
Tie Line 649 Wood-to-Steel Replacement Project

Draft Initial Study/Mitigated Negative Declaration

Application 15-08-006

Prepared for:

Lead Agency

California Public Utilities Commission

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Acronyms and Abbreviations

AB	assembly bill
ADT	Average Daily Traffic
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
APE	area of potential effects
amsl	above mean sea level
ATCM	airborne toxic control measure
BCC	birds of conservation concern
bgs	below ground surface
BMP	best management practice
BOMMP	burrowing owl Monitoring and Mitigation Plan
BUOW	burrowing owl
CAA	Federal Clean Air Act
CACW	Coastal Cactus Wren
CAGN	Coastal California Gnatcatcher
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Standards Code
CCR	California Code of Regulations
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CEMA	California Emergency Management Agency
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CHRIS	California Historical Resources Information System
CMP	Congestion Management Plan
CNCA	California Noise Control Act
CNDDDB	California Natural Diversity Database

1	CNPS	California Native Plant Society
2	CO	carbon monoxide
3	CO ₂ e	carbon dioxide equivalent
4	CO ₂	carbon dioxide
5	CPUC	California Public Utilities Commission
6	CRPR	California Rare Plant Register
7	CRHR	California Register of Historical Resources
8	CUPA	Certified Unified Program Agency
9	CVESD	Chula Vista Elementary School District
10	CWA	Clean Water Act
11	CWC	California Water Code
12	cy	cubic yard
13	dB	decibel
14	dBA	A-weighted decibel
15	DPM	diesel particulate matter
16	DTSC	California Department of Toxic Substances Control
17	DWR	California Department of Water Resources
18	EO	executive order
19	EDR	Environmental Data Resources
20	EIR	environmental impact report
21	ESA	Endangered Species Act
22	°F	Fahrenheit
23	FAA	Federal Aviation Administration
24	FC	federal candidate
25	FCC	federal species of concern
26	FE	federally endangered
27	FEMA	Federal Emergency Management Agency
28	FMMP	Farmland Mapping and Monitoring Program
29	FP	federally protected
30	FPPA	Farmland Protection Policy Act
31	FR	Final Rule
32	FT	federally threatened
33	FTA	Federal Transit Administration
34	FUDS	Formerly Used Defense Site
35	GHG	greenhouse gas
36	GIS	Geographic Information System
37	GO	General Order
38	gpm	gallons per minute
39	HCP	habitat conservation plan

1	I	interstate
2	IS	initial study
3	in/sec	inches per second
4	kV	kilovolts
5	LBVI	Least Bell's vireo
6	L _{dn}	day-night sound level
7	L _{eq}	equivalent sound level
8	L _{max}	maximum sound level
9	LOS	level of service
10	L _{xx}	percentile-exceeded sound level
11	m	meters
12	m ³	cubic meters
13	MBTA	Migratory Bird Treaty Act
14	μg	micrograms
15	MHPA	Multi-Habitat Planning Area
16	MLD	most likely descendent
17	MMTCO _{2e}	million metric tons of carbon dioxide equivalent
18	MND	Mitigated Negative Declaration
19	mph	miles per hour
20	MPPEH	Material Potentially Presenting and Explosive Hazard
21	MRZ	Mineral Resources Zone
22	MS4	Regional Water Quality Control Board's Regional Municipal Separate Storm
23		Sewer Systems
24	MSCP	Chula Vista Multiple Species Conservation Program
25	msl	mean sea level
26	MTS	San Diego Metropolitan Transit System
27	MWD	Metropolitan Water District of Southern California
28	NAAQS	National Ambient Air Quality Standards
29	NAHC	California Native American Heritage Commission
30	NCCP	Natural Community Conservation Plan
31	NEHRP	National Earthquake Hazards Reduction Program
32	NHPA	National Historic Preservation Act of 1966
33	NHTSA	National Highway Traffic Safety Administration
34	NMFS	National Marine Fisheries Service
35	NML	nest monitoring log
36	NO ₂	nitrogen dioxide
37	NO _x	nitrogen oxides
38	NPDES	National Pollutant Discharge Elimination System
39	NPPA	Native Plant Protection Act

1	NRCS	National Resources Conservation Service
2	NRHP	National Register of Historic Places
3	OEHHA	California Office of Environmental Health Hazard Assessment
4	OHWM	Ordinary High Water Mark
5	OSHA	Occupational Safety and Health Administration
6	PCE	Primary Constituent Element
7	PEA	Proponent's Environmental Assessment
8	PM	particulate matter
9	PM ₁₀	particulate matter of aerodynamic radius of 10 micrometers or less
10	PM _{2.5}	particulate matter of aerodynamic radius of 2.5 micrometers or less
11	ppm	parts per million
12	PPV	peak particle velocity
13	PRC	Public Resources Code
14	proposed project	proposed Tie Line 649 Wood-to-Steel Replacement Project
15	QCB	Quino checkerspot butterfly
16	RAQS	Regional Air Quality Strategy
17	RCP	San Diego Association of Governments Regional Comprehensive Plan
18	RCRA	Resource Conservation and Recovery Act of 1976
19	RMS	root mean square
20	ROG	reactive organic gas
21	ROW	right of way
22	RPO	Resource Protection Ordinance
23	RR	road rut
24	RWQCB	Regional Water Quality Control Board
25	SANDAG	San Diego Association of Governments
26	SB	Senate Bill
27	SCAQMD	South Coast Air Quality Management District
28	SD&AE	San Diego and Arizona Eastern
29	SD&IV	San Diego & Imperial Valley
30	SDCAPCD	San Diego County Air Pollution Control District
31	SDCWA	San Diego County Water Authority
32	SDDEH	County of San Diego Department of Environmental Health
33	SDFD	San Diego Fire-Rescue Department
34	SDG&E	San Diego Gas & Electric Company
35	SDNHM	San Diego Natural History Museum
36	SDRPD	San Diego Rural Fire Protection District
37	SDSU	San Diego State University
38	SDTI	San Diego Trolley, Inc.
39	SIP	State Implementation Plan

1	SMARA	Surface Mining and Reclamation Act
2	SR	state route
3	SSC	Species of Special Concern
4	SUMP	Standard Urban Storm Water Mitigation Plan
5	SWFL	Southwestern willow flycatcher
6	SWPPP	stormwater pollution prevention plan
7	SWRCB	California State Water Resources Control Board
8	SWUHSD	Sweetwater Union High School District
9	SVP	Society of Vertebrate Paleontology
10	TAC	toxic air contaminant
11	TCR	tribal cultural resource
12	TL	tie line
13	TMA	transportation management area
14	U.S.	United States
15	USACE	U.S. Army Corps of Engineers
16	USC	United States Code
17	USDA	U.S. Department of Agriculture
18	USDOT	U.S. Department of Transportation
19	USEPA	U.S. Environmental Protection Agency
20	USFWS	U.S. Fish and Wildlife Service
21	USFS	U.S. Forest Service
22	USGS	U.S. Geological Survey
23	UXO	unexploded ordinance
24	V/C	volume to capacity
25	VdB	vibration decibel
26	VOC	Volatile Organic Compound
27	WDR	waste discharge requirement
28	WL	watch list
29	WRCC	Western Regional Climate Center
30	WYBC	Western yellow billed cuckoo.



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SAN FRANCISCO, CALIFORNIA 94102-3298

Draft Initial Study/Mitigated Negative Declaration

Tie Line 649 Wood-to-Steel Replacement Project

1.0 Draft Initial Study/Mitigated Negative Declaration

1.1 Background and Need for the Project

San Diego Gas & Electric Company (SDG&E) is a regulated public utility that provides natural gas and electric service to approximately 1.4 million customers. SDG&E maintains a service area of approximately 4,100 square miles, including 25 cities and various unincorporated areas within San Diego County and southern Orange County. In an effort to maintain existing electric power lines and improve overall system reliability, SDG&E has made a concentrated effort toward fire prevention and fire preparedness in high fire threat and wind-prone areas within SDG&E's service territory. Past wildfire events have resulted in widespread damage to SDG&E property and service outages. As such, SDG&E routinely replaces existing wood poles with steel poles to reduce the hazard from wildfires and improve system performance in hazardous wind-prone areas.

As part of continuing system upgrades, SDG&E is proposing the Tie Line (TL) 649 Wood-to-Steel Replacement Project (proposed project). The proposed project would replace wood poles with steel poles, supporting the power lines of an approximately 7-mile-long portion of an existing 69 kilovolt (kV) single-circuit power line (TL 649). The portion of TL 649 where existing poles would be replaced is in the southeastern portion of San Diego County, California, near the United States–Mexico border.

1.2 Contact Information

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1.3 Project Purpose and Objectives

SDG&E is responsible for the maintenance of its tie lines throughout its service areas for the transmission of electricity. The proposed project tie line is currently supported by wood structures that are susceptible to fire damage in the event of a wildland fire. The proposed project is being constructed in an area designated as highly susceptible to wildfire and exposed to hazardous wind conditions. High winds can cause power lines to touch, fall onto, or come in contact with adjacent vegetation, causing sparks that could ignite potentially damaging wildfires.

The primary objective of the proposed project is to replace existing wood structures with steel poles to reduce the likelihood of service disruption along TL 649 in the event of a wildland fire. Implementation of the proposed project improvements would help ensure SDG&E's service reliability during wildfire events and improve fire safety conditions consistent with SDG&E's Community Fire Safety Program.

1.4 Project Location and Setting

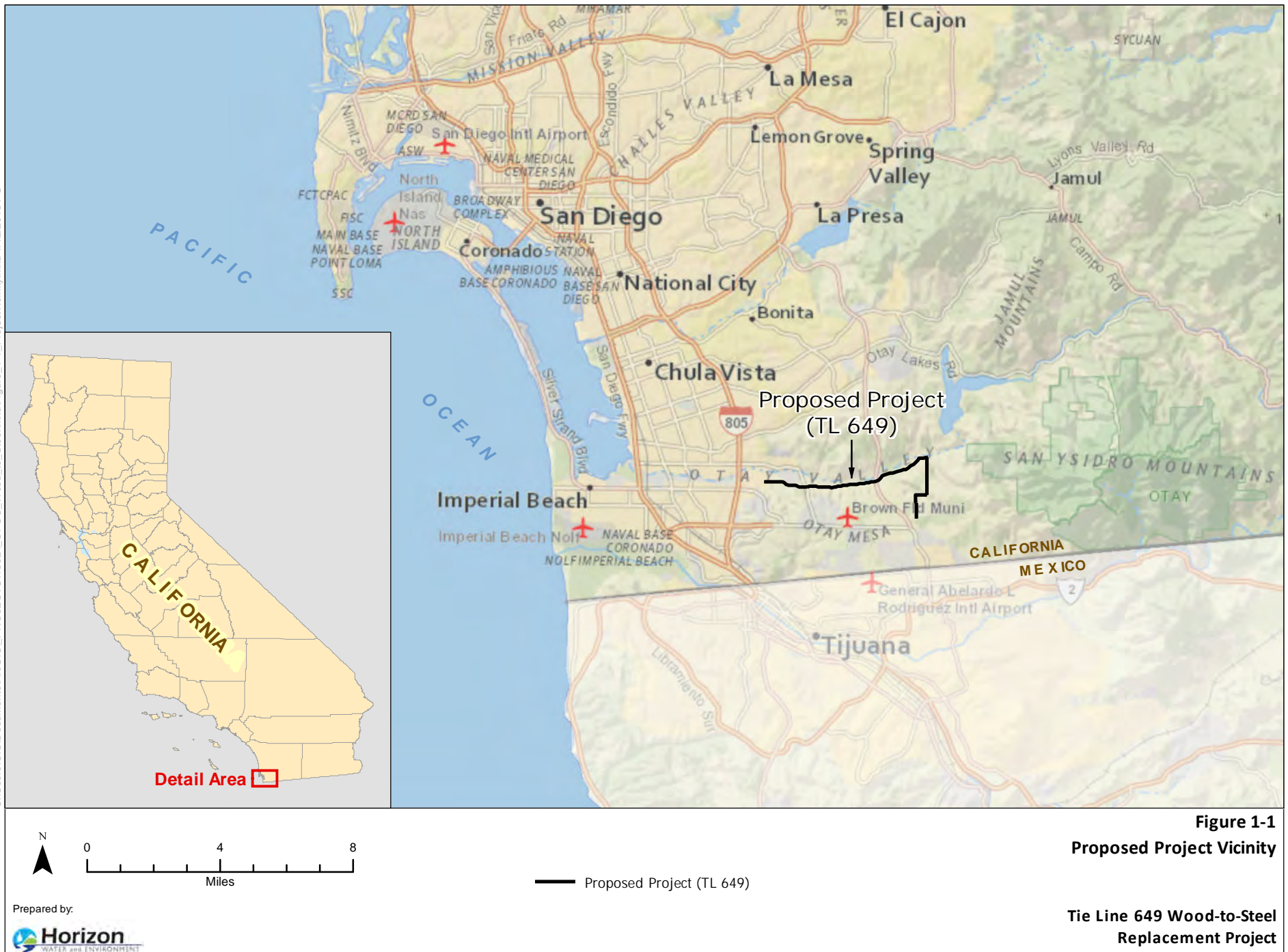
The proposed project is located in the southeastern portion of San Diego County, California, approximately 12 miles southeast of downtown San Diego and approximately 1.5 miles north of the United States–Mexico border, as shown in **Figure 1.4-1**, Proposed Project Vicinity. The proposed project includes an approximately 7-mile section of the existing TL 649 alignment, located through portions of the City of Chula Vista, the City of San Diego, and unincorporated San Diego County, as shown in **Figure 1.4-2**, Proposed Project Components. The proposed project alignment and approximate disturbance areas, including staging areas and work areas for poles 1 through 117, are detailed in Appendix A, Detailed Route Mapset.

Surrounding land uses along the proposed project alignment include residential, recreational, institutional, open space, public lands, rural lands, and utility corridors. The western portion of the proposed project alignment (Pole Nos. 1 through 17), west of Heritage Road, passes through residential developments and recreational facilities. East of Heritage Road, TL 649 continues east approximately 3.9 miles (Pole Nos. 18 through 76) and then turns south for 1.1 miles (Pole Nos. 76 through 97), passing through mostly undeveloped open space, public and rural lands. TL 649 continues westerly adjacent to the Richard J. Donovan Correctional Facility (Pole Nos. 88 through 97) and then turns west continuing through undeveloped open space, public and rural lands for approximately 0.3 mile (Pole Nos. 97 through 103). The alignment then turns south for approximately 0.8 mile (Pole Nos. 103 through 117), parallel to Harvest Road, terminating approximately 0.5 mile north of Otay Mesa Road.

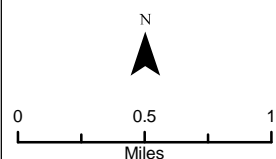
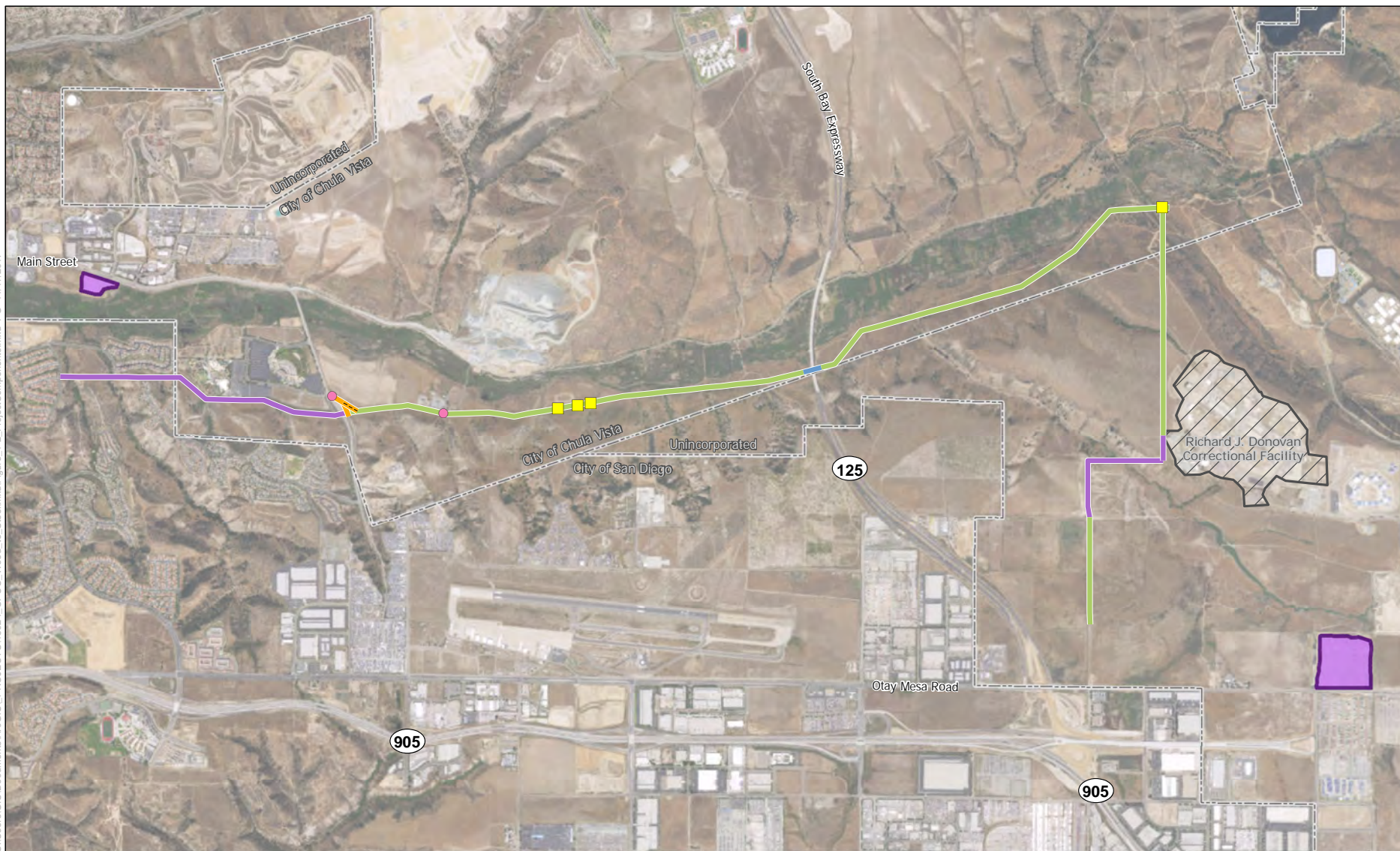
A portion of the proposed project alignment (Pole Nos. 64 through 94) passes through a Formerly Used Defense Site (FUDS) known as the Brown Field Naval Bombing Range (**Figure 1.4-3**). The 510-acre Brown Field Bombing Range was used by the Department of the Navy for dive-bombing and aerial rocket training from 1942 through 1960. The site was also known as the Otay Mesa Bombing Range, the Otay Bombing Target, or Otay Mesa Bombing Target #32.

Along a portion of the proposed project alignment is an underground, 36-inch, high-pressure gas line owned and operated by SDG&E.

The proposed project alignment and temporary staging areas are located on land zoned within three separate local jurisdictions—the County of San Diego, the City of San Diego, and the City of Chula Vista. Additional discussion of General Plan-designated land uses and zoning designations in the vicinity of the proposed project is provided in Section 2.10, Land Use and Planning.



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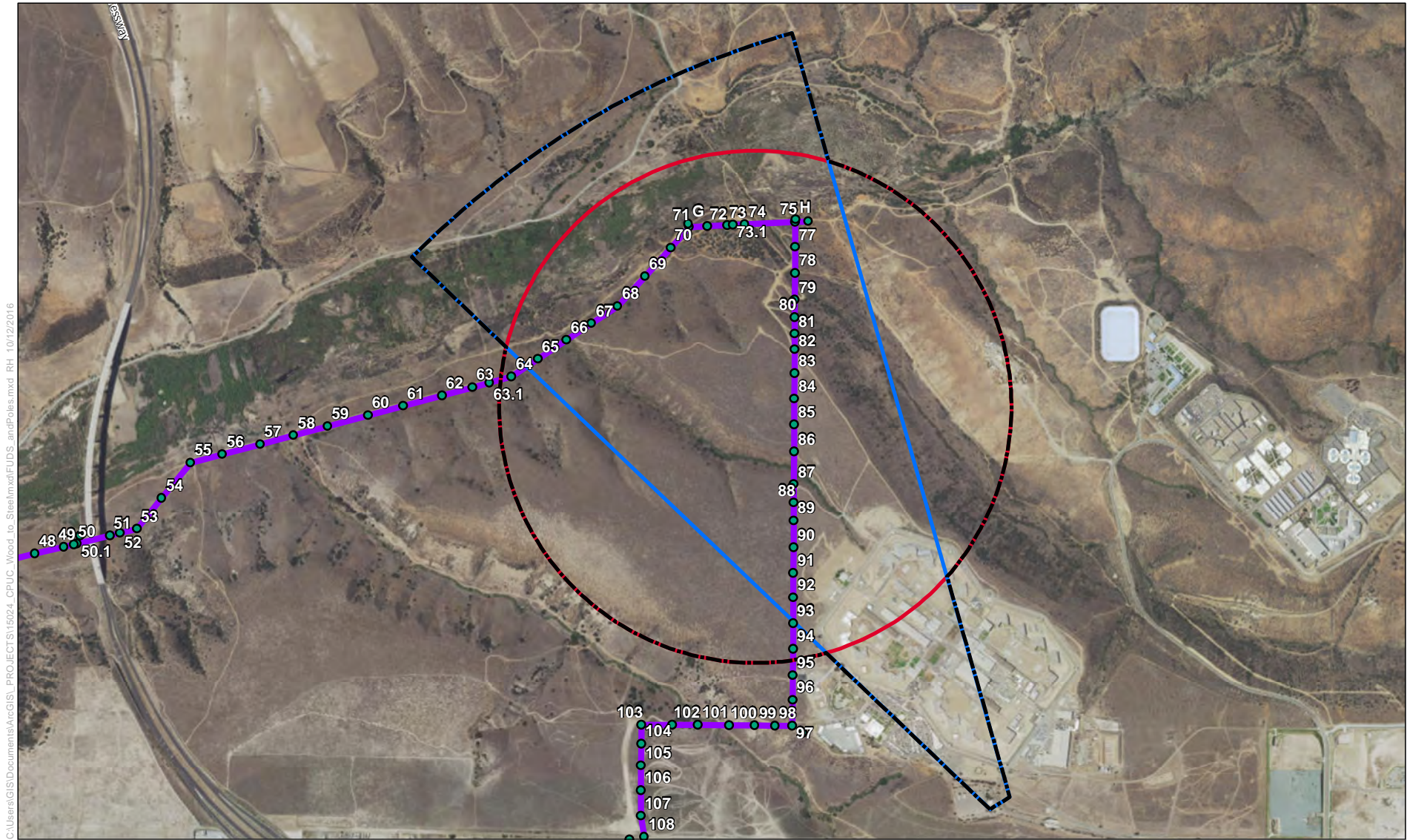


- Wood-to-Steel Replacement
- Wood-to-Steel Replacement with Distribution Underbuild
- Underground to Overhead Conversion with Distribution Underbuild
- Distribution Line Removal
- Wood-to-Steel Replacement Distribution Only

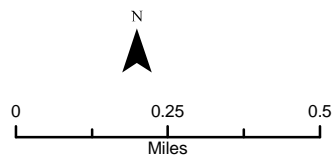
- Underground Distribution Intercept
- Access Road Modification
- Staging Yard
- Municipal Boundaries

Figure 1-2
Proposed Project
Components

Tie Line 649 Wood-to-Steel
Replacement Project



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Prepared by:



— Project Alignment
● Project Poles

□ Aerial Rocket Range Boundary

□ Bomb Target Boundary

□ Formerly Used Defense Site (FUDS) Boundary

Source: USACE 2007

Figure 1-3
Formerly Used Defense Site (FUDS) Boundary and Associate Poles

Tie Line 649 Wood-to-Steel Replacement Project

1.5 Project Components

The proposed project involves wood-to-steel pole replacement activities and the associated transferring or replacing of existing conductors and ancillary facilities to new poles. Primary project components would involve the removal of existing wood power and distribution line poles, installation of galvanized steel poles, transfer of existing power line conductors onto new poles, either transfer of existing or installation of new distribution conductors on new poles, interception and transfer of underground power lines to new pole locations, conversion of existing underground power lines to an overhead configuration, transfer of existing telecommunication cables onto the new poles, and modifications and improvements of existing access roads where undersized. The locations of primary project components are included in Figure 1.4-2, Proposed Project Components.

This section includes a discussion of proposed project facilities, construction activities, and operational activities. Changes from existing SDG&E operations and maintenance are identified, as appropriate.

1.5.1 Pole Installation and Removal

Approximately 132 existing wood poles would be replaced with approximately 117 galvanized steel poles. **Table 1.5-1**, Proposed Pole Installation Approximations, summarizes the quantity and the approximate dimensions of the replacement steel poles. New poles would typically be placed in line with existing conductor and within 10 feet of existing poles, except in a few locations where design requirements or site conditions present physical restrictions, as noted below:

- Pole No. 18 would be relocated approximately 30 feet from the existing pole location in order to place it into alignment with the existing distribution line and pick up the distribution line at this pole. As a result, the alignment is slightly modified, but is located within the existing easements.
- Pole No. 25 would be relocated approximately 50 feet from the existing pole location due to the removal of the overhead distribution transformers from Pole No. 26 and realignment of distribution Pole No. 25 with distribution Pole No. 25.1.
- Pole No. 73.1 would be relocated approximately 140 feet from the existing pole location because Pole No. 74 is being removed due to soil erosion at the current location.

Poles would be installed to support an average conductor span length of approximately 400 feet. Three different pole installation methods (direct bury, pier foundation, and micro-pile foundation) would be used to install new poles, as discussed below. Galvanized steps would be installed on the new poles for maintenance access.

See Appendix A, *Detailed Route Mapset*, for proposed steel pole installation and wood pole removal locations. Work areas for each pole would be centered around the existing pole location, where feasible, but may vary in shape and size to accommodate the type of pole foundation to be installed and to avoid and minimize impacts to sensitive resources.

Table 1.5-1. Proposed Pole Installation Approximations

Pole Installation Method	Approximate Pole Quantity	Approximate Maximum Pole Length (Feet)	Approximate Maximum Height Above Ground (Feet)	Average Base Diameter at Grade (Feet)
Direct Bury	89	100	84	2.5
Pier Foundation	21	83	85	7
Micro-pile Foundation	7	88	90	7
Total	117	—	—	—

Direct-Bury Steel Pole Installation

Direct-bury steel poles would extend no more than 84 feet above the ground surface and are proposed at approximately 89 locations. A truck-mounted auger, track-mounted drill rig, hand tools, or similar methods would be used to excavate approximately 4.5-foot-diameter holes to a depth of 6 to 16 feet below ground surface (bgs). New poles would be delivered to the site and placed using a line truck, crane, bucket truck, or helicopter. The hole would be backfilled with concrete, 1 foot of crushed rock will be placed below the bearing plate. Hole drilling would generate approximately 3.5 to 9.5 cubic yards (cy) of excess material, per pole, that would be reused on site, to the extent feasible, or disposed off site. Each direct-bury steel pole replacement would have a temporary impact area of approximately 1,240 square feet and result in a permanent footprint of approximately 16 square feet. SDG&E has conservatively assumed approximately 1,240 square feet of temporary ground disturbance per pole as a result of pole replacement, removal activities, and minor modifications made in the field during construction.

Pier Foundation Steel Pole Installation

Pier foundation steel poles would extend no more than 85 feet above the ground surface and are proposed at approximately 21 locations. A truck-mounted auger, track-mounted drill rig, hand tools, or similar methods would be used to excavate approximately 7-foot-diameter holes to a depth of approximately 30 feet bgs. New poles would be delivered to the site and placed using a line truck, crane, bucket truck, or helicopter. The pole would be secured within a steel-reinforced concrete foundation, with the finished foundation extending approximately 2 feet above the ground surface. Hole drilling would generate approximately 42.8 cy of excess material, per pole, that would be reused on site, to the extent feasible, or disposed off site. Each pier foundation steel pole replacement would have a temporary impact area of approximately 5,625 square feet and result in a permanent footprint of approximately 39 square feet¹.

Micro-Pile Foundation Steel Pole Installation

Micro-pile foundation steel poles would extend no more than 90 feet above the ground surface and are proposed at approximately seven locations. Four to sixteen holes, approximately 6 to 9 inches in diameter, would be excavated approximately 30 feet bgs in a circular pattern around each new pole location. Holes for micro-pile foundations would be drilled using a small drill rig or similar equipment operated from the top of an elevated platform. The platform would be approximately 8 feet by 8 feet, placed on 4 to 6 legs, and approximately six feet above grade. Steel rods would be inserted into the holes, centered, and backfilled with a mixture of water, Portland cement, and sand. Steel rods would protrude above grade and would connect to a steel cap/transition plate supporting the structure above grade. New poles would be delivered

¹ Pier foundation activities require a greater disturbance area than direct-bury steel poles due to the greater number and larger size of equipment needed to construct the foundations, and also due to the larger size of the pole foundations.

1 to the location and placed on the steel cap/transition plate using a line truck, crane, bucket truck, or
2 helicopter. Hole drilling would generate approximately 0.9 to 7.9 cy of excess material, per pole, which
3 would be reused on site, to the extent feasible, or disposed off site. Each micro-pile foundation steel pole
4 replacement would have a temporary impact area of approximately 1,260 square feet and result in a
5 permanent footprint of approximately 39 square feet.

6 ***Existing Wood Pole Removal***

7 Following relocation of all conductors and telecommunication cables from wooden poles to steel poles,
8 existing wood poles would be removed from the proposed project area. The entire pole would be removed
9 unless a sensitive resource would be impacted by the pole butt removal or site-specific ground conditions
10 (e.g., nearness to cultural resources, nearness to hazardous materials sites, or instability of soils) suggest
11 leaving the pole base would be less impactful. In these cases, the pole would be cut at the base or six to 12
12 inches bgs and covered with native material (otherwise referred to as the “flush-cut” method.) Similarly,
13 anchors and stub poles would also be removed where feasible, or left in place if existing site-specific ground
14 conditions (e.g., nearness to cultural resources, nearness to hazardous materials sites, or instability of soils)
15 suggest removal would cause impacts to surrounding sensitive resources.

16 A typical removal operation using the flush-cut method consists of cutting the pole at the base level with
17 the ground using a chainsaw, then removing the cut section of the pole for proper disposal. Pole topping
18 may occur in the event that collocated telecommunication utilities and/or distribution electric cabling is not
19 able to be transferred to the new poles immediately. In such a scenario, SDG&E crew and/or contractor
20 would transfer or install conductor on the new poles and leave the telecommunication or distribution cabling
21 in place on the old poles. The old pole would then be cut off at a predetermined height above the telecom
22 or distribution cables in order to allow for sufficient clearances between the old pole and conductor on the
23 new poles. Once the telecommunication and/or distribution cabling is moved to the new poles, the old poles
24 would be completely removed or “flush cut,” as described above. Cutting a pole with a chainsaw for either
25 removal or topping takes approximately one minute per pole and the number of poles cut during a day
26 varies depending on the contractor and crew construction methods and strategy.

27 Cross arms, distribution conductors, and poles would be removed with the use of boom and bucket trucks.
28 Anchor rods would be unscrewed or cut off approximately 18 inches bgs. Holes remaining from the wood
29 poles would be backfilled with native soils, excavated soil from the new pole locations, or imported
30 materials similar to the surrounding area. The proposed project site would be restored to approximate pre-
31 construction conditions. Existing poles, associated hardware, and any other debris generated from proposed
32 project activities would be recycled or disposed of at an approved facility. Existing poles range in height
33 from approximately 24 to 70 feet tall. SDG&E has assumed approximately 1,256 square feet of temporary
34 ground disturbance per pole for existing wood poles removal-only, or poles with overhead work only,
35 accounting for minor modifications made in the field during construction.

36 ***Guys, Anchorage, and Grounding Rods***

37 Anchors, approximately 4 inches in diameter (0.09 square foot), would be installed at select steel pole
38 locations. Holes for anchors would be excavated with the use of a drilling rig, backhoe, and either an air
39 compressor with a jack hammer or hand dug with shovels. Following placement of plate anchors at the
40 bottom of each hole, holes would be backfilled with native soil. A bucket truck would be used for the
41 installation of tensioned cable lines, known as guys, between poles, or between poles and anchors.

42 In addition, steel poles would require the installation of two 8-foot-long and 1-inch-wide grounding rods,
43 approximately 6 feet apart and buried 8 to 18 inches bgs within the established work area of each pole.

1 Grounding rods would be installed by driving the rods into the earth using a sledgehammer or jack hammer.
2 Each grounding rod would have a permanent footprint area of less than 0.01 square foot.

3 **1.5.2 Conductor Installation**

4 Following installation of new steel poles, three existing 69 kV conductors would be transferred from the
5 existing wood poles to one or both sides of the steel poles. Where existing distribution lines are collocated
6 underneath the three 69 kV conductors, SDG&E would either transfer existing conductors or install three
7 new 12 kV specular conductors to the new steel poles. Conductor installation and tensioning would require
8 approximately 28 stringing sites, each approximately 30 feet wide by 150 feet long (4,500 square feet),
9 located throughout the proposed project alignment depending on site conditions and sensitive
10 environmental areas present (see Appendix A, Detailed Route Mapset). Stringing sites would be spaced
11 approximately 3,000 feet apart and would generally be located at the end of a straight power line segment
12 where the line changes direction. Tractor-trailer pulling equipment would be staged at stringing sites to
13 assist with tensioning the conductor to a pre-calculated level. Conductor may also be installed by helicopter.
14 Stringing sites would also be used for conductor installation and loading tractor-trailers with reels of
15 conductor and trucks with tensioning equipment.

16 During the initial installation of replacement steel poles, insulators and stringing sheaves would be installed
17 for distribution conductor. Stringing sheaves are rollers that are attached to the cross arm of a supporting
18 structure. The sheaves allow the conductor to be pulled through each pole until it is ready to be pulled up
19 to its final tension position. A rope would be pulled through the rollers from structure to structure using
20 traditional tractor-trailer pulling equipment. Once the rope is in place, it would be attached to a steel or
21 synthetic cable and pulled back through the sheaves. After the conductor is pulled into place, the sag
22 between the structures would be adjusted to a pre-calculated level. Depending on electrical capacity of the
23 conductors (i.e., 69 kV or 12 kV), installation would occur at a minimum of 25 to 30 feet above the ground.
24 The conductor would then be attached to the end of each insulator, the sheaves would be removed, and the
25 vibration dampers and other hardware accessories would be installed. At each pole replacement site, bucket
26 trucks would be used to unclip the power line conductor from the existing wood pole, attach the conductor
27 to an insulator on the new steel pole, and install vibration damper and other auxiliary equipment.

28 SDG&E would remove existing conductors in a method similar to the reverse of the conductor installation
29 process. The old conductors would be recycled at an approved facility.

30 In some cases, sleeves or splices may be installed on the conductors. This might occur when stringing
31 operations slightly damage the conductor or if the conductor is not long enough and needs to be joined to
32 another segment. If the conductor is damaged, a section of the conductor may be replaced or a repair sleeve
33 may be wrapped around the outside of the conductor and pressed into place to protect the conductor.

34 ***Distribution Line Removal***

35 An underbuilt distribution line on TL 649 connects to an existing distribution line at Pole No. 19. The
36 proposed project would require the relocation of the existing overhead distribution line connection to Pole
37 18, resulting in the removal of an approximately 400-foot-long section of overhead between Pole Nos 18.3
38 and 19 and the removal of Pole Nos 19 and 19.1.

39 ***Guard Structures***

40 Prior to transferring power line conductors and stringing the new distribution conductors, one to two
41 temporary guard structures (which typically consist of vertical wood poles with cross arms) or bucket trucks
42 may be set up near the alignment crossing at Heritage Road. Guard structures are intended to prevent

conductors from sagging onto adjacent roadways while being transferred from the existing poles to the new poles. Guard structure installation would require a temporary work area of approximately 72 to 144 square feet. Alternatively, SDG&E may use flaggers to halt traffic for brief periods while overhead conductors are installed at the Heritage Road crossing.

See Appendix A, *Detailed Route Mapset*, for locations of distribution line removal and guard structures.

1.5.3 Underground Distribution Line Intercepts

The proposed project would require rerouting existing underground distribution lines from existing poles to the new, replacement poles at two locations (refer to Appendix A, *Detailed Route Mapset*). The first pole location (Pole No. 18.5) would extend the existing underground distribution line via three 1-inch-diameter (1,000 circular mil) copper wires to the new pole 18.5 location. The three copper wires would travel through conduit placed in a 2-foot-wide by 20-foot-long by 5-foot-deep trench (linking the existing underground distribution line to the new pole location.) A 4-foot-wide by 4-foot-long by 5-foot-deep access hole would be excavated for workers to tie into the existing underground distribution line.

The second underground distribution line intercept would occur at Pole 25. A conduit housing three cables would be placed in a 1-foot-wide by 80- to 100-foot-long by 3-foot-deep trench linking the existing underground distribution line to the new pole location. A 3-foot-wide by 3-foot-long by 3-foot-deep access hole would be excavated for workers to tie into the existing underground distribution line.

Trenching activities would require an approximately 10-foot-wide work area parallel to the two trench areas. Trenches and access holes would be excavated using a backhoe and other trenching equipment as warranted by site conditions. Polyvinyl chloride cable conduits would be installed, and concrete would be poured around the conduits to form the duct banks. The trenches and access holes would be backfilled with excavated native materials, and cables would be installed in the duct banks upon completion. Each cable segment would be pulled into the duct bank and terminated at the cable pole where the line converts to an overhead configuration. A cable reel would be placed at one end of the section and a pulling rig would be placed at the other end to pull the cable through the ducts. By using a fish line, a larger rope would then be pulled into the duct and attached to the cable puller, which pulls the cable through the duct. To decrease friction during pulling, lubricant would be applied to the cable as it enters the duct.

See Appendix A, *Detailed Route Mapset*, for pole locations of underground distribution line intercepts.

1.5.4 Conversion of Underground Lines to Overhead

TL 649 currently crosses beneath State Route (SR)-125 in an underground configuration. The proposed project would convert the existing underground power lines to an overhead configuration, located beneath the SR 125 elevated structure. New steel poles (Poles 50 and 51) would be installed on either side of SR-125 (refer to Figure 1.4-2, *Proposed Project Components*). Following installation of the new poles, new conductors would connect to the existing power line conductors using sleeves or splices. The existing cables would be recycled at an approved facility, and the existing underground duct bank abandoned in place. Construction methods for the conversion of underground power lines to an overhead configuration would be similar to those described for steel pole and conductor installation. Conversion from an underground to overhead configuration may require a temporary work area and pulling site approximately 25 feet by 75 feet (1,875 square feet); location identified in Appendix A, *Detailed Route Mapset*.

1.5.5 Transfer of Telecommunication Lines

AT&T currently has telecommunication lines co-located on a portion of TL 649 (Poles 108 through 117). After SDG&E power lines have been transferred to the new poles, AT&T would relocate their existing telecommunication lines below the power lines. Upon completion of AT&T line relocation, SDG&E would return to remove the existing wood poles. For these specific poles, AT&T is obligated to relocate their lines but not within a specified timeframe. However, SDG&E would request that it be completed within 30 to 60 days from completion of the new steel pole installation (or sooner if feasible), barring any unforeseen complications.²

1.5.6 Access Road Modifications and Improvements

Site access for the proposed project would use a network of existing dirt and gravel access roads, as identified in Appendix A, Detailed Route Mapset. Most existing access roads are a minimum of 12 feet wide with an additional 2 feet of windrows on each side (approximate). Use of additional existing roads beyond those that have been identified may be required during construction. Other improvements to access roads may be necessary, such as minor grading, importing and compacting more stable materials (e.g., 0.75-inch to 1-inch gravel or Class II base rock) in unstable areas, or applying additional surface materials to improve access conditions. Where existing access roads need repair, a grader would be used to blade and smooth the road. The extent and location of road repairs would be evaluated prior to and throughout construction and would be contingent upon site-specific road conditions. Should additional materials and/or fill be required for road improvements, these materials may be imported at the start of construction and at the end of construction.

SDG&E vehicles may use overland travel routes, which are depicted in Appendix A, Detailed Route Mapset, to access pole locations and traverse around stringing sites that block use of existing access roads. No improvements would be required for overland travel routes; however, vegetation management, such as vegetation removal and tree trimming, may be required to reduce the risk of fire. The overland travel routes are approximate locations and may be shifted based on site conditions, sensitive environmental resources, and access requirements at the time of construction. Additional overland travel routes to work areas may be required during construction.

In addition, SDG&E has identified approximately 10 locations where turnarounds would be required (see Appendix A, Detailed Route Mapset). The number of turnarounds and locations are estimates and subject to change based on site conditions and access requirements at the time of construction. Turnaround areas may also be used for staging and parking during construction.

Table 1.5-2 provides a general estimation of necessary access road modifications and turnarounds.

² Note: For those structures located within high and very high fire hazard severity zones, such as those found on the Proposed Project, SDG&E's Communication Infrastructure Provider (CIP) Pole Attachment Transfer Process applies. This process specifies the steps SDG&E will take to notify associated CIPs and facilitate the timely transfer of these collocated facilities. SDG&E will notify the affected CIP(s) of the need to move communication underbuild at least 60 days prior to construction; at least 30 days prior to construction, SDG&E will provide a design packet to the CIP(s) that includes specific information regarding the facilities to be transferred and the affected location(s). Each CIP has 45 days to transfer its facilities to the new pole(s), once that pole is available for transfer. Beyond 45 days, SDG&E has the right to transfer these facilities.

Table 1.5-2. Approximate Areas of Impact Required for Access Road Improvements and Turnarounds

Impact Type	Approximate Pole Location	Length (Feet)	Width (Feet)	Total Area (Square Feet)
Access Road Improvement	34	50	5	250
Access Road Improvement	35	50	5	250
Access Road Improvement	36	50	5	250
Access Road Improvement	75	50	5	250
Turnaround	3	53	31	1,118
Turnaround	4	40	28	1,101
Turnaround	17	50	41	2,064
Turnaround	26	80	50	3,132
Turnaround	51	128	73	4,312
Turnaround	35	82	46	3,686
Turnaround	58	77	48	1,759
Turnaround	77	40	28	833
Turnaround	78	66	40	2,185
Turnaround	79	42	28	862
Total		858	—	22,052

1.6 Right-of-Way Requirements

SDG&E currently has an approximately 20-foot-wide right of way (ROW) on City of Chula Vista, City of San Diego, San Diego County, state, and private property along the entire length of the power line between Pole Nos. 1 through 117. SDG&E also has a 12-foot-wide (approximate) ROW on private property along the entire length of the distribution line between Pole Nos. 18.1 through 18.5. An encroachment permit is anticipated to be required from the City of Chula Vista for the proposed activities at Heritage Road, described in Section 1.5.2, Conductor Installation. An encroachment permit is anticipated to be required from the California Department of Transportation for activities at SR-125, described in Section 1.5.4, Conversion of Underground Lines to Overhead. An encroachment permit from the City of San Diego is anticipated to be required for the use of a portion of Sea Lavender Way as a stringing site. In addition, SDG&E would need to obtain landowner approval for use of the Main Street Staging Yard and Otay Staging Yard located outside of SDG&E's existing ROWs.

1.7 Construction Elements

1.7.1 Site Preparation and Earthwork

Site preparation would include limited clearing and grubbing, grading, import and placement of fill, and compaction along access routes and at pole installation and removal sites. Grading and earthwork activities at temporary construction work areas would occur on slopes up to 46 percent. Clearing and grubbing would be conducted using handheld gas-powered equipment and other hand tools. All demolished material and debris from the site preparation or trenching phases would be reused on site to the extent feasible or disposed off site at an appropriate location selected by the construction contractor.

1 Tree removal is anticipated to be minimal with a single non-native Peruvian pepper tree (*Schinus molle*)
2 identified for removal near Pole 26. This tree would be removed with the use of a bucket truck and
3 chainsaw. Limbs would be chipped up and hauled away to a green recycling center. Logs would be left on
4 site for the landowner or hauled away to a green recycling center.

5 To the extent feasible, excavated soil would be reused on site. Excavated soil would be temporarily
6 stockpiled adjacent to an excavated hole or trench and later used for backfill (e.g., holes resulting from pole
7 installation/removal, underground trenching excavations). Soil stock piles sitting for 14 days or more would
8 be managed with erosion and sediment controls, such as straw wattles, visqueen covering, or silt fencing.

9 Imported fill, required for pole replacements, site restoration, and/or road repair, would be delivered to
10 construction sites by conventional haul trucks (approximately 10 cy per load). Fill material would be placed
11 with an excavator and compacted with a compactor or roller. It is anticipated that approximately one to two
12 equipment delivery trips would occur for each proposed project site.

13 **1.7.2 Rock-Splitting**

14 In areas where rock is encountered during excavation activities, a hydraulic rock drilling and splitting
15 procedure (known as rock-splitting) may be used, depending on site-specific conditions. The procedure
16 involves drilling a hole in the rock and inserting a non-blasting cartridge of propellant. The cartridge is
17 mechanically initiated by an impact generation device and results in controlled tensile crack propagation in
18 the rock. In excavation locations where rock-splitting proves ineffective, alternative methods, as discussed
19 in Section 1.7.3, Alternative Methods, may be used.

20 **1.7.3 Alternative Methods**

21 In locations where rock is encountered during excavation activities, but where rock-splitting proves
22 ineffective, alternative methods may be used. Alternative methods include installation of additional micro-
23 pile foundation steel poles, jackhammering, and/or use of different sized drill rigs, as described below. Due
24 to the proximity of sensitive resources, including cultural structures and biological receptors, to the
25 proposed project, as well as noise limitations, blasting would not occur during construction.

26 ***Additional Micro-Pile Foundation Steel Poles***

27 SDG&E contractors may install additional micro-pile foundation poles as an alternative to pier foundations
28 or direct-bury poles, previously proposed. Micro-pile foundations require drilling of numerous small holes
29 for the foundation, which typically negates the need for rock-splitting or blasting. Micro-pile foundation
30 steel pole installation methods are described in Section 1.5.1, Pole Installation and Removal.

31 ***Jackhammering***

32 Jackhammering requires the use of jack hammers, drill rigs, rock drills, and air compressors. Jackhammers
33 would be powered by an air compressor that has a large bit on the end to break up rock. Rock would then
34 be removed from the pole hole using an auger or scooped into a bucket and pulled out of the hole.

35 ***Drill Rigs***

36 Different-sized drill rigs may be used, depending on the amount of torque and/or weight deemed necessary
37 and the amount of room available for larger-sized drill rigs at any given work location. A down-the-hole
38 hammer rock drill would sometimes be used, drilling several 2- to 3-inch-diameter sized holes to various
39 depths throughout the entire drilled shaft (also known as the Swiss cheese method). Once this has been

accomplished, the contractor would then proceed to drill and extract the rock using various types of tooling, such as rock augers and core barrels. The equipment required for this alternative includes drilling rigs, rock augers, and rock drills.

1.7.4 Staging Areas

Staging areas would be needed to assemble and store replacement poles; store conductors, construction equipment, other construction-related materials; and park vehicles. Two staging areas would be utilized for the proposed project: the 6-acre Main Street Staging Yard, located northwest of the proposed project at 750 Main Street; and a 4-acre portion of the Otay Staging Yard, located southeast of the proposed project at 7144 Otay Mesa Road. A total of three temporary mobile trailers would be placed at either one of the staging areas and used for construction management activities throughout the duration of construction. Temporary electrical service would be provided through the installation of a temporary tap from an existing distribution line or a gasoline or diesel 25-kilowatt generator, supplying power for approximately 10 hours per day. The temporary power would be used for the operation of the construction trailers, construction lighting, and small hand tools. A temporary 6- to 8-foot-tall chain-link fence with locked gate may be necessary around the perimeter of the Main Street Staging Yard.

Additional discussion of electric service requirements is provided in Section 2.17, Utilities and Service Systems.

In addition to the Main Street Staging Yard and Otay Staging Yard, access road turnarounds, as depicted in Table 1-2, may also be used for temporary staging and parking during construction. SDG&E has identified approximately 10 turnaround locations; however, the number of turnarounds and locations are estimates and subject to change based on site conditions and access requirements at the time of construction.

Staging areas would be accessed using public roadways and existing access roads.

1.7.5 Dewatering

No dewatering of surface waters is anticipated for construction of the proposed project. However, groundwater may be present during excavation activities for pole installation or during trenching for underground distribution lines. If groundwater is encountered, the following general construction procedures would be implemented:

- A submersible pump would be installed.
- If the groundwater is to be discharged to an upland area, it would be pumped to a desiltation tank (i.e., baker tank) for sediment filtering. If the groundwater is pumped to a baker tank, baffles would be installed in the tank to increase sedimentation, and the water in the tank would be tested in accordance with any applicable permit or other requirement.
- If the groundwater is pumped to a baker tank for discharge to surface waters, the water would be tested to ensure compliance with the applicable Regional Water Quality Control Board or State Water Resource Control Board (RWQCB) National Pollutant Discharge Elimination System (NPDES) permit requirements. If the water quality does not meet permit requirements, additional baker tanks would be used and/or additional treatment or filtering would be performed until the applicable requirements are met.

- If the groundwater is not discharged to an upland area or surface waters in the area, or if the water quality does not meet permit requirements, the water would be disposed of at an approved disposal site that is licensed to handle wastewater.

1.7.6 Construction in Vernal Pool Areas

Although vernal pools and other water features (e.g., road ruts, basins) have been identified within and adjacent-to the proposed project area, the proposed project has been designed to avoid vernal pools and other water features, including those containing listed fairy shrimp. Pole installation, anchorage, guard structure installation and removal, excavation, grading, grubbing or filling, will not occur within vernal pools. Additionally, no staging or laydown areas are located within vernal pools or water features.

Existing access roads will be used to the greatest extent feasible. Vehicular travel on existing dirt access roads with road ruts/vernal basins/pools and/or watersheds, will not occur when ponded water is present or soil is wet. Vehicular travel on existing access roads that will be utilized by the Proposed Project occurs year-round from non-SDG&E uses. Existing dirt access roads are heavily utilized and maintained by different agencies, including the County of San Diego, United States Department of Homeland Security, sewer and water line maintenance and access, and Donovan State Prison Vehicles. Construction activities in vernal pool areas will occur only under dry conditions. A qualified biologist will determine dry conditions and monitor construction activities within the vicinity of vernal pools.

Vernal pools adjacent to the approved project area will be fenced for avoidance and storm water BMPs (such as silt fencing and gravel bags) will be installed around areas of ground disturbance to prevent sedimentation. No construction equipment will be fueled or maintained within 100 feet of vernal pools. Therefore, proposed construction activities are not expected to impact vernal pools.

1.7.7 Site Restoration

Site restoration would generally involve removal of all construction materials and debris, regrading disturbed areas to their pre-construction contours, installing erosion controls, and reseeding disturbed areas, as necessary. Temporarily impacted proposed project areas would be reseeded with native plants, with the exception of pole locations that require mandated fire break safety clearances or in locations where property owners have requested otherwise. Any excess excavation material would be reused on site, spread onto access roads, or properly disposed of at an appropriate off-site facility.

1.7.8 Typical Equipment

The main pieces of construction equipment that may be used are as follows:

- | | | |
|------------------------|-------------------------|--------------------|
| ▪ grader | ▪ bucket truck | ▪ crane |
| ▪ loader | ▪ backhoe | ▪ compactor/roller |
| ▪ water truck | ▪ boom truck | ▪ pickup truck |
| ▪ mower | ▪ concrete truck | ▪ generator |
| ▪ dump truck | ▪ wire truck | ▪ air compressor |
| ▪ tractor trailer unit | ▪ pulling rig | ▪ gas-powered weed |
| ▪ drilling rig | ▪ spray truck | abatement tools |
| ▪ forklift | ▪ hydraulic pole puller | ▪ hand tools |
| ▪ chainsaw | ▪ submersible pump | ▪ skid steer |
| ▪ rock auger | ▪ rock drill | ▪ Jackhammer |
| ▪ crew truck | | |

Helicopters are not anticipated to be used for project construction (refer to Section 1.8.1, Aerial Access, for discussion of helicopter usage for operation and maintenance purposes).

1.7.9 Water Utilities

Approximately 4.5 million gallons of water would be required for dust control, compaction, and fire protection. This water would be obtained from a local water purveyor. The Otay Water District provided a Will-Serve Letter on April 4, 2016 (see Appendix B), stating that they have adequate capacity to provide water required for construction of the proposed project. Recycled water would be used to the extent feasible and where applicable regulations permit its use. Additional discussion of water required for the proposed project is provided in Section 2.17, Utilities and Service Systems.

1.7.10 Personnel

Up to 36 construction personnel would be used during the various construction phases. Typically, four or five crews of five workers would work concurrently along the alignment. In addition, approximately five crews of two workers would work concurrently along the alignment where hand digging of pole holes is needed. In addition, one general foreman would work on site during the duration of proposed project construction.

1.7.11 Schedule

Construction of the proposed project would commence after securing all required approvals and permits. Construction of the proposed project is anticipated to last for approximately 9 to 10 months, beginning in February 2019 and ending in November 2019. Construction activities would generally occur up to 6 days per week, Monday through Saturday, and be limited to 12 hours per day or less. **Table 1.7-1**, Proposed Construction Schedule, provides SDG&E's proposed schedule for construction of the proposed project.

Table 1.7-1. Proposed Construction Schedule

Activity	Approximate Duration (Days)	Approximate Start Date
Staging Yard Set-up/Road Refreshing/Vegetation Trimming	6	February 2019
Micro-pile Foundation Construction	40	April 2019
Pier Foundation Construction	63	April 2019
Direct Buried Construction and Pole Installation	90	April 2019
Trenching for Installation of Underground Cables	3	August 2019
Stringing Activities/Transfer Conductor/Staging Activities/Pole Removal	60	August 2019
Demobilization/Clean-up/Road Refreshing	26	November 2019

Nighttime Work

On occasion, construction activities may be required at night to minimize impacts to schedules, facilitate cutover work, and as required by other property owners or agencies, such as the California Independent Service Operator, which may require outages of certain portions of the electric system. If nighttime lighting is required, it could extend up to 12 hours within a 24-hour work day, for up to five pole locations at any given time. Each pole location would require one portable generated light tower.

1.7.12 Operation and Maintenance

Operation and maintenance of the proposed project would primarily involve the inspection and maintenance of facilities and would be consistent with existing SDG&E operational protocols and procedures, including SDG&E's Subregional Natural Community Conservation Plan, which is described in greater detail in Section 2.4, Biological Resources. Maintenance activities would include routine inspections, maintenance, and repair to TL 649 pole structures, and associated equipment. Routine maintenance activities involve both preventative maintenance and emergency repairs to provide service continuity. SDG&E may be required to add, repair, or replace equipment or an existing structure with a larger and/or stronger structure at the same or nearby location due to damage or changes in conductor size in order to maintain uniform, adequate, safe, and reliable service. SDG&E would continue to perform annual aerial and/or ground inspections of proposed project facilities, consistent with the existing operations and maintenance of TL 649. Aerial inspections require the use of an existing helicopter landing zone (approximately 100 feet by 100 feet) and take approximately one day (between the hours of 7:00 am and 4:00 p.m.). Typical operations and maintenance would require four to ten operations/maintenance personnel, two helicopter staff, and a water truck.

Inspection for corrosion, equipment misalignment, loose fittings, and other common mechanical problems would be performed at least every 3 years (per California Public Utility Commission [CPUC] General Order [GO] 165) for power lines. Additional operations and maintenance activities would include herbicide application, vegetation clearing, pole brushing, insulator washing, tree trimming, and ROW access and repairs, which would be performed on an as-needed basis. No change in SDG&E's operation and maintenance protocols and procedures is anticipated or included as part of the proposed project.

1.7.13 Aerial Access

Additional use of helicopters for construction work (e.g., replacement of facility components) is not anticipated; however, in the event aerial access is required, usage would be in accordance with SDG&E's general operation and maintenance guidelines, or as allowed according to biological resource or noise constraints. Typical usage would be to deliver materials (including poles) and/or personnel to a job site. In some instances, SDG&E may need to fly helicopters from their respective home airfields to the proposed project staging areas or landing zones prior to 7:00 a.m. to pick up workers or construction materials in order to meet a 7:00 a.m. start time at the site. Where appropriate, SDG&E would coordinate with San Diego County and the City of Chula Vista regarding helicopter flights to avoid any conflicts with the noise ordinances. Flight paths would follow the right-of-way to the extent practicable and would be coordinated with the Federal Aviation Administration (FAA), where required.

1.7.14 Road Maintenance

Road maintenance includes grading of existing access roads, installation of best management practices (BMPs), spot-repair of erosion sites, and vegetation trimming, as needed. SDG&E performs road maintenance as necessary. Road maintenance may require the use of a motor grader, bulldozer, mini-excavator, skid steer, water truck, and pickup trucks.

1.7.15 Pole Brushing and Vegetation Maintenance

In accordance with fire break clearance requirements in Public Resources Code (PRC) 4292 and Title 14, Section 1254 of the California Code of Regulations (CCR), SDG&E removes flammable vegetation in the area surrounding power line poles to reduce potential fire and other safety hazards. One-person crews typically conduct this work using mechanical equipment consisting of chain saws, weed trimmers, rakes, shovels, and leaf blowers. SDG&E typically inspects poles on an annual basis to determine if brush removal (brushing) is required. Application of herbicides may follow the mechanical trimming of vegetation to prevent vegetation from recurring. This activity generally requires one person in a pickup truck and takes only minutes to spray around the base of the pole within a radius of approximately 10 feet. The employee either walks from the nearest access road to apply the herbicide or drives a pickup truck directly to each pole location as access permits. An SDG&E-approved list of herbicides and discussion of usage is provided in Section 2.8, Hazards and Hazardous Materials.

In accordance with tree and power line clearance requirements in PRC 4293, Title 14, Section 1256 of the CCR and CPUC GO 95, SDG&E trims trees and vegetation to manage fire, electrical reliability, and safety hazards. Regular inspection, regardless of habitat type, is necessary to maintain proper line clearances. SDG&E conducts tree-trimming activities with a two-person crew in an aerial lift truck and a chipper trailer. SDG&E typically inspects trees in its service area for trimming needs on an annual basis.

1.8 Public Involvement Process

Public disclosure and dialogue are priorities under California Environmental Quality Act (CEQA). CEQA requires a period during the Initial Study/Mitigated Negative Declaration (IS/MND) process when interested stakeholders, interested public agencies, and the general public can provide comments on the impacts of the proposed project.

Pursuant to Sections 15073.5 and 15105[b] of the CEQA Guidelines, the CPUC circulated the Draft IS/MND for a 30-day public and agency review on the date of issuance of the Notice of Intent. All comments received prior to 5:00 p.m. from the date specified for closure of the public comment period in

the Notice of Intent will be considered. Input, questions, and comments on this project can be sent to the contacts identified in Section 1.2, Contact Information.

See Section 3.0, Consultation, Coordination, Public Review, and List of Preparers, for further details regarding public review.

1.9 Permits and Approvals

Table 1.9-1 describes permits and regulatory compliance requirements for the proposed project, along with the associated responsible or permitting agency.

Table 1.9-1. Applicable Permits and Regulatory Requirements

Regulatory Agency	Law/Regulation	Purpose	Permit/Authorization Type
<i>Federal Agencies</i>			
U.S. Fish and Wildlife and National Marine Fisheries Service (USFWS and NMFS)	Federal Endangered Species Act (ESA)	U.S. Army Corps of Engineers (USACE) must consult with USFWS and NMFS if threatened or endangered species may be affected by the project.	No-take concurrence or ESA Section 7 or 10 consultation, Incidental Take Permit, if required
	Migratory Bird Treaty Act	Prohibits the take of any migratory bird, or the parts, nests, or eggs of such a bird, except under the terms of a valid permit	
U.S. Army Corps of Engineers	Clean Water Act (CWA), Section 404	Regulates the discharge of dredged or fill materials into the waters of the U.S.	TBD
<i>State Agencies</i>			
California Department of Fish and Wildlife (CDFW) – South Coast Region	California Endangered Species Act (CESA) (Fish & Game Code Section 2081[b])	Issuance of incidental take agreements	Compliance with CESA
	Native Plant Protection Act	Prohibits take of endangered or rare native plants without properly notifying CDFW	Compliance with CESA
California Department of Transportation (Caltrans)	N/A	Potential encroachment into Caltrans right-of-way under SR-125	Encroachment Permit
California Public Utilities Commission	N/A	Overall approval of proposed project	Permit to Construct

Regulatory Agency	Law/Regulation	Purpose	Permit/Authorization Type
State Water Resource Control Board	CWA Section 402	National Pollutant Discharge Elimination System (NPDES) program regulates discharges of pollutants.	NPDES General Permit Construction Permit
San Diego Regional Water Quality Control Board (Region 9)	Porter-Cologne Water Quality Control Act – Waste Discharge Requirements (WDR)	Regulates discharges of materials to land and protection of beneficial uses of waters of the State.	WDRs if dewatering is required
	CWA Section 401	Regulates the discharge to waters of the state	TBD
State Historic Preservation Officer	National Historic Preservation Act Section 106	USACE must consult with State Historic Preservation Officer if historic properties or prehistoric archaeological sites may be affected by the project.	To be conducted in conjunction with USACE Section 404 compliance if required
Local Agencies			
City of Chula Vista	N/A	Lane closure	Traffic Control Permit
	N/A	Construction activities within the Heritage Road right-of-way and construction of facilities over Heritage Road	Encroachment Permit
City of San Diego	N/A	Lane closure	Traffic Control Permit
San Diego County	County Ordinance Section 36.408	Comply with County noise ordinances	SDG&E Maintenance Work (Non-Standard Work Hours) notification form
	N/A	Lane closure	Traffic Control Permit

1.10 Environmental Determination

An IS was prepared to identify potential effects on the environment from the construction and operation of system upgrades to TL 649 and to evaluate the significance of these effects pursuant to CEQA. The findings documented in the IS are based on project information presented in the applicant's Proponent's Environmental Assessment (PEA) filed with the CPUC on August 10, 2015, and subsequent applicant responses to data requests by the CPUC.

It is determined that the proposed project WOULD NOT HAVE a significant effect on the environment with incorporation of the mitigation measures identified in the IS and listed in the Mitigation, Monitoring, Reporting, and Compliance Plan (Appendix C).

John E. Forsythe, AICP, Senior Environmental Planner Date
Energy Division, Infrastructure Permitting and CEQA
California Public Utilities Commission

Lonn Maier, Supervisor Date
Energy Division, Infrastructure Permitting and CEQA
California Public Utilities Commission

2.0 Draft Initial Study

The environmental resources checked below would be potentially significantly affected by this project, as defined by CEQA and as indicated by the checklists presented in this IS. All impacts to these environmental resources would be reduced to a less-than-significant level with implementation of mitigation measures.

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology and Soils |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input checked="" type="checkbox"/> Hydrology and Water Quality |
| <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation and Traffic | <input type="checkbox"/> Utilities and Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

On the basis of this initial evaluation and pursuant to CEQA requirements:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

John E. Forsythe, AICP, Senior Environmental Planner Date
Energy Division, Infrastructure Permitting and CEQA
California Public Utilities Commission

Approach, Terminology, and Impact Analysis Methodology

The purpose of an IS is to determine whether the proposed project may cause a significant impact to the environment. If a significant impact may occur that cannot be reduced to a less-than-significant level, an Environmental Impact Report (EIR) must be prepared.

Pursuant to CEQA, this IS evaluates potential impacts with respect to the series of checklist items for each environmental factor identified in Appendix G of the CEQA Guidelines. This IS uses the following terminology to describe environmental effects of the proposed project:

- A finding of *no impact* is made when the analysis concludes that the project would not affect the particular environmental resource or issue.
- An impact is considered *less than significant* if the analysis concludes that there would be no substantial adverse change in the environment and that no mitigation is needed.
- An impact is considered *significant* if it results in a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by using specific significance criteria as a basis of evaluation. Mitigation measures and/or alternatives are identified to reduce these potential effects on the environment.

This IS identifies particular mitigation measures that are intended to lessen project impacts. The state CEQA Guidelines (14 CCR 15370) define mitigation as:

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment;
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and compensating for the impact by replacing or providing substitute resources or environments.

The applicant, SDG&E, has made revisions in the project or agreed to all mitigation measures identified in this IS to reduce significant impacts prior to release of this IS/MND for public review.

2.1 Aesthetics

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.1.1 Setting

Environmental Setting

Terminology Overview

Visual character, visual quality, and visual sensitivity are three terms used throughout this section. Visual character is the unique set of landscape features that combine to make a view, including native landforms, water, and vegetation patterns as well as built features such as buildings, roads, and other structures.

Visual quality is the intrinsic appeal of a landscape or scene due to the combination of natural and built features in the landscape. Natural and built features combine to form unique perspectives with varying degrees of visual quality, which is rated in this analysis as high, moderate, or low. A high visual quality rating is defined as visual resources that are unique or exemplary of the region's natural or cultural scenic amenities. A moderate visual quality rating is defined as visual resources typical or characteristic of the region's natural and/or cultural visual amenities. A low visual quality rating refers to areas generally lacking in natural or cultural visual resource amenities typical of the region.

Visual sensitivity reflects the level of interest or concern that viewers and responsible land management agencies have for a particular visual resource with visual quality taken into account. Visual sensitivity is a measure of how noticeable proposed changes might be in a particular setting and is determined based on the distance from a viewer, the contrast of the proposed changes, and the duration that a particular view would be available to viewers. For example, areas such as scenic vistas, parks, trails, and scenic roadways typically have a high visual quality and visual sensitivity because these locales are publicly protected, appear natural, view durations are typically long, and close-up views are more commonly available.

1 **Visual Character and Quality of the Site**

2 *Regional Character*

3 The proposed project alignment traverses the southern portion of San Diego County, generally following
4 the Otay River to the south. The project area is situated in the Lower California Peninsular Range where
5 elevations range from approximately 150 feet (western end of the project area) to approximately 600 feet
6 where the alignment heads south, and 590 feet at the terminus. At a regional level, the landscape
7 surrounding the project alignment is largely characterized by canyons and mesa formations throughout the
8 Otay River Valley.

9 *Project Vicinity Character*

10 The western end of the proposed project alignment begins in a residential neighborhood at the terminus of
11 Sea Lavender Way and traverses easterly through Dennery Canyon and open space lands. The alignment
12 continues easterly and passes residential neighborhoods and recreational facilities including the Aquatica
13 San Diego water park and an outdoor amphitheater. East of Heritage Road, the surrounding landscape
14 becomes less urban and characterized by mostly rolling hills and mesas. The topography is rugged and the
15 landscape is relatively arid with vegetation primarily consisting of low-lying shrubs and grasses. The
16 proposed project alignment crosses SR-125 and continues eastward through more open space and rural
17 lands. The eastern portion of the proposed project alignment skirts the western perimeter of a correctional
18 facility and ends in a largely undeveloped area.

19 The built environment includes low- and medium-density residential development in the western portion
20 of the proposed project area. As the alignment enters the City of Chula Vista, the built environment to the
21 north includes an outdoor water park and outdoor amphitheater. In addition, the existing TL 649 alignment
22 is part of the built environment, which includes 30- to 76-foot-tall wood poles along with conductors
23 themselves.

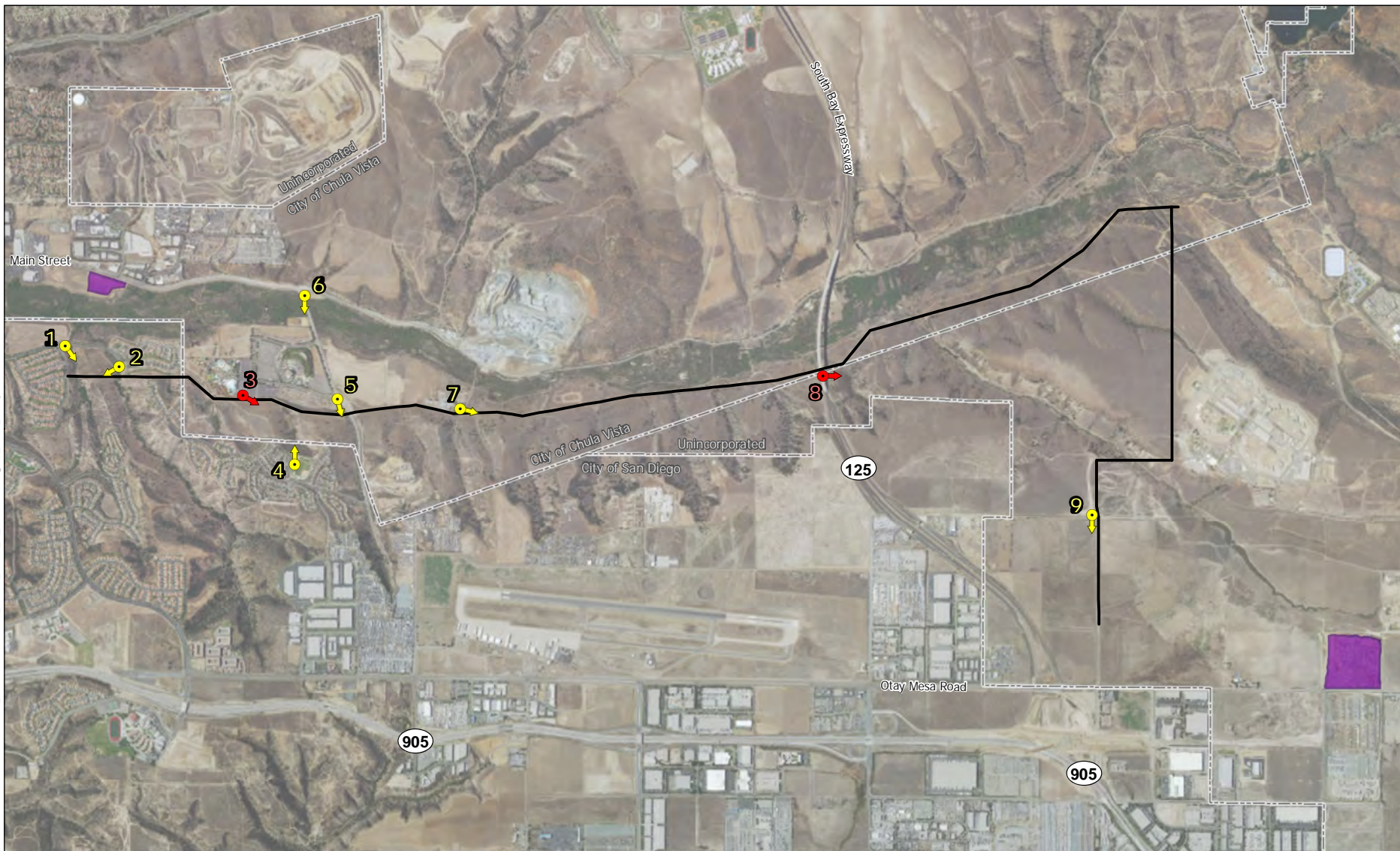
24 With regards to the proposed project area's visual quality, the natural landscapes in combination with
25 residential development and the existing electrical distribution line are characteristic of the region. These
26 elements are commonly seen throughout the southern portion of San Diego County.

27 **Viewer Groups and Viewer Sensitivity**

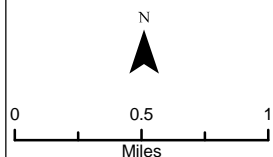
28 Publicly accessible views of the proposed project alignment are primarily available from (1) residential
29 neighborhoods in the cities of San Diego and Chula Vista; (2) publicly accessible trails, open spaces and
30 viewpoints; and (3) publicly accessible roads and SR-125. Views are also available from the nearby parking
31 lots of the outdoor water park and outdoor amphitheater to the north of the project alignment in Chula Vista.



32 Existing views of the proposed project alignment were captured from various vantage points, as shown in
33 Figure 2.1-1. Figure 2.1-2 through 2.1-9 include representative views looking towards the project alignment
34 from Dennery Road, Aquatica San Diego water park, Vista Pacifica Community Park, Heritage Road, Main
35 Street at Heritage Road, an open space area within Otay River Valley, SR-125, and Harvest Road. The
36 photographs presented in Figures 2.1-2 through 2.1-9 were extracted from the SDG&E's PEA for the
37 proposed project (See Appendix D, SDG&E 2015).




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**Figure 2.1-1
Viewpoints of Proposed Project**



-  Viewpoint, visual simulation
-  Viewpoint, photo

-  Proposed Project (TL 649)
-  Staging Yard
-  Municipal Boundaries

Prepared by:



**Tie Line 649 Wood-to-Steel
Replacement Project**



Viewpoint 1: Existing view looking southeast from Dennery Road



Visual simulation of the Proposed Project from Viewpoint 1



Viewpoint 2: Existing view looking west from Topsail Drive and Dennerly Road



Visual simulation of the Proposed Project from Viewpoint 2



Viewpoint 3: View looking southeast from the Aquatica San Diego water park



Viewpoint 8: Existing passenger view looking east-northeast from State Route (SR-) 125

Figure 2.1-4

Existing views of Proposed Project from Viewpoints 3 and 8

Tie Line 649 Wood-to-Steel Replacement Project



Viewpoint 4: Existing view looking north from the north side of Vista Pacifica Community Park



Visual simulation of the Proposed Project from Viewpoint 4

Figure 2.1-5
Existing and Simulated Views of Viewpoint 4

Tie Line 649 Wood-to-Steel Replacement Project



Viewpoint 5: Existing view looking south from Heritage Road



Visual simulation of the Proposed Project from Viewpoint 5

Figure 2.1-6
Existing and Simulated Views of Viewpoint 5
Tie Line 649 Wood-to-Steel Replacement Project



Viewpoint 6: Existing view looking south from Main Street at Heritage Road



Visual simulation of the Proposed Project from Viewpoint 6



Viewpoint 7: Existing view to the east-southeast from an open space area within the Otay River Valley



Visual simulation of the Proposed Project from Viewpoint 7



Viewpoint 9: Existing view looking south from Harvest Road at Lonestar Road



Visual simulation of the Proposed Project from Viewpoint 9

Figure 2.1-9
Existing and Simulated Views of Viewpoint 9
Tie Line 649 Wood-to-Steel Replacement Project

The following text describes the representative views of the proposed project along with visual quality and sensitivity of those views. **Table 2.1-1** summarizes the viewer sensitivity of the major viewer types that would be affected by the proposed project.

- **Viewpoint 1 (Figure 2.1-2, top photograph).** This photograph shows an existing view looking southeast from Dennery Road west of Topside Lane. This view is representative of views available to motorists and pedestrians traveling on Dennery Road. From this perspective, the access road and low-lying shrubs are visible in the foreground. Residential development covering the hillside to the east and the existing TL 649 traversing the canyon can be seen in the backdrop. The open space canyon provides visual contrast to the residential neighborhood, is characteristic of the region's visual amenities, and is judged to have moderate to high visual quality. Because views from Dennery Road would be fleeting for motorists, visual sensitivity is considered low. For residences and pedestrians, the view duration is longer; therefore, visual sensitivity for these viewers is considered moderate.
- **Viewpoint 2 (Figure 2.1-3, top photograph).** This photograph presents an existing view looking west-southwest from Dennery Road west of Topside Lane. From this perspective, views consist of the largely undeveloped Dennery Canyon, access road, and existing transmission line. This photograph is representative of views available from residences located at the eastern end of Dennery Road and western end of Topsail Drive. Similar to Viewpoint 1, the open canyon provides visual contrast to the residential neighborhood. Motorists traveling on Dennery Road and Topside Lane have low visual sensitivity. Since residents and recreationists have longer view durations, visual sensitivity is considered moderate.
- **Viewpoint 3 (Figure 2.1-4, top photograph).** This photograph presents an existing view of the line looking southeast from the Aquatica San Diego water park. Because recreationists at the water park are expected to be focused on activities offered at the park itself and not the surrounding landscape, visual quality is considered moderate and visual sensitivity is considered low to moderate.
- **Viewpoint 4 (Figure 2.1-5, top photograph).** This photograph shows an existing view looking north from the northwest corner of Vista Pacifica Community Park in a residential neighborhood near Dennery Canyon (approximately 0.2 mile away). The prominent visual features include the residential development interspersed with open space, both of which are characteristic of the region's visual quality. From this perspective, visual quality is considered moderate and visual sensitivity is also considered moderate.
- **Viewpoint 5 (Figure 2.1-6, top photograph).** This photograph presents a view looking south from Heritage Road. Views consist of the hillside in the distance, mature trees and vegetation lining along the road, light poles, and the existing transmission line that traverses across the road. Given the mostly undeveloped nature of the surrounding landscape, visual quality is considered moderate. For motorists driving by, views from this perspective are fleeting; thus, visual sensitivity for motorists is considered moderate.
- **Viewpoint 6 (Figure 2.1-7, top photograph).** This photograph presents a view looking south from the Main Street and Heritage Road intersection. From this perspective, the alignment is approximately 0.5 mile away in the middleground. Prominent features include the rolling hills, the wall of the Sleep Train Amphitheater, and the existing transmission line that parallels Heritage Road. Because the open space development provides pleasing visual contrast to nearby development, visual quality is considered moderate. Since views of the project alignment are distant and fleeting for motorists, visual sensitivity is considered low.

- **Viewpoint 7 (Figure 2.1-8, top photograph).** This photograph shows an existing view looking east-southeast from an open space area within the Otay River Valley. This is a representative view of the project alignment from the perspective of recreationists. Views primarily consist of the hilly open space lands and the existing TL 649. Given the undeveloped nature of the area, visual quality and visual sensitivity ratings are considered moderate to high.
- **Viewpoint 8 (Figure 2.1-4, bottom photograph).** This photograph shows an existing view of the alignment looking east from SR-125. From this perspective, the predominant visual features include the open space lands and hillsides in the distance. Although the existing line and poles can be seen, views are somewhat obscured by the presence by the highway and railing as the alignment crosses underneath SR-125. Given the undeveloped and rural nature of the surrounding landscape, visual quality is moderate. Due to the high speed of travel on SR-125 and because views of the existing line are obscured, visual sensitivity is considered low for motorists.
- **Viewpoint 9 (Figure 2.1-9, top photograph).** This photograph shows an existing view looking south from Harvest Road at Lonestar Road. Views consist of the existing alignment and undeveloped lands. Development can be seen in the background (approximately 0.7 mile away). Due to the undeveloped nature of the surrounding landscape, visual quality is moderate. Although motorists have unobstructed views of the alignment, due to the short duration of views, visual sensitivity is considered low to moderate.

Table 2.1-1. Summary of Visual Sensitivity Findings Based on Viewer Types, Visual Exposures, and Visual Quality

Viewpoint Number and Viewer Type	Visual Quality	View Exposure	Visual Sensitivity	Visible Pole Location Numbers
Motorists				
1. Dennery Road*	Moderate	Foreground Distance Unobstructed View Moderate Number of Viewers Moderate View Duration	Low to Moderate	4, 5, 6
5. Heritage Road*	Moderate	Foreground Distance Unobstructed View Moderate Number of Viewers Short View Duration	Moderate	17, 18
6. Heritage Road/Main Street*	Moderate	Middleground Distance Partially-obstructed View Due to Intervening Vegetation Moderate Number of Viewers Short View Duration	Low	14, 15, 16, 17
8. SR-125	Moderate	Foreground Distance Partially-obstructed View Due to Highway and Railing High Number of Viewers Short View Duration	Low	51, 52, 53

Viewpoint Number and Viewer Type	Visual Quality	View Exposure	Visual Sensitivity	Visible Pole Location Numbers
9. Harvest Road*	Moderate	Foreground Distance Unobstructed View Short View Duration	Low to Moderate	110, 111, 112, 113, 114, 115, 116, 117
Residences				
2. Dennery Road and Topsail Drive*	Moderate	Foreground Distance Obstructed to Unobstructed View Long View Duration	Moderate	4, 5, 6
Recreationists				
4. Vista Pacifica Community Park*	Moderate	Foreground Distance Unobstructed View Moderate Number of Viewers Moderate View Duration	Moderate	14, 15
7. Otay River Valley Open Space Area*	Moderate to High	Foreground Distance Unobstructed View Moderate Number of Viewers Moderate View Duration	Moderate to High	28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38
3. Aquatica water park and Sleep Train amphitheater	Moderate	Foreground Distance Unobstructed View High Number of Viewers Low View Duration	Low to Moderate	12, 13

*Simulations were prepared for these viewpoints.

Regulatory Setting

Federal

No federal regulations are applicable to aesthetics in relation to the proposed project.

State

California Scenic Highway Program

In 1963, the California Legislature created the Scenic Highway Program to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to the highways. The state regulations and guidelines governing the Scenic Highway Program are found in Section 260 through 263 of the Streets and Highways Code. A highway may be designated as scenic depending on how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the travelers' enjoyment of the view (California Department of Transportation [Caltrans] 2008).

There are no state-designated scenic highways within the vicinity of the proposed project. SR-125 is considered scenic in an area outside of the project area (from SR-91 to SR-8 near La Mesa).

Local

Because the CPUC regulates and authorizes the construction of investor-owned public utility facilities, the CPUC has exclusive jurisdiction over the siting and design of the proposed project. As such, projects under CPUC jurisdiction, including the proposed project, are exempt from local regulations and permitting. However, Section III.C of CPUC GO 131-D (planning and construction of facilities for the generation of electricity and certain electric transmission facilities) requires “the utility to communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any non-discretionary local permits.” As a result, SDG&E has taken into consideration local plans and policies as they relate to aesthetic resources. Although County and City local policies are listed below, they are provided for disclosure purposes only.

County of San Diego General Plan

The Conservation and Open Space Element of the County of San Diego General Plan includes goals and policies pertinent to the protection of scenic corridors, scenic viewsheds, and dark skies within the natural environment. There are no County-designated scenic routes in the project vicinity. However, the project area is situated within the planned Otay Valley Regional Park, which is planned within the open space corridor along the Otay River. The following policies in the County of San Diego General Plan are relevant to the proposed project:

- **LU-2.8 Mitigation of Development Impacts.** Require measures that minimize significant impacts to surrounding areas from uses or operations that cause excessive noise, vibrations, dust, odor, aesthetic impairment and/or are detrimental to human health and safety.
- **LU-15.1 Telecommunication Facilities Compatibility with Setting.** Require that wireless telecommunication facilities be sited and designed to minimize visual impacts, adverse impacts to the natural environment, and are compatible with existing development and community character.
- **COS-11.1 Protection of Scenic Resources.** Require the protection of scenic highways, corridors, regionally significant scenic vistas, and natural features, including prominent ridgelines, dominant landforms, reservoirs, and scenic landscapes.
- **COS-11.2 Scenic Resource Connections.** Promote the connection of regionally significant natural features, designated historic landmarks, and points of regional historic, visual, and cultural interest via designated scenic corridors, such as scenic highways and regional trails.
- **COS-11.3 Development Siting and Design.** Require development within visually sensitive areas to minimize visual impacts and to preserve unique or special visual features, particularly in rural areas, through the following:
 - Creative site planning
 - Integration of natural features into the project
 - Appropriate scale, materials, and design to complement the surrounding natural landscape
 - Minimal disturbance of topography
 - Clustering of development so as to preserve a balance of open space vistas, natural features, and community character

- Creation of contiguous open space networks

- **COS-11.5 Collaboration with Private and Public Agencies.** Coordinate with the California Public Utilities Commission, power companies, and other public agencies to avoid siting energy generation, transmission facilities, and other public improvements in locations that impact visually sensitive areas, whenever feasible. Require the design of public improvements within visually sensitive areas to blend into the landscape.

City of San Diego General Plan

The City of San Diego's Otay Mesa Community Plan Update, which is part of the City of San Diego's General Plan, was adopted in March 2014. This plan acknowledges open space corridors within Otay Mesa offer potential recreation opportunities with trails and scenic overlook areas, including within Dennery Canyon. The Plan identifies potential view corridor opportunities in the project area:

- Dennery Road and Topside Lane (approximately 0.1 mile north of the proposed project alignment)
- Avenida de las Vistas near its intersection with Vista San Rafael (approximately 0.5 mile south of the proposed project alignment)
- On the north side of Vista Pacifica Neighborhood Park (approximately 0.2 mile south of the project alignment)
- North of Pogo Row (three view corridors approximately 0.3 mile south of the proposed project alignment)

Policies pertaining to scenic resource protection in the Otay Mesa region that are relevant to the proposed project include the following:

- 4.12-1. Protect and enhance major and minor public view corridors and access corridors within Otay Mesa.
 - Integrate and coordinate public view areas with public access to open space linkages where appropriate.
 - Locate public view areas within parks or trail staging areas when appropriate.

City of Chula Vista General Plan

According to the City of Chula Vista General Plan, the portions of the project alignment that travel through the City of Chula Vista are designated as open space and open space preserve. The general plan values scenic vistas and open space including the Otay River Valley. Based on the Land Use and Transportation chapter of the City of Chula Vista's General Plan, the following roads that would be crossed by the project alignment are identified as scenic roadways:

- Main Street from Interstate (I)-805 to Heritage Road (adjacent to the Main Street Staging Yard)
- Heritage Road from Telegraph Canyon Road to the City of Chula Vista southern boundary

Policies pertinent to aesthetics/scenic resources within the Land Use and Transportation chapter of the City of Chula Vista's General Plan include the following:

- **LUT 10.7** – Work with utility providers to coordinate the design of utility facilities (e.g., substations, pump stations, switching buildings, etc.) to ensure that the facilities fit within the context of their surroundings and do not cause negative visual impacts.
- **LUT 13.1** – Identify and protect important public viewpoints and viewsheds throughout the planning area, including features within and outside the planning area, such as: mountain; native habitat areas; San Diego Bay; and historic resources.

2.1.2 Environmental Impacts

a. Would the project have a substantial adverse effect on a scenic vista? (Less than Significant)

For the purposes of this analysis, a scenic vista is considered a view of an area that is recognized for its scenery and valued for its scenic quality and includes views from locally designated scenic roads. Although there are no state-designated scenic vistas in the project vicinity, as described in Section 2.1.1, Setting, local vistas and scenic corridors are designated by the cities of San Diego and Chula Vista. According to the City of Chula Vista General Plan, the following roads are considered scenic roadways: Main Street (from I-805 to Heritage Road) and Heritage Road (from Telegraph Canyon Road to the City of Chula Vista southern boundary). Within 0.25 mile, the Otay Mesa Community Plan also acknowledges potential scenic viewing opportunities of Dennerly Canyon and the greater Otay Valley from the following points: Dennerly Canyon Road (west of Topside Lane) and Vista Pacifica Neighborhood Park. Representative views from these locations are Viewpoints 1, 2, 4, 5, and 6 which are presented in Figures 2.1-2, 2.1-3, 2.1-5, 2.1-6, and 2.1-7, respectively. The other viewpoints presented in Figure 2.1-1 are described under the criterion c. discussion below.

Construction

The Otay Staging Yard would not be visible from any scenic vistas. Motorists driving along Main Street would have close-up views of equipment and materials stored at the Main Street Staging Yard. However, due to the speed of travel, views from this scenic road would be brief and would not result in a substantial adverse effect.

Close-up views of proposed construction activities, including equipment, materials, vehicles, and work crews along the proposed project alignment, would be visible from the adjacent residential neighborhood along Dennerly Road (Viewpoints 1 and 2). Views of the project alignment would also be visible from the north side of Vista Pacifica Neighborhood Park (Viewpoint 4), but they would be distant at approximately 0.2 mile away. There would also be close-up views of the alignment for motorists traveling on Heritage Road (Viewpoint 5), but they would be fleeting as the cars are moving quickly past the alignment. From Main Street and Heritage Road (Viewpoint 6), views of project construction activities along the alignment would be barely visible due to distance (approximately 0.5 mile away), intervening topography, and the high speed of travel.

Although project construction activities would be visible at varying degrees at the above-described viewpoints, views of these areas would be brief in duration and short-term. As a result, construction-related impacts, including the staging of equipment, on scenic vistas would be less than significant.

Operation and Maintenance

Simulations were developed for Viewpoints 1, 2, 4, 5, and 6, which are presented in Figures 2.1-2, 2.1-3, and 2.1-5 through 2.1-7. These simulations are from SDG&E's PEA (SDG&E 2015). As shown in these simulations and described in more detail in criterion c. below, the increase in pole heights and change in

pole material (from wood to steel) would result in an incremental visual change from these viewpoints. In general, these five views are dominated by the grass-covered hills and changes in topography. From Heritage Road, close-up views of the new poles and conductors would be clearly visible but due to the speed of travel, the duration of such views would be brief. Similarly, as shown in the simulations in Viewpoints 1 and 2 in Figures 2.1-2 and 2.1-3, views from Dennery Canyon Road would remain dominated by the canyon itself. Due to distance, and as shown in the simulations in Viewpoints 6 and 4 in Figures 2.1-7 and 2.1-5, respectively, the new poles would hardly be noticeable from Heritage Road and Main Street and Vista Pacifica Neighborhood Park. Because the increased pole height and material type would constitute an incremental visual change, the poles would be installed generally in the same location as the existing poles, and views of the proposed project alignment would be brief in duration, long-term impacts on scenic vistas would be less than significant.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (No Impact)

As described in the section above (see criterion a.), the proposed project would be visible from some locally designated scenic roadways and for the purposes of this analysis, those views are considered scenic vistas. The proposed project alignment is not visible from any officially designated scenic highway and does not include any scenic resources within the area of a designated state scenic highway. Therefore, the proposed project would not result in substantial damage to scenic resources within a state scenic highway. There would be no impact.

c. Would the project substantially degrade the existing visual character or quality of the site and its surroundings? (Less than Significant)

Construction

As described above under criterion a., at varying levels of degree, motorists, residents and recreationists would have temporary views of construction equipment, materials, and activities from local roads, parks, and open space areas.

Motorists traveling on Main Street would have brief views of the Main Street Staging Yard. Similarly, motorists traveling on Otay Mesa Road may have partial and fleeting views of equipment and materials stored at the Otay Staging Yard. Because both staging yards would be located in areas with industrial uses (e.g., the Otay Staging Yard is a wrecking yard), the presence of construction equipment and materials at these sites are not expected to substantially degrade the existing industrial character of these sites or surrounding areas.

As described under criterion (a) above, proposed construction activities along the proposed project alignment would be faintly visible from the adjacent residential neighborhood along Dennery Road (Viewpoints 1 and 2), and from the north side of Vista Pacifica Neighborhood Park (Viewpoint 4). There would also be close-up views of the alignment for motorists traveling on Heritage Road (Viewpoint 5). Because views would be distant, in the case of Viewpoints 1 and 4, and in the case of Viewpoint 5, would be fleeting as cars are moving quickly past the alignment, construction-related impacts on visual character or quality of the project site and surroundings would be considered less than significant. From Main Street and Heritage Road (Viewpoint 6), views of project construction activities along the alignment would be barely visible due to distance (approximately 0.5 mile away), intervening topography, and the high speed of travel.

For these reasons, construction-related impacts on visual character or quality of the project site and surroundings would be less than significant.

Operation and Maintenance

Once construction is completed, the new poles would range between 84 and 90 feet tall and would have a galvanized steel finish. As discussed in Section 1.5.1, Pole Installation and Removal, most new poles would be installed in line with the existing conductor and would be within 10 feet of existing pole locations. Other poles would be constructed in the general vicinity of the existing pole locations.

Visual simulations of Viewpoints 1, 2, 4, 5, 6, 7, and 9 are presented in Figures 2.1-2, 2.1-3, 2.1-5 through 2.1-9 (bottom photograph). These viewpoints and photographs have been selected as being representative of the types of views that would affect the most sensitive viewer groups from publicly accessible areas; no simulations were prepared for Viewpoints 3 and 8. The following discussion describes the change in visual character at each of these viewpoints.

- **Viewpoints 1 and 2 (see Figures 2.1-2 and 2.1-3):** The photograph at Viewpoint 1 was taken looking southeast from Dennery Road west of Topsail Drive and the photograph at Viewpoint 2 was taken looking southwest from the Dennery Road and Topsail Drive intersection. As shown in the existing views, the landscape is characterized by the chaparral and coastal sage scrub-covered hillsides, residential development, and the existing transmission line. Visual quality of the area is considered moderate as the shrub-covered hills provide pleasing contrast to the nearby residential development. The simulated view shows the replaced poles and transmission line, which are visible in the foreground. While the poles would be taller and consist of a different finish, the conversion in wood to steel poles would not substantially alter the overall view of the landscape and the project would not substantially degrade the visual character of quality of the site or its surroundings.
- **Viewpoint 4 (see Figure 2.1-5):** The photograph at Viewpoint 4 was taken from the north side of the Vista Pacifica Community Park. This photograph represents a view corridor as identified in the Otay Mesa Community Plan Update. This particular photograph captures the perspective of park users, which primarily consist of residents who live nearby. The proposed project alignment is situated against a background consisting of the Aquatica San Diego water park and Sleep Train amphitheater. Beyond these man-made facilities, views of open space lands can be seen. From this perspective, the poles visible in Viewpoint 4 are expected to increase in height by approximately 2 to 10 feet from their existing heights of 60 and 68 feet tall, respectively. Due to distance, the increased height and new finish of the poles would not be noticeable from this particular viewpoint. For this reason and because the new poles and conductor would be consistent with the existing visual character, the proposed project would not substantially degrade the visual character or quality of the site or its surroundings.
- **Viewpoint 5 (see Figure 2.1-6):** The photograph at Viewpoint 5 was taken from Heritage Road south of its intersection with Entertainment Circle looking south. This vantage point captures the perspective of motorists traveling south along Heritage Road. As depicted in the existing view, the landscape is characterized by the shrub-covered hills, landscaping along the roadway, light poles, and the existing TL 649. As shown in the simulated view, the two poles presented are anticipated to increase in height from approximately 66 feet tall to approximately 75 feet tall. The galvanized steel poles would be taller and consist of a more urban character than the existing wood poles. In particular, Pole No. 17 (shown to the right) would be larger and more prominent for passing motorists. Due to the speed of travel and because the proposed poles and transmission line would be generally consistent with the existing structures, the proposed project would not substantially degrade the visual character or quality of the site or its surroundings.
- **Viewpoint 6 (see Figure 2.1-7):** The photograph at Viewpoint 6 was taken from the Heritage Road and Main Street intersection looking south, approximately 0.5 mile away from the proposed project

alignment. As described in Section 2.1.1, Main Street is identified as a locally scenic roadway in the City of Chula Vista General Plan. This vantage point captures the perspective of motorists traveling on Main Street at Heritage Road. The heights of three of the poles in the simulation would increase by approximately 10 feet, 2 feet, and 9 feet, respectively. Pole No. 16 would decrease in height by approximately 2 feet. Views of other utility poles, landscaping, and the hills in the background are the dominant visual features. The presence of intervening landscaping and the wall of the amphitheater obscure views of the current alignment and, once the project is completed, would continue to screen views of the proposed project alignment. Because of the project alignment's distance from Viewpoint 6 and for the reasons described above, the proposed project would not substantially degrade the visual character or quality of the site or its surroundings.

- **Viewpoint 7 (see Figure 2.1-8):** The photograph at Viewpoint 7 was taken from an open space area within the Otay River Valley. As the proposed project alignment runs parallel to the open space corridor, recreationists (e.g., hikers) would have close-up views of the new poles and conductor line for several miles. From this vantage point, the two poles shown closest to the viewer are projected to increase by approximately 4 feet in height. Although the galvanized steel finish of the poles would be more urban/industrial in character in comparison to the existing wood poles, the grey-colored finish would still blend in with the landscape. Therefore, from this perspective, the proposed project would not substantially degrade the visual character or quality of the site or its surroundings. This impact would be less than significant.
- **Viewpoint 9 (see Figure 2.1-9):** The photograph at Viewpoint 9 was taken southwest of the Richard J. Donovan Correctional Facility at Harvest Road and Lonestar Road. The heights of existing poles range from approximately 54 to 57 feet and are estimated to increase in height by approximately 11 to 22 feet. The proposed changes would be visible to motorists traveling on Harvest Road. Like other views, the galvanized steel finish of the poles would introduce a more urban/industrial character to the landscape but since the poles would be similar in nature with the existing poles, the introduction of steel poles would not substantially change or degrade the visual character or quality of the site and surroundings. For these reasons, from this perspective, the impact would be less than significant.

Visual simulations show that new galvanized steel poles and new conductor lines would not substantially alter the overall visual character of the project area. The open space areas consisting of canyons and mesas would remain as the dominant visual features in the landscape. The change in pole heights ranging from a reduction in height of approximately 2 feet to an increase of approximately 33 feet, and the change in reflectivity of the new poles would constitute a minor to moderate change in the project area's visual character. Visual changes would be more perceptible from close-up views such as Viewpoints 1, 2, 5, 7, and 9. However, most of these views are located along public roadways where view durations would be brief due to the speed of travel (35 miles per hour [mph] or more). Visual changes associated with the new poles may also be noticeable to recreationists from Viewpoint 7 but, as described above, the open space canyons and mesas would remain the dominant visual features in the landscape and the replacement of steel poles would not substantially degrade the existing visual character. Visual changes associated with the proposed project would be less noticeable from viewpoints located in the middle ground distance (e.g., Viewpoint 6). In conclusion, because views of the project components would be brief and the change in pole heights and finish would constitute a minor change relative to the overall landscape, the proposed project's effect on visual character and quality of the project area would be less than significant.

1 *d. Would the project create a new source of substantial light or glare which would adversely*
2 *affect day or nighttime views in the area? (Less than Significant with Mitigation)*

3 As discussed in Section 1.7.10, Schedule, throughout construction duration, construction activities would
4 primarily occur Monday through Saturday for a maximum of 12 hours per day. While most construction
5 would take place during daytime hours, on occasion some construction activities may be required at night
6 to minimize impacts to the construction schedule and to facilitate cutover work, as required by other
7 property owners or agencies (e.g., the California Independent Service Operator). If nighttime lighting is
8 required, it could extend up to 12 hours within a 24-hour work day for up to five pole locations at any given
9 time. Each pole would require one portable generated light tower. In the event that nighttime lighting is
10 needed near the residential areas (e.g., the western portion of the project alignment), temporary views of
11 nighttime construction lighting could adversely affect adjacent residences and motorists traveling on the
12 affected roadway. This is considered a potentially significant impact. To minimize any temporary adverse
13 effects on residential views during the duration of nighttime construction, implementation of Mitigation
14 Measure AES-1 would ensure that nighttime construction lighting is shielded and oriented downward and
15 would reduce this impact to a less-than-significant level.

16 Once construction is complete, no new permanent lighting would be required for the proposed project. The
17 new steel poles could create a new source of glare due to their finish. The poles would consist of galvanized
18 steel. Over time, galvanized steel typically weathers and becomes duller in appearance. Any potential glare
19 generated by the new conductors would be similar to the current conductor lines. As a result, light and glare
20 impacts would be considered less than significant.

21 **Mitigation Measure AES-1: Nighttime Construction Lighting**

22 If nighttime construction lighting is required near residential areas, the construction contractor
23 shall shield and orient lighting downward to minimize effects on nearby receptors. Lighting
24 shall be directed toward active construction areas only, and shall have the minimum brightness
25 necessary to ensure worker safety.

1

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1 2.2 Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2 2.2.1 Setting

3 *Environmental Setting*

4 The proposed project alignment does not cross, and poles and associated work areas are not located within,
5 any lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; or land
6 under a Williamson Act Contract (California Department of Conservation [CDC] 2014a and 2014b). The
7 proposed project section of the existing alignment crosses lands designated as Farmland of Local
8 Importance, as summarized in **Table 2.2-1** (CDC 2014a).

Table 2.2-1. Farmland of Local Importance

Jurisdiction	Approximate Length of Farmland of Local Importance Traversed (miles)	Poles located Within Farmland of Local Importance
City of San Diego	Less than 0.1	1
City of Chula Vista	2.0	9, 11, 12, 14, 15, 16, 17, 18.3, 18.31, 33, 34, 35, 36, 37, 37.1, 38, 47, 48, 49, 50, 50.1, 50.2, 51, 52, 53, 55, 56, 59, 60, 61, 62, 63, 63.1, 64, B
Unincorporated San Diego County	1.3	83, 84, 85, 86, 88, 89, 90, 91, 92, 93, 94, 95, 96, 108, 108.1, 109, 110, 111, 112, 113, 114, 115, 116, 117
Total	3.3	—

Source: SDG&E 2015

As described in Section 2.10, Land Use and Planning, in general, west of Heritage Road, the proposed project would traverse open space lands surrounded by residential and recreational uses; the central portion of the project alignment would traverse mostly rural/undeveloped and open space lands; and the eastern end of the project alignment would travel within the property boundary of the Richard J. Donovan Correctional Facility and adjacent to open space lands to the west. Although a section of the existing alignment crosses land zoned Agricultural for 0.7 mile and Residential-Agricultural for 0.2 mile west of Heritage Road, these lands are not currently being used for agricultural purposes (SDG&E 2015). New poles would typically be placed in line with the existing alignment and within 10 feet of existing poles, therefore, agricultural lands crossed by the proposed project segment are already characterized by the existence of TL 649. No portion of the proposed project alignment is currently under active agricultural crop cultivation or being used for livestock grazing (SDG&E 2015). The proposed project does not cross any forest land or land zoned as forest land, timberland, or timberland zoned Timberland Production (U.S. Forest Service [USFS] 2016). The Cleveland National Forest is located approximately 14 miles northeast of the eastern boundary of the proposed project alignment.

Regulatory Setting

Federal

Farmland Protection Policy Act of 1981

The U.S. Department of Agriculture (USDA) administers the Farmland Protection Policy Act (FPPA) of 1981, which is intended to minimize the extent to which federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses. It assures that to the extent possible federal programs are administered to be compatible with state, local units of government, and private programs and policies to protect farmland. For the purpose of the FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land, but not water or urban built-up land (USDA 2016).

State

Farmland Mapping and Monitoring Program

The CDC established the Farmland Mapping and Monitoring Program (FMMP) in 1982, as a non-regulatory program to provide a consistent and impartial analysis of agricultural land use and land use

changes throughout California. Creation of the FMMP was supported by the Legislature and a broad coalition of building, business, government, and conservation interests. The first Important Farmland Maps, produced in 1984, covered 30.3 million acres in 38 counties. This is an ongoing data set that collects data every 2 years to understand changes in agricultural land in the state. Data now spans more than 24 years and has expanded to 49.1 million acres as modern soil surveys have been completed by USDA. FMMP now maps agricultural and urban land use for nearly 98 percent of the state's privately held land (CDC 2015a). FMMP rates and classifies agricultural land according to soil quality, irrigation status, and other criteria. Important Farmland categories are as follows (CDC 2015b):

- **Prime Farmland.** Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. These lands have the soil quality, growing season, and moisture supply needed to produce sustained high yields. Prime Farmland must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.
- **Farmland of Statewide Importance.** Farmland similar to Prime Farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Farmland of Statewide Importance must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.
- **Unique Farmland.** Farmland of lesser quality soils used for the production of the state's leading agricultural crops. These lands are usually irrigated but might include non-irrigated orchards or vineyards, as found in some climatic zones. Unique Farmland must have been cropped at some time during the 4 years before the FMMP's mapping date.
- **Farmland of Local Importance.** Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

Williamson Act

The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) allows local governments to enter into contracts with private landowners for the purpose of preventing conversion of agricultural land to non-agricultural uses. In exchange for restricting their property to agricultural or related open space use, landowners who enroll in Williamson Act contracts receive property tax assessments that are substantially lower than the market rate (CDC 2015c).

Local

Because the CPUC regulates and authorizes the construction of investor-owned public utility facilities, the CPUC has exclusive jurisdiction over the siting and design of the proposed project. As such, projects under CPUC jurisdiction, including the proposed project, are exempt from local land use regulations, permitting, and discretionary policies. However, Section III.C of CPUC GO 131-D (planning and construction of facilities for the generation of electricity and certain electric transmission facilities) requires "the utility to communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any non-discretionary local permits." As a result, CPUC has taken into consideration all State and local plans and policies as they relate to agricultural and forestry resources. Although County and City policies are listed below, they are provided for disclosure purposes only.

San Diego County General Plan

The Land Use Element of the existing San Diego County General Plan contains the following goals and policies that are relevant to the proposed project (San Diego County 2011b):

- **Goal LU-2 Maintenance of the County’s Rural Character.** Conservation and enhancement of the unincorporated County’s varied communities, rural setting, and character.
- **Policy LU-5.3 Rural Land Preservation.** Ensure the preservation of existing open space and rural areas (e.g., forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, and groundwater recharge areas) when permitting development under the Rural and Semi-Rural Land Use Designations.
- **Goal LU-7 Agricultural Conservation.** A land use plan that retains and protects farming and agriculture as beneficial resources that contribute to the County’s rural character.
- **Policy LU-7.1 Agricultural Land Development.** Protect agricultural lands with lower-density land use designations that support continued agricultural operations.

The Conservation and Open Space Element of the existing San Diego County General Plan contains the following goals and policies that are relevant to the proposed project (San Diego County 2011a):

- **Goal COS-6 Sustainable Agricultural Industry.** A viable and long-term agricultural industry and sustainable agricultural land uses in the County of San Diego that serve as a beneficial resource and contributor to the County’s rural character and open space network.
- **Policy COS-6.1 Economic Diversity.** Support the economic competitiveness of agriculture and encourage the diversification of potential sources of farm income, including value added products, agricultural tourism, roadside stands, organic farming, and farmer’s markets.
- **Policy COS-6.2 Protection of Agricultural Operations.** Protect existing agricultural operations from encroachment of incompatible land uses.

San Diego County Otay Subregional Plan

The County of San Diego Otay Subregional Plan contains the following policy relevant to the proposed project (San Diego County 2011c):

- **Land Use A-5 Encourage Interim Agriculture.** Because (a) the long-term development of Otay Mesa will provide opportunities for continued agricultural production as an interim use and (b) such interim uses are compatible with industrial uses as has been demonstrated in many other areas in California and throughout the United States, the County recognizes the opportunities for interim agricultural uses on the Otay Mesa and will, in cooperation with affected property owners, encourage such uses to the greatest extent possible.

City of San Diego General Plan

There are no policies related to agricultural resources provided in the City of San Diego General Plan or General Plan 2010, 2012, and 2015 Amendments (City of San Diego 2008, 2010, 2012, 2015).

City of Chula Vista General Plan

The Environmental Element of the existing City of Chula Vista General Plan contains the following objective relevant to the proposed project (City of Chula Vista 2005):

- **Chapter 9 Objective E4.** Maintain the opportunity for limited agricultural and related uses to occur as an interim land use within the planned development areas and as a potential permanent land use within appropriate locations.

2.2.2 Environmental Impacts

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? (No Impact)

The proposed project is not located in any areas designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the FMMP of the California Resources Agency. The proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, there would be no impact.

b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract? (Less than Significant)

As discussed above under Section 2.2.1, Setting, the approximately 7-mile project alignment would mostly be constructed on vacant, open space land. The proposed project would cross land zoned Agricultural and Residential-Agricultural and land designated as Farmland of Local Importance as defined under the CDC's FMMP. However, because the proposed project would replace existing wood pole structures with steel pole structures within generally the same alignment, the proposed project would not conflict with agricultural zoning or result in any changes to existing land uses. The proposed project is not located in any areas that are under a Williamson Act contract. Therefore, this impact would be less than significant.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220 (g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined in Government Code Section 51104(g))? (No Impact)

There is no forested land or timberland in the project area; therefore, the proposed project would have no effect on forested land nor any zoning regulations designating forested land, timberland, or timberland zoned for Timberland Production. Therefore, there would be no impact.

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use? (No Impact)

There is no forested land or timberland in the project area; therefore, the proposed project would have no impact on forest land.

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use? (Less than Significant)

Portions of the proposed project alignment would traverse land designated as Farmland of Local Importance as defined under the FMMP (refer to Table 2.2-1). The proposed project involves wood-to-steel pole replacement activities and the associated transferring or replacing of existing conductors and ancillary

1 facilities to new replacement poles. No new facilities would be constructed. During construction, new poles
2 would primarily be located immediately adjacent to existing poles, and temporary access roads would be
3 used. Construction of the proposed project would temporarily impact 12.6 acres of Farmland of Local
4 Importance and result in the permanent conversion of approximately 0.03 acre of Farmland of Local
5 Importance to non-agricultural use (SDG&E 2015). However, as stated previously, no land designated as
6 Farmland of Local Importance in the proposed project area is currently being used for active crop cultivation
7 or grazing. Additionally, because the amount of land that would be disturbed is minor and so close to the
8 existing pole locations, impacts to the ability of surrounding agricultural operations to sustain future
9 agricultural activities would not change as a result of the proposed project, and the proposed project would
10 not preclude farming or grazing activities to be conducted on Farmland of Local Importance in the future.

11 Operation and maintenance of the proposed project would involve annual inspection and repair of the power
12 line, pole brushing, and other approved activities consistent with current operation and maintenance plans
13 and procedures. These activities would be conducted using existing access and spur roads and would not
14 require the creation of additional roads that could convert farmland to non-agricultural use. There is no
15 forested land in the project area. Therefore, this impact would be less than significant.

2.3 Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.3.1 Setting

Environmental Setting

The project site is located in San Diego County within portions of the City of San Diego, the City of Chula Vista, and unincorporated County areas all within the San Diego Air Basin.

The San Diego Air Basin encompasses approximately 4,260 square miles and is bounded on the north by Orange and Riverside Counties, on the east by Imperial County, on the west by the Pacific Ocean, and on the south by the Mexican State of Baja California (San Diego County 2007). The Laguna Mountain Range, which runs approximately parallel to the coast, divides the County about 45 miles inland and separates the County's coastal areas from its desert areas. In the County's coastal areas, coastal terraces rise from the ocean into wide mesas which then, eventually, transition into the Laguna Foothills. The Santa Ana Mountains, which run along the coast of Orange County, are north of San Diego County and travel east to join with the Laguna Mountains near the San Diego-Orange County border. (San Diego County 2007).

The strength and position of the semi-permanent high-pressure system over the Pacific Ocean, known as the Pacific High, is the predominant factor affecting the climate of the San Diego Air Basin. The Pacific High system creates a pattern of late-night and early-morning low clouds, hazy afternoon sunshine, daytime onshore breezes, and minimal variation in temperatures year-round. San Diego has a Mediterranean climate, with warm, dry summers and mild, wet winters. Precipitation in the basin ranges from an annual approximate average of 10 inches on the coast to over 30 inches in the Laguna mountains. The average annual precipitation in the desert regions of the County generally range from 4 to 6 inches per year. (San Diego County 2007).

San Diego's climate, particularly the Pacific high pressure, contributes to the creation of air pollution problems. The Pacific high pressure causes sinking, or subsiding air to create a temperature inversion, known as a subsidence inversion, which prevents the vertical dispersion of pollutants. In addition, horizontal pollutant dispersion is limited during the summer because of weak pressure gradients in the mixed layer below the subsidence inversion. Thus, air quality pollutants emitted by human activities end up undergoing

photochemical reactions from exposure to strong sunshine and resulting in the creation of ozone at this surface layer.

Southern California commonly experiences daytime onshore flow (i.e., sea breeze) and nighttime offshore flow (i.e., land breeze). Sea breeze moderates daytime temperatures in the western portion of San Diego County, and blows emissions out to sea at night and returns emissions to land the following day. Sometimes these conditions can lead to the offshore transport of more air pollutants from the Los Angeles region to San Diego County and higher ozone concentrations being measured in San Diego County. In addition, high levels of ozone are transported into San Diego County from Los Angeles due to the stable layer of the elevated subsidence inversion. (San Diego County 2007).

San Diego County is designated as a federal and state non-attainment area for ozone and state non-attainment for particulate matter of aerodynamic radius of 10 micrometers or less (PM_{10}) and particulate matter of aerodynamic radius of 2.5 micrometers or less ($PM_{2.5}$). It is in attainment or unclassified for all other federal and state criteria air pollutants, as shown in **Table 2.3-1**.

Surrounding land uses along the proposed project TL 649 alignment and associated staging yards includes residential, active recreation, public/institutional (Richard J. Donovan Correctional Facility), open space, rural/undeveloped, and light industrial lands (see Figure 2.10-1, Existing Land Use Types). In general, west of Heritage Road, the proposed project would traverse open space lands surrounded by residential and recreational uses including a water park and outdoor amphitheater to the north. The nearest residences to the stringing sites are located approximately 25 feet north and approximately 40 feet south of the stringing site along Sea Lavender Way in the City of San Diego (see Figure 2.12-1, Receptors). There are also residences located approximately 75 feet north of the proposed project alignment within the City of San Diego (between Wood-to-Steel Replacement Pole Nos. 4 through 7; see Appendix A, Detailed Route Mapset, and Figure 2.12-1, Receptors).

The central portion of the project alignment occurs within undeveloped open space, public and rural lands located in Southern Chula Vista. The Richard J. Donovan Correctional Facility is adjacent to approximately nine poles of the eastern portion of the project alignment. There are 19 schools within 2 miles of the proposed project alignment, as depicted in **Figure 2.14-1**, Public Services. The school nearest to the proposed project alignment (approximately 1 mile to the southwest) is Ocean View Hills School, located at 4919 Del Sol Boulevard in San Diego. The closest daycare, Mi Casita Daycare, is located approximately 1,600 feet northwest of the western portion of the proposed project alignment. Kaiser Permanente Adult and Pediatric Urgent Care is located approximately 0.6 mile southwest of the western terminus of the proposed project alignment at 4650 Palm Avenue in San Diego (see Figure 2.14-1, Public Services). The Melrose Care Home II, an assisted living facility, is located approximately 1.2 miles northwest of the proposed project alignment.

Regulatory Setting

Federal

The Clean Air Act (CAA) is implemented by the U.S. Environmental Protection Agency (USEPA) and sets ambient air limits, the National Ambient Air Quality Standards (NAAQS), for six criteria pollutants: PM_{10} , $PM_{2.5}$, carbon monoxide (CO), nitrogen dioxide (NO_2), ground-level ozone, and lead. Of these criteria pollutants, particulate matter (PM) and ground-level ozone pose the greatest threats to human health. Table 2.3-1 shows the current attainment status for the federal and state ambient air quality standards.

State

The California Air Resources Board (CARB) sets standards for criteria pollutants in California that are more stringent than the NAAQS and include the following additional contaminants: visibility-reducing particles, hydrogen sulfide, sulfates, and vinyl chloride.

Table 2.3-1. Attainment Status of the State and Federal Ambient Air Quality Standards for Proposed Project Area within the San Diego Air Basin

Contaminant	Averaging Time	Concentration	State Standards Attainment Status ¹	Federal Standards Attainment Status ²
Ozone	1-hour	0.09 ppm	Nonattainment	See footnote 3
	8-hour	0.070 ppm	Nonattainment	Nonattainment (marginal), See footnote 3
Carbon Monoxide	1-hour	20 ppm	Attainment	
		35 ppm		Unclassified/Attainment
	8-hour	9.0 ppm	Attainment	Unclassified/Attainment
Nitrogen Dioxide	1-hour	0.18 ppm	Attainment	
		0.100 ppm ⁵		Unclassified/Attainment
	Annual arithmetic mean	0.030 ppm	Attainment	
		0.053 ppm		Unclassified/Attainment
Sulfur Dioxide	1-hour	0.25 ppm	Attainment	
		0.075 ppm		Attainment
	24-hour	0.04 ppm	Attainment	
		0.14 ppm		Attainment
	Annual arithmetic mean	0.030 ppm		Attainment
Particulate Matter (PM ₁₀)	24-hour	50 µg/m ³	Nonattainment	
		150 µg/m ³		Unclassified
	Annual arithmetic mean	20 µg/m ³	Nonattainment	
Fine Particulate Matter (PM _{2.5})	24-hour	35 µg/m ³		Unclassified/Attainment
	Annual arithmetic mean	12.0 µg/m ³	Nonattainment	Unclassified/Attainment
Sulfates	24-hour	25 µg/m ³	Attainment	
Lead ⁶	30-day average	1.5 µg/m ³	Attainment	
	Calendar quarter	1.5 µg/m ³		Unclassified
	Rolling 3-month average	0.15 µg/m ³		Unclassified
Hydrogen Sulfide	1-hour	0.03 ppm	Unclassified	
Visibility Reducing Particles	8-hour (10:00 to 18:00 PST)	See footnote 4	Unclassified	
Vinyl Chloride	24-hour	0.01 ppm	Unclassified	

Abbreviations: ppm – parts per million; µg/m³ – micrograms per cubic meter; marginal – the lowest of 5 nonattainment classifications for federal air quality standards.

Notes:

1. California standards for ozone, CO (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), NO₂, suspended particulate matter (PM₁₀), and visibility-reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour, or 24-hour average (i.e., all standards except for lead and the PM₁₀ annual standard), then some measurements may be excluded. In particular, measurements are excluded that CARB determines would occur less than once per year on the average. The Lake Tahoe carbon monoxide standard is 6.0 ppm, one-half the national standard and two-thirds the state standard.
2. National standards shown are the "primary standards" designed to protect public health. National air quality standards are set by USEPA at levels determined to be protective of public health with an adequate margin of safety. National standards other than for ozone, particulates, and those based on annual averages are not to be exceeded more than once per year. The 1-hour ozone standard is attained if, during the most recent 3-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the 3-year average of the 4th highest daily concentrations is 0.075 ppm (75 parts per billion) or less. The 24-hour PM₁₀ standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than 150 µg/m³. The 24-hour PM_{2.5} standard is attained when the 3-year average of 98th percentiles is less than 35 µg/m³. Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM₁₀ is met if the 3-year average falls below the standard at every site. The annual PM_{2.5} standard is met if the 3-year average of annual averages spatially averaged across officially designed clusters of sites falls below the standard.
3. The national 1-hour ozone standard was revoked by the USEPA on June 15, 2005. On October 1, 2015, the USEPA issued a final ruling to change the federal ozone (8-hour) standard from 0.075 ppm to 0.070 ppm. The attainment status provided in this table for the NAAQS ozone standard is based on the 2008 8-hour NAAQS standard of 0.075 ppm since there are not yet available attainment status determinations for the 2015 standard.
4. Statewide Visibility-Reducing Particle Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.
5. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitoring station within an area must not exceed 0.100 ppm (effective January 22, 2010).
6. CARB has identified lead and vinyl chloride as toxic air contaminants with no threshold level of exposure below which there are no adverse health effects determined.

Source: CARB 2016a and 2016b, USEPA 2016

The USEPA and CARB regulate various stationary sources, area sources, and mobile sources. USEPA has regulations involving performance standards for specific sources that may release toxic air contaminants (TACs), known as hazardous air pollutants at the federal level. In addition, USEPA has regulations involving emission criteria for off-road sources, such as construction equipment and vehicles. The CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB also establishes passenger vehicle fuel specifications. Airborne Toxic Control Measures (ATCMs), including the following relevant measures, are implemented to address sources of TACs:

- ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- ATCM to Reduce Particulate Emissions from Diesel-Fueled Engines Standards for Non-vehicular Diesel Fuel
- ATCM for Stationary Compression Ignition Engines

Local

Because the CPUC regulates and authorizes the construction of investor-owned public utility facilities, the CPUC has exclusive jurisdiction over the siting and design of the proposed project. As such, projects under CPUC jurisdiction, including the proposed project, are exempt from local land use regulations, permitting, and discretionary policies. However, Section III.C of CPUC GO 131-D (planning and construction of facilities for the generation of electricity and certain electric transmission facilities) requires “the utility to communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any non-discretionary local permits.” As a result, SDG&E has taken into consideration all State and local plans and policies as they relate to air quality. Although County and City policies are listed below, they are provided for disclosure purposes only.

San Diego County Air Pollution Control District Regulations

The San Diego County Air Pollution Control District (SDCAPCD) has implemented several regulations to control air emissions. These include requiring permits for sources of air emissions; limitations and prohibitions on air emissions, such as fugitive dust, and incorporation of the state’s ATCMs. These regulations would apply to the proposed project during construction and operation. As described above, the San Diego Air Basin is designated in non-attainment for the State PM₁₀ and PM_{2.5} standards and non-attainment for the state and federal ozone standards. Therefore, the SDCAPCD adopted the Regional Air Quality Strategy (RAQS) with the most recent revision in 2016, the 8-hour Ozone Maintenance Plan, and 8-hour Ozone Attainment Plan (SDCAPCD 2016). These plans outline programs and measures for reducing ozone emissions, including transportation control strategies. The RAQS outlines SDCAPCD’s plans and control measures designed to attain the State air quality standards for ozone. In addition, SDCAPCD relies on the State Implementation Plan (SIP), which includes the SDCAPCD’s plans and control measures for attaining the ozone NAAQS. These plans accommodate emissions from all sources, including natural sources, through implementation of control measures, where feasible, on sources to attain the standards. The County of San Diego RAQS relies on information from the San Diego Association of Governments (SANDAG), including the SANDAG Transportation Control Measures Plan, as well as information regarding projected growth in San Diego County, to identify strategies for the reduction of stationary-source emissions through regulatory controls.

San Diego County General Plan

The Conservation and Open Space Element of the existing San Diego County General Plan contains the following goals and policies that are relevant to the proposed project (San Diego County 2011):

- **Goal COS-14 - Sustainable Land Development.** Land use development techniques and patterns that reduce emissions of criteria pollutants and greenhouse gases (GHGs) through minimized

transportation and energy demands, while protecting public health and contributing to a more sustainable environment.

- **Policy - COS-14.8 Minimize Air Pollution.** Minimize land use conflicts that expose people to significant amounts of air pollutants.
- **Policy - COS-14.10 Low-Emission Construction Vehicles and Equipment.** Require County contractors and encourage other developers to use low-emission construction vehicles and equipment to improve air quality and reduce GHG emissions.
- **Goal COS-15 - Sustainable Architecture and Buildings.** Building design and construction techniques that reduce emissions of criteria pollutants and GHGs, while protecting public health and contributing to a more sustainable environment.
- **Policy - COS-15.6 Design and Construction Methods.** Require development design and construction methods to minimize impacts to air quality.

City of San Diego General Plan

The City of San Diego's General Plan contains the following goals and policies related to air quality and the proposed project (City of San Diego 2008):

- **Policy CE-F.1.** Develop and adopt a fuel efficiency policy to reduce fossil fuel use by City departments, and support community outreach efforts to achieve similar goals in the community.
- **Policy CE-F.5.** Promote technological innovations to help reduce automobile, truck, and other motorized equipment emissions.
- **Policy CE-F.8.** Influence the development of state, federal, and local efforts to increase fuel efficiency and reduce greenhouse gas emissions.

City of Chula Vista General Plan

The existing City of Chula Vista General Plan's Environmental Element contains the following goals and policies that are relevant to the proposed project (City of Chula Vista 2005):

- **Objective E6** - Improve local air quality by minimizing the production and emission of air pollutants and toxic air contaminants and limit the exposure of people to such pollutants.
- **Policy E 6.12** - Promote clean fuel sources that help reduce the exposure of sensitive uses to pollutants.

Significance Thresholds

The City and County of San Diego have guidelines for determining significance for air quality analyses (County of San Diego 2007, City of San Diego 2011). The City's guidelines are based on Air Quality Impact Assessment criteria established in SDCAPCD's Regulation II, Rule 20.2, which were prepared for air quality permitting purposes to stationary sources of emissions and not established specifically for CEQA purposes (City of San Diego 2011). Although the SDCAPCD has not established CEQA significance thresholds, the County's Department of Planning and Land Use has established significance thresholds (Pers. Comm. Hamilton 2016, County of San Diego 2007). These thresholds for air quality impact analyses are shown in **Table 2.3-2**. These thresholds would be applicable to construction or operational emissions. Projects below these mass emission thresholds do not have a significant impact on air quality.

The City of Chula Vista uses emission thresholds established by the South Coast Air Quality Management District (SCAQMD), which were originally developed in the SCAQMD's CEQA Air Quality Handbook from 1993 and updated in 2011 (SCAQMD 2015, Pers. Comm. Power 2016). The thresholds for criteria pollutant emissions from construction and operational activities are shown in Table 2.3-2. Project emissions greater than these thresholds would be anticipated to result in a significant impact on ambient air quality.

Table 2.3-2. Significance Thresholds for Construction- and Operation-Related Emissions of Criteria Pollutants

Pollutant	City and County	City of Chula Vista	
	Construction and Operation	Construction	Operation
Carbon Monoxide (CO)	550	550	550
Oxides of Nitrogen (NO _x)	250	100	55
Particulate Matter (PM ₁₀)	100	150	150
Fine Particulate Matter (PM _{2.5})	55	55	55
Oxides of Sulfate (SO _x)	250	150	150
Lead and Lead Compounds	3.2	3	3
Volatile Organic Compounds (VOC) or Reactive Organic Gases (ROG)	75	75	55

Note: Where the County and City guidelines differ (i.e., VOCs and PM_{2.5}), the more conservative County guidelines were used. The County's threshold for VOCs is based on the threshold of significance for VOCs from the SCAQMD for the Coachella Valley.

Source: San Diego County 2007, City of San Diego 2011, SCAQMD 2015, Pers. Comm. Power 2016.

2.3.2 Environmental Impacts

a. Would the project conflict with or obstruct implementation of the applicable air quality plan? (No Impact)

The SDCAPCD is required, pursuant to the federal CAA, to reduce emissions of criteria pollutants for which the San Diego Air Basin is in nonattainment. Strategies to achieve these emissions reductions are developed in the RAQS and SIP, prepared by the SDCAPCD for the region. Both the RAQS and SIP rely on information from CARB and SANDAG, including projected growth in the County, mobile, area and all other source emissions in order to project future emissions and determine from that the strategies necessary for the reduction of stationary source emissions through regulatory controls. The CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the cities and by the County. As such, projects that propose development that is consistent with the growth anticipated by the local general plan would be consistent with the RAQS.

The proposed project is an electrical system infrastructure upgrade project that solely involves the replacement of existing wood structures to steel poles. Therefore, the proposed project's operation would not directly or indirectly result in any long-term population or employment growth, or alteration of existing land uses. In

addition, the proposed project's construction activities would require up to approximately 36 workers during the brief (approximately 7-month) construction period, which would not be a significant change in the population of San Diego County. In addition, the proposed project would not conflict with any of the applicable general plan goals and policies. Therefore, the proposed project would not conflict with or obstruct implementation of the applicable air quality plans, and no impact would result.

b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation? (Less than Significant with Mitigation)

The proposed alignment would require routine operation and maintenance consistent with the manner in which the facilities are currently operated; therefore, this discussion focuses on construction-related emissions from the proposed project. During construction of the proposed project, the combustion of fossil fuels for operation of off-road construction equipment and on-road vehicles (worker, vendor, and haul trucks) would result in construction-related criteria air pollutant emissions. These emissions were estimated in 2016 using the most recent California Emissions Estimator Model (CalEEMod) version (2013.2.2) at that time, and for assumed project construction years of 2016 and 2017 (see Appendix E, Air Quality and Greenhouse Gas Emissions Evaluations). Although a newer CalEEMod version has become available and the estimated years of project construction have changed, the previously modeled emissions for the proposed project are still suitable for use in this analysis. Previously modeled emissions are suitable for this analysis because they would be similar to and more conservative (higher) than any estimated construction emissions for future years (after 2017). The primary reason for older construction years generating greater emissions is that construction equipment and/or vehicles/trucks used in these analyses would generally be older and held to less stringent emissions requirements than newer equipment and vehicles used in future construction years. Construction equipment types for the proposed project are summarized in Section 1.7.7, Typical Equipment. Additional modeling input details can be found in Appendix E.

The average daily emissions estimated during construction for reactive organic gas, oxides of nitrogen (NO_x), CO, sulfur dioxide, PM₁₀, and PM_{2.5} from equipment exhaust and PM₁₀ and PM_{2.5} from fugitive dust are summarized in **Table 2.3-3**. It should be noted that fugitive dust emission estimates reported in Table 2.3-3 include reductions associated with the required standard fugitive dust control measures of the SDCAPCD's Rule 55, Fugitive Dust Control. As shown in Table 2.3-3, the proposed project's estimated construction-related emissions would be below the City and County of San Diego's emission thresholds for all criteria pollutants and most of the City of Chula Vista's emission thresholds with the exception of NO_x.

Table 2.3-3. Estimated Daily Construction Emissions – Unmitigated Criteria Pollutants

Construction Year	Unmitigated Criteria Pollutant Emissions (pounds/day)							
	ROG	NO _x	CO	SO ₂	PM ₁₀		PM _{2.5}	
					Dust	Exhaust	Dust	Exhaust
2016	12	133	79	<0.5	25	6	7	5
2017	9	97	61	<0.5	39	4	12	4
Maximum Daily Emission	12	133	79	<0.5	43		16	
City and County San Diego Thresholds	75	250	550	250	100		55	
City of Chula Vista Thresholds	75	100	550	150	150		55	
Exceeds City/County Threshold?	No	No	No	No	No		No	
Exceeds City of Chula Vista Threshold?	No	Yes	No	No	No		No	

To minimize potential NO_x emissions, the proposed project would implement Mitigation Measure AQ-1, which would require minimization of construction equipment use, proper construction equipment maintenance, and other measures to reduce NO_x emissions such that they would not exceed the City of Chula Vista's significance threshold. As shown in **Table 2.3-4**, mitigated construction emissions of NO_x would be less than the City of Chula Vista's significance threshold.

Furthermore, the proposed project would be required to comply with Rule 55, Fugitive Dust Control, which would control on-site fugitive dust. Therefore, with implementation of mitigation, the criteria pollutant emissions impacts associated with the proposed project's construction would be less than significant.

Table 2.3-4. Estimated Daily Construction Emissions – Mitigated Criteria Pollutants

Construction Year	Mitigated Criteria Pollutant Emissions (pounds/day)							
	ROG	NO _x	CO	SO ₂	PM ₁₀		PM _{2.5}	
					Dust ^a	Exhaust	Dust	Exhaust
2016	5	82	102	<0.5	25	3	3	3
2017	4	60	75	<0.5	39	2	4	2
Maximum Daily Emission	5	82	102	<0.5	41		7	
City and County San Diego Thresholds	75	250	550	250	100		55	
City of Chula Vista Thresholds	75	100	550	150	150		55	
Exceeds City/County Threshold after Mitigation?	No	No	No	No	No		No	
Exceeds City of Chula Vista Threshold after Mitigation?	No	No	No	No	No		No	

Mitigation Measure AQ-1: Implement BMPs for Construction Air Quality

SDG&E or its contractor shall implement the following BMPs to reduce construction equipment emissions, specifically NO_x, to ensure compliance with all applicable NO_x significance thresholds, including the emissions less than a total of 100 lbs No_x/day:

- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13 CCR § 2485). Clear signage regarding this requirement shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications.
- SDG&E or its contractor shall ensure all off-road diesel-powered construction equipment used during each construction phase shall meet USEPA Tier 3 off-road emissions standards. A copy of each unit's certified Tier specification shall be provided to the CPUC at the time of mobilization of each applicable unit of equipment. In the event that Tier 3 off-road emission standards are not available for a particular piece of equipment (i.e., specialized equipment), the next available tier will be used. In addition, if Tier 3 equipment is not available, SDG&E or its contractor will provide detailed information on anticipated daily usage for all equipment types (Tier 3 and non-Tier 3 equipment), including the anticipated hours of usage per day, quantities and types of equipment, revisions to construction phasing, and/or altering daily equipment use (i.e., reducing number of hours of use), as well as any

other necessary information for the CPUC to confirm that the applicable NO_x significance thresholds will be met.

Should construction activities result in emissions that exceed the assumptions represented in the Air Quality modeling analysis (see **Table 2.3-4**, Estimated Daily Construction Emissions – Mitigated Criteria Pollutants), construction emissions shall be re-calculated and mitigation implemented to ensure that the mitigated emissions do not exceed the relevant significance thresholds. Modeling results would be provided to the CPUC for review and approval prior to initiation of the new proposed construction activities.

c. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? (Less than Significant with Mitigation)

The project area is currently in State and/or federal non-attainment for the criteria pollutants PM₁₀, PM_{2.5}, and ozone. The proposed project would contribute particulates and the ozone precursors, volatile organic compounds and NO_x, to the area during construction. As described under criterion (b) above, with implementation of Mitigation Measure AQ-1, emissions during construction would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Construction emissions with mitigation would be less than the significance thresholds (refer to Table 2.3-4, Estimated Daily Construction Emissions – Mitigated Criteria Pollutants). Therefore, construction emissions would not be cumulatively considerable, and the impact would be less than significant with mitigation.

d. Would the project expose sensitive receptors to substantial pollutant concentrations? (Less than Significant with Mitigation)

The proposed project's construction activities would generate diesel particulate matter (DPM) and gasoline fuel combustion emissions that are classified as TACs from the use of construction equipment. Due to the variable nature of construction activity and the varying locations of construction activities, the generation of TAC emissions in most cases would be temporary, especially considering the short amount of time such equipment is typically operating within an influential distance that would result in the exposure of sensitive receptors to substantial concentrations. The majority of the project area is located in an undeveloped, rural area and would not be located near sensitive receptors. Apart from the nearest residence on the western end of the alignment (approximately 75 feet from the project area), the nearest sensitive receptors would be greater than 1,500 feet from the project area.

Chronic and cancer-related health effects estimated over short periods are uncertain. Cancer potency factors are based on animal lifetime studies or worker studies with long-term exposure to the carcinogenic agent. There is considerable uncertainty in trying to evaluate the cancer risk from exposure that would last only a small fraction of a lifetime. The Office of Environmental Health Hazard Assessment (OEHHA) does not recommend assessing cancer risk at a construction site where emissions last less than two months (OEHHA 2015). Since construction activities would last less than two months at each proposed work site, the potential cancer risk to nearby sensitive receptors from construction emissions has not been assessed for the proposed project. Furthermore, construction impacts are most severe adjacent to the construction area and decrease rapidly with increasing distance. Concentrations of mobile-source DPM emissions are typically reduced by 70 percent at a distance of approximately 500 feet (CARB 2005).

Given the uncertainty of estimating chronic health effects over a short period, as well as the uncertainty associated with a screening-level (rather than a detailed) health risk assessment, health effects from construction were not quantified. Implementation of BMPs, as identified in Mitigation Measure AQ-1, would reduce the amount of construction emissions through a combination of newer equipment, aftermarket emission control equipment, equipment maintenance, and work practices to minimize engine use. These construction

1 practices would ensure that health effects from construction of the proposed project are minimized for nearby
2 sensitive receptors. The proposed project's effect on nearby sensitive receptors due to construction-related air
3 pollutant emissions would be less than significant with mitigation. There would be no operational-related air
4 pollutant emissions.

5 *e. Would the project create objectionable odors affecting a substantial number of people? (Less*
6 *than Significant)*

7 Diesel exhaust from construction activities may temporarily generate odors while construction of the proposed
8 project is underway. Once construction activities have been completed, these odors would cease. There would
9 be no operational activities that would generate odors. Construction vehicle idling at the site would be
10 minimized to the extent feasible and so would not cause noticeable odor issues for nearby sensitive receptors.
11 In addition, due to the proposed project's limited duration at any given pole site (up to 10 days) and distance
12 from most sensitive receptors (generally at least 1,500 feet away), it is unlikely the proposed project's
13 construction activities would cause odors that would affect a substantial number of people. Thus, impacts
14 related to potential generation of objectionable odors are expected to be less than significant.

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2.4 Biological Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.4.1 Setting

Regional Setting

Along the proposed project alignment, topography varies considerably. In the western portion, topography is relatively flat in the urban/residential areas of Chula Vista, with elevations ranging from approximately 150 to 400 feet above mean sea level (amsl) (SDG&E 2015a). As the alignment moves east and then south, topography includes river valleys, canyons, and mesa tops, and elevations in the far western end of the proposed project area range from 400 to 600 feet amsl (SDG&E 2015a).

Land use in the proposed project area is predominately open space. Residential use is clustered at the western edge of the proposed project area, and limited institutional uses (Richard J. Donovan Correctional Facility) at the eastern edge. The four open space areas which cross or are adjacent to the proposed project area are shown in

Figure 2.4-1. Biological Technical Report Habitat Plan Areas, Biological Technical Report Habitat Plan Areas. These areas provide habitat for, and have documented occurrences of special status plant and wildlife species (California Department of Fish and Wildlife [CDFW] 2016). Open spaces in the vicinity of the proposed project include:

- Otay Valley Regional Park
- Otay Lakes County Park
- Otay County Open Space Preserve
- The City of San Diego's Multi-Habitat Planning Area (MHPA)

The U.S. Fish and Wildlife Service (USFWS) 2005 *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon* identifies 17 vernal pool regions in California that are based on discrete geographic areas and are associated with endemic plant and animal species. The proposed project is located in the southern portion of the San Diego Vernal Pool Region in the Otay Mesa Core Area (USFWS 2005).

The proposed project is located in a biologically diverse region of San Diego County. The region supports many plant and animal species listed under the federal Endangered Species Act (ESA) and the California Environmental Species Act (CESA), as well as critical habitat for listed species.

Survey Area

The survey area is defined as a 150-foot buffer from the proposed project centerline. For proposed project features that are more than 150 feet from the centerline, the survey area includes an approximately 50-foot buffer around proposed project facilities (e.g., staging yards and stringing sites), and an approximately 20-foot buffer on either side of proposed project access roads (SDG&E 2015).

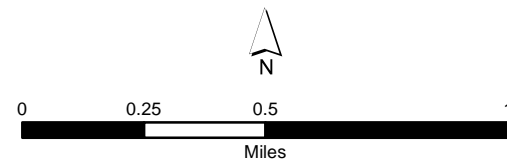
Vegetation Communities

Thirty vegetation communities were mapped by Chambers Group, Inc. during biological surveys of the survey area in the spring and summer of 2014 (Chambers 2015). The vegetation communities mapped in the survey area are shown in **Figure 2.4-2**, Biological Technical Report Vegetation Communities, and listed in **Table 2.4-1**, Vegetation Communities within the Survey Area. Of the 30 vegetation communities, 19 are considered sensitive natural communities (denoted by an asterisk). Bare ground and disturbed areas cover nearly one-third of the total survey area while urban and developed, California sagebrush-California buckwheat scrub, coast prickly pear scrub, annual brome grassland, and purple needlegrass grassland primarily cover the rest.



Legend

- | | |
|---------------------------|---|
| — Transmission Centerline | San Diego County Parks |
| Staging Yard | Multi-Habitat Planning Area |
| Survey Corridor | Multiple Species Conservation |
| Quino Mapped Area | Plan, South County Sub Regional Plan Area |



2.4-1 TL-649 Wood-to-Steel Project Biological Technical Report Habitat Plan Areas



Legend

Survey Corridor

Work Area Type

Proposed Staging Yard

Vegetation (MCV II)

3. California Sagebrush-California buckwheat scrub

7. Urban and Developed

8. Disturbed

17. Tamarisk Thickets

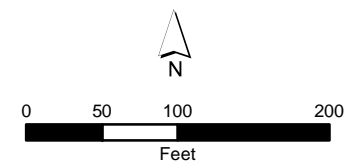
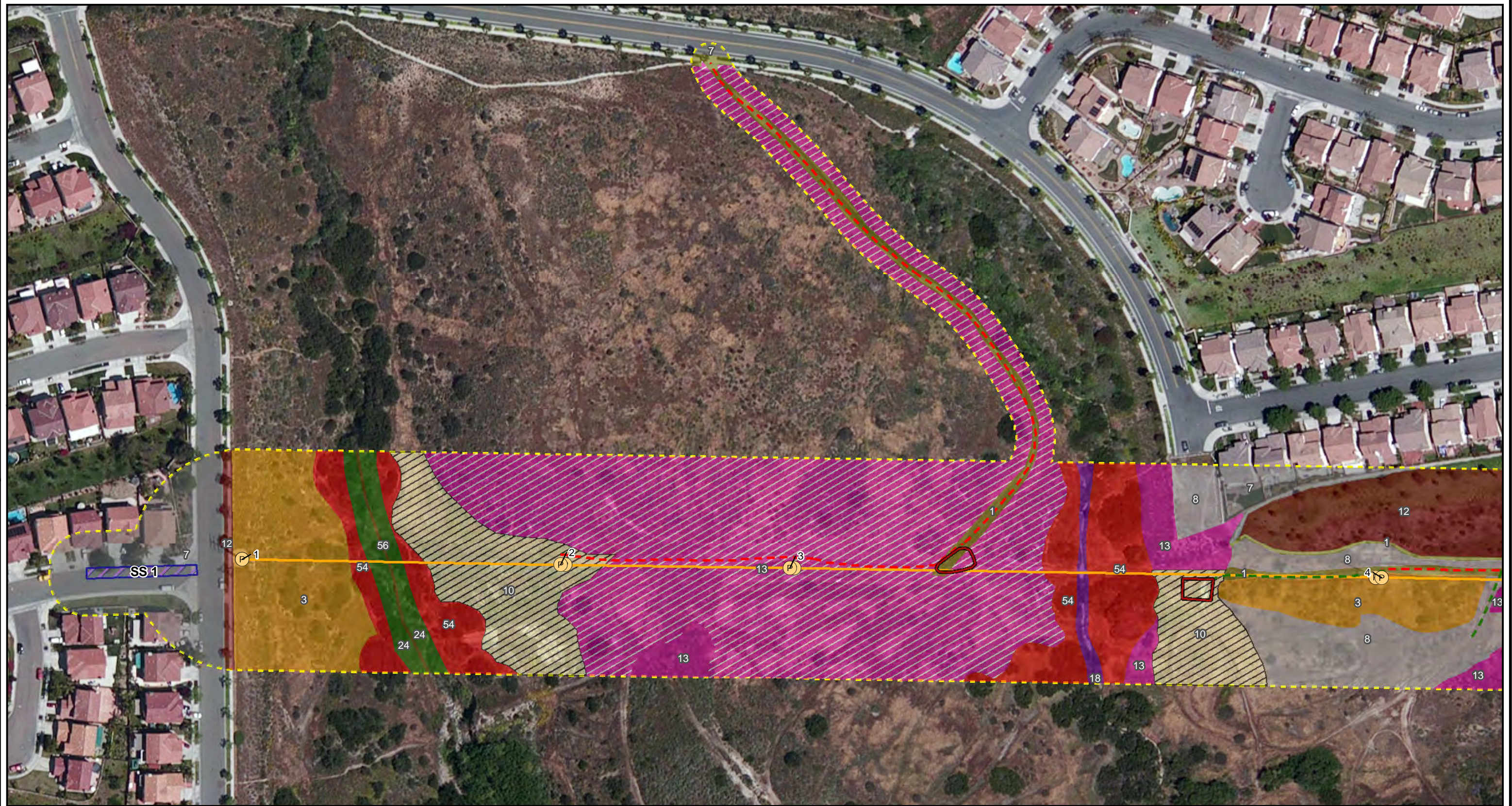


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

--- Survey Corridor

Ⓟ Project Pole

Access Type

— Existing Non-TCM Access Road

— Access Road

Work Area Type

▨ Proposed String Site

▨ Proposed Turnaround

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California buckwheat scrub

7. Urban and Developed

8. Disturbed

10. Annual Brome Grassland

12. Landscape/Ornamental

13. Coast Prickly Pear Scrub

13. Disturbed Coast Prickly Pear Scrub

18. Mulefat Thickets

24. Arroyo Willow - Mulefat Woodland

54. Lemonade Berry Stand

56. Bulrush Marsh

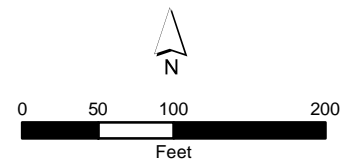


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

--- Survey Corridor

Ⓟ Project Pole

Access Type

--- Existing Non-TCM Access Road

--- Access Road

Work Area Type

▨ Proposed String Site

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California buckwheat scrub

7. Urban and Developed

8. Disturbed

10. Annual Brome Grassland

11. Purple Needlegrass Grassland

12. Landscape/Ornamental

13. Coast Prickly Pear Scrub

17. Tamarisk Thickets

18. Mulefat Thickets

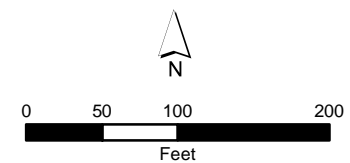


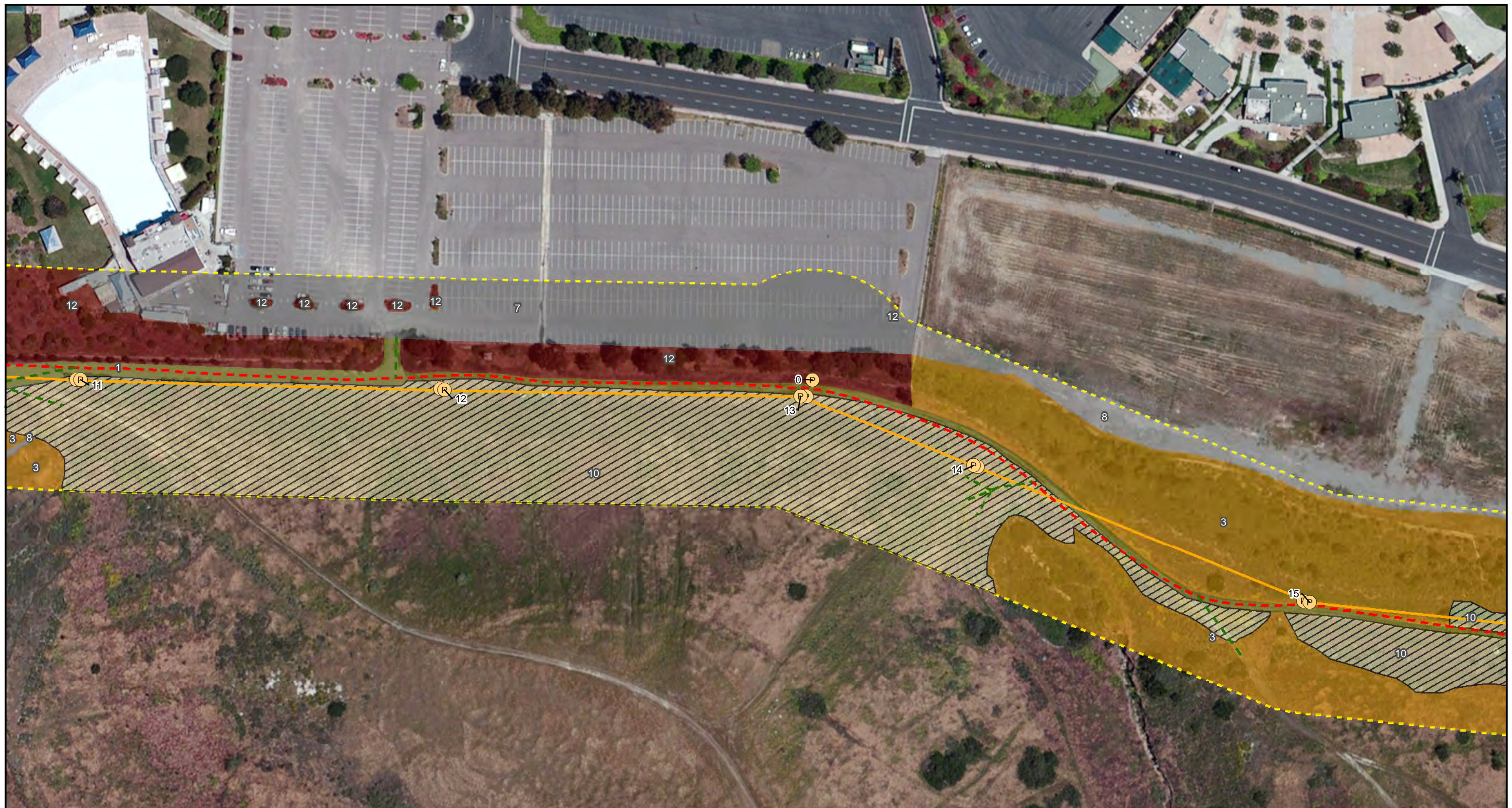
Figure 2-4.2

TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities

Page 3 of 30

Name: 20775 BTR Fig 4 Veg Communities 2015.Mxd
Print Date: 6/30/2015, Author: msimmons





Legend

— Transmission Centerline

--- Survey Corridor

Ⓟ Project Pole

Access Type

--- Existing Non-TCM Access Road

--- Access Road

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California buckwheat scrub

7. Urban and Developed

8. Disturbed

10. Annual Brome Grassland

12. Landscape/Ornamental

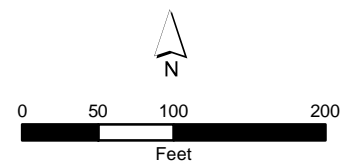


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

--- Survey Corridor

⊙ Project Pole

⏏ Guard Structure

Access Type

--- Existing Non-TCM Access Road

--- Access Road

Work Area Type

▨ Proposed String Site

▨ Proposed Turnaround

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California buckwheat scrub

7. Urban and Developed

8. Disturbed

10. Annual Brome Grassland

11. Purple Needlegrass Grassland

12. Landscape/Ornamental

50. Vegetated Rip-rap Channel

51. Castor Bean Thicket

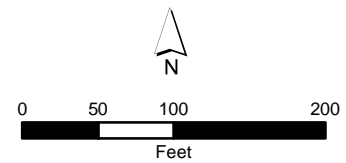


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

--- Survey Corridor

Ⓟ Project Pole

Access Type

--- Existing Non-TCM Access Road

--- Access Road

Work Area Type

▨ Proposed String Site

▨ Proposed Turnaround

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California buckwheat scrub

7. Urban and Developed

8. Disturbed

9. Giant Reed Breaks

10. Annual Brome Grassland

11. Purple Needlegrass Grassland

12. Landscape/Ornamental

51. Castor Bean Thicket

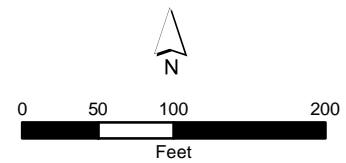
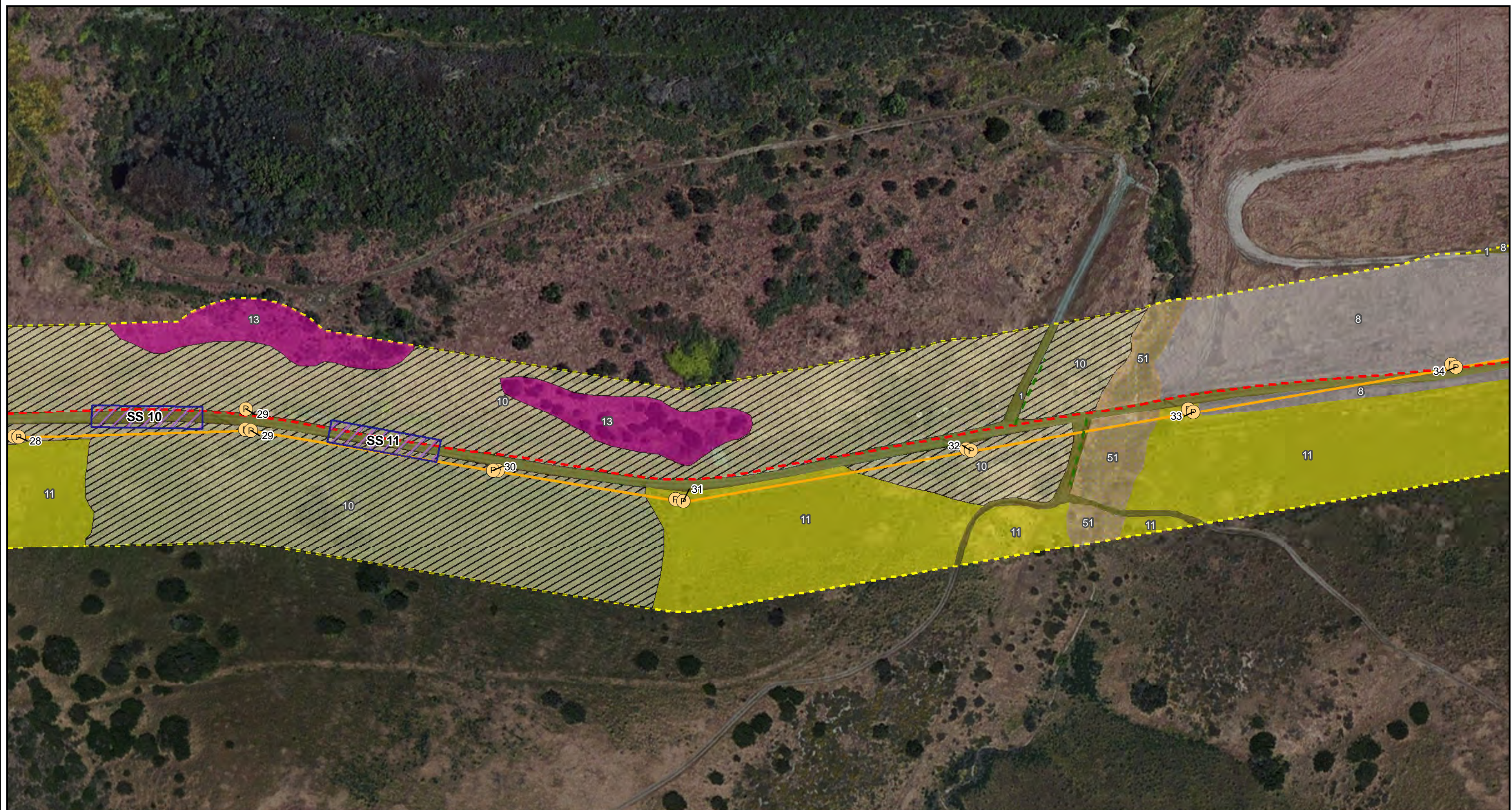


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

- - - Survey Corridor

Ⓟ Project Pole

Access Type

- - - Existing Non-TCM Access Road

- - - Access Road

Work Area Type

- - - Proposed String Site

Vegetation (MCV II)

1. Bareground

8. Disturbed

10. Annual Brome Grassland

11. Purple Needlegrass Grassland

13. Coast Prickly Pear Scrub

51. Castor Bean Thicket

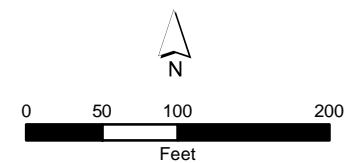


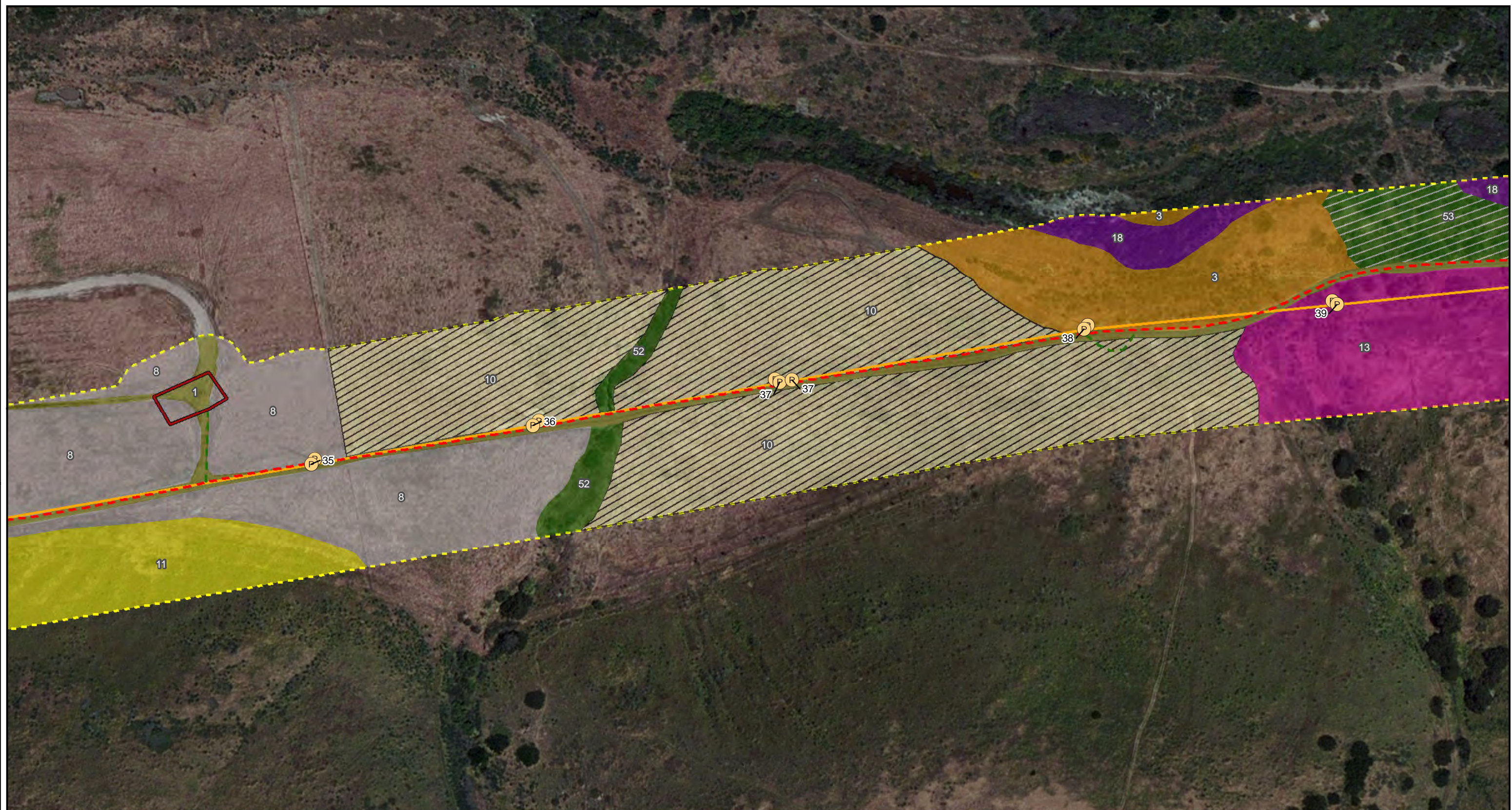
Figure 2-4.2

TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities

Page 7 of 30

Name: 20775 BTR Fig 4 Veg Communities 2015.Mxd
Print Date: 6/30/2015, Author: msimmons





Legend

— Transmission Centerline

--- Survey Corridor

Ⓟ Project Pole

Access Type

— Existing Non-TCM Access Road

— Access Road

Work Area Type

▭ Proposed Turnaround

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California buckwheat scrub

8. Disturbed

10. Annual Brome Grassland

11. Purple Needlegrass Grassland

13. Coast Prickly Pear Scrub

18. Mulefat Thickets

52. Singlewhorl Burrowbush Scrub

53. Singlewhorl Burrow Brush-broom Baccharis Scrub

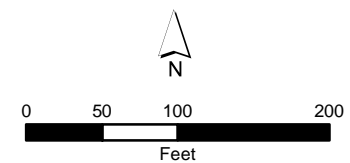
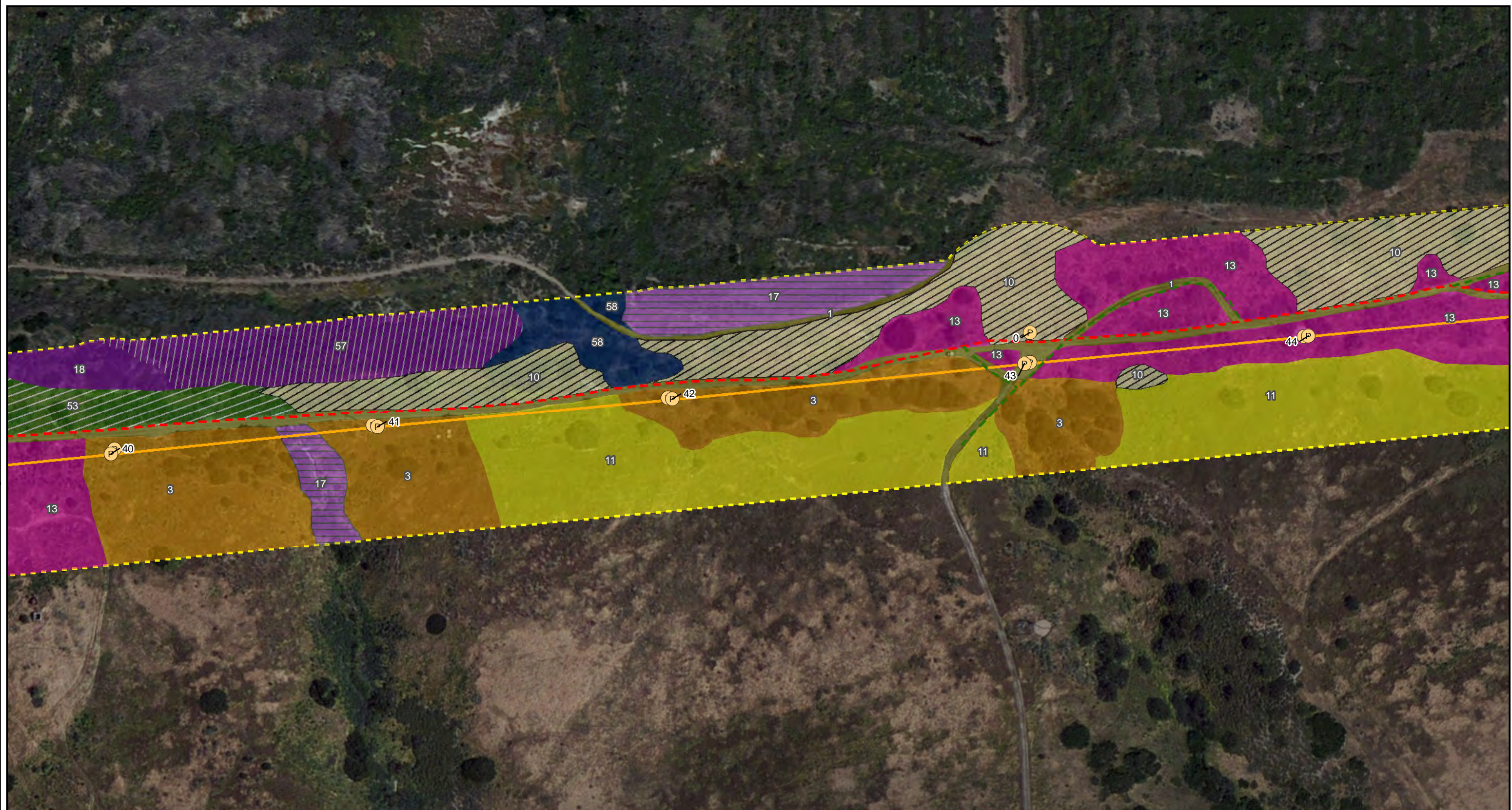


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

- - - Survey Corridor

Ⓟ Project Pole

Access Type

— Existing Non-TCM Access Road

- - - Access Road

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California buckwheat scrub

10. Annual Brome Grassland

11. Purple Needlegrass Grassland

13. Coast Prickly Pear Scrub

17. Tamarisk Thickets

18. Mulefat Thickets

53. Singlehorn Burrow Brush-broom Baccharis Scrub

57. Disturbed Mulefat Thicket

58. Black Willow Forest

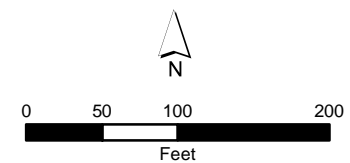
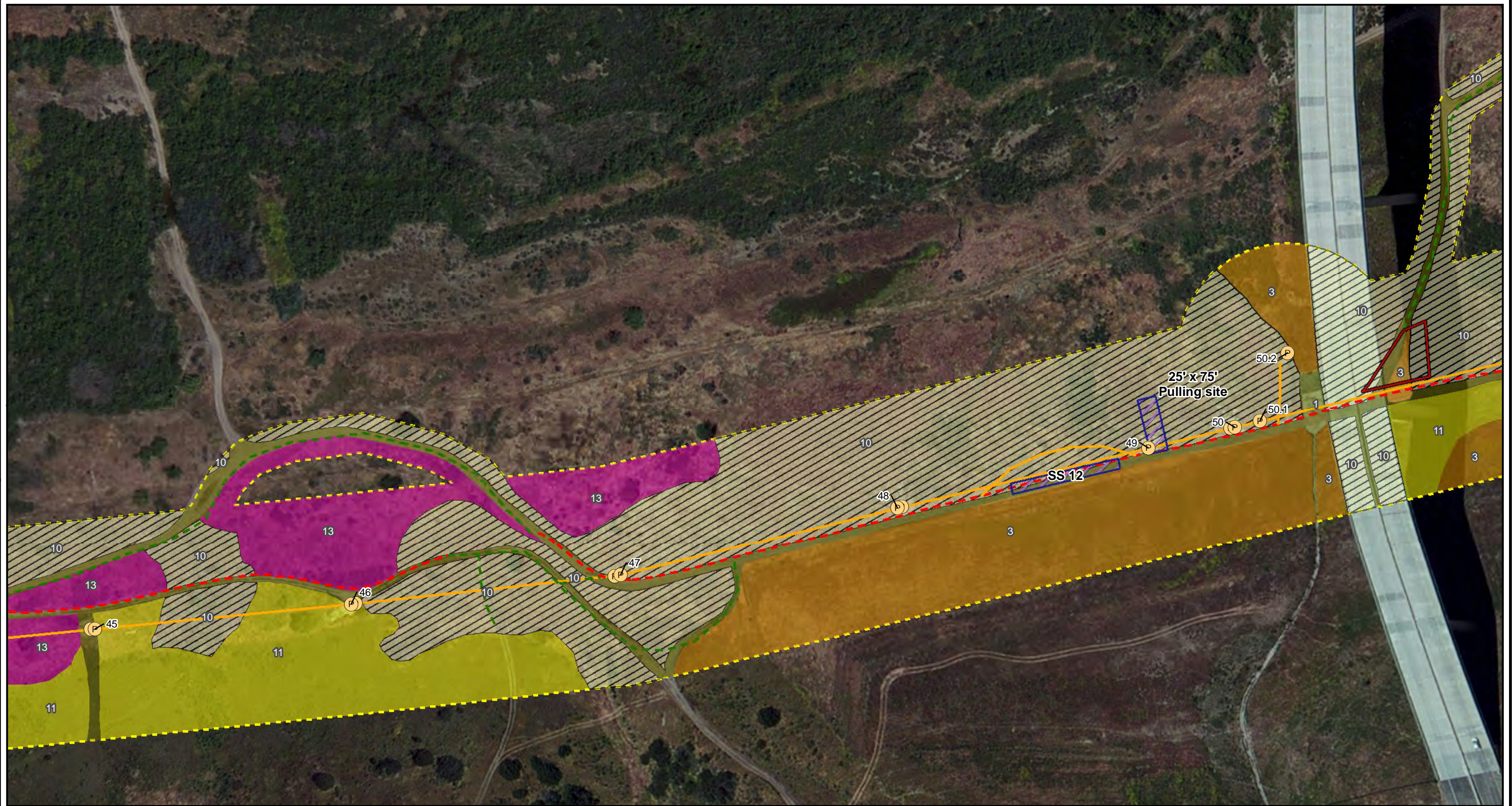


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

--- Survey Corridor

Ⓟ Project Pole

Access Type

— Existing Non-TCM Access Road

— Access Road

— Overland Travel

Work Area Type

▨ Proposed String Site

▨ Proposed Turnaround

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California buckwheat scrub

▨ 10. Annual Brome Grassland

▨ 11. Purple Needlegrass Grassland

▨ 13. Coast Prickly Pear Scrub

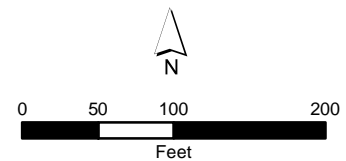


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

- - - Survey Corridor

Ⓟ Project Pole

Access Type

— Existing Non-TCM Access Road

- - - Access Road

— Overland Travel

Work Area Type

▨ Proposed String Site

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California buckwheat scrub

▨ 10. Annual Brome Grassland

11. Purple Needlegrass Grassland

13. Coast Prickly Pear Scrub

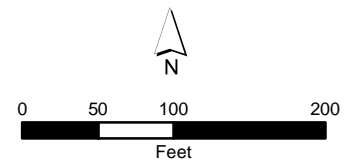
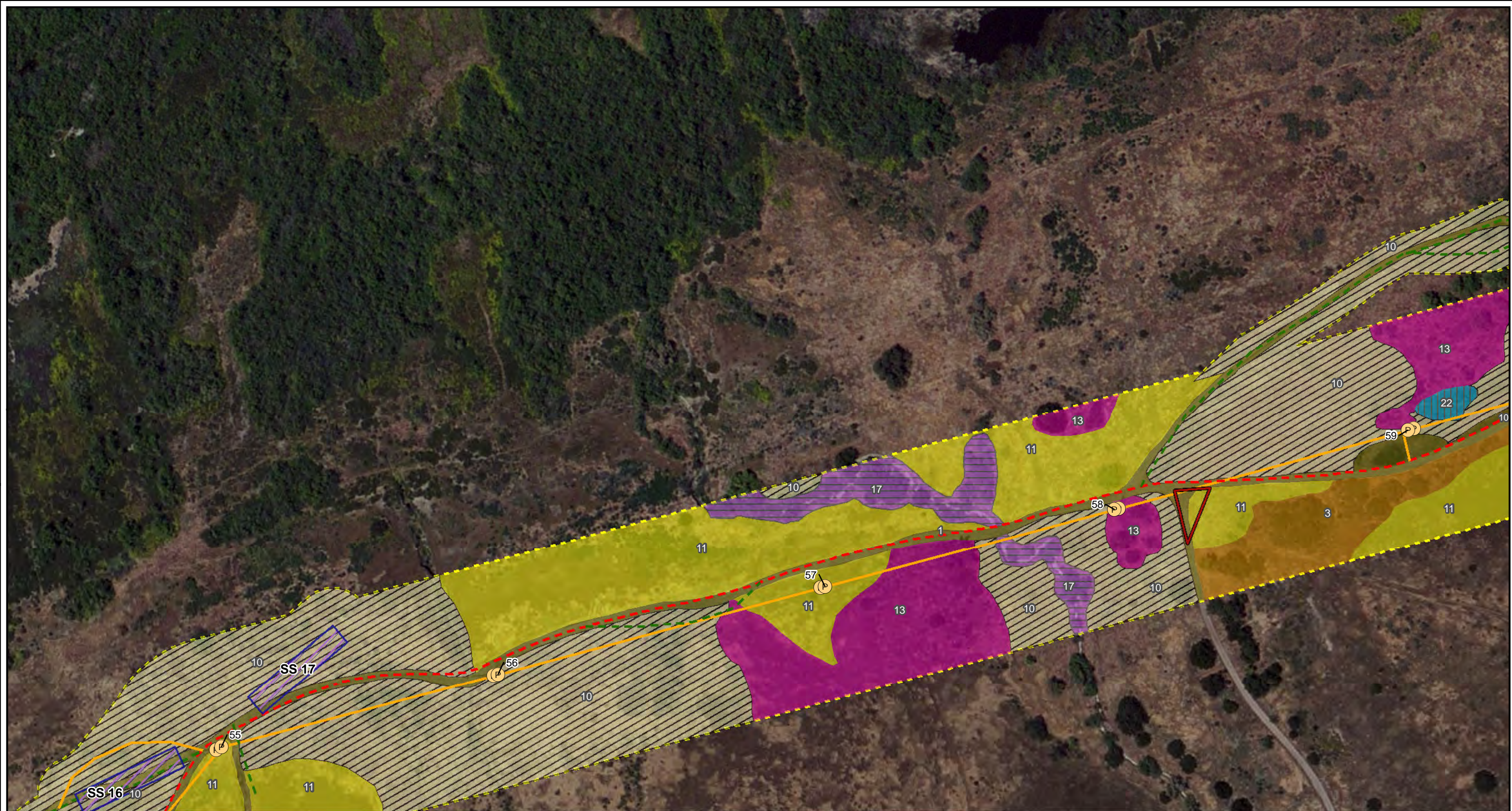


Figure 2-4.2

TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

--- Survey Corridor

Ⓟ Project Pole

Access Type

— Existing Non-TCM Access Road

--- Access Road

— Overland Travel

Work Area Type

▨ Proposed String Site

▨ Proposed Turnaround

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California buckwheat scrub

10. Annual Brome Grassland

11. Purple Needlegrass Grassland

13. Coast Prickly Pear Scrub

17. Tamarisk Thickets

22. Creeping Ryegrass grassland

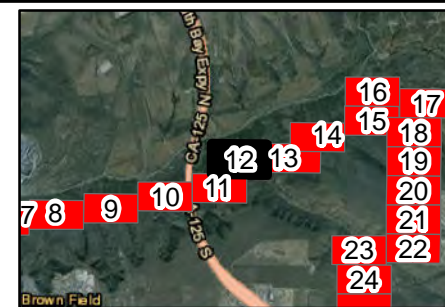
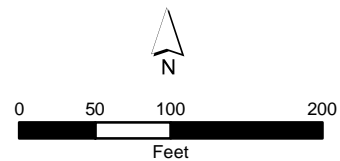
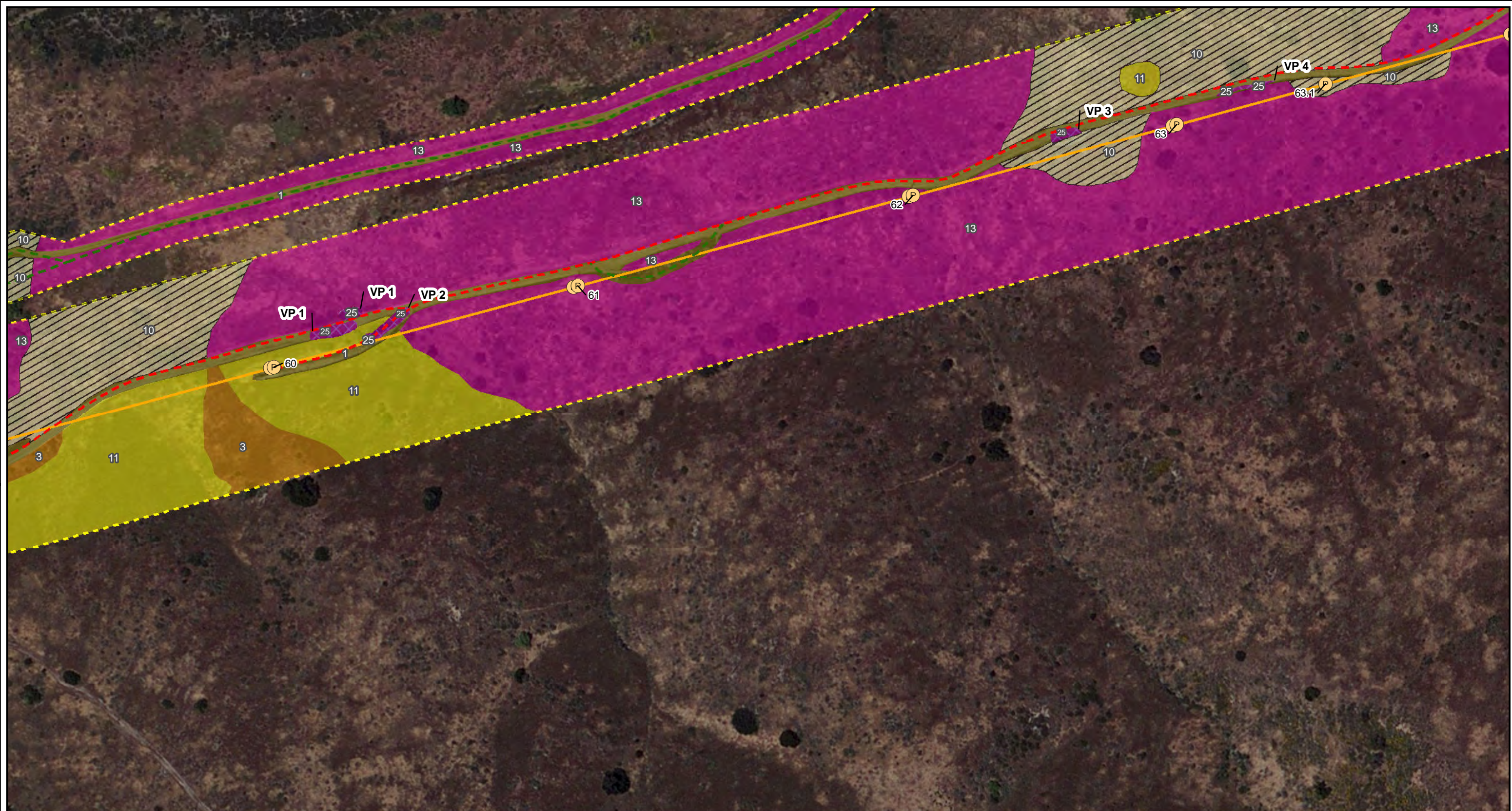


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

- - - Survey Corridor

Ⓟ Project Pole

Access Type

- - - Existing Non-TCM Access Road

- - - Access Road

ACOE Wetland Waters, RWQCB
Waters of the State [Vernal Pool]

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California
buckwheat scrub

10. Annual Brome Grassland

11. Purple Needlegrass Grassland

13. Coast Prickly Pear Scrub

25. Disturbed San Diego Mesa
Claypan Vernal Pools

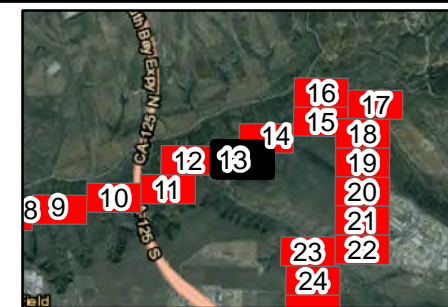
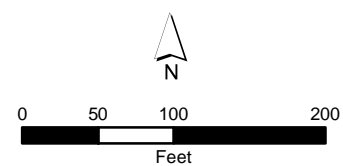
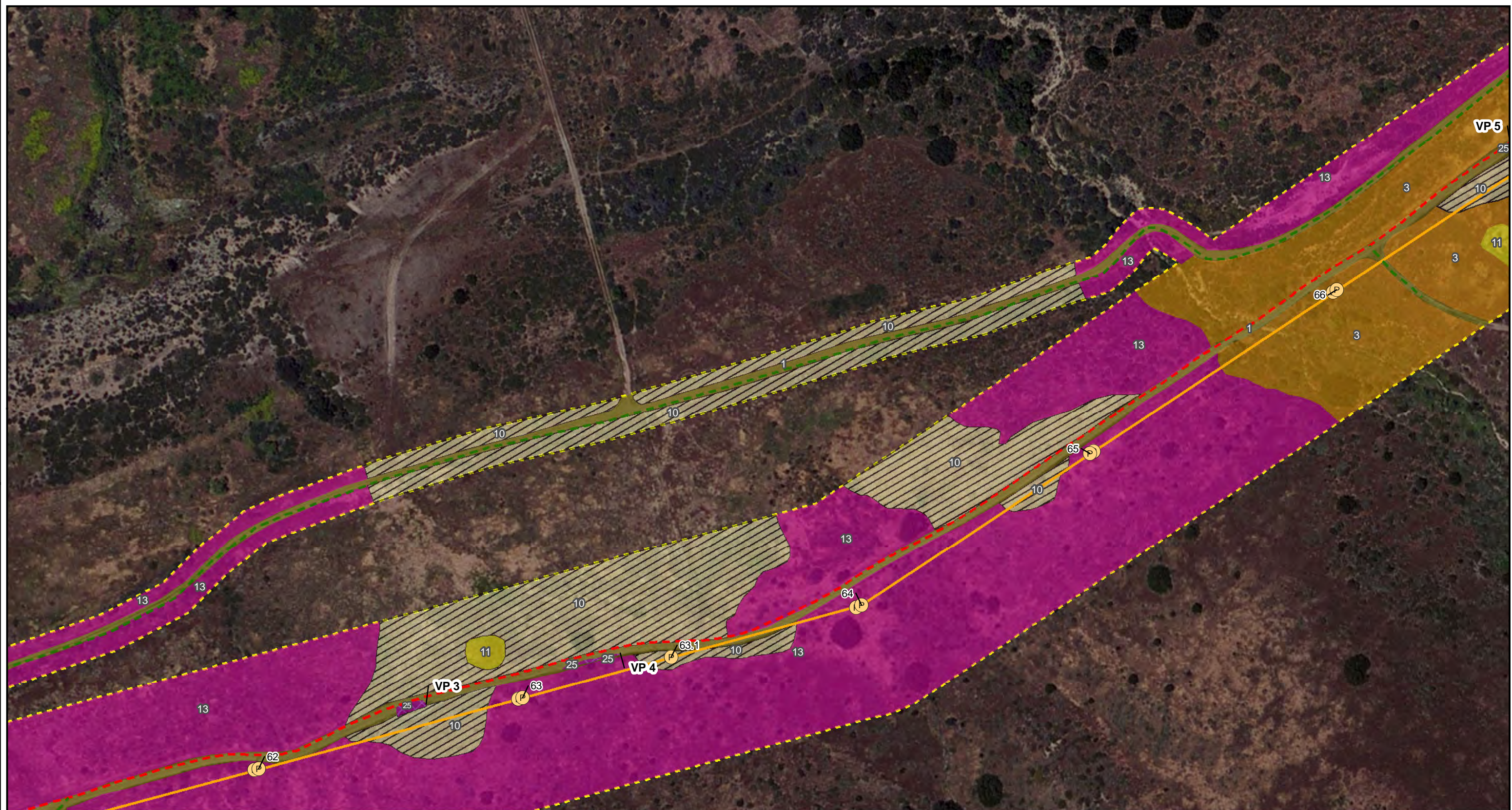


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

- Transmission Centerline
- - - Survey Corridor
- Ⓟ Project Pole

Access Type

- - - Existing Non-TCM Access Road
- - - Access Road

ACOE Wetland Waters, RWQCB
Waters of the State [Vernal Pool]

Vegetation (MCV II)

- 1. Bareground
- 3. California Sagebrush-California buckwheat scrub
- 10. Annual Brome Grassland
- 11. Purple Needlegrass Grassland

13. Coast Prickly Pear Scrub

25. Disturbed San Diego Mesa Claypan Vernal Pools

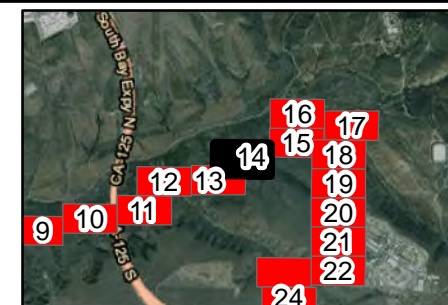
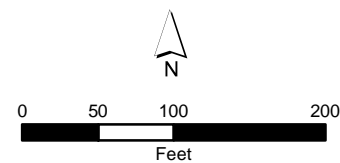
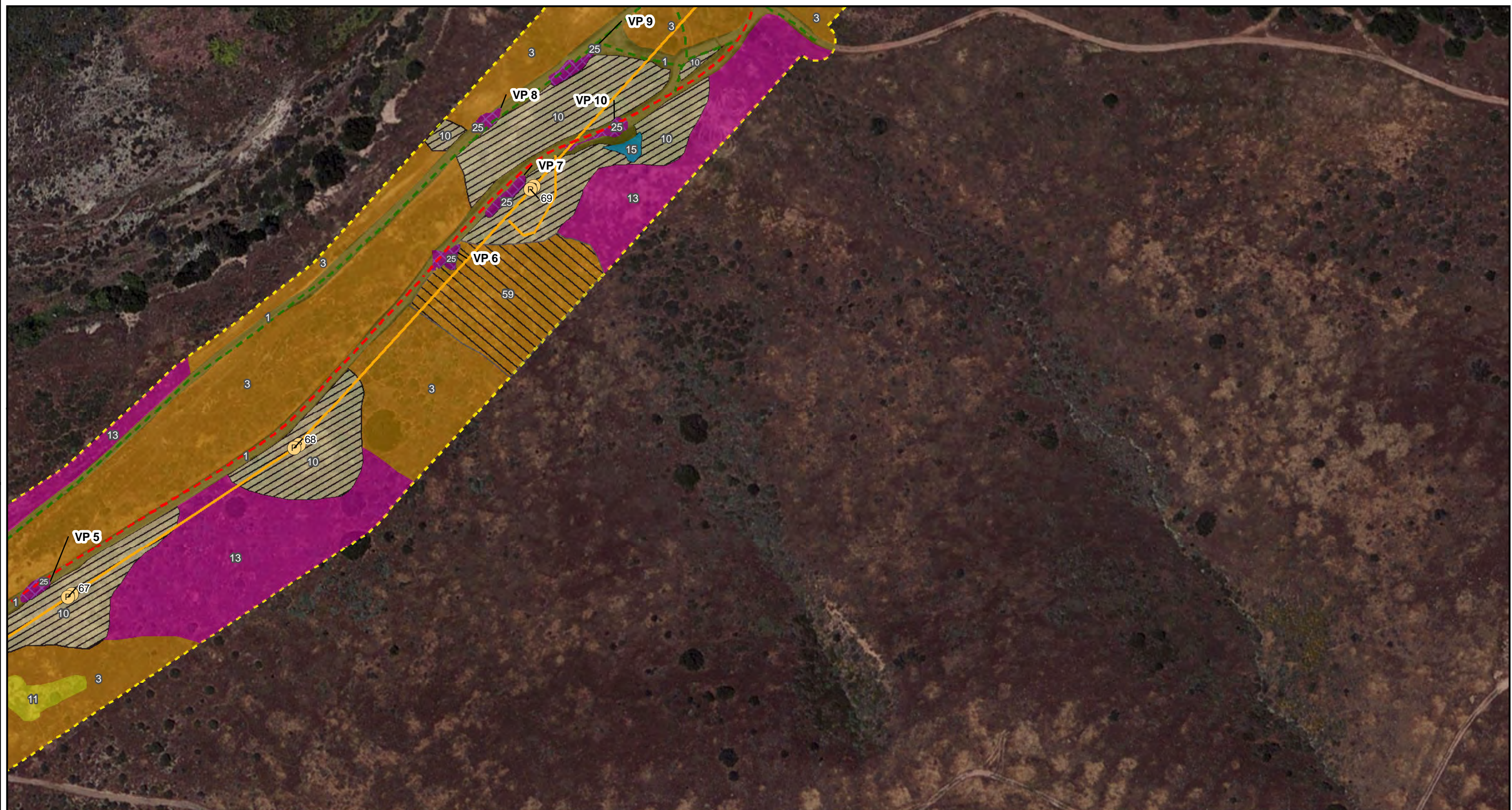


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

- - - Survey Corridor

Ⓟ Project Pole

Access Type

- - - Existing Non-TCM Access Road

- - - Access Road

— Overland Travel

ACOE Wetland Waters, RWQCB
Waters of the State [Vernal Pool]

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California
buckwheat scrub

10. Annual Brome Grassland

11. Purple Needlegrass Grassland

13. Coast Prickly Pear Scrub

15. Pale spike rush marshes

25. Disturbed San Diego Mesa
Claypan Vernal Pools

59. Disturbed California Sagebrush-

California buckwheat scrub

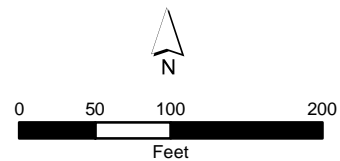


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

Transmission Centerline

Survey Corridor

Project Pole

Access Type

Existing Non-TCM Access Road

Access Road

Work Area Type

Proposed String Site

ACOE Wetland Waters, RWQCB Waters of the State [Vernal Pool]

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California buckwheat scrub

13. Coast Prickly Pear Scrub

16. Fremont Cottonwood Forest

19. Tecate Cypress Stands

25. Disturbed San Diego Mesa Claypan Vernal Pools

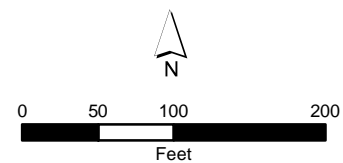
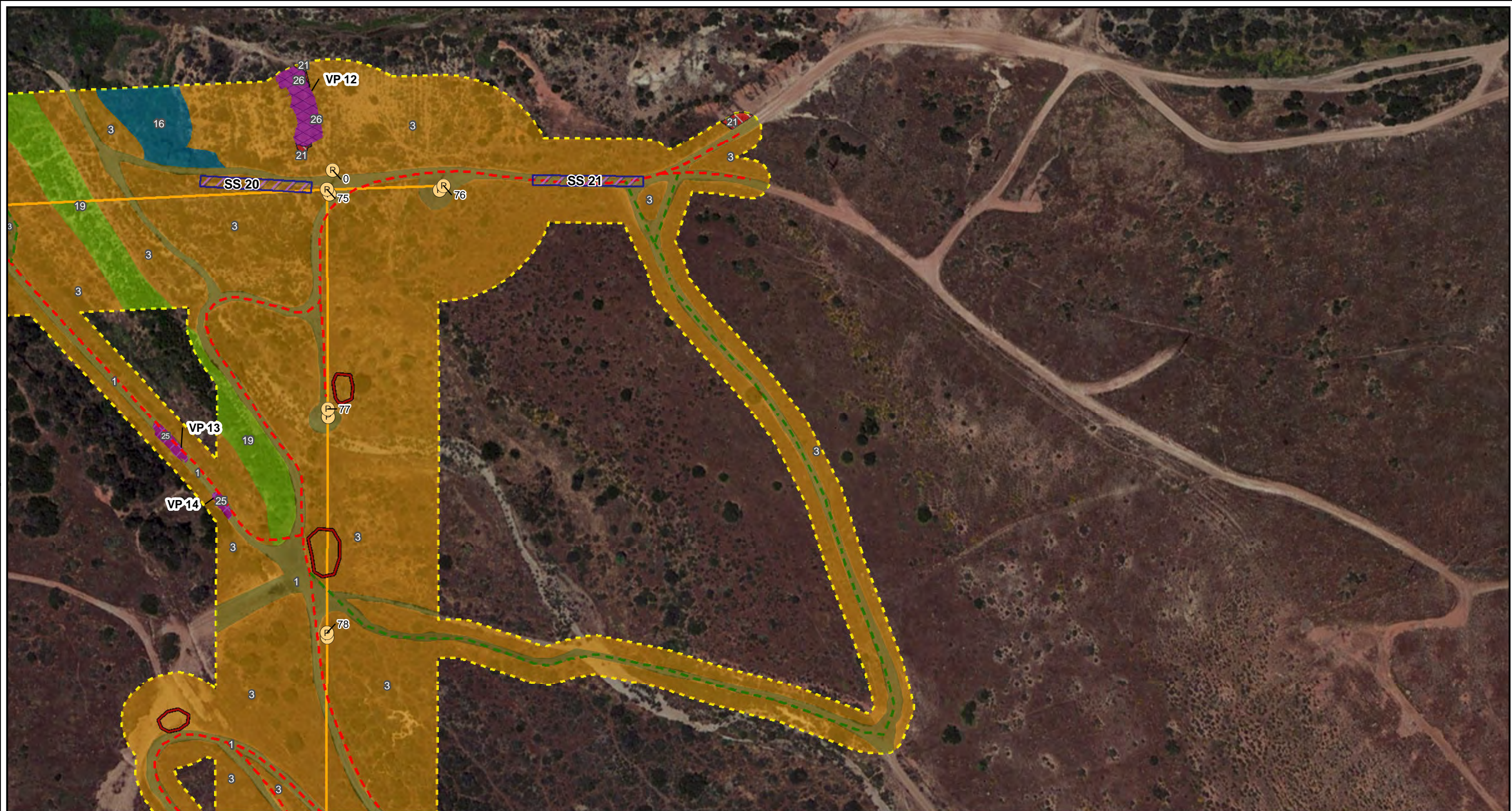


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

--- Survey Corridor

⊙ Project Pole

Access Type

--- Existing Non-TCM Access Road

--- Access Road

Work Area Type

▨ Proposed String Site

▨ Proposed Turnaround

▨ ACOE Wetland Waters, RWQCB Waters of the State [Vernal Pool]

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California buckwheat scrub

16. Fremont Cottonwood Forest

19. Tecate Cypress Stands

21. San Diego Mesa Claypan Vernal Pool Native Grassland Mix

25. Disturbed San Diego Mesa Claypan Vernal Pools

26. San Diego Mesa Claypan Vernal Pool

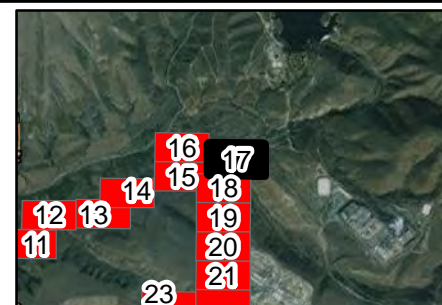
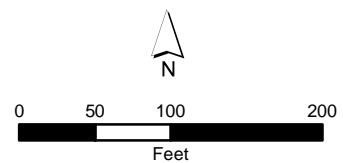


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

--- Survey Corridor

Ⓟ Project Pole

Access Type

--- Existing Non-TCM Access Road

--- Access Road

— Overland Travel

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California buckwheat scrub

8. Disturbed

10. Annual Brome Grassland

21. San Diego Mesa Claypan Vernal Pool Native Grassland Mix

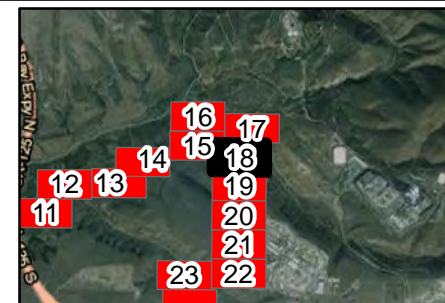
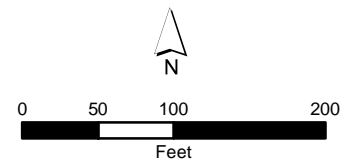
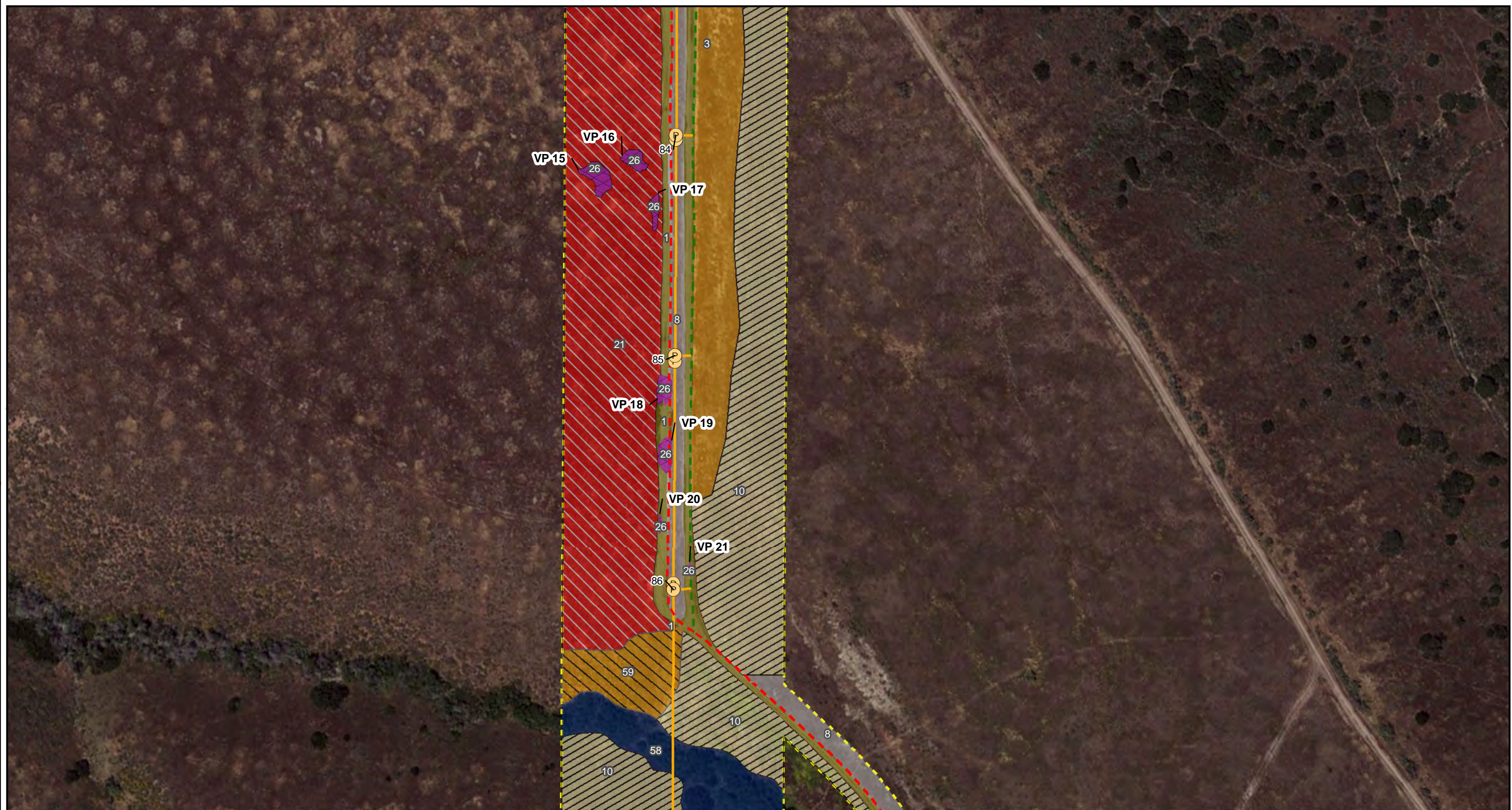


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

Transmission Centerline

Survey Corridor

Project Pole

Access Type

Existing Non-TCM Access Road

Access Road

Overland Travel

ACOE Wetland Waters, RWQCB
Waters of the State [Vernal Pool]

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California
buckwheat scrub

8. Disturbed

10. Annual Brome Grassland

21. San Diego Mesa Claypan Vernal
Pool Native Grassland Mix

26. San Diego Mesa Claypan Vernal
Pool

58. Black Willow Forest

59. Disturbed California Sagebrush-
California buckwheat scrub

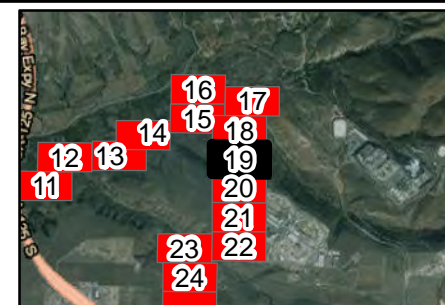
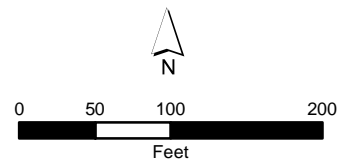


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

Transmission Centerline

Survey Corridor

Project Pole

Access Type

Existing Non-TCM Access Road

Access Road

Overland Travel

ACOE Wetland Waters, RWQCB
Waters of the State [Vernal Pool]

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California
buckwheat scrub

8. Disturbed

10. Annual Brome Grassland

16. Fremont Cottonwood Forest

21. San Diego Mesa Claypan Vernal
Pool Native Grassland Mix

26. San Diego Mesa Claypan Vernal
Pool

58. Black Willow Forest

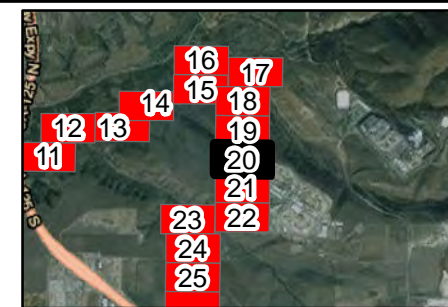
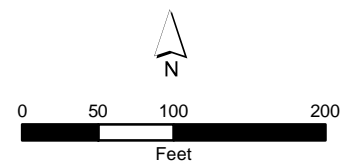
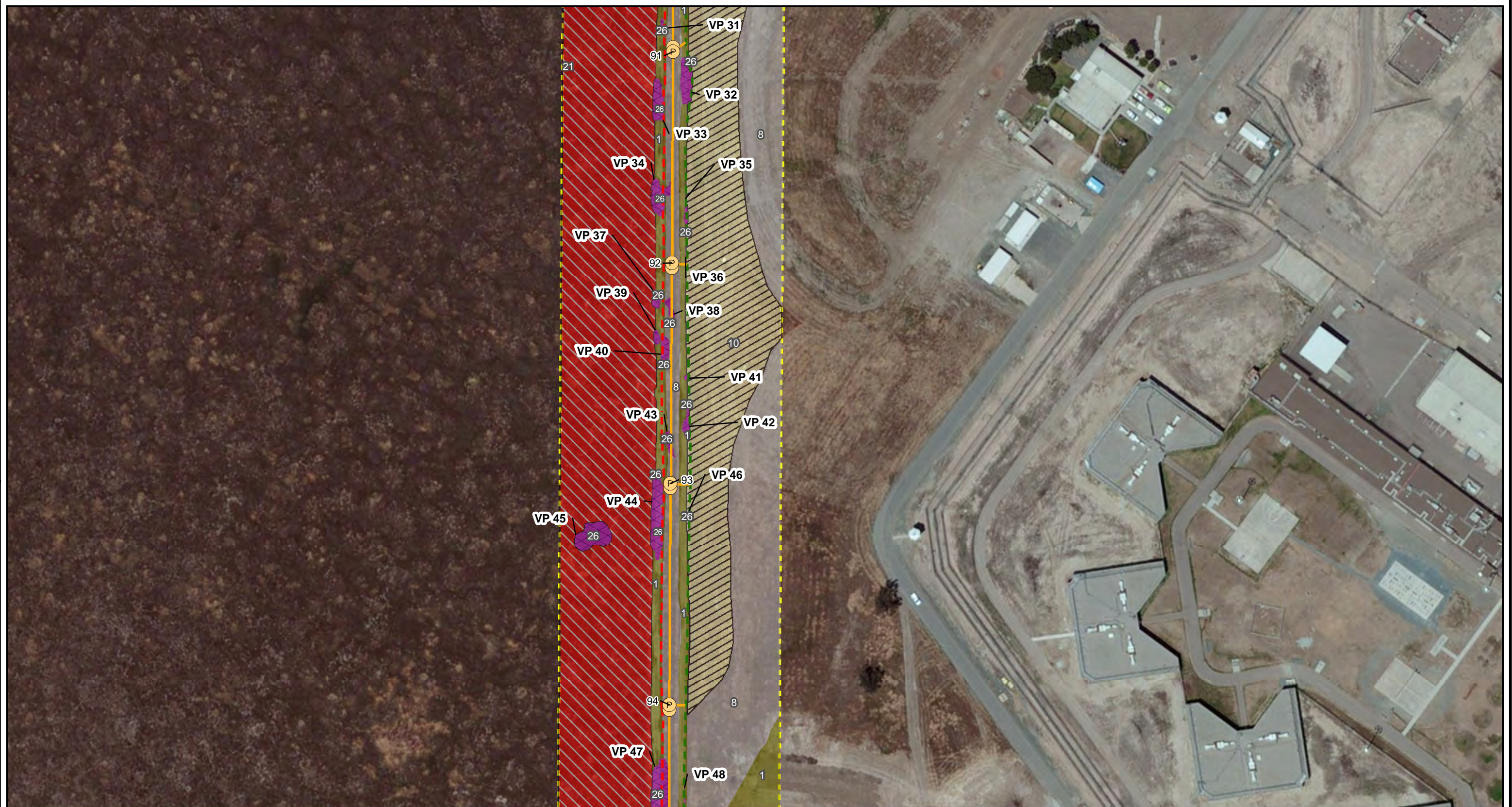


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

--- Survey Corridor

Ⓟ Project Pole

Access Type

— Existing Non-TCM Access Road

— Access Road

— Overland Travel

ACOE Wetland Waters, RWQCB
Waters of the State [Vernal Pool]

Vegetation (MCV II)

1. Bareground

8. Disturbed

10. Annual Brome Grassland

21. San Diego Mesa Claypan Vernal
Pool Native Grassland Mix

26. San Diego Mesa Claypan Vernal
Pool

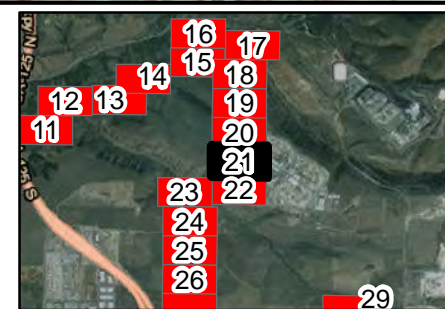
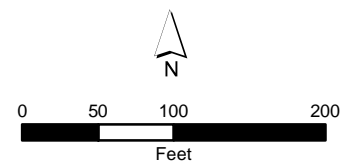


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

--- Survey Corridor

Ⓟ Project Pole

Access Type

--- Existing Non-TCM Access Road

--- Access Road

— Overland Travel

Work Area Type

▨ Proposed String Site

▨ ACOE Wetland Waters, RWQCB Waters of the State [Vernal Pool]

Vegetation (MCV II)

1. Bareground

3. California Sagebrush-California buckwheat scrub

8. Disturbed

10. Annual Brome Grassland

17. Tamarisk Thickets

18. Mulefat Thickets

21. San Diego Mesa Claypan Vernal Pool Native Grassland Mix

26. San Diego Mesa Claypan Vernal Pool

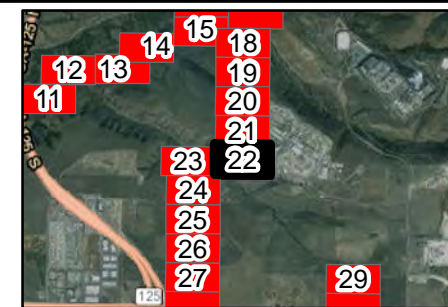
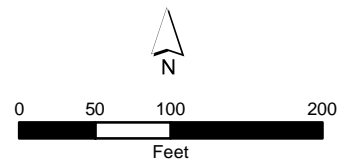


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

- - - Survey Corridor

○ Project Pole

Access Type

- - - Existing Non-TCM Access Road

- - - Access Road

Work Area Type

▨ Proposed String Site

Vegetation (MCV II)

■ 1. Bareground

■ 3. California Sagebrush-California buckwheat scrub

▨ 10. Annual Brome Grassland

■ 13. Coast Prickly Pear Scrub

■ 17. Tamarisk Thickets

■ 18. Mulefat Thickets

■ 23. Spiny Rush Marsh

■ 54. Lemonade Berry Stand

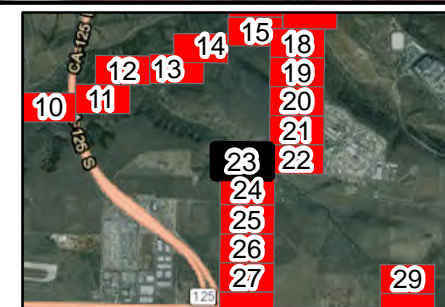
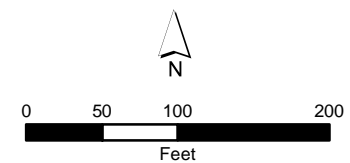


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

Transmission Centerline

Survey Corridor

Project Pole

Access Type

Existing Non-TCM Access Road

Access Road

Overland Travel

Work Area Type

Proposed String Site

Vegetation (MCV II)

1. Bareground

8. Disturbed

10. Annual Brome Grassland

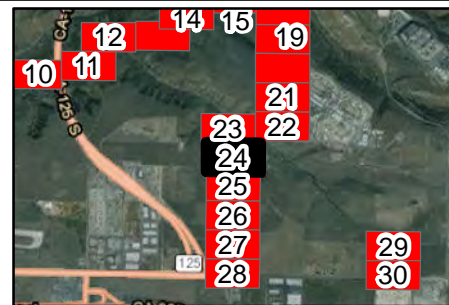


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

--- Survey Corridor

○ Project Pole

Access Type

--- Existing Non-TCM Access Road

--- Access Road

Work Area Type

▨ Proposed String Site

Vegetation (MCV II)

■ 1. Bareground

■ 8. Disturbed

▨ 10. Annual Brome Grassland

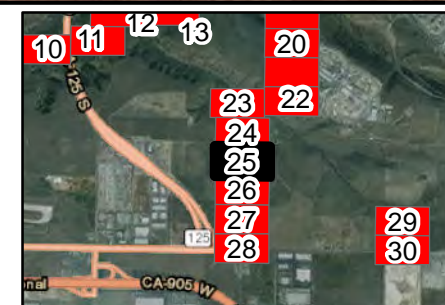
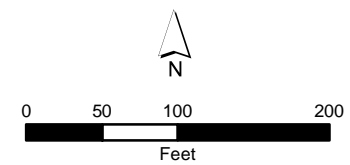


Figure 2-4.2

TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

— Transmission Centerline

--- Survey Corridor

○ Project Pole

Access Type

--- Existing Non-TCM Access Road

--- Access Road

Work Area Type

▨ Proposed String Site

Vegetation (MCV II)

1. Bareground

8. Disturbed

10. Annual Brome Grassland

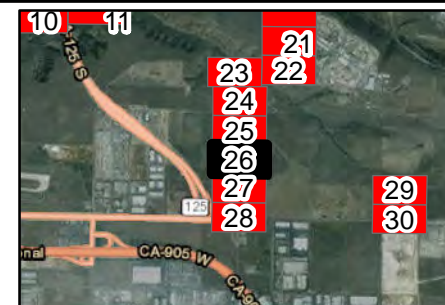
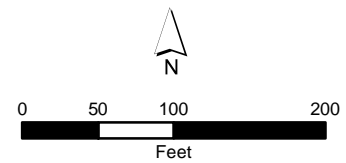


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

Survey Corridor

Access Type

Existing Non-TCM Access Road

Access Road

Work Area Type

Proposed String Site

Vegetation (MCV II)

1. Bareground

8. Disturbed

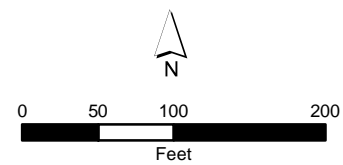
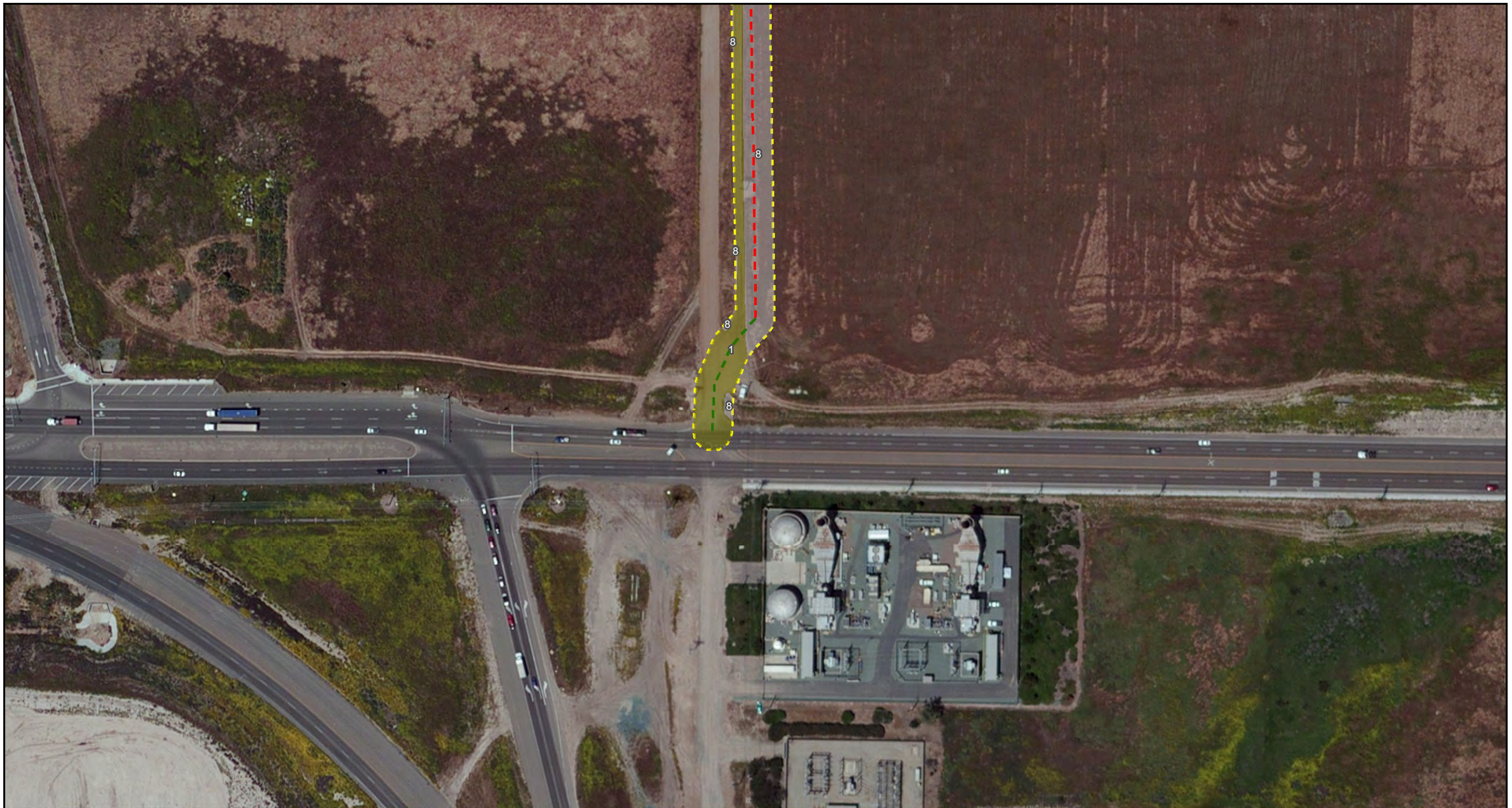


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

Survey Corridor

Access Type

Existing Non-TCM Access Road

Access Road

Vegetation (MCV II)

1. Bareground

8. Disturbed

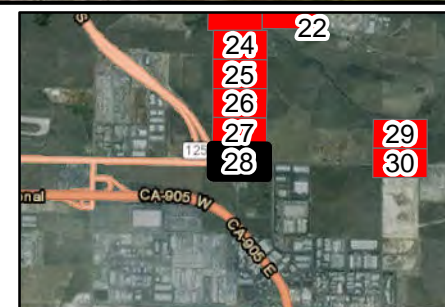
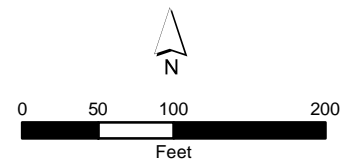


Figure 2-4.2
TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities



Legend

Survey Corridor

Work Area Type

Proposed Staging Yard

Vegetation (MCV II)

1. Bareground

7. Urban and Developed

8. Disturbed

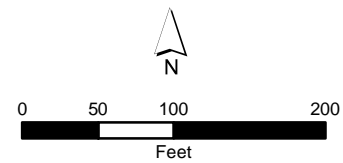


Figure 2-4.2

TL-649 Wood-to-Steel Project
Biological Technical Report
Vegetation Communities

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Name: 20775 BTR Fig 4 Veg Communities 2015.Mxd
Print Date: 6/30/2015, Author: msimmons





- Legend**
- Survey Corridor
 - Work Area Type**
 - Proposed Staging Yard
 - Vegetation (MCV II)**
 - 1. Bareground
 - 7. Urban and Developed
 - 8. Disturbed

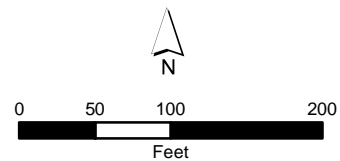


Figure 2-4.2
 TL-649 Wood-to-Steel Project
 Biological Technical Report
 Vegetation Communities

1 Table 2.4-1. Vegetation Communities within the Survey Area

Vegetation Community ³	Approximate Area (acres)
<i>Scrub and Chaparral</i>	
California Sagebrush-California Buckwheat Scrub*	58.80
California Sagebrush-California Buckwheat Scrub (disturbed)*	0.97
Castor Bean Thicket	0.52
Coast Prickly Pear Scrub*	27.91
Coast Prickly Pear Scrub (disturbed)*	5.26
Lemonade Berry Stand*	2.45
Singlewhorl Burrowbush-Broom Baccharis Scrub*	0.93
Singlewhorl Burrowbush Scrub*	0.29
<i>Grasslands, Vernal Pools, Meadows, and Other Herbaceous Communities</i>	
Creeping Ryegrass Grassland	0.06
Purple Needlegrass Grassland*	24.62
San Diego Mesa Claypan Vernal Pool*	0.56
San Diego Mesa Claypan Vernal Pool (disturbed)*	0.24
San Diego Mesa Claypan Vernal Pool Native Grassland Mix*	11.74
<i>Bog and Marsh</i>	
Bulrush Marsh*	0.03
Pale Spike Rush Marshes*	0.02
Spiny Rush Marsh*	0.17
<i>Riparian and Bottomland Habitat</i>	
Arroyo Willow – Mulefat Woodland*	0.30
Fremont Cottonwood Forest*	0.71
Giant Reed Breaks	0.09
Mulefat Thickets*	0.82
Mulefat Thickets (disturbed)	0.90
Tamarisk Thickets	2.39
Vegetated Rip-Rap Channel	0.25
<i>Woodland</i>	
Black Willow Forest*	0.87
Tecate Cypress Stands*	0.67

³An asterisk designates a sensitive natural community, defined as follows:

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

Vegetation Community ³	Approximate Area (acres)
<i>Disturbed or Developed</i>	
Bare Ground	34.27
Disturbed Areas	43.08
Landscape/Ornamental	6.14
Urban and Developed	35.08
Total	340.67

Source: Chambers 2015

Scrub and Chaparral

California Sagebrush-California Buckwheat Scrub

California sagebrush-California buckwheat scrub (*Artemisia californica*-*Eriogonum fasciculatum* Shrubland Alliance) is dominated equally by California sagebrush and California buckwheat in the shrub canopy. Most shrubs are less than 6 feet in height. The canopy is two tiered and intermittent to continuous with some shrubs such as laurel sumac (*Malosma laurina*) and lemonade berry (*Rhus integrifolia*) can reach up to 16 feet in height. Herbaceous layer is seasonally present. This community can be found on steep slopes that are typically south-facing and soils are colluvial derived. Dominant plant species observed within the survey area included California sagebrush, coastal California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*), toyon (*Heteromeles arbutifolia*), laurel sumac (*Malosma laurina*), black sage (*Salvia mellifera*), County Rare Plant Register 2B.2 Munz's sage (*Salvia munzii*) and County Rare Plant Register 4.3 San Diego County viguiera (*Bahiopsis laciniata*). This community is found in both restored (Dennery Canyon Open Space Reserve) and naturally occurring stands within survey area.

Disturbed California Sagebrush-California Buckwheat Scrub

Disturbed California sagebrush-California buckwheat scrub (*Artemisia californica*-*Eriogonum fasciculatum* Shrubland Alliance) is similar to California sagebrush-California buckwheat scrub, however, 25 percent or more of the total vegetation is comprised of nonnative annual grasses. Dominant plant species observed within the survey area included California sagebrush, coastal California buckwheat, toyon, laurel sumac, black sage, ripgut brome, and foxtail chess.

Castor Bean Thicket

In some portions of the survey area, castor bean thicket (*Ricinus communis* Shrubland Alliance) was largely comprised of a monoculture of castor bean (*Ricinus communis*) with lesser amounts of other nonnative shrub species, such as tree tobacco (*Nicotiana glauca*) and sweet fennel also present. Other portions of the survey area were dominated by castor bean with scattered native shrub species such as big saltbush (*Atriplex lentiformis*) also present. The herbaceous layer was dominated by nonnative annual grasses.

Coast Prickly Pear Scrub

Coast prickly pear scrub (*Opuntia littoralis* Shrubland Alliance) is dominated by coast prickly pear (*Opuntia littoralis*) and other cacti in an intermittent or continuous two-tiered shrub canopy less than 6 feet in height. Emergent shrubs, such as laurel sumac, lemonade berry, blue elderberry, and Peruvian peppertree (*Schinus molle*) may be present in low cover. The herbaceous layer is open to continuous and diverse. This vegetation community can be found on south-facing slopes and headlands. Soils are shallow loams and

clays and often times rocky. Dominant plant species observed within the survey area included California sagebrush, coastal California buckwheat, coast cholla (*Cylindropuntia prolifera*), jojoba (*Simmondsia chinensis*), County Rare Plant Register 2B.2 golden-spined cereus (*Bergerocactus emoryi*), County Rare Plant Register 2B.1 San Diego barrel cactus (*Ferocactus viridescens*), hairy yerba santa (*Eriodictyon trichocalyx* var. *trichocalyx*), laurel sumac, and coast prickly pear. This community is found in both restored (Dennery Canyon Open Space Reserve) and naturally occurring stands within survey area.

Disturbed Prickly Pear Scrub

Disturbed coast prickly pear scrub (*Opuntia littoralis* Shrubland Alliance) is similar to coast prickly pear scrub; however, it is more fragmented by a nonnative annual grassland herbaceous layer which comprises 25 percent or more of the total vegetative cover. Dominant plant species observed within this vegetation community in the survey area included California sagebrush, coastal California buckwheat, coast cholla, jojoba, hairy yerba santa, laurel sumac, coast prickly pear, ripgut brome, soft chess, and foxtail chess.

Lemonade Berry Stand

Within the survey area monotypic lemonade berry occasionally occurs in sufficient densities to represent a scrub community. Shrubs can reach up to 26 feet in height. These areas are considered to form a lemonade berry stand (*Rhus integrifolia* Scrubland Stand)-type chaparral community.

Singlewhorl Burrowbush-Broom Baccharis Scrub

Singlewhorl burrobush–broom baccharis scrub (*Ambrosia monogyra*-*Baccharis sarothroides* Shrubland Alliance) occurs occasionally in scattered locations throughout the survey area. Singlewhorl burrobush and broom baccharis (*Baccharis sarothroides*) are co-dominant with lemonade berry in the survey area.

Singlewhorl Burrowbush Scrub

Within the survey area singlewhorl burrobush scrub (*Ambrosia monogyra* Shrubland Alliance) occasionally occurs in sufficient densities with insufficient other species present to represent a multiscrub community. These areas form a singlewhorl burrobush (*Ambrosia monogyra*) chaparral community with lesser amounts of mulefat also present.

Grasslands, Vernal Pools, Meadows, and Other Herbaceous Communities

Creeping Ryegrass Grassland

Creeping ryegrass grassland (*Elymus triticoides* Herbaceous Series) is dominated by creeping ryegrass (*Elymus triticoides*) with other grass species intermixed, including nonnative annual grasses. This vegetation type is typically found in areas that are permanently saturated with a shallow water table, such as valley bottoms and lower portions of alluvial slopes. In addition to creeping ryegrass, other species observed within the survey area include ripgut brome and soft chess.

Purple Needlegrass Grassland

Purple needlegrass grassland (*Nassella pulchra* Herbaceous Alliance) is dominated (or characteristically present) by purple needlegrass (*Stipa pulchra*) in the herbaceous layer in an open to continuous herbaceous layer less than three feet in height. Emergent shrubs, such as California sagebrush, California buckwheat, and some trees may be present in low cover. This community can be found on all topographic locations. Inland soils are deep with high clay content or shallow and rocky near the coast. Within the survey area, nonnative grasses were interspersed between native grasses and shrubs. In addition to purple needlegrass, dominant plant species observed included sand aster (*Corethrogyne filaginifolia*), long-stemmed

buckwheat (*Eriogonum elongatum* var. *elongatum*), California buckwheat, County Rare Plant Register 1B.2 decumbent goldenbush (*Isocoma menziesii* var. *decumbens*), nodding needlegrass (*Stipa cernua*), small-flowered needlegrass (*Stipa lepida*), and nonnative ripgut brome, and foxtail chess.

San Diego Mesa Claypan Vernal Pool

In San Diego County, vernal pools, specifically San Diego Mesa Claypan Vernal Pools are considered sensitive. Soils in this community are finer textured and grayer than the hardpan vernal pool and are typically surrounded by hummocks called mima mounds that may contain grassland habitat. San Diego Mesa claypan vernal pools are characterized by low depressions that sit above a hardpan or claypan layer and are typically flooded and saturated for several weeks to a few months in the winter and spring each year. Vernal pools can be differentiated from other seasonal wetland communities by containing at least one vernal pool indicator species (species known to only or predominantly occur within these isolated seasonal wetlands) such as woolly marbles (*Psilocarphus brevissimus* subsp. *brevissimus*) or button celery (*Eryngium aristulatum* var. *parishii*). Wetland obligate perennial species such as spike rush (*Eleocharis* sp.) frequently occur. Vernal pool plants are not persistent year-round and generally are not evident during summer or fall. Vernal pools are often barren during the summer or may become invaded by upland annual species after the soils have dried out.

Disturbed San Diego Mesa Claypan Vernal Pool

Vernal pools typically describe natural areas where mima mounds or other depressions collect water and support vernal pool indicator species. Previous human disturbances within the proposed project area include construction of roads, border patrol use, sewer and water line maintenance and access, fill, and recreation have resulted in disturbed conditions and the introduction of atypical vegetation within the vernal pools. Disturbed vernal pools are characterized by at least one vernal pool indicator species occurring within disturbed or developed areas. Within the survey area, disturbed vernal pool habitat occurs on previously developed and bladed dirt roads where senesced woolly marbles were prevalent in apparently claypan soils, and signs of hydrology, such as soil cracks were present at the time of the survey. This habitat can be differentiated from the San Diego Mesa Claypan Vernal Pool habitat described above by the presence of areas largely devoid of upland vegetation during the summer due to regular disturbances and soil compaction.

San Diego Mesa Claypan Vernal Pool Native Grassland Mix

Within the survey area, vernal pool obligate indicator species woolly marbles and San Diego button celery were primarily observed within a larger mima mound complex located west of Pole Nos. 96 through 82. Additional wetland associated species associated with San Diego Mesa claypan vernal pools observed within the survey area include adobe popcornflower (*Plagiobothrys acanthocarpus*) and toad rush (*Juncus bufonius*). However, this habitat has been invaded by upland annuals. Based on topography, this habitat type is expected to occur within many of the claypan depressions interspersed between mima mounds in this area of the proposed project. As would be expected during spring and summer months, this habitat was largely dominated by upland species and grasses at the time of the survey. Additional species observed within the vernal pools that lead to development of a new community (Vernal Pool Native Grassland Mix) included nonnative brome grasses, native needlegrass species, and scattered shrubs such as decumbent goldenbush.

Bog and Marsh

Bulrush Marsh

Bulrush marsh (*Scirpus* sp. Herbaceous Alliance) is dominated by one of various the bulrush species. The vegetation community may be permanently or irregularly flooded creating a creek or channel. Soil is typically peaty and supporting other marsh species. Bulrush marsh was interrupted periodically by willow species within the survey area.

Pale Spike Rush Marshes

Pale spike rush marshes (*Eleocharis macrostachya* Herbaceous Alliance) are dominated in an open to continuous herbaceous layer less than three feet in height. This community can be found within lakeshores, streambeds, swales, vernal pools, pastures, ditches, and natural and artificial ponds. Soils are alluvial and often highly organic and are flooded part of the growing season with alkaline, brackish, or fresh water. Within the survey area, the dominant spike rush species is slender creeping spike-rush (*Eleocharis montevidensis*). This community is largely disturbed and can be further characterized by nonnative curly dock (*Rumex crispus*) and nonnative brome grasses, such as ripgut brome.

Spiny Rush Marsh

Spiny rush marsh (*Juncus acutus* Herbaceous Alliance) is dominated by spiny rush with California encelia (*Encelia californica*) dominating the upland vegetation. The vegetation community may be semipermanently flooded, seasonally flooded, permanently saturated, seasonally saturated, or intermittently exposed. Spiny rush marsh is often found at the margins of channels, lakes, ponds, overflow areas, reservoirs, rivers, streams, depressions, seeps, or swales. In addition to spiny rush and California encelia, other plant species within this vegetation community observed within the survey area included San Diego marsh-elder, California adolphia, and tamarisk.

Riparian and Bottomland Habitat

Arroyo Willow – Mulefat Woodland

Arroyo willow-mulefat woodland (*Salix lasiolepis*-*Baccharis salicifolia* Woodland Alliance) is dominated by a primary canopy of tall arroyo willow species that creates an intermittent to open canopy with a shrub layer dominated by mulefat. The vegetation community may be seasonally flooded or saturated with fresh water along flood-plains, or along low gradient depositions adjacent to river or streams. In addition to arroyo willow (*Salix lasiolepis*) and mulefat, black willow (*Salix gooddingii*) was also present periodically throughout the survey area along with non-native tamarisk (*Tamarix* spp.).

Fremont Cottonwood Forest

Fremont cottonwood forest (*Populus fremontii* Forest Alliance) is dominated largely by Fremont cottonwood (*Populus fremontii*) with other large riparian tree species, such as western sycamore, coast live oak (*Quercus agrifolia*), and willow species (*Salix* spp.) occurring within a continuous to open canopy tree canopy less than 80 feet in height. The shrub layer is intermittent to open and the herbaceous layer is variable. This vegetation community can be found on floodplains, along low-gradient rivers, along perennial or seasonally intermittent streams, springs, in lower canyons in desert mountains, in alluvial fans, and in valleys with a dependable subsurface water supply that varies considerably during the year. Dominant plant species observed within the survey area included a closed canopy dominated by Fremont cottonwood, sandbar willow (*Salix exigua*), and arroyo willow, with a dense understory of woody and herbaceous species dominated by mulefat, mugwort, and San Diego marsh-elder (*Iva hayesiana*).

1 Giant Reed Banks

2 Giant reed breaks (*Arundo donax* Semi-Natural Stands) are dominated by large dense continuous stands of
3 giant reed (*Arundo donax*) less than 26 feet in height. Emergent trees may occur at low cover. This
4 vegetation community can be found in riparian areas, along low-gradient streams, ditches, and coastal
5 marshes. Typically, vegetation composition is a feature altered by anthropogenic effects. Within the survey
6 area, this habitat is dominated by nonnative herbaceous plants, such as giant reed and tamarisk, with
7 associated facultative disturbed plants, such as castor bean occurring along the fringes of the mapped
8 community.

9 Mulefat Thicket

10 Mulefat thickets (*Baccharis salicifolia* Shrubland Alliance) are dominated largely by mulefat within a
11 continuous two-tiered shrub layer between 6 and 16 feet in height. Riparian trees may be present at low
12 cover and the herbaceous layer is sparse. This community can be found within canyon bottoms, floodplains,
13 irrigation ditches, lake margins, and stream channels. Soils are mixed alluvium. Natural riparian scrub
14 communities within the survey area were observed most commonly associated with drainages in the Otay
15 River flood plain. These riparian communities were dominated by shrub species, such as mulefat and
16 interspersed broom baccharis (*Baccharis sarothroides*), or sandbar willow, and an herbaceous understory
17 of San Diego marsh-elder, mugwort, and ragweed (*Ambrosia* sp.). Occasional willow species occur within
18 this community infrequently, such as black willow or arroyo willow, providing limited canopy cover.

19 Disturbed Mulefat Thicket

20 Disturbed mulefat thicket (Disturbed Mulefat Shrubland Alliance) is similar to mulefat thicket; however, it
21 is more fragmented by a large stand of nonnative tamarisk shrubs which compose 25 percent or more of the
22 total vegetative cover. Dominant plant species observed within this vegetation community in the survey
23 area included mulefat, tamarisk, San Diego marsh-elder, and spiny rush.

24 Tamarisk Thicket

25 Tamarisk thickets (*Tamarix* spp. Semi-Natural Shrubland Stands) are dominated by one of various *Tamarix*
26 species within a continuous to open shrub canopy less than 26 feet in height. Riparian trees may be present
27 at low cover. Herbaceous layer is sparse. This community can be found within arroyo margins, lake
28 margins, ditches, washes, rivers, and other watercourses. Within the survey area this vegetation community
29 was often found in drainages with evidence of trash and debris present and were all dominated by nonnative
30 plants, including Mediterranean tamarisk (*Tamarix ramosissima*), castor bean, sweet fennel, and tree
31 tobacco. Several of the tamarisk thickets showed evidence of remnant native vegetation as evidenced by
32 sparse mulefat, lemonade berry, broom baccharis, or San Diego marsh-elder also present.

33 Vegetated Rip-Rap Channel

34 The vegetated rip-rap channel is lined with large boulders with intermittent vegetation. Within the survey
35 area the dominant species observed in this channel included San Diego marsh-elder, broom baccharis, and
36 tamarisk with lesser amounts of mulefat, arroyo willow, and lemonade berry.

37 Woodland

38 Black Willow Forest

39 Black willow forest (*Salix gooddingii* Forest Alliance) is composed of tall black willow and scattered
40 western sycamore (*Platanus racemosa*) trees that form a closed canopy. This vegetation community may
41 be seasonally flooded and/or saturated. Black willow forest is typically located in floodplains, low-gradient

depositions along rivers, streams, or meadow edges. Black willow and western sycamore trees comprised the upper canopy of this community within the survey area while arroyo willow, mulefat, blue elderberry (*Sambucus nigra* subsp. *caerulea*) and spiny rush (*Juncus acutus*) dominated the sub-canopy.

Tecate Cypress Stands

Tecate cypress stands (*Callitropsis forbesii* Woodland Alliance) are dominated by Tecate cypress within an open to intermittent tree canopy less than 33 feet in height. The shrub layer is intermittent to continuous and the herbaceous layer is sparse to intermittent. This vegetation community can be found on dry, exposed hillsides and ridgetops, stream banks, and arroyos. Soils are deep with shallow over alkaline clay, sandstone, granitic, mafic, and/or ultra mafic substrates. Within the survey area, one Tecate cypress stand was observed in a large dry wash and was characterized by a solid stand of Tecate cypress with no interspersed understory shrub species. Alluvial scrub species including black sage, hairy yerba santa, County Rare Plant Register 2B.2 Munz's sage, and San Diego marsh-elder were found growing adjacent to the stand of Tecate cypress. Occurrence of this vegetation community within a dry wash is uncommon, indicating that the trees may have been planted for habitat restoration. Signage indicating habitat restoration can be found within this large dry wash.

Disturbed or Developed

Bare Ground

Areas characterized as bare ground include areas with exposed soils, rocky substrate, access roads, and disturbed areas devoid of plant cover. Areas within the survey area considered bare ground are existing access roads or previously graded areas.

Disturbed Areas

Disturbed areas may be nearly devoid of vegetation because of clearing, grading, or routine mowing and tilling and are dominated by pioneering herbaceous species that readily colonize disturbed soils, such as tocalote (*Centaurea melitensis*), wild oat, black mustard, prickly sow-thistle (*Sonchus asper*), and wild lettuce (*Lactuca serriola*). Areas characterized by disturbed habitat have no or negligible ecological value and, within the survey area, are primarily dominated by various combinations of ripgut brome, foxtail chess, Russian thistle (*Salsola australis*), slender wild oat (*Avena fatua*), tocalote, redstem filaree (*Erodium cicutarium*), lamb's quarters (*Chenopodium album*), and hairy crab grass (*Digitaria sanguinalis*). Scattered individuals or remnants of native coastal sage scrub vegetation also occurred including California buckwheat, California sagebrush, and deerweed (*Acmispon glaber*).

Landscape/Ornamental

This vegetation type consists of areas dominated by nonnative species planted for landscaping and that generally occur in residential neighborhoods, commercial properties or along roadsides. This habitat can be found within the survey area near the water park at the western end of the proposed project area. Landscape/ornamental associated species observed during the survey included jacaranda (*Jacaranda mimosifolia*), fountain tree (*Spathodea campanulata*), and cape honeysuckle (*Tecomaria capensis*).

Urban and Developed

Developed areas typically include paved roads, structures, and associated infrastructure areas.

Critical Habitat

The locations of USFWS critical habitat areas for listed species were evaluated using geographic information system (GIS) data. Four USFWS-designated critical habitat areas were identified within the survey area, and are shown in **Figure 2.4-3**, Designated Critical Habitat.

The following species have critical habitat in the proposed project area:

- **Coastal California gnatcatcher.** Critical habitat for coastal California gnatcatcher occurs throughout much of the proposed project area. However, the USFWS designation of critical habitat for the coastal California gnatcatcher specifically excludes areas within functioning Habitat Conservation Plans (HCPs) (Final Rule [FR] 72 72010), including SDG&E ROW within the SDG&E Subregional Natural Community Conservation Plan (NCCP). Since the proposed project is in SDG&E ROW within SDG&E's NCCP, the proposed project is not located in critical habitat for coastal California gnatcatcher.
- **San Diego fairy shrimp.** Fourteen pole locations are located within critical habitat for San Diego fairy shrimp. These include Pole Nos 84 and 96.
- **Quino checkerspot butterfly (QCB).** Seventeen pole locations are located within critical habitat for QCB. These include Pole Nos 80 through 88 and 98 through 105.
- **Otay tarplant.** Sixty-seven pole locations are located within critical habitat for Otay tarplant. These include Pole Nos 8 through 10, 14, 16, 17 through 26, 28 through 32, 39 through 44, and 46 through 79.

USFWS considers primary constituent elements (PCEs), which represent physical and biological features that are essential to the conservation of the species, when determining critical habitat for federally listed species.

In the FR designating San Diego fairy shrimp critical habitat (72 FR 70648), the USFWS defines PCEs as:

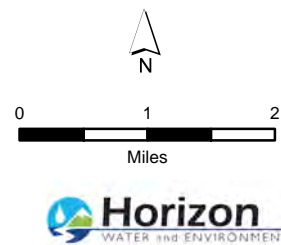
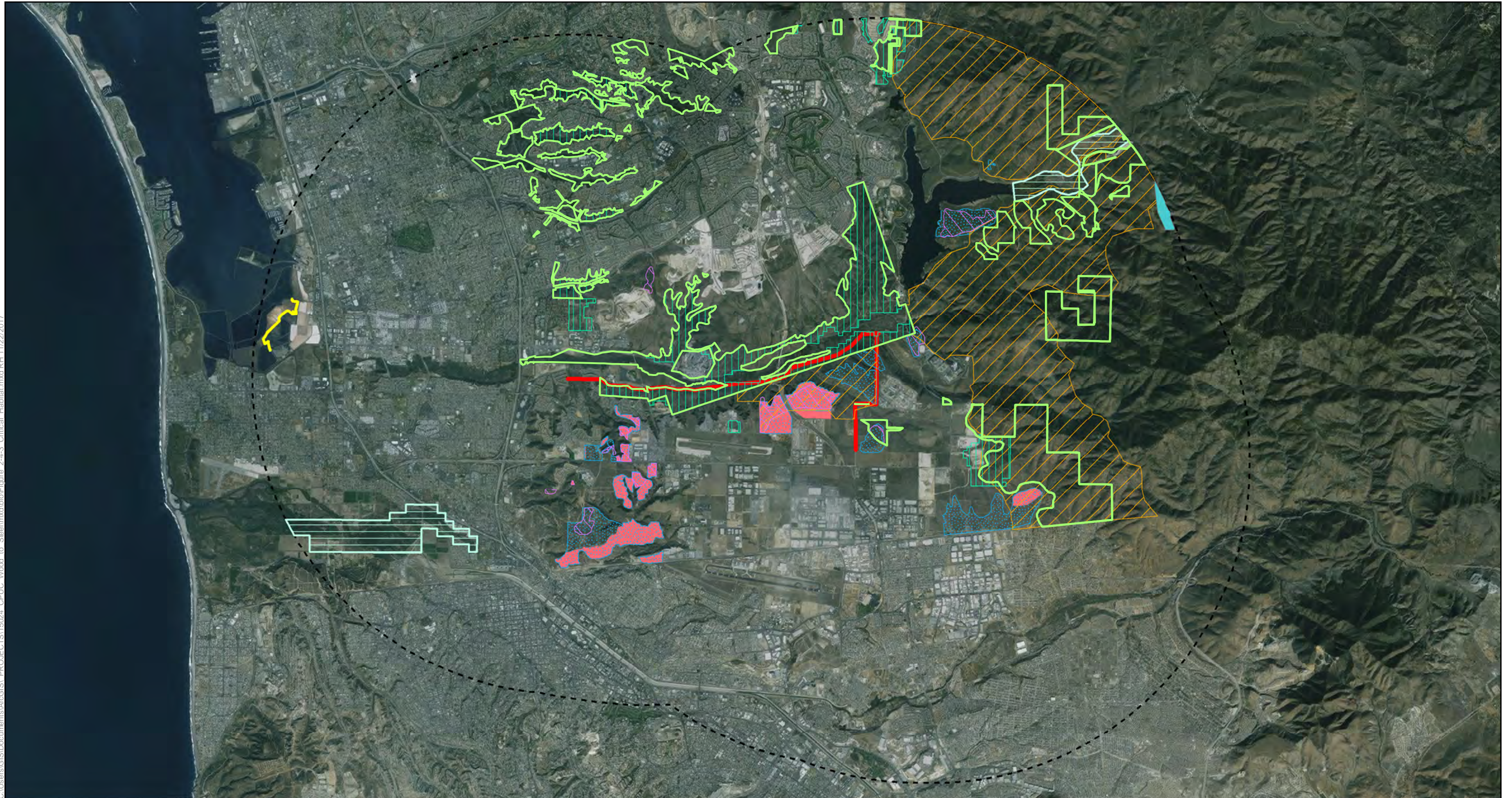
- Vernal pools with shallow to moderate depths (2 to 12 inches) that hold water for sufficient lengths of time (7 to 60 days) necessary for incubation, maturation, and reproduction of the San Diego fairy shrimp, in all but the driest years;
- Topographic features characterized by mounds and swales and depressions within a matrix of surrounding uplands that result in complexes of continuously, or intermittently, flowing surface water in the swales connecting the pools described in above, providing for dispersal and promoting hydroperiods of adequate length in the pools (i.e., the vernal pool watershed); and
- Flat to gently sloping topography, and any soil type with a clay component and/or an impermeable surface or subsurface layer known to support vernal pool habitat (including Carlsbad, Chesterton, Diablo, Huerhuero, Linne, Olivenhain, Placentia, Redding, and Stockpen soils).

PCEs defined in the FR designating critical habitat for QCB (74 FR 28775) include, but are not limited to:

- Plant communities in their natural state or those that have been recently disturbed (e.g., by fire or grubbing) that provide populations of host plants, dwarf plantain (*Plantago erecta*) and wooly plantain (*Plantago patagonica*), and nectar sources for the QCB.

- 1 ▪ Habitat suitability is determined by larval host plant density, topographic diversity, nectar resource
2 availability, and climatic conditions.
- 3 ▪ PCEs can exist in undeveloped areas that support various types of sage scrub, chaparral, grassland,
4 and similar plant communities that provide habitat for host and nectar sources.

5 The FR designating critical habitat for Otay tarplant (67 FR 76030) defines PCEs for Otay tarplant as: soils
6 with a high clay content (generally greater than 25 percent, or clay intrusions or lenses) that are associated
7 with grasslands, open coastal sage scrub, or maritime succulent scrub communities between 80 and 1,000
8 feet elevation.



— Project Route
--- 5-mile Radius

Coastal California gnatcatcher
Least Bell's vireo
Mexican flannelbush
Source: USFWS

Otay tarplant
Quino checkerspot butterfly
Riverside fairy shrimp

San Diego fairy shrimp
Spreading navarretia
Western snowy plover

Figure 2.4-3
Designated Critical Habitat
Within the Project Area

Critical habitat for San Diego fairy shrimp, QCB, and Otay tarplant that meet the PCEs—as defined above—is also considered to be habitat suitable for these federally listed species. Table 2.4-2 provides the total area of critical habitat for these three species within the proposed project area.

Table 2.4-2. Critical Habitat within the Proposed Project Area

Species	Approximate Area (acres)
San Diego fairy shrimp	0.24
Quino checkerspot butterfly	0.93
Otay tarplant	4.31
Total	5.48

Source: Chambers 2015

Wildlife Migration Corridors

Wildlife corridors connect otherwise fragmented habitats. The Otay River, which is located north of the proposed project, acts as a migration corridor for multiple species. The Otay River flows west through the survey area to the Pacific Ocean, where it empties into Egger Highlands at the San Diego Bay National Wildlife Refuge. Other natural drainages and riparian areas may also act as migration corridors. The proposed project’s location is within and adjacent to preserve areas, which allow for wildlife migration/movement. In addition, vernal pool habitats are located within the proposed project which have the potential to support fairy shrimp species. The 2015/2016 protocol-level wet season surveys confirmed that two vernal pool road ruts (RR), RR-93 and RR-85, contain San Diego fairy shrimp (see Appendix F, Tie-Line 649 Vernal Pool and Listed Fairy Shrimp Avoidance Discussion Memo, Chambers 2018 and Appendix G, Survey Summary Report for the 2015/2016 Protocol-Level, Wet Season Fairy Shrimp Survey for the Proposed San Diego Gas and Electric Tie Line 649 Wood to Steel Replacement Project in Southern San Diego County, California, Busby 2016). Additionally, a total of 8 (4 male and 4 female) federally listed endangered San Diego fairy shrimp were collected and identified from one basin (Vernal Pool [VP] 2) during the 2016 protocol-level dry season report (see Appendix H, Survey Summary Report for the 2016 Protocol-Level Dry Season Fairy Shrimp Survey for the Proposed San Diego Gas and Electric Tie Line 649 Wood to Steel Replacement Project in Southern San Diego County, California, Busby and Alden 2017). In 2017, a fairy shrimp species assessment was conducted between Loc-84 through Loc-96 during the wet season. San Diego fairy shrimp were identified in 21 vernal pools/basins along access roads during the assessment: VP-18, 19, 20, 25, 28, 30, 31, 33, 34, 37, 38, 39, 42, 43, 45, 46, 47, and 50 and B-02. These vernal pools/basins are located near pole locations Loc-85, Loc-86, Loc-90, Loc-91, Loc-92, Loc-93, Loc-94, and Loc-95 (Chambers 2018). When vehicles drive through vernal pools on existing roadways, there is potential to move fairy shrimp cysts between pools (SDG&E 2015).

Preserve Areas

Ecological preserves within the proposed project area include Otay Ranch Preserve, Otay Valley Regional Park, and the City of San Diego MHPA (part of the Multi-Species Conservation Plan [MSCP]). Otay Lakes Regional Park is adjacent to but not within the proposed project area. Pole Nos. 1 through 10, 14, 16, 18 through 21, 39, 40 through 46, 53, 56, and 59 through 109 are located within designated preserves (Chambers 2015).

1 **Wetlands and Jurisdictional Waters**

2 The survey area contains aquatic features that may be subject to regulation as wetlands or other
3 jurisdictional waters by the U.S. Army Corps of Engineers (USACE), RWQCB, and CDFW. The waters
4 under each agency's jurisdiction are described in the following paragraphs. More information on these
5 features is provided in the Wetland Delineation Report, which is included as Appendix K in the Biological
6 Technical Report (see Appendix I of this IS/MND). Any temporary or permanent fill in jurisdictional
7 waters would require a Section 404 permit from the USACE, a Section 401 water quality certificate from
8 the RWQCB, and a Streambed Alteration Agreement from the CDFW.

9 The following sections describing jurisdictional features are transcribed directly from SDG&E's PEA
10 (SDG&E 2015).

11 *United States Army Corps of Engineers*

12 A total of 5.55 acres of USACE-jurisdictional waters of the U.S. are located in the proposed project area.
13 Of these waters, 4.45 acres are potentially USACE-jurisdictional wetlands, including 0.80 acre of vernal
14 pool wetlands. Jurisdictional wetlands within the survey area include coastal and valley freshwater marsh,
15 emergent wetland, southern willow scrub, disturbed wetland, and vernal pool wetlands. An additional 11.74
16 acres of San Diego Mesa Claypan vernal pool habitat occur within the survey area and likely are
17 jurisdictional USACE vernal pool wetland waters of the U.S. (see Appendix K, Wetland Delineation
18 Report, in Appendix I, Biological Technical Report of this IS/MND). The area mapped as San Diego Mesa
19 Claypan vernal pool habitat was not formally delineated to minimize impacts to these areas. USACE-
20 jurisdictional other waters of the U.S. (i.e., drainages) display an ordinary high-water mark (OHWM) and
21 have connectivity with navigable waters. A total of 1.09 acres of other waters of the U.S. occur within the
22 survey area.

23 *Regional Water Quality Control Board*

24 The RWQCB has jurisdiction over waters of the State, as defined by the Porter-Cologne Water Quality
25 Control Act. A total of 5.55 acres of RWQCB-jurisdictional features are located in the proposed project
26 area, including 0.80 acre of vernal pools. Although not formally delineated, an additional 11.74 acres of
27 San Diego Mesa Claypan vernal pool habitat occur within the survey area and likely are jurisdictional
28 RWQCB waters of the State vernal pools (see Appendix K, Wetland Delineation Report, in Appendix I,
29 Biological Technical Report of this IS/MND). Waters of the State include unvegetated streambed, coastal
30 and valley freshwater marsh, emergent wetland, riparian scrub, southern willow scrub, disturbed wetland,
31 and vernal pools.

32 *California Department of Fish and Wildlife*

33 A total of approximately 5.79 acres of waters that are subject to CDFW jurisdiction occur in the proposed
34 project area. CDFW jurisdiction includes all non-tidal streambeds mapped at the width of the channel's top
35 of bank, and extends to the edge of riparian canopy and/or associated wetlands, when present. A total of
36 1.09 acres of streambed, and 4.70 acres of riparian vegetation fall within the jurisdiction of the CDFW. The
37 vernal pools present within the proposed project area do not fall within the jurisdiction of the CDFW.

38 **Special-Status Species**

39 Special-status species with the potential to occur in the survey area were identified through a review of the
40 following resources:

- 41 ▪ California Natural Diversity Database (CNDDDB) query for the survey area and surroundings
42 (CDFW 2014 and 2016)

- USFWS Species Occurrence Database (USFWS 2014 and 2016)
- California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California (SDG&E 2015 and 2017) for the survey area and surroundings

Following database review of species known in the vicinity of the proposed project, surveys were conducted by Chambers in the proposed project area in 2014, 2015, and 2016. A San Diego fairy shrimp wet season assessment was conducted by Chambers in 2017.

A review of available data, including the CNDDDB, the USFWS species database, and the CNPS rare plants inventory in conjunction with field surveys, identified 19 sensitive natural communities and 110 sensitive species (80 plants and 66 wildlife species) as being potentially present within the survey area. Critical habitat for three species also occurs within the survey area.

Using information from the literature review and survey results, Chambers developed specific criteria to evaluate special-status plant and wildlife species' potential for occurrence, and the criteria were applied to evaluate target plant and wildlife species (Chambers 2015). The specific criteria are described as follows:

- **Absent.** Species is restricted to habitats or environmental conditions that do not occur within the proposed project area, or a species was not observed within survey area during focused surveys.
- **Low.** Historical records for this species do not exist within the immediate vicinity (approximately five miles) of the proposed project area, and/or habitats or environmental conditions needed to support the species are of poor quality.
- **Moderate.** Either a historical record exists of the species within the immediate vicinity (approximately 5 miles) of the proposed project and marginal habitat exists in the proposed project area; or the habitat requirements or environmental conditions associated with the species occur within the proposed project area, but no historical records exist within the immediate vicinity (approximately 5 miles) of the proposed project.
- **High.** Both a historical record of the species exists within the proposed project area or in the immediate vicinity (approximately 5 miles), and the habitat requirements and environmental conditions associated with the species occur within the proposed project area.
- **Present.** Species was detected within the proposed project area at the time of the survey.

Surveys

These baseline and focused surveys were conducted for wildlife and plant species to determine the baseline biological resource conditions within the proposed project area:

- Focused special-status plant surveys in 2014 (Biological Technical Report, Chambers 2015)
- Jurisdictional Delineation Surveys in May, July, and November 2014 (Appendix K of Appendix I, Biological Technical Report, Chambers 2015)
- Habitat assessment and focused surveys for QCB in 2015 (Appendix J in Appendix I, Biological Technical Report, Chambers 2015)
- Habitat assessment (Biological Technical Report, Chambers 2015) and focused surveys for the Coastal California Gnatcatcher and Coastal California cactus wren in April, May, June 2014 (Appendix G in Appendix I, Biological Technical Report, Chambers 2015)

- Habitat assessment and protocol-level surveys for riparian birds in April 2014 (Appendix H in Appendix I, Biological Technical Report, Chambers 2015)
- Habitat assessment (Appendix I, Biological Technical Report, Chambers 2015) in April 2014, breeding surveys in spring 2014, and non-breeding surveys for the BUOW in the winter of 2014 and 2015 (Appendix I in Appendix I, Biological Technical Report, Chambers 2015)
- Habitat assessment in May, June, and November of 2014 (Appendix I, Biological Technical Report, Chambers 2015), dry-season protocol-level surveys in 2015 and 2016 (Appendix H), wet-season protocol-level surveys for fairy shrimp in 2015 and 2016 (Appendix G), and Wet season fairy shrimp assessment in 2017 (Appendix F)
- Focused special-status species surveys in 2014 and 2015 (Appendix I, Biological Technical Report, Chambers 2015)

The methods of these surveys can be found in their respective reports.

Criteria

Species are considered to be special-status if they meet one or more of the following criteria:

Federal

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

State

- Plant and animal species listed as endangered, threatened, or candidates for listing under the CESA
- Animals designated as Fully Protected Species (FP), as defined in California Fish and Game Code Sections 3511, 4700, 5050, and 5515
- Plants that are state-listed as Rare
- Animal species designated as Species of Special Concern (SSC) by the CDFW
- Plant species ranked by the CNPS as having a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, or 2B

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

Special-Status Plants

Based on the literature and database search, 80 plant species were analyzed for potential to occur within the survey area. The habitat, bloom period, and potential for these special-status plant species to occur are described in **Table 2.4-3**. **Figure 2.4-4** show the locations of the plants in and around the proposed project area.

The 53 plant species originally identified by Chambers were targeted during special-status plant surveys in 2014. The other 27 species were identified through an expanded database search in 2016 and were not

targeted during the surveys, but were still evaluated for their potential to occur in the survey area. Of the 80 special-status plant species evaluated for their potential occurrence within the survey area, 17 species are present and 51 are absent or presumed absent from the survey area based on the results of the two rounds of focused surveys (Chambers 2015).

Special-status plant species encountered and their population counts are listed in Table 2.4-3. In addition to the targeted special-status species, seven CRPR 4 plant species were observed within the survey area. These species have also been included in Table 2.4-3 and in **Table 2.4-4**.

Special-Status Wildlife Species

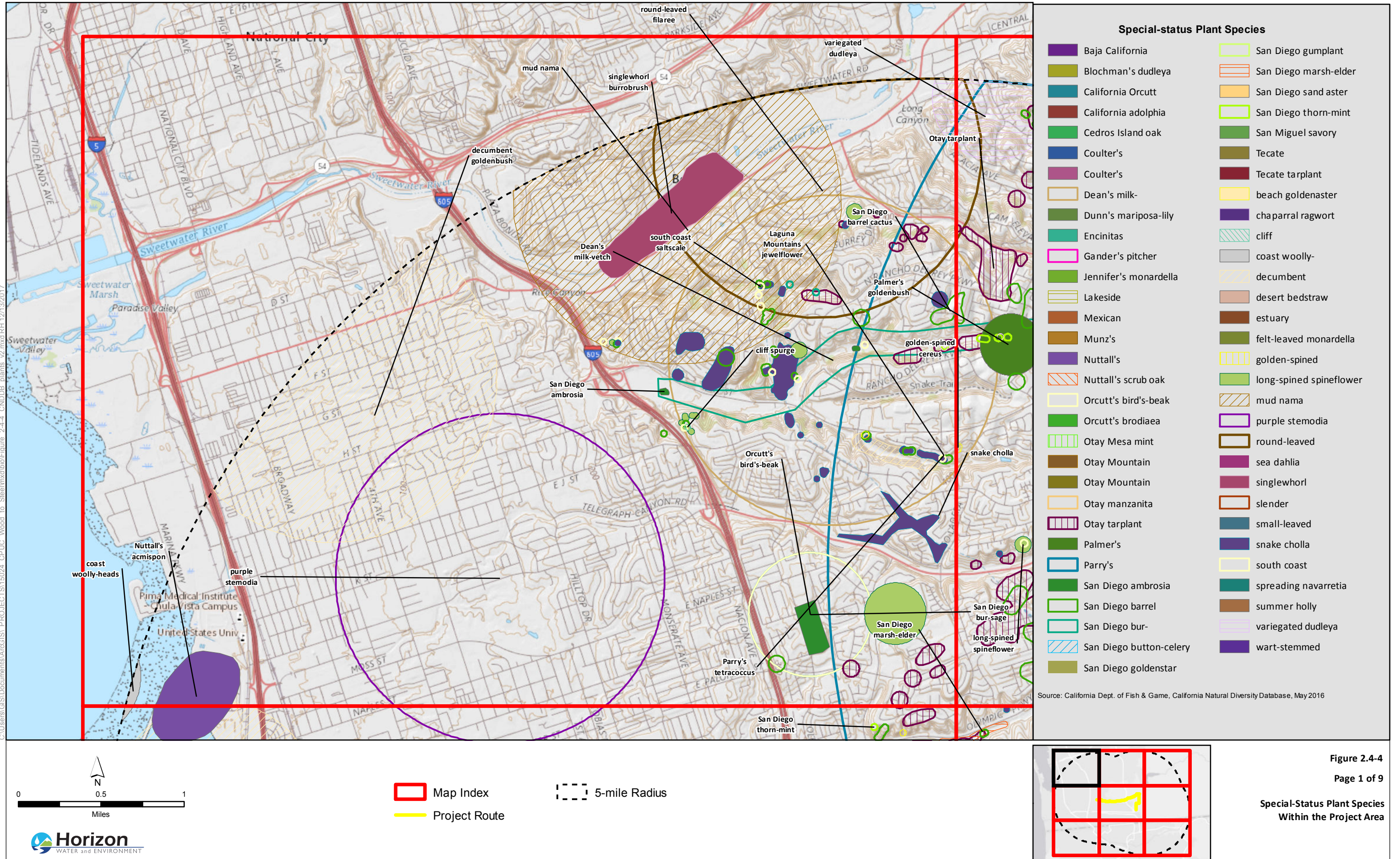
Based on the literature and database search, 66 special-status wildlife species were analyzed for potential to occur within the survey area. The habitat, listing status, and potential for these special-status wildlife species to occur are described in **Table 2.4-5**, Special-status wildlife species, within five miles of the survey area documented in the CNDDDB are shown in **Figure 2.4-5**, Special Status Animal Species.

Eight species are presumed absent, either because they are considered extirpated from the area or because they are associated with habitats which do not occur within the survey area: Pacific pocket mouse (*Perognathus longimembris*), green turtle (*Chelonia mydas*), Swainson's hawk (*Buteo swainsoni*), light-footed clapper rail (*Rallus longirostris levipes*), California black rail (*Laterallus jamaicensis contorniculus*), Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), Western snowy plover (*Charadrius alexandrinus nivosus*), and California least tern (*Sternula antillarum browni*).

Ten species were determined to have a low potential to occur due to low quality suitable roosting or nesting habitat, and/or lack of historic records within the Survey area: Hoary bat (*Lasiurus cinereus*), long-eared myotis (*Myotis evotis*), Mexican long-tongued bat (*Choemycteris Mexicana*), pallid bat (*Antrozous pallidus*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), Townsend's big-eared bat (*Corynorhinus townsendii*), western mastiff bat (*Eumops perotis*), western small-footed myotis (*Myotis ciliolabrum*), Yuma myotis (*Myotis yumanensis*), and the Hermes copper butterfly (*Lycaena hermes*). The California least tern and light-footed clapper rail are considered absent from the survey area for nesting due to lack of suitable nesting habitat; however, there is low potential for these species to infrequently utilize the survey area for dispersal, migration, or while foraging (Chambers 2015).

Twelve species were determined to have a moderate potential to occur because either only marginal suitable habitat for roosting, foraging, and/or nesting occurs in the survey area or because suitable habitat exists in or near the survey area but would not be affected: American badger (*Taxidea taxus*), Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), San Diego desert woodrat (*Neotoma lepida intermedia*), coastal cactus wren (*Campylorhynchus brunneicapillus*), coast patch-nosed snake (*Salvadora hexalepis virgulata*), Coronado Island skink (*Plestiodon skiltonianus interparietalis*), red diamond rattlesnake (*Crotalus ruber*), two-striped garter snake (*Thamnophis hammondi*), western red bat (*Lasiurus blossevillei*), Bell's sage sparrow (*Artemisiospiza belli belli*), Southwestern willow flycatcher (*Empidonax traillii extimus*), and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*). Additional details for the coastal cactus wren, southwestern willow flycatcher, and western yellow-billed cuckoo are discussed below in the section titled, "Focused Surveys."

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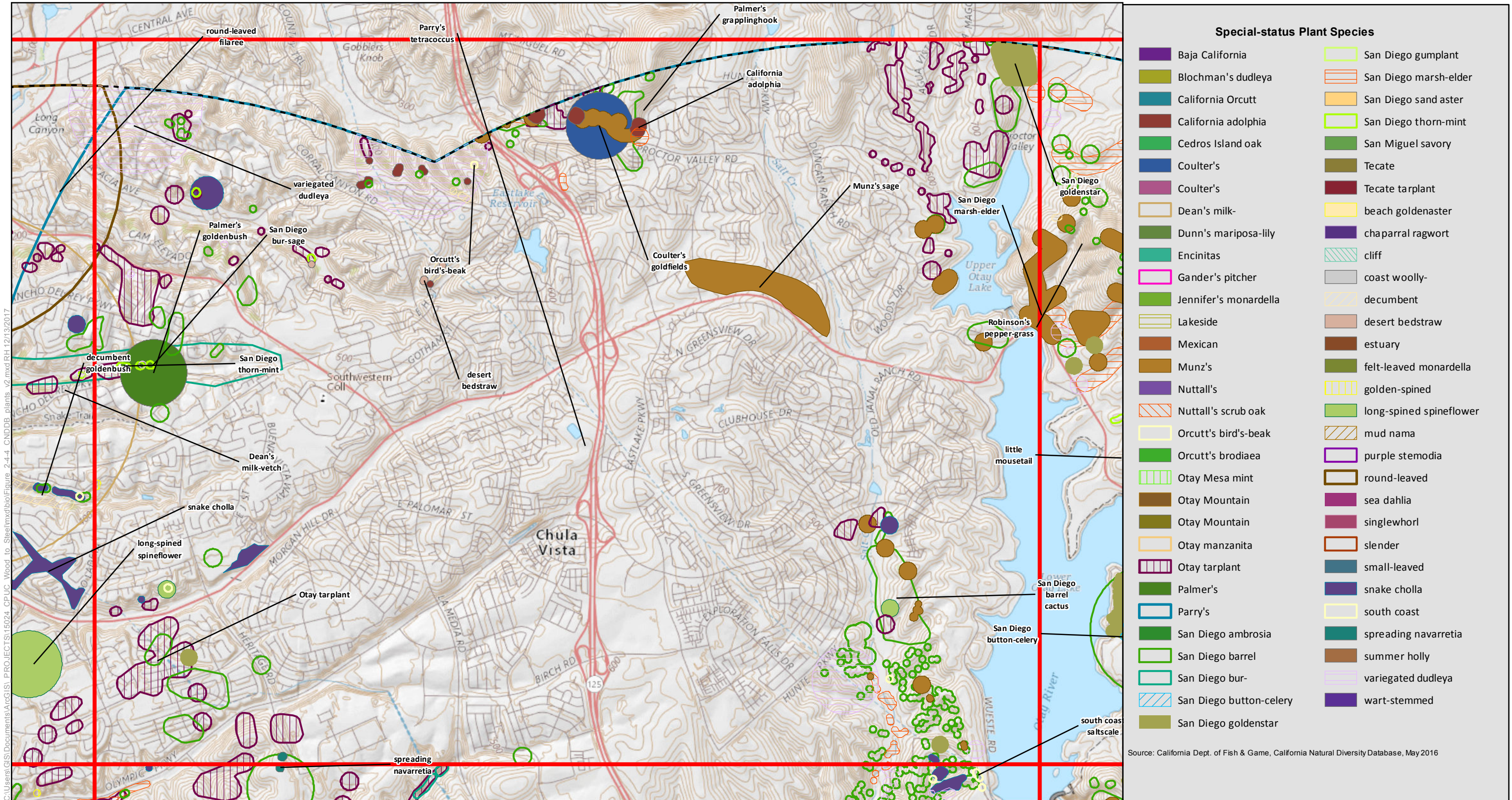
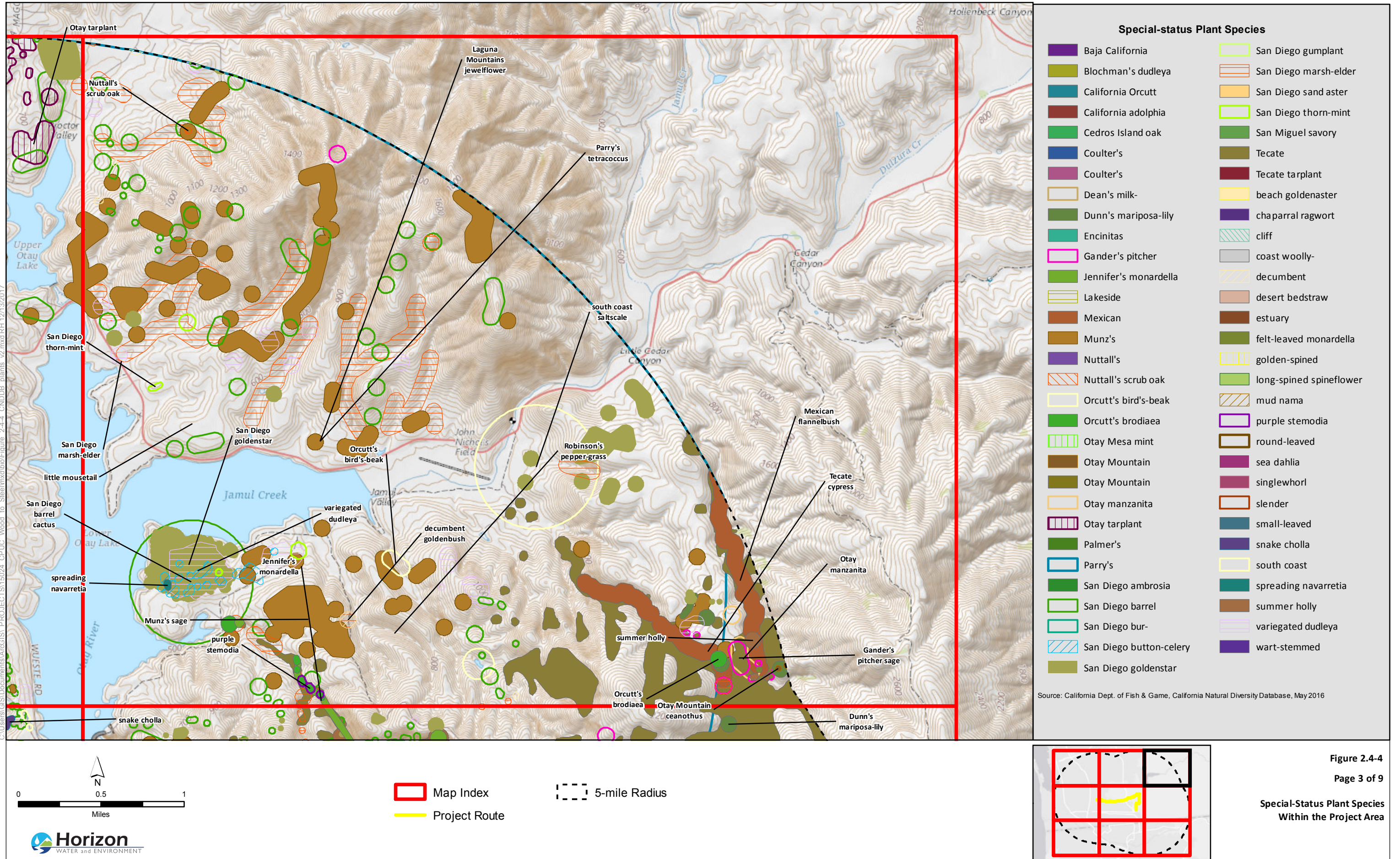
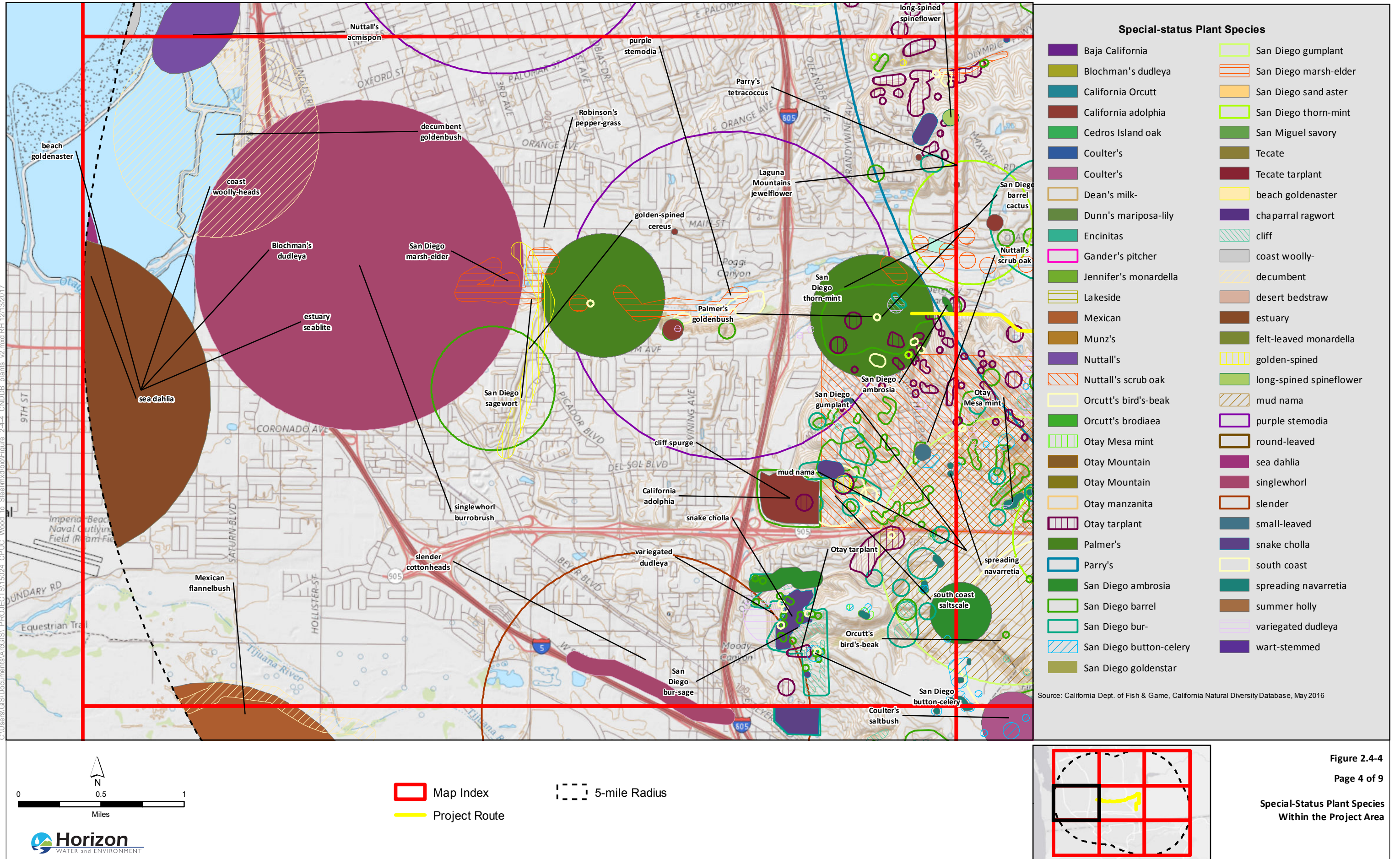


Figure 2.4-4

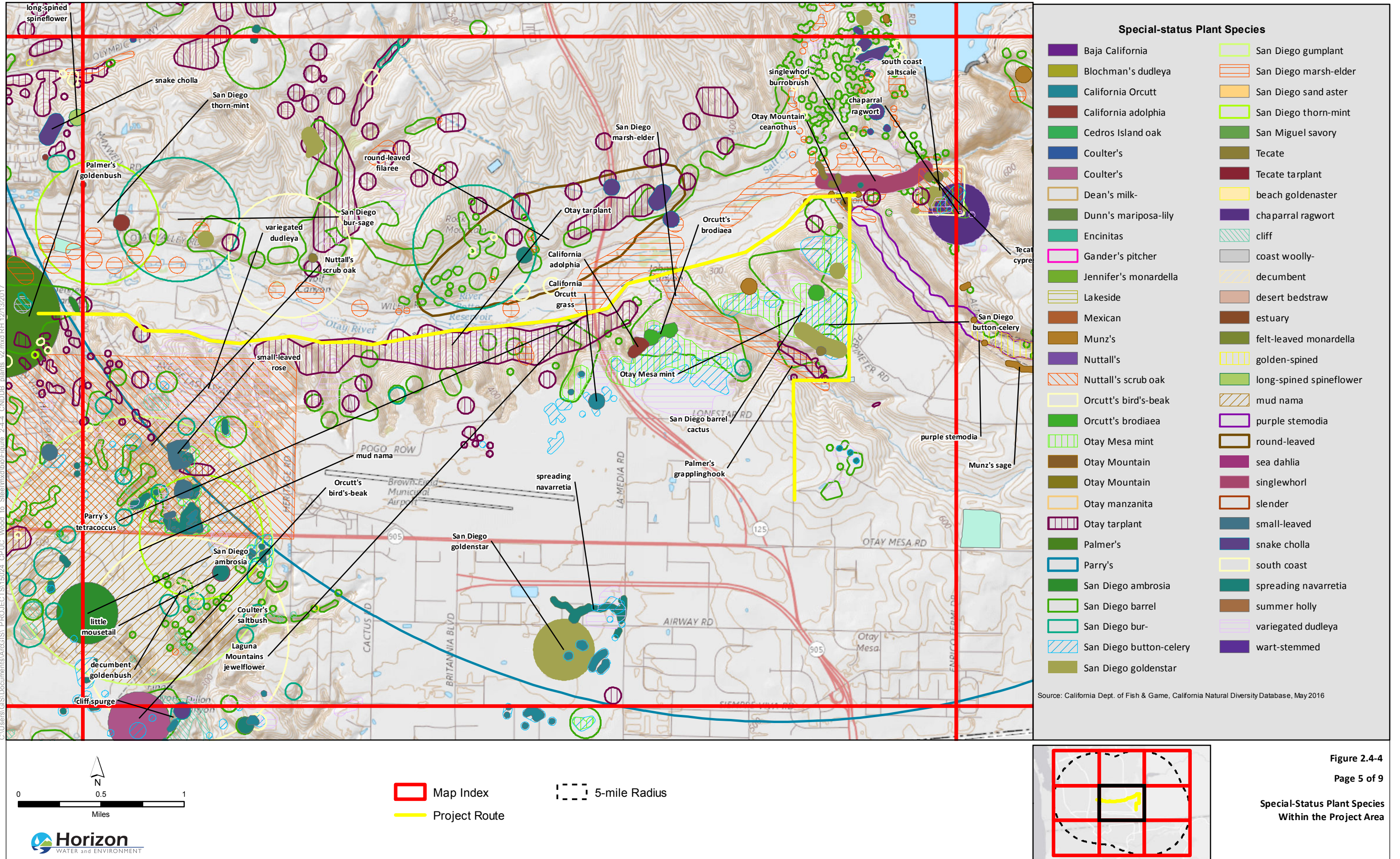
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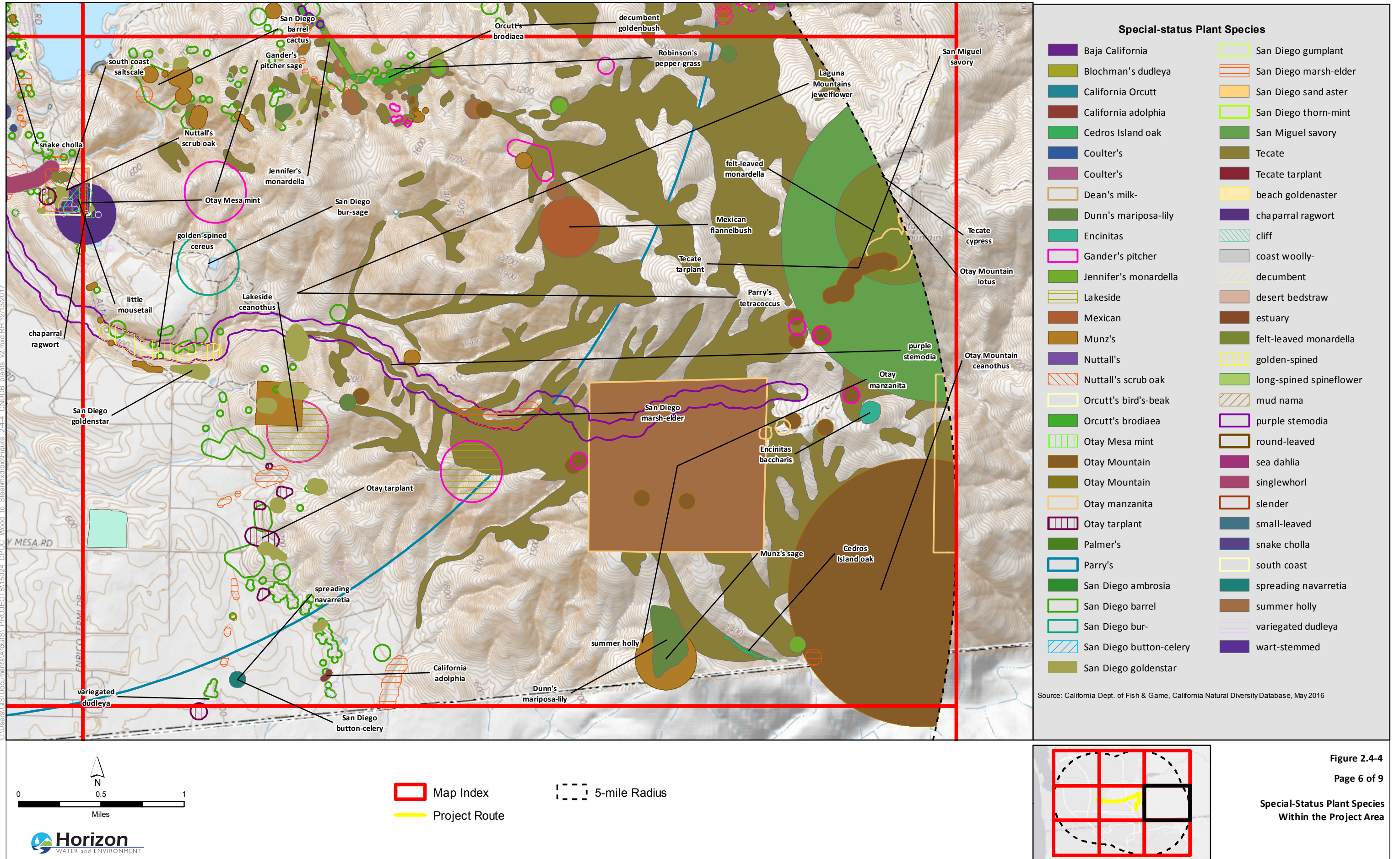
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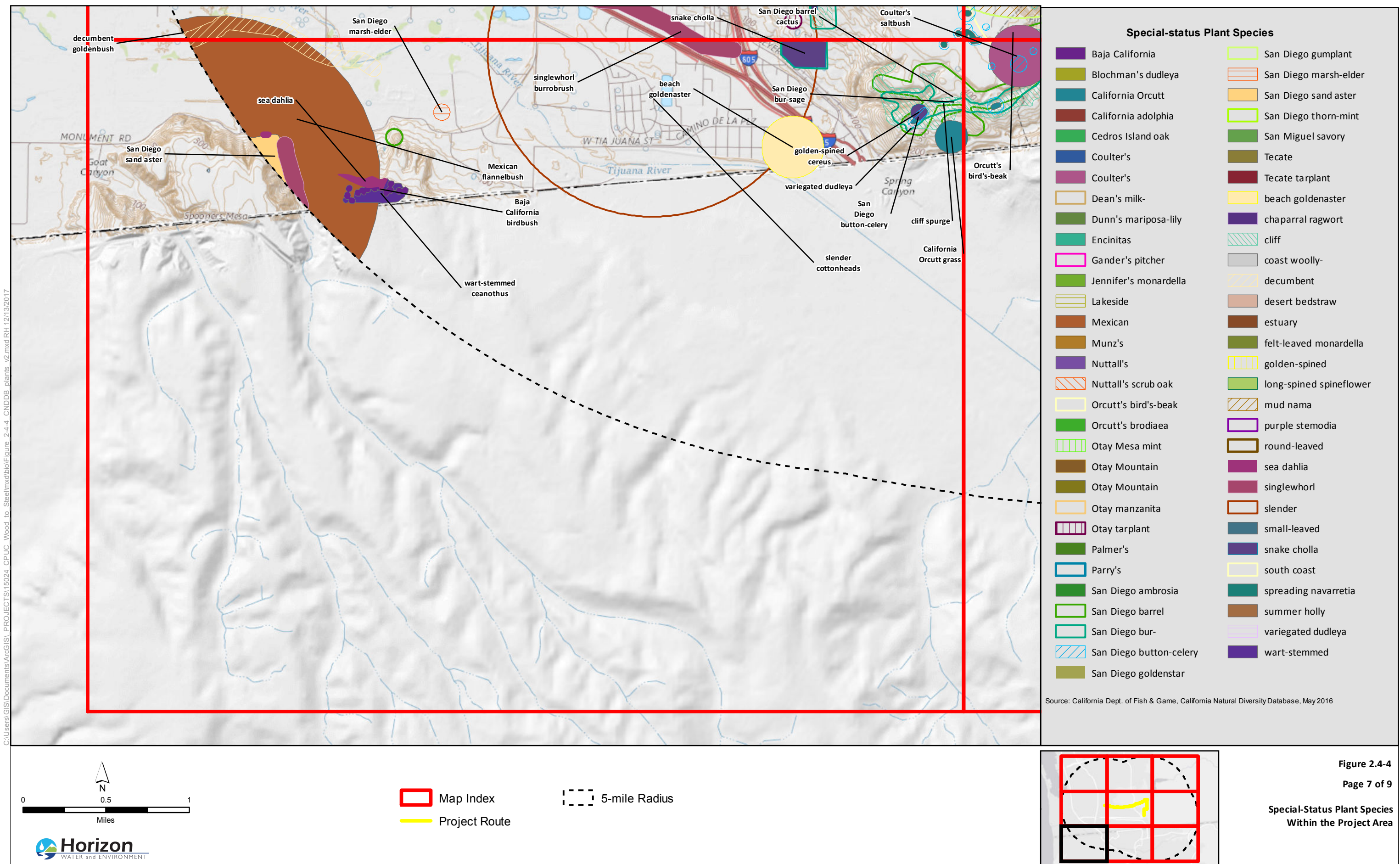
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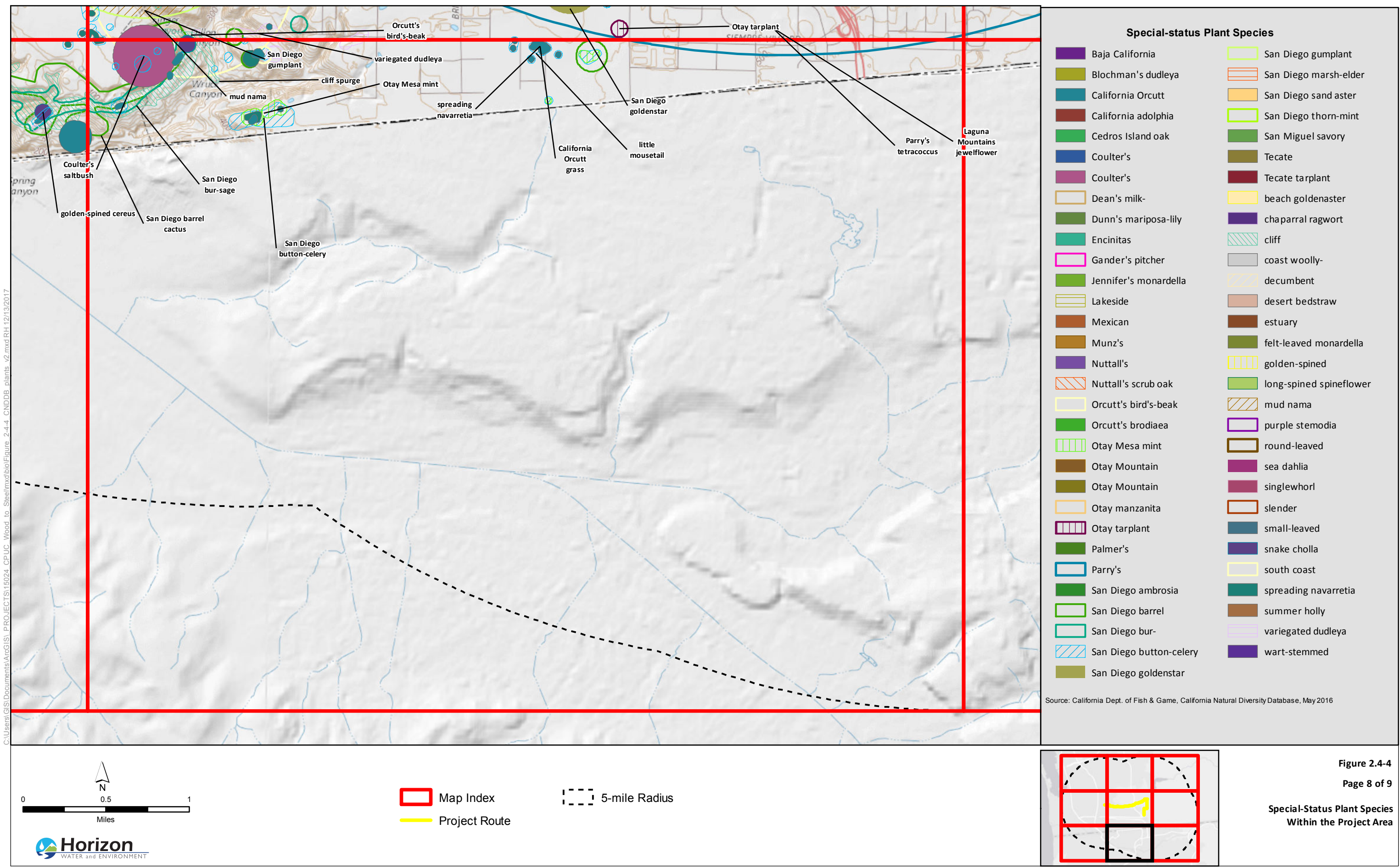
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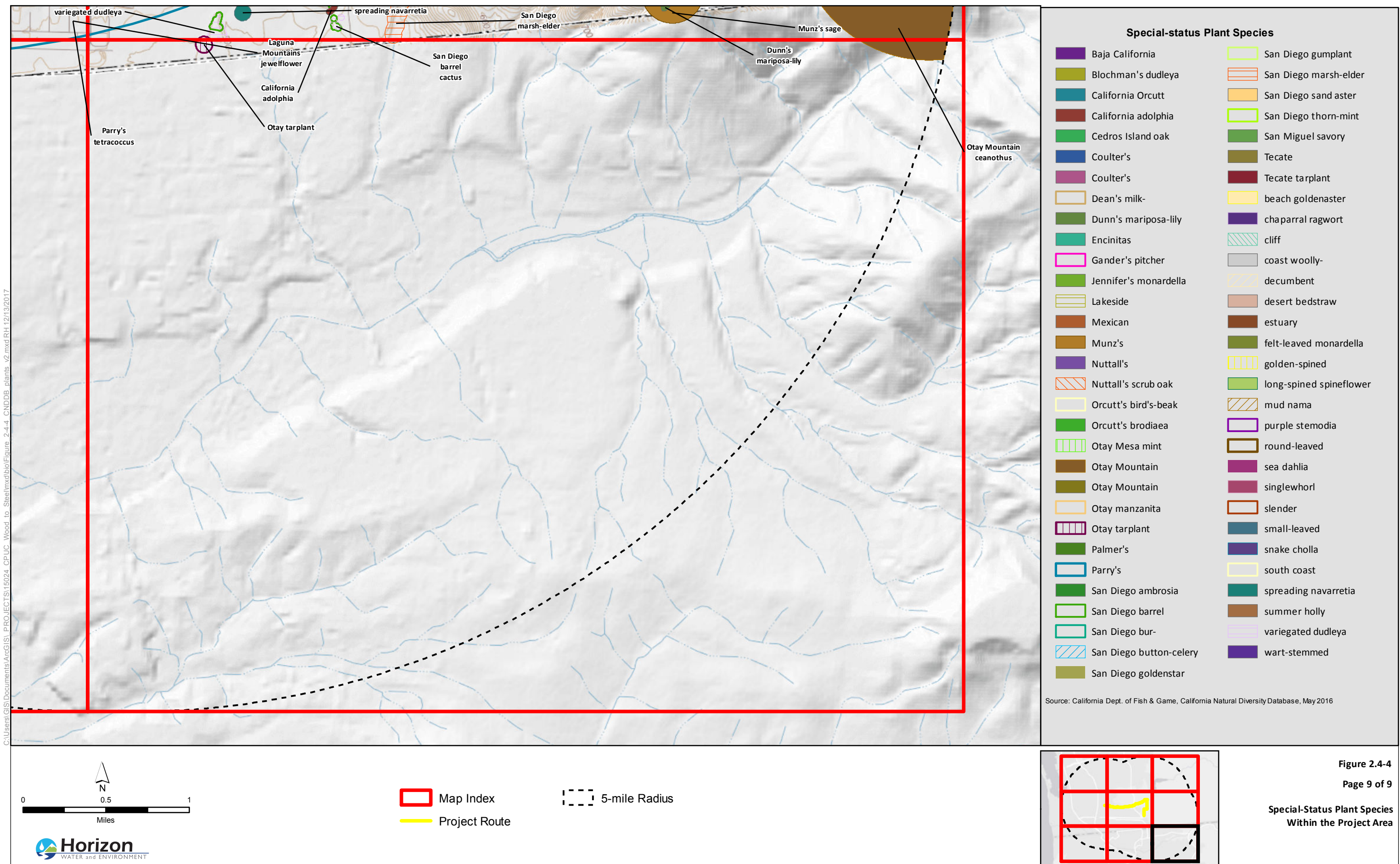
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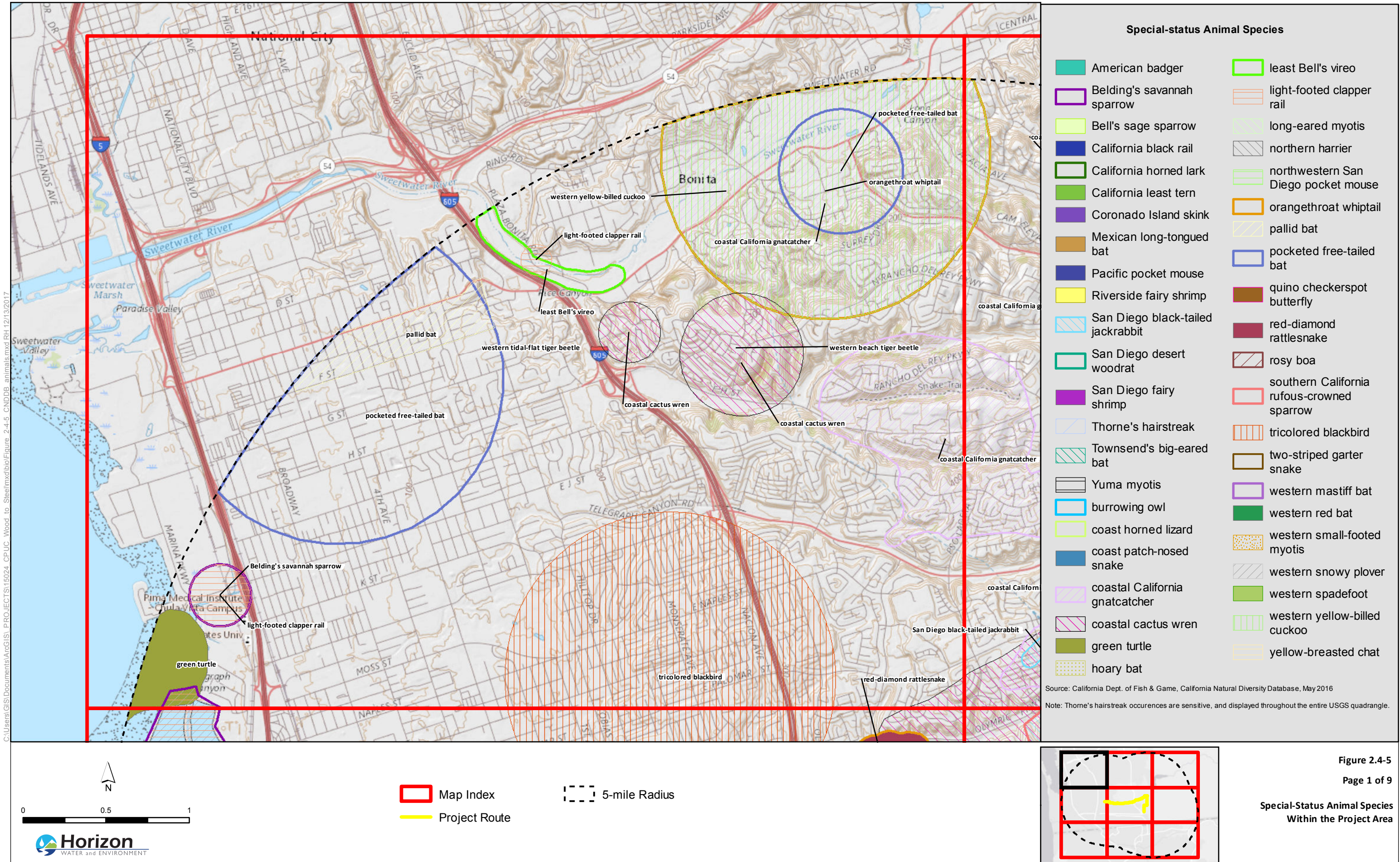


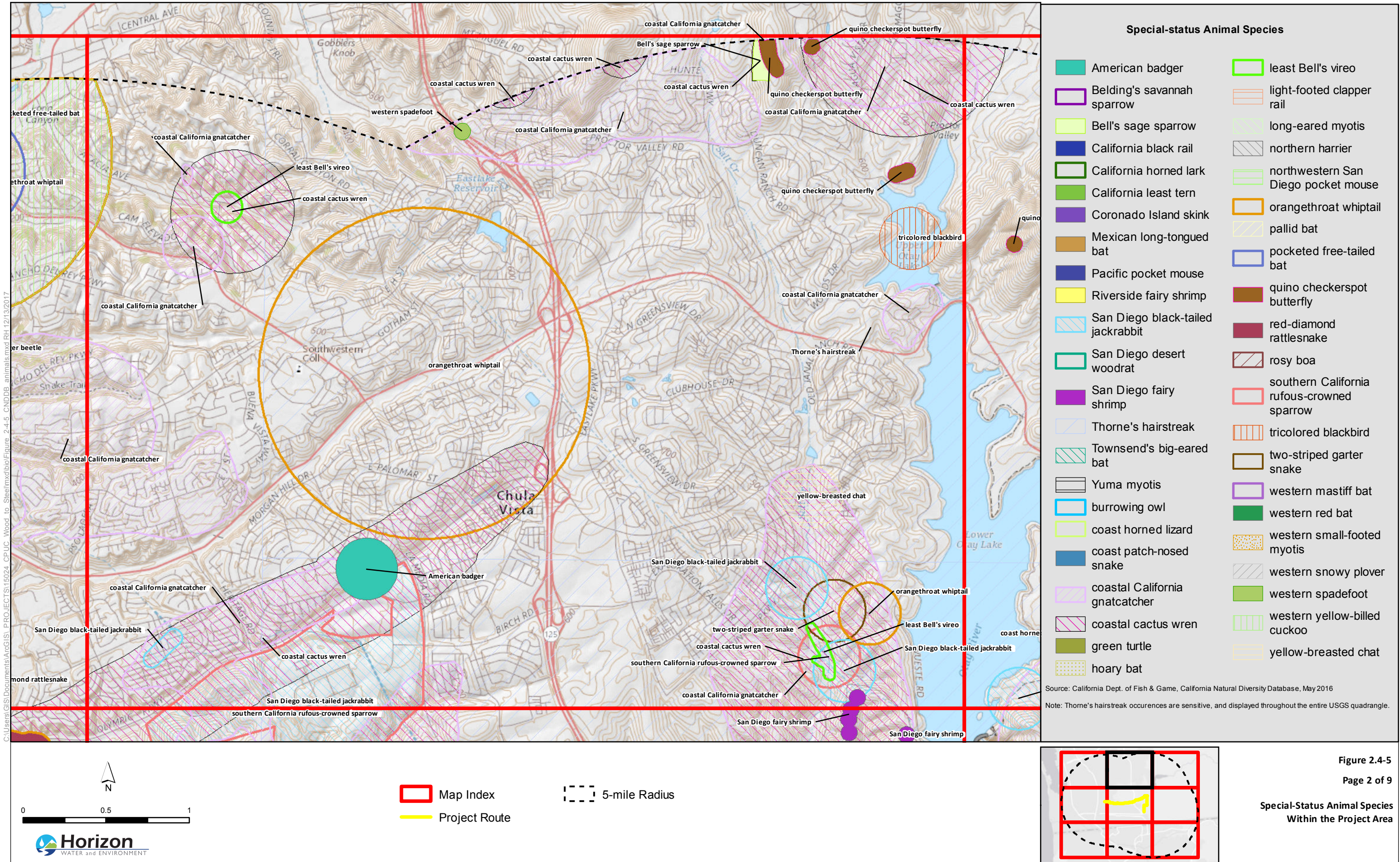
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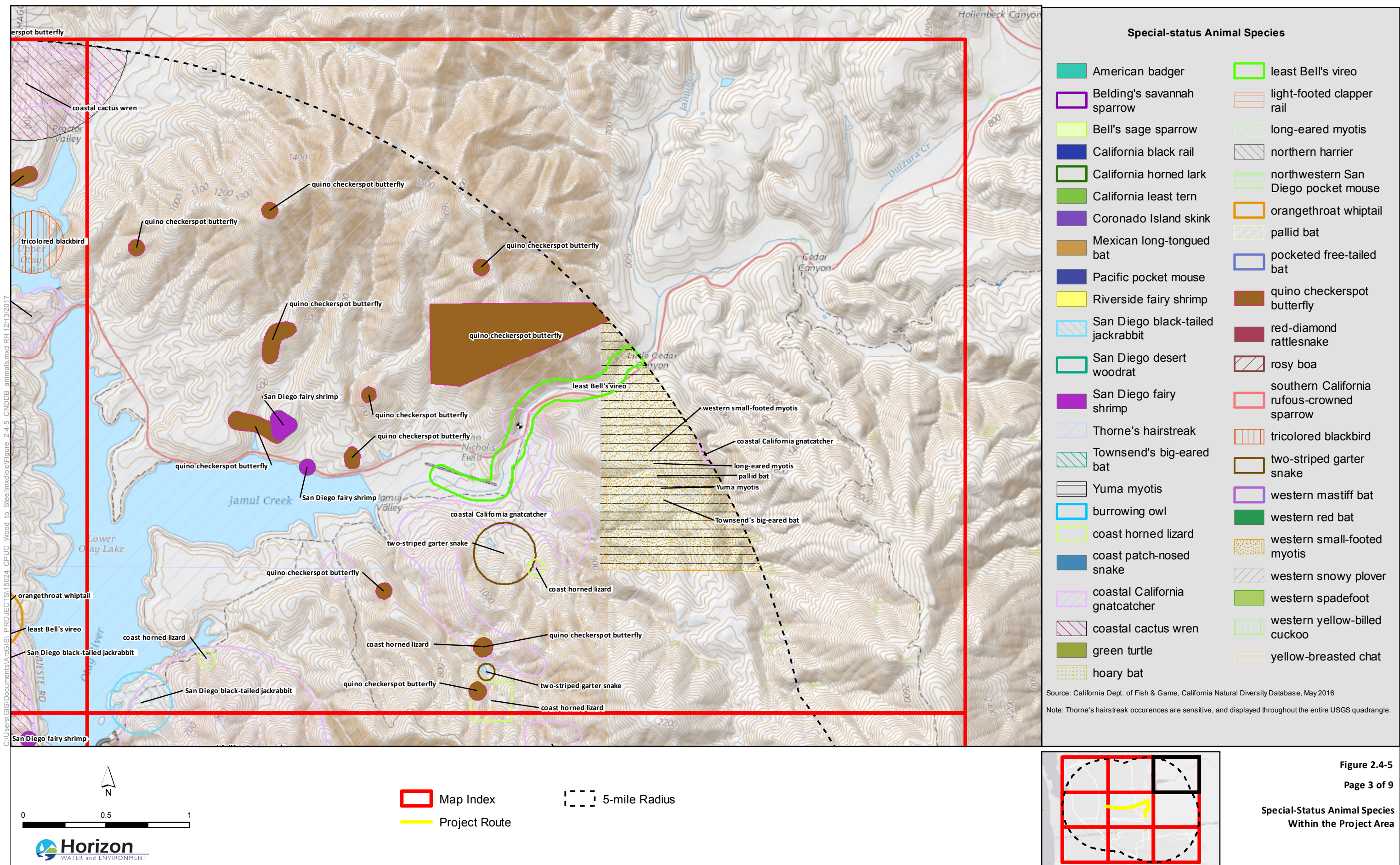


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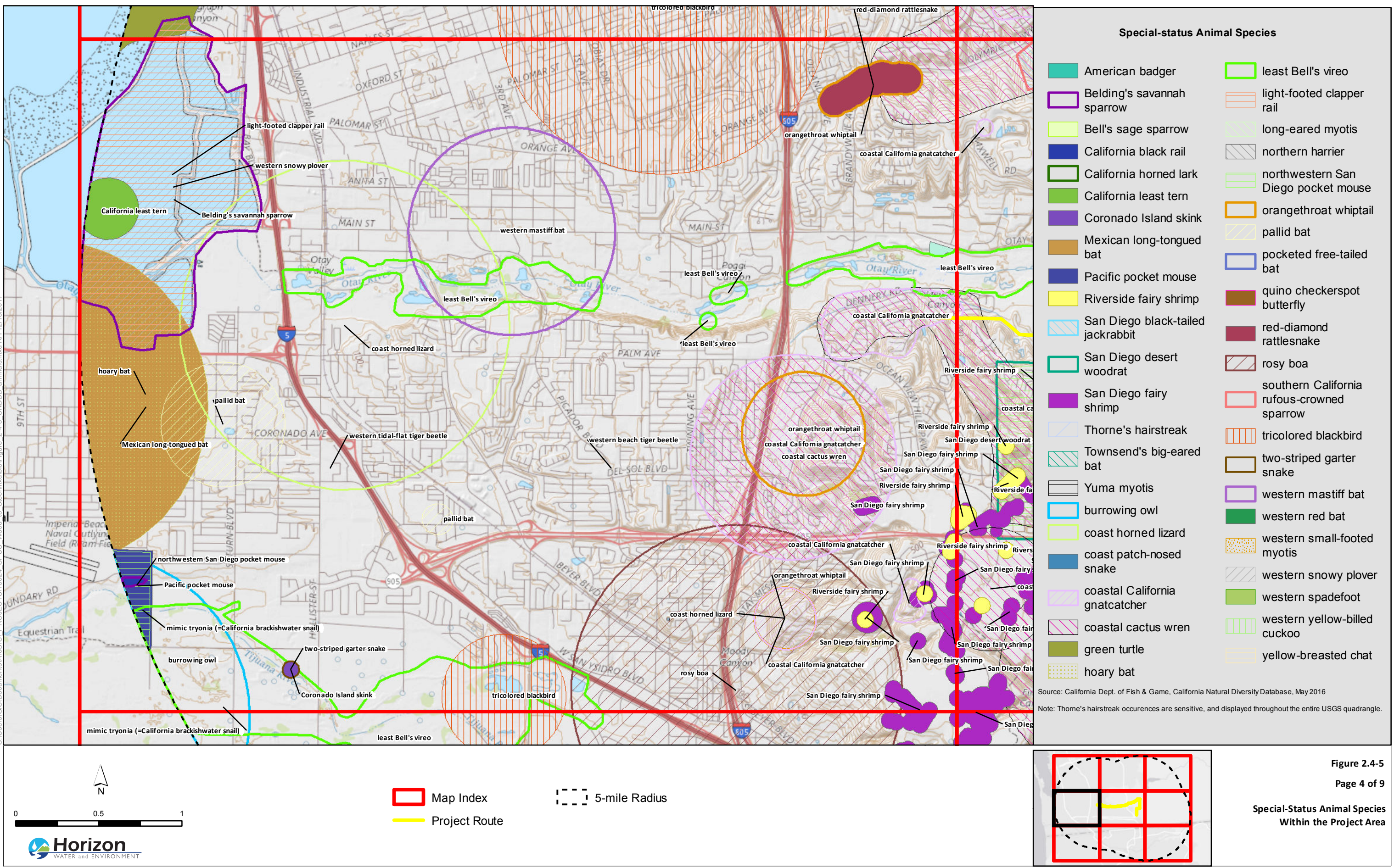








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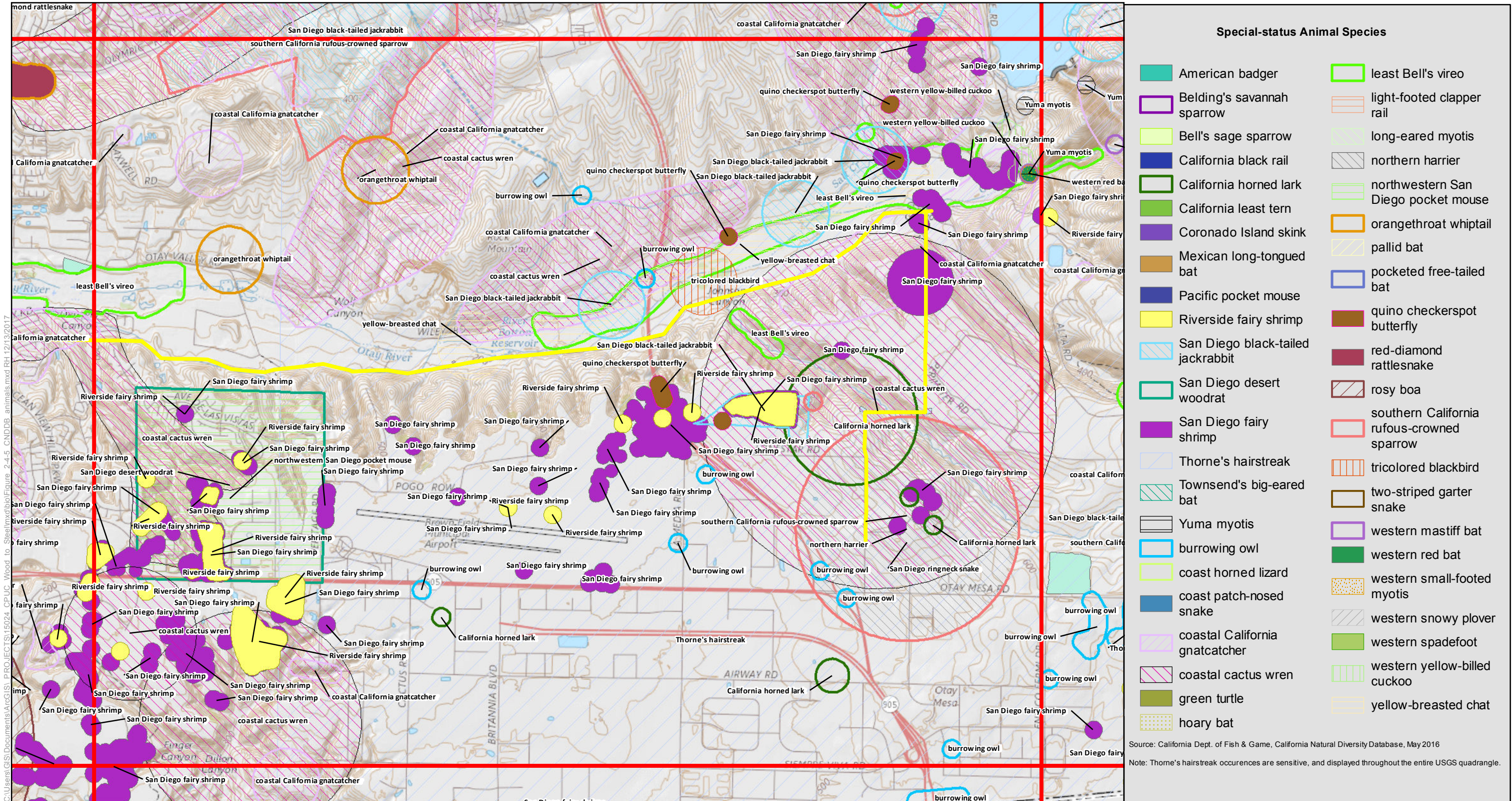


Figure 2.4-5

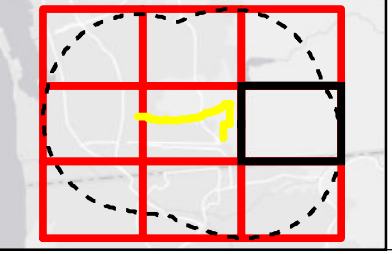
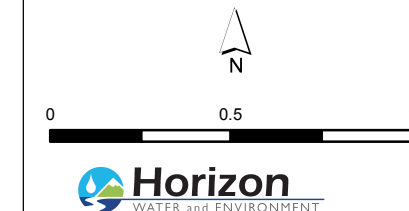
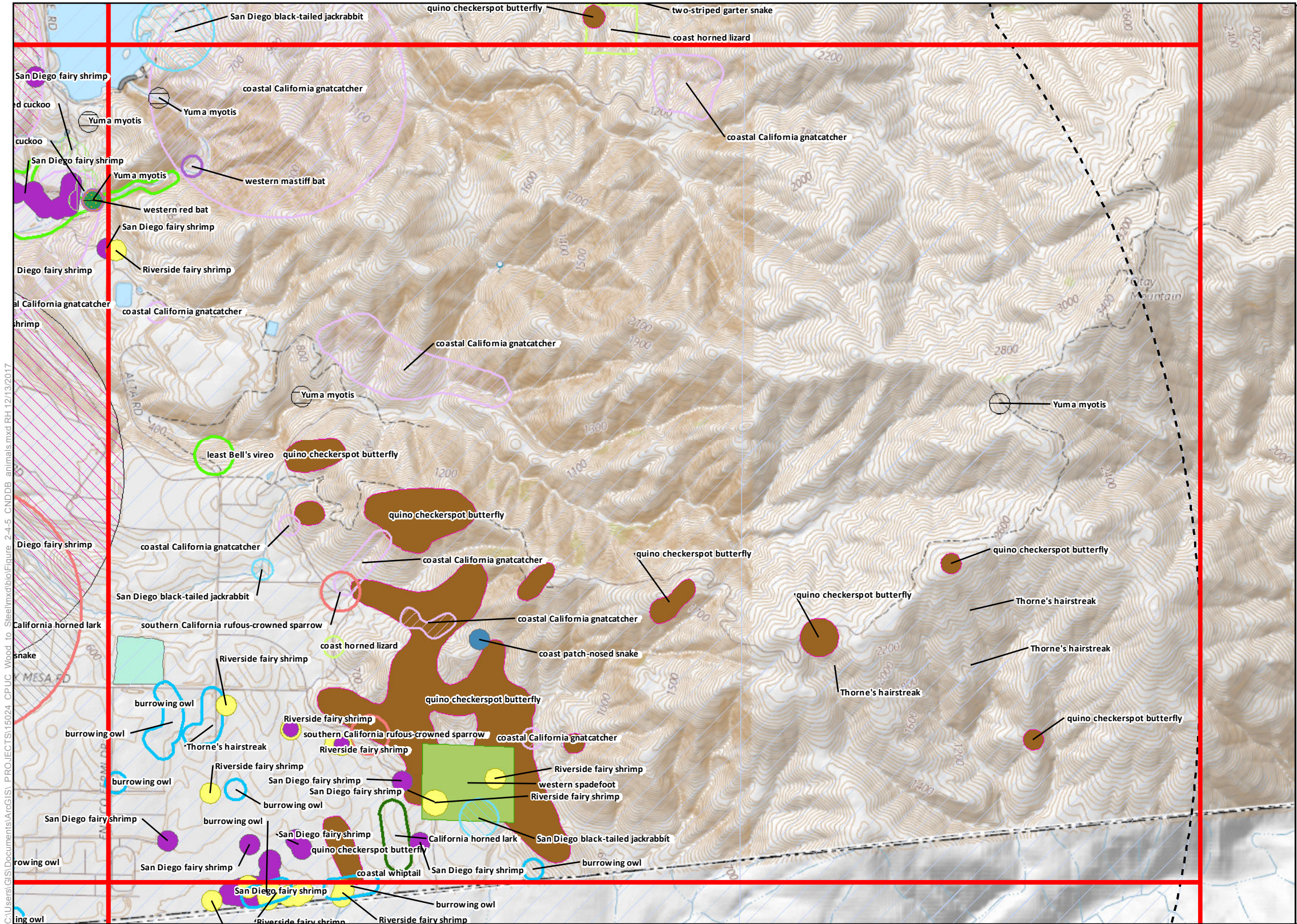
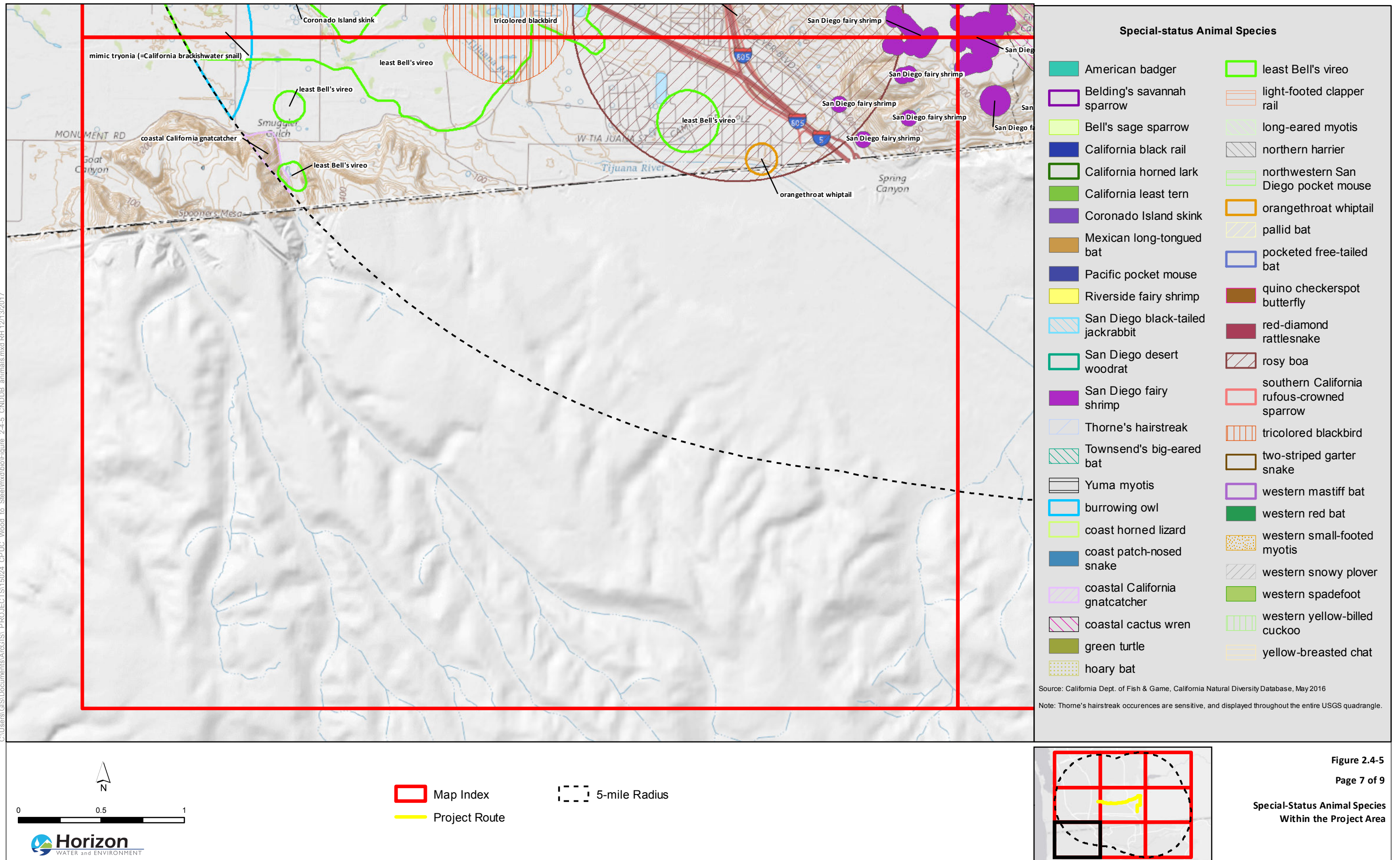
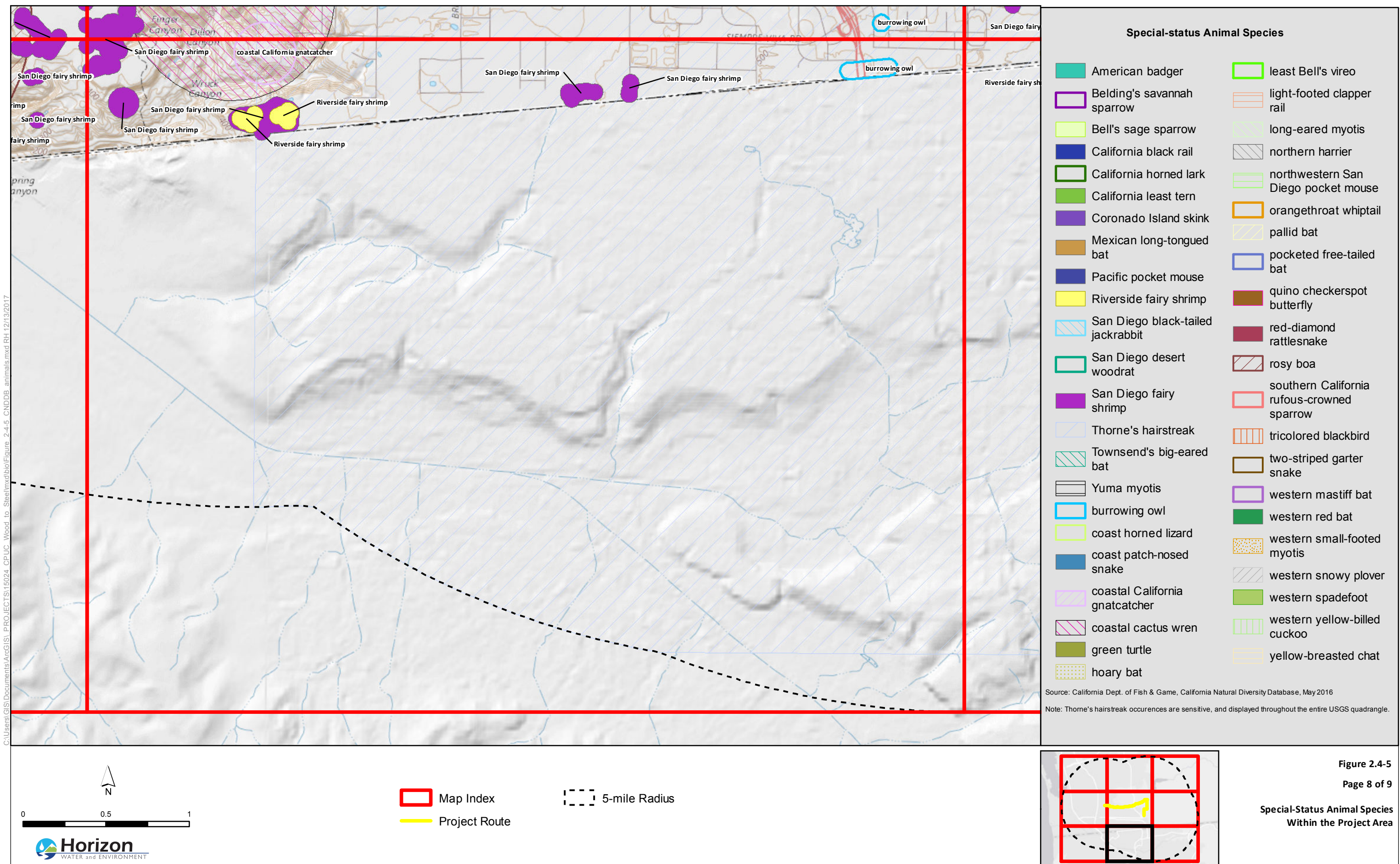


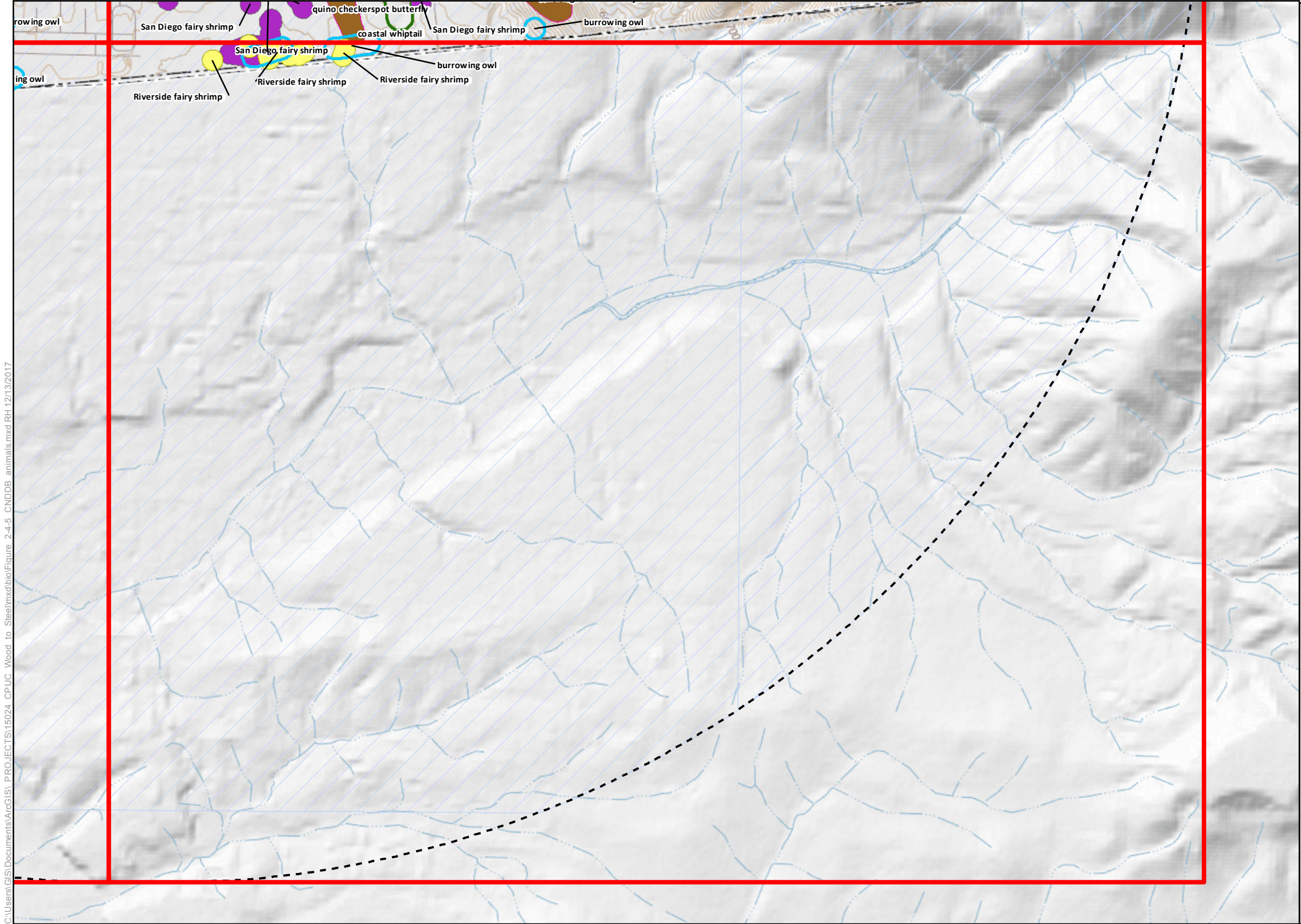
Figure 2.4-5
Page 6 of 9
Special-Status Animal Species
Within the Project Area

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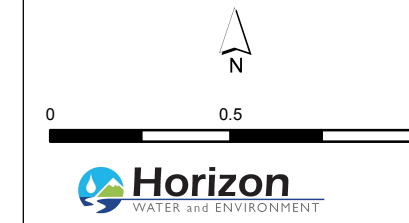
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Special-status Animal Species	
American badger	least Bell's vireo
Belding's savannah sparrow	light-footed clapper rail
Bell's sage sparrow	long-eared myotis
California black rail	northern harrier
California horned lark	northwestern San Diego pocket mouse
California least tern	orangethroat whiptail
Coronado Island skink	pallid bat
Mexican long-tongued bat	pocketed free-tailed bat
Pacific pocket mouse	quino checkerspot butterfly
Riverside fairy shrimp	red-diamond rattlesnake
San Diego black-tailed jackrabbit	rosy boa
San Diego desert woodrat	southern California rufous-crowned sparrow
San Diego fairy shrimp	tricolored blackbird
Thorne's hairstreak	two-striped garter snake
Townsend's big-eared bat	western mastiff bat
Yuma myotis	western red bat
burrowing owl	western small-footed myotis
coast horned lizard	western snowy plover
coast patch-nosed snake	western spadefoot
coastal California gnatcatcher	western yellow-billed cuckoo
coastal cactus wren	yellow-breasted chat
green turtle	
hoary bat	

Source: California Dept. of Fish & Game, California Natural Diversity Database, May 2016
Note: Thorne's hairstreak occurrences are sensitive, and displayed throughout the entire USGS quadrangle.



Map Index
 Project Route
 5-mile Radius

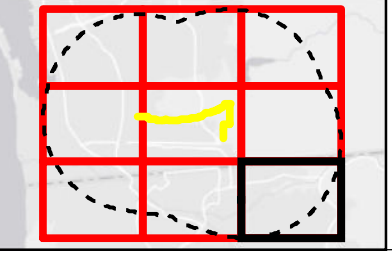


Figure 2.4-5
Page 9 of 9
Special-Status Animal Species Within the Project Area

1 Table 2.4-3. Special-Status Plant Species' Potential to Occur

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
Aphanisma* (<i>Aphanisma blitoides</i>)	--/--1B.2	February-June	This species is an annual herb. It is found growing in coastal bluff scrub, coastal dunes, and coastal scrub. Specifically, it is found on bluffs and slopes near the ocean in sandy or clay soils. 3 and 1,000 feet.	The survey area is within the elevation range of the species, but specific micro-habitat is not present. Absent
Ashy Spike-moss (<i>Selaginella cinerascens</i>)	--/--4.1	Not Applicable (NA)	This species is a fern. It is found in dry habitats, often on clay soils in open areas and in the shade of larger plants at elevations between 30 and 2,152 feet.	This species is present within the survey area in abundant numbers. Present
Baja California birdbush (<i>Ornithostaphylos oppositifolia</i>)	--/CE/2B.1	January-April	This species is a perennial evergreen shrub. It is typically found in chaparral habitat at elevations between 328 and 2,624 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this species was not observed during the focused surveys and is not expected to occur within the survey area. Absent
Beach goldenaster (<i>Heterotheca sessiliflora</i> ssp. <i>sessiliflora</i>)	--/--1B.1	March-December	This species is an herbaceous perennial. It is commonly found on beaches, dunes, and mud flats below 197 feet.	The survey area is within the elevation range of the species, but specific micro-habitat appears to be lacking. This species was not observed during the focused surveys and is not expected to occur within the survey area. Absent
Blochman's dudleya* (<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>)	--/--1B.1	April-June	This species is a perennial herb. It grows in coastal scrub, coastal bluff scrub, chaparral and valley and foothill grassland. It is found on open, rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil. It can be found at elevations between 16 and 1476 feet.	Marginally suitable habitat occurs within the survey area and is within the elevation range of the species. Low

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
Brand's star phacelia* (<i>Phacelia stellaris</i>)	--/--/1B.1	March-June	This species is an annual herb. It grows in open areas of coastal scrub and coastal dune and is found at elevations between 3 and 1,312 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this species is only known from 10 populations, none of which occur within the survey area (Chambers 2015). The closest CNDDDB record is approximately 6.5 miles southwest of the proposed project Low
California adolphia (<i>Adolphia californica</i>)	--/--/2B.1	December-May	This species is a perennial deciduous shrub. It occurs in clay, coastal scrub, chaparral, and valley and foothill habitats. California adolphia can be found at elevations between 148 and 2,427 feet.	This species is present within the survey area. Present
California Orcutt grass (<i>Orcuttia californica</i>)	FE/CE/1B.1	April-August	This species is an annual herb. It is found growing in vernal pool habitats at elevations between 49 and 2,363 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this species was not observed during the focused surveys, and is presumed absent from the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent
California screw moss* (<i>Tortula californica</i>)	--/--/1B.2	NA	This species is a moss. It grows in on sandy soil in chenopod scrub and valley and foothill grassland at elevations between 33 and 4,790 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. The closest CNDDDB occurrence is approximately 6 miles southeast of the proposed project. High
Cedros Island oak* (<i>Quercus cedrosensis</i>)	--/--/2B.2	April-May	This species is a perennial evergreen tree. It occurs in closed-cone coniferous forest, chaparral and coastal scrub at elevations between 836 and 3,150 feet.	Suitable habitat occurs within the survey area, but is not within the elevation range of the species. Absent

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
chaparral ash* (<i>Fraxinus parryi</i>)	--/--/2B.2	March–May	This species is a perennial shrub. It grows in open mixed chaparral and in the chaparral-sage scrub interface in California at elevations between 699 and 2034 feet.	Suitable habitat occurs within the survey area, but is not within the elevation range of the species. Absent
Chaparral ragwort (<i>Senecio aphanactis</i>)	--/--/2B.2	January-April	This species is an annual herb. It is found growing in chaparral, coastal scrub, cismontane woodland, and sometimes in alkaline habitats at elevations between 49 and 2,600 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this species was not observed during the focused surveys and is presumed absent from the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent
Cliff spurge (<i>Euphorbia misera</i>)	--/--/2B.2	December-August	This species is a perennial shrub. This euphorb is found on rocky slopes and coastal bluffs in coastal and desert scrub below 1,640 feet.	This species is present within the survey area and in immediately adjacent areas. Present
Coast woolly-heads (<i>Nemacaulis denudata</i> var. <i>denudata</i>)	--/--/1B.2	April-September	This species is an annual herb. It occurs on coastal dunes below 328 feet.	The survey area is within the elevation range of the species, but specific micro-habitat appears to be lacking. This species was not observed during the focused surveys and is not expected to occur within the survey area. Absent

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
Coulter's goldfields (<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>)	--/--/1B.1	February-June	This species is an annual herb. It is almost always found in areas with seasonal water accumulation, including vernal pools, marshes, and swamps below 3,281 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this species was not observed during the focused surveys and is presumed absent from the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent
Coulter's saltbush (<i>Atriplex coulteri</i>)	--/--/1B.2	March-October	This species is a perennial herb. It often grows in alkaline or clay soils, coastal dunes, coastal scrub, and coastal bluff scrub. Coulter's saltbrush can be found at elevations below 1,500 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this species was not observed during the focused surveys and is presumed absent from the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent
Dean's milk vetch (<i>Astragalus deanei</i>)	--/--/1B.1	February-May	This species is a perennial herb. It occurs in chaparral, cismontane woodland, coastal scrub, and riparian forest habitats. It can be found at elevations between 250 and 2,280 feet.	Habitat for this species occurs on site and is within the elevation range of the species. However, this species was not observed during the focused surveys and is presumed absent from the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent
decumbent goldenbush (<i>Isocoma menziesii</i> var. <i>decumbens</i>)	--/--/1B.2	April-November	This species is a perennial shrub. This variety of goldenbush favors hillsides and arroyos in sandy soils in coastal scrub, grassland, and disturbed habitat	This species is present within the survey area and in immediately adjacent areas. Present

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
Dehesa nolina* (<i>Nolina interrata</i>)	--/CE/1B.1	June-July	This species is a perennial herb. It is found in chaparral, typically on rocky hillsides or ravines on ultramafic soils (gabbro or metavolcanic). Dehesa nolina can be found at elevations between 590 and 2,805 feet.	The survey area is within the elevation range of the species, but specific micro-habitat is not present. Additionally, this species is only known in California from the Dehesa Valley. Absent
delicate clarkia (<i>Clarkia delicata</i>)	--/--/1B.2	April-June	This species is an annual herb. It often grows in gabbroic soils in chaparral and cismontane woodland. Delicate clarkia can be found at elevations between 770 and 3,280 feet.	The survey area is within the elevation range of the species, but specific micro-habitat appears to be lacking. This species was not observed during the focused surveys and is not expected to occur within the survey area. Absent
desert bedstraw (<i>Galium proliferum</i>)	--/--/2B.2	March-June	This species is an annual herb. It is found in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland in areas with a rocky, limestone substrate. It can be found at elevations between 3,904 and 5,348 feet.	The survey area does not contain suitable habitat and is not within the elevation range for this species. Absent
Dunn's mariposa-lily (<i>Calochortus dunnii</i>)	--/CR/1B.2	April-June	This species is a perennial, bulbiferous herb. It occurs in gabbroic or metavolcanic soils and rocky, closed- cone, coniferous forest, chaparral, and valley and foothill grassland. Dunn's mariposa-lily can be found at elevations between 600 and 6,000 feet.	Suitable habitat occurs on site and is within the elevation range of the species. However, this species was not observed during the focused surveys and is presumed absent from the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
Encinitas baccharis (<i>Baccharis vanessae</i>)	FT/CE/1B.1	August- November	This species is a perennial deciduous shrub. It occurs in chaparral (maritime) and cismontane woodland habitats. Encinitas baccharis can be found at elevations between 200 and 2,360 feet.	Suitable habitat occurs on site and is within the elevation range of the species. However, this species was not observed during the focused surveys and is not expected to occur within the survey area. Absent
estuary seablite* (<i>Suaeda esteroa</i>)	--/--/1B.2	May-January	This species is a perennial herb. It grows in Marshes and swamps, specifically coastal salt marshes in clay, silt, and sand substrates at elevations below 16 feet.	The survey area does not contain suitable habitat and is not within the elevation range for this species. Absent
felt-leaved monardella* (<i>Monardella hypoleuca</i> ssp. <i>lanata</i>)	--/--/1B.2	June-August	This species is a perennial rhizomatous herb. It occurs in chaparral and cismontane woodland, specifically in sandy soil in the understory of mixed chaparral, chamise chaparral, and southern oak woodland. It can be found at elevations between 984 and 5,167 feet.	Suitable habitat occurs on site and but it is not within the elevation range of the species. Absent
Gander's pitcher sage (<i>Lepechinia ganderi</i>)	--/--/1B.3	June-July	This species is a perennial shrub. It grows in gabbroic or metavolcanic soils in closed-cone coniferous forest and chaparral, coastal scrub, and valley and foothill grassland habitats. Gander's pitcher sage can be found at elevations between 1,000 and 3,300 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this species was not observed during the focused surveys and is not expected to occur within the survey area. Absent
Gander's ragwort* (<i>Packera ganderi</i>)	--/CR/1B.3	April-June	This species is a perennial herb. It is found on recently burned sites and gabbro outcrops in chaparral. It can be found at elevations between 1,312 and 3,937 feet.	The survey area contains marginally suitable habitat but is not within the elevation range for this species. Absent

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
golden-spined cereus (<i>Bergerocactus emoryi</i>)	--/--/2B.2	May-July	This species is a perennial stem succulent. It occurs in closed-cone coniferous forest, chaparral, and coastal scrub. Golden-spined cereus can be found at elevations between 10 and 1,300 feet.	This species is present in the survey area. Present
graceful tarplant (<i>Holocarpha virgata</i> ssp. <i>elongata</i>)	--/--/4.2	June- November	This species is an annual herb. It can be found at elevations between 76 and 3,363 feet.	This species is present in the survey area. Present
Jennifer's monardella (<i>Monardella stoneana</i>)	--/--/1B.2	June- September	This species is a perennial herb. It grows in rocky, intermittent streambeds within closed-cone coniferous forest, chaparral coastal scrub, and riparian scrub habitats. Jennifer's monardella occurs at elevations between 30 and 2,600 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this species was not observed during the focused surveys and is not expected to occur in the survey area. Absent
lakeside ceanothus (<i>Ceanothus cyaneus</i>)	--/--/1B.2	April-June	This species is an evergreen shrub. It occurs in sandy or rocky openings of closed-cone coniferous forests and chaparral habitats. Lakeside ceanothus can be found at elevations between 770 and 2,550 feet.	Suitable habitat occurs on site and is within the elevation range of the species. This species is restricted to a small area near Lakeside in San Diego County. However, this species was not observed during the focused surveys and is not expected to occur in the survey area. Absent
long-spined spineflower (<i>Chorizanthe polygonoides</i> var. <i>longispina</i>)	--/--/1B.2	April-July	This species is an annual herb. It occurs in clay soils of chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pools. Long-spined spineflower can be found at elevations between 100 and 5,020 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this species was not observed during the focused surveys and is presumed absent from the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
Mexican flannelbush (<i>Fremontodendron mexicanum</i>)	FE/CR/1B.1	March-June	This species is a perennial shrub. It is found growing in cismontane woodland, chaparral, and closed cone conifer forest habitats at elevations between 33 and 2,349 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this was not observed during the focused surveys and is not expected to occur in the survey area. Absent
Moreno currant* (<i>Ribes canthariforme</i>)	--/--/1B.3	February-April	This species is a perennial deciduous shrub. It grows in chaparral and riparian scrub and can be found among boulders in oak-manzanita thickets in shaded or partially shaded sites at elevations between 1,115 and 3,937 feet.	Suitable habitat occurs within the survey area, but is not within the elevation range of the species. Absent
mud nama (<i>Nama stenocarpum</i>)	--/--/2B.2	January-July	This species is an annual/perennial herb. It is found growing in marsh and swamp habitats (e.g., lake margins and riverbanks) at elevations between 16 and 1,640 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this species was not observed during the focused surveys and is presumed absent from the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent
Munz's sage (<i>Salvia munzii</i>)	--/--/2B.2	February-April	This species is a perennial shrub. This sage species is typically found in coastal sage scrub and chaparral habitats below 2,625 feet.	This species is present within the survey area and in immediately adjacent areas. Present
Nuttall's acmispon (<i>Acmispon prostratus</i>)	--/--/1B.1	March-July	This species is an annual herb. It occurs in coastal scrub (sandy) and coastal dune habitats. Nuttall's acmispon can be found at elevations less than 33 feet.	No suitable habitat for this species occurs within the survey area, and it was not observed during focused surveys. This species is presumed absent from the survey area. Absent

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
Nuttall's scrub oak (<i>Quercus dumosa</i>)	--/--/1B.1	February- August	This species is a perennial evergreen shrub. It is found growing in sandy, clay loam, closed-cone coniferous forest, chaparral, and coastal scrub habitats at elevations between 49 and 1,300 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. Historical records show this species has occurred within the survey area. This species was not observed during the focused surveys and is not expected to occur in the survey area. Absent
oil neststraw* (<i>Stylocline citroleum</i>)	--/--/1B.1	March-April	This species is an annual herb. It is found in chenopod scrub, coastal scrub, and valley and foothill grassland. Specifically, it grows in flats with clay soils in oil-producing areas at elevations between 164 and 1,312 feet.	The survey area is within the elevation range of the species, but specific micro-habitat is not present. Low
Orcutt's bird's-beak (<i>Dicranostegia orcuttiana</i>)	--/--/2B.1	March- September	This species is an annual herb. It typically occurs in coastal scrub habitats at elevations below 1,148 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this species was not observed during the focused surveys and is presumed absent from the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent
Orcutt's brodiaea (<i>Brodiaea orcuttii</i>)	--/--/1B.1	May-July	This species is an annual herb. It occurs in grassland near streams and vernal pools. Orcutt's brodiaea can be found at elevations between 98 and 5,560 feet.	Suitable habitat occurs on site and is within the elevation range of the species. However, this species was not observed during the focused surveys and is presumed absent from the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
Orcutt's dudleya* (<i>Dudleya attenuata</i> ssp. <i>attenuata</i>)	--/--/2B.1	May-July	This species is a perennial herb. It is found in coastal scrub, coastal bluff scrub, and chaparral habitats on rocky mesas, canyons, and ridges. It can be found at elevations between 10 and 164 feet.	Suitable habitat occurs on site and but it is not within the elevation range of the species, although elevations are close. This species is only known in California from Border Field State Park (Chambers 2015). Low
Orcutt's pincushion* (<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>)	--/--/1B.1	January-August	This species is an annual herb. It grows on sandy sites in coastal bluff scrub and coastal dunes. Orcutt's pincushion can be found at elevations between 0 and 328 feet.	The survey area is within the elevation range of the species, but specific micro-habitat is not present. Absent
Otay manzanita (<i>Arctostaphylos otayensis</i>)	--/--/1B.2	January-April	This species is a perennial evergreen shrub. It occurs in metavolcanic, chaparral, and cismontane woodland habitats. Otay manzanita can be found at elevations below 1,300 feet.	This species is present within the survey area and in immediately adjacent areas. Present
Otay mesa mint (<i>Pogogyne nudiuscula</i>)	FE/CE/1B.1	May-July	This species is a perennial herb. It often grows in clay soils within vernal pool habitats. Otay Mesa mint can be found at elevations between 295 and 820 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. Historical records show this species has occurred within the survey area. However, this species was not observed during the focused surveys and is presumed absent from the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent
Otay Mountain ceanothus (<i>Ceanothus otayensis</i>)	--/--/1B.2	January-April	This species is an evergreen shrub. It occurs on rocky slopes in chaparral habitats at elevations between 394 and 3,609 feet.	This species is present within the survey area and in immediately adjacent areas. Present

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
Otay Mountain lotus* (<i>Hosackia crassifolia</i> var. <i>otayensis</i>)	--/--/1B.1	May-August	This species is a perennial herb which grows in chaparral on metavolcanic rock, often in disturbed areas. It is found at elevations between 1,470 and 3,297 feet.	The survey area does not contain suitable micro habitat and is not within the elevation range for this species. Absent
Otay tarplant (<i>Deinandra conjugens</i>)	FT/CE/1B.1	May-June	This species is an annual herb. It grows on clay soils within coastal scrub and valley and foothill grassland habitats. It is found at elevations between 80 and 980 feet.	This species is present within the survey area and in immediately adjacent areas. A portion of the proposed project area is located within USFWS critical habitat for this species. Present
Palmer's frankenia* (<i>Frankenia palmeri</i>)	--/--/2B.1	May-July	This species is a perennial herb. It is found in coastal dunes, coastal salt marshes and playas. It is found at elevations between 0 and 33 feet.	The survey area does not contain suitable habitat and is not within the elevation range for this species. Absent
Palmer's goldenbush (<i>Ericameria palmeri</i> var. <i>palmeri</i>)	--/--/1B.1	July- November	This species is a perennial, evergreen shrub. It is found in mesic soils within chaparral and coastal scrub habitats. The elevation range of this species ranges between 98 and 1,970 feet amsl.	Suitable habitat occurs within the survey area and is within the elevation range of the species. Historical records show this species has been observed within one mile of the Main Street Staging Yard. However, this species was not observed during the focused surveys and is not expected to occur in the survey area. Absent
Palmer's grapplinghook (<i>Harpagonella palmeri</i>)	--/--/4.2	March-May	This species is an annual herb. It is found in clay soils in open grassy areas within shrubland, chaparral, coastal scrub, and valley and foothill grassland at elevations between 66 and 291 feet.	This species is present within the survey area. Present

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
Parry's tetracoccus (<i>Tetracoccus dioicus</i>)	--/--/1B.2	April-May	This species is a perennial shrub. It is found on dry, stony slopes. Its habitat includes chaparral and coastal scrub at elevations between 500 feet and 3,300 feet amsl.	Suitable habitat occurs within the survey area and is within the elevation range of the species. Historical records show this species has occurred within five miles of the survey area. This species was not observed during the focused surveys and is not expected to occur within the survey area. Absent
prostrate vernal pool navarretia* (<i>Navarretia prostrata</i>)	--/--/1B.1	April–July	This species is a perennial herb. It is found in coastal scrub, valley and foothill grassland, vernal pools, meadows and seeps. Specifically, it grows in alkaline soils in grassland, or in vernal pools, generally in mesic, alkaline sites at elevations between 10 and 4052 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. The closest CNDDDB occurrence is approximately 6.2 miles northwest of the proposed project. High
purple stemodia (<i>Stemodia durantifolia</i>)	--/--/2B.1	Year-round	This species is a perennial herb. It can be found in Sonoran Desert scrub, often on mesic, sandy soils at elevations between 591 and 984 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. Historical records show this species has occurred within the survey area. However, this species was not observed during the focused surveys and is presumed absent from the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
Ramona horkelia* (<i>Horkelia truncata</i>)	--/--1B.3	May-June	This species is a perennial herb. It occurs in chaparral and cismontane woodland. Habitats in California include: mixed chaparral, vernal streams, and disturbed areas near roads. Clay soil; at least sometimes on gabbro. It is found at elevations between 1,312 and 4,265 feet.	Suitable habitat occurs within the survey area, but is not within the elevation range of the species. Absent
round-leaved filaree (<i>California macrophylla</i>)	--/--1B.1	March-May	This species is an annual herb. It occurs in cismontane woodland and valley and foothill grassland habitats. Round-leaved filaree can be found at elevations between 50 and 3,930 feet.	Suitable habitat occurs on site and is within the elevation range of the species. However, this species was not observed during the focused surveys and is presumed absent within the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent
salt marsh bird's-beak (<i>Chloropyron maritimum</i> subsp. <i>maritimum</i>)	FE/CE/1B.2	May-October	This species is an annual herb. This federally listed endangered species is associated with coastal salt marshes in elevations below 33 feet.	The survey area is marginally within the species' range, but habitat is lacking. This species was not observed during the focused surveys and is not expected to occur in the survey area. Absent
San Diego ambrosia (<i>Ambrosia pumila</i>)	FE/--1B.1	April-October	This species is a perennial rhizomatous herb. It occurs in disturbed areas, chaparral, coastal scrub, valley and foothill grassland, and vernal pool habitats, and can be found at elevations below 1,360 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. Historical records show this species has occurred within the survey area. However, this species was not observed during the focused surveys and is presumed absent from the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
San Diego barrel cactus (<i>Ferocactus viridescens</i>)	--/--/2B.1	May-June	This species is a stem succulent. This barrel cactus species grows in sandy and rocky areas within chaparral, coastal sage scrub, vernal pools, and valley grassland habitats at elevations between 10 and 1,476 feet.	This species is present within the survey area and in immediately adjacent areas. Present
San Diego bur sage (<i>Ambrosia chenopodiifolia</i>)	--/--/2B.1	April-June	This species is a perennial shrub. It occurs in coastal scrub and can be found at elevations between 180 and 508 feet.	This species is present within the survey area. Present
San Diego button-celery (<i>Eryngium aristulatum</i> var. <i>parishii</i>)	FE/CE/1B.1	April-June	This species is an annual/perennial herb. It can be found in mesic soils of coastal scrub, valley and foothill grassland, and vernal pools. San Diego button-celery can be found at elevations between 65 and 2,034 feet.	This species is present within the survey area and in immediately adjacent areas. Present
San Diego County viguiera (<i>Bahiopsis laciniata</i>)	--/--/4.3	February-August	This species is a perennial shrub. It can be found in chaparral and coastal scrub habitats at elevations between 197 and 2,460 feet.	This species is present within the survey area in abundant numbers. Present
San Diego goldenstar (<i>Bloomeria clevelandii</i>)	--/--/1B.1	April-May	This species is a perennial bulbiferous herb. It occurs in chaparral, valley and foothill grassland, coastal scrub, and vernal pool habitats. It can be found at elevations between 164 and 1,525 feet.	This species is present within the survey area and in immediately adjacent areas. Present
San Diego gumplant* (<i>Grindelia hallii</i>)	--/--/1B.2	May - October	This species is a perennial herb. It grows in meadows, valley and foothill grassland, chaparral, and lower montane coniferous forest. It frequently occurs in low moist areas in meadows and associated species commonly include <i>Wyethia</i> , <i>Ranunculus</i> , <i>Sidalcea</i> . It is found at elevations between 607 and 5,725 feet.	Suitable habitat occurs on site and but it is not within the elevation range of the species. Low

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
San Diego marsh-elder (<i>Iva hayesiana</i>)	--/--/2B.2	April-October	This species is a perennial herb and is associated with streambeds, depressions, and alkaline sinks. San Diego marsh-elder can be found at elevations between 33 and 1,640 feet.	This species is present within the survey area and in immediately adjacent areas. Present
San Diego milk-vetch* (<i>Astragalus oocarpus</i>)	--/--/1B.2	May-August	This species is a perennial herb and occurs in openings in chaparral or on gravelly flats and slopes in thin oak woodland at elevations between 394 and 5,890 feet.	Habitat for this species occurs on site and is within the elevation range of the species. The closest CNDDDB occurrence is approximately 8.7 miles northeast of the proposed project. High
San Diego sagewort (<i>Artemisia palmeri</i>)	--/--/4.2	May- September	This species is a perennial herb. It grows in sandy coastal ravines and river drainages and can occasionally be found in chaparral communities. It can be found at elevations between 7 and 2,815 feet.	This species is present within the survey area. Present
San Diego sand aster* (<i>Corethrogyne filaginifolia</i> var. <i>incana</i>)	--/--/1B.1	June- September	This species is a perennial herb which is grows in coastal scrub, coastal bluff scrub and chaparral, often in disturbed sites. It can be found at elevations between 10 and 377 feet.	Habitat for this species occurs on site and is within the elevation range of the species. This species is found closer to the ocean than the proposed project. The closest CNDDDB occurrence is approximately 4.8 miles southwest of the proposed project. Moderate

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
San Diego thorn-mint (<i>Acanthomintha ilicifolia</i>)	FE/--/ 1B.1	April-June	This species is an annual herb. It occurs in vernal pools, clay, openings, chaparral, valley and foothill grassland, and coastal sage scrub habitats, and can be found at elevations between 33 and 3,150 feet.	Suitable habitat occurs within the survey area, and the upper reaches of the site are within the elevation range of the species. However, this species was not observed during focused surveys and is presumed absent from the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent
San Miguel savory (<i>Clinopodium chandleri</i>)	--/--/1B.2	March-July	This species is a perennial herb. It is often found growing on rocky slopes in chaparral habitats below 3,609 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this perennial species was not observed during the focused surveys and is presumed absent from the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent
Santa Catalina Island currant (<i>Ribes viburnifolium</i>)	--/--/1B.2	February-April	This species is a perennial evergreen shrub. This currant species can be found growing in chaparral and forest openings at elevations between 98 and 1,969 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this species was not observed during the focused surveys and is not expected to occur within the survey area. Absent
sea dahlia* (<i>Leptosyne maritima</i>)	--/--/2B.2	March-May	This species is a perennial herb which can be found in coastal scrub and coastal bluff scrub. It occurs on a variety of soil types, including sandstone at elevations between 16 and 607 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. The closest CNDDDB occurrence is approximately 4.5 miles southwest of the proposed project High

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
Shaw's agave* (<i>Agave shawii</i> var. <i>shawii</i>)	--/--/2B.1	September- May	This species is a perennial leaf succulent. It occurs on coastal bluffs and slopes within coastal sage scrub at elevations between 32 and 394 feet.	No suitable habitat for this species occurs within the survey area. Absent
singlewhorl burrobush (<i>Ambrosia monogyra</i>)	--/--/2B.1	August- November	This species is a perennial shrub. It occurs in sandy, chaparral, and Sonoran Desert scrub habitats, and can be found at elevations between 36 and 1,640 feet.	This species is present within the survey area. Present
slender cottonheads* (<i>Nemacaulis denudata</i> var. <i>gracilis</i>)	--/--/2B.2	March – May	This species is an annual herb. It occurs in coastal dunes, desert dunes, Sonoran Desert scrub, in dunes or sand. It can be found at elevations between -164 and 1,312 feet.	The survey area is within the elevation range of the species, but suitable habitat is not present. Absent
Small-flowered morning-glory (<i>Convolvulus simulans</i>)	--/--/4.2	March-July	This species is an annual herb. It occurs in valley grassland, northern coastal scrub, and coastal sage scrub at elevations between 21 and 2,698 feet.	This species is present within the survey area. Present
small-leaved rose (<i>Rosa minutifolia</i>)	--/CE/1B.1	January-June	This species is a perennial deciduous shrub. It is found growing in chaparral and coastal scrub habitats at elevations between 492 and 525 feet.	This species is present within the survey area and in immediately adjacent areas. Present
snake cholla (<i>Cylindropuntia californica</i>)	--/--/1B.1	April-May	This species is a perennial stem succulent. This cactus species is almost always found on the coast in chaparral and sage scrub habitats. Snake cholla typically occurs at elevations below 820 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this species was not observed during the focused surveys and is not expected to occur within the survey area. Absent

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
south coast saltscale (<i>Atriplex pacifica</i>)	--/--1B.2	March- October	This species is an annual herb. It occurs in coastal bluff scrub, dunes, and playa habitats. South coast saltscale can be found at elevations below 460 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this species was not observed during the focused surveys and is presumed absent from the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent
southwestern spiny rush (<i>Juncus acutus</i> ssp. <i>leopoldii</i>)	--/--4.2	NA	This species is a native grass that occurs in moist salt marshes at elevations between 0 and 1,000 feet.	This species is present within the survey area in abundant numbers. Present
spreading navarretia (<i>Navarretia fossalis</i>)	FT/--1B.1	April-June	This species is an annual herb. It is found growing in chenopod scrub, marsh/swamp, playa, and vernal pool habitats at elevations between 98 and 2,040 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this species was not observed during the focused surveys and is presumed absent from the survey area. It should be noted that surveys were conducted during a sustained drought and this species may occur during periods of sufficient rainfall. Presumed absent
summer holly (<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>)	--/--1B.2	April-June	This species is an evergreen shrub that occurs in chaparral habitats at elevations between 328 and 1,804 feet.	Suitable habitat occurs within the survey area and is within the elevation range of the species. However, this species was not observed during the focused surveys and is not expected to occur in the survey area. Absent

Species Name	Listing Status (Federal/ State/CRPR)	Bloom Period	Habitat	Potential to Occur
Tecate cypress (<i>Hesperocyparis forbesii</i>)	--/--/1B.1	Not Applicable (NA)	This species is a perennial, evergreen tree. It often grows in clay, gabbroic, or metavolcanic soils in closed-cone coniferous forest and chaparral habitats. Tecate cypress can be found at elevations between 840 and 4,900 feet.	This species is present within the survey area and in immediately adjacent areas. Present
Tecate tarplant* (<i>Deinandra floribunda</i>)	--/--/1B.2	August- October	This species is an annual herb found in chaparral and coastal scrub, often in little drainages or disturbed areas. Tecate tarplant can be found at elevations between 230 and 4000 feet.	Habitat for this species occurs in the survey area and is within the elevation range of the species. The closest CNDDB occurrence is approximately 4.7 miles east of the proposed project. High
variegated dudleya (<i>Dudleya variegata</i>)	--/--/1B.2	April-June	This species is a perennial herb. It is found in heavy clay soils within chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pool habitats at elevations between 10 and 1,900 feet	This species is present within the survey area and in immediately adjacent areas. Present
wart-stemmed ceanothus (<i>Ceanothus verrucosus</i>)	--/--/2B.2	January-April	This species is an evergreen shrub that occurs on rocky slopes in chaparral habitats at elevations below 1,148 feet.	Suitable habitat occurs on site and is within the elevation range of the species. However, this species was not observed during the focused surveys and is not expected to occur in the survey area. Absent
willowy monardella* (<i>Monardella viminea</i>)	FE/CE/1B.1	June–August	This species is a perennial herb. It grows in coastal scrub/alluvial ephemeral washes with adjacent coastal scrub, chaparral, riparian forest, riparian scrub and riparian woodland. It is found in canyons, in rocky and sandy places, sometimes in washes or floodplains; with <i>Baccharis</i> , <i>Iva</i> , etc. This species can be found at elevations between 164 and 738 feet.	Habitat for this species occurs in the survey area and is within the elevation range of the species. However, the Survey area is not within the known range of this species (USFWS 2016a). The closest CNDDB occurrence is approximately 11 miles northwest of the proposed project. Low

1 Source: Biological Technical Report (Chambers 2015); additional species added marked with an asterisk.

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1 **Table 2.4-4. Special-Status Plant Species Observations within the Survey Area**

Species Name	Listing Status (Federal/State/CRPR)	Total Observed
ashy spike-moss	--/--/4.1	2,500+ (Species too abundant to count)
California adolphia	--/--/2B.1	16
cliff spurge	--/--/2B.2	17
decumbent goldenbush	--/--/1B.2	1,556
golden-spined cereus	--/--/2B.2	184
graceful tarplant	--/--/4.2	165
Munz's sage	--/--/2B.2	2,008
Otay manzanita	--/--/1B.2	1
Otay Mountain ceanothus	--/--/1B.2	1
Otay tarplant	FE/CE/1B.1	49
Palmer's grapplinghook	--/--/4.2	221
San Diego barrel cactus	--/--/2B.1	361
San Diego bur sage	--/--/2B.1	173
San Diego button-celery	FE/CE/1B.1	82
San Diego County viguiera	--/--/4.3	2,500+ (Species too abundant to count)
San Diego goldenstar	--/--/1B.1	33
San Diego marsh-elder	--/--/2B.2	1,149
San Diego sagewort	--/--/4.2	21
singlewhorl burrobrush	--/--/2B.1	1,735
small-flowered morning-glory	--/--/4.2	169
small-leaved rose	--CE/1B.1	20
southwestern spiny rush	--/--/4.2	2,500+ (Species too abundant to count)

Species Name	Listing Status (Federal/State/CRPR)	Total Observed
Tecate cypress	--/--/1B.1	1,033
variegated dudleya	--/--/CRPR List 1B.2	302

Source: Biological Technical Report (Chambers 2015)

Four species were determined to have a high potential to occur due to suitable foraging, nesting, and dispersal habitat in the survey area: coast horned lizard (*Phrynosoma coronatum*), Riverside fairy shrimp (*Streptocephalus woottoni*), BUOW (*Athene cunicularia hypogea*), and QCB (*Euphydryas editha quino*). BUOW and QCB while not observed within the survey area during focused surveys, are considered to have a high potential to disperse within the survey area in the future (Chambers 2015). Additional details for these species are discussed below in the section titled, “Focused Surveys.”

Twenty-three species were identified as present during the survey efforts. San Diego black-tailed jackrabbit (*Lepus californicus bennetti*) was observed within the survey area. California horned lark (*Eremophila alpestris actia*) was observed in suitable habitat within the survey area and has a high potential to nest within suitable grassland habitats, disturbed areas, and appropriate sparse shrub communities. Clark’s marsh wren (*Cistothorus palustris clarkae*) was observed foraging and has a high potential to nest within the survey area. Coastal California Gnatcatcher (CAGN) were observed nesting and foraging generally north and west of Location 80. Least Bell’s vireo (LBVI) was observed nesting within the survey area, but is not expected to nest within proposed project impact areas. Grasshopper sparrow (*Ammodramus savannarum perpallidus*) was observed in suitable habitat within the survey area and has a high potential to nest within suitable grassland habitats. The southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) was observed within the survey area and has a high potential to nest within the survey area. White-faced ibis (*Pelgadis chihi*) was observed foraging within the survey area but are not expected to nest, due to lack of suitable nesting habitat. Orange-throated whiptail (*Aspisdoscelis hyperythra beldingi*) was observed throughout the survey area. Thorne’s hairstreak (*Mitoura thornei*) was observed within suitable Tecate cypress stands; however, this habitat does not occur within proposed project impact areas. Western spadefoot toad (*Spea hammondi*) was observed in larval form within non-jurisdictional road ruts and vernal pools generally east of SR-125 and south along the access road near Donovan State Prison. Although the Allen’s hummingbird (*Selasphorus sasin*), Cooper’s hawk (*Accipter cooperii*), Lawrence’s goldfinch (*Spinus lawrenci*), northern harrier (*Circus cyaneus*), Nuttall’s woodpecker (*Picoides nuttallii*), yellow-breasted chat (*Icteria virens*), and yellow warbler (*Dendroica petechia*) were observed during the surveys, these species have only a moderate potential to nest within the survey area. The double-crested cormorant (*Phalacrocorax auritis*), olive-sided flycatcher (*Contopus cooperi*), osprey (*Pandion haliaetus*), and white-tailed kite (*Elanus leucurus*) were observed foraging but are considered to have a low or absent potential to nest within the survey area due to very limited or a lack of suitable nesting habitat. San Diego fairy shrimp (*Branchinecta sandiegonensis*) were observed in various vernal pool road ruts, vernal pools and basins.

Protocol-level and focused surveys were conducted in 2014 and 2015 for the BUOW, coastal cactus wren, coastal California gnatcatcher, Least Bell’s vireo, southwestern willow flycatcher, western yellow-billed cuckoo, and QCB. Of these species, only coastal California gnatcatcher and Least Bell’s vireo were observed within the survey area (Chambers 2015). Foraging southwestern willow flycatcher and coastal cactus wren were observed in suitable habitat adjacent to but outside of the survey area (Chambers 2015).

1 Table 2.4-5. Special-Status Wildlife Species' Potential to Occur.

Species Name	Listing Status (Federal/State/Other)	Habitat Requirements	Potential to Occur
Mammals			
American badger (<i>Taxidea taxus</i>)	--/SSC/--	This species is most abundant in drier, open stages of most shrub, forest, and herbaceous habitats. American badgers need sufficient food, friable soils, and open, uncultivated ground. They prey on burrowing rodents and dig burrows themselves.	CNDDDB lists one record of occurrence within five miles of the proposed project, approximately 12,814 feet from the proposed project. Marginal quality habitat for this species exists within the survey area. Moderate
big free-tailed bat* (<i>Nyctinomops macrotis</i>)	--/SSC/WBWG medium-high-priority species	This species is primarily found in low-lying arid areas in Southern California. It needs high cliffs or rocky outcrops for roosting sites and feeds principally on large moths.	The closest CNDDDB occurrence is approximately 8.2 miles north of the proposed project. The survey area contains low- quality roosting habitat to support this species. Low
California leaf-nosed bat* (<i>Macrotus californicus</i>)	--/SSC/WBWG high-priority species	This species is found in desert riparian, desert wash, desert scrub, desert succulent scrub, alkali scrub and palm oasis habitats. It needs rocky, rugged terrain with mines or caves for roosting.	The closest CNDDDB occurrence is approximately 10.2 miles east of the proposed project. The survey area contains low- quality roosting habitat to support this species. Low
Hoary bat (<i>Lasiurus cinereus</i>)	--/--/WBWG medium- priority species	This species prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Hoary bats roost in dense foliage of medium to large trees. They feed primarily on moths and require water.	Although CNDDDB lists one record of occurrence within five miles of the proposed project (approximately 22,471 feet from the proposed project), the survey area contains low- quality roosting habitat to support this species. Low
Long-eared myotis (<i>Myotis evotis</i>)	--/--/WBWG medium- priority species	This species occurs primarily in coniferous forests at elevations between 7,000 and 9,600 feet. Their diet consists of insects and moths.	CNDDDB lists one record of occurrence within five miles of the proposed project (approximately 21,703 feet from the proposed project), and the survey area contains low- quality roosting habitat to support this species. Low

Species Name	Listing Status (Federal/State/Other)	Habitat Requirements	Potential to Occur
Mexican long-tongued bat (<i>Choeronycteris mexicana</i>)	--/SSC/WBWG high- priority species	This species occurs in a variety of habitats, such as desert and montane riparian, chaparral, and woodlands. Mexican long-tongues bat feeds primarily on nectar, and may also consume fruit juices and pollen.	CNDDDB lists one record of occurrence within five miles of the proposed project (approximately 22,471 feet from the proposed project), and the survey area contains low- quality roosting habitat to support this species. Low
Northwestern San Diego pocket mouse (<i>Chaetodipus fallax fallax</i>)	--/SSC/--	This species occurs in chaparral, sage scrubs, and grasslands with rocks and coarse gravel. Northwestern San Diego pocket mouse is primarily granivorous; however, it will also consume green vegetation and insects.	CNDDDB lists two records of occurrence within five miles of the proposed project, with the closest being approximately 80 feet from the proposed project. Marginal quality habitat for this species exists within the survey area. Moderate
Pacific pocket mouse (<i>Perognathus longimembris pacificus</i>)	FE/SSC/--	This species occurs in coastal sage scrub dominated by sagebrush and maritime chaparral sage scrub; it requires loose sandy soils within the immediate vicinity of the Pacific Ocean. This species' diet ranges from seeds, forbs, and arthropods.	This species is considered extirpated from southern San Diego. As a result, Pacific pocket mouse is considered absent from the survey area. Absent
Pallid bat (<i>Antrozous pallidus</i>)	--/SSC/WBWG high- priority species	This species inhabits elevations below 6,000 feet and rocky, arid deserts and canyon lands, shrub-steppe grasslands, karst formations, and higher-elevation coniferous forests. Pallid bats are most common in open, dry habitats with rocky areas for roosting; these roosts must protect the bats from high temperatures. This species is very sensitive to the disturbance of roosting sites.	CNDDDB lists four records of occurrence within five miles of the proposed project, the closest is approximately 15,880 feet from the proposed project. In addition, the survey area contains low-quality roosting habitat to support this species. Low
Pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>)	--/SSC/WBWG medium priority species	This species occurs in pinyon-juniper habitats and a wide variety of desert habitats, such as alkali desert scrub, desert succulent scrub, and desert washes. It forages over open water for moths, flies, lacewings, and other insects.	CNDDDB lists three records of occurrence within five miles of the proposed project, the closest being approximately 2,801 feet from the proposed project.** However, the survey area contains low-quality roosting habitat to support this species. Low

Species Name	Listing Status (Federal/State/Other)	Habitat Requirements	Potential to Occur
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	--/SSC/--	This species is found in intermediate canopy stages of shrub habitats and open shrub/herbaceous and tree/herbaceous edges in coastal sage scrub habitats in Southern California	This species was observed within the survey area. CNDDDB lists 11 records of occurrence within five miles of the proposed project, with the closest occurrence 214 feet from the proposed project. Present
San Diego desert woodrat (<i>Neotoma lepida intermedia</i>)	--/SSC/--	This species occurs in coastal scrub of Southern California from San Diego County to San Luis Obispo County. It prefers moderate to dense canopies, particularly abundant in rock outcrops and rocky cliffs and slopes.	CNDDDB lists one record of occurrence within five miles of the proposed project (approximately 570 feet from the proposed project), and the survey area contains moderate-quality suitable habitat to support this species. Moderate
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	--/SSC/WBWG high- priority species/--	This species is found in all habitats except alpine, and it is elusive and rare throughout its range. Its diet primarily consists of moths.	CNDDDB lists one record of occurrence within five miles of the proposed project (approximately 21,703 feet from the proposed project). However, the survey area contains low-quality roosting habitat to support this species. Low
Western mastiff bat (<i>Eumops perotis</i>)	--/SSC/WBWG high- priority species	This species occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. They roost in crevices in cliff faces, high buildings, trees, and tunnels.	CNDDDB lists three records of occurrence within five miles of the proposed project, the closest is approximately 2,801 feet from the proposed project.** However, the survey area contains low-quality roosting habitat to support this species. Low
Western red bat (<i>Lasiurus blossevillei</i>)	--/SSC/WBWG high- priority species	This species occurs in edge areas near streams and open fields, far from humans. Western red bat is primarily insectivorous, and consumes moths, crickets, cicadas, and beetles.	CNDDDB lists one record of occurrence within five miles of the proposed project and approximately 2,801 feet from the proposed project.** The survey area contains suitable roosting habitat along the edges of streams to support this species; however, no bat hibernaculum would be permanently affected. Moderate

Species Name	Listing Status (Federal/State/Other)	Habitat Requirements	Potential to Occur
Western small-footed myotis (<i>Myotis ciliolabrum</i>)	--/--/WBWG medium- priority species	This species occurs in a wide variety of habitats, such as open grasslands, canyons, and woodlands. Moths and beetles make up most of this species' diet.	CNDDDB lists two records of occurrence within five miles of the proposed project, and the closest is approximately 2,801 feet from the proposed project.** However, the survey area contains low-quality roosting habitat to support this species. Low
western yellow bat* (<i>Lasiurus xanthinus</i>)	--/SSC/ WBWG high- priority species	This species is found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. It forages over water and among trees.	The closest CNDDDB occurrence is approximately 10.6 miles north of the proposed project. The Survey area contains low-quality roosting habitat to support this species. Low
Yuma myotis (<i>Myotis yumanensis</i>)	--/--/WBWG Low-Medium Priority	This species is found in various habitat types, though it is most closely associated with open woodlands near large, open water sources. Yuma myotis feeds over water sources for moths, caddisflies, midges, and termites.	CNDDDB lists six records of occurrence within five miles of the proposed project, with the closest occurrence approximately 2,801 feet from the proposed project.** However, the survey area contains low-quality roosting habitat to support this species. Low
Birds			
Allen's hummingbird (<i>Selasphorus sasin</i>)	BCC/--/--	This species occurs in coastal chaparral, open riparian woodlands below 1,000 feet in elevation, mixed evergreen, and oak woodlands. Allen's hummingbird prefers open habitats near the coast and along the forest edge. It feeds on floral nectar and small insects. This species nests in trees or shrubs, placing their nests 1 to 50 feet off the ground.	This species was observed foraging within the survey area. CNDDDB lists no records of occurrence within five miles of the proposed project, and there is marginal quality nesting habitat present within the survey area. Present (foraging)/Moderate (nesting)

Species Name	Listing Status (Federal/State/Other)	Habitat Requirements	Potential to Occur
Belding's savannah sparrow (<i>Passerculus sandwichensis beldingi</i>)	--/CE/--	This species is a year-round resident of the coastal salt marshes of Southern California. Belding's savannah sparrow primarily nests in pickleweed (<i>Salicornia virginica</i>) and is ecologically associated with dense patches of pickleweed. Its diet consists of insects, seeds, and grasses.	CNDDDB lists three records of occurrence within five miles of the proposed project, with the closest observation being approximately 20,882 feet from proposed project. However, no suitable nesting habitat occurs within or immediately adjacent to the survey area. Absent
Bell's sage sparrow (<i>Artemisiospiza belli belli</i>)	BCC/WL/--	This species is a year-round resident in chaparral dominated by chamise (<i>Adenostoma fasciculatum</i>), as well as coastal scrub dominated by sage. Bell's sage sparrow is predominantly insectivorous, but also consumes seeds and green foliage. It typically builds nests on the ground, beneath shrubs.	CNDDDB lists one record of occurrence approximately 25,102 feet from the proposed project. Marginal quality habitat for this species occurs within sage dominant coastal sage scrub habitats, however the chamise dominated communities preferred by this species were not observed. Moderate (foraging/nesting)
Western Burrowing owl (<i>Athene cunicularia hypogea</i>)	BCC/SSC/--	This species occurs in open, dry annual or perennial grasslands, deserts, and scrub characterized by low-growing vegetation. It is a subterranean nester and is dependent on burrowing mammals, most notably the California ground squirrel (<i>Otospermophilus beecheyi</i>).	CNDDDB lists 17 records of occurrence within five miles of the proposed project with three records within 1,500 feet of the proposed project. The survey area contains good-quality habitat for burrowing owl. This species was not observed during focused surveys conducted by Chambers in 2014. High (foraging/nesting)
California black rail (<i>Laterallus jamaicensis contumiculus</i>)	BCC/FP/--	This species occurs in tidal emergent wetlands, salt marshes, freshwater marshes, and wet meadows. Its diet mainly consists of small aquatic and terrestrial invertebrates.	CNDDDB lists one record of occurrence within five miles of the proposed project. This record was documented in 1908, and is located approximately 25,676 feet from the proposed project. This species is considered extirpated from San Diego and the last known breeding records are from the 1950s. Absent

Species Name	Listing Status (Federal/State/Other)	Habitat Requirements	Potential to Occur
California horned lark (<i>Eremophila alpestris actia</i>)	--/WL/--	This species occurs in open habitats with sparse vegetation, such as prairies, deserts, and agricultural lands. Its diet consists of weed and grass seeds and the occasional invertebrate.	This species was observed foraging within the survey area. CNDDDB lists one record of occurrence within five miles of the proposed project. This observation was approximately 12,959 feet from the proposed project. High quality nesting habitat for this species occurs within the survey area. Present (foraging)/High (nesting)
California least tern (<i>Sternula antillarum browni</i>)	FE/CE/--	This species occurs in marine estuaries, bays, and near-shore marine waters. California least tern feeds on small fish caught in estuaries and lagoons where the water is shallow. Its nests are shallow depressions made on sandy or gravelly substrate.	CNDDDB lists one record within five miles of the proposed project, and specifically approximately 24,000 feet from the proposed project. This species is determined to be absent from the survey area for nesting, as it requires specific habitat conditions for nesting that are not present. Low (foraging)/Absent (nesting)
Clark's marsh wren (<i>Cistothorus palustris clarkae</i>)	--/SSC/--	This species occurs in emergent wetland habitat dominated by cattails, bulrushes, and sedges. Its diet primarily consists of insects, spiders, and invertebrates gleaned from vegetation.	This species was observed foraging within the survey area. CNDDDB lists no records of occurrence within five miles of the proposed project. However, there is high quality nesting habitat in a wetland within the survey area. Present (foraging)/High (nesting)
Coastal cactus wren (<i>Campylorhynchus brunneicapillus</i>)	BCC/SSC/--	This species occurs in coastal sage scrub interlaced with patches of opuntia. Its diet is primarily insectivorous, and it forages on the ground for prey items, such as caterpillars, moths, and grasshoppers.	CNDDDB lists 15 records of occurrence within five miles of the proposed project, and two are less than 1,000 feet from the proposed project. This species was not observed during focused surveys conducted by Chambers in 2014. Low quality nesting habitat for this species was observed to occur within the survey area. Moderate (foraging)/Low (nesting)

Species Name	Listing Status (Federal/State/Other)	Habitat Requirements	Potential to Occur
Coastal California gnatcatcher (<i>Poliophtila californica californica</i>)	FT/SSC/--	This species is an obligate, permanent resident of coastal sage scrub below 2,500 feet in elevation in Southern California. It is found in low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	CNDDDB lists 31 records of occurrence of this species within five miles of the proposed project. Two of these observations were within 1,000 feet of the proposed project. USFWS species occurrence data lists 623 records of occurrence within five miles of the proposed project. Three of these observations were within the survey area. In addition, the survey area contains good-quality, suitable habitat. The USFWS designation of critical habitat for the coastal California gnatcatcher specifically excludes SDG&E right-of-way within SDG&E's NCCP. Since the proposed project is in SDG&E right-of-way within SDG&E's NCCP, the proposed project is not located in critical habitat for coastal California gnatcatcher. During the 2014 focused surveys, approximately 30 pairs of gnatcatchers were observed within the survey area. Present (foraging)/Present (nesting)
Cooper's hawk (<i>Accipiter cooperii</i>)	--/WL/--	Cooper's hawk (nesting) is a California SSC. This species occurs as a migrant and/or resident over most of the U.S. from southern Canada to northern Mexico.	This species was observed within the survey area. CNDDDB lists no records of occurrence within five miles of the proposed project. Suitable nesting habitat for this species is limited within the survey area. Present (foraging)/Moderate (nesting)
Double-crested cormorant (<i>Phalacrocorax auritis</i>)	--/WL (nesting colony)/--	This species is found along the California coast, on inland lakes, and in fresh, salt, and estuarine waters throughout the year. Double-crested cormorants feed primarily on fish, and will rarely eat crustaceans, amphibians, or insects.	This species was observed foraging within the survey area. CNDDDB lists no records of occurrence within five miles of the proposed project. Nesting is not expected. Present (foraging)/Low (nesting)
golden eagle* (<i>Aquila chrysaetos</i>)	BCC/FP,SSC/--	This species is found in rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range. Large trees in open areas also provide nesting habitat.	The closest CNDDDB occurrence is approximately 8.7 miles east of the proposed project. This species could potentially move through the proposed project area, but nesting is not expected. Moderate (foraging)/Low (nesting)

Species Name	Listing Status (Federal/State/Other)	Habitat Requirements	Potential to Occur
Grasshopper sparrow (<i>Ammodramus savannarum perpallidus</i>)	--/SSC/--	This species is found in most coastal counties, along the western side of the Sacramento Valley, and in the western foothills of the Sierra Nevada Mountains. It prefers breeding habitat comprised of open grasslands, preferably with bunch grass (versus sod-type) as the predominant cover; however, through much of California, non-native annual grasslands and agricultural fields are used in the absence of native bunch-grass ecosystems.	This species was observed foraging within the survey area. CNDDDB lists no records of occurrence within five miles of the proposed project. High quality nesting habitat for this species was observed to occur within the survey area. Present (foraging)/High (nesting)
Lawrence's goldfinch (<i>Spinus lawrencei</i>)	BCC/--/--	This species occurs in a broad range of habitats, such as open woodlands, chaparral, desert riparian, and lower montane habitats. It gleans vegetation and ground for seeds, and its preferred seeds include, pigweed, fiddleneck, starthistle, and chamise.	This species was observed foraging within the survey area. CNDDDB lists no records of occurrence within five miles of the proposed project. Moderate quality nesting habitat for this species was observed to occur within the survey area. Present (foraging)/Moderate (nesting)
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE/CE/--	This species occurs in early successional habitats along rivers with low, dense vegetation. Its diet consists of insects and spiders.	This species was documented foraging and nesting within the survey area. CNDDDB lists 14 records of occurrence of this species within five miles of the proposed project. One of these occurrences was documented within the survey area. In addition, the survey area contains good-quality, suitable habitat. Present (foraging/nesting)
Light-footed clapper rail (<i>Rallus longirostris levipes</i>)	FE/CE/--	This species is found year-round in coastal wetlands and brackish areas. It gleans for crabs, mussels, clams, insects, spiders, and worms in areas with high vegetation in the marsh.	CNDDDB lists four records of occurrence of this species within five miles of the proposed project (all more than 20,000 feet from the proposed project). However, the survey area contains low-quality habitat to support this species and no suitable nesting habitat. Low (foraging)/Absent (nesting)

Species Name	Listing Status (Federal/State/Other)	Habitat Requirements	Potential to Occur
Northern harrier (<i>Circus cyaneus</i>)	--/SSC/--	This species occurs in a wide variety of habitats, with wetlands, marshes, fields, and grasslands being the most common. It preys on small mammals, reptiles, amphibians, and birds.	This species was observed foraging within the survey area. CNDDDB lists no records of occurrence within five miles of the proposed project. Moderate quality habitat for nesting occurs within the survey area. Present (foraging)/Moderate (nesting)
Nuttall's woodpecker (<i>Picoides nuttallii</i>)	BCC/--/--	This species occurs in low-elevation riparian deciduous and oak woodland habitats. It pecks, drills, and gleans insects and spiders from trunks, branches, and foliage.	This species was observed foraging within the survey area. CNDDDB lists no records of occurrence within five miles of the proposed project. Moderate quality habitat for nesting occurs within the survey area. Present (foraging)/Moderate (nesting)
Olive-sided flycatcher (<i>Contopus cooperi</i>)	--/SSC/--	This species occurs along edges and openings lining dense coniferous forests. It is insectivorous, sallies flying insects from a high perch, and has a mild preference for bees.	This species was observed foraging within the survey area. CNDDDB lists no records of occurrence within five miles of the proposed project. Low quality habitat for nesting occurs within the survey area. Present (foraging)/Low (nesting)
Osprey (<i>Pandion haliaetus</i>)	--/WL/--	This species is found near large bodies of water, such as rivers, lakes, and bays. It is largely piscivorous, and it catches fish found near the water's surface.	This species was observed foraging within the survey area. CNDDDB lists no records of occurrence within five miles of the proposed project. Low quality habitat for nesting occurs within the survey area. Present (foraging)/Low (nesting)
Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)	--/WL/--	This species occurs in coastal sage scrub, chaparral, and rocky brush-laden hillsides. Its diet consists primarily of small grass and forb seeds, and occasionally it will also consume insects.	This species was observed foraging within the survey area. CNDDDB lists four records of occurrence within five miles of the proposed project, approximately 5,660 feet from the proposed project. High quality habitat for nesting occurs within the survey area. Present (foraging)/High (nesting)

Species Name	Listing Status (Federal/State/Other)	Habitat Requirements	Potential to Occur
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	FE/CE/--	This species breeds in a variety of riparian habitats with multi-tiered canopies and surface water and/or saturated soils along streams. Its habitat types may include a variety of willow, cottonwood, coast live oak, alder, and tamarisk woodlands.	CNDDDB and the USFWS list no records of occurrence within five miles of the proposed project. In addition, breeding habitat for this species is limited within the survey area, due to the lack of habitat structure and occurrence of standing water. Moderate (foraging)/Low (nesting)
Swainson's hawk* (<i>Buteo swainsoni</i>)	BCC/CT/--	This species breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannas, and agricultural or ranch lands with groves or lines of trees. It requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	The closest CNDDDB occurrence is approximately 6.2 miles northeast of the proposed project. However, the San Diego County breeding population of this species is considered extirpated. Absent
tricolored blackbird* (<i>Agelaius tricolor</i>)	BCC/SC, SSC/--	This species is highly colonial and is most numerous in the Central Valley and vicinity. It is largely endemic to California and requires open water, protected nesting substrate, and foraging areas with insect prey within a few kilometers of the colony.	The closest CNDDDB occurrence overlaps the proposed project, in the vicinity of Johnson Canyon. There are also three other CNDDDB occurrences within 5 miles of the proposed project, although one is considered extirpated. Suitable habitat is present. High (foraging)/High (nesting)
Western snowy plover (<i>Charadrius alexandrinus nivosus</i>)	FT/SSC/--	This species occurs in sandy dune-type habitats along coastlines. It forages for insects, amphipods, and other small invertebrates in wet and dry, sandy or gravelly substrates.	This species is considered absent within the survey area for foraging and nesting, as it requires specific habitat conditions for foraging and nesting that are not present within the survey area. CNDDDB lists one record within five miles of the proposed project, approximately 20,882 feet from the proposed project. Absent

Species Name	Listing Status (Federal/State/Other)	Habitat Requirements	Potential to Occur
Western yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	FT/CE/--	This species is found in cottonwood-willow riparian habitat. Its diet in California primarily consists of caterpillars, tree frogs, katydids, and grasshoppers.	CNDDDB lists two records of occurrence within five miles of the proposed project, with the closest approximately 2,461 feet from the proposed project. No USFWS occurrences were documented within 5 miles of the proposed project. This species was not observed in the survey area during focused surveys conducted by Chambers in 2014. Moderate (foraging)/Low (nesting)
White-faced ibis (<i>Pelgadis chihi</i>)	--/WL/--	This species occurs mostly in freshwater marshes, and it can also occasionally be found in flooded meadows and saltwater marshes. It probes muddy substrate for earthworms, insects, crustaceans, amphibians, fishes, and invertebrates.	This species was documented foraging within the survey area. CNDDDB lists no records of occurrence within five miles of the proposed project. This species is considered absent from the survey area for nesting, as it has special nesting habitat restrictions that are not present within the survey area. Present (foraging)/Absent (nesting)
White-tailed kite (<i>Elanus leucurus</i>)	--/FP/--	This species occurs in low to moderate elevation grasslands, savannas, agricultural areas, wetlands, marshes, and riparian woodlands. Its diet consists of small mammals, amphibians, lizards, and large insects.	This species was observed foraging within the survey area. CNDDDB lists no records of occurrence within five miles of the proposed project. Low to marginal quality nesting habitat was observed within the survey area. Present (foraging)/Low (nesting)
Yellow-breasted chat (<i>Icteria virens</i>)	--/SSC/--	This species occurs in dense riparian thickets. It gleans vegetation for spiders, insects, and berries.	This species was observed foraging within the survey area. CNDDDB lists three records of occurrence within five miles of the proposed project, the closest approximately 237 feet from the proposed project. Moderate quality habitat for nesting occurs within the survey area. Present (foraging)/Moderate (nesting)

Species Name	Listing Status (Federal/State/Other)	Habitat Requirements	Potential to Occur
Yellow warbler (<i>Dendroica petechia</i>)	--/SSC/--	This species is found in riparian woodlands, swamp edges, and willow thickets, and it prefers early successional understories with medium-high shrub and tree density.	This species was observed foraging within the survey area. CNDDDB lists no records of occurrence within five miles of the proposed project. Moderate quality habitat for nesting is present within the survey area. Present (foraging)/Moderate (nesting)
Reptiles			
Coast horned lizard (<i>Phrynosoma coronatum</i>)	--/SSC/--	This species occurs in a variety of habitats, such as coastal sage scrub, chaparral, various woodlands, and annual grasslands. Its diet consists almost exclusively of ants.	CNDDDB lists six records of occurrence for this species within five miles of the proposed project, with the closest being approximately 9,398 feet from the proposed project. Although not observed during the survey effort, high quality habitat for this species occurs within the survey area. High
Coast patch-nosed snake (<i>Salvadora hexalepis virgultea</i>)	--/SSC/--	This species occurs in California from the northern Carrizo Plains in San Luis Obispo County, south through the coastal zone, south and west of the deserts, and into coastal northern Baja California. This species inhabits semi-arid, brushy areas and chaparral in canyons, rocky hillsides, and plains up to 7,000 feet in elevation.	CNDDDB lists one record of occurrence within five miles of the proposed project (approximately 13,125 feet from the proposed project), and the survey area contains moderate-quality suitable habitat. Moderate
Coronado Island skink (<i>Plestiodon skiltonianus interparietalis</i>)	--/SSC/--	This species occurs in early successional stages of habitats, such as coastal sage scrub, chaparral, open woodland, and conifer forests. It forages through leaf litter for small invertebrates.	CNDDDB lists one record of occurrence within five miles of the proposed project, approximately 22,399 feet from the proposed project. This species was not observed during the survey effort, and moderate quality habitat exists within the survey area. Moderate

Species Name	Listing Status (Federal/State/Other)	Habitat Requirements	Potential to Occur
Green turtle (<i>Chelonia mydas</i>)	FT/--/--	This species occurs in shallow waters within reefs, bays, and inlets. It diets only on seagrasses and algae.	CNDDDB list one record of occurrence within five miles of the proposed project (approximately 24,648 feet from the proposed project). However, the green turtle is considered absent from the proposed project as this species is restricted to habitats that do not occur within the ROW. Absent
Orange-throated whiptail (<i>Aspisdoscelis hyperythra beldingi</i>)	--/SSC/--	This species occurs in coastal sage scrub and chaparral habitats with sandy washes, rocky outcrops, and adequate shading. Its diet consists mainly of insects and spiders.	This species was observed throughout the survey area. CNDDDB lists nine records of occurrence within five miles of the proposed project, with the closest occurrence approximately 2,000 feet from the proposed project. Present
Red diamond rattlesnake (<i>Crotalus ruber</i>)	--/SSC/--	This species is found in several habitat types, such as coastal sage scrub, grassland, and woodland associated large rocks or boulders. Its diet consists mainly of squirrels for adults and lizards for juveniles.	CNDDDB lists one record of occurrence within five miles of the proposed project (approximately 6,812 feet from the proposed project), and the survey area contains good- quality suitable habitat. Moderate
Rosy boa (<i>Lichanura trivirgata</i>)	FSS/--/--	This species occurs in rocky coastal sage, inland sage, and chaparral-covered hillsides and canyons. It predates on small mammals, reptiles, amphibians, and birds.	CNDDDB lists one record of occurrence within five miles of the proposed project (approximately 7,837 feet from the proposed project), and the survey area contains good- quality, suitable habitat. High
silvery legless lizard* (<i>Anniella pulchra pulchra</i>)	FSS/SSC/--	This species occurs in sandy or loose loamy soils under sparse vegetation, and prefers soils with high moisture content.	The closest CNDDDB occurrence is approximately 5.4 miles southeast of the proposed project. The survey area contains suitable habitat. High
Two-striped garter snake (<i>Thamnophis hammondi</i>)	--/SSC/--	This species occurs in coastal California from the vicinity of Salinas to northwest Baja California. This species is highly aquatic, and is found in or near permanent fresh water. It is often along streams with rocky beds and riparian growth up to 7,000 feet in elevation.	CNDDDB lists four records of occurrence within five miles of the proposed project, the closest approximately 7,220 feet from the proposed project. Suitable habitat for this species is present within the survey area. Moderate

Species Name	Listing Status (Federal/State/Other)	Habitat Requirements	Potential to Occur
western pond turtle* (<i>Emys marmorata</i>)	FSS/SSC/--	This species is a thoroughly aquatic turtle of ponds, marshes, rivers, streams & irrigation ditches, usually with aquatic vegetation, below 6000 feet elevation. It needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 kilometer from water for egg-laying.	The closest CNDDDB occurrence is approximately 12.5 miles northeast of the proposed project. The survey area contains marginally suitable habitat. Low
Amphibians			
arroyo toad* (<i>Anaxyrus californicus</i>)	FE/SSC/--	This species is found in semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. Specifically, it is found in rivers with sandy banks, willows, cottonwoods, and sycamores as well as loose, gravelly areas of streams in drier parts of range.	The closest CNDDDB occurrence is approximately 7.5 miles north of the proposed project. The survey area contains potentially suitable habitat. However, the proposed project is not considered within the range of this species (USFWS 2016b) Low
Western spadefoot (<i>Spea hammondi</i>)	--/SSC/--	This species is found in grasslands, floodplains, washes, and playas. Its diet consists of invertebrates, beetles, moths, earthworms, crickets, flies, and ants.	This species was observed in larval form within the survey area generally east of SR-125 within road ruts and vernal pool features. CNDDDB lists two records of occurrence within five miles of the proposed project, with the closest being approximately 13,155 feet from the proposed project. Present
Invertebrates			
Quino checkerspot butterfly (<i>Euphydryas editha quino</i>)	FE/--/--/Covered under the SDG&E Low-Effect Habitat Conservation Plan for QCB	Adults are found along low hilltops, rocky outcrops, and ridges.	The CNDDDB lists 18 records of occurrence within five miles of the proposed project, the closest being approximately 1,137 feet from the proposed project. A portion of the survey area is located within USFWS critical habitat for this species. Focused survey efforts during the 2015 adult flight season resulted in no detections within the survey area. High

Species Name	Listing Status (Federal/State/Other)	Habitat Requirements	Potential to Occur
Hermes copper butterfly (<i>Lycaena hermes</i>)	FC/--/--	Hermes copper butterfly is found in mixed woodlands, chaparral, and coastal sage scrub from San Diego County to adjacent Baja California Norte, Mexico. Spiny redberry (<i>Rhamnus crocea</i>) is the host larval food plant for this species, which is common in cismontane California coastal sage scrub and chaparral vegetation communities. However, this species is limited to only a portion of the redberry range, usually along north-facing hillsides or within deeper, well-drained soils of canyon bottoms where host (spiny redberry) and nectar (California buckwheat) plants are present. In addition, mature spiny redberry plants appear to be essential to this species' survival. It may take as long as 18 years after a wildfire for this species to re- colonize an area.	No CNDDDB records of occurrence are documented within five miles of the proposed project. There are approximately only 20 known populations of Hermes copper butterfly. While suitable habitat for this species is present within the survey area, the closest documented population occurs near the Otay Lakes Reservoir, approximately 3 miles from the proposed project. Low
Riverside fairy shrimp (<i>Streptocephalus woottoni</i>)	FE/--/--	This species is found in deep, cool vernal pools. It lives as a filter feeder, and consumes algae, bacteria, and various detritus in water.	This species has a high potential to occur within the survey area. The survey area contains good-quality, suitable habitat, and the CNDDDB lists 16 records of occurrence within five miles of the proposed project, the closest is approximately 1,359 feet from the proposed project. USFWS critical habitat for this species is located more than 1,000 feet south of the proposed project. High

Species Name	Listing Status (Federal/State/Other)	Habitat Requirements	Potential to Occur
San Diego fairy shrimp (<i>Branchinecta sandiegonensis</i>)	FE/--/--	This species occurs only in high-quality vernal pools. It lives as a filter feeder, and consumes algae, bacteria, and various detritus in water.	This species was observed in two vernal pool road ruts (RR-93 and RR-85) in the survey area during the 2015/2016 protocol-level wet season fairy shrimp surveys, and also in a basin (VP 2) during the 2016 dry-season surveys. San Diego fairy shrimp were also identified in VP-18, 19, 20, 25, 28, 30, 31, 33, 34, 37, 38, 39, 42, 43, 45, 46, 47, and 50 and B-02. The CNDDB lists 18 records of occurrences within five miles of the proposed project, the closest being approximately 1,288 feet from the proposed project. USFWS critical habitat for this species is located along the eastern portion of the proposed project near the Richard J. Donovan Correctional Facility. Present
Thorne's hairstreak (<i>Mitoura thornei</i>)	--/--/Covered under the County of San Diego MSCP Subarea Plan	This species is only found on Otay Mountain in interior cypress woodland between 800 and 3,290 feet in elevation. Immature Thorne's hairstreaks are herbivorous and adults are nectivorous.	Present within the survey area at the far northeastern end, in habitats not proposed for construction activities. The CNDDB lists six records of occurrence within five miles of the proposed project, the closest is approximately 9,726 feet from the proposed project. Present

- 1 ** A July 15, 2003 CNDDB occurrence recorded the following five species of bats in the same location (2,801 feet from the proposed project): pocketed free-tailed bat, western
- 2 mastiff bat, western red bat, western small-footed myotis, and Yuma myotis.
- 3 Source: *Biological Technical Report (Chambers 2015) with additional species added marked with an asterisk.*

A 2015 and a 2016 protocol-level dry season and a 2015/2016 protocol-level wet season survey were conducted for the San Diego and Riverside fairy shrimp. In the 2015 dry season survey, neither species were observed during the dry season survey; however, San Diego fairy shrimp were present in two road rut vernal pools (Road Rut-93 and Road Rut 85) in the survey area during the wet season surveys (Appendices F and G) and also in one basin (VP 2) during the 2016 dry season survey (Appendix H). In 2017, a fairy shrimp species assessment was conducted between Loc-84 through Loc-96 during the wet season. San Diego fairy shrimp were identified in 21 vernal pools/basins along access roads during the assessment: VP-18, 19, 20, 25, 28, 30, 31, 33, 34, 37, 38, 39, 42, 43, 45, 46, 47, and 50 and B-02. These vernal pools/basins are located near pole locations Loc-85, Loc-86, Loc-90, Loc-91, Loc-92, Loc-93, Loc-94, and Loc-95 (Appendix F).

Focused Surveys

Coastal Cactus Wren and Coastal California Gnatcatcher

Suitable breeding habitat for Coastal Cactus Wren (CACW) was extremely limited within the survey area. Only three patches of cacti, offering low quality nesting substrate due to their small size, were observed. No CACW individuals or signs of nesting were observed in the survey area. It is not expected that breeding CACW occurs within the proposed project area. For details of the CACW survey results, see the *2014 Tie-Line 649 Wood to Steel Pole Project, California Gnatcatcher and Coastal Cactus Wren Survey Report* in Appendix G of the Biological Technical Report, Chambers 2015 (see Appendix I).

The coastal sage scrub habitat within and adjacent to the survey area is well suited for CAGN. Several patches of occupied habitat occur within the survey area, and approximately 30 pairs of CAGN were observed. Adult and juvenile CAGN from territories identified in the 2014 surveys, as well as dispersing individuals from adjacent habitat, would likely form breeding territories in future nesting seasons in similar locations along the survey area. Details regarding the results of the surveys are included in the *2014 Tie-Line 649 Wood to Steel Pole Project, California Gnatcatcher and Coastal Cactus Wren Survey Report* in Appendix G of the Biological Technical Report, Chambers 2015 (see Appendix I).

Riparian Bird Species

The 2014 riparian bird surveys for LBVI, Southwestern willow flycatcher (SWFL), and Western yellow billed cuckoo (WYBC) were conducted based on the habitat suitability assessment made during the initial round of focused LBVI surveys. Subsequent surveys were conducted in all areas that contained riparian habitat suitable for nesting of the three target species. Four LBVI territories (LBVI 2, 8, 9, and 10) were documented within the survey area. A total of 17 LBVI territories were detected during surveys, with approximately half confirmed to be occupied by paired individuals. Evidence of successful breeding was documented in at least two territories. Male LBVI and juveniles from territories identified in the 2014 surveys, as well as dispersing LBVI from adjacent habitat, would likely form breeding territories in future nesting seasons and in similar locations within the survey area. In addition, the structure of the riparian habitat adjacent to the survey area was well suited for LBVI. Details regarding the results of the surveys are included in the *2014 Tie-Line 649 Wood to Steel Project, Riparian Bird Survey Report* in Appendix H of the Biological Technical Report, Chambers 2015 (see Appendix I).

Breeding habitat for SWFL was limited within the survey area, due to the lack of habitat structure and presence of standing water. In general, potential breeding habitat for this species runs parallel and to the north of the survey area along the Otay River, and was primarily outside of the designated survey area. Six willow flycatchers (*Empidonax trallii*) were observed between May 21 and June 20 outside of the survey area but within suitable breeding habitat. Although these observations fell within the migratory period for this species, the birds lacked territorial behavior and were not observed on subsequent visits. These factors

1 indicate the observations were likely the northwestern subspecies (*E. t. brewsteri*), a state listed endangered
2 species, which does not breed locally.

3 In addition, one confirmed SWFL, based on call and leg bands, was observed on several occasions between
4 June 5 and June 20. The observation of SWFL in this location was unique, with the nearest summer record
5 of SWFL being from east Otay Lake in 1975 (Unitt 1987; Unitt pers. comm. 2014, Chambers 2015). Based
6 on the 2014 protocol SWFL surveys, it has been determined that no active breeding SWFL territories occur
7 within or adjacent to the survey area.

8 Breeding habitat for WYBC was extremely marginal within the survey area, and did not offer the species
9 composition or structure preferred by WYBC. Some higher quality stands of willow-cottonwood forest
10 located near the eastern end of the Otay River and below Otay Dam were surveyed as well; however,
11 WYBC were not detected, and these areas are well beyond the survey buffer for the survey area. Based on
12 the 2014 protocol WYBC surveys, it has been determined that breeding WYBC are not likely to occur
13 within or adjacent to the survey area. Virtually no suitable breeding habitat for WYBC was documented
14 within the survey area. Surveys of low-quality habitat were performed during 2014 surveys, and no WYBC
15 were observed. It is not expected that breeding WYBC would occur in the future within the survey area.
16 Details regarding the results of the surveys are located in the *2014 Tie-Line 649 Wood to Steel Pole Project,*
17 *Riparian Bird Survey Report* in Appendix H of the Biological Technical Report, Chambers 2015 (see
18 Appendix I).

19 *Western Burrowing Owl*

20 A total of five suitable habitat areas (Area 1 through Area 5) were mapped and surveyed as suitable BUOW
21 habitat. Area 1 is located between Pole Nos 18 and 24 and is 32.72 acres in size. Burrows within dirt mounds
22 were observed along the southern and northern edges of this area, most occupied by ground squirrel. No
23 signs of current use by BUOW were observed. Area 2 is located between Locations 47 and 49 and is 3.87
24 acres in size. Rodent burrows, located in a large dirt mound along the northern edge of the suitable habitat
25 area, were observed; however, no burrowing owl sign was observed. Area 3 is located between Locations
26 103 and 117 and is 115 acres in size. A total of seven burrows, suitable in size for BUOW, were observed,
27 a majority of these clustered in small dirt mounds. On April 30, 2014, during the first round of surveys,
28 excrement (whitewash) and prey pellets were observed near a burrow adjacent to Location 8. The prey
29 pellets consisted of mainly beetle exoskeleton, suggesting the presence of BUOW. No additional sign of
30 use or occupancy was observed on subsequent rounds. Area 4 is located directly south of the proposed
31 project access road entrance off Otay Mesa road and is 2.5 acres in size. No burrows were found inside
32 Area 4. Area 5 is located directly east of the proposed Otay Staging Yard and is 6.4 acres in size. A total of
33 17 rodent burrows were observed, most occupied by ground squirrels. No active BUOW burrows were
34 observed during the 2014 survey effort; however, ground squirrel activity and burrows support the habitat
35 requirements for this species; therefore, there is a potential for burrowing owl to occupy the areas in the
36 future.

37 The Main Street Staging Yard was incorporated into the proposed project after BUOW assessments and
38 focused surveys were conducted. Suitable habitat for BUOW was identified on November 3, 2014 within
39 the Main Street Staging Yard. Chambers Group conducted wintering BUOW surveys within the entire
40 proposed project survey area, including the Main Street Staging Yard. No occupied wintering habitat was
41 observed within the survey area. Details regarding the results of the surveys are included in the *2014 Tie-*
42 *Line 649 Wood to Steel Pole Project, Burrowing Owl Survey Report* in Appendix I of the Biological
43 Technical Survey Report, Chambers 2015 (see Appendix I).

Quino Checkerspot Butterfly

The QCB is covered under the SDG&E Low-Effect QCB HCP. The QCB HCP Mapped Areas for QCB includes a majority of the survey area, from Location 18 east and south to the Border Substation. The focused survey for QCB was conducted during the 2015 adult flight season within suitable habitat identified during the habitat assessment. A total of 142.2 total acres of QCB suitable habitat was determined to occur within the survey area; however, no QCB were observed during the focused survey effort.

Vegetation communities within survey area for QCB included; San Diego mesa claypan vernal pool - native grassland mix, disturbed vernal pools, meadow/seeps, California sagebrush-California buckwheat scrub, disturbed California sagebrush-California buckwheat scrub, California buckwheat scrub, coast prickly pear scrub, chamise-Munz's sage chaparral, purple needlegrass grassland, annual brome grassland, pale spike rush marshes, bare ground and disturbed areas (i.e., dirt roadways).

Within the survey area, dirt access roads are graded regularly and devoid of larval host plant patches, and therefore, are not suitable for QCB larval stages; however, the roads may serve in a very limited capacity as basking or resting habitat for QCB individuals that may fly in from adjacent areas.

Dominant shrub species in the survey area included California buckwheat, lemonade berry and California sagebrush. Sub-dominant to occasional shrub species included but were not limited to: San Diego County viguiera, laurel sumac, jojoba, Munz's sage, and white sage.

The most prevalent host plant species observed was dot-seed plantain (*Plantago erecta*), and the only other observed host plant species was purple owl's clover (*Castilleja exserta*). As such, the vast majority of the patches were exclusively of dot-seed plantain, with only a few patches intermixed with purple owl's clover. All of the host plant patches were mapped between Locations 99 and 63, with the majority of the patches in the San Diego mesa claypan vernal pool native grassland mix between Locations 99 and 82 and the coastal sage scrub-associated communities between Locations 82 and 69. The largest mapped patches were of moderate and high densities adjacent to the dirt roads between Locations 69 and 74, along the south side of the Otay River valley. Details regarding the results of the surveys are located in the 2015 Tie-Line 649 Wood to Steel Pole Project, Quino Checkerspot Butterfly Survey Report in Appendix J of the Biological Technical Report, Chambers 2015 (see Appendix I).

A total of 31 butterfly species were observed over the course of these surveys (included in Appendix J of the Biological Technical Report [see Appendix I]). The most commonly observed species included the checkered white (*Pontia protodice*), which was mostly observed during the last half of the surveys, California ringlet (*Coenonympha tullia*), observed over the first half of the surveys (particularly in Section 3 of the survey area), and Behr's metalmark (*Apodemia virgulti*) and painted lady (*Vanessa cardui*), mostly observed during the earlier to middle surveys. All other species were observed in smaller numbers with observations that also varied by season.

Riverside Fairy Shrimp and San Diego Fairy Shrimp

The Riverside fairy shrimp is a small freshwater crustacean. The Riverside fairy shrimp is found in complexes in Otay Mesa in San Diego County. It subsists as a filter feeder, consuming bacteria, algae, protozoa, and detritus. This species produces cysts that withstand extreme weather conditions and that hatch once the pool refills, depending on the temperature. The CNDDB lists 16 records of occurrences within five miles of the survey area, with the closest within approximately 1,359 feet from proposed project components. USFWS species occurrence data lists 70 records of occurrences within five miles of the proposed project, the closest within approximately 1,453 feet of the proposed project.

The San Diego fairy shrimp is a vernal pool habitat specialist found in small, shallow vernal pools, and has been recorded in degraded habitats such as ditches and road ruts. The majority of pools inhabited by San Diego fairy shrimp are located in San Diego County, including Marine Corps Base Camp Pendleton, inland to Ramona, south through Del Mar Mesa, Kearny Mesa, Proctor Valley, Otay Mesa, and into northwestern Baja California, Mexico. The cysts sink to the bottom of the pool environment, where they can withstand temperature extremes or pool drying and hatch in the future when conditions are more favorable. Cysts can stay dormant for years until conditions are right. The CNDDDB lists 18 records of occurrences within five miles of the survey area, the closest within approximately 1,288 feet from the proposed project components. USFWS species occurrence data lists 291 records of occurrences within five miles of the proposed project, with five records occurring within the survey area. Several known occurrences are located within the vernal pools and road ruts within the survey area, and a majority of the pools are located within close proximity (less than 0.5 mile) of known occurrences and/or designated critical habitat.

Chambers Group and RECON (see Appendix K, Wetland Delineation Report, in the Biological Technical Report [Appendix I of this IS/MND]) identified 0.80 acres of vernal pools within the survey area and mapped vernal pool boundaries to assist in re-evaluating the current design of the proposed project for avoidance of vernal pools. An additional survey was conducted by Chambers Group and RECON on November 3, 2014 after a rain event to identify areas where seasonal ponding occurred. The boundaries of all seasonally ponded areas and areas where there was hydrologic evidence of ponding (saturated or wetted soils), were mapped for avoidance of fairy shrimp during construction (see Appendix K, Wetland Delineation Report in the Biological Technical Report, Chambers 2015 [Appendix I of this IS/MND]). These areas are collectively considered suitable habitat for sensitive fairy shrimp. A majority of these areas occur within the existing utility access road, and are subject to a wide range of ambient disturbance. In addition, these road areas are subject to routine maintenance such as grading or installation of gravel or crushed rock to fill potholing.

Protocol-level surveys were conducted for both the Riverside and San Diego fairy shrimp in 2015 and 2016 to determine the presence or absence of fairy shrimp species occurring within the survey area. A protocol-level dry season fairy shrimp survey was conducted in 2015 and yielded no observations of sensitive fairy shrimp. Additional details of the 2015 dry season survey can be found in the dry season survey summary report, *Survey Summary Report for the 2015 Protocol-Level, Dry Season Fairy Shrimp Survey for the Proposed San Diego Gas & Electric Tie-line 649 Wood to Steel Project in Southern San Diego County, California*, and dated July 8, 2016. This report can be provided by SDG&E.

An additional protocol-level dry season survey was conducted in 2016 by Busby Biological Services, Inc. and Alden Environmental, Inc. to include: (1) basins that were not surveyed during the 2015 dry season surveys but were surveyed during the 2015/2016 wet season, (2) basins that were inundated during the 2015/2016 wet season survey with a larger surface area than originally estimated during the 2015 dry season survey, (3) basins that contained cysts during the 2015 dry season survey that did not hatch during dry season laboratory hydration, and (4) basins that did not contain cysts during the 2015 dry season survey but contained fairy shrimp during the 2015/2016 wet season survey (Busby and Alden, 2017). During the 2016 dry season survey, basins were not surveyed that did not contain cysts during the 2015 dry season survey or fairy shrimp during the 2015/2016 wet season surveys, as directed by USFWS Biologist Patrick Gower (Busby and Alden, 2017).

In the protocol-level wet season surveys conducted in 2015 and 2016, San Diego fairy shrimp were observed in two different vernal pool road ruts in the survey area. Between 10 and 20 adult individuals of San Diego fairy shrimp and versatile fairy shrimp (non-special-status) were detected in RR-93, a road rut with a high level of disturbance and little to no vegetation. This basin is within the U.S. Geological Survey (USGS) Otay Mesa quadrangle, approximately 400 feet south of the Otay River, approximately 4,200 feet southwest of the Lower Otay Reservoir.

Five individual adult San Diego fairy shrimp were detected in RR-85, a road rut with a high level of disturbance and little to no vegetation. This basin is approximately 600 feet south of RR-93 where San Diego fairy shrimp were also detected. RR-85 is situated within a dirt access road within the USGS *Otay Mesa* quadrangle, approximately 1,000 feet south of the Otay River, approximately 5,000 feet southwest of the Lower Otay Reservoir.

In 2017, a fairy shrimp species assessment was conducted between Loc-84 through Loc-96 during the wet season. San Diego fairy shrimp were identified in 21 vernal pools/basins along access roads during the assessment: VP-18, 19, 20, 25, 28, 30, 31, 33, 34, 37, 38, 39, 42, 43, 45, 46, 47, and 50 and B-02. These vernal pools/basins are located near pole locations Loc-85, Loc-86, Loc-90, Loc-91, Loc-92, Loc-93, Loc-94, and Loc-95 (Appendix F).

Regulatory Setting

Federal

Endangered Species Act

The ESA (16 USC Section 1531 et seq.; 50 Code of Federal Regulations [CFR] Parts 17 and 222) provides for conservation of species that are endangered or threatened throughout all or a substantial portion of their range, as well as protection of the habitats on which they depend. The USFWS and the National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. In general, the USFWS manages terrestrial and freshwater species, whereas NMFS manages marine and anadromous species.

Section 9 of the ESA and its implementing regulations prohibit the “take” of any fish or wildlife species listed under the ESA as endangered or threatened, unless otherwise authorized by federal regulations. The ESA defines the term “take” to mean “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” (16 USC Section 1532). Section 7 of the ESA (16 USC Section 1531 et seq.) outlines the procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats. Section 10(a)(1)(B) of the ESA provides a process by which non-federal entities may obtain an incidental take permit from the USFWS or NMFS for otherwise lawful activities that incidentally may result in “take” of endangered or threatened species, subject to specific conditions. A HCP must accompany an application for an incidental take permit.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC, Chapter 7, Subchapter II) implements international treaties which protect migratory birds. The MBTA prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. The act encompasses whole birds, parts of birds, occupied bird nests, and eggs. Disturbance during the breeding season that could result in the loss of fertile eggs or nestlings, or otherwise lead to abandonment, would violate the MBTA. The Migratory Bird Permit Memorandum dated April 15, 2003, clarifies that destruction of most unoccupied bird nests (without eggs or nestlings) is permissible under MBTA; exceptions include nests of federally threatened or endangered migratory birds, bald eagles (*Haliaeetus leucocephalus*), or golden eagles (*Aquila chrysaetos*), which have specific protection measures beyond the MBTA (see below). USFWS is responsible for overseeing compliance with MBTA.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 USC Section 668; 50 CFR Part 22) prohibits anyone, without a permit issued by the Secretary of the Interior, from “taking” bald and golden eagles, including their parts,

1 nests, or eggs. The Act defines “take” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect,
2 molest, or disturb.” USFWS administers the Bald and Golden Eagle Protection Act.

3 *Clean Water Act*

4 Clean Water Act (CWA) Section 404 regulates the discharge of dredged and fill materials into waters of
5 the U.S., which include all navigable waters, their tributaries, and some isolated waters, as well as some
6 wetlands adjacent to the aforementioned waters (33 CFR Section 328.3). Areas typically not considered to
7 be jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially
8 irrigated areas, artificial lakes or ponds used for irrigation or stock watering, small artificial water bodies
9 such as swimming pools, vernal pools, and water-filled depressions (33 CFR Part 328). Areas meeting the
10 regulatory definition of waters of the U.S. are subject to the jurisdiction of the USACE under the provisions
11 of CWA Section 404. Construction activities involving placement of fill into jurisdictional waters of the
12 U.S. are regulated by the USACE through permit requirements. No USACE permit is effective in the
13 absence of state water quality certification pursuant to Section 401 of CWA.

14 Section 401 of the CWA requires an evaluation of water quality when a proposed activity requiring a federal
15 license or permit could result in a discharge to waters of the U.S. In California, the State Water Resources
16 Control Board (SWRCB) and its nine RWQCB issue water quality certifications. Each RWQCB is
17 responsible for implementing Section 401 in compliance with the CWA and its water quality control plan
18 (also known as a Basin Plan). Applicants for a federal license or permit to conduct activities that may result
19 in the discharge to waters of the U.S. (including wetlands or vernal pools) must also obtain a Section 401
20 water quality certification to ensure that any such discharge would comply with the applicable provisions
21 of the CWA.

22 *Clean Water Rule*

23 The EPA and the USACE published a FR in the Federal Register on June 29th, 2015 to define Waters of
24 the United States under the CWA. The Clean Water Rule was enacted to ensure that waters protected under
25 the CWA are more precisely defined and predictably determined; however, on October 9th, 2015, the U.S.
26 Court of Appeals for the Sixth Circuit stayed the Clean Water Rule nationwide pending further action of
27 the court. Subsequently, this rule currently is not being enforced by USACE and EPA. The USACE resumed
28 nationwide use of the agencies’ regulations as they were prior to August 15th, 2015 to define the term
29 “waters of the United States.” On March 6th, 2017, the Trump administration announced its intent to review
30 and rescind or revise the rule (USACE and EPA, 2017). On June 27th, 2017, a new rule was proposed that
31 would replace the 2015 Clean Water Rule with regulations that were in tact prior to the Clean Water Rule.
32 The EPA and the USACE closed an extended comment period on September 27th, 2017; the comment
33 period was the first step to re-define the definition of “waters of the United States.”

34 **State**

35 *California Environmental Quality Act*

36 Section 15065 of the CEQA Guidelines (14 CCR) requires that a lead agency determine whether a project
37 has the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife
38 population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, and/or
39 substantially reduce the number or restrict the range of an endangered, rare, or threatened species. Such
40 impacts would be considered significant under CEQA.

41 CEQA Guidelines Section 15380 defines the terms “species,” “endangered,” “rare,” and “threatened” as
42 they pertain to CEQA. Section 15380 also provides a greater level of consideration for state-listed or
43 federally listed species, and for any species that can be shown to meet the criteria for listing, but that has

not yet been listed. In summary, the criteria for considering a species endangered, rare, or threatened under CEQA are as follows:

- when its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors; or
- although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or
- the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered “threatened” as defined in the ESA.

Species that meet the criteria listed above are often considered “Species of Special Concern” by CDFW. Species of Special Concern is an administrative designation and carries no formal legal status. Generally, Species of Special Concern should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined in Section 15380 of the CEQA Guidelines; however, some older lists of Species of Special Concern were not developed using criteria relevant to CEQA, and the information used in generating those lists is out of date. Therefore, the current circumstances of each unlisted Species of Special Concern must be considered in the context of Section 15380 criteria and not automatically presumed to be rare, threatened, or endangered.

California Fish and Game Code

Sections 700 and Others—Species Protection

The Fish and Game Code established CDFW (Fish & Game Code Section 700) and states that the fish and wildlife resources of the state are held in trust for the people of the state by and through CDFW (Fish & Game Code Section 711.7[a]). Fish & Game Code Section 1802 states that CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. All licenses, permits, tag reservations, and other entitlements for the take of fish and game authorized by the Fish and Game Code are prepared and issued by CDFW (Fish & Game Code Section 1050[a]). Provisions of the Fish and Game Code establish special protection to certain enumerated species, such as Section 5515, which lists fully protected fish species.

Section 1602—Lake or Streambed Alteration

Fish & Game Code Section 1602 states that “an entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake” unless CDFW receives written notification regarding the activity and the entity pays the applicable fee. If CDFW determines that the activity may substantially adversely affect an existing fish or wildlife resource, an agreement is issued to the entity that includes reasonable measures necessary to protect the resource.

Sections 1900–1913 (Native Plant Protection Act)

The Native Plant Protection Act (NPPA) of 1977 (California Fish & Game Code Sections 1900–1913) directs CDFW to carry out the California State Legislature’s intent to “preserve, protect and enhance rare and endangered plants in this state.” NPPA authorizes CDFW to designate plants as endangered or rare and prohibits take of any such plants, except as authorized in limited circumstances.

CDFW and CNPS, a non-governmental organization, jointly maintain CRPR lists. These lists include plant species of concern in California. Vascular plants included on these lists are defined as follows:

- **List 1A.** Plants considered extinct or extirpated in California.
- **List 1B.** Plants that are rare, threatened, or endangered in California and elsewhere.
- **List 2.** Plants that are rare, threatened, or endangered in California, but more common elsewhere.
- **List 3.** Plants about which more information is needed—review list.
- **List 4.** Plants of limited distribution—watch list.

Plants appearing on Lists 1 and 2 are, in general, considered to meet CEQA Guidelines Section 15380(b) criteria, and adverse effects to these species may be considered significant. Impacts to plants that are on Lists 3 and 4 are also considered during CEQA review, although because these species are typically not as rare as those on Lists 1 and 2, impacts on them are less frequently considered potentially significant. CNPS, however, recommends that plants appearing on Lists 1 through 4 be evaluated under CEQA, and therefore they have been evaluated in this document (CNPS 2017).

Sections 2050-2098 (California Endangered Species Act)

The CESA (Fish & Game Code Sections 2050–2098) prohibits state agencies from approving a project that would jeopardize the continued existence of a species listed under the CESA as endangered or threatened, or would result in the destruction or adverse modification of habitat essential to the continued existence of those species, if reasonable and prudent alternatives are available that would avoid a jeopardy finding.

Section 2080 of the Fish & Game Code prohibits the take of any species that is state listed as endangered or threatened, or designated as a candidate for such listing. “Take” is defined by Section 86 of the Fish and Game Code as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill” an individual of a listed species. Under the CESA, CDFW may issue an incidental take permit authorizing the take of listed and candidate species that is incidental to an otherwise lawful activity, subject to specified conditions.

Sections 3503, 3513, and 3800 (Nesting Bird Protections)

Fish & Game Code Sections 3503, 3513, and 3800 protect native and migratory birds, including their active or inactive nests and eggs, from all forms of take. Section 3503 states the following: “It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” Section 3503.3 specifically protects raptors (i.e., eagles, falcons, hawks, and owls) (i.e., birds in the orders Falconiformes or Strigiformes) and their nests. Section 3513 protects migratory birds, as it states the following: “It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Treaty Act.” Section 3800 of the California Fish and Game Code protects from take all birds occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds or nongame birds, except when take is related to mining operations, and when a mitigation plan has been prepared and approved by CDFW.

Sections 3511, 4700, 5050, and 5515 (Fully Protected Species)

Sections 3511, 4700, 5050, and 5515 of the Fish & Game Code identify species that are fully protected from all forms of take. Section 3511 lists fully protected birds, Section 5515 lists fully protected fish, Section 4700 lists fully protected mammals, and Section 5050 lists fully protected amphibians.

Porter–Cologne Water Quality Control Act

See Section 2.9, “Hydrology and Water Quality.”

National Pollutant Discharge Elimination System Permits

See Section 2.9, “Hydrology and Water Quality.”

Local

Because the CPUC regulates and authorizes the construction of investor-owned public utility facilities, the CPUC has exclusive jurisdiction over the siting and design of the proposed project. As such, projects under CPUC jurisdiction, including the proposed project, are exempt from local land use and zoning regulations and permitting. However, Section III.C of CPUC GO 131-D (planning and construction of facilities for the generation of electricity and certain electric transmission facilities) requires “the utility to communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any non-discretionary local permits.” As a result, SDG&E has taken into consideration all State and local plans and policies as they relate to biological resources. Although County and other local policies are listed below, they are provided for disclosure purposes only.

County of San Diego General Plan

Several goals and policies within the Conservation and Open Space Element of the San Diego County General Plan (County of San Diego 2011) relate to the protection of biological resources and are considered applicable to the proposed project. The following goals and policies in the County’s general plan are relevant to the proposed project:

- **GOAL COS-1.** Inter-Connected Preserve System. A regionally managed, inter-connected preserve system that embodies the regional biological diversity of San Diego County.
- **COS-1.2** Minimize Impacts. Prohibit private development within established preserves. Minimize impacts within established preserves when the construction of public infrastructure is unavoidable.
- **COS-1.3** Management. Monitor, manage, and maintain the regional preserve system facilitating the survival of native species and the preservation of healthy populations of rare, threatened, or endangered species.
- **GOAL COS-2.** Sustainability of the Natural Environment. Sustainable ecosystems with long-term viability to maintain natural processes, sensitive lands, and sensitive as well as common species, coupled with sustainable growth and development.
- **COS-2.1** Protection, Restoration and Enhancement. Protect and enhance natural wildlife habitat outside of preserves as development occurs according to the underlying land use designation. Limit the degradation of regionally important natural habitats within the Semi-Rural and Rural Lands regional categories, as well as within Village lands where appropriate.

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- **COS-2.2** Habitat Protection through Site Design. Require development to be sited in the least biologically sensitive areas and minimize the loss of natural habitat through site design.

City of San Diego General Plan

Several goals and policies within the Conservation Element of the City of San Diego General Plan (City of San Diego 2008) relate to the protection of biological resources and are considered applicable to the proposed project. The following goals and policies in the City’s general plan are relevant to the proposed project:

- **Policy CE-G.1.** Preserve natural habitats pursuant to the MSCP, preserve rare plants and animals to the maximum extent practicable, and manage all City-owned native habitats to ensure their long-term biological viability.
 - a. Educate the public about the impacts invasive plant species have on open space
 - b. Remove, avoid, or discourage the planting of invasive plant species
 - c. Pursue funding for removal of established populations of invasive species within open space.
- **Policy CE-H.7.** Encourage site planning that maximizes the potential biological, historic, hydrological, and land use benefits of wetlands.
- **Policy CE-H.8.** Implement a “no net loss” approach to wetlands conservation in accordance with all city, state, and federal regulations.

City of Chula Vista General Plan

Several policies within the Environment Element of the City of Chula Vista General Plan (City of Chula Vista 2005) relate to the protection of biological resources and are considered applicable to the proposed project. In 2003, the City of Chula Vista adopted the City of Chula Vista Multiple Species Conservation Plan (Chula Vista MSCP) Subarea Plan. Within the jurisdiction of the City of Chula Vista, the Subarea Plan is the policy document through which the MSCP Subregional Plan is implemented.

The following goals and policies in the City of Chula Vista’s general plan are applicable to the proposed project:

Subarea Plan Goals:

- **Goal 1.** To conserve covered species and their habitats through the conservation of interconnected significant habitat cores and linkages.

General Plan Objectives:

- **Objective E-1.** Conserve Chula Vista’s sensitive biological resources.
- **Objective E-2.** Protect and improve water quality within surface water bodies and groundwater resources within and downstream of Chula Vista.

1 *City of San Diego Environmentally Sensitive Lands Regulations*

2 The City of San Diego Municipal Code developed Environmentally Sensitive Lands (ESL) Regulations
3 (§143 / Chapter 14, Article 3, Division 1) to protect; preserve; and, where damaged, restore, the
4 environmentally sensitive lands of San Diego and the viability of the species supported by those lands.
5 These regulations are intended to ensure that development proceeds in a manner that protects the overall
6 quality of the resources and the natural and topographic character of the area, and to serve as implementing
7 tools for the City’s MHPA. The ESL defines sensitive biological resources as on those lands included within
8 the MHPA as identified in the City of San Diego’s MSCP Subarea Plan (City of San Diego 1997), and other
9 lands outside of the MHPA that contain wetlands; vegetation communities classifiable as Tier I, II, IIIA or
10 IIIB; habitat for rare, endangered, or threatened species; or narrow endemic species.

11 *San Diego Multiple Species Conservation Program*

12 The San Diego MSCP was prepared pursuant to standards developed by USFWS and CDFW to meet the
13 requirements of the California Natural Communities Act of 1991. The MSCP was developed for
14 southwestern San Diego County, and protects 85 species in this area. The County of San Diego and the
15 cities in the southwestern part of the county, including San Diego and Chula Vista jointly prepared the
16 MSCP. The County of San Diego, City of San Diego, and City of Chula Vista have each adopted subarea
17 plans that conform to and implement the MSCP requirements, as described below.

18 *County of San Diego Multiple Species Conservation Program Subarea Plan*

19 The County of San Diego MSCP Subarea Plan was adopted in 1997 and applies to unincorporated lands in
20 the study area (County of San Diego 1997). The MSCP Subarea Plan designates some land in the vicinity
21 of the proposed project as Public Lands and Dedicated Private Open Space, which are part of the Otay
22 Valley Regional Park.

23 *City of San Diego Multiple Species Conservation Program Subarea Plan*

24 The City of San Diego adopted its MSCP Subarea Plan in 1997 (City of San Diego 1997). This subarea
25 plan forms the basis of the implementation of the regional MSCP and is the agreement between the City
26 and the wildlife agencies to issue take permits at the local level. The goal of the City’s MSCP is to maintain
27 and enhance biological diversity in the region and to conserve viable populations of endangered, threatened,
28 and key sensitive species and their habitats, ultimately preventing local extirpation and extinction,
29 minimizing the need for future listings, and enabling economic growth in the region. The City has also
30 developed an MHPA, in cooperation with the USFWS and CDFW, property owners, developers, and
31 environmental groups. The MHPA delineates core biological resource areas and corridors targeted for long-
32 term conservation.

33 *City of Chula Vista Multiple Species Conservation Program Subarea Plan*

34 The City of Chula Vista MSCP Subarea Plan, which is part of the City of Chula Vista General Plan, was
35 adopted in 2003 and provides for the conservation of covered species and associated habitats, in a manner
36 consistent with the regional plan. Land uses in the area of the proposed project are designated as
37 Development, 100 Percent Conservation Areas – Habitat Preserve, and Planned Active Recreation Area.

38 Additionally, the City of Chula Vista Wetlands Protection Program (WPP) is incorporated in the City of
39 Chula Vista MSCP Subarea Plan. The WPP protects wetlands by individual project entitlement reviews and
40 the associated CEQA process. This process provides an evaluation of wetlands avoidance and minimization
41 and ensures compensatory mitigation for unavoidable impacts, thereby achieving the overall goal of “no
42 net loss” of wetlands. The City of Chula Vista WPP and Section 5.2.4 WPP of the Subarea Plan state that

impacts to wetlands must be avoided or minimized to the maximum extent practicable. Depending on the type of wetland, the City of Chula Vista applies a wetland mitigation ratio based on habitat type; however, these mitigation ratios are not meant to be additive or duplicative to mitigation measures required by the Federal or State wetland permitting process.

Otay Valley Regional Park Concept Plan

The Otay Valley Regional Park Concept Plan was developed through a multi-jurisdictional planning effort by the County of San Diego and the cities of Chula Vista and San Diego to develop a regional park in southern San Diego County. The plan calls for a park extending from the coastal salt ponds, through the Otay River Valley, to Otay Lakes. The plan was developed to be consistent with the MSCP. The goal of the park is to provide a mix of recreational activities, protect environmentally sensitive areas, protect cultural and scenic resources, and encourage compatible agricultural uses in the park. The Otay Valley Regional Park Concept Plan aims to provide policy direction to the three jurisdictions for the purchase of properties and development of a regional park. The plan also recommends development of a regional trail system along the river, as well as recreational areas, viewpoints and two interpretive centers. Within the boundaries established by the San Diego MSCP, the plan calls for sensitive areas to be designated as Open Space/Core Preserve Areas. Efforts toward implementation of this plan have been made by the cooperating jurisdictions, including the partial development of a trail system and a large acquisition of open space by the County of San Diego. The portions of the regional trail system that have been developed are outside of the proposed project area, but land acquired for open space by the County of San Diego is located immediately south of the proposed project.

San Diego Gas & Electric Company Subregional Natural Community Conservation Plan/HCP

In 1995, due to the presence of species protected under Section 10(a) of the federal ESA, SDG&E developed a subregional habitat and species conservation plan, i.e., the Subregional NCCP. The purpose of the NCCP is to establish and implement a long-term agreement between SDG&E, the USFWS, and the CDFW for the preservation and conservation of sensitive species and their habitats. The NCCP covers activities and impacts related to installation, use, maintenance, and repair of the existing SDG&E gas and electric system and typical expansions to that system.

A revision to the NCCP was filed in 2004, entitled the *SDG&E Subregional Plan – Clarification Document*. The Clarification Document incorporates minor modifications to resource management policies and specifically expands on vernal pool resources located both on and off SDG&E access roads. Additional vernal pool protocols establish clear standards for avoidance, minimization, and mitigation of temporary and permanent impacts. In 2017, the USFWS issued a permit for an HCP that supported the continuation of activities covered in the NCCP. Under the new Low-Effect (LE) HCP, SDG&E will continue to apply all of the conservation efforts, mitigation measures, and operational protocols implemented under the 1995 NCCP (USFWS 2016c).

In total, the NCCP includes 110 plant and wildlife species and identifies 69 Operational Protocols designed to avoid and minimize potential impacts to sensitive (i.e., special-status) species and their habitats, including sensitive hydrological features. These features include drainages, wetlands, and vernal pools.

SDG&E is seeking incidental take coverage through the LE HCP for construction impacts. Mitigation measures found in the 1995 NCCP will be applied to the project. Additionally, separate mitigation measures are detailed below in Section 2.4.2, Environmental Impacts.

San Diego Gas & Electric Company's Low-Effect HCP for the QCB

To minimize and mitigate effects of its activities on the federally endangered QCB SDG&E prepared a Low-Effect HCP for QCB. This HCP also allowed SDG&E to obtain incidental take authorization for QCB from the USFWS. The Low-Effect HCP addresses potential impacts to the QCB from the use, maintenance, and repair of existing gas and electric facilities and allows for typical expansions to those systems. Pole and tower replacement is a covered activity under the HCP.

Avoidance and operational protocols are the backbone of protections for the QCB emphasized in the Low-Effect HCP. The Low-Effect HCP was prepared in consultation with the USFWS to fulfill the requirements of a ESA Section 10(a)(1)(B) permit application for SDG&E activities. All proposed project activities are covered by the Low-Effect HCP.

2.4.2 Environmental Impacts

Overview

The following discussion describes the proposed project's potential to impact sensitive resources during construction of the proposed project, and whether or not those impacts would be significant. The analysis uses significance criteria based on the CEQA Appendix G Guidelines. The potential direct and indirect effects of the proposed project are addressed. Potential impacts to biological resources are separated into those likely to occur from construction and those that may occur as a result of power line operation and maintenance. SDG&E anticipates that the duration of construction activities (i.e., when temporary impacts would occur) would be approximately 9-10 months.

Impact categories are defined as follows:

- **Direct.** Direct impacts are caused by the proposed project and occur at the same time and place as the proposed project. Any alteration, disturbance, or destruction of environmental resources that would result from project-related activities is considered a direct impact.
- **Indirect.** As a result of proposed project-related activities, environmental resources may also be affected in a manner that is not direct. Indirect impacts may occur later in time or at a place that is farther removed in distance from the project than direct impacts, but indirect impacts are still reasonable foreseeable and attributable to project-related activities.
- **Permanent.** All impacts that result in the irreversible removal of environmental resources or cause impacts that endure beyond 2 years are considered permanent.
- **Temporary.** Any impacts considered to have reversible effects on environmental resources, where the impact is 2 years or less in duration, are considered temporary.

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, ESA, MBTA, Bald and Golden Eagle Protection Act, CESA, and CEQA. For construction of the proposed project, SDG&E is seeking incidental take coverage under the LE HCP and NCCP. If incidental take coverage for construction impacts cannot be obtained through the LE HCP or NCCP, SDG&E would consult with USFWS and CDFW for compliance with the FESA and CESA. Compliance may require a proposed project-specific Incidental Take Permit under Section 10 of the FESA and California Fish and Game Code Section 2081. SDG&E proposes to avoid water resources during construction, and therefore, avoidance of waters would be covered under the SWRCB Construction General Permit and outlined in more detail in the proposed

project's Storm Water Pollution and Prevention Plan (SWPPP). If, however, impacts to jurisdictional waters and associated riparian/wetland habitat cannot be avoided, SDG&E would submit applications for required permits (401 certification, 404 and 1600-1602 permits) to comply with the CWA and Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Wildlife Code. In addition, SDG&E would implement mitigation measures detailed below.

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

Criteria for Determining Significance

The proposed project would result in a significant impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW, USFWS, or NMFS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW, USFWS, or NMFS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal waters) 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; or
- Conflict with local policies or ordinances protecting biological resources, or conflict with the provisions of an adopted HCP or NCCP.

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

Discussion of Checklist Responses

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW, USFWS, or NMFS? (Less than Significant with Mitigation)

Special-Status Plants

Twenty-four special-status plant species were documented within the survey area during surveys conducted for the PEA (Chambers 2015). All of these species are listed in **Table 2.4-3**. Of the plant species observed within the survey area, the following species were observed within the areas proposed for temporary construction activities:

- Singlewhorl burrobush
- Small-flowered morning glory
- San Diego barrel cactus
- Munz's sage
- San Diego bur sage
- San Diego marsh elder
- San Diego County viguiera
- Ashy spike-moss
- Decumbent goldenbush

The total area of impacts to these species would be determined during the focused surveys for special-status plants proposed under Mitigation Measure BIO-1: Focused Surveys for Special-Status Plants.

Four of these species (singlewhorl burrobush, small-flowered morning glory, Munz's sage, and San Diego County viguiera) were observed within areas proposed for the footprint of the poles. These species would be directly and permanently affected by the proposed project. The total area of impacts to these species is listed in **Table 2.4-6**. The location of special-status plant species within the proposed project area can be seen in **Figure 2.4-4**.

Table 2.4-6. Estimated Area of Permanent Impacts to Special Status Plants

Species Name	Listing Status	Estimated Area of Impacts (square feet)
Munz's sage	--/--/2B.2	38.29
San Diego County viguiera	--/--/4.3	10.82
Singlewhorl burrobush	--/--/2B.1	31.62
Small-flowered morning-glory	--/--/4.2	15.81

Source: Chambers 2015

1 *Direct Impacts*

2 Construction of the proposed project could have direct and permanent impacts on special-status plant
3 species or their habitat as a result of the following activities: removal of plants in the footprint of the poles;
4 and trampling or destruction of plants from the use of overland travel routes, temporary work areas
5 (including staging yards, turnaround areas and stringing sites), guard structures, existing pole removal,
6 trenching for the underground distribution line, and unauthorized vehicle use outside of existing and/or
7 approved access roads. Table 2.4-6 provides the habitat acreage that would be affected.

8 *Indirect Impacts*

9 Indirect impacts may include construction-related runoff, sedimentation, and erosion, which could damage
10 individuals, alter site conditions in a manner which favors the establishment of non-special-status plants,
11 or bury small plants and seedlings. Increased erosion can adversely affect plant growth and success by
12 removing valuable topsoil and exposing roots. SDG&E would prepare a SWPPP as well as implement all
13 applicable BMPs detailed in Mitigation Measure BIO-1. Applicable BMPs from SDG&E's *Best*
14 *Management Practices Manual for Water Quality Construction* (BMP Manual) (see Appendix J) would be
15 implemented. The BMP Manual provides guidance on additional sediment controls, waste management
16 and materials controls, non-stormwater discharge controls, erosion controls, and soil stabilization.

17 Construction activities, such as grading and driving heavy equipment on unpaved roadways can result in
18 increased levels of blowing dust that may settle on surrounding vegetation. Construction dust could
19 potentially temporarily reduce the photosynthetic capacity of special-status plants.

20 Additionally, invasive and non-native plants pose a threat to special-status plant populations and the
21 communities in which they live. Invasive and non-native plants can spread when invasive or nonnative
22 plant seeds are brought in on the soles of shoes or on the tires and undercarriages of vehicles or equipment.
23 They can also be brought in if soil containing the seeds is imported. Furthermore, ground disturbance from
24 construction activities generally favors the establishment of non-native species because they are more
25 adapted to disturbance than native species. Once established, these non-native species are often able to out-
26 compete the natives and sometimes displace them, especially if there is further disturbance, for example,
27 from fire.

28 Wildfires caused by construction are rare but may occur and the associated land disturbance would affect
29 special-status plants.

30 Munz's sage, San Diego County viguiera, singlewhorl burrobush, and small-flowered morning-glory

31 An estimated area of 38.29 square feet of Munz's sage, 10.82 square feet of San Diego County viguiera,
32 31.62 square feet of singlewhorl burrobush, and 15.82 square feet of small-flowered morning-glory would
33 be permanently affected by installation of new poles. Singlewhorl burrobush has a CRPR rank of 2B.1 and
34 is highly threatened in California but common outside of California. Munz's sage has a CRPR rank of 2B.2
35 and is moderately threatened in California, but common outside of California. Impacts to Munz's sage and
36 singlewhorl burrobush would be considered significant, as the loss of these plants would cause potentially
37 significant impacts to the populations of these CRPR Rank 2B species in the vicinity of the proposed project
38 area.

39 Small-flowered morning-glory has a CRPR of 4.2 and San Diego viguiera has a CRPR of 4.3. A CRPR of
40 4.2 means that the plant is moderately threatened in California, and CRPR of 4.3 means that the plant is not
41 very threatened in California. Impacts to these species would be considered less than significant as the loss
42 of individual plants within the impact areas would not cause potentially significant impacts to the

populations of these CRPR Rank 4.2 and 4.3 species. These plants are not considered rare in the County of San Diego.

Direct Impacts to Special-Status Plants Not Observed

Impacts to special-status species not documented during the focused surveys could occur in the proposed project area. Focused plant surveys were conducted during a drought; therefore, some annual or bulbiferous species may not have germinated/emerged during the 2014 growing season. Eighteen species were presumed absent due to the drought but could occur during periods of sufficient rainfall events: California orcutt grass, Chaparral ragwort, Coulter's goldfields, Coulter's saltbush, Dean's milk vetch, Dunn's mariposa-lily, long-spined spineflower, mud nama, Orcutt's bird's-beak, Orcutt's brodiaea, Otay mesa mint, purple stemodia, round-leaved filaree, San Diego ambrosia, San Diego thorn-mint, San Miguel savory, south coast saltscale, and spreading navarretia. Additionally, six plant species—California screw moss (*Tortula californica*), prostrate vernal pool navarretia (*Navarretia prostrata*), San Diego milk-vetch (*Astragalus oocarpus*), San Diego sand aster (*Corethrogyne filaginifolia* var. *incana*), sea dahlia (*Leptosyne maritima*) and Tecate tarplant (*Deinandra floribunda*)—were identified as having moderate to high potential to occur within the survey area. These species were not targeted in the 2014 focused plant surveys, and may potentially be present in the proposed project area.

If unanticipated occurrences of special-status plant species that are federal or State listed were to occur in a proposed work area and were to be affected by the proposed project, impacts would be significant because plants that are federally- or State-listed are considered very rare and the impact would significantly affect the population of the species. If unanticipated occurrences of special-status plant species that are ranked CRPR 1, 2, 3 or 4 were to occur in a proposed work area and were affected by the proposed project, impacts would be potentially significant because plants with these rankings are considered rare.

Several mitigation measures are proposed to avoid, reduce, or compensate for direct and indirect impacts on special-status plant species. Mitigation Measure BIO-1: Focused Surveys for Special-Status Plants would further identify special-status plants that would be permanently and temporarily affected in the survey area by conducting surveys in their appropriate blooming periods. Mitigation Measure BIO-2: Pre-construction Surveys would require pre-construction surveys for activities occurring off of access roads in sensitive habitats and would identify and flag sensitive plants, habitats, and construction areas. Mitigation Measure BIO-3: Employee Biological Training would require training of personnel working within the project area. Mitigation Measure BIO-4: Biological Construction Monitoring would require a biological monitor to be present at the proposed project site during ground disturbing activities. Mitigation Measure BIO-5: Avoid or Minimize Impacts on Special-Status Plant Species during Construction would require SDG&E to avoid impacts to special-status species to the maximum extent possible by installing flagging or fencing. Mitigation Measure BIO-6: Compensate for Impacts on Special-Status Plant Species would be implemented to provide compensatory mitigation should special-status plants be adversely affected. Mitigation Measure BIO-7: Implement Fire Prevention BMPs during Construction and Operation Activities would help salvage special-status plants in areas where fire prevention would occur. Additionally, implementation of Mitigation Measure AQ-1: Implement BMPs for Construction Air Quality will help reduce impacts from fugitive dust.

Mitigation Measure BIO-1: Focused Surveys for Special-Status Plants

During the appropriate blooming seasons for special status plants beginning in April 2018, a CPUC-approved botanist(s) shall perform focused surveys for special-status plant species that occur, and have the potential to occur, in the project's temporary and permanent work areas to determine impacts to these species. Floristic surveys shall be performed according to the *Protocols for Surveying and Evaluating Impacts to Specials Status Native Plant Populations and Sensitive Natural Communities* (CDFG 2018 or current version). Floristic surveys shall be

performed during the appropriate bloom period(s) for each species. If special-status plants are detected within 50 feet of approved work areas, Mitigation Measure BIO-5 shall be implemented.

Mitigation Measure BIO-2: Pre-construction Surveys

The CPUC-approved qualified biologist(s) shall conduct pre-construction surveys for all activities occurring off of access roads in sensitive habitats. The pre-construction surveys shall be conducted no earlier than 30 days prior to surface disturbance. The results of the pre-construction surveys shall be documented by the CPUC-approved qualified biologist in a pre-construction survey report. Documentation of the pre-construction survey report shall be provided to the CPUC for review and approval prior to the start of construction. The results shall be submitted to USFWS and the CDFW, jointly referred to as regulatory agencies, as required by any regulatory permits or approvals. The pre-construction study report shall include the following:

- Type, location, and size of project
- Date, time, weather, surrounding land uses
- Evaluation of type and quality of habitat
- Work description and methods for avoidance or minimization of ground disturbance, including biological monitoring during construction
- Anticipated impacts and proposed mitigation
- Map of location of work area

In those situations where the CPUC-approved qualified biologist cannot make a definitive species identification, the biologist shall make a determination based on available evidence and professional expertise.

In order to ensure that habitats are not adversely affected, the CPUC-approved biologist shall flag boundaries of habitat, which must be avoided. When necessary, the CPUC-approved biologist shall also demark appropriate equipment laydown areas, vehicle turn around areas, and pads for placement of large construction equipment, such as cranes, bucket trucks, and augers. When appropriate, the CPUC-approved biologist shall make office and/or field presentations to field staff to review and become familiar with natural resources to be protected on a project site-specific basis.

The CPUC-approved biologist shall be contacted to perform a pre-activity survey when vegetation trimming is planned in sensitive habitats. Whenever possible, vegetation in sensitive habitats, such as California sagebrush-California Buckwheat Scrub and Purple Needlegrass grassland shall be scheduled for trimming in non-sensitive times (i.e., outside of breeding or nesting seasons).

SDG&E shall maintain a library of special-status plant species locations; known to SDG&E, occurring within the project survey area. "Known" means a verified population either extant or documented using record data. Information on known sites may come from a variety of record data sources including local agency HCPs, focused plant surveys, pre-construction surveys, or biological surveys conducted for environmental compliance of the proposed project. Plant inventories shall be consulted as part of pre-construction survey procedures.

Mitigation Measure BIO-3: Employee Biological Training

All SDG&E personnel working (deliveries of materials excluded) within the project area shall participate in an employee training program conducted by SDG&E, with annual updates. The program shall describe special-status plant and wildlife species and habitats that could occur within the proposed project work areas; protection afforded to these species and their habitats, and; avoidance and minimization measures required to avoid and/or minimize impacts from the project. A fact sheet conveying this shall also be distributed to all employees working in the project area. Each employee shall be given a decal to indicate that he/she has attended the training. Penalties for violations of environmental laws shall also be incorporated into the training session. The roles and responsibilities of a CPUC-approved qualified biologist and other environmental representatives shall be identified in the Mitigation Monitoring and Reporting Plan and discussed during training. A copy of the training and training materials shall be provided to CPUC for review and approval at least 30 days prior to the start of construction. Training logs and sign-in sheets shall be provided to CPUC on a monthly basis. As needed, in-field training shall be provided to new on-site construction personnel by the SDG&E environmental representative or a qualified individual who shall be identified by SDG&E's Project Biologist, or initial training shall be recorded and played for new personnel.

Mitigation Measure BIO-4: Biological Construction Monitoring

A CPUC-authorized biological monitor must be present at the project site during all initial ground-disturbing and vegetation-removal activities. After the initial ground-disturbing and vegetation-removal activities, the monitor will coordinate with CPUC and SDG&E to determine often a monitor will need to be present at the project site. The monitor shall survey the construction sites and surrounding areas for compliance with all environmental specifications. Weekly biological monitoring reports shall be prepared and submitted to CPUC throughout the duration of project construction to document compliance with environmental requirements. In the event any work occurs beyond the approved limits, it shall be reported by SDG&E's compliance team in accordance with the Mitigation Monitoring and Reporting Plan (see Appendix C).

Mitigation Measure BIO-5: Avoid or Minimize Impacts on Special-Status Plant Species during Construction

All special-status federally and/or State-listed and/or CRPR Rare Plant Rank 1B or 2B species plant populations detected within the construction zone or within 50 feet of the approved work area or within a 10-foot radius of access roads shall be staked, flagged, or fenced by a qualified biologist approved by the CPUC. The plants shall be monitored throughout the duration of construction to determine whether the project has resulted in adverse effects (direct or indirect), as determined by a CPUC-approved qualified botanist. If the botanist determines that special-status plants have been adversely affected, SDG&E shall implement measures to compensate for the impacts as described in Mitigation Measure BIO-6. All stakes, flagging, and fencing shall be removed no later than 30 days after construction is complete. Additional avoidance and minimization measures include restricting vehicles to existing roads unless supervised by an onsite biological monitor, minimizing impacts by defining the disturbance areas, and designing the construction activities to avoid or minimize new disturbance and erosion.

Mitigation Measure BIO-6: Compensate for Construction-Related Impacts to Special-Status Federally and/or State-listed and/or CRPR Rare Plant Rank 1B or 2B Species (special-status plants)

If avoidance is not feasible, SDG&E shall implement measures to compensate for impacts on special-status plants. Where impacts to special-status plant species are unavoidable, the impact shall be quantified and compensated through mitigation consistent with the measures established in the SDG&E LE HCP and/or NCCP, or through off-site land preservation and/or plant salvage and relocation per the direction of the CDFW. Where off-site land preservation is biologically preferred, the land shall contain comparable special-status plant resources as the affected lands and shall include long-term management and legal protection assurances to the satisfaction of the CPUC. Off-site mitigation land shall be identified prior to the start of construction. The establishment of long-term land management and legal protection assurances must be completed within 36 months of construction start. Where salvage and relocation is demonstrated to be feasible and biologically preferred by the wildlife agencies, it shall be conducted pursuant to a CPUC-approved salvage and relocation plan that details the methods for salvage, stockpiling, and replanting, as well as the characteristics of the receiver sites. The salvage and relocation plan shall also define the monitoring strategy with a minimum of annual monitoring for 5 years or until success criteria are met. If the salvage and relocation fail to meet the established success criteria after 5 years, maintenance and monitoring shall extend beyond the 5-year period until the criteria are met, or unless otherwise approved by the CPUC. Success criteria shall include a minimum of:

- A surveyed population size count roughly equal to or greater than the number of individuals transplanted (this total may include both transplanted individuals that have survived as well as any additional supplemental plantings following the initial transplantation that have survived at least two growing seasons), and
- Less than 5 percent cover of invasive weeds not already pervasive within the project area.

Any salvage and relocation plans must be approved by the CPUC at least 30 days prior to project construction.

Mitigation Measure BIO-7: Implement Fire Prevention BMPs during Construction Activities

Fire prevention BMPs shall be implemented during construction activities. Fire prevention BMPs shall be implemented during construction of the proposed project as specified by the Construction Fire Prevention/Protection Plan (see Mitigation Measure HAZ-4: Prepare and Implement a Project-Specific Construction Fire Prevention Plan in Section 2.8, Hazards and Hazardous Materials). In the event that a state- or federally listed plant species is located within the area required to be cleared for fire protection purposes, SDG&E shall notify CDFW, in writing, of the plant's identity and location and of the proposed activity, which shall result in a take of such plant. Notification shall occur 10 working days prior to such activity, during which time USFWS or CDFW may remove such plant(s). If neither USFWS nor CDFW have removed such plant(s) within 10 working days following the notice, SDG&E may proceed to complete its fire clearing and cause a take of such plant(s) consistent with SDG&E's take coverage for the federal Endangered Species Act or California Endangered Species Act-listed plants. When fire clearing is necessary in instances other than around power poles, and the potential for impacts to special-status species exist, SDG&E shall follow the pre-construction survey and notification procedures in Mitigation Measure BIO-2, above. Wire stringing shall

be allowed year-round in sensitive habitats if the conductor does not drag on the ground or in brush and vehicles remain on access roads.

Special-Status Mammals

One special-status mammal, the San Diego black-tailed jackrabbit, was observed within the survey area during surveys conducted by Chambers in 2014 and 2015. Four special-status mammals have a moderate potential to occur in the survey area:

- Northwestern San Diego pocket mouse
- San Diego desert woodrat
- American badger
- Western red bat

Direct Impacts

Proposed construction activities may result in temporary and permanent direct impacts to these five special-status mammals that are either present or have a moderate potential to occur within the survey area.

Construction activities could potentially injure or kill a special-status mammal species during vegetation removal, installation of new poles and the underground distribution line, access road modifications, work in temporary work areas, staging yards, turnaround areas and stringing sites as well as use of the access roads, overland travel routes and guard structures. Injury or mortality could occur from collisions with equipment and vehicles, and also during ground disturbing activities.

Direct injury or mortality to the western red bat is not expected as potential roosting habitat (near the edges of streams) would not be affected. Additionally, the single non-native Peruvian pepper tree (*Schinus molle*), which would be removed near pole 26, is not anticipated to support roosting bats. There would be no direct impacts to the western red bat.

Injury or mortality of the San Diego black-tailed jackrabbit, northwestern San Diego pocket mouse, San Diego woodrat, or the American badger would be considered a significant impact because all of these species are designated SSC. Temporary impacts from construction include increased human presence, vibration, ground disturbance, and noise, which could result in these five special-status mammal species avoiding habitat in proximity to the proposed project. Because no focused surveys were performed for these species, it is not possible to fully and accurately quantify impacts from construction of the proposed project on each species; therefore, it is assumed that construction of the proposed project could significantly impact these species.

Special-Status Mammal Habitat

Permanent impacts from the installation of power poles would result in a permanent loss of 0.08 acre of vegetation, reducing foraging, burrowing, and nesting (woodrat) habitat. Temporary impacts in temporary work areas (areas around new poles and poles to be removed, staging yards, turnaround areas, stringing and pulling sites, guard structure areas) and trenching for the underground distribution line intercept could disturb vegetation that could be used for foraging, burrowing, and nesting (woodrat) habitat. Suitable habitat, however, surrounds the proposed project area that special-status mammals could utilize.

Powerlines

Powerlines and associated structures can provide perching opportunities for raptors that may prey on special-status mammals. As the proposed project would reduce the number of poles, predation on special-

status mammals is not expected to increase. The impact to special-status mammals as a result of the existing powerline on new poles would be less than significant.

Indirect Impacts

Construction disturbance could indirectly impact special-status mammal species through fugitive dust and invasive and non-native plant species introduction.

Construction activities, such as grading and driving construction equipment on unpaved roadways, could create dust that may settle on the surrounding vegetation which would adversely affect plants, resulting in adverse effects to special-status mammals dependent on the plants (or the prey they consume that are dependent on the plants).

Special-status mammals could also be adversely affected by the introduction of non-native and invasive plant species. Non-native and invasive plant species can displace and outcompete native plant species and therefore reduce and change the native habitat that a mammal species prefers or is dependent upon.

Several mitigation measures are proposed to avoid, reduce, or compensate for direct and indirect impacts on special-status mammal species. Mitigation Measure BIO-8: Cover and/or provide Escape Routes for Wildlife would be implemented to ensure that no wildlife becomes entrapped in trenches or excavations. Mitigation Measure BIO-9: Survey Work Protocols would be implemented to ensure measures are in place to protect biological resources during SDG&E surveys. Mitigation Measure BIO-10: Enforce Speed Limits would minimize speeds of construction vehicles. Mitigation Measure BIO 11: Minimize Night Construction Lighting Adjacent to Native Habitats would reduce the distraction to wildlife caused by bright lights. Mitigation Measure BIO-12: Prohibit Littering and Remove Trash from Construction Areas Daily would ensure that no construction trash is left behind. Mitigation Measure BIO-13: Prohibit the harm, harassment, Collection-of, or Feeding-of Wildlife would be implemented so that wildlife in the proposed project area is not bothered. Mitigation Measure BIO-14: Obtain and Implement the Terms of Agency Permit(s) with Jurisdictional federal or State-listed Species would ensure protection of State and federally listed species. Mitigation Measure BIO-15: Special-Status Bat Species Mitigation would assess potential bat habitat in the proposed project area and establish exclusion zones should bat maternity roosts be present. Mitigation Measures BIO-2, BIO-3, and BIO-4 would also be implemented to mitigate for potential impacts to special-status mammals.

Mitigation Measure: BIO-8: Cover and/or Provide Escape Routes for Wildlife

All steep trenches and excavations during construction shall be inspected twice daily (i.e., morning and evening) by the CPUC-authorized biologist or trained project personnel to monitor for wildlife entrapment. Large/steep excavations shall be covered. If fully covering the excavations is impractical, ramps will be used to provide means of escape for wildlife that enter the excavations, or open holes will be securely fenced with exclusion fencing.

If common wildlife species are found in an excavation or hole, the CPUC-authorized biologist shall immediately be informed and the animal(s) removed. If the animal(s) is/are a sensitive species that require(s) special handling authorization, a qualified biologist (agency-permitted or approved to handle a specific species) shall remove the animal before resumption of work in that immediate area.

Mitigation Measure: BIO-9: Survey Work Protocols

SDG&E shall implement the following measures during survey work:

-
- Brush clearing for foot path or line-of-sight cutting shall not be allowed from February through September without prior approval from the CPUC-, USFWS-, and CDFW-approved biologist, who would ensure the brush clearing activity, does not adversely affect a special-status species or nesting birds.
 - SDG&E survey personnel shall keep vehicles on existing access roads.
 - Hiking off roads or paths for survey data collection shall be allowed year-round as long as other protocols are met.

Mitigation Measure BIO-10: Enforce Speed Limits

Vehicles shall not exceed 15 mph on unpaved roads and the right-of-way accessing the construction site or 10 mph during the night.

Mitigation Measure BIO-11: Minimize Night Construction Lighting Adjacent to Native Habitats

Lighting of construction areas at night shall be the minimum necessary for personnel safety and shall be low illumination, selectively placed, and directed/shielded appropriately to minimize lighting in adjacent native habitats.

Mitigation Measure BIO-12: Prohibit Littering and Remove Trash from Construction Areas Daily

Littering shall not be allowed. All food-related trash and garbage shall be removed from the construction sites on a daily basis or secured in a closed container.

Mitigation Measure BIO-13: Prohibit the Harm, Harassment, Collection-of, or Feeding-of Wildlife

Project personnel shall not harm, harass, collect, or feed wildlife. No pets shall be allowed in the construction areas.

Mitigation Measure BIO-14: Implement the Terms of Agency Permit(s) with Jurisdictional Federal or State-listed Species

The applicant shall utilize the SDG&E LE HCP and/or NCCP for impacts to federally listed wildlife species and state listed wildlife species resulting from this project. Avoidance and minimization measures will be implemented per these permits including the potential use of helicopters if appropriate. The terms and conditions included in these authorizations shall be implemented, which may include seasonal restrictions, relocation, monitoring/reporting specifications, and/or habitat compensation through restoration or acquisition of suitable habitat.

Mitigation Measure BIO-15: Special-Status Bat Species Mitigation

Prior to construction, suitable special-status bat habitat shall be assessed by a CPUC-approved, qualified biologist in trees within a 50-foot buffer of active work areas and in any structures with suitable special-status bat roosting habitat within a 100-foot buffer of active work areas (e.g., bridges). If an active special-status bat maternity roost is found in a tree or structure, the approved biologist shall define an appropriate limited or no-work exclusion buffer surrounding the special-status bat maternity roost based on the bat species, numbers, and roost type (i.e., individuals, small group, or potential maternal colony), the type of work to occur, and the

duration of the work-related disturbance. The limited work or exclusion areas shall remain in effect until the approved biologist determines that the work would no longer be a disturbance to the roost. A reduction in the buffer may be approved by the qualified biologist if there is a change in the type of work to be conducted. The limited work or exclusion buffer shall not apply to construction-related traffic using existing roads where the use of the road is not limited to project-specific use, such as where the public has access or other entities use the road). In addition, the exclusion buffer shall not apply if the roost(s) is/are located in a residential, commercial, or industrial area. The boundaries of the limited or no work buffer shall be clearly marked by the approved biologist. The approved biologist shall inspect construction and roost sites when construction is occurring to ensure the integrity of the limited or no-work buffer and to ensure that the size of the buffer is adequate based on-site conditions and construction generated noise, dust, etc. All bat roosts documented during pre-construction surveys shall be reported through the MMRP.

Special-Status Birds

Eighteen special-status birds were present in the survey area during surveys conducted by Chambers in 2014 and 2015:

- | | |
|----------------------------------|--|
| ▪ Allen's hummingbird | ▪ Northern harrier |
| ▪ California horned lark | ▪ Nuttall's woodpecker |
| ▪ Clark's marsh wren | ▪ Olive-sided flycatcher |
| ▪ Coastal California gnatcatcher | ▪ Osprey |
| ▪ Cooper's hawk | ▪ Southern California rufous-crowned sparrow |
| ▪ Double-crested cormorant | ▪ White-faced ibis |
| ▪ Grasshopper sparrow | ▪ White-tailed kite |
| ▪ Lawrence's goldfinch | ▪ Yellow-breasted chat |
| ▪ Least bell's vireo | ▪ Yellow warbler |

Five special-status bird species were not observed during the surveys but have high and moderate potential to occur in the survey area due to presence of foraging and/or nesting habitat:

- Bell's sage sparrow
- Burrowing owl
- Coastal cactus wren
- Southern willow flycatcher
- Western yellow-billed cuckoo

Direct Impacts

The proposed project may result in temporary and permanent impacts to special status birds that are present and/or have a moderate or high potential to breed, nest, or forage within the proposed project area. Permanent and direct impacts to foraging or nesting birds could occur if a species were injured or killed during construction activities, including through removal of wood poles (utilized by cavity nesters and raptors) and vegetation removal for new pole installation. Vegetation removal during the nesting season (February 1st to September 15th, and as early as January 1st for some raptors) could also disrupt normal breeding behavior, including territory establishment and mate pairing, as well as potentially destroy active nests, eggs, and unfledged young. In addition, construction activities, such as noise from construction equipment and vehicles and visual distractions, within close proximity of active nests could cause nest abandonment and the subsequent mortality of eggs or nestlings.

1 Special-Status Bird Habitat

2 Permanent impacts to suitable nesting and foraging habitat for special-status birds could occur through
3 removal of wood poles (which support cavity nesters and raptors, depending on the design of cross-arms)
4 and the removal of vegetation during pole installation and access road modifications. Pole installation
5 would result in 0.08 acre of permanent impact to suitable habitat. The use of overland routes, stringing sites
6 and temporary work areas for installation of new poles could result in temporary impacts to special-status
7 bird habitats. Temporary impacts may also include an increase in noise and human presence from
8 construction equipment and vehicles, which may cause birds to avoid that area, thus effectively and
9 temporarily reducing available habitat for that species.

10 Coastal California Gnatcatcher

11 The CAGN was observed within the survey area and is anticipated to nest within the survey area on an
12 annual basis. Permanent impacts to this species include the removal of nesting and foraging habitat for pole
13 installation and access road modifications. Temporary impacts to this species may also include noise and
14 visual disturbance, and temporary loss of foraging and nesting habitat (Chambers 2015).

15 Least Bell's Vireo

16 Riparian habitat for the LBVI occurs mostly outside of the survey area, however, breeding LBVI were
17 observed within the survey area. This species is anticipated to nest in the survey area on an annual basis.
18 Permanent impacts include the removal of foraging habitat for pole installation and access road
19 modifications. Temporary impacts to this species may also include noise and visual disturbance, and
20 temporary loss of foraging habitat. No impacts to nesting habitat is expected (Chambers 2015).

21 Burrowing Owl

22 BUOWs were not observed during the 2014 protocol breeding season surveys or the 2014/2015 winter
23 surveys; however, BUOW has a high potential to occur within the survey area in future years due to the
24 presence of high-quality habitat and recent breeding records within 2 miles of the survey area. Adult and
25 juvenile BUOW may form breeding territories in future breeding seasons in locations within the survey
26 area. Ground-disturbing activities, such as grading and vegetation removal could result in the destruction
27 of burrows, resulting in a significant impact. Temporary impacts to this species may include noise, ground
28 vibrations, visual disturbance, and temporary loss of foraging habitat (Chambers 2015).

29 Other Special-Status Bird Species

30 The SWFL, CACW, and Bell's sage sparrow were determined to have a moderate potential to forage within
31 the survey area. Although one male SWFL was observed in the survey area, a breeding pair is not expected
32 to be affected by proposed project activities due to the distance of potential territory and lack of habitat
33 within the survey area. Temporary impacts to SWFL may include noise and visual disturbance, and
34 temporary loss of foraging habitat.

35 Although WYBC was observed during the surveys, this species was not identified as nesting during the
36 focused survey. Very limited suitable breeding habitat for WYBC was documented within the survey area.
37 It is not expected that breeding WYBC would occur within the proposed project area, and no permanent or
38 temporary impacts to this species are anticipated.

39 Very limited suitable breeding habitat for CACW was documented within the survey area. It is not expected
40 that breeding CACW would occur within the proposed project area, and no direct impacts to this species
41 are anticipated. Temporary impacts to this species include noise and visual disturbance, and temporary loss

of foraging habitat. No nesting habitat is expected to be adversely affected as a result of the proposed project.

Bell's sage sparrow has a moderate potential to nest and forage within the survey area; however, this species was not observed during the survey efforts. The closest recorded occurrence was documented approximately 7.75 miles from the proposed project. Direct impacts to nesting habitat could occur due to pole installation. Temporary impacts to this species may also include noise and visual disturbance, and temporary loss of foraging habitat.

The olive-sided flycatcher, osprey, white-tailed kite, double-crested cormorant, and white-faced ibis were observed foraging in survey area, but are considered to have a low or no potential to nest within the survey area due to very limited suitable nesting habitat. Temporary impacts to these species include noise and visual disturbance, and temporary loss of foraging habitat.

The Lawrence's goldfinch, Allen's hummingbird, northern harrier, Cooper's hawk, Nuttall's woodpecker, and yellow warbler were observed during the surveys; however, these species were not identified as nesting during the focused surveys and have a moderate potential to nest within the survey area based on the moderate quality of suitable nesting habitat. The Clark's marsh wren and the grasshopper sparrow were observed foraging and have a high potential to nest within the survey area. Temporary impacts to these species include noise and visual disturbance, and temporary loss of foraging and nesting habitat. Permanent impacts include the removal of nesting and foraging habitat for pole installation and access road modifications.

Indirect Impacts

Construction disturbance could indirectly impact special-status birds through fugitive dust, invasive and non-native plant species introduction, human presence, and excessive construction noise.

Construction activities, such as grading and driving construction equipment on unpaved roadways, could create dust that may settle on the surrounding vegetation which would adversely affect plants, resulting in adverse effects to special-status birds' dependent on the plants (or the prey they consume that are dependent on the plants).

Special-status birds could also be adversely affected by the introduction of non-native and invasive plant species. Non-native and invasive plant species can displace and outcompete native plant species, and therefore, reduce and change the native habitat that a bird species prefers or is dependent upon.

Special-status birds may be temporarily displaced within the construction areas and may avoid the area immediately surrounding the construction areas due to human presence and noise.

With implementation of Mitigation Measure BIO-16: Avoid and Minimize Impacts to Special-Status Raptors, Passerine Species, and other Birds Protected under the MBTA, as well as Mitigation Measure AQ-1: Implement BMPs for Construction Air Quality (see Section 2.3, Air Quality), Mitigation Measures BIO-2, BIO-3, BIO-4, BIO-09, BIO-13, and BIO-14, potential impacts to special-status birds and birds protected under the MBTA would be reduced to a level that is less than significant with mitigation.

Mitigation Measure BIO-16: Avoid and Minimize Impacts to Special-Status Raptors, Passerine Species, and other Birds Protected under the MBTA and California Fish and Game Code (sections 3503, 3513, and 3800)

If ground and vegetation disturbing activities occur during the nesting bird season (generally between January 15 and August 31, but may be earlier or later depending on species, location,

and weather conditions), a survey for nesting birds shall be conducted according to the following provisions:

- Nest surveys shall occur within 5 days prior to the start of ground-disturbing construction or vegetation trimming or removal activities. If there is no work in an area for 7 days, it shall be considered a new work area if construction, vegetation trimming, or vegetation removal begins again.
- Surveys shall be conducted with sufficient survey duration and intensity of effort necessary for the identification of active nests (a nest containing eggs or chicks). A nest is no longer an “active nest” if abandoned by the adult birds or once fledglings are no longer dependent on the nest.
- Surveys shall include nests of protected species within vegetation identified for removal and/or pruning, and within the following buffers of active work areas: 500 feet for raptors and listed passerine birds (including the CAGN and LBVI). Appropriate buffers for non-listed birds protected under the MBTA and Fish and Game Code will be established by the CPUC-approved biologist.
- Surveys shall be conducted during locally appropriate dates for nesting seasons determined in consultation with the USFWS and CDFW; note that generally the season is between January 15 and August 31 but may be earlier or later depending on species, location, and weather conditions. Species-specific nesting seasons for some species are identified below.
- The surveys shall be conducted by a CPUC- approved qualified biologist.
- Survey results shall be provided to CPUC.
- Work areas within which significant noise is not generated, such as work performed manually, by hand or on foot, and/or that would not cause significant disturbances to nesting birds (e.g., driving on access roads, and activities at staging and laydown areas) do not need to be surveyed prior to use. None of these activities shall result in physical contact with a nest.
- If active nests are detected during these surveys, no vegetation removal activities should be conducted until nestlings have fledged or the nest fails. If the activity must occur, a CPUC-approved biologist will establish a buffer zone around the nest and no activities will occur within that zone until nestlings have fledged and left the nest area.

Buffers

- Buffers around active nests shall be established: 500 feet for raptors and listed passerine birds. Buffer distances for non-listed birds under the MBTA and California Fish and Game code will be established by the CPUC-approved biologist. The CPUC-approved biologist will take into consideration if there are natural landforms that create a barrier between the work area and the nest or if there are urban distractions, such as roadways, that are closer and create a greater potential disturbance for nesting activities. In the absence of natural barriers or urban distractions, buffer reductions must be approved on a case-by-case basis as required below.

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- Buffers shall not apply to construction-related traffic using existing roads where the use of such roads is not limited to project-specific use. Where road use is limited to project-specific use, a buffer reduction or approval to drive through a buffer shall be obtained as described below under “Buffer Reduction.”
 - As appropriate, exclusion techniques may be used for any construction equipment that is left unattended for more than 24 hours to reduce the possibility of birds nesting in the construction equipment. An example of an exclusion technique is covering equipment with tarps.

Buffer Reduction

The specified buffers from nesting birds may be reduced on a case-by-case basis if, based on compelling biological or ecological reasoning (e.g., the biology of the bird species, concealment of the nest site by topography, land use type, vegetation, level of project activity, and level of pre-existing disturbance on site), it is determined by a CPUC-approved qualified biologist that implementation of a specified smaller buffer distance would still avoid nest abandonment and failure. This requirement includes buffer reductions or temporary buffer incursions for project-related use of roads where no stopping, standing, or other work activities shall occur in the buffer. Requests to reduce standard buffers or for temporary buffer incursions must be submitted to CPUC’s independent biologist for review. Requests to reduce buffers must include:

- Species
- Location
- Pre-existing conditions present on site
- Description of the work to be conducted within the reduced buffer
- Size and expected duration of proposed buffer reduction
- Reason for the buffer reduction
- Name and contact information of the CPUC-approved qualified biologist(s) who requested the buffer reduction and would conduct subsequent monitoring
- Proposed frequency and methods of monitoring necessary for the nest given the type of bird and surrounding conditions

CPUC shall respond to SDG&E’s request for a buffer reduction (and buffer reduction terms) within 1 business day; if a response is not received, SDG&E may proceed with the buffer reduction until CPUC’s independent biologist can review and approve or deny the buffer reduction request. If SDG&E proceeds with a reduced buffer, nests shall be monitored on a daily basis during construction activities. If the buffer reduction request is denied, or if the qualified biologist determines that the nesting bird(s) are not tolerant of project activity, the specified buffer(s) listed above in this measure shall be implemented.

Non-special status species found building nests within the work areas after specific project activities begin may be tolerant of that specific project activity; however, the CPUC -approved qualified biologist shall implement an appropriate buffer or other appropriate measures to protect the nest after taking into consideration the position of the nest, the bird species nesting on site, the type of work to be conducted, and duration of the construction disturbance. In these cases, the proposed buffer or other measures must be approved by CPUC’s independent biologist through the buffer reduction process outlined in this measure, if buffers are less than those specified in this measure. These nests shall be monitored on a daily basis and only during construction activities (no monitoring required during periods when no work is conducted) by

a qualified biologist until the qualified biologist has determined that the young have fledged or construction ends within the work area (whichever occurs first). If the qualified biologist determines that the nesting bird(s) are not tolerant of project activity, the buffer outlined above in this measure shall be implemented.

Monitoring and Reporting

Each nest identified in the project area should be included in a Nest Monitoring Log (NML). The NMLs should be updated daily and submitted to the CPUC on a weekly basis. The NMLs should provide a summary of each nest identified, including the species, status of the nest, buffer information, and fledge or failure data. The NMLs would allow for tracking the success and failure of the buffers and would provide data on the adequacy of the buffers for certain species.

Nest locations and exclusion buffers shall be mapped (using GIS) for all nests identified. This information shall be maintained in a database and shall be provided to CPUC.

A final report shall be submitted to CPUC at the end of each nesting season summarizing all avian-related monitoring results and outcomes for the duration of project construction.

Specific Requirements for Coastal California Gnatcatcher and Least Bell's Vireo

Prior to commencing construction activities, SDG&E shall conduct surveys for CAGN and LBVI in accordance with USFWS' *Coastal California Gnatcatcher* (USFWS 1997) and *Least Bell's Vireo Survey Guidelines* (USFWS 2001). If CAGN or LBVI are detected during the surveys, SDG&E shall consult with the USFWS to determine appropriate avoidance measures. The performance standard for avoidance shall be no potential impacts to an established CAGN or LBVI nest. This shall be accomplished by establishing a no-disturbance buffer around the active nest. The no-disturbance buffer shall be a minimum of 500 feet, but may be larger depending on site specific conditions and consultation with USFWS.

During the nesting season, pre-construction surveys are required where there is potential for nesting habitat for the coastal CAGN or LBVI within or adjacent to the proposed project area. The following measures shall be adhered to when project activities during the breeding season occur within habitats that may support LBVI and CAGN:

- A biologist knowledgeable of LBVI and/or CAGN biology and ecology, approved by the CPUC, would survey within the project impact footprint and a 500-foot buffer before clearing vegetation or project construction to check for LBVI and/or CAGN nesting activity. Should an active nest be located in the impact footprint, then work would be suspended until the nest is vacated.
- For project activities occurring during the breeding season adjacent to known occupied LBVI and/or CAGN nesting habitat, the biologist would monitor nesting bird activity. If the biologist determines that nesting birds are being disrupted by project activities, then work would be suspended until effective minimization measures (e.g., noise attenuation structures) developed in coordination with the CPUC, USFWS, and CDFW are in place or until after the breeding season is completed.

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- Any lighting required during project activities would be shielded and directed away from vireo and/or flycatcher habitat to ensure that these areas are not artificially illuminated.

Specific Requirements for Western Burrowing Owl

The 2014 survey effort indicated that BUOWs were not nesting in the survey area (see the Burrowing Owl Survey Report in Appendix I of the Biological Technical Survey Report, Chambers 2015 (see Appendix I). However, there is high quality suitable habitat for this species in the survey area, and this species may occur in future years. If this species were present in the survey area, direct and indirect impacts could occur. Implementation of Mitigation Measure BIO-17: Avoid or Minimize Impacts on Burrowing Owls would reduce impacts to a level that is less than significant with mitigation.

Mitigation Measure BIO-17: Avoid or Minimize Impacts on Burrowing Owls

SDG&E shall prepare a BUOW Monitoring and Mitigation Plan (BOMMP) consistent with the *CDFW Staff Report on Burrowing Owl Mitigation* (CDFG 2012). SDG&E shall submit the BOMMP to CDFW and CPUC. SDG&E shall be required to obtain approval from CDFW on the BOMMP prior to construction. SDG&E shall provide the approved BOMMP to the CPUC 30 days prior to construction.

In accordance with the *CDFW Staff Report on Burrowing Owl Mitigation* (CDFG 2012) and the BOMMP, SDG&E shall conduct take avoidance pre-construction surveys for the BUOW prior to initiating ground disturbance activities. If BUOWs are detected, SDG&E shall implement the CDFW-approved BOMMP in coordination with CDFW. The BOMMP shall state that disturbance to active burrows shall be avoided during the nesting season (February 1 through August 31). Buffers shall be established around occupied burrows in accordance with guidance provided in the *CDFW Staff Report on Burrowing Owl Mitigation* (CDFG 2012) and the BOMMP.

If work in these habitats is delayed or suspended for more than 30 days after the take avoidance pre-construction surveys, the site shall be resurveyed.

Special-Status Reptiles

One special-status reptile, the orange-throated whiptail, was observed in the survey area during surveys conducted by Chambers in 2014 and 2015. There are six special-status reptiles that were not observed within the survey area but have a moderate to high potential to occur due to suitable habitat:

- | | |
|---------------------------|----------------------------|
| ▪ Coast horned lizard | ▪ Red diamond rattlesnake |
| ▪ Coast patch-nosed snake | ▪ Rosy boa |
| ▪ Coronado Island skink | ▪ Two-striped garter snake |

Direct Impacts

Construction activities in the proposed project area could potentially injure or kill a special-status reptile species as a result of traffic on access roads and overland routes, and in turnaround areas. Additionally, work occurring in temporary work areas, staging areas, stringing site areas, underground distribution line areas, and around guard structures could harm special-status reptile species. Burrows used by these species may be removed, resulting in the potential for direct mortality. Steep-walled trenches/excavations could result in entrapment of these species, potentially leading to direct mortality. Approximately 0.08 acre of

potential foraging and breeding habitat would be permanently adversely affected as a result of the installation of new steel poles.

Temporary impacts from construction include increased human presence, vibration, ground disturbance, and noise, which could result in these species avoiding habitat in proximity to the proposed project. Additionally, disruption to hibernation, feeding, and breeding could occur as a result of these activities.

Direct impacts to special-status reptiles would be considered potentially significant. Because no focused surveys were performed for these species, it is not possible to fully and accurately quantify impacts from construction of the proposed project on each species; therefore, it is assumed that construction of the proposed project could significantly impact these species.

Indirect Impacts

Construction disturbance could indirectly impact special-status reptile species through degradation of burrows, fugitive dust, invasive and non-native plant species introduction, and excessive construction noise.

Construction activities that cause burrows to collapse could cause indirect impacts to reptiles, resulting in a loss of access to thermal and protective cover.

Construction activities, such as grading and driving construction equipment on unpaved roadways could create dust that may settle on the surrounding vegetation which would adversely affect plants, resulting in adverse effects to special-status reptiles dependent on the plants (or the prey they consume that are dependent on the plants).

Special-status reptiles could also be adversely affected by the introduction of non-native and invasive plant species. Non-native and invasive plant species can displace and outcompete native plant species and therefore reduce and change the native habitat that a reptile species prefers or is dependent upon. This impact would be significant.

Implementation of Mitigation Measures BIO-2, BIO-3, BIO-4, BIO-8, BIO-9, BIO-10, and BIO-13 would reduce potential impacts to these species to a level that is less than significant.

Special-Status Amphibians

One special-status amphibian, the western spadefoot toad, was observed within the survey area during jurisdictional delineation surveys conducted by Chambers in 2015. The western spadefoot toad was observed in larval form in road ruts and vernal pools located east of SR-125 and south near Donovan State Prison.

Direct Impacts

Through avoidance of federally listed fairy shrimp species, pole location re-design has been implemented to avoid habitat that may also host western spadefoot. The adult form of this species, however, spends the majority of its life underground, and therefore could be present throughout the survey area. Western spadefoot toad could be injured or killed from construction activities that cause ground disturbance, including the installation of new poles, access road modifications, and vehicle and equipment use on access roads and overland routes. Temporary impacts such as disruption of breeding behavior due to vehicle traffic could also occur, as well as ground vibrations and noise from construction activities.

Although western spadefoot toad was observed during the jurisdictional delineation surveys in 2015, no focused surveys were performed for this species, so it is not possible to fully and accurately quantify

impacts; therefore, it is assumed that construction of the proposed project could significantly impact western spadefoot toad.

Indirect Impacts

Construction disturbance would indirectly impact the western spadefoot toad through increased erosion and sedimentation, fugitive dust, the release of toxic chemicals (e.g., oil), and invasive and non-native plant species introduction.

Sedimentation associated with erosion would adversely affect the western spadefoot toad in vernal pool and road rut vernal pools should construction spoils from the proposed project area reach these areas. An increase in turbidity could affect water quality, resulting in a significant impact. Construction activities, such as grading and driving of heavy equipment on unpaved access roads or on overland routes can result in increased levels of blowing dust that may settle on aquatic habitats, also adversely affecting water quality and resulting in a significant impact. The western spadefoot toad could also be adversely affected by decreased water quality or suffer mortality if a toxic substance spilled or flowed into aquatic habitat, resulting in a significant impact.

The western spadefoot toad would be adversely affected through habitat degradation from invasive and non-native plant species, which can invade aquatic habitats and displace open water used by the western spadefoot toad.

SDG&E would implement Mitigation Measure BIO-18: Provide Habitat Compensation or Restoration for Permanent Impacts to Native Vegetation Communities in order to compensate or restore western spadefoot toad habitat. Additionally, the following mitigation measures would ensure that impacts to the western spadefoot toad are less than significant: Mitigation Measure HYD/WQ-1: Implement Measures to Protect Aquatic Resources During Project Construction (see Section 2.9, Hydrology and Water Quality), Mitigation Measures BIO-2, BIO-3, BIO-4, BIO-8, BIO-9, BIO-10, and BIO-13.

Following completion of non-native plant removal, native plants would be installed as appropriate within remaining open spaces within the enhancement area under the direct supervision of a qualified biologist, to create an area of relatively open, low-growth, native scrub/grassland habitat. Soils in open areas not currently supporting native vegetation would be turned with hand tools to make them more friable, resulting in conditions more suitable for burrowing by western spadefoot toad. Should any burrowing western spadefoot toads be detected during this activity, CDFW would be notified and all spadefoot toads detected would be collected and maintained in captivity by a CDFW-approved biologist until habitat enhancement activities are completed. Supplemental plantings may include California buckwheat, California broom, California sagebrush, and native bunch grasses such as foothill needlegrass (*Stipa lepidota*), purple needlegrass (*S. pulchra*), and coast range melic (*Melica imperfecta*). In order to provide some shade to the seasonal pools, supplemental plantings of mule fat (*Baccharis salicifolia*) and/or coyote brush (*B. pilularis*) would be placed around the perimeter of both pools. Shading the pools is expected to result in slower evaporation of water in the pools following seasonal rains.

Mitigation Measure BIO-18: Provide Habitat Compensation or Restoration for Permanent Impacts to Native Vegetation Communities.

Permanent impacts to all native vegetation communities shall be compensated through SDG&E's LE HCP and/or NCCP at a 2:1 ratio.

Special-Status Invertebrates

Two special-status invertebrates, San Diego fairy shrimp and Thorne's hairstreak, were both observed in the survey area during surveys and assessments conducted by Chambers in 2015, 2016 and 2017. Two additional special-status invertebrates were not observed during surveys but have high potential to occur within the survey area: QCB and Riverside fairy shrimp.

San Diego and Riverside Fairy Shrimp

A total of 118 basins (vernal pools, road ruts, and other wet depressions) in the project survey area are considered to be suitable habitat for both the San Diego and Riverside fairy shrimp (Busby 2016). Protocol-level dry season surveys were conducted in 2015 and 2016, and wet season surveys were done in 2015/2016 for both the San Diego and Riverside fairy shrimp in the survey area. In 2017, a fairy shrimp species assessment was conducted between Loc-84 through Loc-96 during the wet season. Additionally, Pole Nos. 83 through 86 and 88 through 97 occur in critical habitat for the San Diego fairy shrimp.

Based on the 2015/2016 wet season protocol-level surveys for both of these special status species, the San Diego fairy shrimp was found present in two road ruts (Road Rut-93 and Road Rut-85) in the project survey area (see Figure 4 in Appendix G, *TL 649 Fairy Shrimp Survey Project Survey Results Map in the Survey Summary Report for the 2015/2016 Protocol-Level, Wet Season Fairy Shrimp Survey for the Proposed San Diego Gas & Electric Tieline 649 Wood to Steel Pole Replacement Project in Southern San Diego County, California* and Appendix F *Tie-Line 649 Vernal Pool and Listed Fairy Shrimp Avoidance Discussion Memo*). During the 2016 dry season protocol-level survey, eight San Diego fairy shrimp (4 females, 4 males) were observed in VP2. No special-status fairy shrimp were observed in the 2015 dry season survey. During the 2017 assessment, San Diego fairy shrimp were identified in 21 vernal pools/basins along access roads: VP-18, 19, 20, 25, 28, 30, 31, 33, 34, 37, 38, 39, 42, 43, 45, 46, 47, and 50 and B-02. These vernal pools/basins are located near pole locations Loc-85, Loc-86, Loc-90, Loc-91, Loc-92, Loc-93, Loc-94, and Loc-95 (Chambers 2018).

Direct Impacts

Pole locations and work areas have been designed to avoid all mapped vernal pools. It is anticipated that SDG&E would need to drive through suitable habitat (vernal pool RRs) for special-status fairy shrimp on the access roads. Vehicle and equipment access on roads containing vernal pool road ruts could degrade the quality of the pool or crush San Diego and Riverside fairy shrimp cysts. These impacts would be significant. These existing access roads, however, are highly utilized year-round by vehicles not associated with the proposed project. Additionally, SDG&E proposes to drive through these areas only when they are dry; therefore, temporary impacts, such as disruption of foraging and/or breeding behavior from vehicle traffic are not anticipated to impact special-status fairy shrimp species substantially beyond existing activity levels within the proposed project area.

RECON performed a delineation of jurisdictional wetlands and waters within the proposed project. This report was completed in 2015 and is included as Appendix K of the Biological Technical Report, Chambers 2015 (see Appendix I). No permanent dredge or fill impacts to vernal pools are anticipated as discussed in Section 2.9, Hydrology and Water Quality.

Construction occurring in the microwatershed of vernal pools, could result in sedimentation, and alteration of hydrology and drainage patterns. SDG&E would implement a SWPPP and all applicable BMP's out of their BMP handbook to reduce sedimentation into aquatic resources.

1 *Indirect Impacts*

2 Construction disturbance would indirectly impact special-status invertebrates through increased erosion
3 and sedimentation, fugitive dust, the release of toxic chemicals (e.g., oil), and invasive and non-native plant
4 species introduction.

5 Sedimentation associated with erosion would adversely affect San Diego and Riverside fairy shrimp
6 habitats in vernal pool and road rut vernal pools should construction spoils from the proposed project area
7 reach these areas. An increase in turbidity could affect water quality, resulting in a significant impact.
8 Construction activities, such as grading and driving of heavy equipment on unpaved access roads or on
9 overland routes can result in increased levels of blowing dust that may settle on aquatic habitats, also
10 adversely affecting water quality and resulting in a significant impact. Dust can also settle on surrounding
11 vegetation, which could adversely affect the plants and the special-status invertebrates' dependent on the
12 plants, resulting in a significant impact. San Diego and Riverside fairy shrimp habitats could also be
13 adversely affected by decreased water quality or cysts could be destroyed if a toxic substance spilled or
14 flowed into aquatic habitat, resulting in a significant impact.

15 Special-status invertebrates could be adversely affected through habitat degradation from invasive and non-
16 native plant species. Non-native and invasive plant species could outcompete native species that QCB
17 depend on should they be introduced or spread throughout the proposed project area, resulting in a
18 significant impact.

19 Mitigation Measure BIO-19: Avoid Impacts to Special-Status Fairy Shrimp would ensure that vernal pools
20 are avoided to the maximum extent possible. Mitigation Measure BIO-20: Minimize and Compensate for
21 Impacts to Special-Status Fairy Shrimp and Their Habitat would ensure that direct and indirect impacts to
22 vernal pools would be compensated. Mitigation Measure HYD/WQ-2: Implement Measures to Protect
23 Aquatic Resources during Project Construction (see Chapter 2.9 Hydrology) would ensure that aquatic
24 resources (vernal pools, wetlands, and drainages) are protected during construction. Mitigation Measure
25 AQ-1: Implement BMPs for Construction Air Quality (see Section 2.3, Air Quality) would reduce the
26 amount of fugitive dust that would settle on aquatic resources. Implementation of these Mitigation Measures
27 as well as Mitigation Measures BIO-3, BIO-4, and BIO-14 would reduce impacts to special-status
28 invertebrates to less than significant.

29 **Mitigation Measure BIO-19: Avoid Impacts to Special-Status Fairy Shrimp**

30 Jurisdictional vernal pools adjacent to the project footprint, plus a five-foot buffer (where
31 feasible, and not including those located within Project-related access roads), shall be fenced
32 with orange safety fencing to ensure no people or equipment impact the vernal pools during
33 construction activities. A silt fence shall be installed along the base of the roadway and also
34 around areas of ground disturbance to prevent increased erosion or sedimentation during
35 construction in vernal pool areas. Gravel bags shall be placed along the bottom of the fence to
36 minimize erosion or sedimentation into vernal pools, and removed upon completion of
37 construction.

38 During construction in areas containing delineated vernal pools, including access roads
39 adjacent to vernal pools, a biological monitor shall be present in order to avoid and minimize
40 potential impacts to sensitive resources. Vehicle trips in areas that contain delineated vernal
41 pools shall be limited to the extent feasible. Crews shall carpool and/or walk in to limit trips.
42 Guidance shall be provided by the qualified biological monitor. The Environmental Surveyor
43 will check to verify compliance, including observing that flagged areas have been avoided.
44 Also, at completion of work, the Environmental Surveyor is responsible for removing all

habitat flagging from the project site. The biological monitor shall document all accidental or unanticipated impacts to vernal pools. The impacts shall be provided to the CPUC, CDFW and USFWS in a post-construction report within 30 days of project completion.

SDG&E shall assume presence of special-status fairy shrimp in vernal pool road-ruts located between poles 84 and 96. These vernal pools shall be avoided when ponded or wet. Construction access shall be allowed in these vernal pool areas when CPUC-approved biologist determines that the vernal pools are dry. No parking, staging, or other use of the areas that have vernal pools are permitted.

Steel plates may be placed over delineated vernal pool road ruts when they are dry in order to avoid and minimize potential impacts or temporary disturbance to vernal pools from project vehicles.

To the extent feasible, all construction equipment shall be fueled and maintained at least 100 feet from the nearest vernal pools. No project-related staging, parking or storage shall occur within or directly adjacent to delineated vernal pools.

Mitigation Measure BIO-20: Minimize and Compensate for Impacts to Special-Status Fairy Shrimp and Their Habitat

If direct or indirect impacts to habitat (vernal pools and road rut vernal pools) supporting special-status fairy shrimp cannot be avoided then the following measures shall be implemented:

- Impacts to jurisdictional vernal pools (with or without special-status shrimp), basins, and road rut vernal pools supporting listed San Diego fairy shrimp shall require mitigation through an –off site approved vernal pool restoration area or restoration plan as described below, and no mitigation would be required for road rut vernal pools that do not support special-status species.
- Impacts to jurisdictional vernal pools, with or without covered species present, shall be mitigated at a 3:1 ratio for all impacts. Mitigation may occur onsite provided that a sufficient number of degraded pools exist in the vicinity and have been approved by the CPUC and USFWS for restoration and /or enhancement. Otherwise, mitigation shall be implemented offsite at the pre-approved vernal pool restoration area. Mitigation credits, as approved by CPUC and USFWS, may be accumulated and used through past or advance creation, restoration, and enhancement of the vernal pool basin area. The areas pre-approved by the CPUC and USFWS for creation, restoration, and/or enhancement of vernal pool basin area shall be of high quality (e.g., Carmel Mesa and Otay Mesa) and shall support special-status species affected by the project. Pre-approved vernal pool mitigation areas must be managed and monitored pursuant to a management plan approved by CPUC and USFWS. If SDG&E does not mitigate at a pre-approved vernal pool restoration area, then CPUC and USFWS concurrence on an acceptable mitigation site is required prior to any impacts to vernal pools. Recognizing that restoration efforts may vary; if impacts to vernal pools are necessary or if unanticipated impacts to vernal pools occur as part of construction, SDG&E shall prepare a detailed vernal pool restoration plan based on a generalized approach for vernal pool restoration which has been previously approved by USFWS. This plan shall be provided prior to impacts to vernal pools or no later than 30 days following an unanticipated impact. If further requirements to this generalized approach are necessary, CPUC and USFWS shall respond to the restoration plan within 30 days.

No planned impacts to vernal pools shall occur until adequate mitigation for impacts to vernal pools and special-status vernal pool species has been secured off-site or a restoration plan has been approved by the CPUC and USFWS for any mitigation outside of pre-approved vernal pool restoration areas.

Where access roads containing pools are used, the following measures shall apply during project construction:

- The delineation of all jurisdictional pool boundaries (i.e., the pool exclusion/buffer zone) that occur off of roadways shall be staked/flagged prior to the start of work.
- Jurisdictional pools that occur within roadways or road-rut vernal pools will be presurveyed, mapped and avoided when wet. A qualified biological monitor shall be present to monitor access road use.
- The qualified biological monitor shall have the authority to halt any project activity that is deemed to be affecting, or potentially affecting, a pool. The qualified biological monitor shall consult with the work supervisor, and if necessary, the USFWS to resolve the issue.
- All staking/flagging shall be removed by the biological monitor following completion of the work.
- A minimum of 150 feet shall be provided between pools and all long-term staging.
- Implement a SWPPP to reduce the potential for sediments and contaminants to enter pools or depressions where vernal pool branchiopods may occur (see Chapter 2.8 Hazards and Hazardous Materials).

Thorne's Hairstreak and QCB

Thorne's hairstreak was observed at the far northeastern end of the survey area. The San Diego MSCP covers Thorne's hairstreak. The MSCP protects suitable habitat for Thorne's hairstreak, which consists of Tecate cypress forest or habitats with dominant components of Tecate cypress. No temporary or permanent impacts to these habitats are anticipated as a result of the proposed project. Thus, no direct impacts to this species are anticipated.

Although the QCB was not observed at the time of the 2015 survey, the area was historically used by QCB and there is suitable breeding and foraging habitat for this species in the survey area. The proposed project is also within a USFWS-recommended survey area for QCB.

SDG&E has acquired take coverage for QCB under its Low-Effect HCP for QCB. The QCB HCP mapped areas include the majority of proposed project area, from Location 18 east and south to the Border Substation (see Figure 7: QCB Habitat Map in the Biological Technical Report, Chambers 2015). Temporary impacts resulting from the installation of new poles, vehicle traffic, and stringing sites may disrupt QCB foraging behavior. These impacts would constitute take of the QCB. Additionally, the proposed project would result in a total of 52,533 square feet (1.21 acres) of temporary and permanent impacts to QCB suitable habitat (Chambers 2015). Because no individuals were observed during focused surveys for QCB in the 2015 adult flight season, suitable habitat within the proposed project area for QCB is considered unoccupied. Per the HCP, 52,533 square feet (1.21 acres) of QCB suitable habitat would be mitigated for according to ratios for suitable – unoccupied habitat (Chambers 2015).

Implementation of Mitigation Measure BIO-21: Conduct Protocol Surveys for QCB would ensure that surveys were completed within 1 year prior to project construction activities in occupied habitat. Mitigation Measure BIO-22: Avoid Host Plants for QCB would ensure that host plants are avoided to the maximum extent possible. Mitigation Measure BIO-23: Mitigate for Impacts to QCB would mitigate for impacts to this species. Implementation of these mitigation measures as well as Mitigation Measures BIO-2, BIO-3, BIO-4 and BIO-13, would reduce impacts to a level that is less than significant.

Mitigation Measure BIO-21: Conduct Protocol Surveys for QCB

Per SDG&E's Quino Checkerspot Butterfly Low-Effect Habitat Conservation Plan (QCB HCP), a USFWS-permitted biologist shall conduct pre-construction protocol surveys for QCB within 2 years prior to construction activities, or as required by the USFWS, in the project survey area. The permitted biologist shall perform the surveys in accordance with the most currently accepted protocol survey method. Results shall be reported to the USFWS within 45 days of the completion of the survey.

Mitigation Measure BIO-22: Avoid Host Plants for QCB

SDG&E shall avoid host plants, dot-seed plantain (*Plantago erecta*) and purple owl's clover (*Castilleja exserta*), to the maximum extent possible. The CPUC-approved biological monitor shall flag these plants within construction work areas for avoidance during the pre-construction survey.

Mitigation Measure BIO-23: Mitigate for Impacts to QCB

Temporary and permanent impacts to QCB shall be compensated through SDG&E's QCB HCP. Occupied habitat shall be mitigated for at a 2:1 ratio, while un-occupied habitat shall be mitigated for at a 1:1 ratio.

Operation and Maintenance

Operation and maintenance activities for the proposed project will be conducted in the same manner as the existing facilities. Operation and maintenance activities are expected to decrease slightly as a result of the proposed project due to the lower maintenance requirements of the replacement steel poles relative to the existing wood poles. As a result, there will be no increase in vehicle trips and activities and no increase in the potential to impact species and habitat as a result of the proposed project.

To further minimize operation and maintenance activities within the proposed project area, SDG&E will utilize NCCP Operational Protocols 1 through 5, 7, 8, 10, 11, 13 through 17, 20, 24, 25, 27, 28, 29, 30, 34, 35, 37 through 44, 54, 55, and 57. These protocols include, but are not limited to, designing the operation and maintenance of the proposed project to minimize disturbance, minimizing impacts by defining the disturbance areas, restricting vehicles to existing roads when feasible, monitoring during clearing and grading activities, and minimizing erosion. With implementation of these NCCP Operational Protocols there will be no impacts from operation and maintenance activities.

b. Would the project 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 US Fish and Wildlife Service? (Less than Significant with Mitigation)

Direct Impacts

The proposed project is anticipated to permanently and temporarily impact five sensitive vegetation communities: California sagebrush-California buckwheat scrub, coast prickly pear scrub, coast prickly pear scrub-disturbed, lemonade berry stand, and purple needlegrass grassland. Permanent impacts would occur from vegetation clearing for installation of steel poles and access road modifications. Temporary impacts would occur during the removal of existing wood poles, installation of new poles and an underground distribution line, use of stringing sites, staging yards, turnaround areas, overland routes, guard structures, and access road modifications.

The proposed project has been designed to avoid sensitive vegetation communities, wherever possible, including using existing access roads, and placing any new facilities and staging areas outside sensitive vegetation communities when feasible.

Table 2.4-7 quantifies the extent of impacts to sensitive vegetation communities resulting from construction and operation of the proposed project.

Indirect Impacts

Construction disturbance would indirectly impact sensitive vegetation communities through increased erosion and sedimentation, fugitive dust, and invasive and non-native plant species introduction.

Increased erosion would adversely affect plant growth and success by removing valuable topsoil and exposing roots. Sedimentation would bury small plants or seedlings. Construction activities, such as grading and driving of heavy equipment on unpaved roadways and on overland routes would result in increased levels of blowing dust that may settle on surrounding vegetation. Increased levels of dust on plants can adversely affect plants' photosynthetic capabilities and impact the health of the community, resulting in a significant impact. The impacts of increased erosion and sedimentation and fugitive dust would have a substantial adverse effect on sensitive vegetation communities and would be considered significant impacts.

Table 2.4-7. Anticipated Impacts to Sensitive Vegetation Communities

Vegetation Community	Total within impact	Impact Area (acres)	
		Permanent	Temporary
<i>Scrub and Chaparral</i>			
California Sagebrush-California Buckwheat Scrub	1.56	0.01	1.54
Coast Prickly Pear Scrub	0.44	<0.01	0.44
Coast Prickly Pear Scrub (disturbed)	0.04	<0.01	0.04
Lemonade Berry Stand	<0.01	0.00	<0.01

Vegetation Community	Total within impact	Impact Area (acres)	
		Permanent	Temporary
<i>Grasslands, Meadows, and Other Herbaceous Communities</i>			
Purple Needlegrass Grassland	0.47	0.01	0.47
Total	2.52	0.02	2.50

Source: SDG&E 2015

Invasive and non-native plants pose a threat to sensitive vegetation communities. Invasive and non-native plant species can spread when seeds are brought in on the soles of shoes or the tires and undercarriages of vehicles or equipment. They can also be brought in if soil containing non-native plant seed is imported. Furthermore, ground disturbance from construction activities generally favors the establishment of non-native species because they are more adapted to disturbance than native species. Once established, these non-native species are often able to out-compete the natives and sometimes displace them, especially if there is further disturbance, for example, from fire. Wildfires caused by construction are rare but may occur and would be significant. These invasive plants may allow for an increase in fire frequency and affect the biological diversity and species composition of native communities and adversely affect a community's value as a special-status plant and wildlife habitat.

Wildfires have become more frequent with growth in the human population, creating a situation in which vegetation communities (and, therefore, habitats for plant and animal species) are changed dramatically and may not recover. This change in vegetation community is called "type conversion" and can occur to any native vegetation community. If the proposed project were to cause a fire, or fires, that led to type conversion of sensitive vegetation communities, the impact would be significant, and mitigation would be required.

Temporary and permanent loss of sensitive natural communities would be considered a potentially significant impact. Implementation of Mitigation Measure BIO-24: Minimize Area of Disturbance of Sensitive Habitat Mitigation Measure would minimize the disturbance and removal of special-status plants. Mitigation Measure BIO-25: Restore All Temporary Construction Areas Pursuant to a Habitat Restoration Plan would require areas of disturbance in the proposed project area to be revegetated with native vegetation following guidance in a Habitat Restoration Plan. Mitigation Measure HAZ-4: Prepare and Implement a Project-Specific Construction Fire Prevention Plan (see Section 2.8, Hazards and Hazardous Materials) would reduce the fire risk and the risk of "type conversion." SDG&E would implement Mitigation Measure HYD/WQ-1 and Mitigation Measure AQ-1: Implement BMPs for Construction Air Quality (see Section 2.3, Air Quality) to reduce impacts from erosion and dust. Upon implementation of these mitigation measures as well as Mitigation Measures BIO-3 and BIO-4 impacts to sensitive vegetation communities would be reduced to a less than significant level.

Mitigation Measure BIO-24: Minimize Area of Disturbance of Sensitive Habitat

The disturbance or removal of vegetation shall not exceed the minimum necessary to complete construction and shall only occur within the defined work area. Boundaries of habitats to be avoided shall be clearly flagged, and turnaround and stringing areas shall be clearly marked.

Mitigation Measure BIO-25: Restore All Temporary Construction Areas Pursuant to a Habitat Restoration Plan

All temporary work areas not subject to long-term use or ongoing vegetation maintenance shall be mitigated or restored per SDG&E's LE HCP and/or NCCP. If restored, the sites shall be

revegetated with native species characteristic of the adjacent native vegetation communities in accordance with a Habitat Restoration Plan as described in SDG&E NCCP 7.2 Habitat Enhancement Measures. Restoration techniques may include: hydroseeding, hand-seeding, imprinting, and soil and plant salvage. The Habitat Restoration Plan shall include success criteria and monitoring specifications and shall be approved by the CPUC prior to construction of the project. At the completion of project construction, all construction materials shall be completely removed from the site. Topsoil located in areas to be restored would be conserved and stockpiled during the excavation process for use in the restoration. Wherever possible, vegetation would be left in place to avoid excessive root damage to allow for natural recruitment following construction. Temporary impacts shall be either mitigated per the LE HCP and/or NCCP or restored sufficient to compensate for the impact. If restoration of temporary impact areas do not achieve the success criteria per the Habitat Restoration Plan, the temporary impact shall be considered a permanent impact and compensated accordingly.

Operation and Maintenance

Operation and maintenance activities for the proposed project will be conducted in the same manner as the existing facilities, which includes the implementation of NCCP Operational Protocols. Operation and maintenance activities are expected to decrease slightly as a result of the proposed project due to the lower maintenance requirements of the replacement steel poles relative to the existing wood poles. As a result, there will be no increase in the number of vehicle trips and activities and no increase in the potential to impact sensitive natural communities over baseline conditions.

c. Would the project 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? (Less than Significant with Mitigation)

Direct Impacts

There are 21 jurisdictional drainages in the survey area (see Appendix K in the Biological Technical Report, Chambers 2015 [Appendix I of this IS]). The main access road within the survey area crosses 12 of the 21 drainages. A total of 5.55 acres of USACE-jurisdictional waters were identified in the survey area. Of these waters, 4.45 acres are potentially USACE-jurisdictional wetlands (including 0.80 acre of vernal pools) and 1.09 acres are non-wetland waters, with an additional 11.74 acres of vernal pool habitat likely to support jurisdictional wetland waters of the U.S. (SDG&E 2015). These pools may be considered both waters of the U.S. and waters of the State, and therefore are under jurisdiction of the USACE and San Diego RWQCB.

No poles would be placed within a drainage or vernal pool. Staging areas, temporary work areas, turnaround areas, stringing sites, guard structures, and the underground distribution line have all been located outside aquatic resources.

It is anticipated that SDG&E would drive through vernal pools located in the existing access roads. Additionally, SDG&E is anticipated to drive through jurisdictional drainages which cross the existing access roads. Existing access roads are used for a variety of non-proposed project purposes, and use of these access roads would not substantially degrade wetlands or waters compared to baseline conditions. Vehicle and equipment access on roads containing vernal pools or road rut vernal pools could degrade the quality of the pool.

No permanent dredge or fill impacts to jurisdictional wetlands or waters are anticipated from the proposed project. However, construction occurring in the microwatershed of vernal pools or other jurisdictional features could result in sedimentation, and alteration of hydrology and drainage patterns.

In addition to the requirements in this IS/MND, SDG&E is required to obtain permits from USACE, CDFW, and RWQCB prior to impacting any jurisdictional waters. The permits from USACE, CDFW, and the RWQCB may impose additional limitations and mitigation requirements for impacts to jurisdictional resources. SDG&E would be required to implement all measures in the permits for impacts to jurisdictional resources. The CPUC would monitor implementation of the additional conditions contained in these permits in the Mitigation Monitoring and Reporting Plan (see Appendix C, Mitigation Monitoring and Reporting Plan).

Indirect Impacts

Construction disturbance would indirectly impact jurisdictional water features through increased erosion and sedimentation and the release of toxic chemicals (e.g., oil). Sedimentation associated with erosion would adversely affect jurisdictional water features should construction spoils from the proposed project reach these areas. An increase in turbidity could affect water quality. Construction activities, such as grading and driving of heavy equipment on unpaved access roads or on overland routes, can result in increased levels of blowing dust that may settle in jurisdictional water features, also adversely affecting water quality. Jurisdictional water features could also be adversely affected by decreased water quality if a toxic substance spilled or flowed into them.

Implementation of Mitigation Measure BIO-26: Avoid and Minimize Impacts to Federally Protected Wetlands Mitigation ensures avoidance of federally protected wetlands upon implementation of a SWPPP, and restoration and revegetation of wetlands to pre-construction conditions. Mitigation Measure BIO-27: Obtain Regulatory Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State requires a CWA Section 404 permit and Section 401 Water Quality Certification for placement of fill into waters of the U.S., should these permits be necessary. Implementation of these mitigation measures as well Mitigation Measures BIO-24, BIO-25 and HYD/WQ-2 would reduce impacts to federally protected wetlands to a level that is less than significant.

Mitigation Measure BIO-26: Avoid and Minimize Impacts to Federally Protected Wetlands

To the extent feasible, project-related activities shall avoid federally protected wetlands. A SWPPP shall be implemented to reduce the potential for sediments and contaminants to enter wetlands and waters. After construction, surface topography and drainage shall be restored to pre-construction conditions. Where appropriate, revegetation shall be implemented with site-adapted native species.

Mitigation Measure BIO-27: Obtain Regulatory Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State

Work within areas defined as waters of the U.S. that includes placement of fill shall require a CWA Section 404 permit and Section 401 Water Quality Certification. All work proposed in jurisdictional waters of the U.S. shall be authorized under these permits, and the work shall comply with the general and regional conditions of the permits. In areas where disturbance to jurisdictional waters or wetlands occurs, SDG&E shall implement mitigation consistent with the terms of a CWA Nationwide Permit and/or the FR on Compensatory Mitigation for Losses of Aquatic Resources (73 C.F.R. 19594). Compensatory mitigation may include creation, re-establishment, or enhancement of wetlands in the project area or at an off-site location.

Compensatory mitigation may also include purchase of credits at an approved mitigation bank or contribution to an approved in-lieu fee program.

Operation and Maintenance

Operation and maintenance activities for the proposed project will be conducted in the same manner as the existing facilities. Operation and maintenance activities are expected to decrease slightly as a result of the proposed project due to the lower maintenance requirements of the replacement steel poles relative to the existing wood poles and the reduction of the total number of poles. As a result, there will be no increase in the number of vehicle trips and activities, and no increase in the potential to impact vernal pool habitats as a result of operation and maintenance of the proposed project. Therefore, no additional impacts to jurisdictional waters (e.g., vernal pools) are anticipated as a result of the proposed project.

d. Would the project 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? (Less than Significant with mitigation)

As described in Section 2.4.1, the proposed project is located largely within open space. Drainage features in the vicinity of the proposed project could be used by mammals as a movement corridor; however, no permanent structures as a result of construction activities would be placed in drainages. Construction activities may temporarily disrupt movement of wildlife species, as species may avoid areas of active construction although wildlife would be able to move around the temporary work areas during construction and after construction is complete. Construction may also impact breeding wildlife through distractions and noise.

Impacts to wildlife would be minimized by implementation of Mitigation Measures BIO-2, BIO-3, BIO-4, BIO-9, BIO-10, BIO-13, and BIO-24. These mitigation measures would reduce potential impacts to movement or breeding of wildlife species to a level that is less than significant with mitigation.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (No Impact)

The proposed project is located within the cities of San Diego and Chula Vista, and in unincorporated San Diego County. Based on a review of applicable local policies, the proposed project would not conflict with local policies, which include the City of San Diego MSCP Subarea Plan and the City of Chula Vista MSCP Subarea Plan. The proposed project is also consistent with relevant policies in the County of San Diego's General Plan. The proposed project is not a new construction project, and impacts within the City of San Diego's MHPA and the Otay Ranch Preserve are temporary in nature and consistent with the policies outlined in those plans. The proposed project would not conflict with the monitoring, management, or maintenance of either the City of San Diego's MHPA or the Otay Ranch Preserve. In addition, the CPUC has exclusive jurisdiction over the siting and design of the proposed project. As such, projects under CPUC jurisdiction, including the proposed project, are exempt from local land use and zoning regulations and permitting. Because these local policies or ordinances do not apply to the proposed project, there would be no impact. Therefore, the construction and operation of the proposed project would not conflict with any environmental plans, policies, or regulations adopted by agencies with jurisdiction over local regulations related to biological resources.

Additional detail on the proposed project's consistency with existing land use regulations is provided in Section 2.10, Land Use and Planning.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (No Impact)

The CPUC has prescribed mitigation measures that meet the SDG&E LE HCP and/or Subregional NCCP requirements in the event that the current NCCP cannot be relied on for mitigation. These measures were designed to be consistent with the NCCP; therefore, there would be no impact.

The proposed project would also occur within the San Diego MSCP, and portions of the proposed project would occur within the subarea plans for the County of San Diego, City of San Diego, and City of Chula Vista. The proposed project also occurs within SDG&E's Low-Effect HCP for the QCB. In the event of a conflict, the SDG&E Subregional NCCP would supersede other applicable plans. The proposed project would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP, thus there would be no impact.

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2.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.5.1 Setting

Environmental Setting

Prehistory

The prehistory of coastal and inland southern California is varied and rich, with occupations extending from at least 12,000 years ago to historic contact. Numerous chronological sequences have been devised to assess cultural changes within various areas of southern California in the past 75 years or more (Moratto 1984). The framework used here is divided into three major periods: Paleoindian Period (ca. 9000–6000 B.C.), Archaic Period (6000 B.C.–A.D. 500), and Late Prehistoric Period (A.D. 500–Historic Contact).

Paleoindian Period (ca. 9000–6000 B.C. [11,500-8000/7500 B.P.]

Although occupation in California began as early as 8,000 to 11,000 years ago, evidence for the presence of humans prior to about 6000 B.C. (or 8,000 years Before Present [B.P.]) is relatively sparse and scattered throughout the State. The earliest accepted dates for human occupation of southern California come from sites along the coast, particularly from two of the Northern Channel Islands located off the coast from Santa Barbara. The adaptations reflected in the archaeological record from these sites are referred to as a Paleo-Coastal Tradition that was dependent on marine resources (Jones 1991; Jones et al. 2002). However, an increasing frequency of radiocarbon dates show occupation of the Southern Channel Islands, as well as the coastal areas of Orange and San Diego counties, as early as 9,000 to 10,000 years B.P. (Byrd and Raab 2007:219). Paleoindians who lived away from the coast in California are reflected in what is termed the Western Pluvial Lakes Tradition. These Paleoindians practiced a diverse mixture of hunting and gathering, and were not dependent on large Pleistocene megafauna as in other parts of North America at the time. As indicated by the name, Western Pluvial Lakes Tradition, the major occupational emphasis of peoples living during this period was on Pleistocene lakeshores in the now-arid areas of southern California, the western

Great Basin, and along the Cascade–Sierra Nevada uplift that forms California’s eastern border (see Moratto 1984:90–92).

Archaic Period (6000 B.C.–A.D. 500 [8000/7500-1500 B.P.])

Subsistence patterns shifted around 6000 B.C., coincident with the gradual desiccation associated with the onset of the Altithermal, a warm and dry period that lasted about 3,000 years. The Archaic Period generally is characterized by an ecological adaptation to collecting, which resulted in an increased frequency of ground stone implements. The Early Archaic Period in southern California is generally referred to as the Milling Stone Period (Wallace 1978), with sites common in the southern California coastal region between Santa Barbara and San Diego, and at many near-coastal and inland locations. A distinction is made between coastal (La Jolla complex) and inland (Pauma complex) cultures within San Diego County during the entirety of the Archaic Period (cf. True 1958), although considerable debate exists as to the relationship between the San Dieguito, La Jolla, and Pauma complexes within the San Diego County subregion (see Laylander 2017). Regardless of the San Dieguito debate, archaeological evidence from both inland and coastal sites in San Diego County indicates a long period of cultural continuity during the entire span of the Archaic Period.

Late Prehistoric Period (A.D. 500–Historic Contact [1500 B.P.-Historic Contact])

The Late Prehistoric Period in southern California is characterized by a number of changes in subsistence, foraging, and land use patterns, which reflect patterns of Native American groups in the historic period. Small projectile points become dominant during this period, signifying use of the bow and arrow. The period also witnessed an increased emphasis on plant collecting and processing, population size and settlement growth, the establishment of permanent villages, expansion of trade networks, and, in some areas, rock art. Two cultural complexes have been defined for San Diego County during the Late Prehistoric Period: the San Luis Rey II complex in the north and the Cuyamaca complex in the south (Moratto 1984). The San Luis Rey II complex likely represents the forebears of the Takic-speaking Luiseño/Juaneño who inhabited northern San Diego County during the ethnohistoric period. The forebears of the Yuman-speaking Kumeyaay (Ipai and Tipai geographic divisions) of ethnographic and modern times may be represented by the Cuyamaca complex.

Ethnography

At the time of European contact, most of present-day Imperial and San Diego Counties were populated with Yuman-speaking peoples, collectively referred to today as the Kumeyaay, and called Diegueño by the Spanish (Kroeber 1925; Luomala 1978). The Kumeyaay language consists of three main dialects that correspond to the geographic divisions of the Kumeyaay. These dialects are Ipai, Kumeyaay, and Tipai (Shiple 1978). The Ipai (formerly Northern or Western Diegueño) inhabited the central portion of San Diego County, whereas the Kamia (formerly Eastern Diegueño) occupied the remaining southern part of San Diego County and eastward into Imperial County and the California portion of the Colorado Desert. Tipai (formerly Southern Diegueño) territory included Jamul in San Diego County, extending southward deep into Baja California.

Kumeyaay territory was divided among bands that generally controlled 10 to 30 miles within a drainage system (Shipek 1982:297). The entire band aggregated in winter villages, which were placed in sheltered valleys near reliable sources of water (Luomala 1978:597). All of the Ipai and many of the Tipai camped in coastal valleys during certain times of the year, when they gathered coastal resources. Land resources generally belonged to individual bands, with few areas considered “tribal” or open to anyone (Shipek 1982:301).

Numerous reservations were formed after the mid-1870s through the 1890s. These include Barona Ranch, Campo, Cuyapaipe, Inaja and Cosmit, Los Coyotes (shared with Mountain Cahuilla), Manzanita, Mesa Grande, Santa Ysabel, Sycuan, and Viejas (Capitan Grande) (California Indian Assistance Program 2003). The Jamul Indian Village reservation was established in 1912, but did not become federally recognized until 1981 (Jamul Indian Village 2017). In the 1920s, many Kumeyaay became members of the Mission Indian Federation, which was organized to fight for self-rule on southern California reservations. Today 13 Kumeyaay tribes are joined together as the Kumayaay Nation.

Historic Context

Post-Contact history for the State of California is generally divided into three periods: the Spanish Period (1769–1822), Mexican Period (1822–1848), and American Period (1848–present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish Period in California begins with the establishment in 1769 of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823 throughout the state. Independence from Spain in 1821 marks the beginning of the Mexican Period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican-American War, signals the beginning of the American Period when California became a territory of the United States.

Spanish Period (1769-1822)

Spanish explorers made sailing expeditions along the coast of southern California between the mid-1500s and mid-1700s. In search of the legendary Northwest Passage, Juan Rodríguez Cabrillo stopped in 1542 at present-day San Diego Bay. Much of the present California and Oregon coastline was mapped and recorded in the next half-century by Spanish naval officer Sebastián Vizcaíno. The Spanish crown laid claim to California based on the surveys conducted by Cabrillo and Vizcaíno. Inland exploration and colonization of Alta California by Spain was not a priority for more than 200 years. The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California’s “historic period.” Portolá established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California (Kyle et al. 2002).

In July 1769, Franciscan Friar Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions that would be established in Alta California between 1769 and 1823. The series of 21 missions paralleled the California coastline between San Diego and Sonoma. A second mission in San Diego County, Mission San Luis Rey de Francia, was founded near present-day Oceanside in 1798. All of the missions contained churches, workshops, storehouses, soldiers’ barracks, and quarters for Native American neophytes, who were used as labor. In San Diego, 1,400 Native Americans were associated with the mission by 1797. The cattle and horses raised on the pastures adjacent to the first mission led to the eventual expansion of ranching to other areas and missions within San Diego County and beyond.

Mexican Period (1822-1848)

After more than a decade of intermittent rebellion and warfare, New Spain (Mexico and the California territory) won independence from Spain in 1821. Extensive land grants were established in the interior during the Mexican Period, in part to increase the population away from the more settled coastal areas where the Spanish had concentrated their colonization efforts. At the same time, the influence of the California missions waned in the late 1820s through the early 1830s. Following adoption of the Secularization Act of 1833, the Mexican government privatized lands owned by the California missions, redistributing them to private, non–Native American ranchers through several hundred land grants.

1 During the Mexican Period, the large ranchos became important economic and social centers. This included
2 the Rancho Milijo, which covered 30 square miles from the ocean to the Tia Juana mountains and contained
3 Otay Valley and Mesa. Rancho Milijo was granted to Santiago Emilio Arguello in 1833 (Schoenherr 2017).

4 *American Period (1848-Present)*

5 War in 1846 between Mexico and the United States ended with the Treaty of Guadalupe Hidalgo, signed
6 in 1848, ushering California into its American Period. California became one of the United States with the
7 Compromise of 1850. San Diego County, at first stretching from the bay east to the Colorado River, was
8 designated upon statehood and formally organized in 1852. Later, portions of San Diego County were
9 carved out to create part of Riverside County in 1893 and Imperial County in 1907.

10 The California Southern Railroad (a subsidiary of the Santa Fe Railway system) connected the Los Angeles
11 area through Oceanside with San Diego in 1885. Arrival of the Southern Pacific, Santa Fe, and connecting
12 lines throughout southern California in the 1870s and 1880s brought economic opportunity and
13 exponentially increased the state's population, a combined economic and cultural phenomenon widely
14 identified as the Boom of the Eighties. The town of El Centro was linked directly with San Diego in 1919
15 with construction of the San Diego and Arizona Railway.

16 *San Diego County*

17 Successful Gold Rush merchant and land speculator Alonzo E. Horton moved from San Francisco to San
18 Diego in 1867, purchased 960 acres adjacent to the bay south of Old Town, and laid out an "addition" for
19 San Diego's new town site. The fast-growing city was re-incorporated in 1872, and within a few years San
20 Diego became the largest California city south of Los Angeles. Beginning in the 1870s, many residents of
21 San Diego County commonly lived on farmsteads, often forming rural communities with clusters of other
22 nearby farmsteads; Otay Mesa is one example of these late 19th century communities.

23 San Diego Bay first harbored U.S. Navy ships in 1898, and San Diego County thereafter hosted several
24 major naval installations, accelerating after construction of the Pacific fleet's coaling station in 1907. The
25 Navy added its first Naval Air Station on North Island in 1917, and during World War II the city and bay
26 became a major center of the aircraft industry and naval aviation. At the northwestern extent of the county,
27 Marine Corps Base Camp Pendleton was established on the coast in 1942 to train Marines for the war. After
28 the war, many personnel that had been stationed in San Diego County returned to the area with their families
29 to create the next population and housing boom (Davidson 1955).

30 Outside the City of San Diego, the earliest farmers and farming communities owned the most productive
31 land and prospered well into the 1920s. Many of the county's smaller agricultural tracts disappeared in the
32 1920s and 1930s, and some were incorporated into a few large agricultural tracts. The associated decline in
33 cattle ranching was further exacerbated by the creation of the Cleveland National Forest in 1908. Developed
34 to protect the San Diego, Orange, and Riverside County watershed, the United States Forest Service placed
35 strict guidelines on the number of cattle permitted to graze the forest lands and on burning vegetation to
36 improve forage quality. Still, beef production remained one of the more important agricultural industries in
37 San Diego throughout the 1930s and 1940s.

38 The key industries in the county include agriculture, the military and homeland defense industry, innovation
39 technology (biomedical, software, telecommunications), international trade, manufacturing, and tourism
40 (City-Data.com 2017). Of these, manufacturing, including shipbuilding and repair, production of toys and
41 sporting goods, computers, metals, and industrial machinery, contributed the most to the county's gross
42 national product in 2002. Agricultural production in the county now focuses on specialized crops (e.g.,
43 avocados, exotic flowers, nursery and decorative plants). San Diego County has the twelfth-largest farm

economy in the U.S., with more small farms (less than 10 acres in size) than any other county in California (San Diego Farm Bureau 2017).

Paleontology

Paleontological resources (i.e., fossils and fossiliferous deposits) are considered nonrenewable scientific resources that provide information about the history of life on earth. Paleontological resources are the remains and/or traces of prehistoric life, exclusive of human remains, and including the localities where fossils were collected and the sedimentary rock formations from which they were obtained/derived. They can include bones, teeth, soft tissue, shells, wood, leaf impressions, footprints, burrows, and microscopic remains. Fossils are typically preserved in sedimentary rock, but can also be found in some volcanic rocks and low-grade metamorphic rocks. In general, paleontological resources are considered to be older than the middle Holocene (i.e., older than about 5,000 years), and therefore do not include materials associated with archaeological resources; the boundaries of archaeological sites are defined by the extent of the resource, whereas paleontological sites are defined by the extent of the entire rock unit that is known to contain or has the potential to contain significant paleontological resources (SVP 2010)

As described in the Society of Vertebrate Paleontology's (SVP) Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources, the paleontological potential of a rock unit can be determined based on review of available geological and paleontological literature, geologic maps, and records of fossil localities maintained by institutions (e.g., museums and universities). The SVP defines "significant paleontological resources" as fossils and fossiliferous deposits consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic (the study of decaying organisms over time and how they become fossilized), taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. The SVP describes the paleontological potential of a rock unit as having either a "high", "undetermined", "low", or "no potential" for containing significant paleontological resources. In areas determined to have a high or undetermined potential for significant paleontological resources, the SVP recommends implementing a program to mitigate adverse impacts to the potential or known fossil resources (SVP 2010).

The following description of local geology and paleontology resources along the project alignment is based on a report prepared by the San Diego Natural History Museum (SDNHM) Department of PaleoServices (SDNHM Department of PaleoServices. 2013). This report included review of paleontological locality and specimen records held in the Department of Paleontology at the SDNHM and included characterization of paleontological sensitivity ratings for each of the proposed pole location areas and a summary of all the known fossil localities (where fossils have been recovered) within one mile of the project alignment.

The proposed project alignment is underlain by Tertiary and Quaternary sediment deposits, including the following (the paleontological sensitivity of each formation is shown in parentheses):

- Late Pleistocene to Holocene-age (200,000 years to recent) older terrace deposits (moderate paleontological sensitivity) and young alluvial floodplain deposits (low paleontological sensitivity);
- Middle to late Pleistocene-age (500,000 years old to 10,000 years old) old alluvial floodplain deposits (moderate paleontological sensitivity);
- Early to middle Pleistocene-age (0.5 to 1.5 million years old) Lindavista Formation (moderate paleontological sensitivity);
- Late Oligocene (29 million years old) Otay Formation

- Upper sandstone member (high paleontological sensitivity);
- Middle gritstone member (unspecified by SDNHM Department of PaleoServices, 2013, but assumed to be high paleontological sensitivity based on association and proximity to upper sandstone member);
- Basal fanglomerate member (moderate paleontological sensitivity); and
- The middle Eocene-age (43 million years old) Mission Valley Formation (high paleontological sensitivity).

Research Methods

The project study area for cultural and paleontological resources was defined as the proposed project's permanent and temporary work area footprint. The study area included an approximately 300-foot-wide corridor comprised of a 150-foot buffer to each side of the powerline centerline, and a 30-foot buffer to either side of proposed project access roads. Also included in the study area were proposed staging areas, stringing sites, guard structures, and helicopter landing sites.

All aspects of the cultural resources study were conducted in accordance with the U.S. Secretary of the Interior's Standards and Guidelines for Identification of Cultural Resources (48 CFR Parts 44720–44723). Resource documentation also followed the guidance outlined in Instructions for Recording Historical Resources (Office of Historic Preservation 2011). Methods employed for the proposed project consisted of pre-field research, Native American consultation, fieldwork, and report preparation. In conjunction with prehistoric and historic overviews, previous investigations and historic maps provided background information for assessing cultural sensitivity and identifying the types of sites likely to be located within the project study area.

California Historical Resources Information System Records Search

A record search was conducted in March 2010 and July 2014 by the South Coastal Information Center of the California Historical Resources Information System (CHRIS) at San Diego State University. The purpose of the record search was to identify the presence of any previously recorded cultural resources within the project's original study area, and to determine if any portions of the original project study area had previously been surveyed for cultural resources. The record search identified 34 previously recorded archaeological sites within the project study area. These included 28 prehistoric sites, four historic-era sites, and two sites with both prehistoric and historic-era components (e.g., dual component sites). One historic-era house with outbuildings had also been recorded. One of the prehistoric sites (CA-SDI-9976) had previously been evaluated and determined eligible for the California Register of Historical Resources (CRHR).

Paleontological Resources Records Search

As described above, the information on the geologic setting and the potential presence of paleontological resources in this document was primarily based on a records search conducted by the SDNHM PaleoServices Department (including a search for records of fossil finds within 1 mile of the proposed project alignment). No paleontological resource field surveys were conducted.

Native American Consultation

The Native American Heritage Commission (NAHC) was contacted in April 2010 for a search of the sacred lands files for the project study area and a list of individuals who might have additional knowledge about

tribal resources in the project area. The NAHC responded on April 28, 2010, stating that sacred land files failed to identify any Native American cultural resources in the project area, but noting that resources had been recorded in the vicinity. The NAHC also provided a list of knowledgeable Native Americans in the region. A second request was made to the NAHC on May 28, 2015, and a response was received on June 19, 2015.

The 15 individuals identified by the NAHC in their 2015 response were contacted by letter mailed June 26, 2015 (see **Table 2.5-1**). The letters were intended to inform the individuals and organizations about the proposed project, to inquire whether they knew of any unrecorded Native American cultural resources or other areas of concern within or adjacent to the study area, and to solicit comments, questions, or concerns with regard to the proposed project. A proposed project location map was included with each letter. No responses have been received from any of those contacted, to date.

Table 2.5-1. Native American Requests for Comments and Concerns

Organization/Tribe	Name of Contact	Letter Date	Follow-up Phone Call	Consultation Actions
Barona Group of the Capitan Grande	Ms. Sheilla Alvarez	06/26/2015	07/23/2015	Left voicemail
Barona Group of the Capitan Grande	Mr. Clifford LaChappa, Chairperson	06/26/2015	07/23/2015	Left message with receptionist
Ewiiapaayp Tribal Office	Mr. Will Micklin, Executive Director	06/26/2015	07/23/2015	Left voicemail
Ewiiapaayp Tribal Office	Mr. Robert Pinto, Sr., Chairperson	06/26/2015	07/23/2015	Left voicemail
Inaja Band of Mission Indians	Ms. Rebecca Osuna, Chairperson	06/26/2015	07/23/2015	No message or answering service
Inter-Tribal Cultural Resource Protection Council	Mr. Frank Brown, Coordinator	06/26/2015	07/23/2015	Left voicemail
Jamul Indian Village	Mr. Raymond Hunter, Chairperson	06/26/2015	07/23/2015	Left voicemail for new Chairperson, Erica Pinto.
Kumeyaay Cultural Historic Committee	Mr. Ron Christman	06/26/2015	07/23/2015	No message or answering service
Kumeyaay Cultural Repatriation Committee	Mr. Steve Banegas, Spokesperson	06/26/2015	07/23/2015	Left voicemail
Kumeyaay Cultural Repatriation Committee	Ms. Bernice Paipa, Vice Spokesperson	06/26/2015	07/23/2015	No phone number listed; No response as of 5/17/2016

Organization/Tribe	Name of Contact	Letter Date	Follow-up Phone Call	Consultation Actions
Kumeyaay Diegueno Land Conservancy	Mr. Kim Bactad, Executive Director	06/26/2015	07/23/2015	Spoke with Lisa at the conservancy, she had the mailed letter but had not reviewed the project yet. No phone number listed; No response as of 5/17/2016.
Sycuan Band of Kumeyaay Nation	Ms. Lisa Haws, Cultural Resources Manager	06/26/2015	07/23/2015	Left voicemail
Sycuan Band of Kumeyaay Nation	Mr. Cody J. Martinez, Chairperson	06/26/2015	07/23/2015	Left voicemail
Viejas Band of Kumeyaay Indians	Ms. Julie Hagen, Environmental Coordinator	06/26/2015	07/23/2015	Left voicemail
Viejas Band of Kumeyaay Indians	Mr. Anthony R. Pico, Chairperson	06/26/2015	07/23/2015	Left voicemail for new Chairperson, Mr. Robert J. Welch, Sr.

1 A request was also made to the NAHC on March 14, 2016 for a local tribal consultation list in order to
2 notify interested tribes about the proposed project pursuant to PRC 21080.3.1(d). The NAHC responded
3 that same day, and the CPUC sent proposed project notification letters to all those listed on March 21, 2016.
4 Tribes with a traditional and cultural affiliation with the proposed project area who were contacted are listed
5 in **Table 2.5-2**. Copies of all Native American correspondence are in Appendix K.

6 **Table 2.5-2. Native American Consultation for PRC 21080.3.1(d)**

Organization/Tribe	Name of Contact	Letter Date	Consultation Actions
Campo Band of Mission Indians	Mr. Ralph Goff, Chairperson	03/21/2016, via certified mail.	No response as of 05/18/2016.
Iipay Nation of Santa Ysabel	Mr. Clint Linton, Director of Cultural Resources	03/21/2016, via certified mail.	No response as of 05/18/2016.
Iipay Nation of Santa Ysabel	Mr. Virgil Perez, Chairperson	03/21/2016, via certified mail.	No response as of 05/18/2016.
Jamul Indian Village	Ms. Erica Pinto, Chairperson	03/21/2016, via certified mail.	No response as of 05/18/2016.
Kwaaymii Laguna Band of Mission Indians	Ms. Carmen Lucas	03/21/2016, via certified mail.	No response as of 05/18/2016.

Organization/Tribe	Name of Contact	Letter Date	Consultation Actions
Sycuan Band of the Kumeyaay Nation	Mr. Cody J. Martinez, Chairperson	03/21/2016, via certified mail.	No response as of 05/18/2016.
Viejas Band of Kumeyaay Indians	Mr. Robert J. Welch, Sr., Chairperson	06/26/2015	The tribe requested consultation on the proposed project via letter dated April 5, 2016. The tribe requested a copy of the cultural resources report in order to make an informed decision about the project. The reports were sent on May 18, 2016. A follow up conference call was held on October 25, 2017.

1

2 The Viejas Band of Kumeyaay Indians was the only tribe to request consultation within the required 30-
3 day time frame stipulated in PRC 21080.3.1(b)(2). The CPUC followed up with the Viejas Band through
4 several phone calls and emails with Ms. Julie Hagen, who was the designated contact for the tribe. Copies
5 of the cultural resources reports prepared for the proposed project were forwarded to Ms. Hagen on May
6 18, 2016, at her request. A follow up call was made to Ms. Hagen on July 19, 2016 to ensure that she
7 received the reports and to discuss any concerns of the tribe. Ms. Hagen was not available and a message
8 was left on her answering machine. A follow-up call was made to the tribe in October 2017 and it was
9 learned that Ernest Pingleton, the tribe's Tribal Historic Preservation Officer, was assigned as the contact
10 for Assembly Bill (AB) 52 consultations. A conference call was held on October 25, 2017 with Mr. Ray
11 Teran, Tribal Grants Administrator. Mr. Teran was participating in the call on behalf of Mr. Pingleton. The
12 purpose of the call was to provide an update on the proposed project, and to determine if the tribe had any
13 concerns. Mr. Teran requested that a Native American monitor be present for all ground disturbance, given
14 the known sensitivity of the proposed project area for Native American sites. He further noted that the
15 Jamul Indian Village is actually closer to the proposed project site, and that the Viejas Band would work
16 with the Jamul tribe to provide monitors. Mr. Teran was specifically asked if there were concerns about
17 Tribal Cultural Resources (TCRs) in the proposed project area, and he noted that the tribe is not aware of
18 any TCRs. Consultation is on-going, and the CPUC will continue consultation with the tribe until
19 consultation has been concluded pursuant to PRC 21080.3.2(b).

20 Field Survey

21 Initial archaeological pedestrian survey was conducted of the original project study area between March 17
22 through April 26, 2010 (Blotner and Clowery 2010). As the proposed project plans were refined, additional
23 survey was conducted in July and November 2014 (Tennesen and Gusick 2015). The results of these studies
24 indicated that 19 cultural resources had the potential to be impacted by the proposed project; these included
25 16 archaeological sites and three built environment resources, as listed in **Table 2.5-3**. One previously
26 recorded archaeological site, CA-SDI-8912, within a proposed staging area could not be relocated during
27 the field surveys, as the site location appeared to be covered with several feet of fill material. A second site,
28 W-170, was identified in a record from the San Diego Museum of Man, but there is little information about
29 the site other than the record form that notes it was a village site destroyed by a flood in 1916 (Tennesen
30 and Gusick 2015). The site was not relocated in the field during the survey efforts. In addition to the
31 resources listed in Table 2.5-3, 11 isolated resources were recorded. Other than a small segment of Otay

1 Mesa Road, the isolated artifacts consisted of one or two items of flaked stone, such as two flakes of
2 debitage, or one core and one flake of debitage.⁴

3 **Table 2.5-3. Cultural Resources within the Proposed Project Area**

Site Number	Site Type	Site Description	Existing TL 649 poles	National Register of Historic Places/California Register of Historical Resources Eligibility
CA-SDI-9970	Archaeological	Lithic scatter	2	Not eligible
CA-SDI-9975	Archaeological	Lithic scatter	5	Not eligible
CA-SDI-9976	Archaeological	Lithic scatter	3	Eligible
CA-SDI-9980	Archaeological	Lithic scatter	1	Not eligible
CA-SDI-9981	Archaeological	Lithic scatter	1	Not eligible
CA-SDI-10783	Archaeological	Lithic scatter	6	Not eligible
CA-SDI-10875	Archaeological	Lithic scatter	11	Not eligible
CA-SDI-11385H	Archaeological	Brown Field bombing range	6	Not eligible
CA-SDI-11386H	Built Environment	House and outbuildings	0	Not evaluated
CA-SDI-11952	Archaeological	Lithic scatter	1	Not eligible
CA-SDI-12337	Archaeological	Very large lithic scatter	15	Not eligible
CA-SDI-12940/14196	Archaeological	Lithic scatter with shell and rock alignments	2	Not eligible
CA-SDI-14178	Archaeological	Lithic scatter	1	Not eligible
CA-SDI-14186/26549	Archaeological	Lithic scatter with shell	3	Not eligible
CA-SDI-14194	Archaeological	Lithic scatter	3	Not eligible
CA-SDI-14195	Archaeological	Lithic scatter	0	Not eligible
CA-SDI-14199	Archaeological	Lithic scatter	6	Not eligible
CA-SDI-19922H	Built Environment	Metal/wood structure and trough	0	Not evaluated
CA-SDI-21507	Archaeological	Lithic scatter	0	Not eligible
TL-649	Built environment	Transmission line	n/a	Not eligible

4 *Source: Tennesen and Gusick 2015*

5 Fifteen of the 16 archaeological sites listed in Table 2.5-3 were subject to sub-surface archaeological testing
6 in 2014 to determine whether any of the sites were eligible for listing in the CRHR. Archaeological testing
7 focused on those areas within sites that were identified by SDG&E as possible locations for replacement

⁴Debitage refers to the waste flakes that result during the manufacture of flaked stone tools, such as arrow points or knives. Cores are the cobbles from which large flakes are taken to be shaped into tools.

poles or access road modifications. Site CA-SDI-996 was not tested because it had already been determined eligible for the CRHR. Neither of the built environment sites (CA-SDI-11386H and CA-SDI-19922H) were evaluated because they do not contain archaeological deposits and because replacement poles would not impact the structures associated with the resources (Tennesen and Gusick 2015).

Sub-surface testing revealed that all of the 15 sites tested had been previously disturbed and lacked subsurface deposits. As a result, it appears that none of the sites likely contain information important to the prehistory or history of California and are, therefore, not eligible for listing in the CRHR (Tennesen and Gusick 2015).

Built Environment Studies

As listed above in Table 2.5-3, two resources of the built environment were recorded during the cultural resources inventory: CA-SDI-11386H and CA-SDI-19922H. CA-SDI-11386H includes an uninhabited residence and a round barn described as a “twenty-sided quail farm structure” (Blotner 2010a). The residence is about 80 feet from Pole No. 26, while the barn is approximately 300 feet from Pole No. 26. According to the site record update, review of historic aerial photography and topographic maps suggests that the barn was constructed pre-1920s while the house is somewhat younger. The second site, CA-SDI-19922H, is comprised of a concrete trough and a standing, single-dimension structure of wood and metal referred to as a “cattle brusher” on the site record (Blotner 2010b). This resource is about 50 feet from Pole No. 45.

Neither site has been formally evaluated for the National Register of Historic Places (NRHP)/CRHR eligibility. The seemingly unique construction of the quail barn at CA-SDI-11386H suggests that it is potentially eligible for the NRHP/CRHR, and is treated as an eligible resource for the purposes of this proposed project. The house, as part of this resource, is also treated as potentially eligible. The concrete trough recorded at CA-SDI-19922H is a ubiquitous feature on ranches of all kinds. The associated cattle brush, while somewhat unusual in design, is not a unique feature, as such implements are, and have been, commonly used by ranchers today and in the historic past in California and beyond. The commonality and limited research potential of these features render CA-SDI-19922H ineligible for the NRHP/CRHR.

The existence of Tie Line 649 (TL 649) dates to 1916. Because the resource, including some of the poles scheduled to be replaced for the proposed project, is over 50 years old, the transmission line was evaluated for CRHR eligibility (Weishar, et al. 2015).

TL 649 runs approximately 7 miles on a roughly east-west axis, beginning at the Otay Substation in the west and terminating at the Otay Lake Substation on the east. It generally follows the south side of the Otay River and passes 0.75 mile north of Brown Field, a military airstrip. The line contains two spur lines that extend south of the line. The western spur is approximately 2 miles long, and terminates at the San Ysidro Substation. The easternmost spur is approximately 2 miles long, ending at the Border Substation; it passes directly west of the Donovan Correctional Facility. Although the proposed project includes only an approximately 7-mile segment of TL 649, including 5 miles of the line located between Black Coral Way to near the Donovan Correction Facility, and the 2-mile-long easternmost spur (refer to Figure 1.4-2, Proposed Project Components); the entirety of TL 649 was evaluated for CRHR eligibility, and as a CEQA historic resource. TL 649 was also evaluated for NRHP eligibility, according to the County of San Diego Resource Protection Ordinance (RPO), and for the County of San Diego’s Local Register of Historical Resources.

Weishar, et al. 2015 describe the evolution of TL 649 as follows:

[T]he first poles associated with TL 649 were erected in 1916 along the main line. Between 1916 and 1970, the main line was the sole component of TL 649. The utility poles dating to 1916 were all wood construction and were between 30 and 45 feet in height. These poles are documented on the main line north and east of Brown Field. During the 1920s and 1930s, 15 additional poles were added to TL 649. These were 35 and 40 feet in height, constructed of wood, and generally adjacent to the 1916-era poles. Between 1940 and 1960, 50 poles were introduced into the transmission line; 26 of which were installed in 1955. This enhancement also included upgrading of line capacity. Pole height remained between 35 and 45 feet with a couple of poles reaching 65 feet. Further improvements to TL 649 came in 1947 with construction of the Otay Substation, forming the western terminus of the transmission line. In 1962 a majority of the poles dating to 1916, 1920s, 1930s, and 1940s were removed and replaced with taller versions. An additional 23 poles were also constructed. These new poles were significantly taller than their predecessors, reaching 75 feet in height. These poles comprise most of the main line and coincided with the construction of the Otay Lake Substation c. 1962.

In 1971–1972, SDG&E built the San Ysidro Substation. This western spur line extends north from the San Ysidro Substation to join the main line. According to SDG&E utility pole cards, poles existed prior to the substation on this spur, even as early as 1951 and were subsequently altered in the 1970s. It is not known where these earlier poles were transferring power from nor where. Currently, most of the western spur line is underground, with only a few modern wood and steel poles. It is not known when the line was put underground.

Construction on the eastern spur of TL 649 started in 1985 with construction of the Border Substation. Two years later, SDG&E installed 42 new utility poles which served to connect the Border Substation with the main line. Most of these wood poles are 65 and 70 feet high, though two poles are 85 feet high, making them the tallest poles in the transmission line. These two poles are at the junction of the eastern spur and the main line.

The evaluation of TL 649 determined that the resource has diminished integrity of design materials, craftsmanship, location, setting, feeling, and association, even though this property type is designed to be continually upgraded and components are meant to be replaced. Most of the original wood poles have been replaced, at least once, and the replacement poles are up to twice the size of the original poles. In addition, much of the western spur is now underground.

Research indicated that other transmission lines in the region were earlier in time and are longer in length, and are, therefore, better representations of early 20th century large-scale transmission lines. Furthermore, there is no evidence that a significant individual is associated with TL 649, and it does not embody the distinct characteristics of a type period, or method of construction, or represent a work of a master; in general wood transmission lines are a commonplace resource and lack innovation in design or ingenuity in conveying high voltage electricity. Lastly, being a common property type, the resource is unlikely to yield information important to history or prehistory. For these reasons, TL 649 does not appear to be eligible for listing in the CRHR, NRHP, the County of San Diego RPO, or the San Diego County Local Register of Historical Resources.

Tribal Cultural Resources

No TCRs have been identified within the proposed project study area, to date.

Paleontological Study

The number of existing poles in each paleontological sensitivity rating category are as follows:

- 41 existing poles are located in an area with a high paleontological sensitivity rating;
- 59 existing poles are located in an area with a moderate paleontological sensitivity rating; and
- 32 existing poles are located in an area with a low paleontological sensitivity rating.

Since activities at the staging areas would only disturb near-surface soils and would not be expected to result in impacts to paleontological resources, these areas were not included in the survey.

The SDNHM Department of PaleoServices' paleontological locality and specimen records indicate 26 fossil discovery sites located within 1 mile of the proposed project alignment. Three of these localities were discovered in late Pleistocene-age (500,000 to 10,000 years old), unnamed, non-marine terrace deposits. These localities produced fossilized remains of marine vertebrates (e.g., fish) and terrestrial vertebrates (e.g., horses). Thirteen localities were found in the near-shore marine deposits of Pliocene-age (2 million to 4 million years old) San Diego Formation (the San Diego Formation does not crop out within the Area of Potential Effects (APE), but is exposed in drainages to the south). These localities produced leaf impressions of plants (e.g., legumes, willow, oak, laurel, and flowering plants), shell and internal molds of marine invertebrates (e.g., snails, clams, tusk shells, branchiopods, and crabs), mineralized remains of marine vertebrates (e.g., fish, whales, and walrus), and fossilized remains of terrestrial vertebrates (e.g., birds, deer, camels, and tortoises). Eight localities were discovered in the fluvial deposits or the late Oligocene-age (29 million years old) Otay Formation. These localities produced internal molds of marine invertebrates (e.g., snails), and fossilized remains of terrestrial vertebrates (e.g., artiodactyls, rodents, snakes, and lizards). Two localities were found in the marine deposits of the Eocene-age (43 million years old) Mission Valley Formation. These localities produced shell material and internal molds of marine invertebrates (e.g., snails and clams) and fossilized remains of marine vertebrates (e.g., fish, rays, and sharks).

Regulatory Setting

Federal

National Historic Preservation Act of 1966

The proposed project does not have a federal nexus and, therefore, reference to the National Historic Preservation Act (NHPA) and other federal laws is provided here for informational purposes only. Enacted in 1966 and amended in 2000, the NHPA instituted a multifaceted program, administered by the Secretary of the Interior, to encourage sound preservation policies of the nation's cultural resources at the federal, state, and local levels. The NHPA authorized the expansion and maintenance of the NRHP, established the position of State Historic Preservation Officer, provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the goals of the NHPA, assisted Native American tribes in preserving their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP). Projects that involve federal funding or permitting (i.e., have a federal nexus) must comply with the provisions of the NHPA, as amended (16 U.S.C. 470f).

Cultural resources are considered during federal undertakings chiefly under Section 106 of the NHPA through one of its implementing regulations, 36 CFR 800 (Protection of Historic Properties), as well as the National Environmental Policy Act. Properties of traditional religious and cultural importance to Native Americans are considered under Section 101(d)(6)(A) of the NHPA. Section 106 states that federal agencies with direct or indirect jurisdiction over federally funded, assisted, or licensed undertakings must take into account the effect of the undertaking on any historic property that is included in or eligible for inclusion in

the NRHP, and that the ACHP must be afforded an opportunity to comment, through a process outlined in the ACHP regulations, in Title 36 CFR Part 800, on such undertakings.

Other federal laws pertaining to cultural resources include the Archaeological Data Preservation Act of 1974, American Indian Religious Freedom Act of 1978, Archaeological Resources Protection Act of 1979, and Native American Graves Protection and Repatriation Act of 1989.

Paleontological Resources Preservation Act

The Paleontological Resources Preservation Act (16 U.S.C Title 16, Chapter 1C), which became law in 2009, requires the U.S. Secretaries of the Interior and Agriculture to manage and protect paleontological resources on federal lands using scientific principles and expertise. The Paleontological Resources Preservation Act only applies to federal lands and does not affect private lands. It provides authority for the protection of paleontological resources on federal lands including criminal and civil penalties for fossil theft and vandalism. Since the proposed project alignment and temporary staging areas are located on lands under local jurisdiction (the County of San Diego, the City of San Diego, and the City of Chula Vista), the Paleontological Resources Preservation Act would not apply.

State

California Environmental Quality Act

California cultural resources laws and regulations are located in CEQA and the CEQA Guidelines, as well as the PRC. PRC Section 5097.2 requires responsible state agencies to determine whether a project area contains resources that include archaeological or paleontological sites, burial grounds or historical features. CEQA requires that state agencies determine whether the project has a significant effect on a unique archaeological resource or a historical resource, pursuant to Sections 21083.2 and 21084.1, respectively. Section 15064.5(b) of the CEQA Guidelines states that “a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.” Lead agencies must identify potentially feasible measures to mitigate significant adverse changes in the significance of a historical resource. Historical resources are those that:

- Are listed in, or determined to be eligible for listing in, the CRHR (PRC Section 5024.1(d));
- Are included in a local register of historical resources (PRC Section 5020.1(k)) or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g); or
- Are determined by a lead agency to be historically significant.

Eligibility criteria for CRHR are set forth in PRC Section 5024.1(c). A resource is eligible for CRHR if it:

- Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- Is associated with lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

A resource must retain adequate integrity to be eligible for listing in the CRHR. Integrity is the authenticity of a resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance. Integrity must be judged with reference to the particular criteria under which the resource is eligible for listing in the CRHR (14 CCR Section 4852[c]). Integrity assessments are generally made with regard to the retention of the following:

- 1 ▪ **Location.** Where the historic property was constructed or the place where the historic event
2 occurred.
- 3 ▪ **Design.** The combination of elements that create the historic form, plan, space, structure, and style
4 of a property. This includes organization of space, proportion, scale, technology, ornamentation,
5 and materials. This is applicable to larger properties for the historic way in which the buildings,
6 sites, and structures are related.
- 7 ▪ **Setting.** The physical environment of a historic property. It refers to the historic character of the
8 property. It includes the historical relationship of the property to surrounding features and open
9 space. These include topographic features, vegetation, simple manmade paths or fencing, and the
10 relationship between buildings, structures, or open space.
- 11 ▪ **Materials.** The physical elements that were combined during a particular period of time and in a
12 particular pattern or configuration to form the historic property.
- 13 ▪ **Workmanship.** The physical evidence of the crafts of a particular culture or people during a given
14 period in history. It may be expressed in vernacular methods of construction and plain finishes or
15 in highly sophisticated configuration and ornamental detailing.
- 16 ▪ **Feeling.** The property's expression of the aesthetic or historic sense of a particular period of time.
17 It results from the presence of physical features that, taken together, convey the property's historic
18 character.
- 19 ▪ **Association.** The direct link between an important historic event or person and a historic property.
20 A property retains association if it is the place where the event or activity occurred and is
21 sufficiently intact to convey that relationship to an observer. Like feeling, association requires the
22 presence of physical features that convey a property's historic character.

23 CEQA Guidelines Section 15064.5 also applies to unique archaeological resources, as defined in PRC
24 Section 21083.2(g). A unique archaeological resource is an archaeological artifact, object, or site for which
25 it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high
26 probability that it meets one of the following criteria:

- 27 1. The archaeological artifact, object, or site contains information needed to answer important
28 scientific questions, and there is a demonstrable public interest in that information; or
- 29 2. The archaeological artifact, object, or site had a special and particular quality, such as being oldest
30 of its type or the best available example of its type; or
- 31 3. The archaeological artifact, object, or site is directly associated with a scientifically recognized
32 important prehistoric or historic event or person.

33 A non-unique archaeological resource is an archaeological artifact, object, or site that does not meet the
34 above criteria. Impacts on non-unique archaeological resources and resources are not historical resources,
35 and thus receive no further consideration under CEQA.

36 AB 52, which was approved in September 2014 and which went into effect on July 1, 2015, requires that
37 state lead agencies consult with a California Native American tribe that is traditionally and culturally
38 affiliated with the geographic area of a proposed project, if so requested by the tribe. The bill, chaptered in

CEQA Section 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment.

Defined in Section 21074(a) of the PRC, TCRs are:

(1) Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:

a. Included or determined to be eligible for inclusion in the CRHR; or

b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under Section 21074 as follows:

(b) A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to newly chaptered Section 21080.3.2, or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TCRs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

Under CEQA Guidelines Section 15064.5, a project potentially would have significant impacts if it would cause substantial adverse change in the significance of one of the following:

1. A historical resource;

2. A unique archaeological resource;

3. Human remains (i.e., where Native American human remains are identified or likely within the project).

PRC Section 21084.1 indicates that a project may have a significant effect on the environment if it causes a substantial adverse change in the significance of a historical resource; the section further defines “historical resource” and describes what constitutes a “significant” historical resource.

Section 15064.5 of CEQA also assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed under PRC Section 5097.98.

As noted above, CEQA Section 21083.2 and CEQA Guidelines Section 15064.5 provide specific guidance on historical and unique archaeological resources and, under CEQA, resources called “historical resources” can be of historic or prehistoric age. It is possible that a paleontological resource could be determined to be a historical resource. Although CEQA does not define what constitutes “a unique paleontological resource,” the criteria defining a unique archaeological resource could be applied to define a unique paleontological resource.

Local

Because the CPUC regulates and authorizes the construction of investor-owned public utility facilities, the CPUC has exclusive jurisdiction over the siting and design of the proposed project. As such, projects under CPUC jurisdiction, including the proposed project, are exempt from local land use and zoning regulations and permitting. However, Section III.C of CPUC GO 131-D (planning and construction of facilities for the generation of electricity and certain electric transmission facilities) requires “the utility to communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any non-discretionary local permits.” As a result, SDG&E has taken into consideration all State and local plans and policies as they relate to cultural resources. Although County and other local policies are listed below, they are provided for disclosure purposes only.

County of San Diego Resource Protection Ordinance

The majority of development in the County is subject to the RPO (1991). This ordinance requires that cultural resources be evaluated as part of the County’s discretionary environmental review process and if any resources are determined significant under the RPO, they must be preserved. The RPO prohibits development, trenching, grading, clearing, and grubbing, or any other activity or use that may result in damage to significant prehistoric or historic site lands, except for scientific investigations with an approved research design prepared by an archaeologist certified by the Society of Professional Archaeologists.

Conservation Element of the San Diego County General Plan

The Conservation Element of the San Diego County General Plan (1975, amended 2000) provides policies for the protection of natural resources. These policies provide guidance for the preservation of cultural, historic, and paleontological resources.

San Diego County Local Register of Historical Resources

The San Diego County Local Register’s (2002) purpose is to develop and maintain, “an authoritative guide to be used by state agencies, private groups, and citizens to identify the County’s historical resources and to indicate which properties are to be protected, to the extent prudent and feasible, from substantial adverse change.” Sites, places, or objects, which are eligible to the NRHP or CRHR, are automatically included in the San Diego County Local Register. The eligibility criteria for the San Diego Local Register mirrors the criteria for the NRHP and the CRHR.

2.5.2 Environmental Impacts

Cultural resources include prehistoric archaeological sites, historic-era archaeological sites, TCRs, and historic buildings, structures, landscapes, districts, and linear features. Prehistoric archaeological sites are places where Native Americans lived or carried out activities during the prehistoric period, which is generally prior to the late 1700s. Historic-era archaeological sites reflect the activities of people after initial exploration and settlement in the region by the Spanish during the late 1700s, and by others later on. Native American sites can also reflect the historic era. Prehistoric and historic-era sites contain artifacts, cultural features, subsistence remains, and human burials.

Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils. This is determined by rock type, past history of the rock unit in producing significant fossils, and fossil localities that are recorded from that unit. Paleontological sensitivity is derived from the fossil data collected from the entire geologic unit, not just from a specific survey.

a. Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? (Less than Significant with Mitigation)

Archaeological site CA-SDA-9976, a Native American lithic scatter from the prehistoric era, was previously determined eligible for the NRHP/CRHR. Three existing wood poles of TL 649 are located within the site boundaries, and are expected to be replaced with three new steel poles; furthermore, road relocation and grading within the site is anticipated. Excavation for the new poles and road construction/grading has the potential to impact portions of the site that contribute to its eligibility.

Avoidance during construction is always the preferred treatment for historical resources (CCR 15126.4.b.3.A), however, this is not always possible. This is particularly problematic for linear projects that already pass through an archaeological site and the trajectory of the alignment cannot be modified significantly, such that the resource can be avoided. In these situations, CCR 15126.4.b.3.C considers data recovery an acceptable form of mitigation to treat the archaeological resources. Implementation of Mitigation Measure CR-1 would minimize potential impacts by preparing and implementing a data recovery treatment plan for CA-SDI-9976, thereby resulting in a less than significant impact.

It is possible that undiscovered historical resources of an archaeological nature may be present in the project area and, if present, these resources could be impacted during the ground-disturbing activities associated with the proposed installations. In order to maintain these potential impacts to a less-than-significant level, Mitigation Measure CR-2 and Mitigation Measure CR-3 would be implemented during construction. Therefore, impacts to historical resources that are archaeological sites would be less than significant with mitigation.

Mitigation Measure CR-1: Prepare and Implement an Archaeological Treatment Plan for Site CA-SDI-9976 Prior to Construction

Prior to proposed project construction, SDG&E shall prepare an archaeological treatment plan to conduct data recovery excavations in portions of Site CA-SDI-9976 scheduled to be impacted by construction. The treatment plan shall include provisions for monitoring at CA-SDI-9976 during construction by an archaeologist and a Kumeyaay Native American monitor. The implementation of the treatment plan shall be overseen by an archaeologist who meets the Secretary of Interior's professional standards in archaeology under contract to SDG&E, after approval of the plan by CPUC. A report shall be prepared to document the methods used for the data recovery program and the results of the study; the final report shall be submitted to the CPUC and filed with the South Coastal Information Center of the CHRIS.

Mitigation Measure CR-2: Conduct Cultural and Paleontological Resource Training to Workers Prior to Construction

Prior to initiation of ground-disturbing activities, SDG&E, contractor, and subcontractor proposed project personnel shall receive training about the kinds of archaeological and paleontological materials that could be present above and below the ground surface within the project area, and the protocols to be followed, should any such materials be uncovered during construction. Training materials shall be prepared by a professional archaeologist, paleontologist, or paleontological monitor. Training may be required during different phases of construction to educate new construction staff personnel. A sign-in sheet of contractor and

subcontractor project personnel who have received training shall be provided to the CPUC on a weekly basis.

Mitigation Measure CR-3: Immediately Halt Construction if Cultural Resources are Discovered, Evaluate All Identified Cultural Resources for Eligibility for Inclusion in the CRHR, and Implement Appropriate Mitigation Measures for Eligible Resources

The large number of archaeological sites recorded along the proposed project alignment points to the sensitivity of the region for these resources. As a result, initial construction ground disturbance within 50 feet of an archaeological site will be monitored by an archaeologist and Native American monitor under the direction of a qualified archaeologist who meets the Secretary of Interior's professional standards in archaeology. If the qualified archaeologist determines that the potential for cultural resources is low after initial ground disturbance, the qualified archaeologist may determine that monitoring is no longer required in that location. A monitoring plan will be prepared by SDG&E, and approved by CPUC, prior to the beginning of construction to clearly describe the responsibilities of the monitors and reporting protocols.

If cultural resources, such as structural features, unusual amounts of bone or shell, flaked or ground stone artifacts, historic-era artifacts, human remains, or architectural remains are encountered during project construction activities, work shall be suspended immediately at the location of the find and within a radius of at least 50 feet and SDG&E and the CPUC shall be contacted immediately. Isolates will not constitute a discovery.

All previously unevaluated cultural resources uncovered during construction within the project site shall be evaluated for eligibility for inclusion in the CRHR. If they cannot be avoided by project design, resource evaluations shall be overseen by an archaeologist who meets the U.S. Secretary of the Interior's professional standards in archaeology, history, or architectural history, as appropriate. If any of the resources meet the eligibility criteria identified in 36 CFR 60.4, or PRC Section 5024.1 or CEQA Section 21083.2(g), mitigation measures shall be implemented in accordance with CEQA Guidelines Section 15126.4(b) before construction resumes. If the resource is not eligible or is able to be avoided, construction may resume immediately.

For CRHR-eligible resources that would be impacted by project construction, mitigation measures for archaeological resources may include (but are not limited to) avoidance; incorporation of sites within parks, greenspace, or other open space; capping the site; deeding the site into a permanent conservation easement; or data recovery excavation. Mitigation measures for Native American resources will be implemented in consultation with a Native American monitor who has a traditional and cultural affiliation with the project area. Implementation of the mitigation would be required before resuming any construction activity in the vicinity of the finds.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? (Less than Significant with Mitigation)

Sixteen archaeological sites were identified, recorded, and evaluated for listing in the CRHR as part of the cultural resources studies conducted for the proposed project. Site CA-SDI-9976 has previously been determined eligible for the CRHR and is, therefore, a historical resource pursuant to Section 15064.5. Implementation of Mitigation Measure CR-1, discussed above, would render this impact less than significant with mitigation. Test excavations to determine CRHR eligibility found that none of the other 15 sites within the proposed project APE appear eligible for listing in the CRHR (Tennesen and Gusick 2015).

In addition, the 10 isolated archaeological items recorded during the study are not considered eligible for the CRHR due to their very limited data potential. As a result, there would be no impact to these resources.

As previously noted, it is possible that undiscovered archaeological resources could be present in the project area. If present, these resources could be impacted during the ground-disturbing activities associated with the proposed installations. Depending on the nature of the materials and the extent of the disturbance and/or damage, impacts could be significant. Implementation of Mitigation Measures CR-2 and CR-3 would maintain these potential construction-related impacts at a less-than-significant level.

c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (Less than Significant with Mitigation)

The entire project alignment is underlain by Tertiary and Quaternary sediment deposits, a portion of which are identified as having moderate and high paleontological sensitivity. Specifically, 41 existing poles would be located in an area with a high paleontological sensitivity rating and 59 existing poles would be located in an area with a moderate paleontological sensitivity rating. Since the replacement poles would be located near the existing poles, it is assumed that approximately 100 poles would be placed in locations of moderate to high paleontological sensitivity. Activities at the staging areas would only disturb near-surface soils and would not be expected to result in impacts to paleontological resources.

The types of excavation for pole replacement proposed includes:

- **Direct-bury installation.** A truck-mounted auger, track-mounted drill rig, hand tools, or similar methods would be used to excavate holes, approximately 4.5 feet in diameter, to a depth of approximately 6 to 16 feet bgs.
- **Pier foundation steel pole installation.** A truck-mounted auger, track-mounted drill rig, hand tools, or similar methods would be used to excavate holes, approximately 7 feet in diameter, to a depth of approximately 30 feet bgs.
- **Micro-pile foundation steel pole installation.** Four to 16 holes, approximately 6 to 9 inches in diameter, would be excavated 30 feet bgs in a circular pattern around each new pole location. Holes for micro-pile foundations would be drilled using a small drill rig or similar equipment operated from the top of an elevated platform.
- **Jackhammer installation.** The jackhammer would be powered by an air compressor that has a large bit on the end to break up the rock. The rock would then be removed from the pole hole using the auger or scooped into a bucket and pulled out of the hole. Jackhammering would require the use of drilling rigs, rock drills, and air compressors.
- **Drill rig installation.** Different-sized drill rigs may be used, depending on the amount of torque/weight deemed necessary and the amount of room available for larger-sized drill rigs at each work location. A down-the-hole hammer rock drill will sometimes be used, drilling several 2- to 3-inch-diameter- sized holes to depth throughout the entire drilled shaft. Once this has been accomplished, the contractor will then proceed to drill/extract the rock using various types of tooling, such as rock augers and core barrels. The equipment required for this alternative includes drilling rigs, rock augers, and rock drills.
- **Rocksplitting.** In areas where hard rock is encountered during excavation activities, a hydraulic rock drilling and splitting procedure (rock-splitting) may be used, depending on site-specific conditions. The procedure involves drilling a hole in the rock and inserting a non-blasting cartridge

of propellant. The cartridge is mechanically initiated by an impact generation device and results in controlled tensile crack propagation in the rock.

All the proposed excavation methods could be destructive of paleontological resources, which would be most likely to occur in those areas underlain by formations of moderate to high paleontological sensitivity. This is a potentially significant impact. Implementation of Mitigation Measure CR-2 and CR-4 would ensure that potential impacts to paleontological resources would be less than significant.

Mitigation Measure CR-4: Conduct Paleontological Monitoring During Excavations, and Immediately Halt Construction if Paleontological Resources are Discovered and Determine Their Significance.

A paleontological monitor shall work under the direction of a qualified paleontologist and shall be on-site to observe excavation operations that involve the initial excavation of previously undisturbed deposits for the 100 poles located within paleontologically sensitive (moderate to high) formations (i.e., late Pleistocene to Holocene-age older terrace deposits, middle to late Pleistocene-age old alluvial floodplain deposits, early to middle Pleistocene-age Lindavista Formation, all late Oligocene Otay Formation members, and the middle Eocene-age Mission Valley Formation). The information indicating which poles are located in these moderate to highly sensitive formations is included in Table 1 of the paleontological resources study conducted for this project (SDNHM Department of PaleoServices. 2013. Paleontological record search – SDG&E TL 649 Wood to Steel, Revised [eTS #8357]). A paleontological monitor works under the direction of a qualified paleontologist and is an individual who has experience in the collection and salvage of fossil materials. A qualified paleontologist is defined as an individual with experience meeting the SVP's guidelines (SVP, 2010).

In the event that fossils are encountered, the paleontological monitor shall have the authority to divert or temporarily halt construction activities in the area of discovery to allow recovery of fossil remains in a timely fashion. The paleontologist shall contact SDG&E's Cultural Resource Specialist and Environmental Project Manager at the time of discovery, who will then notify the CPUC of the find. The paleontologist, in consultation with SDG&E's Cultural Resource Specialist, shall determine the significance of the discovered resources. SDG&E's Cultural Resource Specialist and Environmental Project Manager shall concur with the evaluation procedures to be performed before construction activities would be allowed to resume. Because of the potential for recovery of small fossil remains, it may be necessary to set up a screen-washing operation on site. If fossils are discovered, the qualified paleontologist (or paleontological monitor) shall recover them along with pertinent stratigraphic data. Because of the potential for recovery of small fossil remains, recovery of bulk sedimentary-matrix samples for off-site wet screening from specific strata may be necessary, as determined in the field. Fossil remains collected during monitoring and salvage shall be cleaned, repaired, sorted, catalogued, and deposited in a scientific institution with permanent paleontological collections. A final summary report that outlines the results of the recovery program shall be completed and submitted to the CPUC within 60 days of the completion of monitoring. The report would discuss the methods used, stratigraphic section(s) exposed, fossils collected, and significance of recovered fossils.

d. Would the project disturb any human remains, including those interred outside of formal cemeteries? (Less than Significant with Mitigation)

Human remains are not known to exist within the proposed project area. However, if human remains are encountered during project construction, Mitigation Measure CR-5 and would be implemented during construction to ensure that potential impacts are kept to a less-than-significant level.

Mitigation Measure CR-5: Immediately Halt Construction if Human Remains Are Discovered and Implement Applicable Provisions of the California Health and Safety Code

If human remains are discovered during the project's construction activities, the requirements of California Health and Human Safety Code Section 7050.5 shall be followed. Potentially damaging excavation shall halt in the project site of the remains, with a minimum radius of 100 feet, and the San Diego County coroner shall be notified. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner, or their representatives, determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). Pursuant to the provisions of PRC Section 5097.98, the NAHC shall identify a Most Likely Descendent (MLD). The MLD designated by the NAHC shall have at least 48 hours to inspect the site and propose treatment and disposition of the remains and any associated grave goods. The project proponent shall work with the landowner and the MLD to ensure that the remains are treated with dignity and to come to a decision on the final disposition of the remains. If there are disputes between the landowner and the MLD, the NAHC will mediate the dispute to attempt to find a resolution.

e. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC section 21074. (Less than Significant Impact with Mitigation)

Consultation with tribes who have a traditional and cultural affiliation with the proposed project area did not result in the identification of TCRs; therefore, CPUC has determined that no TCRs are known to exist in the proposed project area. As a result, there would be no impact to these resources. If TCRs are identified within the proposed project area at a later date, the CPUC would work with the tribe(s) to avoid or mitigate any impacts that might affect TCRs. If TCRs are identified within the proposed project area, with implementation of Mitigation Measure CR-6, any potential impacts would be less than significant with mitigation.

Mitigation Measure CR-6: Prepare Treatment Plans for any TCRs Identified in the Proposed Project Area.

No TCRs are currently identified within the project area. If TCRs are identified in the proposed project area, the CPUC would consult with the Viejas Band and/or other tribes with a traditional and cultural affiliation to the resource, as appropriate, to develop feasible alternatives to avoid or substantially lessen the impacts on identified TCRs pursuant to PRC 21083.b.2, or in accordance with PRC 21084.3. If necessary, SDG&E would prepare the treatment plan once treatment has been agreed upon by the CPUC, SDG&E, the Viejas Band, and other tribes, as appropriate, for submittal to the CPUC.

2.6 Geology and Soils

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.6.1 Setting

Environmental Setting

The cities of San Diego and Chula Vista lie within the Peninsular Ranges geomorphic province, east of the foothills of the San Ysidro Mountains. This geomorphic province is characterized by a series of northwest trending valleys and mountain ranges composed of granitic rock intruding older metamorphic rock (CDC 2002). The Peninsular Ranges stretch about 900 miles southward from the Transverse Ranges north of the Los Angeles basin to the tip of the Baja Peninsula, west to the Pacific Ocean, and east to the Colorado Desert and the Salton Sea. Low-lying coastal plains flank the western side of the province. The proposed project is located in the coastal plain region along the Otay River and Otay Valley, approximately 6.4 miles east of the Pacific Ocean.

Geology

Regional geologic mapping indicates that the project alignment is underlain by a thick layer of Quaternary and Tertiary aged marine and alluvial sedimentary rocks that unconformably overlie basement rocks (California Geological Survey [CGS] 2002 and 2008a). The sedimentary rocks are composed of nearshore marine, beach, estuarine, lagoonal, and continental deposits that formed across a transitional zone from a marine to a non-marine environment. These sedimentary units are mostly sandstone, siltstone and claystone with layers of conglomerate with cobbles ranging up to 18 inches in diameter (CGS 2002 and 2008a). Notably, the formation includes layers of bentonitic (primarily composed of volcanic ash) claystone.

In 2014, a geotechnical investigation and corresponding report was completed by Geocon Inc.) to evaluate surface and subsurface soil and geologic conditions in the vicinity of each pole location (Geocon Inc. 2014). Geotechnical services included drilling 21 small-diameter exploratory borings to a maximum depth of approximately 41 feet and 11 seismic refraction lines where boring was not feasible due to environmental, overhead utility, or subsurface constraints. The subsurface evaluation generally confirmed the regional geologic mapping.

Portions of the project alignment are directly underlain by Quaternary-age alluvial sediment (mostly unconsolidated sand and gravel) and, in some areas, older terrace deposits. Colluvium (i.e., sediment derived from hillslope processes), including landslide deposits, have been mapped in the project area and were encountered in some of the geotechnical borings.

Approaching the eastern boundary of the proposed project and the San Ysidro Mountains, underlying geology shifts from non-marine sedimentary units (e.g., Otay Formation) to older, Jurassic metavolcanic rocks of mostly granodiorite and tonalite (CGS 2008). Although this type of bedrock was not encountered in the subsurface borings and trenches conducted during the geotechnical investigation (Geocon Inc. 2014), seismic refraction studies indicated its presence at depths possibly encountered in foundation construction. Geologic units underlying the proposed project as mapped by the CGS are summarized below in **Table 2.6-1**.

Table 2.6-1. Geologic Units Underlying the Proposed Project

Unit Symbol	Geologic Formation	Geologic Age (Epoch)	Description	Number of Poles within Formation* (Approximate)
Qal (Qya)	Young alluvial floodplain deposits	Holocene	Unconsolidated to consolidated silt, clay, sand, and gravel. Includes active deposition along small drainage channels	20
Qls	Landslide deposits	Holocene and Late Pleistocene	Landslide slump and rock fall deposits, unconsolidated to moderately well consolidated	2
Qt (Qoa)	Old alluvial floodplain deposits	Late to Middle Pleistocene	Moderately consolidated, poorly sorted floodplain deposits consisting of gravelly sand, silt, and clay.	63
Ql (Ovoa) (Qvop)	Very old interfingering marine and alluvial floodplain deposits	Middle to Early Pleistocene	Well consolidated, poorly sorted estuarine and colluvial deposits consisting of siltstone, sandstone, and conglomerate.	13

Unit Symbol	Geologic Formation	Geologic Age (Epoch)	Description	Number of Poles within Formation* (Approximate)
To	Otay Formation	Late Oligocene	Light-gray and light-brown, medium and coarse-grained, nonmarine arkosic sandstone intertongued with light-brown siltstone and light-gray claystone. Much of the claystone is composed of light-gray bentonite that occurs in beds up to 1 meter in thickness.	22
Tfg (Tof)	Otay Formation-fanglomerate	Oligocene to Miocene	Poorly cemented boulder conglomerate and coarse-grained sandstone. Interfingered with overlying Otay Formation.	9
Tmv	Mission Valley Formation	Middle Eocene	Predominantly light olive-gray, soft and friable, fine- to medium-grained marine and nonmarine sandstone containing cobble conglomerate tongues.	10

Note: *Actual underlying geology may differ from State geologic maps.

Sources: CGS 2002; CGS 2008.

Soils

Soils vary along the alignment depending on sources of parent material, local topography, and landform type. In general, soils along mesa tops and upper hillslopes contain higher percentages of clay, with more loamy soils in gulches and other drainage features extending from the top of the mesa down to the Otay River floodplain (Natural Resources Conservation Service [NRCS] 2016). Soils within the floodplain consist mostly of sands. Soils underlying the proposed project as mapped by the NRCS are summarized below in **Table 2.6-2**.

The geotechnical investigation encountered undocumented fill at 14 of 21 boring locations along the project alignment (Geocon Inc. 2014). The undocumented, placed fill was observed to a maximum depth of 5 feet and was likely placed during the construction of access roads and/or installation of underground utilities. The fill consists of a heterogeneous mixture of unconsolidated sediments including gravel, sand, silt and clay. Where encountered, the fill was up to 5 feet thick.

Soil Erosion

Soil erosion is the process of removing soil particles from a land surface by wind, water, or gravity. Factors influencing the rate of erosion may include climatic conditions, soil composition and roughness, soil moisture, ground cover, and topography and slope. Most natural erosion occurs slowly. However, ground-disturbing construction activities may increase the rate of erosion by exposing bare soils to the effects of wind and/or water. The soils along the project alignment and the erosion potential of each soil unit is provided in Table 2.6-2.

1 **Table 2.6-2. Soils Underlying the Proposed Project**

Soil Unit Name	Parent Material	Percent Slope	Erosion Potential	Average depth to Bedrock (inches)	Permeability	Expansion Potential	Location (Pole Number) *
Diablo clay	calcareous sandstone and shale	2 to 9	Moderate	24 to 40	Slow	High	108, 108.1, 109, 112-114
		9 to 15	Moderate				1, 15, 50.2, 55, 56, 110, 111, 115, 116
		15 to 30	Severe				32-34, 40, 43, 46-54, 57, 59-65
		30 to 50	Severe				18-18.2, 19-31, C, D, E
Olivenhain cobbly loam	gravelly alluvium derived from mixed sources	2 to 9	Slight	>80	Very slow	Moderate	67-73.1, 76
		9 to 30	Moderate				4
		30 to 50	High				2, 3, 66, 74, 78-82, 87, 97-100
Salinas clay loam	alluvium derived from sedimentary rock	2 to 9	Moderate	>80	Moderately slow	Moderate	9-14, 16, 17, 18.3, 18.31, 18.4, 18.5, 35-38, A, B
Stockpen gravelly clay loam	alluvium derived from sedimentary rock	0 to 2	Slight	>80	Very slow	High	83-86, 88-96
Linne clay loam	residuum weathered from calcareous sandstone and shale	9 to 30	Severe	20 to 40	Moderately slow	Moderate	5-8, 101-107
Riverwash	sandy, gravelly, or cobbly alluvium derived from mixed sources	—	Slight	>80	Rapid	Low	39, 41, 42, 44, 45, 58, F, G
Visalia gravelly sandy loam	alluvium derived from granite	2 to 5	Slight	>80	Moderately rapid	Low	75, 77, H

2 Notes: *Actual underlying soils may differ from NRCS maps.

3 Sources : IBC 2012; NRCS 2016; UC Davis 2016.

Expansive Soils

Expansive soils are predominantly composed of clays and can undergo substantial volume change in response to changes in moisture content. During wetting and drying cycles, expansive soils may shrink and swell, creating differential ground movements. This uneven movement can fracture concrete foundations and footings, resulting in potential damage or failure of infrastructure. The soils along the project alignment and the expansion potential for each soil unit is provided in Table 2.6-2.

Seismicity

Southern California is considered one of the most seismically active regions in the United States and the San Diego area is classified as Seismic Risk IV (the highest risk category) in the Unified Building Code. Historically, the San Diego area has experienced relatively low earthquake-related activity compared to other areas of Southern California. Since the turn of the 20th century and the use of seismic monitoring technology, no earthquake epicenters can be directly correlated with known onshore faults in the San Diego area prior to 1980 (CDC 1980).

Fault Zones and Ground Rupture

Horizontal and/or vertical surface or ground ruptures can occur during seismic events, typically along existing fault lines. Ground rupture that occurs along fault trace (mapped location of the intersection(s) of a fault with the ground surface) is referred to as *fault rupture*. Fault rupture generally occurs only during earthquakes larger than Magnitude 5. Some seismogenic faults (e.g., blind thrusts) do not extend to the ground surface and may not generate fault rupture even during major earthquakes. Other rupturing of the ground surface can occur as the result of slope failure or settlement caused by seismic shaking. Ground ruptures can result in damage to buildings, roads, and underground utilities. The potential for ground rupture depends on the proximity of faults, shaking severity, and local geologic conditions.

Faulting in the San Diego region is generally characterized by a series of north-northwest trending right-lateral faults. Many of the regional faults are associated with the Newport-Inglewood-Rose Canyon fault zone, with the Silver Strand section running parallel to the coastline through central San Diego Bay and downtown San Diego (CGS 2010). The most recent fault rupture occurred within the Rose Canyon fault zone within the last 11,000 years. The Rose Canyon fault zone runs in a north-south direction, beginning off the coast of the City of San Clemente, south through La Jolla, then through downtown San Diego and San Diego Bay. Many of the Quaternary-age faults in the region are considered potentially active (activity within the last 700,000 years) or inactive. The closest identified fault to the proposed project is the La Nacion fault zone, approximately 0.3 mile west of the project alignment. The last observable major displacement along this fault occurred within the last 1.6 million years (CDC 2010). **Table 2.6-3** presents regional faults, their distance from the proposed project, and their most recent evidence of fault rupture. The evidence based on fault rupture does not characterize the more recent and ongoing occurrence of smaller earthquakes along these or other unmapped faults.

Table 2.6-3. Faults in the Vicinity of the Proposed Project

Fault	Approximate Distance from Proposed Project	Last Known Major Displacement
La Nacion Fault Zone (inactive)	0.3 mile west	Within last 1.6 million years; age undifferentiated
San Ysidro Fault Zone (inactive)	1.8 miles southwest	Older than 1.6 million years
Chula Vista Fault Zone (potentially active)	3.3 miles northwest	11,700–700,000 years ago; without historical record

Fault	Approximate Distance from Proposed Project	Last Known Major Displacement
Rose Canyon Fault Zone, Silver Strand Section (active)	5.3 miles northwest	200–11,700 years ago; without historical record
Coronado Bank Fault Zone, Coronado Bank Section (active)	15.3 miles southwest	200–11,700 years ago; without historical record
San Diego Trough (active)	22.2 miles southwest	200–11,700 years ago; without historical record
Elsinore Fault Zone, Julian Section (active)	39.2 miles northeast	200–11,700 years ago; without historical record

Sources: Kahle 1988; CDC 2010

Ground Shaking

Seismically induced ground shaking can cause substantial damage to structures. The severity of ground shaking experienced at a specific location depends on a variety of factors, such as the magnitude and duration of the seismic event, fault type associated with the event, distance from the epicenter, and physical properties of the underlying geology and soils. The Modified Mercalli Intensity scale of perceived intensity, shown in **Table 2.6-4**, is based on observed effects and is the current standard used throughout the United States. Less intense earthquakes are typically rated on the basis of individual accounts, whereas higher intensity events are rated based on observed structural damage.

Table 2.6-4. Modified Mercalli Intensity Scale

Intensity	Shaking	Description/Damage
I	Not Felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest, especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very Strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

Source: USGS 1989.

Significant ground shaking events can periodically affect the region. Historic accounts from the 19th century indicate several large earthquakes generated a perceived intensity ranging from strong (MMI VI) to violent (MMI IX) (CDC 1980). Lower levels of ground shaking have also been felt during more recent events along southern California and regional faults.

The proposed project includes the construction of a number of concrete footings and installation of large power poles that could conceivably fail if on-site seismic or geologic conditions during design or construction were not addressed. However, the expected (10 percent chance of occurring in the next 50 years) peak ground shaking (acceleration⁵) at the project site is relatively low at 0.22 gram (CGS 2008).

Differential Settling, Subsidence, and Liquefaction

Settlement of the ground surface can be caused by a number of geologic processes. Settlement is the lowering of the land surface elevation as a result of the compression, compaction, or consolidation of underlying soils, sediment, or rock. These processes are exasperated under increased loading (e.g., additional sediment deposition or construction of structures, including fills) or the withdrawal of subsurface water. The processes cause a reduction in the volume of the materials. Compaction and compression generally occurs within unconsolidated granular soils or sediment over a relatively short timeframe. Consolidation usually occurs over a longer period (sometimes many years) in saturated finer grained material as pore water (i.e., water within the spaces between sediment grains) is forced out of the sediment structure under loading or groundwater pumping. Surface settlement can be referred to as subsidence, a term generally used for settlement of large magnitude or affecting a large area.

Ground settlement can cause the development of cracks or fissures in the ground surface. When ground settlement is non-uniform or uneven, differential settlement results, potentially inducing stress to structures.

A special type of compaction, hydrocompaction/hydroconsolidation, can occur in arid climates (such as San Diego). This phenomenon generally occurs most significantly in low-density, dry soils with relatively high silt content. The clay and silt in some of these deposits provide cohesion, holding sand grains in place but leaving space between them. Upon wetting, the silt and clay lose their cohesion, and the sand grains move closer together and take up less space. This process can result in ground settlement, including differential settlement.

Liquefaction can occur when water-saturated, loose sandy soils suddenly lose strength during seismic shaking. The primary factor that triggers liquefaction is moderate to strong ground shaking. The probability of liquefaction correlates directly with the intensity and duration of ground shaking (i.e., the stronger and/or longer the earthquake, the greater the chance of liquefaction). Additionally, physical properties may increase the susceptibility of soil to liquefaction. Saturated relatively clean/loose granular soils have a relatively high susceptibility for liquefaction while cohesive soils (even if saturated) have a low susceptibility. During liquefaction, liquefied soils may flow, causing ground settlement and/or lateral spreading (and associated surface cracking). All of these processes can lead to severe damage in concrete foundations and infrastructure. Young alluvium within the Otay River Valley and floodplain area is considered a moderate to high liquefaction hazard (CDC 1980; County of San Diego 2009).

Landslide and Slope Failure

Landslides or slope failure may occur in steeply sloped areas (15 percent slope or greater) following heavy rains, seismic events, or human activities (e.g., grading or excavation activities). Saturated, loosely

⁵ Ground shaking is usually quantitatively expressed as the acceleration of movement relative to the acceleration of gravity (g).

consolidated soils and precipitation events increase the likelihood that an earthquake will trigger landslides and slope failures.

According to CDC Landslide Hazard Identification mapping (1995), the southern hillslopes of the Otay Valley are designated as Most Susceptible, and have the highest risk of landslides. These areas are characterized by unstable slopes due to weak underlying material (e.g., Otay Formation) and adverse geologic structure (e.g., dip slopes and/or daylighted bedding planes) (CDC 1995). Much of the southern slopes of the valley and adjacent drainages show past or recent evidence of landslides or downward creep and should be considered naturally prone to failure.

Regulatory Setting

Federal

National Earthquake Hazards Reduction Act

The National Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) and creation of the National Earthquake Hazards Reduction Program (NEHRP) established a long-term earthquake risk-reduction program to better understand, predict, and mitigate risks associated with seismic events. The following four federal agencies are responsible for coordinating activities under NEHRP: U.S. Geological Survey, National Science Foundation, Federal Emergency Management Agency (FEMA), and National Institute of Standards and Technology. Since its inception, NEHRP has shifted its focus from earthquake prediction to hazard reduction. The current program objectives (NEHRP 2017) are to:

- Develop effective measures to reduce earthquake hazards;
- Reduce facilities and system vulnerabilities to earthquakes;
- Improve earthquake hazards identification and risk assessment methods; and
- Improve the understanding of earthquakes and their effects.

Implementation of NEHRP objectives is accomplished primarily through original research, publications, and recommendations and guidelines for state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

State

Alquist–Priolo Earthquake Fault Zoning Act

The Alquist–Priolo Earthquake Fault Zoning Act (PRC Section 2621 et seq.) was passed to reduce the risk to life and property from surface faulting in California. The Alquist–Priolo Act prohibits construction of most types of structures intended for human occupancy on the surface traces of active faults and strictly regulates construction in the corridors along active faults (earthquake fault zones). It also defines criteria for identifying active faults, giving legal weight to terms such as “active,” and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones. Under the Alquist–Priolo Act, faults are zoned and construction along or across them is strictly regulated if they are “sufficiently active” and “well defined.” Before a project can be permitted, cities and counties are required to have a geologic investigation conducted to demonstrate that the proposed buildings would not be constructed across active faults.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (PRC Sections 2690–2699.6) establishes statewide minimum public safety standards for mitigation of earthquake hazards. While the Alquist–Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the Alquist–Priolo Act. The state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other seismic hazards, and cities and counties are required to regulate development within mapped seismic hazard zones. In addition, the act addresses not only seismically induced hazards but also expansive soils, settlement, and slope stability. Under the Seismic Hazards Mapping Act, cities and counties may withhold the development permits for a site within seismic hazard zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans.

California Public Utilities Commission General Order 95

CPUC GO 95, Rules for Overhead Line Construction, provides general standards for the design and construction of overhead powerlines. GO 95 outlines safety factors and strength requirements for poles, crossarms, guy lines, and other structures, as well as minimum pole setting depths. GOs are administered and enforced by CPUC.

California Building Standards Code

Title 24 CCR, also known as the California Building Standards Code (CBC), specifies standards for geologic and seismic hazards other than surface faulting. These codes are administered and updated by the California Building Standards Commission. CBC specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in California.

Local

Because the CPUC regulates and authorizes the construction of investor-owned public utility facilities, the CPUC has exclusive jurisdiction over the siting and design of the proposed project. As such, projects under CPUC jurisdiction, including the proposed project, are exempt from local land use and zoning regulations and permitting. However, Section III.C of CPUC GO 131-D (planning and construction of facilities for the generation of electricity and certain electric transmission facilities) requires “the utility to communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any non-discretionary local permits.” As a result, SDG&E has taken into consideration all State and local plans and policies as they relate to geology and soils. Although County and other local policies are listed below, they are provided for disclosure purposes only.

County of San Diego General Plan

The County of San Diego General Plan, Safety Element, contains the following policies related to geology, soils, and seismicity (County of San Diego 2011):

- **S-7.1 Development Location.** Locate development in areas where the risk to people or resources is minimized (i.e., require development be located a minimum of 50 feet from active or potentially active faults).
- **S-7.2 Engineering Measures to Reduce Risk.** Require all development to include engineering measures to reduce risk in accordance with the CBC, Uniform Building Code, and other seismic and geologic hazard safety standards, including design and construction standards that regulate land use in areas known to have or potentially have significant seismic and/or other geologic hazards.

- **S-8.1 Landslide Risks.** Direct development away from areas with high landslide, mudslide, or rock fall potential when engineering solutions have been determined by the County to be infeasible.

- **S-8.2 Risk of Slope Instability.** Prohibit development from causing or contributing to slope instability.

County of San Diego Regulatory Ordinances

San Diego County regulations related to construction, grading, and erosion control are defined in Title 8, Division 7, Grading, Clearing, and Waterbodies, of the County Code of Regulatory Ordinances. This section addresses grading setbacks, maximum slope angles, soils requirements, erosion control, and site drainage. The provisions in the County Code of Regulatory Ordinances apply to the unincorporated areas of San Diego County.

City of Chula Vista General Plan

The City of Chula Vista 2020 General Plan, Environmental Element, contains the following policies related to geology, soils, and seismicity (Chula Vista 2015):

- **E 14.1.** To the maximum extent practicable, protect against injury, loss of life, and major property damage through engineering analyses of potential seismic hazards, appropriate engineering design, and the stringent enforcement of all applicable regulations and standards.
- **E 14.3.** Require site-specific geotechnical investigations for proposals within areas subject to potential geologic hazards; and ensure implementation of all measures deemed necessary by the City Engineer and/or Building Official to avoid or adequately mitigate such hazards.
- **E 14.5.** Wherever feasible, land uses, buildings, and other structures determined to be unsafe from geologic hazards shall be discontinued, removed, or relocated.

City of Chula Vista Municipal Code

Regulations related to construction and grading are defined in Title 15, Chapter 15.04, Excavation, Grading, Clearing, Grubbing, and Fills, of the City of Chula Vista Municipal Code. Regulations related to erosion control and water quality are defined in Title 14, Chapter 14.20, Storm Water Management and Discharge Control, of the City of Chula Vista Municipal Code. These codes provide minimum standards for grading and erosion, sedimentation, and water pollution control to protect downstream waterways and wetlands, and to promote the public safety. The provisions in the Municipal Code apply to areas within Chula Vista city limits.

City of San Diego General Plan

The City of San Diego (2008) General Plan, Conservation and Public Safety Elements, contain the following policies related to geology, soils, and seismicity:

- **CE-B.4.** Limit and control runoff, sedimentation, and erosion both during and after construction activity.
- **PF-Q.1.** Protect public health and safety through the application of effective seismic, geologic, and structural considerations, including requiring the submission of geologic and seismic reports, as well as soils engineering reports, in relation to applications for land development permits whenever

seismic or geologic problems are suspected; and adhering to state laws pertaining to seismic and geologic hazards.

- **PF-Q.2.** Maintain or improve integrity of structures to protect residents and preserve communities.

City of San Diego Municipal Code

Regulations related to construction, grading, and erosion control are defined in Chapter 14, Article 2, General Development Regulations, of the City of San Diego Municipal Code. This chapter addresses standards for grading and erosion, sedimentation, and water pollution control. These minimum standards and regulations aim to protect downstream waterways and wetlands, and to promote the safety, public health, convenience, and the general welfare of the community. The provisions in the Municipal Code apply to areas within City of San Diego limits.

2.6.2 Environmental Impacts

a. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- i) Rupture of a known earthquake fault, as delineated on the most recent Alquist–Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42? (No Impact)*

The proposed project is not located in an Alquist–Priolo zone or in proximity to a known active fault. The closest active (i.e., evidence of fault rupture within the last 11,000 years) fault, the Rose Canyon fault zone, is approximately 5.3 miles northwest of the proposed project. This fault zone is considered potentially active. The La Nacion fault zone is within 0.3 mile of the western end of the project alignment. Evidence suggests that seismic displacement has not occurred along this fault zone within the last 1.6 million years (age undifferentiated), classifying the La Nacion fault zone as inactive (CDC 2010). Ground rupture would not be anticipated along the proposed project alignment during construction and operation and the proposed project would not exacerbate fault rupture conditions. Therefore, there would be no impact.

- ii) Strong seismic ground shaking? (Less than Significant)*

As discussed in the Seismicity subsection above, there is potential for strong seismic ground shaking at the proposed project site. However, the proposed project would comply with CPUC’s GO 95 (see, “Regulatory Setting,” subsection, “State” above), which provides general standards for the design and construction of overhead electric lines. GO 95 strength requirements and project engineering calculations for wind and broken conductor loading exceed anticipated seismic forces that may occur along the project alignment. Additionally, concrete foundations would be constructed to current CBC (2013) standards, which considers seismically induced stresses for new construction. The seismic building requirements under Title 24, Part 2 of the CBC are specifically tailored to meet regional requirements for increased seismic stability. With adherence to GO 95 and the current CBC standards, foundational or structural damage associated with the effects of seismic ground shaking would be minimal. In addition, the proposed project would not intensify the effects of seismic ground shaking on existing structures. Therefore, effects of seismic ground shaking would be less than significant.

iii) Seismic-related ground failure, including liquefaction? (Less than Significant with Mitigation)

Earth movements and differential settling have the potential to injure people through substantial damage to and/or collapse of structures during either construction or operation of a facility. The proposed project alignment traverses many soil types, including alluvial sediments (alluvium) that may be susceptible to liquefaction or differential settling. Hazard mapping classifies the Otay River and floodplain area as prone to liquefaction (County of San Diego 2009; NRCS 2015). Geotechnical investigations confirmed the presence of alluvial deposits in approximately one-third of the exploratory borings along the proposed project alignment (Geocon Inc. 2014). However, the soils were relatively dense and shallow groundwater was absent during exploratory borings; risks associated with liquefaction are considered low in the vicinity of the proposed project (Geocon Inc. 2014).

Despite infrequent seismic-related ground shaking of substantial duration or intensity in the San Diego region during the recent past, the potential for occurrence of a significant seismic event exists. Steep slopes, saturated soil conditions, and/or unstable underlying geologic or soil units may fail during a significant seismic event and potentially damage or impact operations of the proposed project. A geotechnical investigation and corresponding report completed by Geocon Inc. (2014) evaluated subsurface soil and geologic conditions along the proposed project alignment. The report characterizes soil layers by depth below the existing grade at boring locations and assigned soil parameters that may be utilized for pier foundation design and construction. The report's recommendations provide the basis to address site-specific geologic conditions with a focus on the stability, strength, and shrink/swell potential; and the slope-hazard (maximum friction angle) of underlying soils. While, specific foundation designs for each pole have not yet been developed, inadequate materials or installation methods for pole foundations may destabilize underlying soils or create an unstable base for pole structures that may fail during a significant seismic event and be considered a significant impact.

Following implementation of findings and recommendations of Mitigation Measure GEO-1 and adherence to current GO 95 and CBC standards, hazards stemming from seismic-related ground failure or liquefaction due to insufficient foundation materials or methods would be less than significant with mitigation.

Mitigation Measure GEO-1: Incorporate Report Recommendations from the Geotechnical Investigation into Design Level Geotechnical Foundation Design Report

SDG&E and/or its design contractor shall require in contract documents that a site-specific, design-level geotechnical foundation investigation and corresponding report be required before final design approval. The geotechnical investigation shall be conducted by a qualified geotechnical engineer, or team of geotechnical engineers, to evaluate subsurface soil and geologic conditions at the project site. The geotechnical report shall document the results of that investigation and provides conclusions and recommendations that address site-specific soil parameters into final pole foundation designs and address ground and slope stability issues at each pole location. Recommendations shall address site and geologic conditions with a focus on the expansion, shrink/swell potential, liquefiable soils, physical instability, and corrosivity of underlying soils, as well as any other geologic hazards that are identified during the course of the investigation. The report shall provide design criteria to address any geotechnical issues and ensure that the proposed project's structures and facilities remain stable. The report may incorporate the findings of previous geotechnical reports (e.g., Geocon Inc. 2014).

The design-level geotechnical evaluation report shall be certified by a licensed professional geotechnical engineer or certified engineering geologist and adhere to design requirements set forth in the CBC and all applicable state and local code requirements. All design measures,

recommendations, design criteria, and specifications set forth in the design-level geotechnical evaluation shall be implemented as a condition of project approval.

iv) Landslides? (Less than Significant with Mitigation)

Much of the proposed project alignment passes along the top-, middle-, or toe-of-bank of the Otay Valley with moderate to very steep slopes, increasing to over 35 percent in some areas. Many of the drainages and slopes on the south bank of the Otay Valley show evidence of past or recent landslides or downward creep and should be considered a potential risk to structure stability. In the event of a landslide, proposed project structures constructed in landslide areas may be damaged or lost, resulting in a significant impact. In addition, during excavation activities for pole foundations, open excavation areas may destabilize slopes increasing the potential for seismic-induced landslide.

To reduce risks associated with slope instability, where feasible, design of the proposed project would avoid placement of new poles in steep-sloped areas, such as ephemeral drainages and canyons, where the potential for landslides is increased. If placement of poles in steep-sloped areas is unavoidable, SDG&E and/or its design contractor would evaluate the potential for pole installation to destabilize underlying soils and be required to design and construct the proposed project in accordance with Mitigation Measure GEO-1. Following implementation of design specifications of Mitigation Measure GEO-1 and adherence to GO 95 and current CBC standards, potential hazards from on-site landslides would be less than significant.

b. Would the project result in substantial soil erosion or the loss of topsoil? (Less than Significant)

Construction-related grubbing, excavation, grading, or other activities may remove the vegetative cover and/or compromise the soil structure, thereby increasing the potential for wind and runoff erosion of soils. As shown in Table 2.6-2, many of the underlying soils in the project alignment are susceptible to the effects of erosion. The proposed project could therefore result in substantial soil erosion from wind and rainfall runoff occurrences during project construction when soils would be disturbed.

As detailed in Section 2.9, Hydrology and Water Quality, all projects that disturb greater than 1.0 acre, including the proposed project, require compliance with the NPDES General Construction Permit (SWRCB Order 2009-009-DWQ), including preparation and implementation of a SWPPP, to ensure proposed project construction activities would not result in substantial soil erosion or loss of top soil. Examples of erosion-minimizing measures that may be identified in the SWPPP include the following:

- Using drainage control structures (e.g., straw wattles or silt fencing) to direct surface runoff away from disturbed areas;
- Strictly controlling vehicular traffic;
- Implementing a dust-control program during construction;
- Restricting access to sensitive areas;
- Using vehicle mats in wet areas; and
- Revegetating disturbed areas, where applicable, following construction.

The SWPPP would be implemented throughout the proposed project and compliance monitored by a qualified SWPPP practitioner. Compliance with the NPDES General Construction Permit and implementation of SWPPP requirements, would ensure that this impact would be less than significant.

c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse? (Less than Significant with Mitigation)

The proposed project alignment is underlain by various different geologic units, each with different strength and stability characteristics. Since the proposed project does not include groundwater extraction, no increase in potential settlement would be expected. The majority of the project alignment is underlain by consolidated rock formations (e.g., the siltstones and sandstones of the Otay Formation) and have a low liquefaction (and lateral spreading) potential. The unconsolidated alluvial deposits were found to be relatively dense and shallow groundwater was absent during exploratory borings. Therefore, the liquefaction risks associated with the alluvial deposits are considered low in these areas (Geocon Inc. 2014).

Some areas within the proposed project alignment are underlain by unconsolidated geologic units consisting of alluvium deposits and highly weathered rock. These geologic units and soils may be subject to landslide, differential settlement, or lateral spreading, especially following periods of precipitation. Additionally, during construction activities, excavation and trenching for pole foundations could temporarily create potentially unstable slopes.

Because project activities may further destabilize steep, relatively unstable geologic layers and increase the potential for slope failure and damage structures or injure workers, this impact would be considered significant. As described in Item 2.6.2(a)(iii) above, the Mitigation Measure GEO-1 requires design and construction specifications to ensure that the poles and foundations are designed and installed to address seismic-related or soil stability issues and minimize the potential risk of structural failure. Following implementation of Mitigation Measure GEO-1 and adherence to current GO 95 and CBC standards, potential hazards from landslide, lateral spreading, liquefaction, or collapse would be less than significant.

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? (Less than Significant with Mitigation)

During wetting and drying cycles, expansive soils may shrink and swell, creating differential ground movements that can fracture foundations and footings, resulting in infrastructure damage and potential risks to property. As provided in Table 2.6-2, NRCS mapping identified most of the underlying soils in the project alignment as having moderate to high expansion potential. A geotechnical investigation evaluated the physical properties of the underlying soils along the project alignment and confirmed the widespread presence of expansive soils (Geocon Inc. 2014).

Expansive soils may potentially damage foundations or lead to the structural failure of a pole. Pole failure may result in power outages, damage to other structures or roadways, or injure people. In locations mapped with moderate or high soil expansion potential, as identified in Geocon Inc. (2014), the proposed project could create a substantial risk to life or property if a pole were to fail. This impact would be considered significant. Risks from expansive soils would be minimized through the implementation of Mitigation Measure GEO-1, which requires design and construction specifications to increase structural support by considering underlying soil characteristics. After implementation of Mitigation Measure GEO-1, potential impacts would be reduced to a less than significant level.

1 *e. Would the project have soils incapable of adequately supporting the use of septic tanks or*
2 *alternative waste water disposal systems where sewers are not available for the disposal of*
3 *waste water? (No Impact)*

4 Septic tanks or alternative wastewater disposal systems would not be installed as part of the proposed
5 project. The proposed project would have no impact.

1

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2.7 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.7.1 Setting

Environmental Setting

Climate change results from the accumulation in the atmosphere of GHGs, which are produced primarily by the burning of fossil fuels for energy. Because GHGs (carbon dioxide [CO₂], methane, and nitrous oxide) persist and mix in the atmosphere, emissions anywhere in the world affect the climate everywhere in the world. GHG emissions are typically reported in terms of carbon dioxide equivalents (CO₂e) which converts all GHGs to an equivalent basis taking into account their global warming potential compared to CO₂.

Anthropogenic (human-caused) emissions of GHGs are widely accepted in the scientific community as contributing to global warming. Temperature increases associated with climate change are expected to adversely affect plant and animal species, cause ocean acidification and sea level rise, affect water supplies, affect agriculture, and harm public health.

Global climate change is already affecting ecosystems and societies throughout the world. Climate change adaptation refers to the efforts undertaken by societies and ecosystems to adjust to and prepare for current and future climate change, thereby reducing vulnerability to those changes. Human adaptation has occurred naturally over history; people move to more suitable living locations, adjust food sources, and more recently, change energy sources. Similarly, plant and animal species also adapt over time to changing conditions; they migrate or alter behaviors in accordance with changing climates, food sources, and predators.

Many national, as well as local and regional, governments are implementing adaptive practices to address changes in climate, as well as planning for expected future impacts from climate change. Some examples of adaptations that are already in practice or under consideration include conserving water and minimizing runoff with climate-appropriate landscaping, capturing excess rainfall to minimize flooding and maintain a constant water supply through dry spells and droughts, protecting valuable resources and infrastructure from flood damage and sea level rise, and using water-efficient appliances.

In 2015, total California GHG emissions were 440.4 million metric tons of carbon dioxide equivalents (MMTCO₂e). This represents less than a 1-percent decrease in total GHG emissions from 2014 and a continuing decline in emissions since 2013. The 2013 increase was driven primarily by strong economic growth in the state, the unexpected closure of the San Onofre Nuclear Generating Station, and drought conditions that limited in-state hydropower generation. Although GHG emissions reached a peak in 2004, overall GHG emissions have decreased by approximately 5.5 percent since 2000 when emissions were at 465.9 MMTCO₂e (CARB 2017a).

In 2015, the transportation sector of the California economy was the largest source of emissions, accounting for approximately 39 percent of the total emissions. On-road vehicles accounted for more than 90 percent of emissions in the transportation sector. The industrial sector accounted for approximately 23 percent of the total emissions, and emissions from electricity generation were about 19 percent of the total. The rest of the emissions are made up of various sources (CARB 2017a).

GHG emission sources in San Diego County follow a similar pattern as statewide emission sources with on-road transportation sources contributing approximately 45 percent of the County's GHG emissions in 2014. In 2014, total estimated GHG emissions in San Diego County were 3.2 MMTCO₂e (County of San Diego 2017a). Electricity was the second largest GHG emitter at 24 percent (County of San Diego 2017a).

Regulatory Setting

Federal

In April 2007, the U.S. Supreme Court found in the case of *Massachusetts vs. the USEPA* that the USEPA can regulate greenhouse gases, such as CO₂, as "air pollutants" under the CAA (United States Department of Justice 2015). Following that decision, the USEPA developed regulations to reduce GHG emissions from motor vehicles and has developed permitting requirements for large stationary emitters of GHGs. On April 1, 2010, USEPA and the National Highway Traffic Safety Administration (NHTSA) established a program to reduce GHG emissions and improve fuel economy standards for new model year 2012-2016 cars and light trucks. On August 9, 2011, USEPA and the NHTSA announced standards to reduce GHG emissions and improve fuel efficiency for heavy-duty trucks and buses. In August 2016, USEPA and the NHTSA jointly finalized Phase 2 Heavy-Duty National Program standards to reduce GHG emissions and improve fuel efficiency of medium-and heavy-duty vehicles for model year 2018 and beyond (USEPA 2017a).

State

In recent years, California has enacted a number of policies and plans to address GHG emissions and climate change. In 2006, the California State Legislature enacted AB 32, the Global Warming Solutions Act, which set the overall goals for reducing California's GHG emissions to 1990 levels by 2020. Executive Orders (EOs) S-3-05 and B-16-2012 further extend this goal to 80 percent below 1990 levels by 2050. CARB has completed rulemaking to implement several GHG emission reduction regulations and continues to investigate the feasibility of implementing additional GHG emission reduction regulations. These include the low carbon fuel standard, which reduces GHG emissions associated with fuel usage, and the renewable portfolio standard, which requires electricity suppliers to increase the amount of electricity generated from renewable sources to 33 percent by 2020.

CARB approved the First Update to the AB 32 Scoping Plan on May 22, 2014 (CARB 2017b). This update defines climate change priorities for the next 5 years and also sets the groundwork to reach long-term goals set forth in EOs S-3-05 and B-16-2012. The update also highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals and evaluates how to align the State's longer term GHG reduction strategies with other state policy priorities for water, waste, natural resources, clean energy, transportation, and land use.

In April 2015, Governor Brown issued EO B-30-15 which established a GHG reduction target of 40 percent below 1990 levels by 2030. This is a target between previously established targets of achieving 1990 levels by 2020 and 80 percent below 1990 levels by 2050. The EO also directs the state to incorporate climate change impacts in the Five-Year Infrastructure Plan, updating the state's climate adaptation strategy, and implement measures under existing agency and departmental authority to reduce GHG emissions.

Senate Bill (SB) 32, a follow-up to the California Global Warming Solutions Act of 2006 (AB 32), similarly calls for a statewide GHG emissions reduction to 40 percent below 1990 levels by December 31, 2030. This target would be accomplished by promoting technology and implementing cost-effective GHG emission reductions, especially in the state’s most disadvantaged communities, which would be disproportionately affected by climate change.

AB 197 expands the legislative oversight of CARB and associated climate change activities. The bill includes updates to the CARB board membership numbers and responsibility, CARB regulations and rulemaking, and the schedule by which information is updated and disclosed. AB 197 and Senate Bill 32 were approved by the governor in September 2016.

CARB is updating the Scoping Plan to reflect progress since 2005, additional reduction measures, and plans for reductions beyond 2020. In early 2017, CARB released the draft proposed second update to reflect the 2030 target set by Executive Order B-30-15 and codified by SB 32 (CARB 2017b). The updated Scoping Plan is expected to be adopted in late 2017.

Local

Because the CPUC regulates and authorizes the construction of investor-owned public utility facilities, the CPUC has exclusive jurisdiction over the siting and design of the proposed project. As such, projects under CPUC jurisdiction, including the proposed project, are exempt from local land use and zoning regulations and permitting. However, Section III.C of CPUC GO 131-D (planning and construction of facilities for the generation of electricity and certain electric transmission facilities) requires “the utility to communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any non-discretionary local permits.” As a result, SDG&E has taken into consideration all State and local plans and policies as they relate to greenhouse gases. Although County and other local policies are listed below, they are provided for disclosure purposes only.

County of San Diego Climate Action Plan

The County of San Diego adopted a climate action plan (CAP) in 2012, which was ultimately struck down in October 2014 (Latham & Watkins LLP 2014). The legal challenges to the adopted CAP included but were not limited to the County’s failure to prepare an EIR for the CAP and its related significance thresholds; make findings regarding its environmental effects; and properly analyze the County’s failure to comply with the required emission reductions established in Executive Order S-3-05 (Latham & Watkins LLP 2014). In August 2017, San Diego County released a draft CAP, revised draft Guidelines for Determining Significance for Climate Change, a threshold of significance for GHG emissions, a General Plan Amendment to the 2011 County General Plan related to goals and policies of requiring CAP preparation, and an associated Draft Supplemental EIR, which analyzes all of these components as one project (San Diego County 2017b). The CAP includes 11 GHG Reduction Strategies and 29 GHG Reduction Measures that the County would implement to reduce GHG emissions (San Diego County 2017b). One such measure includes requiring alternative fuels to be used in 10 percent of construction equipment in new non-residential construction projects (San Diego County 2017a). The proposed significance threshold is qualitative and indicates that projects would have a less than significant cumulatively considerable contribution to climate change impacts if the project is found to be consistent with the CAP (San Diego County 2017c). The proposed project’s analysis does not rely upon the 2012 CAP, the 2017 CAP, or the significance thresholds identified in either document.

San Diego County General Plan

The Conservation and Open Space Element of the San Diego County General Plan contains the following goals and policies that are relevant to the proposed project (San Diego County 2011):

- **Goal COS-14 - Sustainable Land Development.** Land use development techniques and patterns that reduce emissions of criteria pollutants and GHGs through minimized transportation and energy demands, while protecting public health and contributing to a more sustainable environment.
- **Policy COS-14.10 Low-Emission Construction Vehicles and Equipment.** Require County contractors and encourage other developers to use low-emission construction vehicles and equipment to improve air quality and reduce GHG emissions.
- **Goal COS-15 - Sustainable Architecture and Buildings.** Building design and construction techniques that reduce emissions of criteria pollutants and GHGs, while protecting public health and contributing to a more sustainable environment.
- **Policy COS-15.6 Design and Construction Methods.** Require development design and construction methods to minimize impacts to air quality
- **Goal COS-17 - Sustainable Solid Waste Management.** Perform solid waste management in a manner that protects natural resources from pollutants while providing sufficient, long term capacity through vigorous reduction, reuse, recycling, and composting programs.
- **Policy COS-17.2 Construction and Demolition Waste.** Require recycling, reduction and reuse of construction and demolition debris.

City of San Diego Climate Action Plan

In December 2015, the City of San Diego adopted a CAP, which updates the City’s 2005 CAP and serves four primary purposes including providing a road map to achieve GHG reductions, conformance to California’s laws and regulations, implementing the General Plan, and providing CEQA tiering for new development’s GHG emissions (City of San Diego 2016). The City’s 2015 CAP provides an emissions inventory for 2010, and establishes reduction targets and identifies federal, State, and local measures to reduce emissions that when totaled meet or exceed the 2020 and 2035 targets. Reductions would be met by incorporating five strategies focused on energy & water efficient buildings; clean & renewable energy; bicycling, walking, transit and land use; zero waste (gas and waste management); and climate resiliency. The City’s CAP was amended on July 12, 2016 to include a Checklist that provides a streamlined review process for the GHG emissions analysis of proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA (City of San Diego 2017, City of San Diego 2016, Pers.Comm. Santoro 2016).

City of San Diego General Plan

The City of San Diego’s General Plan contains the following goals and policies that are relevant to the proposed project (City of San Diego 2008):

- **Policy CE-A.1.** Influence State and federal efforts to reduce greenhouse gas emissions so that implementation of requirements are equitably applied throughout the State, and to address actions that are beyond the jurisdiction of local governments.
- **Policy CE-A.2.** Reduce the City’s carbon footprint. Develop and adopt new or amended regulations, programs, and incentives as appropriate to implement the goals and policies set forth in the General Plan to:
 - Create sustainable and efficient land use patterns to reduce vehicular trips and preserve open space;

- 1 – Reduce fuel emission levels by encouraging alternative modes of transportation and
- 2 increasing fuel efficiency;
- 3 – Improve energy efficiency, especially in the transportation sector and buildings and
- 4 appliances;
- 5 – Reduce the Urban Heat Island effect through sustainable design and building practices,
- 6 as well as planting trees (consistent with habitat and water conservation policies) for
- 7 their many environmental benefits, including natural carbon sequestration;
- 8 – Reduce waste by improving management and recycling programs;
- 9 – Plan for water supply and emergency reserves.
- 10 ▪ **Policy CE-A.3.** Collaborate with climate science experts on local climate change impacts,
- 11 mitigation, and adaptation, including sea level changes, to inform public policy decisions.
- 12 ▪ **Policy CE-A.8.** Reduce construction and demolition waste in accordance with Public Facilities
- 13 Element, Policy PF-1.2, or by renovating or adding on to existing buildings, rather than
- 14 construction of new buildings.
- 15 ▪ **Policy CE-A.9.** Reuse building materials, use materials that have recycled content, or use materials
- 16 that are derived from sustainable or rapidly renewable sources to the extent possible, through
- 17 factors including:
 - 18 – Scheduling time for deconstruction and recycling activities to take place during project
 - 19 demolition and construction phases;
 - 20 – Using life cycle costing in decision-making for materials and construction techniques. Life
 - 21 cycle costing analyzes the costs and benefits over the life of a particular product,
 - 22 technology, or system;
 - 23 – Removing code obstacles to using recycled materials in buildings and for construction;
 - 24 and
 - 25 – Implementing effective economic incentives to recycle construction and demolition
 - 26 debris (see also Public Facilities Element, Policy PF-1.2)
- 27 ▪ **Policy CE-A.13.** Regularly monitor, update, and implement the City’s Climate Protection Action
- 28 Plan to ensure, at a minimum compliance with all applicable federal state and local laws.
 - 29 a. Inventory greenhouse gas emissions, including emissions for the City community-at-
 - 30 large, and for the City as an organization.
 - 31 b. Identify actions and programs designed to reduce the climate change impacts caused by
 - 32 the community-at-large and the City as an organization.

33 *City of Chula Vista Climate Action Plan*

34 Beginning in 2000 with the adoption of the City of Chula Vista’s *CO₂ Reduction Plan*, the City has aimed

35 to reduce its GHG emissions and address climate change threats on the local community. Additional City

documents to address these issues include the *Climate Change Working Group Measures Implementation Plans* (July 2008), a *Climate Adaptation Strategies* document (2011), a *Climate Action Plan Progress Report* (November 2013), a *2014 Climate Action Plan Update – Recommendations* document, and a *Climate Action Plan* (September 2017). Combined these plans provide new climate mitigation measures; 11 strategies to “adapt” the community to climate change impacts within energy and water supply, public health, wildfires, ecosystem management, coastal infrastructure, and the local economy sectors; and identify measures to reduce GHG emissions and quantify the anticipated reductions (City of Chula Vista 2017).

City of Chula Vista General Plan

The City of Chula Vista General Plan’s Environmental Element contains the following goals and policies that are relevant to the Proposed Project (City of Chula Vista 2005):

- **Objective E6.** Improve local air quality by minimizing the production and emission of air pollutants and toxic air contaminants and limit the exposure of people to such pollutants.
- **Policy E 6.5.** Ensure that plans developed to meet the City’s energy demand use the least polluting strategies, wherever practical. Conservation, clean renewables, and clean distributed generation should be considered as part of the City’s energy plan, along with larger natural gas-fired plants.
- **Policy E 6.12.** Promote clean fuel sources that help reduce the exposure of sensitive uses to pollutants.
- **Objective E 7.** Promote energy conservation through the efficient use of energy and through the development of local, non-fossil fuel-based renewable sources of energy.
- **Policy E7.8.** Ensure that residential and non-residential construction complies with all applicable City of Chula Vista energy efficiency measures and other green building measures that are in effect at the time of discretionary permit review and approval or building permit issuance, whichever is applicable.
- **Objective E8.** Minimize the amount of solid waste generated within the General Plan area that requires landfill disposal.
- **Policy E8.1.** Promote efforts to reduce waste, minimize the need for additional landfills, and provide economically and environmentally sound resource recovery, management, and disposal facilities.

Significance Thresholds

In 2015, the County of San Diego developed a recommended approach to address climate change in CEQA documents that includes a suggested “bright line” screening-level threshold for projects of 900 metric tons of MTCO_{2e} based on the California Air Pollution Control Officers Association’s (CAPCOA’s) identified screening threshold (San Diego County 2015, CAPCOA 2008). The guidance document indicates that construction emissions may be amortized over an assumed 20-year life of the project. Project emissions below this bright-line threshold are assumed to be less than significant for GHG emissions. The new draft County Guidelines for Determining Significance for Climate Change were not relied upon in this analysis because they have not yet been finalized, and provide a qualitative threshold (comply with the CAP) instead of a quantitative threshold (San Diego County 2017c).

The City of San Diego has a single significance threshold to evaluate GHG emissions-related impacts in CEQA documents. The threshold is that a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the City's CAP, including implementation of applicable required measures identified in the City's CAP and its checklist (City of San Diego 2017). The City of Chula Vista does not have any adopted CEQA significance thresholds (Pers. Comm. Power 2016). However, the City recommends use of the South Coast Air Quality Management District's (SCAQMD's) thresholds (Pers. Comm. Power 2016). The SCAQMD has established a threshold of 10,000 MTCO₂e for GHG emissions by industrial facilities and recommends amortizing the construction emissions over 30 years (SCAQMD 2015).

Table 2.7-1 summarizes the applicable GHG significance thresholds.

Table 2.7-1. Significance Thresholds for Construction- and Operation-Related Emissions of Criteria Pollutants

	County of San Diego	City of Chula Vista
GHG Emission Significance Threshold (MTCO ₂ e)	900	10,000

Note: As described above, the City of San Diego does not have a numeric significance threshold.

Source:

2.7.2 Environmental Impacts

a. Generate greenhouse gas emissions either directly or indirectly, that may have a significant impact on the environment? (Less than Significant)

The proposed project would generate GHG emissions during construction. Construction-related GHG emissions would result from the combustion of fossil-fueled construction equipment, material hauling, and worker trips. Following the same methods and using the same assumptions as discussed in Section 2.3, Air Quality, these emissions were estimated in MTCO₂e for each construction phase using CalEEMod version 2013.2.2 (see **Table 2.7-2**). The proposed project's alignment would require routine operation and maintenance consistent with the manner in which the facilities are currently operated; therefore, this discussion focuses on construction-related emissions from the project.

The proposed project would emit approximately 850 MTCO₂e total during construction activities or approximately 43 MTCO₂e per year over an assumed 20-year operational life of the project, which is less than the thresholds established or recommended by the County of San Diego and the City of Chula Vista. The County's threshold was developed with the goal of complying with AB 32, and based upon a review of the CAPCOA's guidance for threshold development. As detailed in the County's "*Recommended Approach to Addressing Climate Change in CEQA Documents*" document (San Diego County 2015), implementation of CAPCOA's guidance on threshold development would ensure compliance with AB 32 by setting a threshold at a level such that 90 percent of proposed projects would be reviewed to assess the need for additional GHG reduction mitigation measures. Because the County's threshold of 900 MTCO₂e is more conservative than the City of Chula Vista's threshold, the proposed project would also comply with the other local thresholds. Projects that are less than the significance threshold would be considered a less-than-cumulative considerable impact (San Diego County 2015). The Proposed Project would comply with AB 32's and SB 32's GHG reduction goals.

The City of San Diego does not have a numeric GHG significance threshold and instead relies upon compliance with its CAP (Pers.Comm. Santoro 2016). As discussed further in Impact 2.7.2.b, the Proposed Project would comply with the City’s CAP.

Therefore, since the proposed project’s GHG emissions would be well below the significance thresholds and the proposed project complies with the City of San Diego’s CAP, this impact would be considered less than significant.

Table 2.7-2. Estimated Greenhouse Gas Emissions

Construction Phase	CO2 Equivalent (metric tons)
2016	551
2017	302
Project Total	853
Project Total Amortized Over a 20-Year Operational Period	43
County of San Diego Threshold	900
City of Chula Vista Threshold	10,000
Exceed a Significance Threshold?	No

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of greenhouse gases? (Less than Significant)

The State of California has implemented AB 32 to reduce GHG emissions. The proposed project does not pose any conflict with the most recent list of CARB’s early action strategies, nor is it one of the sectors at which measures are targeted. The First Update to the AB 32 Scoping Plan did not mention similar projects as a specific target for additional strategies, but emission reductions at the project site would be influenced by decisions relating to target sectors such as water, waste, natural resources, and transportation. Similarly, the draft 2017 Climate Change Scoping Plan (CARB 2017b) doesn’t mention similar projects for targeted GHG emission reductions. The proposed project would not be required to report emissions to CARB. Therefore, emissions generated by the proposed project would not be expected to have a substantial contribution to the ongoing impact on global climate change. While local plans, policies and regulations do not apply to the State, the location of the project is in line with local general plan policies regarding land use, transportation, air quality planning goals, and local CAPs, including the City of Chula Vista’s CAP and the City of San Diego’s CAP Consistency Checklist. A copy of the City of San Diego’s CAP Consistency Checklist has been completed for the proposed project and included as Appendix L. In addition, the proposed project would replace existing wood poles with steel poles to reduce the hazard from wildfires and improve system performance in a hazardous wind-prone area, which would be consistent with climate change adaptation strategies recommended in the City of Chula Vista’s CAP. For these reasons, the proposed project would not conflict with AB 32, SB 32, the local general plans, and CAPs. Therefore, this impact would be less than significant.

1 2.8 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2 Hazardous materials are chemical and non-chemical substances that can pose a threat to the environment
3 or human health if misused or released. Hazardous materials occur in various forms and can cause death,
4 serious injury, long-lasting health effects, and damage to buildings, homes, and other property. Hazardous
5 materials are used in industry, agriculture, medicine, research, and consumer goods. Hazardous materials
6 can include explosives, flammable and combustible substances, poisons, radioactive materials, pesticides,
7 petroleum products, and other materials defined as hazardous under the Resource Conservation and
8 Recovery Act (RCRA) in 40 CFR 261. These substances are most often released as a result of motor vehicle
9 or equipment accidents or because of chemical accidents during industrial use. Hazardous substances have
10 the potential to leach into soils, surface water, and groundwater if they are not properly contained.

Existing sources for physical hazards include contamination, proximity to airports, wildland fire hazards, explosives of concern (e.g., unexploded ordinance [UXO]), and objects that could induce current and voltage and result in shock hazards

2.8.1 Setting

Environmental Setting

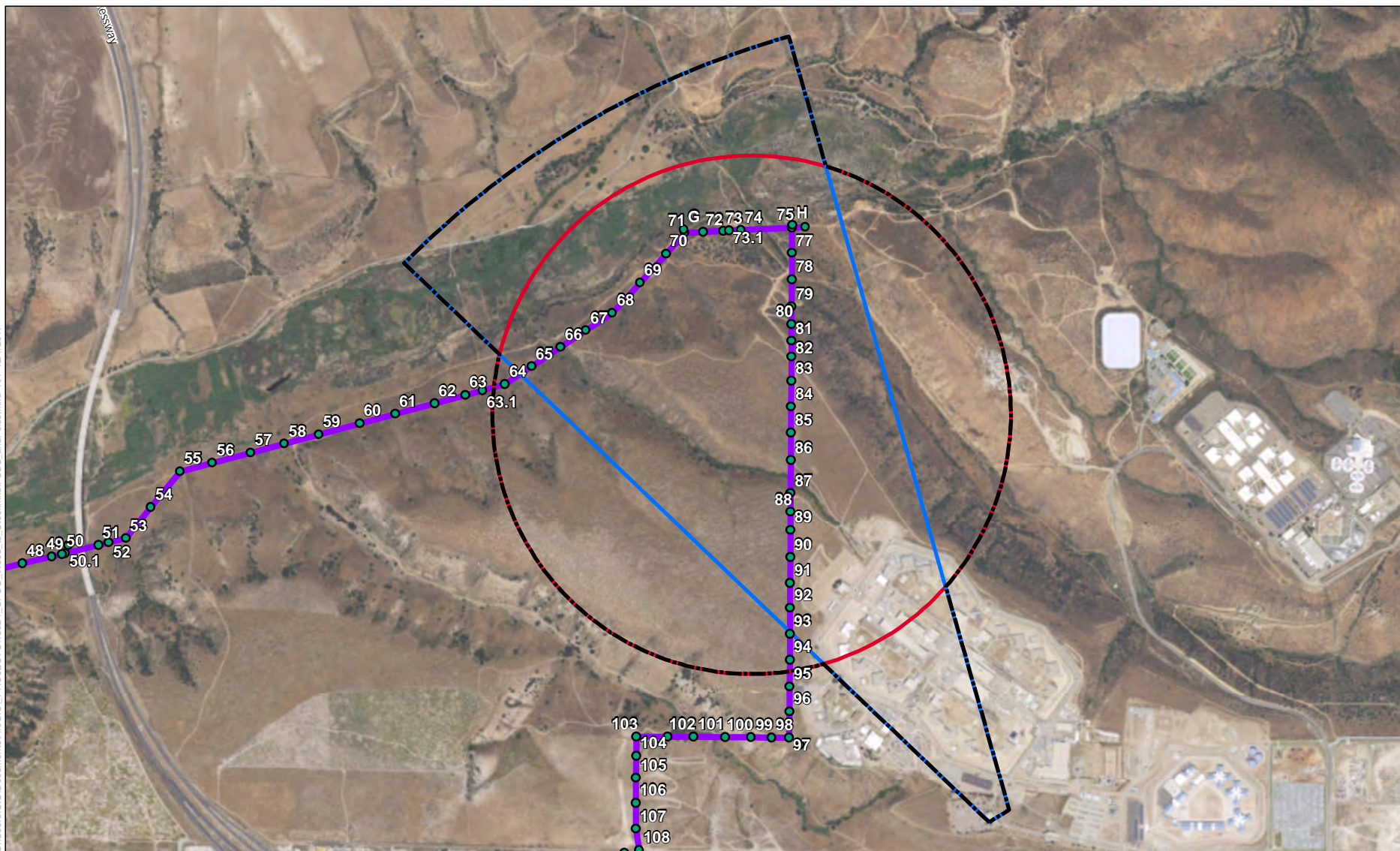
Hazardous Sites

The PEA prepared for the proposed project included a DataMap Corridor Study prepared by Environmental Data Resources (EDR) (see Appendix M). Five properties within an eighth of a mile of the proposed project alignment were identified as being listed on regulatory agency databases associated with hazardous materials handling. However, no properties within an eighth of a mile of the proposed project alignment were identified as being listed on regulatory agency databases for hazardous materials release sites (EDR, 2014). Based on the review of the California Department of Toxic Substances Control (DTSC) EnviroStor online database and the SWRCB GeoTracker online database, two hazardous materials release sites were identified within the vicinity of the proposed project: (1) the former Otay Skeet and Trap Shooting Range and (2) the former Brown Field Bombing Range. The former Otay Skeet and Trap Shooting Range is located immediately north of a portion of the proposed project (Pole Nos. 18 through 22) and east of Heritage Road. In addition, the northeast portion of the proposed project (Pole Nos. 64 through 94) is located within the FUDS eligible boundary of the former Brown Field Bombing Range (see **Figure 2.8-1**, Formerly Used Defense Site Boundary and Associated Poles).

The former Otay Skeet and Trap Shooting Range is located at 5350 Heritage Road in the City of Chula Vista, and is impacted with chemicals of potential concern including metals (such as lead, arsenic, and chromium) and polycyclic aromatic hydrocarbons in soil and perchlorate in groundwater as a result of former site activities that included operation of a shooting range from the mid-1960s through the mid-1990s (DTSC, 2016). In 2012 and 2013, this property was remediated under the oversight of the County of San Diego, Department of Environmental Health (SDDEH). The remedial action included consolidating and capping contaminated materials within an engineered unit and off-site disposal of contaminated materials. SDDEH issued a certificate of completion for the remedial action in November 2013 (SDDEH 2013). A portion of the remedial excavation area extended to the northern edge of the unnamed roadway to the east of Heritage Road (TRC 2013). Pole No. 21 is located approximately 30 feet south of this portion of the remedial excavation area. Groundwater monitoring results indicate that the depth to groundwater in the area of this site located near the proposed project alignment ranges from approximately 55 to 65 feet bgs) (TRC 2011).

The former Brown Field Bombing Range is located approximately 2 miles northeast of the Brown Field Air Field in the City of San Diego. From 1942 to 1960, this site was used by the U.S. Navy as a dive-bombing practice range and aerial rocket range. Military munitions and explosives of concern (e.g., UXO) and chemicals of potential concern including metals have been found in the soil of this site (Parsons 2007). A UXO field investigation was conducted by InDepth Corporation (2017, see Appendix N) to identify UXO or Material Potentially Presenting and Explosive Hazard (MPPEH) on the surface of the project footprint that could pose a hazard to project personnel. Based on this investigation, InDepth Corporation concluded that (1) project personnel would not be exposed to surface UXO/MPPEH hazards, and (2) there is a low probability that there may be practice bomb debris, fuze components, and/or practice bombs subsurface that may contain explosive residue.

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0 0.25 0.5
Miles

Prepared by:



— Project Alignment
● Project Poles

□ Aerial Rocket Range
Boundary

□ Bomb Target Boundary

□ Formerly Used Defense
Site (FUDS) Boundary

Source: USACE 2007

Figure 2.8-1
Formerly Used Defense Site
Boundary and
Associated Poles

Tie Line 649 Wood-to-Steel
Replacement Project

1 **Sensitive Receptors**

2 There are no schools located within 0.25 mile of the proposed project (see Figure 2.14-1 in Section 2.14,
3 Public Services). The closest school to the proposed project alignment is Ocean View Hills School, which
4 is located approximately 1 mile south of the western end of the proposed project alignment. The closest
5 school to a proposed staging area is Valle Lindo Elementary School, which is located approximately 0.8
6 miles northwest of the western staging area of the proposed project (California Department of Education
7 2016).

8 **Airports**

9 The proposed project site is located approximately 0.8 miles north and 1.3 miles east of the Brown Field
10 Municipal Airport and crosses through Review Areas 1 and 2 of the Airport Influence Area which are
11 designated in the Airport Land Use Compatibility Plan (ALUCP) for the Brown Field Municipal Airport
12 (San Diego County Regional Airport Authority 2010). Review Area 1 consists of locations where noise or
13 safety concerns may necessitate limitations on the types of land use actions. Review Area 2 consists of
14 locations beyond Review Area 1 but within the airspace protection and/or overflight notification areas.
15 Limits on the heights of structures, particularly in areas of high terrain, are the only restrictions on land uses
16 within Review Area 2. Coordination with the FAA is required by the ALUCP prior to construction of the
17 proposed project due to the proximity to the Brown Field Municipal Airport.

18 **Wildland Fire Hazards and Responsibilities**

19 The proposed project is located within areas classified by the CAL FIRE Fire and Resource Assessment
20 Program as Very High Threat and Extreme Threat (CAL FIRE 2005). San Diego County is dominated by
21 a Mediterranean-type climate (mild, wet winters and hot, dry summers), which supports a highly fire-prone
22 landscape. Winds originating from the Great Basin, locally known as the Santa Ana winds, create extreme
23 fire weather conditions characterized by low humidity, sustained high-speed winds, and extremely strong
24 gusts. High winds can cause power lines to touch, fall onto, or come in contact with adjacent vegetation,
25 causing sparks that could potentially ignite wildfires.

26 **Regulatory Setting**

27 **Federal**

28 *Comprehensive Environmental Response, Compensation, and Liability Act*

29 The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also called the
30 Superfund Act; 42 USC Section 9601 et seq.) is intended to protect the public and the environment from
31 the effects of past hazardous waste disposal activities and new hazardous material spills. Under CERCLA,
32 the USEPA has the authority to seek the parties responsible for hazardous materials releases and to ensure
33 their cooperation in site remediation. CERCLA also provides federal funding (through the Superfund) for
34 the remediation of hazardous materials contamination. The Superfund Amendments and Reauthorization
35 Act of 1986 (Public Law 99-499) amends some provisions of CERCLA and provides for a Community
36 Right-to-Know program.

37 *Resource Conservation and Recovery Act*

38 The RCRA of 1976 (42 USC Section 6901 et seq.), as amended by the Hazardous and Solid Waste
39 Amendments of 1984, is the primary federal law for the regulation of solid waste and hazardous waste in
40 the United States. These laws provide for the cradle-to-grave regulation of hazardous wastes, including
41 generation, transportation, treatment, storage, and disposal. Any business, institution, or other entity that

generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of.

USEPA has primary responsibility for implementing RCRA, but individual states are encouraged to seek authorization to implement some or all RCRA provisions. California received authority to implement the RCRA program in August 1992. The DTSC is responsible for implementing the RCRA program in addition to California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law.

Occupational Safety and Health Administration

The Occupational Safety and Health Administration (OSHA) is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances (as well as other hazards). OSHA also establishes criteria by which each state can implement its own health and safety program.

Toxic Substances Control Act

The Toxic Substances Control Act of 1976 (15 USC 2601 et seq.) authorizes the USEPA to track industrial chemicals produced within or imported into the United States. Under this act, the USEPA screens and tests industrial chemicals that pose a potential health hazard to humans or the environment. This act grants the USEPA the authority to control and ban newly developed industrial chemicals and other chemicals that pose a risk in order to protect public and environmental health.

State

Safe Drinking Water and Toxic Enforcement Act of 1986 – Proposition 65

The Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65, protects the state's drinking water sources from contamination with chemicals known to cause cancer, birth defects, or other reproductive harm. Proposition 65 also requires businesses to inform the public of exposure to such chemicals in the products they purchase, in their homes or workplaces, or that are released into the environment. In accordance with Proposition 65, the California Governor's Office publishes, at least annually, a list of such chemicals. The Office of Environmental Health Hazard Assessment, an agency under the California Environmental Protection Agency (CalEPA), is the lead agency for implementation of the Proposition 65 program. Proposition 65 is enforced through the California Attorney General's Office; however, district and city attorneys and any individual acting in the public interest may also file a lawsuit against a business alleged to be in violation of Proposition 65 regulations.

The Unified Program

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of seven environmental and emergency response programs (CalEPA 2017):

- Aboveground Petroleum Storage Act Program
- Area Plans for Hazardous Materials Emergencies
- California Accidental Release Prevention Program
- Hazardous Materials Release Response Plans and Inventories (Business Plans)

- 1 ▪ Hazardous Material Management Plan and Hazardous Material Inventory Statements (California
- 2 Fire Code)
- 3 ▪ Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Programs
- 4 ▪ Underground Storage Tank Program

5 CalEPA and other state agencies set the standards for their programs, while local governments (Certified
6 Unified Program Agencies [CUPAs]) implement the standards.

7 *Hazardous Materials Business Plans*

8 Hazardous materials business plans are required for businesses that handle hazardous materials in quantities
9 greater than or equal to 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of compressed gas,
10 or extremely hazardous substances above the threshold planning quantity (40 CFR, Part 355, Appendix A).
11 Business plans are required to include an inventory of the hazardous materials used/stored by the business,
12 a site map, an emergency plan, and a training program for employees. In addition, business plan information
13 is provided electronically to a statewide information management system, verified by the applicable CUPA,
14 and transmitted to agencies responsible for the protection of public health and safety (i.e., local fire
15 department, hazardous material response team, and local environmental regulatory groups).

16 *California Occupational Safety and Health Administration*

17 The California Occupational Safety and Health Administration (Cal/OSHA) assumes primary responsibility
18 for developing and enforcing workplace safety regulations in California. Cal/OSHA regulations pertaining
19 to the use of hazardous materials in the workplace (CCR Title 8) include requirements for safety training,
20 availability of safety equipment, accident and illness prevention programs, warnings about exposure to
21 hazardous substances, and preparation of emergency action and fire prevention plans. Hazard
22 communication program regulations that are enforced by Cal/OSHA require workplaces to maintain
23 procedures for identifying and labeling hazardous substances, inform workers about the hazards associated
24 with hazardous substances and their handling, and prepare health and safety plans to protect workers at
25 hazardous waste sites. Employers must also make material safety data sheets available to employees and
26 document employee information and training programs.

27 *California Department of Forestry and Fire Protection Wildland Fire Management*

28 The Office of the State Fire Marshal and CAL FIRE administer state policies regarding wildland fire safety.
29 Construction contractors must comply with the following requirements in the PRC during construction
30 activities at any sites with forest-, brush-, or grass-covered land:

- 31 ▪ Earthmoving and portable equipment with internal combustion engines must be equipped with a
- 32 spark arrestor to reduce the potential for igniting a wildland fire (PRC Section 4442).
- 33 ▪ Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the
- 34 highest-danger period for fires (PRC Section 4428).
- 35 ▪ On days when a burning permit is required, flammable materials must be removed to a distance of
- 36 10 feet from any equipment that could produce a spark, fire, or flame, and the construction
- 37 contractor must maintain the appropriate fire-suppression equipment (PRC Section 4427).

- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines must not be used within 25 feet of any flammable materials (PRC Section 4431).

Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Material Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a plan that describes business facilities, inventories, emergency response plans, and training programs. Hazardous materials are defined as raw or unused materials that are part of a process or manufacturing step. They are not considered to be hazardous waste. Health concerns pertaining to the release of hazardous materials, however, are similar to those relating to hazardous waste.

Hazardous Waste Control Act

The Hazardous Waste Control Act created the State Hazardous Waste Management System, which is similar to, but more stringent than, the federal RCRA program. The act defines “hazardous wastes” as waste products with properties that make them dangerous or potentially harmful to human health or the environment. Hazardous wastes can be the byproducts of manufacturing processes or simply discarded commercial products, such as cleaning fluids or pesticides. The act is implemented by regulations set forth in CCR Title 22, Division 4.5, which describes the following required parameters for the proper management of hazardous waste:

- Identification and classification
- Generation and transport
- Design and permitting of recycling, treatment, storage, and disposal facilities
- Treatment standards
- Operation of facilities and staff training
- Closure of facilities and liability requirements

These regulations list materials that may be hazardous and establish criteria for identifying, packaging, and disposing of them. Under this act and CCR Title 22, a generator of hazardous waste must complete a manifest that accompanies the waste from the generator to the transporter to the ultimate disposal location. Copies of the manifest must be filed with the DTSC.

CPUC General Order 95

The CPUC regulates privately owned energy facilities, including natural gas, water, and electrical facilities, as well as railroad and passenger transportation facilities. GO 95 contains requirements and specifications for overhead electric power line construction. These requirements are intended to ensure safety to persons engaged in the construction, maintenance, operation, and use of electrical facilities. The regulations are also intended to ensure the general reliability of the state’s utility infrastructure and services.

Rule 35 of GO 95 establishes minimum clearances between line conductors and nearby vegetation for fire prevention purposes. These minimum clearances for vegetation management must be maintained through activities such as tree trimming prior to construction and throughout operation and maintenance of utility facilities.

1 **Local**

2 Because the CPUC regulates and authorizes the construction of investor-owned public utility facilities, the
3 CPUC has exclusive jurisdiction over the siting and design of the proposed project. As such, projects under
4 CPUC jurisdiction, including the proposed project, are exempt from local land use and zoning regulations
5 and permitting. However, Section III.C of CPUC General Order 131-D (planning and construction of
6 facilities for the generation of electricity and certain electric transmission facilities) requires “the utility to
7 communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any non-
8 discretionary local permits.” As a result, SDG&E has taken into consideration all State and local plans and
9 policies as they relate to hazards and hazardous resources. Although County and other local policies are
10 listed below, they are provided for disclosure purposes only. As outlined in the following subsections, the
11 construction and operation of the proposed project will not conflict with any environmental plans, policies,
12 or regulations related to hazards and hazardous materials.

13 *County of San Diego*

14 Within the County of San Diego, hazardous materials are addressed through various County codes and
15 regulations. As the CUPA, the SDDEH Hazardous Materials Division’s hazardous material requirements
16 include hazardous waste determination, storage and transportation of hazardous waste, treatment and
17 disposal requirements, biennial reporting, emergency preparedness and prevention, emergency procedures,
18 business plans, personnel training, and standards for violations. Regulations for the storage and use of
19 explosives are provided in San Diego County Zoning Ordinance General Regulations Section 6904 (County
20 of San Diego 2014a).

21 The County of San Diego Fire Code (County of San Diego, 2011a) includes requirements for access roads,
22 emergency access, maintenance for vacant property, disposal of wood chips and other organic materials,
23 hazardous fire areas, use of spark arresters, open-flame equipment, and use of fire roads and firebreaks. In
24 addition, the Fire Code provides requirements for brush and vegetative growth management along power
25 line ROWs. Brush clearance requirements for structures and roadways are also identified in the County of
26 San Diego Fire Code. Other fire regulations for the County are provided in the County of San Diego Zoning
27 Ordinance General Regulations Section 6905 (County of San Diego, 1999).

28 *City of San Diego General Plan and Municipal Code*

29 The Public Facilities, Services, and Safety Element of the City of San Diego General Plan addresses public
30 facilities and services, such as fire and rescue, police, stormwater protection, and disaster preparedness.
31 The General Plan identifies goals and policies intended to allow for the efficient and adequate provision of
32 public services and facilities, as well as to reduce the potential for hazardous or emergency situations to
33 occur (City of San Diego 2015).

34 *City of Chula Vista Urban-Wildland Interface Code*

35 The City of Chula Vista’s Urban-Wildland Interface Code contains regulations for mitigating life and
36 property hazards due to wildland fire exposures and fire exposures from adjacent structures, and for
37 preventing structure fires from spreading to wildland (City of Chula Vista, 2016).

38 *Otay Subregional Plan*

39 The Otay Subregional Plan implements all existing elements of the County of San Diego General Plan. The
40 Subregional Plan identifies policies to discourage industries with pollution or other nuisance characteristics
41 from locating near the United States–Mexico border, and to recognize existing and planned safety zones

and enforce adequate noise protection near Brown Field Municipal Airport in accordance with the Brown Field ALUCP (County of San Diego 2011b).

East Otay Mesa Business Park Specific Plan

The East Otay Mesa Business Park Specific Plan establishes a planning framework for a comprehensive approach to the development of the East Otay Mesa area, in accordance with all County of San Diego goals, objectives, and policies. The East Otay Mesa Specific Plan implements the policies of the County of San Diego General Plan, including the Otay Subregional Plan. Consistent with County of San Diego's public safety goal of minimizing injury, loss of life, and damage to property from fire, the East Otay Mesa Specific Plan requires fire-wise landscaping, clearance zones around fire hydrants, utility poles, and overhead wires, and setbacks when locating trees next to 69 kV lines (County of San Diego 2015).

Otay Mesa Community Plan

The Land Use Element of the Otay Mesa Community Plan addresses hazardous and toxic substances. The Community Plan contains policies and recommendations to provide adequate distance between land uses with hazardous substances and sensitive receptors, locate intensive uses with hazardous substances within areas designated Heavy-Industrial, establish remediation protocols to reduce public health risks, and require documentation of hazardous materials investigations during review of all development projects (City of San Diego 2014).

Brown Field Municipal ALUCP

The proposed project site is approximately 0.8 mile north and 1.3 miles east of the closest Brown Field Municipal Airport runway. The Airport Land Use Commission (ALUC) is required by federal and state law to create or update ALUCPs for San Diego County's 16 public use and military airports. The ALUCPs, including the ALUCP for the Brown Field Municipal Airport, address airport compatibility issues related to noise, safety, airspace protection, and aircraft overflight. Local agencies are required to submit proposed actions to the ALUC for compatibility review until their general plans are found to be consistent with the applicable ALUCP (San Diego County Regional Airport Authority, 2010).

2.8.2 Environmental Impacts

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (Less than Significant with Mitigation)

Construction

Earthmoving activities within the FUDS boundary (Pole Nos. 62 through 103) could potentially result in detonation of subsurface UXO. This would be a potentially significant impact. Therefore, Mitigation Measure HAZ-1 would be implemented to reduce the potential risk of UXO detonation.

Mitigation Measure HAZ-1: Perform Unexploded Ordnance Awareness Training and On-Site UXO Construction Monitoring

SDG&E or a qualified SDG&E contractor shall provide proposed project-specific daily awareness training regarding UXO identification and response procedures to all project personnel performing ground disturbing work in potential UXO hazard areas. A UXO technician shall be on site during all earth-disturbing activities in potential munitions hazards areas within the FUDS boundary to monitor the work and ensure that hazardous areas are

1 avoided. If a UXO is discovered during project related construction activities, excavation
2 activities in the vicinity shall cease and the on-site UXO technician shall assess the condition
3 of the munition. Upon discovery, the San Diego County Sheriff's Bomb/Arson Unit would be
4 notified. Excavation activities in the vicinity shall not resume until the UXO has been removed.
5 SDG&E shall also notify DTSC if UXO is discovered.

6 Implementation of Mitigation Measure HAZ-1 would ensure that potential impacts from inadvertent
7 detonation of unknown subsurface UXO during construction of the proposed project would be less than
8 significant.

9 Construction of the proposed project would require the routine use of hazardous materials including fuel,
10 oils, and lubricants inside vehicles and equipment. Other hazardous materials that may be used during
11 construction activities include paints/coatings and various cleaners/solvents. Use of hazardous materials
12 during construction may pose health and safety hazards to construction workers if the materials are
13 improperly handled, or to nearby residents and the environment surrounding the proposed project if the
14 hazardous materials are accidentally released into the environment. Potential impacts associated with
15 accidental releases of hazardous materials into the environment are discussed in Item 2.8.2(b).

16 The routine handling and use of hazardous materials would be performed in accordance with OSHA
17 regulations, including training requirements for construction workers and ensuring that hazardous materials
18 are accompanied by a safety data sheet. Cal/OSHA regulations include requirements for protective clothing,
19 training, and limits on exposure to hazardous materials. Compliance with these existing regulations would
20 ensure that workers are protected from exposure to hazardous materials that may be used on site.

21 Because the proposed project would result in soil disturbance greater than 1 acre, management of hazardous
22 materials during construction activities would be subject to the requirements of the Stormwater
23 Construction General Permit (CGP), which requires preparation and implementation of a SWPPP to reduce
24 the risk of spills or leaks from reaching the environment, which would also reduce the risk of exposure for
25 workers and the public. For example, construction site operators must store chemicals in watertight
26 containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed
27 (completely enclosed).

28 Construction of the proposed project would result in the generation of various waste materials that would
29 require recycling and/or disposal, including some waste materials that may be classified as hazardous waste.
30 Hazardous materials would be transported by a licensed hazardous waste hauler, and disposed of at facilities
31 that are permitted to accept such materials as required by the U.S. Department of Transportation (USDOT),
32 RCRA, and state regulations.

33 In 1990 and 1994, the federal Hazardous Material Transportation Act was amended to improve the
34 protection of life, property, and the environment from the inherent risks of transporting hazardous material
35 in all major modes of commerce. The USDOT developed hazardous materials regulations, which govern
36 the classification, packaging, communication, transportation, and handling of hazardous materials, as well
37 as employee training and incident reporting. The transportation of hazardous materials is subject to both
38 RCRA and USDOT regulations. The California Highway Patrol, the Caltrans, and the DTSC are responsible
39 for enforcing federal and state regulations pertaining to the transportation of hazardous materials.

40 Mitigation Measure HAZ-2 would be implemented to ensure compliance with the hazardous materials and
41 worker safety regulations discussed above and to further ensure that potential impacts from the routine
42 transport, use, or disposal of hazardous materials during construction of the proposed project would be less
43 than significant.

Mitigation Measure HAZ-2: Personnel Training

Prior to the start of construction, all SDG&E, contractor, and subcontractor project personnel shall receive environmental training regarding the appropriate work practices necessary to effectively implement hazardous materials procedures and protocols and to ensure compliance with SDG&E's Project Design Features and Ordinary Construction/Operating Restrictions and applicable hazardous materials-related laws and regulations. Construction workers that would be involved in the handling of hazardous waste shall receive appropriate training as required by CFR, Title 29, Section 1910.120 (e.g., Hazardous Waste Operations and Emergency Response training). Training shall include, but would not be limited to the following:

- Review of health and safety plans prepared for the project, including warnings about exposure to hazardous substances that may be used or encountered;
- Hazardous materials storage, handling, and disposal procedures;
- Hazardous materials spill prevention and response measures (e.g., specified locations for construction vehicle and equipment refueling, daily vehicle and equipment inspections to identify leaking fuels and/or oils as early as possible, and spill containment); and
- Availability and use of safety equipment, including personal protective equipment.
- A sign-in sheet of project personnel who have received training shall be provided to CPUC on a weekly basis.

Compliance with the hazardous materials and worker safety regulations described above and implementation of Mitigation Measure HAZ-2 would ensure that potential impacts from the routine transport, use, or disposal of hazardous materials during construction of the proposed project would be less than significant.

With implementation of Mitigation Measures HAZ-1 and HAZ-2 project construction would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant with mitigation incorporated.

Operation

As discussed in Section 1.8, Operation and Maintenance, operation and maintenance of the proposed project would be conducted in the same manner as the existing power line, which is covered under SDG&E's existing policies and procedures for these activities. Inspection and maintenance activities would not increase in duration, intensity, or frequency; therefore, and the proposed project would not result in any new or additional transport, use, or disposal of hazardous materials. Impacts would be less than significant.

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (Less than Significant with Mitigation)

Construction

Construction of the proposed project would not include the use or storage of large quantities of hazardous materials within the ROW alignments (SDG&E 2015). Due to the limited amount of hazardous materials that would be required, impacts associated with a large release of hazardous materials that could affect the local environment or surrounding public are not anticipated. While fuel trucks would be used on site, the likelihood of a major spill from their use is low. Refueling of equipment and vehicles would typically take place within the staging yards, with the use of secondary containment devices to minimize potential fuel releases. In addition, SDG&E construction crews would keep a spill kit at each work area for use in the event of a spill, in accordance with SDG&E's Water Quality Construction BMPs Manual (see Attachment H).

As discussed above, the proposed project would be subject to the requirements of the CGP, which requires preparation and implementation of a SWPPP to reduce the risk of spills or leaks from reaching the environment, including procedures to address minor spills of hazardous materials. Measures to control spills, leakage, and dumping must be addressed through structural as well as non-structural BMPs as required by the CGP. For example, equipment and materials for cleanup of spills must be available on site and spills and leaks must be cleaned up immediately and disposed of properly, and BMPs also include treatment requirements, operating procedures, and practice to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

As discussed in Item 2.8.2(a), the transportation of hazardous materials is subject to both RCRA and USDOT regulations. If a discharge or spill of hazardous materials occurs during transportation, the transporter is required to take appropriate immediate action to protect human health and the environment (e.g., notify local authorities and contain the spill), and is responsible for the discharge cleanup.

Elevated metals concentrations have been identified in soil at the former Brown Field Bombing Range site; therefore, contaminated soil may be excavated as part of proposed project construction. Previously unidentified contaminated soil could also be encountered in other areas of the proposed project. Excavating and grading of contaminated soil could potentially expose workers to contaminants in soil, and could also potentially expose the surrounding public to contaminants in dust that could be generated by construction activities. Additionally, if contaminated soil is improperly managed, re-used, or disposed of, contaminants in the soil could be released into the environment. This is a potentially significant impact.

As discussed in Item 2.8.2(a), operation and maintenance activities for the proposed project would be conducted in a similar manner as the existing facilities and less frequent use of hazardous materials would be required within the proposed project ROWs. Soil disturbance or excavation activities are not anticipated to be performed during routine operation and maintenance activities. However, if soil disturbance or excavation activities are required, contaminated soil in the vicinity of the former Brown Field Bombing Range or previously unidentified contaminated soil may be encountered.

The following mitigation measure shall be implemented to ensure construction workers, the public, and the environment are not exposed to contaminated soil that may be encountered during construction or operation of the proposed project.

Mitigation Measure HAZ-3: Perform Soil Sampling and Soil Management Procedures

The following measures shall be implemented:

- Soil testing for metals contamination shall be conducted for all excavation activities within 500 feet of the former Brown Field Bombing Range FUDS eligible property boundary (e.g., excavation activities occurring at Pole Nos. 63 through 96). In addition, an unanticipated soil contamination handling plan shall be prepared to address the procedures to be followed if contaminated soils are encountered during testing or excavation activities. This plan shall contain guidelines for the characterization, any necessary removal, transport, and disposal of contaminated soil requiring excavation during construction. The plan shall emphasize that all activities within or in close proximity to contaminated areas shall adhere to all applicable federal, state, and local environmental and hazardous waste laws and regulations.

- If soil that is stained, discolored, odorous, or otherwise suspected to be contaminated is encountered in other areas of the proposed project during excavation activities for project construction or operation, work shall be stopped and a qualified environmental professional shall evaluate the suspect soil. The qualified environmental professional shall be a professional engineer or professional geologist registered in California, with applicable experience in the evaluation and remediation of hazardous waste, or someone under their direct supervision, or have a Baccalaureate degree or higher in science or engineering and five years of relevant full-time work experience; or ten years of relevant full-time work experience. The suspect soil shall either be sampled in place and analyzed to determine appropriate management options or containerized and managed in accordance with all applicable federal, state, and local regulations. Based on the results of observation and analysis, the contractor's health and safety officer or the appropriate SDG&E representative shall decide whether to remove or avoid the contaminated soil.

If during excavation work, the contractor observes visual or olfactory evidence of contamination in the exposed soil, a report of the location and the potential contamination, results of laboratory testing, recommended mitigation (if contamination is verified), and actions taken shall be submitted to the CPUC for each event. This report shall be submitted within 30 days of receipt of laboratory data.

Compliance with the regulations discussed above and implementation of Mitigation Measure HAZ-3 would ensure that potential impacts associated with accidental releases of hazardous materials into the environment during construction or operation of the proposed project would be less than significant.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (No Impact)

The proposed project is not located within a 0.25 mile of an existing or proposed school location. Therefore, no impact would occur.

1 *d. Would the project be located on a site that is included on a list of hazardous materials sites*
2 *compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a*
3 *significant hazard to the public or the environment? (Less than Significant with Mitigation)*

4 **Construction**

5 As discussed in Section 2.8.1, two hazardous materials release sites were identified which could potentially
6 affect the proposed project: the former Otay Skeet and Trap Shooting Range and the former Brown Field
7 Bombing Range.

8 The former Otay Skeet and Trap Shooting Range is not included on a list of hazardous materials sites
9 compiled pursuant to Government Code Section 65962.5; however, it is a hazardous materials release site
10 that was evaluated and remediated under DTSC and SDDEH oversight. As discussed in Section 2.8.1 above,
11 a portion of the remedial excavation area of this site is located approximately 30 feet north of Pole No. 21,
12 and the depth to groundwater in this area ranges from approximately 55 to 65 feet bgs. Because soil
13 remediation has been completed at this site, contaminated soil associated with this site is not expected to
14 be encountered during construction of the proposed project. The deepest excavations for new pole
15 installations would be approximately 30 feet bgs; therefore, potentially contaminated groundwater is not
16 anticipated to be encountered during construction of the proposed project.

17 The proposed project crosses through the former Brown Field Bombing Range, which is a DTSC state
18 response site and therefore is included on a list of hazardous materials sites compiled pursuant to
19 Government Code Section 65962.5. As discussed in Section 2.8.1, UXO and contaminants including metals
20 have been found in the soil of this site. Construction activities in the vicinity of this site could harm workers
21 if a UXO is encountered and explodes, and construction workers or the public could be harmed if excavated
22 soil containing UXOs is re-used at another location and the relocated UXOs are encountered and explode.
23 This is a potentially significant impact. Potentially significant impacts from excavation and grading of
24 contaminated soil in the vicinity of this site could also occur as discussed in Item 2.8.2(b).

25 **Operation**

26 Soil disturbance or excavation activities are not anticipated to be performed during routine operation and
27 maintenance activities; however, if soil disturbance or excavation activities are required to be performed in
28 the vicinity of the former Brown Field Bombing Range for operations and maintenance activities,
29 contaminated soil or UXOs could be encountered. Impacts would be potentially significant.

30 Implementation of Mitigation Measure HAZ-1 and HAZ-2 would ensure that potential impacts UXO in the
31 vicinity of the former Brown Field Bombing Range during construction of the proposed project would be
32 less than significant. Implementation of Mitigation Measure HAZ-3 would ensure that construction and
33 operation and maintenance workers, the public, and the environment are not harmed by contaminated soil
34 during construction and operations of the proposed project.

35 Implementation of Mitigation Measures HAZ-1, HAZ-2 and HAZ-3 would ensure that potential impacts
36 associated with encountering contaminated soil and UXO in the vicinity of the former Brown Field
37 Bombing Range during construction or operation of the proposed project would be less than significant.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? (Less than Significant)

The proposed project site crosses through the Airport Influence Area of the Brown Field Municipal Airport (San Diego County Regional Airport Authority, 2010). However, FAA aeronautical studies determined that no hazards to air navigation would result from the proposed project and no additional lighting or utility pole markings would be required (FAA 2015, see Appendix O). The proposed project would therefore have a less-than-significant impact on aviation hazards.

f. For a project in the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? (No Impact)

The proposed project is not located within 2 miles of a private airstrip. Therefore, no impact would occur.

g. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (No Impact)

The proposed project would not impair implementation of or interfere with the County of San Diego Operational Area Emergency Operations Plan because the proposed project alignment does not cross the evacuation routes in the area identified in the Emergency Operations Plan, which includes I-5, I-805, I-905, and SR-125 (County of San Diego, 2014b). The proposed project does cross SR-125; however, the construction activities would occur beneath SR-125, which is an elevated roadway structure in this area. The proposed project would not interfere with traffic on SR-125, and therefore would have no impact on the County of San Diego Operational Area Emergency Operations Plan.

h. Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? (Less than Significant with Mitigation)

As discussed in Section 2.8.1, the mechanical and structural design and construction of the proposed project must meet the requirements of CPUC GO 95, which are intended to prevent fire hazards. SDG&E takes into account normal and unusual structural loading in its designs under GO 95 to prevent fire hazards. The conversion to steel poles would reduce the potential for fire hazards relative to the existing wood poles.

Construction activities could increase the risk of starting fires due to the increased presence of vehicles, equipment, and human activity in areas of elevated fire hazard severity. In particular, heat or sparks from construction vehicles or equipment have the potential to ignite dry vegetation. This is a potentially significant impact.

Mitigation Measure HAZ-4, which is in accordance with SDG&E's Project Design Features and Ordinary Construction/Operating Restrictions, would be implemented to reduce the risk of starting wildfires during construction of the proposed project.

Mitigation Measure HAZ-4: Prepare and Implement a Project-Specific Construction Fire Prevention Plan.

The following measures shall be implemented:

- SDG&E shall prepare a project-specific construction fire prevention plan which shall include the following:

- A description of the procedures for minimizing fire potential (e.g., vegetation removal and disposal procedures).
- The requirements of Title 14, California Forest Practice Rules of the CCR.
- Relevant components of the SDG&E Fire Prevention Plan (SDG&E 2014).
- The firefighting equipment (e.g., shovels, pulaskis, and backpack pumps) that must be maintained on site and in vehicles for the duration of construction.
- The appropriate timing and use of fire-protective mats or shields during grinding and welding operations.
- Emergency response and reporting procedures.
- Relevant emergency contact information.
- Prior to construction, SDG&E shall submit the project-specific construction fire prevention plan to the CPUC for record keeping purposes.
- Prior to the start of construction activities, SDG&E shall assess the work areas, access roads, and ROW for wildland fire risk and fire hazard reduction (e.g., vegetation removal and disposal) shall be performed in accordance with the Project-Specific Construction Fire Prevention Plan.
- The project-specific construction fire prevention plan shall be implemented throughout construction of the proposed project.

Implementation of Mitigation Measure HAZ-4 would ensure that the risk of starting wildfires during construction of proposed project would be less than significant.

As discussed in Item 2.8.2(a) above, operation and maintenance of the proposed project would be conducted in the same manner as the existing power line, which is covered under SDG&E's existing policies and procedures for these activities. No change would occur in the operation and maintenance of the line. Therefore, potential impacts associated with wildfires during operation of the proposed project would be less than significant.

1 2.9 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or offsite?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j. Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.9.1 Setting

Environmental Setting

Topography

The proposed project is located in the southeastern portion of San Diego County, California, approximately 12 miles southeast of downtown San Diego and approximately 1.5 miles north of the United States–Mexico border (see Figure 2.1-1).

Topography along the project alignment is characterized by relatively flat mesa land to the south with steep, ephemeral drainages cutting finger canyons northward to the Otay Valley (USGS 2015a; USGS 2015b). The Otay Valley floor is within the floodway and floodplain of the Otay River, approximately 300 feet below the top of the Otay Mesa and ranges in width from approximately 900 to 1,100 feet. In addition to the finger canyons, several larger canyon systems extend southward into the mesa area, with Dennery Canyon west of Heritage Road, Johnson Canyon east of SR-125, and O’Neal Canyon near the eastern border. Hillslopes of the canyon sides average between 15 and 30 percent, but increase to over 35 percent in some areas. Rock Mountain (approximate elevation of 660 feet mean sea level [msl]) lies on the northern side of the Otay River. The proposed project varies in elevation depending on the distance from the Otay River and Pacific Ocean, ranging from 155 feet msl near the western end of the alignment to 605 feet msl as the alignment travels south over Otay Mesa.

Climate

The San Diego area has a semi-arid coastal climate with mild to moderate temperature fluctuations and relatively low amounts of precipitation. The Pacific Ocean and regional topography strongly influence local climatic conditions. Temperatures range from average lows near 44 degrees Fahrenheit (°F) in December/January to average highs of 74°F in August/September (Western Regional Climate Center [WRCC] 2016). Average annual precipitation at the proposed project is approximately 9.73 inches, with rain falling primarily from October through April (WRCC 2016.)

Surface Water Hydrology

Surface Waters

The main surface water feature in the vicinity of the proposed project is the Otay River system; located directly adjacent to the proposed project at Pole Nos 1 through 76. The Otay River watershed is an oblong-shaped watershed that drains a total surface area of roughly 144 square miles, with the headwaters originating on Lyons Peak (3,733 feet msl) and meandering westward approximately 33 miles before draining into the Pacific Ocean (USGS 2016). The Otay River was once a perennial stream but now flows intermittently due to diversions and damming. Two water supply reservoirs, the Upper Otay (approximately 3.5 miles north) and Lower Otay reservoirs (approximately 0.7 mile northeast), capture low to moderate runoff amounts but offer little flood control. Consequently, the overall flow regime of the Otay River is one of little or no flow over long periods, interrupted by episodic larger flows.

The southern end of the project alignment (Poles 109 through 117, approximately 0.4 mile of the alignment), lies within the Tijuana River watershed. The Tijuana River watershed covers a 1,750 square-mile area, stretching across northwestern Mexico and a small portion of southwestern California (San Diego State University [SDSU] 2005). The proposed project does not cross or pass near any drainages or surface waters located in the Tijuana River watershed.

Other surface hydrological features include vernal pool complexes of varying size and quality distributed on the mesas and the eastern end of the Otay Valley. Refer to Section 2.4, Biological Resources, for further discussion on vernal pool complexes.

The proposed project crosses numerous non-jurisdictional swales and jurisdictional ephemeral drainages that funnel into the Otay River. Twenty-one potentially jurisdictional drainages were observed near the proposed project alignment, with 12 additional non-jurisdictional features (e.g., swales, a brow-ditch, and two erosional features) (SDG&E 2015). Jurisdictional delineation surveys for the proposed project identified 0.80 acre of vernal pools, with an additional 11.74 acres of vernal pool habitat likely to support jurisdictional wetland waters of the U.S. (SDG&E 2015). These pools meet the criteria for waters of the U.S. and waters of the state and, therefore, are under jurisdiction of the USACE and San Diego RWQCB.

Surface Water Quality

The San Diego RWQCB adopted the Water Quality Control Plan (Basin Plan) for the San Diego Basin (Region 9) to preserve and enhance the beneficial uses and quality of water resources in the San Diego area (San Diego RWQCB 2011). The Basin Plan lists the following beneficial uses for waterbodies (or watersheds) in the proposed project alignment, as presented in **Table 2.9-1**.

Table 2.9-1. Beneficial Uses for Creeks in the Project Area for West San Diego County

Channel	MUN	AGR	IND	PROC	REC-1	REC-2	BIOL	WARM	COLD		WILD	RARE
Otay River	+	E	P		P	E		E			E	E
Dennerly Canyon	+	E	P		P	E		E			E	
Johnson Canyon	+	E	P		P	E		E			E	
O'Neal Canyon	+	E	P		P	E		E			E	
Lower Otay Reservoir	E	E	E	E	E	E		E	E		E	
Tijuana River	+		P		P	E	E	E				

Notes:

+ Exempted

Indicates that the water body has been exempted from the municipal use designation.

P Potential Beneficial Use

Indicates a potential beneficial use that would probably develop in future years through the implementation of various control measures. Potential uses also include uses that have been developed in the past but have been abandoned for reasons other than water quality.

E Existing Beneficial Use

Indicates an existing beneficial use actually attained in the surface or ground water.

Source: San Diego RWQCB 2011.

Under CWA § 303(d), states are required to identify “impaired water bodies” (i.e., those not meeting established water quality standards), identify the pollutants causing the impairment, establish priority rankings for waters on the list, and develop a schedule for the development of control plans to improve water quality. USEPA then approves the State’s recommended list of impaired waters or adds and/or removes waterbodies.

The current, 2012 CWA Section 303(d) List does not identify the Otay River watershed as being impaired by water quality contaminants (SWRCB 2012). However, a portion of the project is located in the Tijuana River watershed. The Tijuana River watershed is listed as impaired by eutrophic conditions⁶, indicator bacteria, low dissolved oxygen, pesticides, phosphorus, sedimentation/siltation, selenium (natural and unknown sources), solids, surfactants (methylene-blue active substances), synthetic organics, total nitrogen (natural, unknown, urban runoff and nonpoint sources), toxicity, trace elements, and trash.

Floodplains

FEMA produces flood insurance rate maps that identify special flood hazard areas. The maps further classify these areas into “zones” that broadly characterize the potential risk of an area being inundated by a 100-year or 500-year flood in any given year. Also included as special flood zones are “Regulatory Floodways,” or areas that must be reserved so as not to increase flood water surface elevation more than a designated height. According to the applicable FEMA flood insurance rate maps (06073C2158G, 06073C2159G, and 06073C2178G) most of the project alignment is within the 100-year flood zone and 500-year flood zone of the Otay River (FEMA 2012).

In addition, the project alignment is located downstream of Lower Otay Reservoir (Lake). The eastern border of the project alignment is less than 0.8 mile from the Lower Otay dam. In the event of a catastrophic failure of the dam, floodwaters may potentially surge downstream through the Otay Valley, inundating roughly the 100-year flood elevation, or an estimated elevation of 108 feet above the valley floor at Dennery Canyon (CDC 1980; FEMA 2012).

Stormwater

Most of the proposed project alignment traverses undeveloped and open space areas with limited development or impervious surfaces. Thus, stormwater drainage and conveyance infrastructure is largely absent along the project alignment. Stormwater runoff along the eastern portion of the project alignment, within undeveloped open space, is informally managed through a combination of roadside ditches and municipal systems that direct collected stormwater to natural drainage features, or is designed to drain to the Otay River. West of Heritage Road, the City of Chula Vista and the City of San Diego oversee management of dedicated stormwater management systems serving the residential and commercial developments within Dennery Canyon (City of San Diego 2015). These stormwater facilities collect and convey overland flows to local drainages using curbs, concrete drainage channels, and culverts that ultimately discharge to the Otay River. Stormwater discharges within the City of Chula Vista, City of San Diego, and San Diego County are regulated by the San Diego RWQCB under a regional stormwater discharge permit (NPDES No. CAS0109266; Waste Discharge Requirements Order No. R9-2013-0001, as amended).

Groundwater

The Otay Valley and southern portion of San Diego Bay overlie the Otay Valley Groundwater Basin. The basin is bounded by the San Ysidro Mountains to the east, by semipermeable marine deposits to the north and south, and the Pacific Ocean to the west (California Department of Water Resources [DWR] 2004; DWR 2016). Water-bearing formations include alluvium (up to 300 gallons per minute [gpm] yield), the San Diego Formation (150 to 400 gpm yield), and the Otay Formation (10 to 50 gpm yield) (DWR 2004). However, the alluvium layer is considered too thin to be a viable aquifer while salt water intrusion below the coastal plain and high chloride concentrations in the eastern basin make the Otay Valley Groundwater Basin marginal to inferior for domestic and agricultural uses (DWR 2014). Basin recharge occurs from

⁶Eutrophic conditions within a body of water are typically rich in nutrients and support a dense plant population, the decomposition of which kills animal life by depriving them of oxygen.

1 percolation of precipitation and infiltration of surface flows and ponding within the Otay Valley.
2 Groundwater storage and capacity of the basin is unknown.

3 Local groundwater supplies vary seasonally depending on recent levels of precipitation. Shallow
4 groundwater supplies would be expected during wet years, periods of recent rains, or releases from the
5 Lower Otay Reservoir, especially in areas along the Otay River floodplain. However, during normal or dry
6 conditions, regional levels are estimated to be at least 18 to 100 feet bgs, depending on time of year and
7 location. During geotechnical exploratory borings up to 40 feet bgs, groundwater was not encountered
8 (Geocon Inc. 2014).

9 **Tsunamis, Seiches, and Mudflows**

10 A tsunami is a wave or series of waves in the ocean that can travel extremely quickly (as fast as 500 mph)
11 to land and be substantially higher than normal waves, thereby causing flooding of inland areas and hazards
12 to life and property (CGS 2012). Tsunami inundation maps have been developed by the State for the San
13 Diego area (California Emergency Management Agency [CEMA] 2009). Potential tsunami hazard areas
14 are limited to the Pacific Ocean coastline, Mission Bay, and San Diego Bay areas. The proposed project
15 would be located outside of tsunami inundation zones.

16 A seiche is a standing wave in an enclosed or partially enclosed body of water, such as a lake, bay, or
17 estuary, which oscillates back and forth from one side of the waterbody to the other. The motion of a seiche
18 is similar to that of water sloshing back and forth between the walls of a swimming pool. Seiches can be
19 caused by earthquakes, tsunamis, very strong winds, and severe storm fronts. No large bodies of water are
20 located adjacent to the proposed project.

21 Mudflows are a form of mass wasting where soils become liquefied under heavy precipitation and/or
22 groundwater flows. Mudflows are similar to landslides but are triggered by excessive volumes of water,
23 lowering the viscosity of the soils and allowing the material to rapidly flow greater distances and over more
24 gradual terrain. A mudflow requires source material to be predominantly fine-grained material and most
25 commonly occur in mountainous areas or drainage areas. Areas of disturbance from earthmoving,
26 vegetation removal, or previously burnt during wildfires increase the possibility of a mudflow occurring.
27 Mudflows are the most commonly occurring hazard in the San Diego region (San Diego County 2007).

28 The proposed project area contains steep slopes (up to 35 percent slopes) along Dennerly Canyon, Johnson
29 Canyon, O'Neal Canyon, and smaller finger canyons on the south side of the Otay Valley. Areas of
30 previously documented landslides occur along some of these steeper areas. These areas may be prone to
31 mudflows following periods of intense rainfall. Additionally, stretches of the project alignment are
32 designated as a fire hazard severity zone, with past wildfires occurring at the head of Johnson Canyon (San
33 Diego County 2014). The potential for mudflows to occur increases in recent burn scar areas.

34 **Regulatory Setting**

35 **Federal**

36 *Clean Water Act*

37 The CWA is the primary federal law that protects the quality of the nation's surface waters, including lakes,
38 rivers, and coastal wetlands. The key sections pertaining to water quality regulation for the proposed project
39 are CWA Sections 303, 401, 402, and 404.

1 *CWA Section 303(d) – Listing of Impaired Water Bodies*

2 Under CWA Section 303(d), states are required to identify “impaired water bodies” (those not meeting
3 established water quality standards), identify the pollutants causing the impairment, establish priority
4 rankings for waters on the list, and develop a schedule for the development of control plans to improve
5 water quality. The USEPA then approves the state’s recommended list of impaired waters or adds and/or
6 removes water bodies. As stated previously, the Otay River is not listed as an impaired water body, but the
7 Tijuana River watershed is impaired by a number of pollutants.

8 *CWA Section 401 – Water Quality Certification*

9 CWA Section 401 requires an evaluation of water quality when a proposed activity requiring a federal
10 license or permit could result in a discharge to waters of the U.S. In California, the SWCRB and its nine
11 RWQCBs issue water quality certifications. Each RWQCB is responsible for implementing Section 401 in
12 compliance with the CWA and its water quality control plan (also known as a Basin Plan), as discussed
13 below in reference to the Porter-Cologne Water Quality Control Act. Applicants for a federal license or
14 permit to conduct activities that might result in the discharge to waters of the U.S. must also obtain a
15 Section 401 water quality certification to ensure that any such discharge would comply with the applicable
16 provisions of the CWA. Section 401 water quality certifications for discharges in the project area are issued
17 by the San Diego RWQCB.

18 *CWA Section 402 – NPDES Permits for Stormwater Discharge*

19 CWA Section 402 regulates construction-related stormwater discharges to surface waters through the
20 NPDES, which is officially administered by the USEPA. In California, the USEPA has delegated its
21 authority to the SWRCB, which, in turn, delegates implementation responsibility to the nine RWQCBs, as
22 discussed below in reference to the Porter-Cologne Water Quality Control Act.

23 The NPDES program provides for both general (those that cover a number of similar or related activities)
24 and individual (activity- or project-specific) permits.

25 Construction General Permit

26 Construction projects that disturb 1.0 or more acres of land are required to obtain coverage under SWRCB’s
27 General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities
28 (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). The general permit
29 requires that the applicant file a public Notice of Intent to discharge stormwater and prepare and implement
30 a SWPPP. The SWPPP must include a site map and a description of the proposed construction activities,
31 demonstrate compliance with relevant local ordinances and regulations, and identify BMPs that would be
32 implemented to prevent soil erosion and protect against discharge of sediment and other construction-
33 related pollutants to surface waters. Permittees are further required to monitor construction activities and
34 report compliance to ensure that BMPs are correctly implemented and are effective in controlling the
35 discharge of construction-related pollutants.

36 *San Diego Regional Municipal Separate Storm Sewer Systems Permit*

37 As discussed in the Stormwater section above, stormwater discharges in the San Diego region are regulated
38 under the San Diego RWQCB’s Regional Municipal Separate Storm Sewer Systems (MS4s) permit
39 (NPDES No. CAS0109266; Waste Discharge Requirements Order No. R9-2013-0001, as amended). This
40 permit covers stormwater discharges from the City of Chula Vista, City of San Diego, and San Diego
41 County within the project area, and other cities and agencies in San Diego, Orange, and Riverside counties.
42 The MS4 Permit requires all development and redevelopment projects to implement stormwater source

control and site design practices to minimize the generation of pollutants. Consistent with this permit, the San Diego Regional Co-permittees, including the City of Chula Vista, City of San Diego, and San Diego County, were required to develop a municipal-specific local Standard Urban Storm Water Mitigation Plan (SUMP) and ordinances consistent with this mitigation plan. The subsequent Countywide Model SUMP contains the following objectives:

- Prohibit non-stormwater discharges
- Reduce the discharge of pollutants to stormwater conveyance systems to the maximum extent practicable by implementing BMPs during the project's construction and post-development (permanent) phases.
- Provide guidance for conformance with regional hydromodification management requirements, or requirements which govern the alteration of landscape to ensure the natural flow of water (this can sometimes take the form of channel modification or channelization.)

The MS4 permit is intended to be used by both public and private development projects, and includes construction BMPs and permanent BMPs that should be followed.

CWA Section 404 – USACE Permit for Discharge of Dredged/Fill Material

CWA Section 404 requires an evaluation of a proposed activity requiring a federal license or permit that could result in a discharge of dredged or fill material to waters of the U.S., including wetlands. The USACE hosts authority of jurisdictional determinations, permit issuance, and enforcement of violations. Permits for discharges into waters of the U.S. may be site-specific or general permits, i.e., nationwide permits or regional general permits.

State

SWRCB – Porter-Cologne Water Quality Control Act

Acting under the leadership of the SWRCB, RWQCBs protect the beneficial uses of surface water and groundwater in California under the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) (California Water Code [CWC] Section 13000 et. seq.). The RWQCBs regulate all pollutant or nuisance discharges that may affect either surface waters or ground Waters of the State. In the absence of a legally approved formal protocol for delineating Waters of the State, all potential waters of the U.S. as well as all isolated waters are considered Waters of the State.

Water quality in California is governed by the Porter-Cologne Act. The Porter-Cologne Act delegates responsibility to the SWRCB for water rights and water quality protection and directs the nine statewide RWQCBs to develop and enforce water quality standards within their jurisdiction. The Porter-Cologne Act requires any entity discharging waste or proposing to discharge waste within any region that could affect the quality of the “Waters of the State” to file a “report of waste discharge” with the appropriate RWQCB. The appropriate RWQCB then must issue a permit, referred to as a waste discharge requirement (WDR). WDRs implement water quality control plans and take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, and the need to prevent nuisances (CWC Section 13263).

The Porter–Cologne Act requires the development and periodic review of Basin Plans for the protection of water quality in each of the state’s nine regions. It requires that each RWQCB formulate and adopt a Basin Plan for all areas within the region (CWC Section 13240). A Basin Plan is unique to each region and must

1 identify beneficial uses, establish water quality objectives for the reasonable protection of the beneficial
2 uses, and establish a program of implementation for achieving the water quality objectives.

3 *California Fish and Game Code – Lake or Streambed Alteration Agreement*

4 Fish & Game Code Section 1602 states that “an entity may not substantially divert or obstruct the natural
5 flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or
6 lake” unless the CDFW receives written notification regarding the activity and the entity pays the applicable
7 fee. If CDFW determines that the activity may substantially adversely affect an existing fish or wildlife
8 resource, an agreement is issued to the entity that includes reasonable measures necessary to protect the
9 resource.

10 *California Building Standards Code*

11 Title 24 CCR, also known as the CBC, specifies standards for geologic and seismic hazards other than
12 surface faulting. These codes are administered and updated by the California Building Standards
13 Commission. CBC specifies criteria for open excavation, seismic design, and load-bearing capacity directly
14 related to construction in California.

15 **Local**

16 Because the CPUC is a state agency, it generally is not subject to local laws, land use regulations and
17 discretionary policies. However, local laws, regulations, and policies are considered here for the evaluation
18 of potential hydrology and water quality impacts that could result from the proposed project to the extent
19 that they may inform the analysis and allow for full disclosure.

20 Because the CPUC regulates and authorizes the construction of investor-owned public utility facilities, the
21 CPUC has exclusive jurisdiction over the siting and design of the proposed project. As such, projects under
22 CPUC jurisdiction, including the proposed project, are exempt from local land use and zoning regulations
23 and permitting. However, Section III.C of CPUC General Order 131-D (planning and construction of
24 facilities for the generation of electricity and certain electric transmission facilities) requires “the utility to
25 communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any non-
26 discretionary local permits.” As a result, SDG&E has taken into consideration all State and local plans and
27 policies as they relate to hydrology and water quality resources. Although County and other local policies
28 are listed below, they are provided for disclosure purposes only.

29 *San Diego County General Plan*

30 The San Diego County General Plan, Conservation and Safety Elements contains the following policies
31 related to hydrology and water quality (San Diego County 2011):

- 32 ▪ **COS-4.3 Stormwater Filtration.** Maximize stormwater filtration and/or infiltration in areas that
33 are not subject to high groundwater by maximizing the natural drainage patterns and the retention
34 of natural vegetation and other pervious surfaces. This policy shall not apply in areas with high
35 groundwater, where raising the water table could cause septic system failures, moisture damage to
36 building slabs, and/or other problems.
- 37 ▪ **COS-5.2 Impervious Surfaces.** Require development to minimize the use of directly connected
38 impervious surfaces and to retain stormwater run-off caused from the development footprint at or
39 near the site of generation.

- **COS-5.3 Downslope Protection.** Require development to be appropriately sited and to incorporate measures to retain natural flow regimes, thereby protecting downslope areas from erosion, capturing runoff to adequately allow for filtration and/or infiltration, and protecting downstream biological resources.
- **COS-5.5 Impacts of Development to Water Quality.** Require development projects to avoid impacts to the water quality (e.g., total dissolved solids) in local reservoirs, groundwater resources, and recharge areas, watersheds, and other local water sources.
- **S-9.2 Development in Floodplains.** Limit development in designated floodplains to decrease the potential for property damage and loss of life from flooding and to avoid the need for engineered channels, channel improvements, and other flood control facilities. Require development to conform to federal flood proofing standards and siting criteria to prevent flow obstruction.
- **S-9.3 Development in Flood Hazard Areas.** Require development within mapped flood hazard areas be sited and designed to minimize on- and off-site hazards to health, safety, and property due to flooding.
- **S-9.5 Development in the Floodplain Fringe.** Prohibit development in the floodplain fringe when located on semi-rural and rural lands to maintain the capacity of the floodplain, unless specifically allowed in a community plan. For parcels located entirely within a floodplain or without sufficient space for a building pad outside the floodplain, development is limited to a single family home on an existing lot or those uses that do not compromise the environmental attributes of the floodplain or require further channelization.
- **S-9.6 Development in Dam Inundation Areas.** Prohibit development in dam inundation areas that may interfere with the County's emergency response and evacuation plans.
- **S-10.1 Land Uses within Floodways.** Limit new or expanded uses in floodways to agricultural, recreational, and other such low-intensity uses and those that do not result in any increase in flood levels during the occurrence of the base flood discharge, do not include habitable structures, and do not substantially harm, and fully offset, the environmental values of the floodway area. This policy does not apply to minor renovation projects, improvements required to remedy an existing flooding problem, legal sand or gravel mining activities, or public infrastructure.
- **S-10.5 Development Site Improvements.** Require development to provide necessary on- and off-site improvements to stormwater runoff and drainage facilities.
- **S-10.6 Stormwater Hydrology.** Ensure development avoids diverting drainages, increasing velocities, and altering flow rates to off-site areas to minimize adverse impacts to the area's existing hydrology.

City of Chula Vista General Plan

The City of Chula Vista 2020 General Plan, Environmental Element, contains the following policies related to hydrology and water quality (City of Chula Vista 2015):

- **E 15.1.** Prohibit proposals to subdivide, grade, or develop lands that are subject to potential flood hazards, unless adequate evidence is provided that demonstrates that such proposals would not be adversely affected by potential flood hazards and that such proposals would not adversely affect surrounding properties. Require site-specific hydrological investigations for proposals within areas

subject to potential flood hazards; and implement all measures deemed necessary by the City Engineer to avoid or adequately mitigate potential flood hazards.

- **E 15.2.** Wherever feasible, land uses, buildings, and other structures determined to be unsafe from flood hazards shall be discontinued, removed, or relocated.

City of San Diego General Plan

The City of San Diego General Plan, Conservation and Public Safety Elements, contain the following policies related to hydrology and water quality (City of San Diego 2008):

- **CE-B.4.** Limit and control runoff, sedimentation, and erosion both during and after construction activity.
- **CE-E.2.** Apply water quality protection measures to land development projects early in the process—during project design, permitting, construction, and operations—in order to minimize the quantity of runoff generated on site, the disruption of natural water flows and the contamination of stormwater runoff.
- **CE-E.3.** Require contractors to comply with accepted stormwater pollution prevention planning practices for all projects.
- **CE-E.6.** Continue to encourage “Pollution Control” measures to promote the proper collection and disposal of pollutants at the source, rather than allowing them to enter the storm drain system.
- **PF-G.1.** Ensure that all stormwater conveyance systems, structures, and maintenance practices are consistent with federal CWA and California RWQCB NPDES permit standards.
- **PF-G.2.** Install infrastructure that includes components to capture, minimize, and/or prevent pollutants in urban runoff from reaching receiving waters and potable water supplies.
- **PF-G.3.** Meet and preferably exceed regulatory mandates to protect water quality in a cost-effective manner monitored through performance measures.
- **PF-G.5.** Identify and implement BMPs for projects that repair, replace, extend or otherwise affect the stormwater conveyance system. These projects should also include design considerations for maintenance, inspection, and, as applicable, water quality monitoring.

City of San Diego Municipal Code

Chapter 4, Article 3, Division 3 of the San Diego Municipal Code contains stormwater management and discharge controls. The purpose of these controls are to protect and enhance the quality of water and wetlands in a manner consistent with the CWA and NPDES Permit CAS0109266, as amended. This division includes prohibited discharges, requires implementation of BMPs to reduce risk of non-stormwater or pollutant discharges, compliance with any general stormwater NPDES permit, and development and implementation of a SWPPP.

Chapter 14, Article 2, Division 2 of the San Diego Municipal Code contains general development regulations for development of, and impacts to, drainage facilities. The purpose of these regulations are to limit water quality impacts from development, minimize hazards due to flooding, minimize impacts to environmentally sensitive lands, and provide consistency with federal and state regulations. This division applies to all new development in the city and requires that all stormwater runoff control and drainage

facilities be constructed in accordance with standards established in the Land Development Manual, the Standard Specifications for Public Works, and any City-adopted supplements.

2.9.2 Environmental Impacts

a. Would the project violate any water quality standards or waste discharge requirements? (Less than Significant with Mitigation)

Construction

During construction, SDG&E would utilize existing access roads that pass through different surface water features (small creek channels) and road rut vernal pools for the transportation of construction and personnel vehicles and equipment. Use of these access roads could result in the suspension of sediments, increased turbidity, and the contamination of these aforementioned creek channels and vernal pool road ruts, creating a substantial adverse impact to existing water quality. The proposed project would also result in ground disturbance and expose soils, potentially resulting in increased erosion and sedimentation.

Project construction would also involve the operation and storage of construction equipment, which typically contains hazardous materials, such as fuel, hydraulic fluid, lubricant, oil, grease, etc. Accidental spills of these materials or improper material disposal could potentially be transported through overland sheet flow and/or flow through ephemeral drainages that are tributaries to the Otay River or Tijuana River (SDG&E 2015). Many hazardous materials used in construction activities are toxic to aquatic organisms or humans and, if allowed to enter waterways, could adversely affect designated beneficial uses (see Table 2.9-1). Although not anticipated, shallow groundwater supplies may be encountered during ground-disturbing activities (such as excavation for pole foundations), thereby providing a direct pathway by which hazardous materials could impair groundwater quality. If dewatered groundwater extracted from excavation areas is contaminated and discharged to surface waters or groundwater, the quality of those surface or groundwater resources would be threatened such that water quality standards are exceeded. These scenarios have the potential to result in a substantial adverse impact to water quality.

The proposed project is classified as a Type 1 Linear Underground/Overhead Project where project activities occur on unpaved improved roads and the adjacent shoulders and have a lower potential to impact water quality (SWRCB 2009). Potential water quality risks to receiving waters, as well as risk of project sedimentation, are both considered “low” (SWRCB 2009); however, existing regulations would require the proposed project to implement a number of measures to prevent possible adverse effects on water quality.

Under the CWA, a Section 401 Water Quality Certification and/or Section 404 nationwide or individual permit may be needed for the proposed project should there be any discharges into vernal pools or other waters of the U.S. or State. The Section 401 Water Quality Certification and/or Section 404 nationwide or individual permit may require water quality protection measures and compensatory mitigation for any impacts to these waters. Under Section 402, the proposed project would be required (because it would disturb more than 1 acre of land) to comply with the General Permit for Discharges of Storm Water Associated with Construction Activity (Water Quality Order No. 2009-0009-DWQ) and submit Permit Registration Documents to the SWRCB. Compliance with this permit also includes preparation and implementation of a SWPPP. The SWPPP must be developed by a certified Qualified SWPPP Developer (SWRCB 2017). As described in Section 2.9.1, Setting, the SWPPP must include a list of BMPs to prevent erosion and potential impacts to hydrology and water quality; however, there is some leeway as to which specific BMPs may be included in the SWPPP, as the SWPPP preparer would have some discretion in crafting the plan. Therefore, this IS/MND incorporates Mitigation Measure HYD/WQ-1 to ensure that certain important BMPs for erosion prevention and protection of water quality are implemented during construction of the proposed project. Additionally, Mitigation Measure HYD/WQ-2 requires the applicant

to implement a variety of measures designed for the protection of aquatic resources during construction. These measures include prohibiting the parking of vehicles, staging of equipment, and placement of fill within surface water features. Mitigation Measure HYD/WQ-2 also requires the avoidance of jurisdictional drainage crossings during periods of high flow, and an evaluation of surface flow and ponding after each rain event to determine if a dry-out period is required to avoid substantial impacts to the drainage crossings. Alternative measures, including the implementation of temporary bridges, are also included for avoidance, on an as-needed basis, as determined by the aquatic resource monitor. Implementation of Mitigation Measure BIO-19: Avoid Impacts to Special-Status Fairy Shrimp would ensure that vernal pools are avoided to the maximum extent possible and provides measures to protect vernal pools located in the access roads. Mitigation Measure BIO-20: Minimize and Compensate for Impacts to Special-Status Shrimp provides measures for direct and indirect impacts to vernal pools.

Potential adverse impacts to surface waters or groundwater resulting from project-related discharges would be further reduced with the project's required compliance with the San Diego Regional MS4 Permit, and, if construction dewatering is necessary, the NPDES Groundwater Extraction Discharges to Surface Waters (CAG919003). Furthermore, Mitigation Measure HYD/WQ-3 would be implemented in accordance with local, state, and federal dewatering requirements to ensure that the proposed project would have a less-than-significant impact on water quality.

Additionally, as discussed in Section 2.8, Hazards and Hazardous Materials, storage-of or use-of hazardous materials for the proposed project's construction activities would be limited and handled in compliance with all applicable federal, State, and local hazardous materials and hazardous waste regulations. Mitigation Measure HAZ-2: Personnel Training would ensure that all construction personnel receive the proper training on proper use, handling, storage and disposal of hazardous materials. The project would not require excessive chemical processing, hazardous material storage or stockpiling outside of what is typical for standard construction activities. Compliance with Mitigation Measure HAZ-2 and applicable federal, State, and local hazardous materials and hazardous waste regulations, as described in Section 2.8.1, Setting, would ensure impacts to water quality would be less than significant.

With implementation of Mitigation Measure HYD/WQ-1, HYD/WQ-2, HYD/WQ-3, HAZ-2, and adherence to existing laws and regulations, the proposed project is not anticipated to have any significant impacts on water quality during construction. The proposed project would not be anticipated to violate any water quality standards or waste discharge requirements during construction. This impact would be less than significant with mitigation.

Mitigation Measure HYD/WQ-1: Implement Construction BMPs for Erosion Control

SDG&E and/or its contractor(s) shall implement the following measures during the proposed project construction, or shall implement alternative measures that are equally or more effective:

- Implement practices to reduce erosion of exposed soil and stockpiles, including:
 - watering for dust control,
 - establishing perimeter silt fences,
 - applying hydraulic mulch and/or hydroseed,
 - covering stockpiles when not in use,
 - installation of fiber rolls,

- installation of sediment basins and/or traps, and
- placement of gravel bag berms.
- Minimize soil disturbance areas.
- Preserve existing vegetation, where feasible.
- Implement practices to maintain water quality, including silt fences, stabilized construction entrances, and storm-drain inlet protection.
- Where feasible, limit construction to dry periods.
- Revegetate disturbed areas, as necessary.

The performance standard for these erosion control measures is to use the best available technology that is economically achievable. These measures may be included in SWPPP requirements, as appropriate.

Mitigation Measure HYD/WQ-2: Implement Measures to Protect Aquatic Resources During Project Construction

The following measures shall be implemented by SDG&E or its contractors:

- Jurisdictional drainage crossings shall be avoided during periods of high flow, as determined by the CPUC-approved aquatic resource monitor. After each rain event, drainage crossings shall be evaluated for surface flows and ponding by the aquatic resource monitor to determine if a dry-out period of 24 hours or more (full avoidance of the crossing) is required to avoid substantial impacts to the drainage crossings. If it becomes necessary to place a temporary bridge over a jurisdictional drainage during construction, as determined by the aquatic resource monitor, the bridge shall be placed over the drainage, spanning the channel from bank to bank, above the OHWM, and allowing natural flow to continue downstream. An aquatic resource monitor shall be present during placement and removal of any temporary bridges.
- When a pole location or staging yard is located within 25 feet of a drainage feature that qualifies as a federal and/or state jurisdictional aquatic feature, the following constraints shall apply:
 - A CPUC-approved aquatic resource monitor, with the authority to stop work if necessary, shall be present on site as needed to ensure minimization and avoidance measures are complied with. Monitoring shall be conducted at aquatic features in particular during BMP installation, spot checking during construction, and at the end of construction.
 - Prior to construction activity, the aquatic resource monitor or SDG&E Environmental Representative shall provide an Environmental Tailgate meeting to the crew to review all construction restrictions.
 - Parking of vehicles and staging of equipment shall not occur within jurisdictional aquatic features.

- If work is conducted at pole locations during the rainy season (October 1 through May 1), before scheduling proposed project activities, the weather forecast shall be monitored. Work shall not be scheduled if a greater than 40 percent chance of rain is forecasted during the time needed to complete the activity. If rain does occur unexpectedly during proposed project activities, the site shall be secured using BMPs (e.g., fiber rolls) to prevent sedimentation and erosion.
- Stockpiled material shall not be placed within the jurisdictional drainage or where it could be washed into the jurisdictional drainage feature during a storm event. If stockpile is within 25 feet of a jurisdictional drainage and left overnight, the stockpile shall be covered with plastic and secured.
- Any vegetation that has been mowed or trimmed to provide access or work space shall not be discharged within a jurisdictional drainage or placed where it could be washed into a jurisdictional drainage during a storm event.
- At the end of construction, all unused construction material and debris shall be removed and disposed-of at an appropriate licensed facility, and in accordance with all applicable federal, State, and local regulations.

Mitigation Measure HYD/WQ-3: Implement General Construction Dewatering Procedures

SDG&E or its contractors shall use the following general construction watering procedures:

- A submersible pump shall be installed.
- If the groundwater shall be discharged to an upland area, as necessary, it shall be pumped to a desiltation tank (i.e., baker tank) for sediment filtering. If the groundwater is pumped in accordance with state permitting requirements.
- If the groundwater is pumped to a baker tank for discharge to surface waters, the water shall be tested to ensure compliance with the applicable RWQCB or SWRCB NPDES permit requirements. If the water quality does not meet permit requirements, additional baker tanks shall be used and/or additional treatment or filtering shall be performed until the applicable requirements are met.
- If the groundwater shall not be discharged to an upland area or surface waters in the area, or if the water quality does not meet permit requirements, the water shall be disposed of at an approved SDG&E disposal site that is licensed to handle wastewater.

1 **Operation and Maintenance**

2 Following construction, SDG&E shall continue to regularly inspect, maintain, and repair the power line
3 facilities. Operation and maintenance activities for the proposed project shall be conducted in the same
4 manner as the existing facilities, and are expected to decrease slightly as a result of the proposed project
5 due to the lower maintenance requirements of the replacement steel poles relative to the existing wood
6 poles. Existing access roads shall be utilized to access the new structures. Because no new roads shall be
7 constructed and only minor modifications to existing roads shall occur, impacts to water quality standards
8 and waste discharge requirements associated with operation and maintenance of the proposed project would
9 be less than significant.

10 ***b. Would the project substantially deplete groundwater supplies or interfere substantially with***
11 ***groundwater recharge such that there would be a net deficit in aquifer volume or a lowering***
12 ***of the local groundwater table level (e.g., the production rate of pre-existing nearby wells***
13 ***would drop to a level which would not support existing land uses or planned uses for which***
14 ***permits have been granted)? (Less than Significant)***

15 **Construction**

16 The proposed project is located in the Otay Valley Groundwater Basin; a basin which provides very limited
17 water supply for domestic and agricultural uses. Groundwater supplies underlying the project alignment are
18 estimated to be approximately 18 to 100 feet bgs, depending on the time of year and location (Geocon
19 2014). As discussed in Section 1.7.7, Typical Equipment, the Otay Water District would be providing
20 approximately 4.5 million gallons of recycled water or local municipal supplies for project-related dust
21 control, compaction, and fire protection (see Section 2.17, Utilities and Service Systems, and Appendix B,
22 Otay Water District Will-Serve Letter). Local groundwater resources would not be used for construction or
23 operational purposes.

24 The Otay River floodplain provides groundwater recharge area through percolation of precipitation and
25 infiltration of surface water. The proposed project would remove approximately 132 existing poles and
26 replace them with approximately 117 new poles. While most poles would be installed via direct-bury
27 methods and not result in any additional impervious surface area, approximately 21 poles would be secured
28 to a 7-foot diameter concrete footing increasing impervious surface areas. Each concrete footing would
29 result in a permanent footprint of approximately 39 square feet. Together, 21 poles would result in
30 approximately 819 square feet (0.2 acre) of new impervious surface. This limited surface disturbance would
31 not substantially interfere with groundwater basin recharge in the area, and therefore, impacts would be less
32 than significant.

33 **Operation and Maintenance**

34 Following construction, SDG&E would continue to regularly inspect, maintain, and repair the power line
35 facilities, as well as protect against fire. Operation and maintenance activities for the proposed project
36 would be conducted in the same manner as the existing facilities, and are expected to decrease slightly as a
37 result of the proposed project due to the lower maintenance requirements of the replacement steel poles
38 relative to the existing wood poles. Therefore, there would be no impact of groundwater depletion or
39 recharge during operation and maintenance.

c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site? (Less than Significant with Mitigation)

Construction

In most instances, proposed pole installations would occur within 10 feet of existing poles. Ground disturbance in the proposed project area would occur during pole installations and other minor earthwork activities and vegetation trimming. The proposed project would utilize existing unpaved access roads. Vehicles and equipment are prone to tracking soil and/or spoil from work areas to paved roadways, which could result in erosion and siltation in the project area. Water trucks used during construction to assist with fugitive dust abatement could cause erosion and subsequent sedimentation. In addition, soil compaction—whether intentional or as a result of heavy vehicle and equipment use—can increase surface runoff, which in turn increases erosion potential. These construction activities could result in substantial erosion or siltation on or off site which could potentially alter the existing drainage pattern of the site or area.

Mitigation Measure HYD/WQ-1 would implement BMPs to control erosion and limit areas of disturbance. Mitigation Measure HYD/WQ-2 requires the avoidance of jurisdictional drainage crossings during periods of high flow, and an evaluation of surface flow and ponding after each rain event to determine if a dry-out period is required to avoid substantial impacts to the drainage crossings. Alternative measures, including the implementation of temporary bridges, are also included for avoidance, on an as-needed basis, as determined by the aquatic resource monitor. Avoidance of unpaved access roads which cross jurisdictional water features during periods of high flow and ponding would reduce any potential erosion and siltation that could result from the tracking of soil and spoil from work areas to paved access roads. With implementation of Mitigation Measure HYD/WQ-1 and Mitigation Measure HYD/WQ-2, potential impacts would be reduced to less-than-significant levels.

Additionally, the proposed project is designed to span small canyons and drainages and no new poles or construction equipment would be placed or used within a drainage area. Proposed road improvements would not significantly alter current drainage patterns and would have a net beneficial impact, (refer to Section 1.8.2, Road Maintenance), and therefore reduce erosion and sediment transport. Implementation of Mitigation Measure BIO-19: Avoid Impacts to Special-Status Fairy Shrimp would ensure that vernal pools are avoided to the maximum extent possible and provides measures to protect vernal pools located in the access roads.

Lastly, during construction, clearing, vegetation removal, road grading, and other construction-related excavation activities may expose soils within the project alignment. As described above, Implementation of Mitigation Measure HYD/WQ-1 would minimize and control construction-related erosion and/or siltation by minimizing the extent of ground disturbance, containing sediment on site, implementing barriers or other measures to prevent runoff from reaching surface waters, soil stabilization in temporary work areas, and revegetation of disturbed areas.

Moreover, ground disturbance and construction-related activities would be temporary and limited in scope and area of impact. Mitigation Measure HYD/WQ-2 requires the avoidance of jurisdictional drainage crossings. Avoidance of jurisdictional waters would reduce potential erosion and siltation, and related changes to existing drainage patterns, that could result from construction activities, including the clearing of vegetation, road grading, and other construction-related excavation. With implementation of Mitigation Measure HYD/WQ-1 and HYD/WQ-2, potential impacts to existing drainage patterns would be less than significant.

1 **Operation and Maintenance**

2 Operation and maintenance activities for the proposed project would be conducted in the same manner as
3 the existing facilities, and are expected to decrease slightly as a result of the proposed project due to the
4 lower maintenance requirements of the replacement steel poles relative to the existing wood poles. Existing
5 access roads would be utilized to access new structures. Because no new roads would be constructed, there
6 would be no increase in the erosion or sedimentation potential, and impacts associated with operation and
7 maintenance of the proposed project would be less than significant.

8 *d. Would the project substantially alter the existing drainage pattern of the site or area,*
9 *including through the alteration of the course of a stream or river, or substantially increase*
10 *the rate or amount of surface runoff in a manner which would result in flooding on or off*
11 *site? (Less than Significant with Mitigation)*

12 **Construction**

13 As discussed in Items 2.9.2(b) and (c) above, the proposed project would utilize existing access roads and
14 install new poles within approximately 10 feet of existing poles. These activities could indirectly contribute
15 to the alteration of existing drainage patterns through the release of sediment, erosion, and/or siltation.

16 Construction-related activities would be temporary and controlled through implementation of Mitigation
17 Measure HYD/WQ-1. Mitigation Measure HYD/WQ-1 includes measures that are designed to control the
18 release of sediment and soil erosion, activities that can alter the course and flow of a water feature and relate
19 to indirect flooding on- or off-site. Installation of silt fencing, fiber rolls, gravel bag berms, storm drainage
20 inlet protections, sediments basins and traps can protect the soil surface and prevent the soil particles from
21 being detached and transported by rain, flowing water or wind. Implementation of Mitigation Measure
22 HYD/WQ-1 would ensure that impacts to existing drainage patterns would be less than significant.

23 Changes in surface runoff upon project completion would be primarily associated with changes to
24 impervious surfaces related to the installation of concrete pole footings and road maintenance. Each
25 concrete footing would result in a permanent footprint of approximately 819 square feet (0.2 acre).
26 Collectively, increases at these 21 locations would be negligible over the course of the 7-mile alignment.
27 Minor increases to impervious surface area would not measurably affect drainage patterns such that on- or
28 off-site flooding would occur. Therefore, this impact would be less than significant.

29 **Operation and Maintenance**

30 Operation and maintenance activities for the proposed project would be conducted in the same manner as
31 the existing facilities, and are expected to decrease slightly as a result of the proposed project due to the
32 lower maintenance requirements of the replacement steel poles relative to the existing wood poles. Drainage
33 patterns would remain unchanged and operation and maintenance activities for the proposed project would
34 not result in the potential for increased runoff volumes. As a result, impacts on water runoff or flooding
35 would be less than significant.

1 *e. Would the project create or contribute runoff water which would exceed the capacity of*
2 *existing or planned stormwater drainage systems or provide substantial additional sources of*
3 *polluted runoff? (Less than Significant with Mitigation)*

4 **Construction**

5 The western portion of the proposed project alignment is within commercial and residential developed areas
6 with an established stormwater drainage system operated by the City of Chula Vista and City of San Diego.
7 The eastern portion of the proposed project alignment traverses predominately undeveloped, open space
8 and lacks a dedicated stormwater drainage system.

9 Construction activities occurring in temporary construction areas, including construction yards, pole work
10 areas, existing access roads, and stringing sites could potentially increase stormwater runoff due to soil
11 compaction and vegetation removal. However, as discussed in Item 2.9.2(b), the proposed project would
12 not significantly increase impervious surface area and would thereby not contribute substantial quantities
13 of stormwater runoff compared to existing conditions. As discussed in Item 2.9.2(a) above, standard
14 compliance with NPDES permits regulating construction activities and stormwater discharges in the project
15 area would minimize the likelihood of polluted runoff discharges from the construction area to groundwater
16 or surface water resources. Implementation of Mitigation Measure HYD/WQ-2 as well as Mitigation
17 Measure BIO-18: Provide Habitat Compensation or Restoration for Permanent Impacts to Native
18 Vegetation Communities, would ensure that construction areas are revegetated which would reduce runoff
19 from the proposed project.

20 The use of water for dust- and fire-suppression could increase surface runoff if water is applied in excess
21 and the soil infiltration capacity is exceeded. Procedures outlined in the SWPPP as well as in Mitigation
22 Measure HYD/WQ-1 would be implemented so that runoff and off-site sedimentation are minimized.

23 Construction would introduce new sources of pollutants, such as fuel, hydraulic fluid, lubricant, oil, grease,
24 as well as sediment, trash, and other construction materials that can enter storm water and be transported
25 off site. In accordance with the proposed project's SWPPP and implementation of Mitigation Measure
26 HYD/WQ-1, potential impacts to planned or existing stormwater drainage systems or increases in polluted
27 runoff would be less than significant.

28 **Operation and Maintenance**

29 Operation and Maintenance activities for the proposed project would be conducted in the same manner as
30 the existing facilities. Operation and maintenance activities are expected to decrease slightly as a result of
31 the proposed project due to the lower maintenance requirements of the replacement steel poles relative to
32 the existing wood poles. The amount of surface runoff is expected to be similar to or less than the existing
33 conditions, and no impact would occur to existing storm water conveyance systems.

34 Maintenance activities, such as routine inspections and vegetation management, can introduce pollutants to
35 the site. To prevent vegetation from recurring, SDG&E may apply herbicides around the poles following
36 mechanical clearing of vegetation. Mitigation Measure HAZ-2: Personnel Training would ensure that
37 construction personnel are properly trained in the handling, containment, clean up, and disposal of
38 herbicides to help prevent herbicides from polluting runoff during maintenance activities. Because the
39 replacement steel poles would be taller and therefore the conductors would be farther from surrounding
40 vegetation, vegetation management would be required less frequently than with the existing wood poles.
41 As a result, impacts from runoff would be less than significant.

f. Would the project otherwise substantially degrade water quality? (Less than Significant with Mitigation)

Construction and Operation

As described in Item 2.9.2(a), implementation of Mitigation Measure HYD/WQ-1 would ensure that the proposed project would result in less-than-significant impacts regarding erosion and siltation as well as discharge of pollutants resulting from stormwater runoff from disturbed areas during construction. Proposed project construction would not alter existing drainage patterns. Additionally, as described above, Mitigation Measure HYD/WQ-2 requires the avoidance of jurisdictional drainage crossings when inundated or during wetted conditions. Avoidance of jurisdictional waters would reduce potential for water quality degradation that could result from construction activities. Lastly, all dewatering activities would follow the procedures as outlined in Mitigation Measure HYD/WQ-3.

Implementation of Mitigation Measures HYD/WQ-1, HYD/WQ-2, and HYD/WQ-3 would ensure that proposed project construction activities would not substantially degrade water quality in and around the proposed project area.

No other foreseeable sources of pollution are anticipated to be associated with construction, operation, or maintenance of the proposed project. As a result, impacts would be less than significant.

g. Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? (No Impact)

Construction and Operation

No housing would be constructed as part of the proposed project; therefore, no housing would be placed within flood hazard areas. There would be no impact.

h. Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows? (Less than Significant)

Construction

A portion of the proposed project alignment traverses the Otay River 100-year flood zone and 500-year flood zone (FEMA 2012). In a large flood event, power poles have the potential to impede or redirect flood flows, particularly due to debris trapping on the poles. The proposed project would place three direct-bury poles within the 100-year flood zone (Poles 42, 58, and 59), and four direct-bury poles within the 500-year flood zone (Poles 39, 40, 41, and 74). The proposed new poles would be only slightly larger at the base (approximately 2.5 feet in diameter) compared to existing poles (1.0 to 1.5 feet in diameter). The new poles installed east of Heritage Road would be in open space area where there are very few structures and residents along the project alignment. New poles installed west of Heritage Road would be in commercial and residential areas located more than 0.5 mile away from the flood zone.

As previously discussed, new poles and foundations would not significantly alter drainage patterns nor significantly increase impervious surface area. The proposed project would replace 132 existing poles with 117 new poles installed in close proximity to current pole locations. Because the proposed new structures would be located in close proximity to existing poles and the number of poles in the project area would be reduced overall, the proposed project would not significantly alter existing flood flow patterns, volumes

and/or velocities in the project area. Therefore, the potential for the proposed project to impede or redirect flood flows would be less than significant.

Operation and Maintenance

Operation and maintenance activities for the proposed project would be conducted in the same manner as the existing facilities, and are expected to decrease slightly as a result of the proposed project due to the lower maintenance requirements of the replacement steel poles relative to the existing wood poles. The structures located within the flood hazard areas would remain unchanged during operation and maintenance activities; therefore, there would be no impact.

i. Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? (Less than Significant)

Construction

The Lower Otay Reservoir and dam are located approximately 0.6 mile northwest of the proposed project. Following a catastrophic failure of the Lower Otay Reservoir dam (Savage Dam), flood waters would inundate the Otay Valley to the 100-year flood elevation (approximate) (CDC 1980; FEMA 2012). As discussed in Item 2.9.2(h), three direct-bury poles are within the 100-year flood zone (Poles 42, 58, and 59) and four direct-bury poles are within the 500-year flood zone (Poles 39, 40, 41, and 74). If these poles were to become dislodged during a flood event, damage to people or structures could result. This would constitute a significant impact.

The proposed project would be constructed according to CPUC GO 95 and current CBC building and safety standards. CPUC GO 95 provides general standards for safety factors and strength requirements for poles, crossarms, guy lines, and other structures, as well as minimum pole setting depths. New poles and footings would meet or exceed existing pole strength and stability. These construction and design standards would ensure the new poles would withstand large flood events, including those events related to dam failure, and therefore, it would be unlikely that a pole would become dislodged and cause damage to people or structures. Potential risks to the environment from construction of the proposed project associated with flooding as a result of a dam failure would be less than significant.

Operation and Maintenance

Operation and maintenance activities would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

j. Inundation by tsunami, seiche, or mudflow? (Less than Significant with Mitigation)

Construction

The project alignment is not within a tsunami-inundation area (CEMA 2009) and would not be at risk of inundation during construction or operation of the proposed project.

The closest body of water to the proposed project area is the Lower Otay Reservoir, located approximately 0.6 mile to the northeast of the proposed project area; however, if a seiche were to occur, it would unlikely affect structures associated with the proposed project given the distance from the waterbody.

Steep slopes along Dennery Canyon, Johnson Canyon, O'Neal Canyon, and smaller finger canyons display evidence of landslide activity and may be prone to mudflows following periods of intense rainfall.

1 Additionally, recent burn scar areas from past wildfires increase the potential for mudflows to occur. The
2 proposed project would be predominantly located in areas with moderately to steeply sloping terrain, where
3 the potential for a localized shallow landslide is increased. Temporary impacts from the proposed project's
4 construction activities have the potential to increase surface instability, as does permanent site disturbance.

5 Temporary work areas would be restored to approximate pre-construction conditions to the extent
6 practicable once construction activities are completed, thereby limiting the amount of denuded surface soils
7 and minimizing the potential for shallow landslides to occur. To further reduce risks associated with
8 potential mudflows, SDG&E and/or its design contractor would be required to design and construct the
9 proposed project in accordance with Mitigation Measure GEO-1. Mitigation Measure GEO-1 ensures
10 project components are designed and developed based on underlying soil conditions, increasing structural
11 integrity to a level strength that minimizes risks associated with steep slopes, potentially unstable soils, and
12 mass wasting events, such as landslides and mudflows. In addition, the proposed project would comply
13 with CPUC GO 95 and current CBC building and safety standards. The new poles and footings would meet
14 or exceed existing pole strength.

15 Following restoration of temporary work areas, implementation of Mitigation Measure GEO-1, and
16 adherence to CPUC GO 95 and current CBC standards, installation of the new poles would be able to endure
17 the effects of mudflows; and therefore, potential hazards from mudflows would be less than significant.

18 **Operation and Maintenance**

19 Operation and maintenance activities would not exacerbate any risk of inundation by seiche, tsunami, or
20 mudflow.

1

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2.10 Land Use and Planning

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.10.1 Setting

Environmental Setting

Existing Land Uses

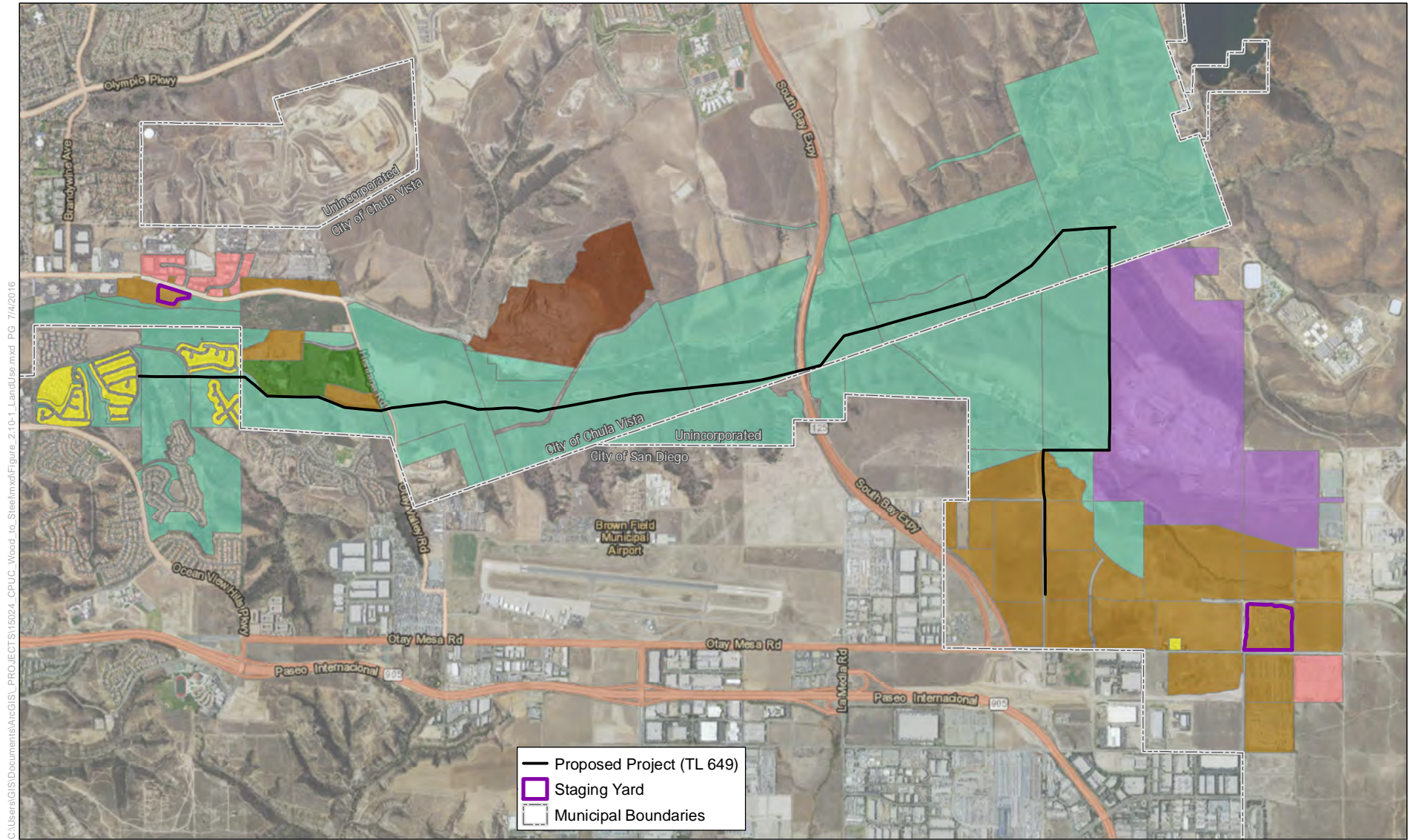
The project is located in portions of the City of San Diego, City of Chula Vista, and unincorporated San Diego. In general, west of Heritage Road, the proposed project would traverse open space lands surrounded by residential and recreational uses, including a water park and outdoor amphitheater to the north. The Main Street staging yard is located on a vacant 6-acre parcel just south of the Main Street and Maxwell Road intersection. This staging area is surrounded by vacant land uses to the south and industrial uses to the north. Figure 2.10-1, Existing Land Use Types, presents current land use surrounding the proposed project and staging yard areas.

The central portion of the project alignment is located in southern Chula Vista. This section of the alignment traverses rural/undeveloped land and generally parallels the Otay River to the south. The Otay Valley Quarry is located north of the central segment of the proposed project. The project alignment crosses SR-125 and continues eastward through open space and rural lands (see Figure 2.10-1).

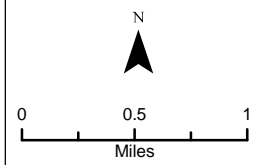
The eastern end of the project alignment is mostly within the jurisdiction of the County of San Diego and travels adjacent to and within the property boundary of the Richard J. Donovan Correctional Facility. Open space lands are to the west of this section of the alignment. The Otay Staging Yard would be located southeast of the eastern end of the alignment at 7144 Otay Mesa Road. This staging area is currently an approximately 33.1-acre wrecking yard secured by screened fencing and locked gates. The project would utilize a 4-acre portion of this site for staging of construction equipment and materials (see Figure 2.10-1).

Existing Right-of-Ways

As described in Section 1.6, Right-of-Way Requirements, SDG&E currently has an approximately 20-foot-wide ROW on City of Chula Vista, City of San Diego, San Diego County, state, and private property along the entire length of the project alignment (between Pole Nos 1 through 117). SDG&E also has an approximately 12-foot-wide ROW on private property along the entire length of the distribution line between Pole Nos. 18.1 through 18.5.



C:\Users\GIS\Documents\ArcGIS\PROJECTS\16024_CPUC_Wood to Steel.mxd\Figure 2.10-1 LandUse.mxd PG 7/4/2016



Prepared by:
Horizon
 WATER and ENVIRONMENT

- Existing Land Use Types
- | | |
|--|--|
| Residential | Light Industrial |
| Open Space | Public/Institutional |
| Rural/Undeveloped | Mining |
| Active Recreation | |

Source: San Diego Association of Governments

Figure 2.10-1
Existing Land Use Types

Tie Line 649 Wood-to-Steel Replacement Project

1 **Regulatory Setting**

2 **Federal**

3 No federal plans or policies related to land use or planning apply to the project.

4 **State**

5 *California Public Utilities Commission*

6 The CPUC has jurisdiction over the siting and design of the proposed project because the CPUC authorizes
7 the construction and maintenance of investor-owned public utility facilities.

8 **Regional**

9 *Otay Valley Regional Park Concept Plan*

10 The Otay Valley Regional Park Concept Plan was a multi-jurisdictional planning effort for the Otay River
11 Valley area led by San Diego County and the cities of Chula Vista and San Diego (County of San Diego
12 1997). The planning area for the Regional Park Concept Plan includes the southern portion of San Diego
13 County, 4 miles north of the United States-Mexico border and would extend approximately 11 miles from
14 the southeastern edge of the salt ponds, through the Otay River Valley to the land surrounding both Lower
15 and Upper Otay Lakes. The concept plan creates a basis for creating the Otay Valley Regional Park, which
16 represents one of the major open space areas within the southern area of San Diego County. Much of the
17 land within the planning area is privately owned. The document provides policy direction for the three
18 jurisdictions for coordinated land use acquisition and development for the regional park. Some of the key
19 goals of the concept plan are to provide for the protection of environmentally sensitive areas and important
20 cultural resources in an open space core, identify areas near open space for active and passive recreational
21 development opportunities, and include a trail system with staging areas, viewpoints, and overlooks. The
22 regional trail system that has been developed is primarily west of I-805 and not near the project area (Otay
23 Valley Regional Park 2016).

24 *Brown Field Municipal ALUCP*

25 The Brown Field Municipal ALUCP was adopted in 2010 by the San Diego County ALUC. The plan
26 promotes compatibility and orderly growth between the Brown Field Municipal Airport and land uses
27 surrounding the airport. The airport is approximately 0.8 mile south of the proposed project. The plan
28 defines noise compatibility and safety zones around the airport. The proposed project is located within Zone
29 6 – Traffic Pattern Zone and the FAA’s height notification boundary, per CFR Title 14 Part 77. SDG&E
30 consulted with the FAA on 34 replacement structures located along the proposed alignment that exceeded
31 the FAA’s Notice Criteria. After completing these evaluations, the FAA issued determinations of no hazard
32 for all 34 structures; therefore, the project would not be required to include additional lighting or include
33 markings at any pole locations evaluated (FAA 2015, see Appendix O).

34 **Local**

35 CPUC has jurisdiction over the siting, design, and construction of the proposed project; therefore, the
36 proposed project is not subject to local discretionary land use regulations. As such, projects under CPUC
37 jurisdiction, including the proposed project, are exempt from local regulations and permitting. However,
38 Section III.C of CPUC GO 131-D (planning and construction of facilities for the generation of electricity
39 and certain electric transmission facilities) requires “the utility to communicate with, and obtain the input
40 of, local authorities regarding land-use matters and obtain any non-discretionary local permits.” The
41 following discussion of local land use plans and policies is provided for informational purposes. As the

proposed alignment traverses three local jurisdictions—the County of San Diego, the City of San Diego, and the City of Chula Vista—relevant land use plans for these jurisdictions are provided below. In addition, **Table 2.10-1** in Section 2.10.2, below, summarizes the proposed project’s consistency with local policies relevant to the project. HCPs and natural community conservation plans covering these three jurisdictions are discussed in Section 2.4, Biological Resources.

San Diego County

San Diego County General Plan

The Land Use Element of the San Diego County General Plan includes maps, goals, and policies intended to guide planners, the general public, property owners, developers, and decision makers about how land in unincorporated San Diego County should be conserved and developed. The County General Plan includes subregional and community plans that contain policies specific to each community. The eastern portion of the project area (Pole Nos. 79 through 117) falls within San Diego County. An analysis of the proposed project’s consistency with policies contained in the Land Use Element of the San Diego General Plan is provided in Table 2.10-1 at the end of this section.

The project alignment crosses lands designated as Public/Semi-Public Facilities, Open Space (Conservation), and Specific Plan Area (County of San Diego 1994, see Figure 2.10-1). The Public and Semi-Public Facilities designation applies to major facilities built and maintained for public use (e.g., the Richard Donovan Correctional Facility). The Open Space Conservation designation generally applies to large tracts of undeveloped land that are dedicated to open space. The East Otay Mesa Business Park Specific Plan, described below, prescribes acceptable land uses within the Specific Plan area.

East Otay Mesa Business Park Specific Plan

The East Otay Mesa Business Park Specific Plan sets forth a comprehensive vision for the approximately 3,013 acres of land in the eastern portion of unincorporated San Diego County. This specific plan implements the policies established in the County General Plan. Land uses surrounding the alignment are designated as Technology Business Park. This designation is intended to encourage research and development industries in the San Diego region, specifically manufacturing operations and business offices that research, develop and produce advanced technologies, such as defense and space technologies, communication, computer and internet, and pharmaceutical and medical products.

San Diego County Zoning Ordinance

The project alignment traverses lands zoned as Open Space, Holding Area, and Specific Planning Area (East Otay Mesa Business Park) (see Figure 2.10-2). Electrical lines and power poles are considered Essential Services, and are permitted in any zoning district.

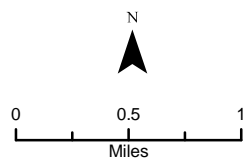
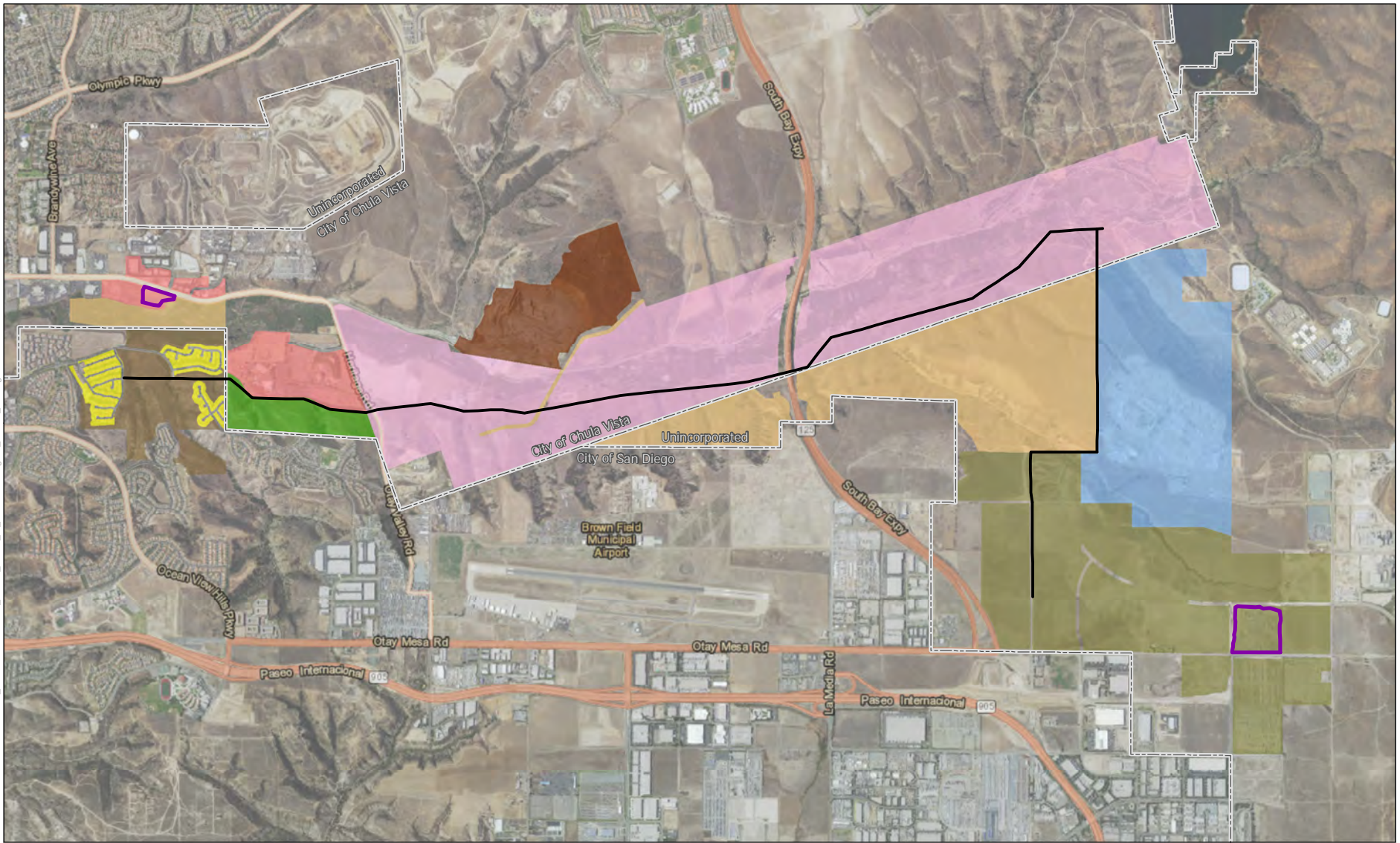
The Otay Staging Yard would be located on a parcel zoned as Specific Planning Area, which is designated as Technology Business Park under the East Otay Mesa Business Park Specific Plan.

City of San Diego

City of San Diego General Plan

The Land Use and Community Planning Element of the City of San Diego General Plan provides a blueprint for future development in the City of San Diego. The western portion of the proposed project (Pole Nos. 1 through 7) would traverse through City of San Diego lands designated as Residential and Park, and Open Space and Recreation (see Figure 2.10-1). Land uses in the City of San Diego are organized into community plan areas; the project area is within the Otay Mesa Community Plan (described below).

C:\Users\GIS\Documents\ArcGIS\PROJECTS\15024_CPUC_Wood to Steel.mxd\Figure 2.10-2 Zoning.mxd PG 6/24/2016



Prepared by:



Generalized Zoning Type

- | | |
|--------------|--------------------------|
| Agricultural | Planned Community |
| Holding Area | Residential |
| Industrial | Residential Agricultural |
| Mining | Specific Planning Area |
| Open Space | |

Sources: City of San Diego; City of Chula Vista;
County of San Diego; San Diego Association of Governments

Proposed Project (TL 649)

Staging Yard

Municipal Boundaries

Figure 2.10-2
Generalized Zoning Categories of
Lands in the Project Vicinity

Tie Line 649 Wood-to-Steel
Replacement Project

1 Otay Mesa Community Plan Update

2 The Otay Mesa Community Plan Update (City of San Diego 2014) is a component of the City of San
3 Diego's General Plan and includes a set of goals, policies, and recommendations related to the future
4 development of this community. As described above, the western portion of the proposed project would be
5 within the planning area of the Otay Mesa Community Plan. The plan divides the planning area into
6 districts; the proposed project is within the Northwest District. The Otay Mesa Community Plan designates
7 areas traversed by the proposed project as Residential – Low (five to nine dwelling units per acre) and Open
8 Space. The Otay Mesa Community Plan Conservation Element acknowledges open space and habitat
9 protection and includes goals and policies that provide preservation of natural open space canyon networks
10 and associated biological resources.

11 City of San Diego Zoning Code

12 The western portion of the proposed project (Pole Nos. 1 through 7) would traverse land zoned RS 1-14
13 (single family residential areas with minimum 5,000-sq.-ft. lots) and AR-1-1 (Agricultural-Residential,
14 minimum 10-acre lots) (see Figure 2.10-2).

15 *City of Chula Vista*

16 City of Chula Vista Vision 2020 General Plan

17 A large portion of the proposed project would traverse lands in the East Planning Area of the Chula Vista
18 General Plan. The alignment would primarily cross land designated as Open Space Preserve; other land
19 designations that would be traversed by the proposed project include Open Space, Open Space-Active
20 Recreation, and Limited Industrial (City of Chula Vista 2005, see Figure 2.10-1). The Open Space Preserve
21 designation is intended for areas designated within the Chula Vista MSCP Subarea Plan for the permanent
22 conservation of biological resources and habitat.

23 The City of Chula Vista has developed planned communities within the East Planning Area. The project
24 area is within the Otay Ranch Subarea and within that, the Otay Valley District. This subarea has been
25 developed to preserve natural resources and links natural areas and development areas by a system of trails
26 and pathways. The Otay Ranch Subarea Plan envisions active recreation uses along the project alignment.

27 Planning and Zoning Code

28 According to Title 19 Planning and Zoning of the City of Chula Vista Municipal Code, the proposed project
29 crosses land zoned as Agricultural (A-8) and Planned Community (PC). A portion of the alignment
30 (between Pole Nos. 8 and 17) is located south of land zoned as Limited Industrial-Precise Plan (ILP). The
31 "P" indicates that the area is within a Precise Plan Modifying District and subject to conditions within a
32 Precise Plan in the area (East Main Street Subarea).

33 The Main Street staging yard is located on a 6-acre vacant parcel south of the Main Street and Maxwell
34 Road intersection. This parcel is zoned as Limited Industrial (ILP). Various uses are permitted in this zone
35 including public and private building material sales yards, service yards, storage yards, and equipment
36 rental. This staging area is also within the Auto Park East Specific Plan, which is intended to provide for
37 the expansion of the existing Auto Park to create a regional destination of automobile sales and service park
38 with supporting uses (City of Chula Vista 2004).

2.10.2 Environmental Impacts

a. Would the project physically divide an established community? (No Impact)

As described in Section 2.10.1, Setting, the approximately 7-mile project alignment would mostly be constructed on vacant, open space land and would replace poles on an existing alignment. Surrounding land uses in the western portion of the project area include residential and recreational land uses (e.g., the Aquatica San Diego water park and outdoor concert amphitheater). Between Heritage Road and the eastern end of the project area, the alignment would occur on open space/rural lands. Land uses surrounding the eastern portion of the alignment are designated for open space, public uses, and technology business park.

The proposed wood-to-steel pole replacement activities and associated transferring or replacing of existing conductors and ancillary facilities to new poles would not physically divide the communities in the cities of San Diego or Chula Vista, or the unincorporated area of San Diego County. Most pole replacement activities would occur within 10 feet of the existing poles. Construction activities would primarily take place within SDG&E's existing ROWs and work areas would be accessed via existing access roads. As described in Chapter 1, Draft Initial Study, encroachment permits may be needed from the City of Chula Vista for construction activities that take place near Heritage Road, as well as from Caltrans for activities near SR-125. Similar types of permits were likely required when the current alignment was originally constructed. In addition, SDG&E would obtain landowner approvals for use of the Main Street Staging Yard and Otay Staging Yard, which are outside of SDG&E's existing ROWs.

Operation and maintenance activities would primarily involve inspection and maintenance of project facilities including routine inspections, maintenance, and repair to TL 649, pole structures and associated equipment. Such activities would be similar to those currently conducted along the existing alignment. As proposed, operation and maintenance activities would be brief and limited to select pole locations, and would not physically divide an established community. Moreover, given that the purpose of the proposed project is to reduce the likelihood of electrical service disruption in the event of a wildland fire and would not change on-site land uses, the project would not physically divide or disrupt an established community. For these reasons, operation of the proposed project would have no impact.

b. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? (No Impact)

The project alignment would traverse lands with various general plan land use designations, including Residential and Park, Open Space and Recreation, Open Space, Open Space-Active Recreation, Limited Industrial, Mixed Use Commercial, Public/Semi-Public Facilities, Open Space (Conservation), and Technology Business Park.

As stated previously, no local land use plans, policies, or regulations of local agencies are applicable to the proposed project because, pursuant to GO No. 131-D, the CPUC has sole and exclusive jurisdiction over the siting and design of the proposed project. Therefore, no project-related conflicts with local plans or policies would occur.

Nonetheless, CPUC and the applicant have coordinated with local agencies regarding land use issues. Table 2.10-1 provides a general project consistency analysis with relevant land use plans and policies, which has been included for informational purposes only. Consistency with resource-specific policies is addressed throughout this Initial Study/Mitigated Negative Declaration. The proposed project alignment would

1 generally follow the existing TL 649 alignment and, because this electrical distribution line already exists,
2 no policy conflicts are anticipated to occur.

3 In addition, use of the Main Street Staging Yard would be consistent with the site's zoning designation of
4 Limited Industrial as storage yards are permitted. Similarly, use of the Otay Mesa Road Staging Yard for
5 temporary storage of construction equipment and materials would not conflict with County zoning as
6 County Code Section 6110, the County's temporary Use Regulations, permits construction support areas
7 adjacent to major construction projects.

8 The proposed project is within the Brown Field Municipal ALUCP Safety Zone 6 – Traffic Pattern Zone,
9 and several of the pole replacement activities required the need for an FAA Obstruction Evaluation. As
10 described in Section 2.10.1, Setting, the FAA conducted an obstruction evaluation and determined that there
11 is no need to install lighting or pole marking. The proposed project would be in compliance with FAA
12 requirements.

13 In conclusion, construction and operation of the proposed project would not conflict with existing plans,
14 policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect. There
15 would be no impact.

16 ***c. Would the project conflict with any applicable habitat conservation plan or natural***
17 ***community conservation plan? (No Impact)***

18 Conflicts with applicable habitat conservation plans and natural community conservation plans are
19 addressed in Section 2.4, Biological Resources. As described in Section 2.4, the proposed project would
20 comply with the requirements of the SDG&E Subregional NCCP/HCP. The proposed project would also
21 be consistent with the regional MSCP and the individual County and cities' MSCP subarea plans. Therefore,
22 the proposed project would not conflict with provisions of these plans and there would be no impact.

1 Table 2.10-1. Project Consistency with Relevant Plans and Policies

Relevant Goals and Policies	Consistent with the Proposed Project?	Explanation
<i>San Diego County General Plan</i>		
LU-4.6: Planning for Adequate Energy Facilities. Participate in the planning of regional energy infrastructure with applicable utility providers to ensure plans are consistent with the County's General Plan and Community Plans and minimize adverse impacts to the unincorporated County.	Yes	The proposed project would be consistent with this policy because SDG&E has and would continue to coordinate with the County of San Diego regarding any project-related activities planned to occur on County-owned lands.
LU-12.3: Infrastructure and Services Compatibility. Provide public facilities and services that are sensitive to the environment with characteristics of the unincorporated communities. Encourage the collocation of infrastructure facilities, where appropriate.	Yes	Proposed pole replacement activities would generally occur at or in close proximity to existing pole locations. The proposed project would not result in new facilities within preserve areas. In addition, implementation of mitigation measures described throughout this document would reduce potential adverse effects to the environment.
LU-12.4: Planning for Compatibility. Plan and site infrastructure for public utilities in a manner compatible with community character, minimize visual and environmental impacts, and whenever feasible, locate any facilities and supporting infrastructure outside preserve areas. Require context sensitive Mobility Element road design that is compatible with community character and minimizes visual and environmental impacts; for Mobility Element roads identified in Table M-4, an Level of Service D or better may not be achieved.	Yes	Proposed pole replacement activities would generally occur at or in close proximity to existing pole locations. The proposed project would not result in new facilities within preserve areas. In addition, implementation of mitigation measures described throughout this document would reduce potential adverse effects to the environment.
<i>East Otay Mesa Business Park Specific Plan</i>		
Public Facilities Goal 1: Provide infrastructure and public facilities in a planned and orderly fashion that would accommodate the planned growth in East Otay Mesa while meeting applicable County standards.	Yes	The proposed project involves replacement of existing wood poles with steel poles for the purpose of reducing wildland fire risks. Although the objective of the project is not related to future growth, existing electricity infrastructure will be an important consideration when planning development in the East Otay Mesa area. The project would not preclude planning for the region.

Relevant Goals and Policies	Consistent with the Proposed Project?	Explanation
<p>Policy PF-7: Coordinate with Franchise Utility Providers to provide dry utilities to serve East Otay Mesa.</p> <p>Implementation: The County would work with SDG&E and Pacific Bell to provide dry utilities to serve development in East Otay Mesa. Utility easements should occur in conjunction with road dedications whenever feasible.</p>	Yes	<p>The proposed project involves replacement of existing wood poles with steel poles. The project alignment would occur within SDG&E's Right-Of-Way (ROW) and the majority of construction activities would occur within their ROW. Similar to current conditions, SDG&E would continue to provide electricity to the East Otay Mesa area.</p>
City of San Diego General Plan		
<p>PF-M.4: Cooperatively plan for and design new or expanded public utilities and associated facilities (e.g., telecommunications infrastructure, planned energy generation facilities, gas compressor stations, gas transmission lines, electrical substations and other large-scale gas and electrical facilities) to maximize environmental and community benefits.</p> <p>Use transmission corridors to enhance and complement wildlife movement areas and preserved open space habitat as identified in the City's Multiple Species Conservation Program (MSCP).</p> <p>Provide adequate buffering and maintained landscaping between utility facilities and residential and non-residential uses, including the use of non-building areas and/or rear setbacks.</p> <p>Maximize land use and community benefit by locating compatible/appropriate uses within utility easements/right-of-ways (e.g., passive parkland, natural open space, wildlife movement, urban gardens, plant nurseries, parking, access roads, and trails). Trails can be allowed in these easement/right-of-ways, provided proper indemnification, funding and maintenance is set forth in a written agreement between the public utility, the City, and project developer.</p>	Yes	<p>The proposed project would be consistent with this policy because SDG&E has and would continue to coordinate with the City of San Diego regarding any project-related activities planned to occur on City-owned lands. The project alignment would occur within SDG&E's ROW and as described in Section 2.4, Biological Resources, the proposed project would not conflict with provisions established in the City of San Diego's Multiple Species Conservation Program Subarea Plan. In addition, the project would not conflict with nearby recreational uses.</p>
Otay Mesa Community Plan Update		
<p>Policy 6.7-1: Provide future utility services in the most cost-effective and environmentally sensitive manner to meet the General Plan Policies PF-M.1-4. Integrate the design and siting of safe and efficient public utilities and associated facilities into the early stages of the planning and development of future projects.</p>	Yes	<p>Proposed pole replacement activities would generally occur at or in close proximity to existing pole locations. The proposed project would not result in new facilities within preserve areas. In addition, implementation of mitigation measures described throughout this document would reduce potential adverse effects to the environment.</p>

Relevant Goals and Policies	Consistent with the Proposed Project?	Explanation
<i>City of Chula Vista General Plan</i>		
LUT 68.1: Ensure that services and infrastructure are adequate to accommodate development in Villages 13, 14, and 15 of the Otay Ranch GDP [General Development Plan]	Yes	The purpose of the proposed project is to increase electricity supply reliability, particularly in the event of a wildland fire. The project would not affect the City of Chula Vista's ability to serve future development in the Otay Ranch area.
LUT 83.1: Allow limited industrial development on property east of Heritage Road and south of the Otay Valley, subject to the preparation of a master development plan that addresses appropriate street improvements; vehicular access; screening from public viewsheds; development infrastructure; protection of adjacent environmentally sensitive resources; water quality; and phasing.	Yes	The proposed project would not affect the City of Chula Vista's ability to serve or plan for future industrial development in the area east of Heritage Road or south of the Otay Valley.
LUT 74.1: Provide sufficient land and infrastructure to accommodate commercial and industrial uses.	Yes	The proposed project would improve electrical transmission infrastructure in the region. The project would not preclude the City of Chula Vista's ability to serve commercial and industrial uses in the region.

1 Sources: San Diego County 1994 and 2011, City of Chula Vista 2004 and 2005, City of San Diego 2008 and 2014

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2.11 Mineral Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.11.1 Setting

Environmental Setting

As discussed in Section 2.6, Geology and Soils, geology and soils within the project alignment consists predominately of alluvial floodplain deposits of varying Quaternary age and aggregate material. The entire Otay Valley from the Lower Otay Reservoir downstream to the mouth at the southeastern end of San Diego Bay is designated Mineral Resource Zone (MRZ)-2 and recognized as a regionally significant construction aggregate resource area (CDC 1982; CDC 1996). Hydrogeomorphic processes have naturally sorted some channel deposits making them viable for commercial extraction. However, a clay layer has been reported by mining companies to occur at a depth of 15 feet below ground surface and most of the valley has been mined to this level with little or no replenishment within the river channel (CDC 1982). The Otay River channel and floodplain contains an estimated 10 metric tons of unpermitted aggregate deposits between I-805 and Lower Otay Lake (CDC 1996). Much of this area, particularly the upstream-most portion of the river valley is leased to an operating mining pit. In addition to aggregate material, metavolcanic rock deposits can be found at Rock Mountain on the north side of the Otay Valley, east of Heritage Road and approximately 0.2 mile north of the proposed project. Currently, Vulcan Materials Company operates Otay Mesa Quarry at Rock Mountain with operations expected to continue to the year 2050 (approximate) (Otay Valley Regional Park 1997).

Bentonitic clays are other important mineral resources that can occur in the Otay Valley region. These clays (Otay bentonite) differ from sedimentary clay in that they derive from volcanism as opposed to deposition and occur in a sandy member of the Otay Formation. The principal bentonite bed is found between the 350 and 375-foot elevations on the north side of Otay Valley, with lower-grade material between 325 and 350 feet on the south side of the valley (USGS 1980). Although several petroleum companies have mined Otay bentonite in this region in the past, material quality on the south side of the Otay Valley is considered low-grade and overlying sediments make extraction uneconomic except where the clay has been exposed by surface waters (USGS 1980).

Outside of the Otay River floodplain and the adjacent drainage cuts, the rest of proposed project area is designated MRZ-3, "areas containing mineral deposits the significance cannot be evaluated from available data" (CGS 1982; CGS 1996). Most of these areas are located in steep terrain with layered, intermixed material of varying quality, preventing accurate economic evaluation of extracting and processing acceptable material.

1 **Regulatory Setting**

2 **Federal**

3 No federal laws, regulations, or policies relate to mineral resources and the proposed project.

4 **State**

5 *Surface Mining and Reclamation Act of 1975*

6 Surface Mining and Reclamation Act (SMARA) requires that the State Mining and Geology Board identify,
7 map, and classify aggregate resources throughout California that contain regionally significant mineral
8 resources. Designations of land/mineral resource areas are assigned by the CDC and the CGS following
9 analysis of geologic reports and maps, field investigations, and using information about the locations of
10 active sand and gravel mining operations. Local jurisdictions are required to enact planning procedures to
11 guide mineral conservation and extraction at particular sites and to incorporate mineral resource
12 management policies into their general plans.

13 **Local**

14 Because the CPUC regulates and authorizes the construction of investor-owned public utility facilities, the
15 CPUC has exclusive jurisdiction over the siting and design of the proposed project. As such, projects under
16 CPUC jurisdiction, including the proposed project, are exempt from local land use and zoning regulations
17 and permitting. However, Section III.C of CPUC GO 131-D (planning and construction of facilities for the
18 generation of electricity and certain electric transmission facilities) requires “the utility to communicate
19 with, and obtain the input of, local authorities regarding land-use matters and obtain any non-discretionary
20 local permits.” As a result, SDG&E has taken into consideration all State and local plans and policies as
21 they relate to mineral resources. Although County and other local policies are listed below, they are provided
22 for disclosure purposes only.

23 *San Diego County General Plan*

24 The San Diego County General Plan, Conservation and Safety Elements, contain the following policies
25 related to mineral resources (San Diego County 2011):

- 26 ▪ **COS-10.1 Siting of Development.** Encourage the conservation (i.e., protection from incompatible
27 land uses) of areas designated as having substantial potential for mineral extraction. Discourage
28 development that would substantially preclude the future development of mining facilities in these
29 areas. Design development or uses to minimize the potential conflict with existing or potential
30 future mining facilities. For purposes of this policy, incompatible land uses are defined by SMARA
31 Section 3675.
- 32 ▪ **COS-10.2 Protection of State-Classified or Designated Lands.** Discourage development or the
33 establishment of other incompatible land uses on or adjacent to areas classified or designated by
34 the State of California as having important mineral resources (MRZ-2), as well as potential mineral
35 lands identified by other government agencies. The potential for the extraction of substantial
36 mineral resources from lands classified by the State of California as areas that contain mineral
37 resources (MRZ-3) shall be considered by the County in making land use decisions.
- 38 ▪ **COS-10.3 Road Access.** Prohibit development from restricting road access to existing mining
39 facilities, areas classified MRZ-2 or MRZ-3 by the State Geologist, or areas identified in the County
40 Zoning Ordinance for potential extractive use in accordance with SMARA Section 2764.a.

- **COS-10.4 Compatible Land Uses.** Discourage the development of land uses that are not compatible with the retention of mining or recreational access to non-aggregate mineral deposits.

2.11.2 Environmental Impacts

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (No Impact)

The proposed project is located in an area designated as MRZ-2, or areas classified as containing or likely containing important mineral resources. However, the proposed project, including construction activities and pole replacement, would occur within SDG&E's existing ROWs. Extraction of mineral resources is prohibited in ROWs. Operation and maintenance of the proposed project would be conducted in the same manner as existing facilities.

Although considered commercially uneconomical to extract due to overlying sediment depth, low-grade Otay bentonite may be present in the project area between 325 and 350 feet in elevation. The majority of the proposed project traverses the base of the southern side of the Otay Valley, thus avoiding the estimated elevation and contact with Otay bentonite, with exception to the area between Pole Nos. 79 to 80 at the southwest side of O'Neal Canyon. However, the proposed project would replace existing poles at this location and no signs of significant erosion or exposed outcrops are apparent near the work area. In addition, this location is identified as having unstable, steep slope angles (CGS 1980) further prohibiting the potential for viable extraction activities.

Aggregate and crushed stone mining operations occur 0.2 mile north of the proposed project at the Otay Mesa Quarry. Although the project alignment is relatively close to the quarry, the Otay River physically separates the two and construction of the proposed project would not affect quarry operations or result in the loss of availability of known mineral resources. The proposed project would have no impact on mineral resources.

b. Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? (No Impact)

See discussion for Item 2.11.2(a) above. The County of San Diego, City of Chula Vista, and City of San Diego do not identify any important mineral resource recovery sites near the proposed project, nor does the proposed project cross any lands designated as 'Extractive' by the San Diego County Zoning Ordinance. There would be no impact.

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2.12 Noise

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.12.1 Setting

This section of the IS/MND evaluates noise impacts associated with the Tie-Line 649 Wood-to-Steel Replacement Project (proposed project) implementation. The noise analysis is based on the review SDG&E's PEA and data responses (SDG&E 2015 and SDG&E 2016, respectively).

Noise Concepts and Terminology

Noise

Noise is commonly defined as unwanted sound that annoys or disturbs people and can have an adverse psychological or physiological effect on human health. Sound is measured in dBs, which is a logarithmic scale. Decibels describe the purely physical intensity of sound based on changes in air pressure, but they cannot accurately describe sound as perceived by the human ear since the human ear is only capable of hearing sound within a limited frequency range. Therefore, the frequency of a sound must be taken into account when evaluating the potential human response to sound. For this reason, a frequency-dependent weighting system is used and monitoring results are reported in A-weighted decibels (dBA). Decibels and other technical terms are defined in **Table 2.12-1**. Typical A-weighted noise levels at specific distances are shown for different noise sources in Table 2.12-1.

In an unconfined space, such as outdoors, noise attenuates with distance according to the inverse square law. Noise levels at a known distance from point sources are reduced by 6 dBA for every doubling of that distance for hard surfaces, such as cement or asphalt surfaces, and 7.5 dBA for every doubling of distance for soft surfaces, such as undeveloped or vegetative surfaces (Caltrans 1998). Noise levels at a known

distance from line sources (e.g. roads, highways, and railroads) are reduced by 3 dBA for every doubling of the distance for hard surfaces and 4.5 dBA for every doubling of distance for soft surfaces (Caltrans 1998).

Table 2.12-1. Definition of Acoustical Terms

Term	Definition
Decibel (dB)	A unit describing the amplitude of sound on a logarithmic scale. Sound described in decibels is usually referred to as sound or noise "level." This unit is not used in this analysis because it includes frequencies that the human ear cannot detect.
Frequency (hertz)	The number of complete pressure fluctuations per second above and below atmospheric pressure.
A-Weighted Sound Level (dBA)	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound, in a manner similar to the frequency response of the human ear, and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted.
Equivalent Noise Level (L_{eq})	The average A-weighted noise level during the measurement period. For this CEQA evaluation, L_{eq} refers to a 1-hour period unless otherwise stated.
Daily Exposure Level (LEX_{8h})	Sound exposure averaged over 8 hours.
Community Noise Equivalent Level (CNEL)	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels to sound levels during the evening from 7 to 10 p.m. and after addition of 10 decibels to sound levels during the night between 10 p.m. and 7 a.m.
Day/Night Noise Level (L_{dn})	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to sound levels during the night between 10 p.m. and 7 a.m.
Maximum Sound Level (L_{max})	The maximum A-weighted sound level measured by the sound level meter over a given period of time.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Vibration Decibel (VdB)	A unit describing the amplitude of vibration on a logarithmic scale.
Peak Particle Velocity (PPV)	The maximum instantaneous peak of a vibration signal.
Root Mean Square (RMS) Velocity	The average of the squared amplitude of a vibration signal.

Source: Salter 1998; FTA 2006; Acoustic Glossary

Greater decreases in noise levels can result from the presence of intervening structures or buffers.

A typical method for determining a person's subjective reaction to a new noise is by comparing it to existing conditions. The following describes the general effects of noise on people (Salter 1998):

- A change of 1-dBA cannot typically be perceived except in carefully controlled laboratory experiments;
- A 3-dBA change is considered a just-perceivable difference;

- A minimum of 5-dBA change is required before any noticeable change in community response is expected; and
- A 10-dBA change is subjectively perceived as approximately a doubling or halving in loudness.

Table 2.12-2. Typical Sound Levels Measured in the Environment and Industry

Noise Source (Distance in Feet)	A-Weighted Sound Level in Decibels (dBA)	Subjective Impression
Civil Defense Siren (100)	130	Pain Threshold
Jet Takeoff (200)	120	
Rock Music Concert (50)	110	
Pile Driver (50)	100	Very Loud
Ambulance Siren (100)	90	
Diesel Locomotive (25)	85	Loud
Pneumatic Drill (50)	80	
Freeway (100)	70	Moderately Loud
Vacuum Cleaner (10)	60	
Light Traffic (100)	50	
Large Transformer (200)	40	Quiet
Soft Whisper (5)	30	Threshold of Hearing

Source: Arnold P.G. Peterson 1996

Since sound pressure levels are based on a logarithmic scale, they cannot be added or subtracted in the usual arithmetical way. For instance, if one noise source emits a noise level of 90 dBA, and a second source is placed beside the first and also emits a noise level of 90 dBA, the combined noise level is 93 dBA, not 180 dBA. When the difference between two noise levels is 10 dBA or more, the amount to be added to the higher noise level is zero. In such cases, no adjustment factor is needed because adding in the contribution of the lower noise source makes no perceptible difference in what people can hear or measure. For example, if one noise source generates a noise level of 95 dBA and another noise source is added that generates a noise level of 80 dBA, the higher noise source dominates and the combined noise level will be 95 dBA.

Ground-borne Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Several different methods are used to quantify vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors to vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment. Vibration amplitudes are usually expressed as either peak particle velocity (PPV) or the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous peak of the vibration signal. PPV is appropriate for evaluating potential damage to buildings, but it is not suitable for evaluating human response to vibration because it takes the human body time to respond to vibration signals. The response of the human body to

vibration is dependent on the average amplitude of a vibration. The RMS of a signal is the average of the squared amplitude of the signal and is more appropriate for evaluating human response to vibration. PPV and RMS are normally described in units of inches per second (in/sec), and RMS is also often described in vibration decibels (VdB).

Environmental Setting

Surrounding Receptors

The nearest receptors to the proposed project (including the proposed project alignment, the stringing sites, and the staging yards) are residences, a correctional facility, commercial buildings, a recreational water park, and a water pump station. The residences and correctional facility are more sensitive to noise than the commercial and water park because the residences and correctional facilities are places where people rest and sleep, while commercial uses, the water park, and the water pump station are not considered to be noise-sensitive.

The nearest residences to the stringing sites are located approximately 25 feet north and approximately 40 feet south of the stringing site along Sea Lavender Way in the City of San Diego (see **Figure 2.12-1**, Receptors). There are also residences located approximately 75 feet north and south of the proposed project alignment within the City of San Diego (between Wood-to-Steel Replacement Pole No. 4 to No. 7; see Appendix A, Detailed Route Mapset, and Figure 2.12-1, Receptors). A rural residence is located approximately 80 feet north of the proposed project alignment within the City of Chula Vista (near Wood-to-Steel Replacement Pole No. 26, see Appendix A, Detailed Route Mapset, and Figure 2.12-1, Receptors); however, a site reconnaissance in February 2016 indicated that the residence is boarded up with no active signs of occupation (Sunahara 2016).

Within the County of San Diego, the proposed project alignment is located approximately 300 feet away from the fence line of the Richard J. Donovan Correctional Facility (see Figure 1.4-2, Proposed Project Components). The nearest commercial land uses to the staging yards are the commercial buildings located approximately 150 feet north of the Main Street Staging Yard located in the City of Chula Vista (Figure 2.12-1, Receptors). The Aquatica, SeaWorld's Water Park, is located between approximately 100 feet north of the proposed project alignment in the City of Chula Vista. A water pump station is adjacent to the proposed project alignment within the City of Chula Vista (between Wood-to-Steel Replacement Pole No. 18 to No. 18.1; see Appendix A, Detailed Route Mapset, and Figure 2.12-1, Receptors).

Sensitive habitat and federally-protected species are located in the vicinity of the proposed project and are also considered as noise receptors. Temporary impacts on these receptors may result from construction noise and ground vibration. The potential impacts and associated mitigation measures are discussed in detail in Section 2.4, Biological Resources.

There are two historic-era resources located along the proposed project alignment near Wood-to-Steel Replacement Poles 26 and 45 (as described in Section 2.5, Cultural Resources) (see Figure 2.12-1). The first historic-era resource (Site CA-SDI-11386H) consists of an uninhabited rural residence (described above) located approximately 80 feet north of the disturbance area of Pole No. 26 and of a round barn located approximately 300 feet north of the proposed project alignment within the City of Chula Vista (northeast of Wood-to-Steel Replacement Pole No. 26). The second historic-era resource (Site CA-SDI-19922H) consists of a concrete trough and farm equipment located approximately 25 feet east of the disturbance area of Pole No. 45, and 35 feet south of the potential road reestablishment area within the City of Chula Vista. Site CA-SDI-11386H is potentially eligible for listing in the NRHP/CRHR; site CA-SDI-19922H is not considered an eligible resource.

Ambient Noise Environment

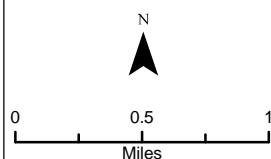
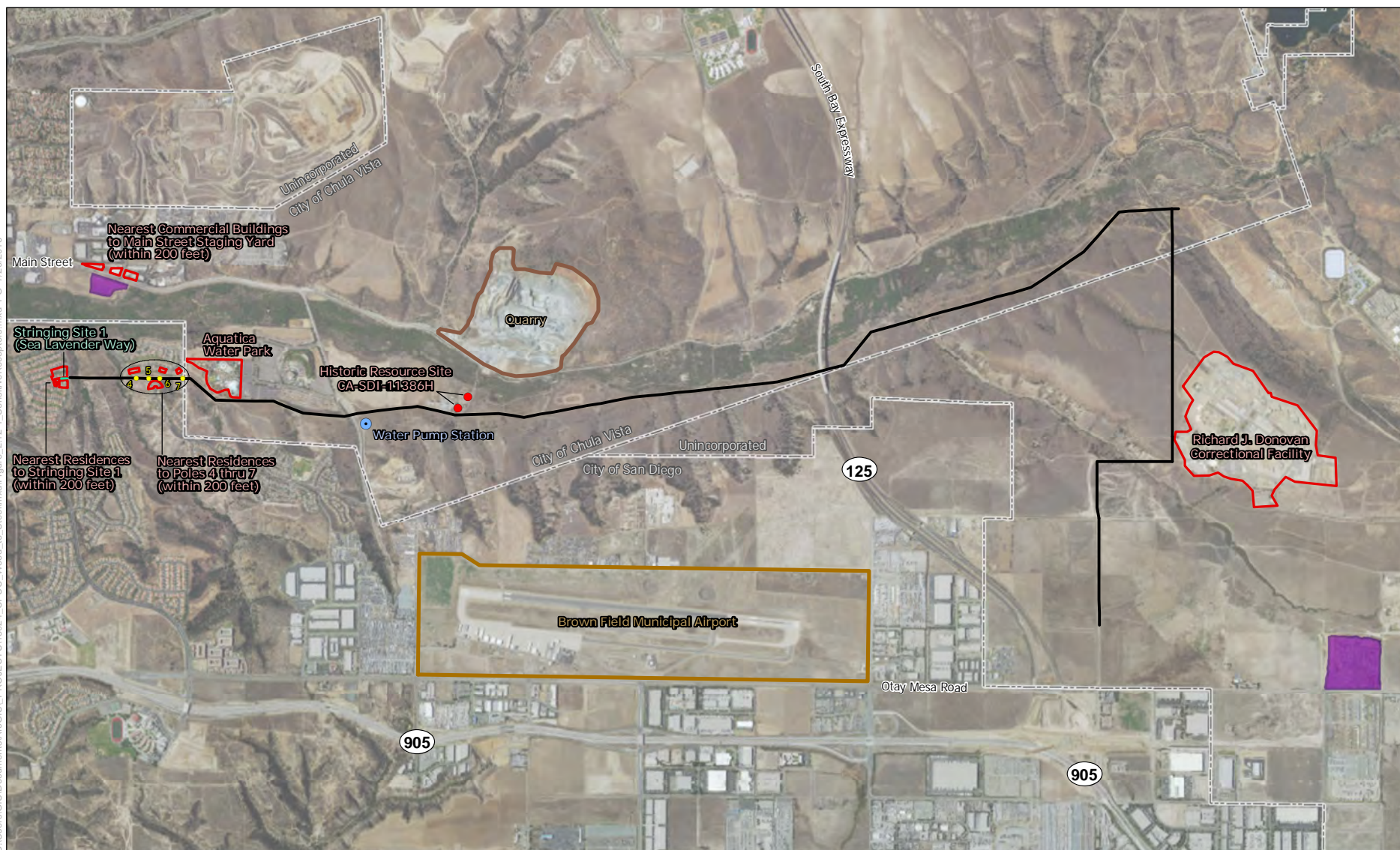
As indicated in the San Diego County General Plan (County of San Diego 2011), City of San Diego General Plan (City of San Diego 2008), and City of Chula Vista General Plan (City of Chula Vista 2005), major sources of noise in San Diego County, City of San Diego and City of Chula Vista include transportation-related activities (automobiles, trucks, other vehicles, aircraft operation, and railroads) and non-transportation-related activities (industrial and commercial operation and maintenance). The San Diego County General Plan presents noise contours for major roadways, railroads, and airports. The City of Chula Vista General Plan presents noise contours for major roadways and airports. The City of San Diego General Plan does not contain noise contours.

As shown on the aircraft noise contours, the central portion of the proposed project alignment (between Wood-to-Steel Replacement Pole No. 18 to No. 50) is located within the Brown Field Municipal Airport's 60 to 65 dBA Community Noise Environment Level (CNEL) contour (see **Figure 2.12-2**). According to the noise contours in the San Diego County General Plan and the City of Chula Vista General Plan, the proposed project alignment is not exposed to traffic noise above 60 to 65 dBA CNEL from major roadways.

The proposed project alignment could be exposed to other non-transportation-related activities, including industrial and commercial operation and maintenance. A quarry is located approximately 800 feet north of the project alignment in the City of Chula Vista near Wiley Road. According to the San Diego County General Plan, quarry operations and the associated mining and blasting activities typically involve a range of noise-generating equipment and may generate excessive noise levels. The associated activities, such as blasting or pile-driving may also generate excessive levels of groundborne vibration. Therefore, although the proposed project alignment is not exposed to traffic noise above 60 to 65 dBA CNEL from major roadways, some portions of the alignment may be exposed to other activities with the potential to generate noise levels of 60 to 65 dBA CNEL or greater, and with the potential to generate perceptible vibration along the alignment.

The existing noise environment along the proposed project alignment includes noise associated with operation and maintenance activities required to maintain the existing power lines. In addition to noise generated during operation and maintenance activities, the existing power line generates low corona noise levels⁷. However, the existing power line is a 69-kilovolt power line, which normally does not produce a noise that is perceptible to humans (Egger 2009).

⁷Corona noise is the audible noise created when energy dissipates from electrical conductive equipment. As energy dissipates from electrical conductive equipment, some of the energy causes local pressure changes that result in audible noise, or in radio or television interference. The audible corona noise generated by corona discharge is characterized as a hissing or crackling sound that may be accompanied by a hum (SDG&E 2015).



Prepared by:

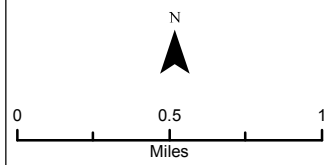
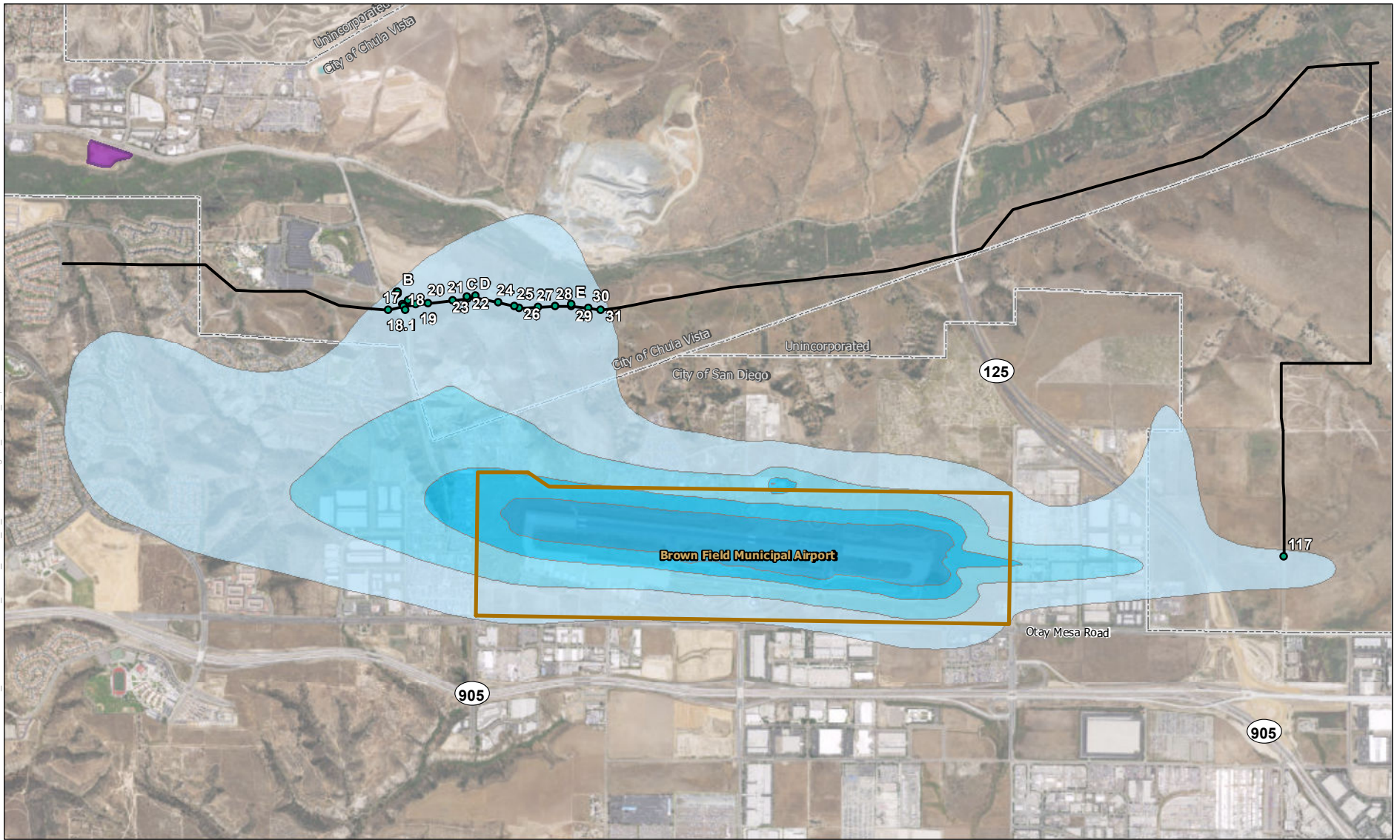


- Proposed Project (TL 649)
- Staging Yard
- Municipal Boundaries
- Stringing Site #1 (Sea Lavender Way)
- Poles 4 through 7

- Receptors
- Brown Field Municipal Airport
- Quarry

**Figure 2.12-1
Receptors**

**Tie Line 649 Wood-to-Steel
Replacement Project**



Prepared by:



- Proposed Project (TL 649)
- Staging Yard
- Municipal Boundaries
- ▭ Brown Field Municipal Airport
- Project Poles within 60-65 dB CNEL

Noise Exposure Range

- 60-65 dB CNEL
- 65-70 dB CNEL
- 70-75 dB CNEL
- 75+ dB CNEL

Figure 2.12-2
Brownfield Airport
Noise Contours

Tie Line 649 Wood-to-Steel
Replacement Project

Regulatory Setting

Federal

No federal laws, regulations, or policies apply to noise and the proposed project.

State

California Noise Control Act

Sections 46000 to 46080 of the California Health and Safety Code codify the California Noise Control Act (CNCA) of 1973. This act established the Office of Noise Control under the California Department of Health Services. The CNCA requires that the Office of Noise Control adopt, in coordination with the Office of Planning and Research, guidelines for the preparation and content of noise elements for general plans. The most recent guidelines are contained in General Plan Guidelines, published by the Governor's Office of Planning and Research in 2017 (Governor's Office of Planning and Research 2017). The document provides land use compatibility guidelines for cities and counties to use in their general plans in order to reduce conflicts between land use and noise.

California Occupational Safety and Health Administration

Noise exposure of construction workers is regulated by the Cal/OSHA. Title 8, Subchapter 7, Group 15, Article 105 of the California Code of Regulations (Control of Noise Exposure) sets noise exposure limits for workers, and requires employers who have workers that may be exposed to noise levels above these limits to establish a hearing conservation program, make hearing protectors available, and keep records of employee noise exposure measurements. The Cal/OSHA also requires backup warning alarms that activate immediately upon reverse movement on all vehicles that have a haulage capacity of 2.5 cubic yards or more (Title 8, California Code of Regulations). The backup alarms must be audible above the surrounding ambient noise level at a distance of 200 feet. In order to meet this requirement, backup alarms are often designed to emit a sound as loud as 82 to 107 dBA Maximum Sound Level (L_{max}) at 4 feet (NCHRP 1999).

Local

Because the CPUC regulates and authorizes the construction of investor-owned public utility facilities, the CPUC has exclusive jurisdiction over the siting and design of the proposed project. As such, projects under CPUC jurisdiction, including the proposed project, are exempt from local land use and zoning regulations and permitting. However, Section III.C of CPUC General Order 131-D (planning and construction of facilities for the generation of electricity and certain electric transmission facilities) requires "the utility to communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any non-discretionary local permits." As a result, SDG&E has taken into consideration all State and local plans and policies as they relate to noise. Although County and other local policies are listed below, they are provided for disclosure purposes only.

County of San Diego

San Diego County Guidelines for Determining Significance for Noise

The San Diego County Guidelines for Determining Significance for Noise (County of San Diego 2009) is used by County staff for review of discretionary projects and environmental documents, pursuant to the CEQA. Project implementation is considered significant if it is anticipated to result in the exposure of any on- or off-site, existing or reasonably foreseeable future noise-sensitive land use to exterior or interior noise (including noise generated from a project together with noise from roads, railroads, airports, heliports, and

all other noise sources) that is either in excess of 60 dB CNEL or an increase of 10 dB CNEL over pre-existing noise.

In addition, project implementation is considered significant if specific uses (organized into three categories, identified below in **Table 2.12-3** under the column ‘Land Use Category’) will be exposed to ground-borne vibration equal to or in excess of levels determined by the Federal Transit Administration’s (FTA’s) Transit Noise and Vibration Impact Assessment (FTA 2006). County guidelines summarizing the FTA’s ground-borne vibration thresholds are provided in Table 2.12-3.

Table 2.12-3. Guidelines for Determining the Significance of Groundborne Vibration

Land Use Category	Ground-Borne Vibration Impact Levels (VdB [1 micro-inch/sec])		
	Frequent Events ¹	Occasional Events ²	Infrequent Events ³
Category 1: Buildings where vibration would interfere with interior operations.	65	65	65
Category 2: Residences and buildings where people normally sleep.	72	75	80
Category 3: Institutional land uses with primarily daytime use.	75	78	83

Notes:

1. “Frequent Events” is defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category.
2. “Occasional Events” is defined as between 30 and 70 vibration events of the same source per day. Most commuter truck lines have this many operations.
3. “Infrequency Events” is defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines.

Source: Federal Transit Administration 2006

San Diego County Code of Regulatory Ordinances Title 3, Division 6, Chapter 4, Sections 36.401-36.435, Noise Ordinance

The 2008 San Diego County Noise Ordinance establishes prohibitions for disturbing, excessive, or offensive noise. It also contains provisions, such as noise level limits, for the purpose of securing and promoting the public health, comfort, safety, peace, and quiet for its citizens (County of San Diego 2008). Section 36.404 of the San Diego County Noise Ordinance contains noise level limits specific to receiving land uses. Section 36.408 of the San Diego County Noise Ordinance sets limits on the time of day and days of the week that construction can occur, as well as setting noise limits for construction activities. The ordinance prohibits operating construction equipment on the following days and times:

- Mondays through Saturdays except between the hours of 7:00 a.m. – 7:00 p.m.

- Sundays and holidays.⁸

In addition, the San Diego County Noise Ordinance requires that between the hours of 7:00 a.m. – 7:00 p.m., no equipment shall be operated so as to cause an 8-hour average construction noise level in excess of 75 dBA when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received. In addition to the general limitations on noise levels discussed above, the following additional L_{max} limitations would apply to impulsive noise from construction equipment, per San Diego County Noise Ordinance Section 36.410 as shown in **Table 2.12-4**.

Table 2.12-4. Maximum Noise Level (Impulsive) Measured at Occupied Property in Decibels (dBA)

Occupied Property Use	Decibels (dBA)
Residential, village zoning or civic use	82
Agricultural, commercial or industrial use	85

Source: County of San Diego undated; County of San Diego 2008

Note: The maximum noise level limitations shall apply to impulsive noise from construction equipment when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is received, for 25 percent of the minutes in the measurement period.

For permanent operation, Section 36.404 of the San Diego County Noise Ordinance also contains sound level limits specific to receiving land uses. If the measured ambient noise level exceeds the applicable limit in the section, the allowable 1-hour average sound level shall be the 1-hour average ambient noise level plus three dBS.

City of San Diego

City of San Diego General Plan

Noise levels within the City of San Diego are regulated by the City's General Plan (City of San Diego 2008). The purpose of the Noise Element in the General Plan is to identify existing conditions and to provide general guidelines that would reduce the negative impact of noise on the community in the future. The General Plan's objective is to protect people living and working in the City of San Diego from excessive noise. The goals and policies applicable to the project are presented below:

- **Goal G.** Minimal exposure of residential and other noise-sensitive land uses to excessive construction, refuse vehicles, parking lot sweeper-related noise and public noise.
 - **Policy-G.1.** Implement limits on the hours of operation for non-emergency construction and refuse vehicle and parking lot sweeper activity in residential areas and areas abutting residential areas.
- **Goal I.** Attenuate the effect of noise on future residential and other noise-sensitive land uses by applying feasible noise mitigation measures.
 - **Policy-I.1.** Require noise attenuation measures to reduce the noise to an acceptable noise level for proposed developments to ensure an acceptable interior noise level, as

⁸A holiday means January 1st, the last Monday in May, July 4th, the first Monday in September, December 25th and any day appointed by the President as a special national holiday or the Governor of the State as a special State holiday.

appropriate, in accordance with California’s noise insulation standards (CCR Title 24) and Airport Land Use Compatibility Plans.

- **Policy-I.3.** Consider noise attenuation measures and techniques addressed by the Noise Element, as well as other feasible attenuation measures not addressed as potential mitigation measures, to reduce the effect of noise on future residential and other noise-sensitive land uses to an acceptable noise level.

City of San Diego Noise Ordinance

The City of San Diego Noise Ordinance establishes prohibitions for disturbing, excessive, or offensive noise and contains provisions (e.g., noise level limits) for the purpose of securing and promoting public health, comfort, safety, peace, and quiet (City of San Diego 2010).

Section 59.5.0404 of the City Noise Ordinance sets limits on the time of day and days of the week that construction can occur, as well as setting noise limits for construction activities. In summary, the ordinance prohibits operating construction equipment on the following days and times:

- Mondays through Saturdays except between the hours of 7:00 a.m. – 7:00 p.m.
- Sundays and holidays (with exception of Columbus Day and Washington’s Birthday).⁹

A permit should be obtained from the Noise Abatement and Control Administrator if construction activities must be conducted outside of these previously listed timeframes. In addition, the ordinance requires that between the hours of 7:00 a.m. – 7:00 p.m., no construction activity shall cause an average noise level of 75 dB or greater during the 12-hour period at or beyond the property lines of any property zoned residential. For permanent operation, Section 59.5.0401 of the City Noise Ordinance establishes noise limits as specified by land use. Noise generated by helicopters at heliports or helistops authorized by a conditional use permit is not subject to the noise limits.

City of Chula Vista

City of Chula Vista General Plan

Noise levels within the City of Chula Vista are regulated by the City’s General Plan (City of Chula Vista 2005). The purpose of the Noise Element in the General Plan is to identify existing conditions and to provide general guidelines that would reduce the negative impact of noise on the community in the future. The General Plan’s objective is to protect people from excessive noise through careful land use planning and the incorporation of appropriate mitigation techniques. The General Plan requires the implementation and enforcement of the City’s noise control ordinance.

City of Chula Vista Noise Ordinance

The City of Chula Vista Noise Ordinance establishes prohibitions for disturbing, excessive, or offensive noise and contains provisions (e.g., noise level limits) for the purpose of securing and promoting public health, comfort, safety, peace, and quiet (City of Chula Vista 2016).

Construction and demolition activities are exempted from the noise levels indicated in Chapter 19.68 of the Municipal Code. Section 19.68.050 of the Noise Ordinance prohibits operating or permitting the operation of any device that creates a vibration which is above the vibration perception threshold of any individual at

⁹ Refer to Section 21.0104 of the City Noise Ordinance for definition of holidays

or beyond the property boundary of the source if on private property or at 150 feet from the source if on a public space or public right-of-way.

For permanent operation, Section 19.68.030 of the City Noise Ordinance establishes noise limits as specified by land use. If the measured ambient level exceeds the permissible standards, the allowable noise exposure standard shall be the ambient noise level. The ambient level shall be measured when the alleged noise violations source is not operating.

2.12.2 Environmental Impacts

Approach to Impact Analysis

Construction Noise Thresholds and Calculations

SDG&E provided a summary of various types of construction equipment that may be used during each phase of construction and their hours of daily operation (SDG&E 2016). The construction equipment list includes noise generated by backup alarms on the heavy equipment, which would be an intermittent source of noise (backup alarm of 107 dBA L_{max} at 4 feet). This equipment list, the associated acoustical usage factors for each equipment (FHWA 2006), and the associated hours of daily operation for each equipment were used to estimate the anticipated noise levels from construction for each phase of work. The information for each equipment is summarized in **Table 2.12-5**.

Table 2.12-5. Equipment Noise Levels and Hourly Operational Percentage Information

Equipment	dBA L_{max} at 50 feet	Acoustical usage factor (percent)
Air Compressor	78	40
Backhoe	78	40
Backup Alarm ¹	80	0.25
Boom Truck	74	40
Bucket Truck	74	40
Chainsaw	84	20
Concrete Truck	79	40
Crane	81	16
Crew Truck	75	40
Drilling Rig	84	20
Dump Truck	76	40
Forklift	75	40
Generator	81	50
Grader	85	40
Jackhammer	85	20
Loader	79	40
Mower	81	50

Equipment	dBA L _{max} at 50 feet	Acoustical usage factor (percent)
Pickup	75	40
Pole Puller	74	40
Pulling Rig	74	40
Rock Drill	85	20
Skid Steer	79	40
Spray Truck	76	40
Submersible Pump	81	50
Tractor Trailer Unit	74	40
Vibratory Roller ²	80	20
Water Truck	76	40
Wire Truck	75	40

Notes:

- Backup alarm is not provided on the list showing construction equipment in Attachment G. However, the Cal/OSHA requires backup warning alarms that activate immediately upon reverse movement on all vehicles that have a haulage capacity of 2.5 cubic yards or more (Title 8, California Code of Regulations). Therefore, this equipment is added to the equipment list table above. This analysis assumes a usage factor of 0.25% for backup alarm.
- Vibratory roller is not provided on the list showing construction equipment in Attachment G. However, a vibratory roller is likely to be used during the process of staging yard setup or road reestablishing. Therefore, this equipment is added to the equipment list table above.
- Rock drills, air compressors, drilling rigs, and/or jackhammers could be used for the Alternative Methods of construction described in Section 1.7.3 of the Project Description. Rock drills and jackhammers were not previously included in the Attachment G list and have been added above.

Source: FHWA 2006; SDG&E 2016

Construction phases for the proposed project would entail staging yard setup, road reestablishing, foundation construction (at each pole one of the following foundation construction methods would be used: micropile, pier, and direct-bury), trenching for installation of underground cables, stringing activities and demobilization/cleanup. Alternative methods for foundation construction, including jackhammering and drill rigs, were also considered; although these would generally be conducted less frequently than the proposed micropile, pier, and direct-bury methods. Only the worst-case noise scenario for each construction phase was considered in the noise analysis. The worst-case noise scenario was considered to be the scenario under which the greatest number of noise generating equipment was likely to be used concurrently. Reference noise levels at 50 feet were calculated, taking into account the fraction of time that the equipment would be in use over an 8-hour work day period. The noise attenuation equation was then applied to calculate the noise levels based on distances to the various nearby receptors described above.

As discussed in the regulatory setting, the County of San Diego established a 75-dBA threshold over an 8-hour period (75 dBA Daily Exposure Level [LEX_{8h}]) for construction activities; the City of San Diego established a 75-dBA threshold over a 12-hour period for construction activities; and the City of Chula Vista exempts construction activities from local noise standards. Because calculating noise levels over an 8-hour period is more conservative than a 12-hour period (the fraction of time that the equipment is in use is higher over an 8-hour period than a 12-hour period), this analysis employed the 75-dBA LEX_{8h} threshold over an 8-hour period for construction activities.

As discussed above, there are two historic-era resources located along the proposed project alignment near Wood-to-Steel Replacement Poles 26 and 45. These historic-era resources are uninhabited and consequently they do not contain residents with the potential to be disturbed by noise and vibration. However, the potential for construction-generated vibration to cause damage to these structures is addressed in this analysis. Similarly, the rural residence is an unoccupied structure, and therefore, only the potential for construction-generated vibration to cause damage to this structure is addressed in this analysis.

Construction Vibration Thresholds

Vibration criteria to prevent disturbance of occupants are summarized in **Table 2.12-6** (adopted from Table 2.12-3). This analysis also employed the vibration criteria to prevent damage to structures from FTA (FTA 2006), which is summarized in **Table 2.12-7**.

Table 2.12-6. Vibration Criteria to Prevent Disturbance – Root Mean Square (Vdb)

Land Use Category	Frequent Events ¹	Occasional Events ²	Infrequent Events ³
Buildings where vibration would interfere with interior operations	65	65	65
Residences and buildings where people normally sleep	72	75	80
Institutional land uses with primarily daytime use	75	78	83

Notes:

1 = More than 70 vibration events of the same kind per day or vibration generated by a long freight train.

2 = Between 30 and 70 vibration events of the same kind per day.

3 = Fewer than 30 vibration events of the same kind per day.

Source: Federal Transit Administration 2006

Table 2.12-7. Vibration Criteria to Prevent Damage to Structures

Building Category	PPV (in/sec)	RMS (VdB)
Reinforced-concrete, steel or timber (no plaster)	0.50	102
Engineered concrete and masonry (no plaster)	0.30	98
Non-engineered timber and masonry buildings	0.20	94
Buildings extremely susceptible to vibration damage	0.12	90

Source: Federal Transit Administration 2006

Operational Period Noise and Vibration Thresholds

As discussed in the regulatory setting, the County of San Diego, the City of Chula Vista, and the City of San Diego have different operational noise standards. If the measured ambient noise level exceeds the applicable standard, the County of San Diego adjusts the standard to equal the 1-hour average ambient noise level plus 3 dBs and the City of Chula Vista adjusts the standard to equal the 1-hour average ambient noise level. The City of San Diego does not address this issue. Consistent with these regulatory standards, this analysis considers an increase in ambient noise and vibration levels as a result of project operation to be a significant impact whether or not ambient noise and vibration standards currently exceed local operational

standards. To determine whether the project has the potential to increase operational noise and vibration, this analysis qualitatively compares the frequency and intensity of the existing sources of noise and vibration before and after the proposed project. The proposed project would have a significant impact if it would increase the frequency and intensity of the existing sources of noise and vibration or generate new sources of noise and vibration during project operation.

a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (Less than Significant with Mitigation)

Construction

Construction workers could be exposed to excessive noise from the heavy equipment used during construction of the proposed project (see Table 2.12-5). However, as discussed above, noise exposure of construction workers is regulated by the Cal/OSHA. The construction contractor for the proposed project would be subject to these regulations, and compliance with these Cal/OSHA regulations will ensure that the potential of construction workers to be exposed to excessive noise is less than significant.

Construction is expected to occur over a period of roughly nine to ten months from initial construction activities through final energization and would temporarily increase noise levels in the vicinity of the proposed project alignment. Construction noise levels would vary from day to day, depending on the number and condition of the equipment being used, the types and duration of activity being performed, the distance between the noise source and the receptor, and the presence or absence of barriers, if any, between the noise source and receptor. As described above, construction phases for the proposed project would entail staging yard setup, road reestablishing, foundation construction, trenching for installation of underground cables, stringing activities and demobilization/cleanup. **Table 2.12-8** indicates the number and types of equipment that would be used in each phase of project construction.

Table 2.12-9 presents the estimated dBA LEX_{8h} at 50 feet for each construction phase under the worst-case noise scenario. Based on these estimated noise levels at 50 feet, noise levels at different distances are also calculated and presented in Table 2.12-9 in order to characterize the potential noise impact from the different construction phases at the closest receptors. Noise levels are also calculated at 95 feet, which is the distance at which the 75 dBA LEX_{8h} threshold for construction noise will not be exceeded.

1 Table 2.12-8. Equipment Quantity for each Construction Phase

Equipment	Staging Yard Setup/Road Reestablishing	Micropile Foundation Construction	Pier Foundation Construction	Direct-Bury Construction and Pole Installation	Trenching for Installation of Underground Cables	Stringing Activities	Demobilization / Cleanup
Air Compressor		2	2	2			
Backhoe			1	1	1		
Backup Alarm ³	NK	NK	NK	NK	NK	NK	<u>NK</u>
Boom Truck			2			3	
Bucket Truck				3		3	
Chainsaw						1	
Concrete Truck		NK	NK	NK	NK		
Crane		2		3			
Crew Truck	NK	NK					NK
Drilling Rig		2	2	3			
Dump Truck	NK	NK	NK	NK	NK		
Forklift		2	2				
Generator		2	2				
Grader	2						<u>1</u>
Jackhammer		NK	NK	NK			
Loader	1						<u>1</u>
Mower	2						
Pickup						NK	NK
Pole Puller						1	
Pulling Rig						1	
Rock Drill		NK	NK	NK			
Skid Steer	1						
Spray Truck							1

Equipment	Staging Yard Setup/Road Reestablishing	Micropile Foundation Construction	Pier Foundation Construction	Direct-Bury Construction and Pole Installation	Trenching for Installation of Underground Cables	Stringing Activities	Demobilization / Cleanup
Submersible Pump		1	1	1	1		
Tractor Trailer Unit	NK	NK	NK	NK	NK	NK	NK
Vibratory Roller	1						
Water Truck	2	1	2	2		2	1
Wire Truck						NK	

Note: NK indicates that the equipment is anticipated for the proposed project, but the quantity of the equipment is not known. In the case of rock drills and jackhammers, these would only be used as alternative methods if the primary proposed construction methods (micropile, pier, or direct-bury) weren't feasible. The quantity of rock drills and jackhammers required is unknown. **Bold and underlined numbers indicate that one piece of the equipment is considered as a component of the worst case operating scenario.**

Source: SDG&E 2016

Table 2.12-9. Simulated Construction Noise Levels

Construction Phase	Approximate LEX _{8h} at 50 feet (dBA)	Calculated LEX _{8h} at 25 feet (dBA) ¹	Calculated LEX _{8h} at 40 feet (dBA) ¹	Calculated LEX _{8h} at 75 feet (dBA) ²	Calculated LEX _{8h} at 95 feet (dBA) ³
Staging Yard Setup	79	--	--	--	72
Road Reestablishing	79	--	--	75	72
Micropile Foundation Construction	77	--	--	73	70
Pier Foundation Construction	77	--	--	--	70
Direct-Bury Construction and Pole Installation	77	--	--	73	70
Trenching for Installation of Underground Cables	75	--	--	70	68
Stringing Activities	75	82	77	--	68
Demobilization/Cleanup	81	--	--	76	74

Note:

- Only stringing activities would occur at a distance of 25 feet and 40 feet away from the residences along Sea Lavender Way; therefore, noise associated with other construction phases at these distances were not calculated.
- No staging yard setup, pier foundation construction, or stringing activities would occur at residences located 75 feet away from the proposed project alignment; therefore, noise associated with these construction phases at this distance were not calculated.
- This analysis found that construction phases would generate noise levels below the 75 dBA LEX_{8h} threshold at 95 feet.
- Alternative pole installation methods such as jackhammering or drill rigs could occur at locations that are currently shown for micropile foundation construction or direct-bury construction and pole installation. These methods would be anticipated to generate similar or lower noise levels as demobilization/cleanup activities based on the potential noise levels generated by construction equipment for these alternative methods (i.e., jackhammers and drill rigs). Therefore, these alternative construction methods would generate noise levels below the 75 dBA LEX_{8h} threshold at 95 feet.

Bold numbers indicate noise levels exceed the 75 dBA LEX_{8h} threshold.

Based on reference noise levels at 50 feet, the following propagation adjustment was applied to estimate noise levels at 25 feet, 40 feet, 75 feet, and 95 feet.

$$dBA2 = dBA1 + 10 \log_{10}(D1/D2)^{2.5}$$

Where:

dBA1 is the reference noise level at a specified distance (in this case 50 feet).

dBA2 is the calculated noise level.

D1 is the reference distance (in this case 50 feet).

D2 is the distance from the equipment to the receiver.

Source: Caltrans 1998

The results of the noise analysis presented in Table 2.12-9 indicates that construction phases are not anticipated to generate noise levels higher than the 75 dBA LEX_{8h} threshold at any other receptors located more than 95 feet from the project alignment, including commercial buildings north of the Main Street Staging Yard (150 feet away) and the correctional facility (300 feet away).

However, as indicated in Table 2.12-9, proposed project construction activities could exceed applicable noise thresholds as follows:

- Noise levels generated by the stringing activities would be approximately 77 dBA LEX_{8h} and 82 dBA LEX_{8h} at the residences located approximately 40 feet south and 25 feet north of the stringing site at Sea Lavender Way in the City of San Diego. Therefore, stringing activities would generate noise levels that exceed the 75 dBA LEX_{8h} threshold at these receptors.
- Noise levels generated by road reestablishment would be approximately 75 dBA LEX_{8h} at the residences 75 feet north and south of the proposed project alignment near pole locations No. 4 through No. 7 within the City of San Diego. Additionally, noise levels generated by demobilization/cleanup activities would be approximately 76 dBA LEX_{8h} at these receptors. Therefore, both road reestablishment and demobilization/cleanup activities would generate noise levels that meet or exceed the 75 dBA LEX_{8h} threshold at these receptors.
- Noise levels generated by alternative methods, such as jackhammering or drill rigs could generate noise levels similar to demobilization/cleanup activities, which would be approximately 76 dBA LEX_{8h} at any residences within 75 feet of any proposed project pole locations using these methods. Therefore, the alternative jackhammering and drill rigs methods for pole installation would generate noise levels that meet or exceed the 75 dBA LEX_{8h} threshold at these receptors.
- Although not anticipated, nighttime work could occur as a result of any of the following conditions: 1) stringing long spans that cannot stop until completion; 2) restrictions that limit outages due to weather or to minimize customer impact; 3) work on freeway crossings that typically can only occur very early on Sunday mornings (such as when SDG&E crosses Heritage Road and under the I-125); or 4) schedule acceleration (e.g. if SDG&E determine it necessary to complete work in advance of wet weather). Because noise is generally more perceptible during nighttime, nighttime construction activities are conservatively considered a significant noise impact. Helicopter work has not been factored into the noise calculations and results presented in Table 2.12-9 because helicopter work is neither anticipated nor desired. However, helicopter use is possible in the limited situations where access to an area is restricted and ultimately the only viable option for SDG&E. Helicopters could be used in either stringing activity and/or in setting up new poles. Stringing activity could involve light- or medium- duty helicopters. Setting up new poles could involve medium- or heavy-duty helicopters, depending on the weight of the poles. A light or medium helicopter could generate noise levels of 90 dBA L_{max} at a distance of 50 feet, and a heavy-duty helicopter could generate noise levels of 102 dBA L_{max} at a distance of 50 feet.

Helicopter takeoffs and landings would be conducted at the staging yards. The nearest receptors to any of the proposed staging yards are the commercial businesses located approximately 150 feet north of the Main Street Staging Yard. At this distance, a light/medium helicopter would generate noise levels of approximately 78 dBA L_{max} and the heavy-duty helicopter would generate noise levels of approximately 90 dBA L_{max} . However, takeoffs and landings would be limited to a couple of times within one day. As discussed above, commercial receptors are not noise sensitive, and therefore, the temporary and intermittent exposure of commercial businesses to noise from helicopter takeoffs and landings at the Main Street Staging Yard is less than significant.

Flight operations above the proposed project alignment are expected to last for no more than 2 hours at any given area per day. Although the use of a helicopter would be temporary, the high noise levels associated with helicopter use could disturb or alarm sensitive receptors, such as residents located near the project alignment and livestock grazed in the open land

along the project alignment. Therefore, helicopter operations above the proposed project alignment is conservatively considered a significant impact because sensitive receptors could be disturbed or alarmed by helicopter noise.

Noise generated by construction of the proposed project has the potential to exceed the 75 dBA LEX,8h threshold. In addition, noise generated by nighttime work, and helicopter use has the potential to disturb sensitive receptors. Potential noise impacts generated by the stringing activities at the residences located approximately 40 feet south and 25 feet north of the stringing site at Sea Lavender Way would be reduced by Mitigation Measures NOI-1 through NOI-5. Potential noise impacts generated by road reestablishment and demobilization/cleanup activities at residences 75 feet north and south of the proposed project alignment near Pole Nos. 4 through 7 would be reduced by Mitigation Measure NOI-1 through NOI-5. Similarly, potential noise impacts of alternative pole installation methods, such as jackhammering or use of drill rigs, would be reduced by Mitigation Measure NOI-1 through NOI-5. Potential noise impacts generated by nighttime construction activities would be reduced by Mitigation Measures NOI-1, NOI-2, and NOI-5. Potential noise impacts generated by helicopter operations above the proposed project alignment would be reduced by Mitigation Measure NOI-2. With implementation of these mitigation measures, the potential exceedances of applicable noise thresholds and the noise impacts from nighttime work and helicopter use would be reduced to a less-than-significant level.

Mitigation Measure NOI-1: Restrict Construction Work Periods

Construction equipment operation shall be limited to the hours of 7 a.m. to 7 p.m. Monday through Saturday and no construction operation shall occur on Sundays or holidays. If construction activities are required outside of these hours, SDG&E shall obtain written authorization from the City of Chula Vista, City of San Diego, or County of San Diego, as appropriate, to perform construction activities outside of the allowed hours stipulated in the applicable municipal ordinance. Official copies of the written authorization shall be submitted to the CPUC before initiating any work outside the hours listed above.

Mitigation Measure NOI-2: Notify Local Landowners of Construction Activities

Residences and landowners within 100 feet of the proposed project alignment (e.g. those near the stringing site at Sea Lavender Way and near Pole Nos. 4 through 7) shall be provided written notice of the planned construction activity at least two days prior to the commencement of work. In addition, residents and landowners within 100 feet of any planned helicopter use along the alignment shall be provided written notice of the helicopter use at least seven days prior to the commencement of work. The notice shall state the date of planned construction activity in proximity to that landowner's property and the range of hours during which maximum noise levels may be anticipated. If nighttime work is anticipated, the notification outlined in this measure shall be provided at least seven days prior to commencement of work to all residences and landowners located within 500 feet of the anticipated work area.

Mitigation Measure NOI-3: Construction Noise Complaints

The proposed project applicant shall submit to CPUC for review and approval a set of procedures for responding to and tracking complaints received pertaining to construction noise, and shall implement the procedures during construction. At a minimum, the procedures shall include:

- a) Designation a Public Liaison dedicated to the project to track and respond to noise complaints for the project;

- b) Protocols for receiving, responding to, and tracking received noise complaints; and
- c) Maintenance of a noise complaint log that records received complaints and how complaints were addressed, which shall be submitted to the CPUC for review upon request.

Mitigation Measure NOI-4: Construction Noise

For construction activities within 100 feet of residential or other sensitive uses (i.e., residences near the stringing site at Sea Lavender Way, and the residences near Pole Nos. 4 through 7), the project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include the following:

- a) Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible.
- b) Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with required construction procedures.
- c) Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled or use other measures to provide an equivalent noise reduction.

Mitigation Measure NOI-5: Project-Specific Construction Noise Reduction Measures

For construction activities within 100 feet of residential or other sensitive uses (i.e., residences near the stringing site at Sea Lavender Way, and the residences near Pole Nos. 4 through 7), the project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant. The plan shall be submitted to the CPUC for review and approval. The plan shall contain a set of site-specific noise attenuation measures to reduce construction noise to less than 75 dBA during a 12-hour period or to the maximum extent practicable.

Although construction-generated noise levels could result in the exposure of the nearby residences to noise in excess of 75 dBA LEX_{8h}, the construction noise would be temporary since the locations of construction activities would vary over time along the proposed project alignment. In particular, stringing activities are expected to last no more than three days near residences along Sea Lavender Way, and micropile foundation, direct-bury, or alternative pole installation methods and related construction activities are expected to last no more than 10 days at each pole location on the portion of the proposed project alignment between Pole Nos. 4 to 7. Considering the temporary nature of the proposed work activity, implementation of Mitigation Measures NOI-1 through NOI-5 would reduce construction period noise to a less-than-significant level.

Operation

Sources of operational noise would include corona noise, maintenance activities required to maintain the new power lines, brushing clearing activities for fire safety, and roadway maintenance. As discussed above, the existing power line is a 69-kilovolt power line, which normally does not produce a noise that is perceptible to humans (Egger 2009). Helicopters are used for patrolling power lines during trouble jobs (e.g., outages/service curtailments) and conducting maintenance activities in areas that have no vehicle access or in rough terrain. Brushing clearing activities for fire safety entail pole brushing and tree trimming, which include trimming or removing flammable vegetation in the area surrounding subject power line poles to reduce potential fire and other safety hazards. Road maintenance and equipment repair and replacement are conducted as necessary. Most maintenance operations take only one day at any given location. SDG&E currently conducts and will continue to conduct the standard operation and maintenance activities along the proposed power line route. Since the proposed project would improve the reliability of the powerline system, the frequency and duration of maintenance activities at any given location along the proposed project alignment would remain the same or decrease. Consequently, the proposed project would not result in a substantial increase in ambient noise levels. As discussed above in the “Approach to Impact Analysis,” this analysis considers the ambient noise level to be the allowable operational noise exposure standard. Therefore, the potential of the operational period of the proposed project to expose persons to noise in excess of standards is less than significant.

b. Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels? (Less than Significant with Mitigation)

Construction

Construction activities can result in varying degrees of ground vibration, depending on the equipment, activity, and relative proximity to sensitive receptors. The vibration levels for construction equipment that could be used at the proposed project are summarized in **Table 2.12-10**. Although the table provides one vibration level for each piece of equipment, it should be noted that there is considerable variation in reported ground vibration levels from construction activities, primarily due to variation in soil characteristics. In addition, vibration effects are typically limited to land uses that are very close to the site.

Table 2.12-10. Vibration Source Levels for Construction Equipment

Equipment	PPV at 25 Feet (in/sec)	PPV at 5 Feet (in/sec)	PPV at 35 Feet (in/sec)	PPV at 40 Feet (in/sec)	PPV at 75 Feet (in/sec)	RMS at 25 Feet (VdB)	RMS at 40 Feet (VdB)	RMS at 75 Feet (VdB)
Caisson drilling	0.089	0.995	0.054	0.044	0.017	87	81	73
Loaded trucks	0.076	0.850	0.046	0.038	0.015	86	80	72
Vibratory Roller	0.210	2.348	0.127	0.104	0.040	94	88	80

Notes: As part of alternative pole installation methods, a jackhammer may also be used. However, a jackhammer would generate lower vibration levels (0.035 PPV at 25 feet) than the equipment analyzed above and therefore was not further considered in this analysis.

A water pump station is adjacent to the proposed project alignment within the City of Chula Vista (between Wood-to-Steel Replacement Pole No. 18 to No. 18.1). Vibration levels were calculated at a distance of 5 feet to show the proximity of the structure.

Based on vibration levels at 25 feet, the following propagation adjustment was applied to estimate PPV vibration levels at 5 feet, 35 feet, 40 feet, and 75 feet assuming:

1 $PPV2 = PPV1 \times (D1/D2)^{1.5}$

2 Where:

3 PPV1 is the reference vibration level at a specified distance.

4 PPV2 is the calculated vibration level.

5 D1 is the reference distance (in this case 25 feet).

6 D2 is the distance from the equipment to the receiver.

7 Based on vibration levels at 25 feet, the following propagation adjustment was applied to estimate RMS vibration levels at
8 40 feet and 75 feet assuming:

9 $RMS2 = RMS1 - 30 \log_{10} (D2/D1)$

10 Where:

11 RMS1 is the reference vibration level at a specified distance.

12 RMS2 is the calculated vibration level.

13 D1 is the reference distance (in this case 25 feet).

14 D2 is the distance from the equipment to the receiver.

15 *Source: FTA 2006*

16 The proposed project has the potential to generate vibration that could exceed the 80 VdB Infrequent Events
17 threshold (Table 2.12-6). Trucks may be used at distances of 25 feet and 40 feet from the residences located
18 near the stringing site near Sea Lavender Way, generating vibration levels of approximately 86 and 80 VdB,
19 respectively. Trucks, a drill rig, and a vibratory roller may be used at a distance of 75 feet from the
20 residences near poles No. 4 through No. 7. The truck and the drill rig would generate vibration levels below
21 the 80 VdB Infrequent Events threshold; however, the vibratory roller would generate vibration levels of
22 approximately 80 VdB, thereby meeting the threshold. However, the exposure of any given resident to
23 construction vibration would be limited in duration because the work would move along the alignment, and
24 construction equipment would be located near any given residential area for only a few days at a time. In
25 particular, stringing activities are expected to last no more than three days near residences along Sea
26 Lavender Way. Furthermore, if a vibratory roller is used for road reestablishment, it is generally expected
27 to be near any given residence for no more than one hour. The potential impacts of vibration would be
28 further reduced by Mitigation Measure NOI-1, which limits construction activities to the hours between
29 7:00 a.m. and 7:00 p.m. Monday through Saturday. This restricts construction activities in the vicinity of
30 Sea Lavender Way and pole locations No. 4 to No. 7 to normal daytime hours, thereby reducing the
31 likelihood of disturbance of residents during particularly sensitive hours (i.e. when people rest and sleep).
32 Considering the temporary nature of the proposed work activity, the implementation of Mitigation
33 Measures NOI-1 would reduce the potential of residents to be disturbed by construction generated vibration
34 to a less-than-significant level.

35 Construction of the proposed project would not have the potential to generate vibration in excess of the
36 thresholds listed in Table 2.12-7 at the nearest residential receptors and at the historic-era resource (the
37 round barn and the unhabitated rural residence) near Wood-to-Steel Replacement Pole 26 (Site CA-SDI-
38 11386H). Vibration levels at the nearest residential receptors to the proposed project alignment would range
39 from approximately 0.015 in/sec PPV when trucks are operated as a distance of 75 feet from a residential
40 receptor to a vibration level of approximately 0.21 in/sec PPV when a vibration roller is operated at a
41 distance of 25 feet from a residential receptor. These vibration levels are below the 0.3 in/sec PPV threshold
42 for engineered concrete and masonry structures (no plaster) (Table 2.12-7). The highest construction
43 vibration levels at the historic-era resource near Wood-to-Steel Replacement Pole 26 (the round barn and
44 the unhabitated rural residence) would be approximately 0.104 in/sec PPV, which is the approximate
45 vibration level generated when a vibration roller is operated at a distance of 40 feet from a receptor. The
46 historic-era uninhabited rural residence is located 45 feet north of the disturbance area of Pole No. 26,
47 therefore this is a conservative estimate of the construction vibration exposure of this receptor. This estimate

is below the 0.12 in/sec PPV threshold for buildings extremely susceptible to vibration damage (Table 2.12-7). For these reasons, the potential of construction generated vibration to cause damage to the nearest residential receptors or to the historic-era resource near Wood-to-Steel Replacement Pole 26 (the round barn and the unhabituated rural residence) is less than significant.

However, construction of the proposed project has the potential to generate vibration in excess of the thresholds listed in Table 2.12-7 at the water pump station. Vibration levels could be as high as 0.995 in/sec PPV and 2.348 in/sec PPV if drilling activity and road reestablishment occur at a distance of 5 feet from the water pump station located near poles No. 18 and No. 18.1. This exceeds the 0.5 in/sec PPV threshold (Table 2.12-7) to prevent damage to buildings that are engineered reinforced-concrete, steel or timber (no plaster). Potential vibration impacts at the water pump structure would be reduced with the implementation of the Mitigation Measure NOI-6, as described below.

Mitigation Measure NOI-6: Vibration Impact Assessment

A structural engineer or other qualified professional shall be retained to prepare a vibration impact assessment (assessment) for the water pump station near the proposed project alignment between poles No. 18 and No. 18.1. The assessment shall take into account project-specific information such as the composition of the structures, location of the various types of equipment used during each phase of the project, and the soil characteristics in the project area, to determine whether project construction may cause damage to this structure. If the assessment finds that the project may cause damage to this structure, the structural engineer or other qualified professional shall recommend design means and methods of construction to avoid the potential damage, if feasible. The assessment and its recommendations shall be reviewed and approved by the CPUC. If there are no feasible design means and methods to eliminate the potential for damage, the structural engineer or other appropriate professional shall undertake an existing conditions study (study) of any structures (or, in case of large buildings, of the portions of the structures) that may experience damage. The study will establish the baseline condition of these structures, including, but not limited to, the location and extent of any visible cracks or spalls. The study shall include written descriptions and photographs. The study shall be reviewed and approved by CPUC. Upon completion of the project, the structures (or, in case of large buildings, of the portions of the structures) previously inspected will be resurveyed, and any new cracks or other changes shall be compared to pre-construction conditions and a determination shall be made as to whether the proposed project caused the damage. The findings shall be submitted to CPUC for review. If the study determines that project construction has resulted in damage to the structure, the damage shall be repaired to the pre-existing condition by the project sponsor, provided that the property owner approves of the repair.

Implementation of Mitigation Measure NOI-6 would reduce impacts related to vibration to a less-than-significant level.

Operation

The normal operation and maintenance of the powerline requires vehicle access and roadway maintenance equipment, as has been previously discussed, which would not introduce new vibration sources or increase the frequency or intensity of existing sources of vibration in the project vicinity. Therefore, the potential of the operational period of the proposed project to expose persons to or generate vibration in excess of standards is less than significant.

c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? (Less than Significant)

The construction period of the proposed project would be temporary. Since the operation and maintenance of the powerline would be conducted in the same manner as the existing condition and the frequency and duration of maintenance activities at any given location along the proposed project alignment would remain the same or decrease, the proposed project would not introduce new noise sources or increase the frequency or intensity of existing sources of noise in the project vicinity. Therefore, the potential of the proposed project to cause a substantial permanent increase in ambient noise levels is less than significant.

d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? (Less than Significant with Mitigation Incorporated)

Noise levels generated by the use of construction equipment could result in a substantial temporary and periodic increase in the ambient noise level in the project vicinity. Particularly, due to the proximity of the sensitive receptors, construction-generated noise levels could exceed the 75 dBA LEX_{8h} threshold at the residences near the stringing site along Sea Lavender Way and the portion of the proposed project alignment between Pole Nos. 4 to 7 (Table 2.12-9). The proposed project would potentially cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity. However, since the locations of construction activities that would require the use of construction equipment with the potential to exceed the 75 dBA LEX_{8h} threshold would vary over time across the proposed project alignment and the implementation of the mitigation measures (Mitigation Measures NOI-1, NOI-2, NOI-3, NOI-4, and NOI-5) will be triggered, the potential impact of a substantial temporary or periodic increase in ambient noise levels due to project construction would be reduced to a less-than-significant level.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? (No Impact)

The proposed project is located approximately 0.8 mile north and 1.3 miles east of the Brown Field Municipal Airport and a portion of the alignment lies within Airport Land Use Compatibility Plan. However, since the proposed project would not introduce new residents to the site and, the proposed project would not have the potential to expose people in the project area to excessive aircraft noise. Therefore, no impact would occur.

f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? (No Impact)

There are no private airstrips located within two miles of the proposed project alignment. Moreover, the proposed project would not introduce new residents to the site. Consequently, the proposed project would not have the potential to expose people to the aircraft noise from a private airstrip. Therefore, no impact would occur.

2.13 Population and Housing

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.13.1 Setting

Environmental Setting

The proposed project includes an approximately 7-mile section of the existing TL 649 alignment, located through portions of the City of Chula Vista, the City of San Diego, and unincorporated San Diego County, as depicted in Figure 1.4-2, Proposed Project Components. Residential developments are primarily located along the western portion of the project alignment, west of Heritage Road.

Population

In 2010, San Diego County (County) had a population of 3,095,313 (SANDAG 2015c). Since 2000, the County's population has increased by approximately 10 percent (from 2,813,833) (SANDAG 2011h); and by 2020, is expected to increase by 14.2 percent to 3,535,000 (SANDAG 2011d). The proposed project alignment occurs within the County's Otay Subregional Planning Area, an area whose population is largely made up of three correctional facilities: East Mesa Detention Facility, George F. Bailey Detention Facility, and Richard J. Donovan Correctional Facility. In 2010, the Otay Subregional Planning Area was estimated to have a population of 4,669 (or approximately 0.15 percent of the County's general population) (San Diego County 2011a).

In 2010, the City of Chula Vista had an estimated population of 243,916, or approximately 7.9 percent of the total population of San Diego County. Since 2000, the City of Chula's population has increased by approximately 41 percent (from 173,556); and by 2020, is projected to increase an additional 10 percent to 267,418 (SANDAG 2011f, 2011a).

In 2010, the City of San Diego had an estimated population of 1,301,617, or approximately 42 percent of the total population of San Diego County (SANDAG 2011g). Since 2000, the City of San Diego's population has increased by approximately 6 percent (from 1,223,400); and by 2020, is projected to increase by approximately 18 percent to 1,542,324 (SANDAG 2011b, 2011g). The proposed project alignment occurs within the City's Otay Mesa Community Planning Area, estimated to have a population of 15,001, or approximately 1 percent of the total population of the City of San Diego (SANDAG 2015b). By 2020, the Otay Mesa Community Planning Area population is projected to increase to 37,102, an almost 150 percent increase (SANDAG 2011c).

1 In 2020, unincorporated San Diego County had a population estimated to be 486,604, or approximately 16
2 percent of the total population of San Diego County (SANDAG 2011i). Since 2000, the City of San Diego's
3 population has increased by approximately 10 percent (from 442,919); and by 2020, is projected to increase
4 by approximately 12 percent to 545,409 (SANDAG 2011e, 2011i).

5 **Housing**

6 In 2010, the County of San Diego had approximately 1,158,076 housing units with a vacancy rate of
7 approximately 6.1 percent. The County's Otay Subregional Planning Area had approximately seven
8 housing units with a vacancy rate of approximately 14 percent (SANDAG 2015a).

9 In 2010, the City of Chula Vista had an estimated 78,384 housing units with a vacancy rate of approximately
10 3.7 percent (SANDAG 2015c). The City of San Diego had an estimated 511,820 housing units with a
11 vacancy rate of approximately 7 percent (SANDAG 2011g). The Otay Mesa Community Planning Area,
12 which is within the City of San Diego, had an estimated 4,145 housing units and a vacancy rate of
13 approximately 4.3 percent (SANDAG 2015b). Unincorporated San Diego County had approximately
14 169,142 housing units, with an estimated vacancy rate of approximately 7 percent (SANDAG 2011i).

15 **Employment**

16 As of March 2016, the County had an unemployment rate of 4.7 percent. The City of San Diego had a
17 similar unemployment rate of 4.5; the City of Chula Vista rate was approximately 5.9 percent (California
18 Employment Development Department [EDD] 2015).

19 **Regulatory Setting**

20 **Federal**

21 No federal laws, regulations, or policies related to population and housing are applicable to the proposed
22 project.

23 **State**

24 No state laws, regulations, or policies related to population and housing are applicable to the proposed
25 project.

26 **Local**

27 Because the CPUC regulates and authorizes the construction of investor-owned public utility facilities, the
28 CPUC has exclusive jurisdiction over the siting and design of the proposed project. As such, projects under
29 CPUC jurisdiction, including the proposed project, are exempt from local land use and zoning regulations
30 and permitting. However, Section III.C of CPUC General Order 131-D (planning and construction of
31 facilities for the generation of electricity and certain electric transmission facilities) requires "the utility to
32 communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any non-
33 discretionary local permits." As a result, SDG&E has taken into consideration all State and local plans and
34 policies as they relate to population and housing.

35 The San Diego Association of Governments Regional Comprehensive Plan (RCP) is the long-term planning
36 structure for the San Diego region. The RCP is, "intended to provide a broad context in which local and
37 regional decisions can be made to foster a healthy environment, a thriving economy, and a high quality of
38 life for all residents. The RCP balances regional population, housing, and employment growth with habitat
39 preservation, agriculture, open space, and infrastructure needs (SANDAG 2004)."

2.13.2 Environmental Impacts

a. Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? (No impact)

The proposed project would replace existing wood poles with weathered steel poles along the TL 649 alignment and would not involve the construction of new or expanded facilities. As described in Section 1.7.7 Personnel, SDG&E anticipates that approximately 36 personnel would be required to construct the proposed project. It is anticipated that the majority of the construction workforce would commute from within the San Diego County area. The project would not provide any additional long-term employment opportunities within the region. No residences or extension of services beyond existing service areas are proposed as part of the project. Therefore, the proposed project would not directly or indirectly generate additional population or cumulatively exceed population projections, nor would it induce substantial growth in the area. No impact would occur.

b. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? (No Impact)

The proposed project and associated staging areas would generally be limited to existing ROWs and existing access roads. No existing housing would be displaced or otherwise affected by the construction or operation of the proposed project; therefore, no impact would occur.

c. Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? (No Impact)

The proposed project and associated staging areas would generally be limited to existing ROWs and existing access roads. No people would be displaced by construction or operation of the proposed project; therefore, no impact would occur.

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2.14 Public Services

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Fire protection?				
ii) Sheriff protection?				
iii) Schools?				
iv) Parks?				
v) Other public facilities?				

2.14.1 Setting

Environmental Setting

The proposed project includes an approximately 7-mile section of the existing TL 649 alignment, located through portions of the City of Chula Vista, the City of San Diego, and unincorporated San Diego County, as depicted in Figure 1.4-2, Proposed Project Components.

Fire Protection

Fire protection and emergency services for the City of Chula Vista are provided by Chula Vista Fire Department; headquarters located at 447 F Street. Chula Vista Fire Department employs approximately 120 workers, the majority of which are professional firefighters. During a typical 24-hour shift, an estimated 36 firefighters and two battalion chiefs are spread among the City's nine fire stations. The proposed project would be served by Fire Station 3, located at 1410 Brandywine Avenue, and Fire Station 7, located at 1640 Santa Venetia Street. These stations are approximately 1.6 miles northwest and 2.4 miles north of the proposed project alignment, respectively (City of Chula Vista 2016a).

Fire protection and emergency services for the City of San Diego are provided by San Diego Fire-Rescue Department (SDFD). SDFD operates 47 fire stations with approximately 801 uniformed personnel and 161 civilian personnel. The proposed project would be served by Fire Station 6, located at 693 Twinning Avenue, approximately 1.3 miles to the southwest of the proposed project alignment. The proposed project would also be served by Station 43, located at 1590 La Media Road, approximately 1.05 miles to the southwest of the proposed project alignment. Fire Station 6 provides both fire protection and medical/rescue services, while Fire Station 43 provides general fire protection services as well as a brush rig and an aircraft-crash firefighting truck (City of San Diego 2016a).

Fire protection and emergency services for unincorporated San Diego County is provided by San Diego Rural Fire Protection District (SDRPD). SDRPD operates a paid and volunteer emergency service system and fire loss mitigation and safety education program for rural and suburban areas of unincorporated San

Diego County. The proposed project alignment would be served by Station 22, located at 446 Alta Road in San Diego, approximately 1 mile to the east of the proposed project alignment (SDRPD 2011).

See **Figure 2.14-1**, Public Services, for a map of fire stations within the immediate vicinity of the proposed project.

Police Protection

The western and central portions of the proposed project alignment, within the City of Chula Vista, would be served by the Chula Vista Police Department. The Chula Vista Police Department employs approximately 240 officers, serving approximately 52 square miles within the City. Chula Vista Police Department is located at 315 4th Avenue, approximately 5 miles northwest of the proposed project alignment (City of Chula Vista 2016b).

The western most portion of the proposed project alignment, within the City of San Diego, would be served by the San Diego Police Department. San Diego Police Department headquarters are located at 1401 Broadway in downtown San Diego, approximately 11.5 miles northwest of the proposed project (City of San Diego 2016c). The proposed project area is located in the Otay Mesa Community Planning Area, served by the San Diego Police Department's Southern Division, which serves approximately 108,000 people within an approximately 31.5-square-mile patrol area. The Southern Division is headquartered at 1120 27th Street in San Diego, approximately 3.2 miles west of the proposed project alignment (City of San Diego 2016d).

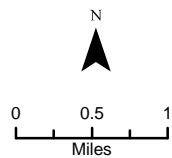
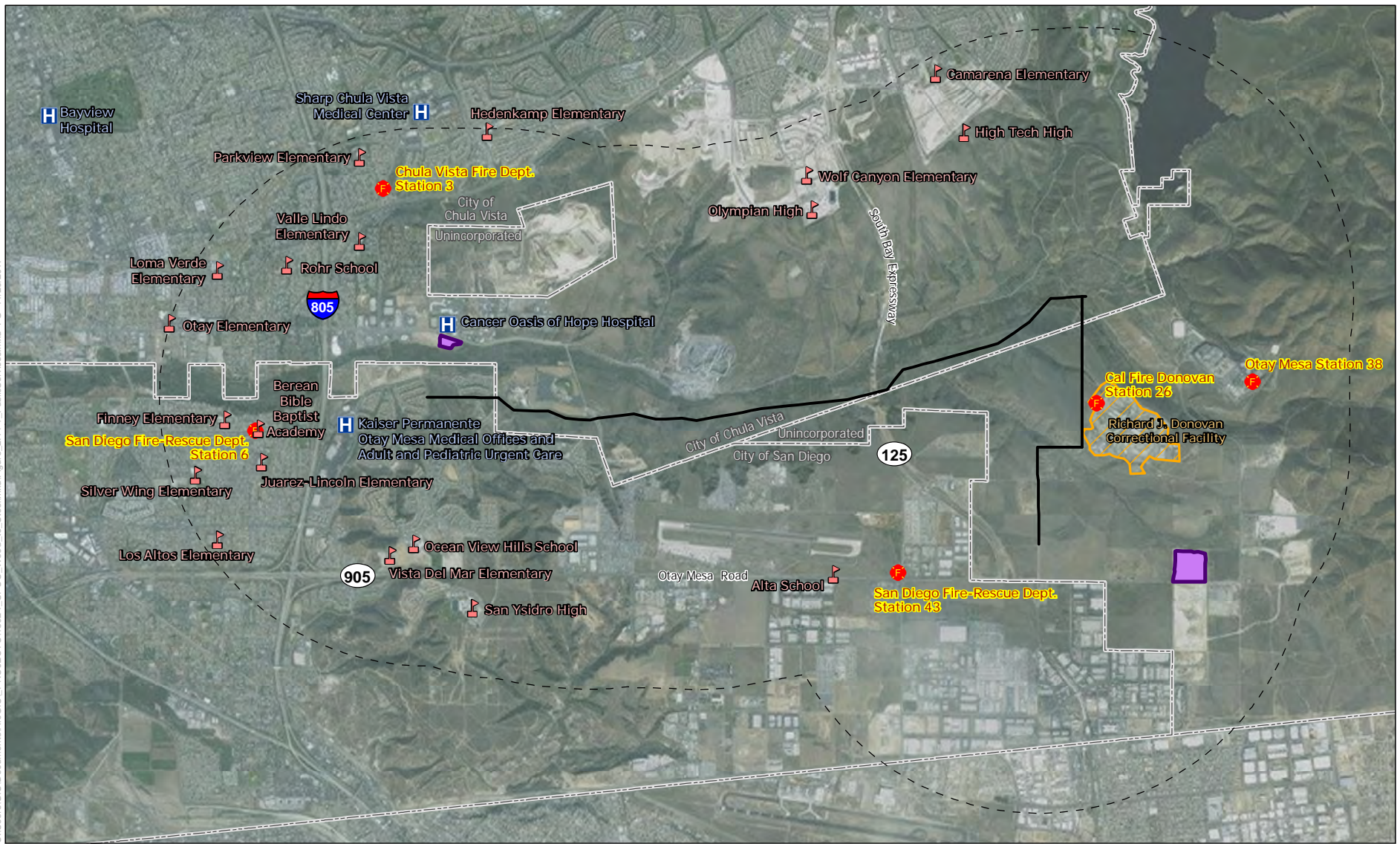
The eastern portion of the proposed project alignment, within the unincorporated region of the County, would be served by San Diego County Sheriff's Department. The San Diego County Sheriff's Department has a service area of approximately 4,200 square miles, employs approximately 4,000 officers and support staff, and operates seven detention facilities, including four in the Otay Mesa area near the proposed project alignment. The closest San Diego County Sheriff's Department station is located at 845 Imperial Beach Boulevard in Imperial Beach, approximately 5.4 miles west of the proposed project alignment (San Diego County 2015).

Due to the proposed project's proximity to the United States–Mexico border, U.S. Customs and Border Patrol has a strong presence in the proposed project area. San Diego Regional Border Patrol headquarters is located at 2411 Boswell Road in San Diego, approximately 2.6 miles south of the proposed project (CBP 2016).

Hospitals

There are no major hospitals within the immediate vicinity of the proposed project. Kaiser Permanente Adult and Pediatric Urgent Care is located approximately 0.6 mile southwest of the western terminus of the proposed project alignment at 4650 Palm Avenue in San Diego. Cancer Oasis of Hope Hospital is located approximately 0.6 mile north of the proposed project alignment at 744 Design Ct, Chula Vista. The nearest hospitals with emergency medical care are both in the City of Chula Vista: Sharp Chula Vista Medical Center, located approximately 2.2 miles north of the proposed project alignment at 751 Medical Center Court; and Bayview Hospital, located approximately 3.5 miles from the proposed project alignment at 330 Moss Street (SHARP Healthcare 2016). See Figure 2.14-1, Public Services, for a map of hospitals within the immediate vicinity of the proposed project.

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Prepared by:



- | | | |
|--------------------------|---------------------------------|----------------------|
| School | Proposed Project (TL 649) | Staging Yard |
| Hospital/Medical Offices | 2-Mile Project Alignment Radius | Municipal Boundaries |
| Fire Station | | |
| Correctional Facility | | |

**Figure 2.14-1
Public Services**

**Tie Line 649 Wood-to-Steel
Replacement Project**

Schools

The proposed project alignment lies within the Chula Vista Elementary School District (CVESD), Sweetwater Union High School District (SWUHSD), and San Ysidro School District (SYSD). CVESD operates 45 schools serving kindergarten through sixth grade (CVESD 2016). SWUHSD operates 32 campuses serving more than 42,000 students in grades seven through twelve, and more than 32,000 adult pupils (SWUHSD 2016). SYSD operates six elementary schools, one middle school, and a preschool and child development center, serving more than 5,230 students (SYSD 2016). There are 19 schools within 2 miles of the proposed project alignment, as depicted in Figure 2.14-1, Public Services. The school nearest to the proposed project alignment (approximately 1 mile to the southwest) is Ocean View Hills Elementary School, located at 4919 Del Sol Boulevard in San Diego, within the SYSD.

Parks and Other Public Facilities

Several private and public local, city, and regional parks are located near the proposed project (see Section 2.15, Recreation, and **Figure 2.15-1**). San Ysidro Branch Library is located approximately 2.7 miles to the west of the proposed project (101 West San Ysidro Boulevard) and Otay Mesa Nestor Library is located approximately 2.7 miles to the west of the proposed project (3003 Coronado Avenue) (City of San Diego 2016b).

Regulatory Setting

Federal

No federal laws, regulations, or policies related to public services are applicable to the proposed project.

State

California Fire Code

The California Fire Code (Title 24 CCR, Part 9) establishes minimum requirements to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings. Chapter 33 of CCR contains requirements for fire safety during construction and demolition as follows:

- **3304.4 Spontaneous ignition.** Materials susceptible to spontaneous ignition, such as oily rags, shall be stored in a listed disposal container.
- **3304.5 Fire watch.** When required by the fire code official for building demolition, or building construction during working hours that is hazardous in nature, qualified personnel shall be provided with at least one approved means for notification of the fire department and their sole duty shall be to perform constant patrols and watch for the occurrence of fire.
- **3308.1 Program superintendent.** The owner shall designate a person to be the fire prevention program superintendent who shall be responsible for the fire prevention program and ensure that it is carried out through completion of the project. The fire prevention program superintendent shall have the authority to enforce the provisions of this chapter and other provisions as necessary to secure the intent of this chapter. Where guard service is provided, the superintendent shall be responsible for the guard service.
- **3308.2 Pre-fire plans.** The fire prevention program superintendent shall develop and maintain an approved pre-fire plan in cooperation with the fire chief. The fire chief and the fire code official shall be notified of changes affecting the utilization of information contained in such pre-fire plans.

- **3310.1 Required access.** Approved vehicle access for firefighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 100 feet of temporary or permanent fire department connections. Vehicle access shall be provided by either temporary or permanent roads, capable of support vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available.
- **3316.1 Conditions of use.** Internal combustion-powered construction equipment shall be used in accordance with all of the following conditions:
 - Equipment shall be located so that exhausts do not discharge against combustible material.
 - Exhausts shall be piped to the outside of the building.
 - Equipment shall not be refueled while in operation.
 - Fuel for equipment shall be stored in an approved area outside of the building.

Local

Because the CPUC regulates and authorizes the construction of investor-owned public utility facilities, the CPUC has exclusive jurisdiction over the siting and design of the proposed project. As such, projects under CPUC jurisdiction, including the proposed project, are exempt from local land use and zoning regulations and permitting. However, Section III.C of CPUC GO 131-D (planning and construction of facilities for the generation of electricity and certain electric transmission facilities) requires “the utility to communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any non-discretionary local permits.” As a result, SDG&E has taken into consideration all State and local plans and policies as they relate to public resources. Although County and other local policies are discussed below, they are provided for disclosure purposes only.

The San Diego County General Plan generally describes the County’s provision and management of fire and police protection services, schools, park and recreation facilities, and other public facilities. The proposed project falls within San Diego County’s Otay Subregional Planning Area. The Otay Subregional Plan outlines the community’s intention to provide adequate and equitably financed public services and facilities (San Diego County 2011a and 2011b).

The Public Facilities, Services, and Safety Element of the City of San Diego General Plan addresses public facilities and services, such as fire and rescue, police, storm water protection, and disaster preparedness. The General Plan identifies goals and policies intended to allow for the efficient and adequate provision of public services and facilities (City of San Diego 2015).

2.14.2 Environmental Impacts

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i) Fire protection? (Less than Significant)

The proposed project is being constructed in an area designated as highly susceptible to wildfire and exposed to hazardous wind conditions. As discussed in Section 1.3, Project Purpose and Objectives, implementation of the proposed project improvements, such as replacing wood poles with steel poles, would help minimize fire risk through enhanced safety and reliability of the power line system during extreme weather conditions, and reduce the risk of accidental ignition from power lines in fire-prone areas.

Construction equipment and vehicles could potentially introduce an ignition source and thereby increase fire risk in the area and potentially generate calls for service, resulting in a significant impact. Likewise, storage, transport, and use of flammable/hazardous materials (e.g., diesel fuel, oil) during construction could present a fire hazard and potentially generate calls for service, resulting in a potentially significant impact. Implementation of SDG&E's Fire Prevention Plan (see Appendix D, SDG&E Proponent's Environmental Assessment for the Tie Line 649 Wood-to-Steel Replacement Project [Attachment 4.8-B Construction Fire Prevention Plan]) would ensure that wildfire impacts would be less than significant and therefore would not result in the need for new fire protection services. Additionally, SDG&E and/or the construction contractor would comply with the California Fire Code requirements for fire safety during construction. Compliance with the California Fire Code would reduce the potential for an increase in fire due to the following requirements: materials susceptible to spontaneous ignition would be stored in a listed disposal container; patrols in hazardous areas would watch for the occurrence of fires (if deemed necessary by fire code official); designation of a person to be the fire prevention program superintendent; development and maintenance of an approved pre-fire plan; approved access for fire-fighting vehicles, and; adherence to conditions of use for internal combustion-powered construction equipment. See "Regulatory Setting" (above) for more details on each of these requirements.

Operation of the proposed project would primarily involve the inspection and maintenance of the project facilities and would be consistent to the existing SDG&E operational protocols and procedures. As discussed in Section 1.8, Operations and Maintenance, inspection and maintenance activities would not increase in duration, intensity, or frequency. The purpose of the wood-to-steel pole conversion is to reduce potential impacts from wildland fires, and would result in an overall reduction of poles. Impacts would be less than significant.

ii) Sheriff protection? (Less than Significant)

Implementation of the proposed project would not require construction of new government facilities (for example, a police station). Pole replacements would be installed along existing ROWs, primarily accessed via private access roads. Some portions of the alignment do cross public roadways or run within close proximity to public roadways, which could require traffic control services or generate traffic-related calls for service from local police or the County sheriff; however, construction in these areas would be temporary and short-term. Any potential calls for service generated during project construction would not be of a level or volume to adversely affect police response times. Additionally, the proposed project would not generate population growth. Therefore, because the proposed project would not require construction of any new

1 governmental facilities, there would be no physical impact to the environment, resulting in no significant
2 impact.

3 ***iii) Schools? (No Impact)***

4 As discussed in Section 2.13, Population and Housing, construction of the proposed project would not
5 generate population growth, and would require only routine inspection and maintenance of proposed project
6 facilities consistent to the existing SDG&E operational protocols and procedures. As described in Section
7 1.7.9, Personnel, SDG&E anticipates that approximately 36 personnel would be required to construct the
8 proposed project. It is anticipated that the majority of the construction workforce would commute from
9 within the San Diego County area. The project would not provide any additional long-term employment
10 opportunities within the region. No residences or extension of services beyond existing service areas are
11 proposed as part of the project. Therefore, no new demand would be placed on schools.

12 ***iv) Parks? (No Impact)***

13 As discussed in Section 2.13, Population and Housing, construction of the proposed project would not
14 generate population growth, and would require only routine inspection and maintenance of proposed project
15 facilities consistent to the existing SDG&E operational protocols and procedures. As described in Section
16 1.7.9, Personnel, SDG&E anticipates that approximately 36 personnel would be required to construct the
17 proposed project. It is anticipated that the majority of the construction workforce would commute from
18 within the San Diego County area. The project would not provide any additional long-term employment
19 opportunities within the region. No residences or extension of services beyond existing service areas are
20 proposed as part of the project. Therefore, the proposed project would not generate any new demand on
21 parks.

22 ***v) Other public facilities? (No Impact)***

23 The proposed project would not be anticipated to affect other public facilities. Again, the proposed project
24 would not generate population growth, and would require only routine inspection and maintenance of
25 proposed project facilities consistent to the existing SDG&E operational protocols and procedures.
26 Therefore, the proposed project would not generate any new demand on public facilities.

1

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2.15 Recreation

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.15.1 Setting

Environmental Setting

Public recreational facilities within the project vicinity (within 2 miles) include the Otay Valley Regional Park, Otay Lakes County Park, Otay County Open Space Preserve, and community parks and recreational fields within the City of San Diego and City of Chula Vista (see **Figure 2.15-1**, Parks and Recreational Facilities).

As discussed in Section 2.10, Land Use and Planning, Otay Valley Regional Park is an open space preserve located within southern San Diego County and managed under a joint agreement between the County of San Diego, City of San Diego, and City of Chula Vista. Regional trail systems that have been developed as part of the open space preserve are primarily west of I-805 and are not located near the project area (Otay Valley Regional Park 2016). Otay Lakes County Park, located approximately 0.7 mile northeast of Pole 76 at 2270 Wueste Road, contains facilities for bird watching, picnicking, and playground equipment. Otay County Open Space Preserve, located approximately 0.7 mile east of pole location 76 at 2155 East Beyer Boulevard, contains numerous hiking trails (San Diego County 2016).

The proposed project is located within 2 miles of several City of San Diego and City of Chula Vista neighborhood parks and recreational fields (see Figure 2.15-1, Parks and Recreational Facilities). The closest community park is Vista Pacifica Park, located approximately 0.2 mile south of Pole 15 at 6000 Avenida De Las Vistas (City of San Diego 2016).

In addition, the City of Chula Vista contains two privately owned recreational facilities within 2 miles of the proposed project: Aquatica San Diego and Sleep Train Amphitheater. The Aquatica San Diego is a seasonal water park located approximately 100 feet north of the proposed project at 2052 Entertainment Circle. Sleep Train Amphitheatre is a year-round outdoor music venue located approximately 0.1 mile north of the proposed project at 2050 Entertainment Circle (City of Chula Vista 2016).

Regulatory Setting

No federal or State regulations, or policies related to recreation are applicable to the proposed project.

Local

Because the CPUC regulates and authorizes the construction of investor-owned public utility facilities, the CPUC has exclusive jurisdiction over the siting and design of the proposed project. As such, projects under

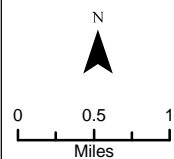
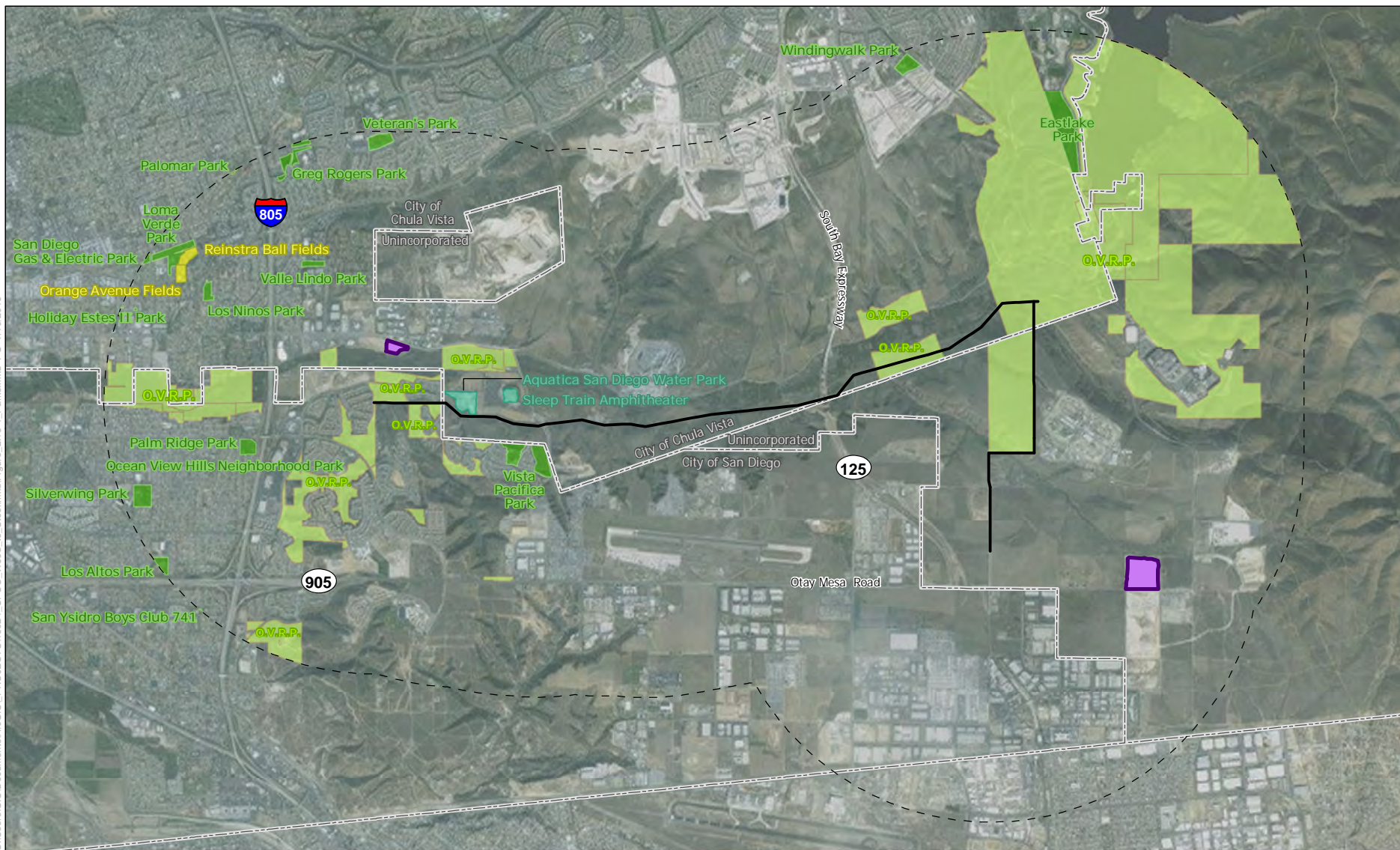
1 CPUC jurisdiction, including the Proposed Project, are exempt from local land use and zoning regulations
2 and permitting. However, Section III.C of CPUC General Order 131-D (planning and construction of
3 facilities for the generation of electricity and certain electric transmission facilities) requires “the utility to
4 communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any non-
5 discretionary local permits.” As a result, SDG&E has taken into consideration all State and local plans and
6 policies as they relate to recreational resources. Although County and other local polices are listed below,
7 they are provided for disclosure purposes only.

8 *San Diego County General Plan*

9 The Conservation and Open Space Element of the San Diego County General Plan (San Diego County
10 2011a) has a primary focus of providing direction to future growth and development in the County of San
11 Diego with respect to the protection and preservation of open space; the provision of park and recreation
12 resources; and the conservation, management, and utilization of natural and cultural resources. The
13 following policies for the designation and review of new public facilities are included in the County General
14 Plan and are applicable to the proposed project.

- 15 ▪ **Goal COS-21.** Park and recreation facilities that enhance the quality of life and meet the diverse
16 active and passive recreational needs of County residents and visitors, protect natural resources,
17 and foster an awareness of local history, with approximately ten acres of local parks and 15 acres
18 of regional parks provided for every 1,000 persons in the unincorporated County.
- 19 ▪ **Policy COS-21.1 Diversity of Users and Services.** Provide parks and recreation facilities that
20 create opportunities for a broad range of recreational experiences to serve user interests.
- 21 ▪ **Goal COS-23 Recreational Opportunities in Preserves.** Acquisition, monitoring, and
22 management of valuable natural and cultural resources where public recreational opportunities are
23 compatible with the preservation of those resources.
- 24 ▪ **Policy COS-23.2 Public Access.** Provide public access to natural and cultural (where allowed)
25 resources through effective planning that conserves the County’s native wildlife, enhances and
26 restores a continuous network of connected natural habitat and protects water resources.

C:\Users\GIS\Documents\ArcGIS\PROJECTS\15024_CPUC_Wood to Steel.mxd Figure 2.15-1 Parks.mxd PG. 7/10/2016



Prepared by:



- City Park
- Otay Valley Regional Park (O.V.R.P.)
- Recreation Field
- Recreation/Entertainment Venue

- Proposed Project (TL 649)
- 2-Mile Project Alignment Radius
- Staging Yard
- Municipal Boundaries

**Figure 2.15-1
Parks and Recreational Facilities**

**Tie Line 649 Wood-to-Steel
Replacement Project**

2.15.2 Environmental Impacts

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (Less than Significant)

As described in Section 2.13, Population and Housing, the proposed project would not substantially increase population. The proposed alignment would require routine operation and maintenance consistent with the manner in which the facilities are currently operated. Operation and maintenance practices do not currently impact recreational uses or facilities in the area; therefore, no operational impacts would occur.

While the proposed project does not cross any existing park or recreational facilities, the Aquatica San Diego parking lot may be used to access Pole Nos. 4 through 17 during construction. In addition, fire hydrants located at Aquatica San Diego and the Sleep Train Amphitheatre may be used to obtain water for dust control purposes. These provisional uses would not require closure or any changes in use of any recreational facilities or parks; therefore, no impacts would occur.

b. Would the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? (No Impact)

The proposed project does not include recreational facilities, nor would it require construction or expansion of recreational facilities. The proposed project would not increase the capacity of the existing power line and, as described in Section 2.13, Population and Housing, would not induce substantial population growth. No impact would occur.

2.16 Transportation and Traffic

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.16.1 Setting

Following are definitions of key traffic and transportation terms used in this section, based on the Highway Capacity Manual, 4th edition (Transportation Research Board 2000), the Mobility Element of the San Diego County General Plan (San Diego County 2011), and the City of San Diego's Otay Mesa Community Plan (City of San Diego 2012).

Level of Service

A qualitative measure describing operational conditions within a traffic stream, based on service measures, such as speed and travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety. Roadway level of service (LOS) is defined according to methodologies presented in the Highway Capacity Manual (Transportation Research Board 2000). Using the Highway Capacity Manual procedures, the quality of traffic operation is graded using six designations, LOS A through F. Table 2.16-1 describes LOS for roadway segments. Table 2.16-2 describes LOS for major roadways near the proposed project.

1 **Table 2.16-1. Roadway Segment LOS Descriptions**

LOS	Descriptions	
	Roadway Segments	Intersections
A	This LOS represents a completely free-flow condition, where the operation of vehicles is virtually unaffected by the presence of other vehicles and only constrained by the geometric features of the highway and by driver preferences.	LOS A describes operations with very low delay. This occurs when progression is extremely favorable, and most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	This LOS represents a relatively free-flow condition, although the presence of other vehicles becomes noticeable. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver.	LOS B describes operations with generally good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.
C	At this LOS the influence of traffic density on operations becomes marked. The ability to maneuver within the traffic stream is clearly affected by other vehicles.	LOS C describes operations with higher delays, which may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
D	At this LOS, the ability to maneuver is notably restricted due to traffic congestion, and only minor disruptions can be absorbed without extensive queues forming and the service deteriorating.	LOS D describes operations with high delay, resulting from some combination of unfavorable progression, long cycle lengths, or high volumes. The influence of congestion becomes more noticeable, and individual cycle failures are noticeable.
E	This LOS represents operations at or near capacity. LOS E is an unstable level, with vehicles operating with minimum spacing for maintaining uniform flow. At LOS E, disruptions cannot be dissipated readily thus causing deterioration down to LOS F.	At LOS E, individual cycle failures are frequent occurrences. The Transportation Analysis for the City of San Diego's Otay Mesa Community Plan Update (City of San Diego 2012) identifies LOS E as the limit of acceptable delay.
F	At this LOS, forced or breakdown of traffic flow occurs, although operations appear to be at capacity, queues form behind these breakdowns. Operations within queues are highly unstable, with vehicles experiencing brief periods of movement followed by stoppages.	LOS F describes a condition of excessively high delay, considered unacceptable to most drivers. This condition often occurs when arrival flow rates exceed the LOS D capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes to such delay.

2 Sources: Transportation Research Board 2000, San Diego County 2011, and City of San Diego 2012.

1 **Table 2.16-2. Major Roadways near the Proposed Project Area**

Roadway	Roadway Segment	Jurisdiction	Average Weekday Traffic Volume	LOS	Classification	No. of Lanes	Crossed by Project Alignment (Y/N)
Otay Mesa Road	Heritage Rd. to Cactus Rd.	City of San Diego	31,682	B	Major Arterial	6	N
Otay Mesa Road	Cactus Rd. to Britannia Blvd.	City of San Diego	50,978	D	Major Arterial	6	N
Otay Mesa Road	Britannia Blvd. to La Media Rd.	City of San Diego	22,343	A	Major Arterial	6	N
Otay Mesa Road	SR-125 NB Ramps to Sanyo Ave.	City of San Diego	14,800	A	Major Arterial	4	N
Main Street	I-805 SB Ramps to I-805 NB Ramps	Chula Vista	27,812	A	Prime Arterial	6	N
Main Street	I-805 NB Ramps to Oleander Ave.	Chula Vista	31,341	A	Prime Arterial	6	N
Main Street	Oleander Ave. to Brandywine Ave.	Chula Vista	23,065	A	Prime Arterial	6	N
Main Street	Nirvana Ave. to Heritage Rd.	Chula Vista	14,900	A	Prime Arterial	6	N
Heritage Road	Main St. to Entertainment Ctr.	City of San Diego and Chula Vista	8,787	A	Collector (undeveloped)	2	N
Heritage Road/Otay Valley Rd.	Entertainment Cir. To Otay Mesa Rd.	City of San Diego and Chula Vista	8,700	F	Collector (commercial land use)	2	Y
Ocean View Hills Parkway	Dennery Rd. to Del Sol Blvd.	City of San Diego	14,200	A	Major Arterial	4	N
Dennery Road	Palm Ave. to Regatta Ln.	City of San Diego	10,300	A	Major Arterial	4	N
Palm Avenue	I-805 NB Ramps to Dennery Rd.	City of San Diego	46,900	C	Prime Arterial	6	N
SR-125	Birch Rd. and Otay Mesa Rd.	Caltrans	9,082	A	Freeway (Toll Road)	4	Y
SR 905	I-805 to Caliente Ave I-805 to Caliente Ave.	Caltrans	63,800	D	Freeway/Expressway	6	N
SR 905	Caliente Ave. to Heritage Rd.	Caltrans	53,000	A	Freeway/Expressway	6	N
SR 905	Heritage Rd. to Britannia Blvd.	Caltrans	49,500	A	Freeway/Expressway	6	N

Roadway	Roadway Segment	Jurisdiction	Average Weekday Traffic Volume	LOS	Classification	No. of Lanes	Crossed by Project Alignment (Y/N)
SR 905	Britannia Blvd. to La Media Rd.	Caltrans	49,500	A	Freeway/ Expressway	6	N
I-805	Main St/Auto Park Dr. to Palm Ave.	Caltrans	150,300	E	Freeway/ Interstate	8	N

Sources: City of Chula Vista 2005, San Diego County 2015, San Diego Gas and Electric 2015, SANDAG 2016a, City of San Diego 2012.

Terminology

Classifications form a hierarchy of streets ranging from those that are primarily for travel between communities to streets that are primarily for local access. The following general descriptions of road classifications are based on information in the San Diego County General Plan (San Diego County 2011) and the City of San Diego's Otay Mesa Community Plan Update (City of San Diego 2012). The general plan for each jurisdiction designates the roadway classifications of specific roadways, for collector roads and higher roadway classifications. Local roads are not specifically designated in the general plans.

Prime arterial or primary arterial. A road that accommodates high-speed, high-volume traffic (San Diego County 2011). A road designed to provide network connectivity, with no driveway access to abutting property (City of San Diego 2012).

Major road. A road that primarily serves medium- to high-volume traffic (San Diego County 2011). A roadway that carries through traffic, providing minimal driveway access to abutting industrial and commercial property (City of San Diego 2012).

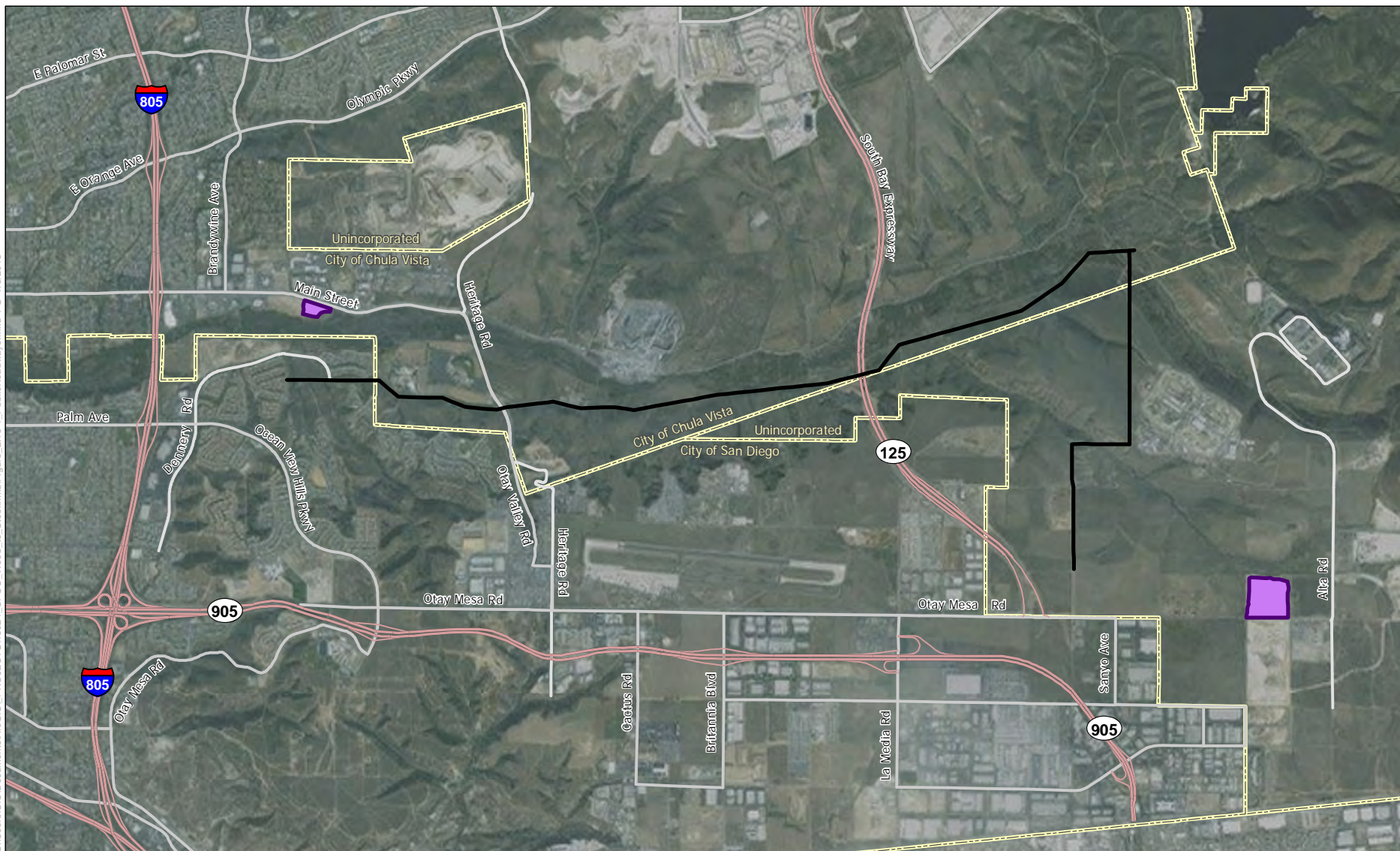
Collector road. A roadway with design speeds that are higher than typically provided for local roads (San Diego County 2011). A roadway that provides for local traffic movement, access to abutting property, alternative routes to reach major streets, and assistance in dispersing traffic (City of San Diego 2012).

Local public roads. These roads are maintained by the local jurisdiction and feed traffic onto roads with designated road classifications (San Diego County 2011). A roadway that provides for local traffic movement, access to abutting property, alternative routes to reach major streets, and assistance in dispersing traffic (City of San Diego 2012).

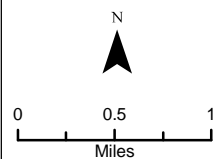
Environmental Setting

Existing Roadway Network

The proposed project is located in the vicinity of several major roadways, including I-805, SR-905, SR-125, and Otay Mesa Road, as shown in **Figure 2.16-1**. Major roadways that may be used for construction equipment travel are listed in **Table 2.16-2**, Major Roadways near the Proposed Project Area. Table 2.16-2 shows the road classification, number of lanes, and LOS information for each roadway where available.



**Figure 2.16-1
Public Roadways**



- | | | |
|------------|---------------------------|----------------------|
| Highway | Proposed project (TL 649) | Municipal Boundaries |
| Major Road | Staging Yard | |

Prepared by:



**Tie Line 649 Wood-to-Steel
Replacement Project**

Additionally, there is a network of existing dirt and gravel access roads, as identified in Appendix A, Detailed Route Mapset. Most existing access roads are a minimum of 12 feet wide with approximately 2 additional feet of windrows (bermed material) on each side.

The proposed project alignment crosses two paved roads, Heritage Road and SR-125. The alignment crosses over Heritage Road just south of the intersection of Heritage Road and Entertainment Circle, between existing Pole Nos. 17 and 18 (see Appendix A, Detailed Route Mapset, Map 6). In the vicinity of the crossing, Heritage Road is a two-lane collector road with a center turn lane. The alignment crosses under SR-125 at the southern end of its 0.6-mile-long elevated span above the Otay River Valley, the Otay River Valley Bridge. SR-125 is a major north-south transportation corridor, which is a four-lane divided highway in the vicinity of the crossing.

Intersections

Table 2.16-3 identifies major intersections near the proposed project area, with available information regarding the existing LOS and seconds of delay.

Table 2.16-3. Intersection Levels of Service (LOS)

Intersection	Jurisdiction	AM Peak Hour		PM Peak Hour	
		Avg. Delay (seconds)	LOS	Avg. Delay (seconds)	LOS
Main St. / I-805 SB ramps	Chula Vista	24.6	C	29.3	C
Main St. / I-805 NB ramps	Chula Vista	17.0	B	21.0	C
Main St. / Oleander Ave.	Chula Vista	4.1	A	4.0	A
Main St. / Brandywine Ave.	Chula Vista	16.5	B	21.6	C
Main St. / Heritage Rd.*	Chula Vista	10.6	B	12.7	B
Palm Ave. / I-805 SB Ramps	City of San Diego	27.5	C	45.4	E
Palm Ave. / I-805 NB Ramps	City of San Diego	33.4	C	51.0	D
Palm Ave. / Dennery Rd.	City of San Diego	34.9	C	37.9	D
Heritage Rd./Avenida de las Vistas**	City of San Diego	48.7	E	19.1	C
Otay Mesa Rd. / Heritage Rd.	City of San Diego	18.5	B	20.8	B
Otay Mesa Rd. / Cactus Rd.	City of San Diego	7.5	A	9.1	A
Otay Mesa Rd. / Britannia Blvd.	City of San Diego	35.7	D	41.5	D
Otay Mesa Rd. / La Media Rd.	City of San Diego	16.5	B	19.6	B
Otay Mesa Rd. / SR-125 SB Off-Ramp	City of San Diego	3.3	A	2.9	A
Otay Mesa Rd. / SR-125 NB On-Ramp	City of San Diego	2.6	A	3.0	A

* One-way stop controlled intersection.

**All-way stop controlled intersection.

Sources: City of Chula Vista 2014, City of San Diego 2012.

Public Transit

Public transit service in the vicinity of the proposed project includes trolley and bus service, as described below.

Trolleys. The University of California San Diego Blue Line, operated by San Diego Trolley, Inc. (SDTI), a wholly-owned subsidiary of the San Diego Metropolitan Transit System (MTS), provides trolley service between San Ysidro in the south and Old Town San Diego in the north (MTS 2016b). The Blue Line operates on the San Diego and Arizona Eastern (SD&AE) Railway tracks, generally following I-5, with the trolley tracks located on the east side of the interstate highway, approximately 2.5 miles west of the proposed project area. The closest Blue Line trolley station is the Iris Avenue station. Northbound weekday service from San Ysidro begins at 4:43 a.m. and the last train departs from San Ysidro at 12:58 a.m. During weekday peak periods, trolleys are scheduled to depart as frequently as every 7 to 8 minutes; during off-peak hours, trolleys depart every 15 minutes (midday) or every 30 minutes (evening). Service is provided on Saturday and Sunday (every 30 minutes or less), with service from San Ysidro beginning at 4:59 a.m. Southbound weekday service from America Plaza, located in Old Town San Diego, begins at 4:48 a.m. on weekdays, and continues until 11:48 p.m. The frequency of southbound trolley service is similar to the northbound trolley schedule (MTS 2014). The Blue Line is one of SDTI's four trolley lines, which serve approximately 97,400 passengers per average weekday (MTS 2013a). The proposed project would not cross any trolley routes.

MTS owns the SD&AE Railway and contracts with the San Diego & Imperial Valley (SD&IV) Railroad and the Pacific Imperial Railroad, Inc. to provide freight service to San Diego shippers over SD&AE ROW (MTS 2016a). SD&IV shares certain tracks with SDTI, operating during non-service trolley hours (MTS 2013a).

Buses. Bus service to the proposed project area is provided by MTS, via bus routes 905, 933/934, and 703/704. Routes 905 and 933/934 provide bus service between the Iris Avenue Trolley Station and the vicinity of the proposed project (MTS 2016b). The proposed project does not cross any existing bus routes.

Bicycle Facilities

There are several bikeways near the proposed project site—including Class II bike lanes (striped lane for one-way bike travel on a street), and Class III bike routes (roadways identified as bicycle routes in which bicycles share the same travel lanes as motor vehicles). In the vicinity of the proposed project, Class II bikeways are provided on Main Street, Heritage Road, Ocean View Hill Parkway, and Dennery Road. Otay Mesa Road is a designated Class III bike route. In addition, bicycles are allowed to use the shoulder of SR-125 (SANDAG 2016c).

Airports

The public airport located closest to the proposed project is Brown Field Municipal Airport, approximately 0.8 mile to the south. Owned and operated by the City of San Diego, Brown Field Municipal Airport has two runways, approximately 8,000 and 3,200 feet long (City of San Diego 2016a). There are 196 aircraft based at the airport, with an average of 246 aircraft operations per day (AirNav LLC 2016). The General Abelardo L. Rodriguez International Airport, also called the Tijuana International Airport, is located approximately 2.7 miles south of the proposed project, just south of the United States–Mexico border. This airport has a single runway, approximately 9,700 feet long. The airport served 3.5 million passengers in 2011 and is owned and operated by Grupo Aeroportuario del Pacífico (Grupo Aeroportuario del Pacífico 2016).

1 **Regulatory Setting**

2 **Federal**

3 *Federal Highway Administration*

4 Federal Highway Administration 23 CFR 450.320 provides for a process in which a region's designated
5 transportation management area (TMA) is required to address congestion management through an analysis
6 of multimodal metropolitan-wide strategies that are cooperatively developed to foster safety and integrated
7 management of new and existing transportation facilities eligible for federal funding.

8 *Federal Aviation Administration*

9 The FAA, an agency that is part of the USDOT, is responsible for regulating civil aviation including the
10 oversight of air traffic and aeronautical obstructions. All airports and navigable airspace not administered
11 by the U.S. Department of Defense are under the jurisdiction of the FAA. The FAA requires notification
12 regarding the construction of objects affecting navigable airspace. The notification requirements in Title
13 14, Section 77 of the CFR requires notification of projects that include the following:

- 14 ▪ Any construction or alteration that is more than 200 feet above ground level.
- 15 ▪ Any construction or alteration that exceeds an imaginary surface extending outward and upward at
16 any of the following slopes:
 - 17 ▪ a slope of 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest
18 runway of an airport with its longest runway more than 3,200 feet in length, excluding heliports.
 - 19 ▪ 50 to 1 for a horizontal distance of 10,000 ft. from the nearest point of the nearest runway of an
20 airport with its longest runway no more than 3,200 ft. in length, excluding heliports.
 - 21 ▪ 25 to 1 for a horizontal distance of 5,000 ft. from the nearest point of the nearest landing and takeoff
22 area of each heliport.

23 Notification must be provided to the FAA at least 45 days before the start date of the proposed construction
24 or alteration or the date an application for a construction permit is filed, whichever is earliest. The FAA
25 uses the notice to:

- 26 ▪ Evaluate the effect of the proposed construction or alteration on safety in air commerce and the
27 efficient use and preservation of the navigable airspace and of airport traffic capacity at public use
28 airports;
- 29 ▪ Determine whether the effect of proposed construction or alteration is a hazard to air navigation;
- 30 ▪ Determine appropriate marking and lighting recommendations;
- 31 ▪ Determine other appropriate measures to be applied for continued safety of air navigation; and
- 32 ▪ Notify the aviation community of the construction or alteration of objects that affect the navigable
33 airspace.

34 The FAA issues a determination stating whether the proposed construction or alteration would be a hazard
35 to air navigation. The FAA would issue a Determination of No Hazard to Air Navigation when a proposed
36 structure does not exceed any of the obstruction standards and would not be a hazard to air navigation. A

Determination of No Hazard to Air Navigation may include conditional provisions, limitations necessary to minimize potential problems, supplemental notice requirements, or marking and lighting recommendations, as appropriate. FAA issues a Determination of Hazard to Air Navigation when the aeronautical study concludes that the proposed construction or alteration would exceed an obstruction standard and would have a substantial aeronautical impact.

State

Caltrans has jurisdiction over the state’s highway system and requires that encroachments within, under, or over Caltrans ROW obtain an encroachment permit. Examples of encroachments include towers and poles. Encroachment permits may include various conditions or restrictions of activities within Caltrans ROW (Caltrans 2016). Under state law Caltrans has discretionary approval authority, as provided in Section 670 of the Streets and Highway Code, to approve projects that encroach on the State’s highway ROW. This discretionary authority gives Caltrans a “Responsible Agency” status under CEQA for the part of a project that requires work within the State’s highway ROW. However, Caltrans’ Project Development requirements, such as the requirement to prepare a traffic study in accordance with Caltrans’ standards, apply only to projects in which the work on the State highway is more than minor or routine (Caltrans 2013).

Local

Because the CPUC regulates and authorizes the construction of investor-owned public utility facilities, the CPUC has exclusive jurisdiction over the siting and design of the proposed project. As such, projects under CPUC jurisdiction, including the Proposed Project, are exempt from local land use and zoning regulations and permitting. However, Section III.C of CPUC General Order 131-D (planning and construction of facilities for the generation of electricity and certain electric transmission facilities) requires “the utility to communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any non-discretionary local permits.” As a result, SDG&E has taken into consideration all State and local plans and policies as they relate to transportation resources. Although County and other local policies are listed below, they are provided for disclosure purposes only.

Congestion Management Program

California State Proposition 111, passed by voters in 1990, established a requirement that urbanized areas prepare and regularly update a Congestion Management Program (CMP). The requirements within the State CMP were developed to monitor the performance of the transportation system, develop programs to address near-term and long-term congestion, and better integrate transportation and land use planning. SANDAG provided regular updates for the state CMP from 1991 through 2008. In October 2009, the San Diego region elected to be exempt from the State CMP and, since this decision, SANDAG, as the designated TMA for the San Diego region, has been abiding by 23 CFR 450.320, described above under the Federal section of the Regulatory Setting, to ensure the region’s continued compliance with the federal congestion management process. Compliance with 23 CFR 450.320 is incorporated in San Diego Forward, a long-range plan that combines and updates two regional planning documents—the RCP and the Regional Transportation Plan/Sustainable Communities Strategy—into a single plan that presents a unified vision for the region’s future (SANDAG 2016d).

Per state law, SANDAG has the authority to determine whether a development project or plan would need to be reviewed for regional significance. SANDAG staff reviews projects and determines if they are regionally significant based on the amount of traffic generated and other regionally significant issues. For projects considered to have significant impacts, SANDAG staff provides comments from a regional perspective that emphasize the need for land use and transportation coordination and are based on policies contained in the San Diego Forward plan (SANDAG 2015).

SANDAG provides various resources for the evaluation of projects, including a Regional Multimodal Transportation Analysis (SANDAG 2011), which builds on SANDAG's Traffic Impact Study Guidelines to provide guidelines for:

- Identifying measures needed to mitigate the impacts on the regional transportation system caused by multiple development projects (as opposed to mitigation measures associated with only a single project); and
- Determining an approach to allocate responsibility for those mitigation measures across multiple development projects.

The Regional Multimodal Analysis guidelines identify an initial screening process, in which the lead CEQA agency determines whether the vehicle trips generated by a proposed project would meet one or more of the screening criteria listed below, and therefore trigger a need for additional analysis. If the screening criteria are not met, the project is screened out from requirements for further analysis of impacts to the regional transportation system. The screening criteria, which are based on SANDAG's Traffic Impact Study guidelines are as follow:

- Greater than 1,000 average daily or 100 peak-hour trip ends if:
 - Project conforms to land use and transportation elements of the applicable general plan, specific, or community plan; and
 - The applicable general plan, specific, or community plan conforms to these guidelines for the analysis of regional transportation system impacts.
- Greater than 500 average daily or 50 peak-hour trip ends if the project does not conform to land use and transportation elements of the general plan or a specific plan.
- Equal to or greater than 20 peak-hour trips per day on an existing highway on- or off-ramp.

San Diego County General Plan

The Mobility Element of the San Diego County General Plan provides the framework for San Diego County decisions concerning the county-wide transportation system. It also provides for coordination with the cities and unincorporated communities within the county, with the Regional Transportation Plan adopted by SANDAG, and with State and federal agencies that fund and manage transportation facilities within the county. The Mobility Element identifies a road network, depicted on community level maps showing the road classification series and the general route of each road (San Diego County 2011). The following goals in the Mobility Element have relevance for the proposed project:

- **Goal M-1 Balanced Road Network.** A safe and efficient road network that balances regional travel needs with the travel requirements and preferences of local communities.
- **Goal M-4 Safe and Compatible Roads.** Roads designed to be safe for all users and compatible with their context.

City of San Diego General Plan

The Mobility Element of the City of San Diego General Plan establishes policies to guide decision making regarding the transportation system. Vehicle congestion relief is an overall goal of the Mobility Element, however, the element allows for varying degrees of acceptable vehicle congestion in different locations,

1 based on the function of the roadway and the desired community character. A related overall goal of the
2 Mobility Element is to further the attainment of a balanced, multi-modal transportation network. The
3 policies included in the Mobility Element advance a strategy for congestion relief and increased
4 transportation choices, helping to achieve a clean and sustainable environment (City of San Diego 2015).
5 The following goals in the City of San Diego's General Plan related to transportation have relevance for
6 the proposed project:

- 7 ▪ Street and Freeway System Goals (Mobility Element Section C):
- 8 ▪ A street and freeway system that balances the needs of multiple users of the public right-of-way
- 9 ▪ Safe and efficient street design that minimizes environmental and neighborhood impacts.

10 *Otay Mesa Community Plan*

11 The Mobility Element of the City of San Diego's Otay Mesa Community Plan refines the Mobility Element
12 of the General Plan through community-specific and regional collaboration recommendations. The Otay
13 Mesa Mobility Element is closely linked to the community plan's Land Use and Urban Design Elements
14 and provides a village, multi-modal approach to planning. The community plan's Mobility Element
15 provides direction on how to achieve mobility and environmental goals through a balanced, multi-modal
16 transportation network (City of San Diego 2012). The following Mobility Element goals, policies and
17 recommendations in the Otay Mesa Community Plan have relevance for the proposed project:

- 18 ▪ **Goal (Mobility Element Section 3.0).** A complete and interconnected street system that balances
19 the needs of drivers, bicyclists, pedestrians and others.
- 20 ▪ **Policy/Recommendation 3.3-1.** Provide an interconnected network of public streets and internal
21 project circulation systems as an organizing framework for development.

22 *City of San Diego Traffic Impact Study Guidelines*

23 The City of San Diego's Traffic Impact Study Manual (City of San Diego 1998) describes the key elements
24 required for preparing and reviewing traffic impact studies for new and expanding land developments in
25 San Diego. The need for a traffic impact study is based on estimated daily trip generation and conformance
26 with the community plan land use and transportation element. This determination is usually made by the
27 Transportation Development Section staff during the project scoping stages. In general, traffic impact
28 studies may be required for developments that do not conform to the community plan and generate more
29 than 500 daily trip ends. The threshold is 1,000 daily trip ends if a project conforms to the community plan.
30 These criteria are consistent with screening criteria included in SANDAG's Regional Multimodal Analysis
31 guidelines, described above under the heading, Congestion Management Program.

32 *City of San Diego Public ROW Permit for Traffic Control*

33 City of San Diego Municipal Code Section 129.0702 requires construction projects that are not performed
34 by the City to obtain a Public ROW Permit for Traffic Control for work that encroaches into the public
35 ROW. Applicants must complete a Public Right-of-Way Permit for Traffic Control form and submit a
36 traffic control plan that meets the City's requirements (City of San Diego 2016b).

37 *City of Chula Vista General Plan*

38 The Land Use and Transportation Element of the City of Chula Vista's General Plan provides land use
39 designations, roadway designations, and generalized land use patterns for the City's development. It sets

forth land use and transportation policies that are implemented by various planning tools, such as the Chula Vista Municipal Code, specific plans, and other planning documents. The Land Use and Transportation Element identifies the acceptable LOS for street classifications, and includes a Circulation Plan of the physical transportation system, such as streets, highways, bicycle routes, paths, and sidewalks. The Circulation Plan depicts the roadway classifications that would serve transportation demand resulting from the complete build-out of the City (City of Chula Vista 2005). The following Mobility Element policies in the Chula Vista General Plan have relevance for the proposed project:

- **LUT 21.4.** Maintain and improve existing infrastructure for the movement of people, goods, and vehicles within and throughout the City.
- **LUT 15.2.** Optimize and maintain the performance of the traffic signal system and the street system to facilitate traffic flow and to minimize vehicular pollutant emission levels.

City of Chula Vista Encroachment Permit

The City of Chula Vista issues encroachment permits for work that encroaches on the City ROW. A traffic control plan must be submitted with the application for an encroachment permit (City of Chula Vista 2011).

2.16.2 Environmental Impacts

a. Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? (Less than Significant)

Construction

The discussion of traffic impacts during construction first describes applicable measures of effectiveness, then describes the construction activities that are evaluated to determine whether there is a conflict with the established measures of effectiveness, and concludes with an assessment of the significance of the impacts.

Measures of Effectiveness

Caltrans, San Diego County and the Cities of San Diego and Chula Vista have each established standards for acceptable LOS, shown in **Table 2.16-4**, for the performance of their respective roadway systems. The table also identifies criteria that may be applied in the analysis of project impacts for roadways or intersections that exceed LOS criteria under existing conditions.

Table 2.16-4. Acceptable LOS

Jurisdiction	Acceptable Traffic Conditions
Caltrans	<ul style="list-style-type: none"> ▪ LOS C (general target, exceptions may apply) ▪ Traffic delays of 30 minutes or more, due to construction, are considered significant
San Diego County	<ul style="list-style-type: none"> ▪ LOS D
City of San Diego	<ul style="list-style-type: none"> ▪ LOS D ▪ For roadway segments with LOS E or F:

Jurisdiction	Acceptable Traffic Conditions
	<ul style="list-style-type: none"> ▪ Allowable decrease in speed: 1 mile per hour ▪ Allowable decrease in ratio of volume to capacity (V/C): 0.02 ▪ For intersections with LOS E or F: ▪ Allowable increase in delay: 2 seconds
City of Chula Vista	<ul style="list-style-type: none"> ▪ LOS C for nonurban arterial streets, except during peak hours LOS D can occur for no more than 2 hours ▪ LOS D for urban streets, except during peak hours LOS E can occur for no more than 2 hours ▪ Impact occurs if project trips comprise 5 percent or more of volume

Sources: Caltrans 2002, 2015; San Diego County 2011; City of San Diego 1998; City of Chula Vista 2013, 2016.

Of the roadway segments identified in Section 2.16.1, Setting, three roadway segments were found to operate an unacceptable LOS under existing conditions. Two are Caltrans facilities, the other is located partially in the City of San Diego, and partially in the City of Chula Vista. The roadway segments are:

- I-805, from Main Street/Auto Park Drive to Palm Avenue
- SR-905, from I-805 to Otay Mesa Road
- Otay Valley Road/Heritage Road, from the intersection of Entertainment Circle to the intersection of Otay Mesa Road

Of the intersections identified in Section 2.16.1, Setting, two intersections – both located in the City of San Diego – currently have an unacceptable LOS in either the morning or evening peak hour, as indicated below:

- Palm Avenue / I-805 southbound ramps intersection (LOS E in the PM peak hour)
- Otay Mesa Road/Heritage Road intersection (LOS E in the AM peak hour)

Traffic Impacts During Construction

Construction-related traffic would consist primarily of daily commutes by construction workers and periodic delivery and removal of materials to and from the site over the course of the construction period. The addition of construction traffic to roadway volumes could result in minor increases in congestion and delay for vehicles, including delay at intersections. Furthermore, the presence of construction truck traffic would temporarily reduce roadway capacity because of the slower travel speeds and larger turning radii of trucks.

While SDG&E would typically encourage construction workers to carpool to work sites (SDG&E 2015), should each worker travel to work alone, a maximum of 72 to 82 one-way vehicle trips (assuming the maximum of 36 construction workers and up to five construction monitors) could result during peak construction work phases. SDG&E anticipates the proposed project would involve approximately 17 to 40 trips per day for construction purposes, applying the maximum daily trip rate to each day that work is planned to occur (SDG&E 2016).

Construction activities are anticipated to require approximately 4,500,000 gallons of water during approximately 182 days of construction. As a result, approximately 24,725 gallons of water would be brought on site each day. The anticipated water truck capacity would be 4,400 gallons; therefore, an average

of six water truck trips would be required each day to deliver the necessary water. In order to be conservative, SDG&E has rounded their assumption up to 10 trips per day to account for the variable nature of linear construction projects.

The combined number of haul truck and water truck trips (17 to 40 trips and 10 trips, respectively), on average, would range from 27 to 50 trips per day (equating to approximately four to seven truck trips per hour, assuming an 8-hour work day). The maximum number of trips likely to result from construction is 99 to 132 trips, which includes commute trips (72 to 82 round trips per day) and truck haul and water trips (27 to 50 trips per day).

Construction-related vehicle traffic would be intermittent and would affect different roadways at different times of day, and would be focused in different locations over the course of the project. Specific areas affected by construction are described below. Roadways and intersections may potentially be affected by these activities, along with the existing LOS, where available, are listed, respectively, in **Table 2.16-5** and **Table 2.16-6**.

- **Staging Yards.** Construction-related traffic would generally occur at the two staging yards, and in the areas of active construction. The staging yards would be located, respectively, west and southeast of the proposed project (refer to Figure 1.4-2, Proposed Project Components). The Main Street Staging Yard would be located west of the proposed project at the intersection of Main Street and Maxwell Road in Chula Vista, and the Otay Staging Yard would be located southeast of the proposed project at the intersection of Otay Mesa Road and Enrico Fermi Drive.
- **Access to Project Alignment.** Due to the nature of linear construction, work within the project alignment would typically occur at a specific pole or a number of poles at any given time, and vehicle trips to the project site would correspond with those construction activities. The proposed project may require improvements to unpaved access roads, such as minor grading, importing and compacting more stable materials in unstable areas, applying additional surface materials to improve access conditions, and constructing new turnarounds. This work would occur on private access roads. Impacts to traffic operations on public roadways would involve the movement of construction vehicles to and from the construction work areas.
- **Roadway Crossings.** The alignment of the proposed project crosses two roadways, SR-125 (at its elevated segment on the Otay River Valley Bridge) and Heritage Road, within the City of Chula Vista. As described in Section 1.5.4, Conversion of Underground Lines to Overhead, work that would occur at the crossing of SR-125 would be conducted under the Otay River Valley Bridge. This work would not affect traffic operations on SR-125. As described in Section 1.5.2, Conductor Installation, where the alignment crosses Heritage Road, construction activity would have the following impact to traffic, depending upon which of two methods is used by the contractor to install overhead conductors across Heritage Road. One method would be to install one to two temporary guard structures (or bucket trucks, serving as guard structures), and may have minor effects on traffic while the guard structures or bucket trucks are being placed in position. The other method would be to direct traffic by flaggers, and would halt traffic on Heritage Road for brief periods while overhead conductors are installed.
- **Stringing Site.** In the western portion of the proposed project alignment, a stringing site is proposed on Sea Lavender Way, a local road within the City of San Diego. Additionally, Sea Lavender Way and a connecting local road, Black Coral Way, would be used to access the stringing site. There are multiple routes of ingress and egress available for residents to utilize during construction. The intersection of Sea Lavender Way and Black Coral Way is located in a residential neighborhood off of Dennery Road, a two-lane collector in this area that transitions to a 4-lane collector east of

Island Breeze Way, and becomes a 4-lane arterial at Regatta Lane. Access to Dennerly Road from this neighborhood is provided by Black Coral Way and Island Breeze Way. Sea Lavender Avenue is approximately 850 feet in length, intersecting with Black Coral Way on one end, and Island Breeze Way on the other. Black Coral Way is approximately 0.5 mile in length, intersecting with Island Breeze Way and two other roads (in addition to Sea Lavender Way) that connect to Island Breeze Way.

- **Other Project Activities.** As part of the proposed project, SDG&E or its contractor would conduct the following activities:
 - Obtain all necessary local and state road encroachment permits prior to construction and would comply with all the applicable conditions of approval.
 - Prepare and implement a traffic control plan to describe procedures to guide traffic through the duration of construction. The traffic control plan would meet all requirements that local jurisdictions may apply through their permitting processes.

Table 2.16-5. Roads Potentially Affected by Construction Traffic

Road	Segment	Jurisdiction(s)	Avg. Weekday Traffic	Existing LOS
Otay Mesa Road	Heritage Rd. to Cactus Rd.	City of San Diego	31,682	B
Otay Mesa Road	Cactus Rd. to Britannia Blvd.	City of San Diego	50,978	D
Otay Mesa Road	Britannia Blvd. to La Media Rd.	City of San Diego	22,343	A
Otay Mesa Road	SR-125 NB Ramps to Sanyo Ave.	City of San Diego	14,800	A
Otay Mesa Rd.	Sanyo Ave to Enrico Fermi Dr,	City of San Diego/ San Diego County	--	--
Main Street	I-805 SB Ramps to I-805 NB Ramps	Chula Vista	27,812	A
Main Street	I-805 NB Ramps to Oleander Ave.	Chula Vista	31,341	A
Main Street	Oleander Ave. to Brandywine Ave.	Chula Vista	23,065	A
Main Street	Nirvana Ave. to Heritage Rd.	Chula Vista	14,900	A
Heritage Road	Main St. to Entertainment Ctr.	City of San Diego and Chula Vista	8,787	A
Heritage Road/ Otay Valley Rd.	Entertainment Cir. To Otay Mesa Rd.	City of San Diego and Chula Vista	8,700	F
Dennerly Road	Palm Ave. to Regatta Ln.	City of San Diego	10,300	A
Dennerly Road	Regatta Ln. to Black Coral Way	City of San Diego	--	--
Palm Avenue	I-805 NB Ramps to Dennerly Rd.	City of San Diego	46,900	C
SR-125	Birch Rd. and Otay Mesa Rd.	Caltrans	9,082	A
I-805	Olympic Parkway to Main St.	Caltrans	121,500	B
I-805	Main St. to Palm Ave.	Caltrans	150,300	E
I-805	Palm Ave. to SR 905	Caltrans	124,000	C
SR 905	I-805 to Caliente Ave.	Caltrans	58,300	C

Road	Segment	Jurisdiction(s)	Avg. Weekday Traffic	Existing LOS
SR 905	Caliente Ave. to Heritage Rd.	Caltrans	53,000	A
SR 905	Heritage Rd. to Britannia Blvd.	Caltrans	49,500	A
SR 905	Britannia Blvd. to La Media Rd.	Caltrans	49,500	A
La Media Rd.	I-905 ramps to Otay Mesa Rd.	City of San Diego	--	--
Black Coral Way	Dennerly Rd to Sea Lavender Way	City of San Diego	--	--
Sea Lavender Way	Black Coral Way to Island Breeze Lane	City of San Diego	--	--
Harvest Rd.	Lonestar Rd. to Otay Mesa Rd.	City of San Diego	--	--

Sources: City of Chula Vista 2005, 2013, 2014; San Diego County 2015; San Diego Gas and Electric 2015; SANDAG 2016b; City of San Diego 2012.

Table 2.16-6. Intersections Potentially Affected by Construction Traffic

Intersection	Jurisdiction	Existing LOS			
		AM Peak Hour		PM Peak Hour	
Main St. / I-805 SB ramps	Chula Vista	24.6	C	29.3	C
Main St. / I-805 NB ramps	Chula Vista	17.0	B	21.0	C
Main St. / Oleander Ave.	Chula Vista	4.1	A	4.0	A
Main St. / Brandywine Ave.	Chula Vista	16.5	B	21.6	C
Main St. / Heritage Rd.*	Chula Vista	10.6	B	12.7	B
Palm Ave. / I-805 SB Ramps	City of San Diego	27.5	C	45.4	E
Palm Ave. / I-805 NB Ramps	City of San Diego	33.4	C	51.0	D
Palm Ave. / Dennerly Rd.	City of San Diego	34.9	C	37.9	D
Heritage Rd./Avenida de Las Vistas**	City of San Diego	48.7	E	19.1	C
Otay Mesa Rd. / Heritage Rd.	City of San Diego	18.5	B	20.8	B
Otay Mesa Rd. / Cactus Rd.	City of San Diego	7.5	A	9.1	A
Otay Mesa Rd. / Britannia Blvd.	City of San Diego	35.7	D	41.5	D
Otay Mesa Rd. / La Media Rd.	City of San Diego	16.5	B	19.6	B
Otay Mesa Rd. / SR-125 SB Off-Ramp	City of San Diego	3.3	A	2.9	A
Otay Mesa Rd. / SR-125 NB On-Ramp	City of San Diego	2.6	A	3.0	A
Otay Mesa Rd./Harvest Rd.	City of San Diego	--	--	--	--
Harvest Rd./Lonestar Rd.	San Diego County	--	--	--	--
Otay Mesa Rd./Enrico Fermi Dr.	San Diego County	--	--	--	--
Dennerly Rd. / Black Coral Wy.	City of San Diego				
Black Coral Wy. / Sea Lavender Wy.	City of San Diego	--	--	--	--

* One-way stop controlled intersection.

** All-way stop controlled intersection.

Sources: City of Chula Vista 2013, 2014; City of San Diego 2012.

Significance of Impacts During Construction

The addition of construction-related traffic is too minor to warrant a traffic impact study, based on screening criteria identified in the City of San Diego's Traffic Impact Study Manual and SANDAG's Regional Multimodal Transportation Analysis, described in Section 2.16.1, Setting. In order to assess the potential for significant impact due to daily construction traffic, an assessment was made of the potential to exceed the standards for acceptable LOS, shown in Table 2.16-4, at roadway segments or intersections.

Roadway Segments

As noted above, LOS F occurs under existing conditions on a roadway segment of Otay Valley Road/Heritage Road, from the intersection of Entertainment Circle to the intersection of Otay Mesa Road. The southern portion of the two-lane collector road segment is located in the City of San Diego; the northern portion is located in the City of Chula Vista. The capacity for a two-lane collector road in a developed area is average daily traffic (ADT) of 6,500 (City of San Diego 1998). In the event that the maximum amount of construction traffic (132 vehicle trips) were to use this road segment on a daily basis for some portion of the construction period, there would be a temporary 0.02 increase in the volume to capacity (V/C) ratio, which is allowable under the City of San Diego standards identified in Table 2.16-4. The maximum number of trips represents 1.5 percent of the existing traffic plus project traffic, which is allowable in Chula Vista, as noted in Table 2.16-4.

Although two segments of highway under Caltrans jurisdiction currently operate at unacceptable levels of service, the maximum daily vehicle trips generated by the project would represent a reduction in the volume to capacity ratio for these segments of 0.0011 and 0.0014, respectively. This minor change in roadway congestion is insufficient to result in 30 minutes of delay, the Caltrans standard criterion for significant impact due to construction traffic. Impacts to LOS on roadway segments would be less than significant.

Intersections

As noted above, under existing conditions, LOS E occurs at the intersection of Palm Avenue and the I-805 southbound ramps, in the City of San Diego, during the evening peak hour. At this location, Palm Avenue is a 6-lane major arterial, and has a capacity of 45,000 ADT (City of San Diego 1998). In the event that the maximum amount of construction traffic (132 vehicle trips) were to use this road segment on a daily basis for some portion of the construction period, there would be a temporary 0.003 increase in the V/C ratio, which would have a negligible effect on delay at this intersection.

Under existing conditions, LOS E occurs at the intersection of Otay Mesa Road and Heritage Road, in the City of San Diego, in the morning peak hour. At this location, Otay Mesa Road is a five-lane major arterial, with a capacity of 35,000 ADT, and Heritage Road is a four-lane collector road with a capacity of 13,000. In the event that the maximum amount of construction traffic (132 vehicle trips) were to use these two road segments on a daily basis for some portion of the construction period, there would be temporary increases in their respective volume to capacity ratio of 0.004 and 0.01. This would have a negligible effect on delay at this intersection. Impacts to LOS at intersections would be less than significant.

Operations

Operation and maintenance activities for the proposed project would be conducted in generally the same manner as for the existing facilities. The proposed project would not generate any additional trips for

operation and maintenance of the upgraded facilities. As a result, there would be no increase in traffic and no reduction in measures of effectiveness, such as LOS, established in applicable plans, ordinances, or policies for the performance of the circulation system. There would be no impact during project operations.

b. Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? (Less than Significant)

The San Diego region has elected to be exempt from the State Congestion Management Program as described in Section 2.16.1, Setting. SANDAG, the Transportation Management Agency for the region has identified the process for evaluating potential impacts related to the federal congestion management process in San Diego Forward, Appendix U7, Federal Congestion Management Process (SANDAG 2015), and the Regional Multimodal Transportation Analysis (SANDAG 2011). Based on these procedures, and as described in Item 2.16.2(a), the proposed project's addition of construction-related traffic is too minor to warrant further study in accordance with SANDAG procedures. The project would not conflict with SANDAG's federal congestion management process. The impact would be less than significant.

c. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? (Less than Significant)

The proposed project is located within 20,000 feet of the Brown Field Municipal Airport, which has a runway length longer than 3,200 feet. The 69 kV steel poles that would be installed as part of the proposed project would have a height of approximately 90 feet above ground level, which given the proposed location, triggers the requirement to notify FAA regarding the construction of objects affecting navigable airspace, under 14 CFR 77. FAA evaluated 34 poles, include the majority of pole numbers 88 through 177, clocated on the west portion of the project alignment, along Harvest Road and in the vicinity of the Donovan State Prison. SDG&E notified FAA of the project and the FAA conducted an aeronautic study, as documented in a Determination of No Hazard to Air Navigation for the project included in Appendix O. The aeronautical study found that the poles do not exceed FAA's obstruction standards and would not be a hazard to air navigation. On this basis, FAA determined there is no need for lighting or markings on the poles (FAA 2015). The Determination of No Hazard to Air Navigation includes a condition that requires SDG&E to notify FAA within five days after construction of the poles reaches its greatest height. The project would have no impact on the Abelardo L. Rodriguez International Airport. The level of impact would be less than significant.

The proposed project would not use helicopters for construction. Consistent with the existing operation and maintenance protocols for inspection along TL 649, inspections during operation of the proposed project may occur in the form of aerial patrol via helicopter. As described in Section 1.8, Operations and Maintenance, while not anticipated, should helicopters be used to assist with operation and maintenance activities (such as facility component replacement), in accordance with *SDG&E's General Operation and Maintenance Guidelines*, SDG&E would notify the FAA and any additional local agencies, as appropriate, in advance. There would be a less than significant impact to air traffic patterns.

d. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (Less than Significant with Mitigation)

The proposed project would not result in permanent changes to circulation patterns or public roadways. Proposed project changes to private access roads would not result in sharp curves or dangerous intersections, or other design features that would substantially increase hazards. The proposed project would not result in permanent changes to the existing uses within the project area.

Construction activities within or adjacent to public roadways, including the potential brief closure of Heritage Road, could create potentially significant traffic hazards, affecting vehicle, transit, bicycle, and pedestrian traffic in the area. Construction activities would increase the potential for conflicts between construction vehicles, conflicts between the movement of traffic and construction activities, and confusion of drivers, bicyclists, and pedestrians resulting from temporary alterations in otherwise familiar roadway conditions. With the adherence to the Mitigation Measure TRA-1, the proposed project's impact on traffic safety hazards would be less than significant.

Mitigation Measure TRA-1: Implementation of Construction Traffic BMPs

SDG&E shall implement the following BMPs:

- Develop circulation and detour plans to minimize impacts to local street circulation. This shall include the use of signing and flagging to guide motor vehicles, bicycles, and pedestrians through and/or around the construction zone.
- Schedule closures of collector and arterial roads to occur outside of peak morning and evening commute hours.
- Schedule lane closures and obstructions on collector and arterial roads to occur outside of peak morning and evening commute hours.
- Include detours for bicycles and pedestrians in all areas potentially affected by project construction.
- Install traffic control devices as specified in the California Department of Transportation Manual of Traffic Controls for Construction and Maintenance Work Zones.
- Prior to any closure of public roadways, notification would be posted and/or circulated to the public within a four-block radius at least 5 days in advance of anticipated closures, or as required by the local jurisdiction.
- SDG&E or its contractor shall employ adequate control devices, signage, a detour route, and flaggers, as necessary.
- Coordinate with local transit agencies for the temporary relocation of routes or bus stops in work zones as necessary.

e. Would the project result in inadequate emergency access? (Less than Significant with Mitigation)

The proposed project does not propose any structures that would permanently block or constrain roadways; therefore, the proposed project would not result in a permanent impact on emergency and residential access.

During construction, road closures, detours, and construction-related traffic could delay or obstruct the movement of emergency vehicles in the vicinity of the proposed project. If construction activities interfere with emergency response efforts such that response times would be extended, a significant impact would result. In addition, safe access to adjacent land uses may be disrupted by equipment, staging, or construction activity. However, the implementation of Mitigation Measures TRA-1 and TRA-2 would ensure that work would be staged and conducted in a manner that would maintain two-way directional flow, and would ensure that an appropriate traffic control plan is developed and implemented. If road closures are anticipated, Mitigation Measure TRA-2 would be implemented to ensure the timely notification of maintenance schedules and consultation with all affected agencies (including police and fire departments) for all activities that could affect emergency access.

With the adherence to the Mitigation Measures TRA-1 and TRA-2, the proposed project's impact on emergency access would be less than significant.

Mitigation Measure TRA-2: Emergency Coordination and Access Considerations

SDG&E or its contractor shall implement the following measures:

- When work is conducted on roads and may have the potential to affect traffic flow, work shall be coordinated with local emergency service providers, as necessary, to ensure that emergency vehicle access and response is not impeded.
- Access to residences and businesses shall be maintained at all times. Access for driveways and private roads shall be maintained to the extent feasible. If construction work would temporarily block access to a driveway or private road, affected property owners shall be notified a minimum of 7 days prior to construction activities.

f. Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? (Less than Significant with Mitigation)

The proposed project would not result in permanent effects on public transit, bicycle, or pedestrian traffic. Temporary construction activities occurring within or immediately adjacent to existing streets could disrupt public transit operations, as well as pedestrian and bicycle access to transit stops, general access along designated bike routes, and sidewalk-based pedestrian access. However, the preconstruction public notifications, signage, flaggers, and sidewalk considerations as stated in Mitigation Measures TRA-1 and TRA-2, would be adequate to alert transit passengers and bicycle and pedestrian traffic to hazards and any necessary revisions to routes during construction activities. With implementation of these mitigation measures, the proposed project's temporary impacts on alternative transportation would be less than significant.

2.17 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.17.1 Setting

Environmental Setting

Overview

The entire length of the proposed project alignment is located within existing SDG&E utility easements, many of which include other existing utility easements with additional aerial electrical distribution lines and buried telecommunications, gas, water, and wastewater lines. This section evaluates impacts to water supply, wastewater, stormwater facilities, solid waste generation, and telecommunication facilities associated with proposed project implementation.

Water

The Otay Water District and the City of San Diego Public Utilities Department, through a purchase agreement with the San Diego County Water Authority (SDCWA), an independent public agency, provide water to the proposed project area. SDCWA purchases the majority of its water from the Metropolitan Water District of Southern California (MWD), which imports water from two primary sources: Colorado River and Northern California. The MWD blends water sources received at a facility in Riverside County and transfers untreated water to San Diego's three treatment facilities: Miramar Water Treatment Plant,

1 Alvarado Water Treatment Plant, and Otay Water Treatment Plant (SDCWA 2016, MWD 2015, Otay
2 Water District 2017a and 2017b, City of San Diego 2017a).

3 Water within the City of San Diego is also obtained from local water supplies, including nine surface water
4 reservoirs, eight of which are connected directly or indirectly to the city's three water treatment facilities.
5 The geographic areas served by the three water treatment facilities are flexible such that various areas within
6 the City of San Diego can be supplied by more than one of the plants (City of San Diego 2017a).

7 For the southeastern portions of the alignment, outside of the City of San Diego, water is provided by the
8 Otay Water District. In addition to purchasing water from SDCWA, the Otay Water District also purchases
9 water from the Helix Water District. The Otay Water District operates the Ralph W. Chapman Water
10 Reclamation Facility and maintains a connection with the City of San Diego's South Bay Water
11 Reclamation Plant (Otay Water District 2016).

12 **Sewer**

13 The City of San Diego Public Works Department provides services to the western-most portion of the
14 proposed project alignment. Wastewater would be treated through the Metropolitan Sewerage Sub-system.
15 Wastewater is conveyed to the North City Water Reclamation Plant, Point Loma Wastewater Treatment
16 Plant, and South Bay Water Reclamation Plant, and eventually discharged to the Pacific Ocean (City of
17 San Diego 2017b).

18 The City of Chula Vista would provide sewer services to the western and central portions of the proposed
19 project alignment, treating wastewater at the Point Loma Wastewater Treatment Plant and eventually
20 discharging to the Pacific Ocean (City of Chula Vista 2017).

21 The eastern most portion of the proposed project alignment, located within the unincorporated region of the
22 County, would be serviced by San Diego County Sanitation District. Wastewater would be transmitted to
23 the Point Loma Wastewater Treatment Plant and eventually discharged to the Pacific Ocean (San Diego
24 County 2016).

25 **Solid Waste**

26 Seven active landfills are located within San Diego County. The Otay Landfill, located approximately
27 1 mile from the western terminus of the proposed project alignment, would likely be the primary receiver
28 of solid waste generated from the proposed project. As of 2012, the Otay Landfill's remaining capacity was
29 approximately 21.2 million cy, approximately 40 percent of its total capacity (CalRecycle 2016 and 2017).

30 **Telecommunications**

31 AT&T provides telephone, video/cable, digital subscriber line, and broadband services to residents within
32 the proposed project area. Cox Communications also provides cable, broadband, and telephone services
33 (SDG&E 2015).

34 **Regulatory Setting**

35 **Federal**

36 No federal laws, regulations, or policies relate to utilities and service systems and the proposed project.

1 **State**

2 *Protection of Underground Infrastructure*

3 Under California Government Code Section 4216 et seq., owners and operators of underground utilities are
4 required to become members of and participate in a regional notification center, so that they would receive
5 notification of planned excavation reports from public and private excavators. The responsibilities of utility
6 operators working in the vicinity of utilities are detailed in Section 1, Chapter 3.1 Protection of Underground
7 Infrastructure, Article 2 of California Government Code 4216-4216.9. This law requires that an excavator
8 must contact a regional notification center at least 2 days prior to excavation of any subsurface installation.
9 Any utility provider seeking to begin a project that may damage underground infrastructure can call
10 Underground Service Alert, the regional notification center. Underground Service Alert would notify the
11 utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are
12 required to mark the specific location of their facilities within the work area prior to the start of project
13 activities in the area.

14 *Title 8 CCR Section 1541: Excavations*

15 Section 1541 of the CCR requires excavators to determine the approximate locations of subsurface
16 installations, such as sewer, telephone, fuel, electric, and water lines, before opening an excavation.

17 *California Integrated Waste Management Act of 1989*

18 The California Integrated Waste Management Act of 1989 (PRC, Division 30) requires all California cities
19 and counties to implement programs to reduce, recycle, and compost wastes by at least 50 percent by 2000
20 (PRC Section 41780). The state, acting through the California Integrated Waste Management Board,
21 determines compliance with this mandate. Per-capita disposal rates are used to determine whether a
22 jurisdiction's efforts are meeting the intent of the act.

23 *AB 341: Mandatory Commercial Recycling*

24 AB 341 (Chapter 476, Statutes of 2011) directed CalRecycle to develop and adopt regulations for
25 mandatory commercial recycling in the State of California. AB 341 requires commercial enterprises and
26 public entities that generate four or more cy per week of waste, and multi-family housing facilities with
27 five or more units, to adopt recycling practices.

28 *California Public Utilities Commission*

29 CPUC regulates privately owned telecommunications, electric, natural gas, water, railroad, rail transit, and
30 passenger transportation companies in California. CPUC is responsible for ensuring that California utility
31 customers have safe, reliable utility service at reasonable rates, protecting utility customers from fraud, and
32 promoting the health of California's economy. CPUC establishes service standards and safety rules and
33 authorizes utility rate changes.

34 **Local**

35 Because the CPUC regulates and authorizes the construction of investor-owned public utility facilities,
36 the CPUC has exclusive jurisdiction over the siting and design of the proposed project. As such, projects
37 under CPUC jurisdiction, including the proposed project, are exempt from local land use and zoning
38 regulations and permitting. However, Section III.C of CPUC GO 131-D (planning and construction of
39 facilities for the generation of electricity and certain electric transmission facilities) requires "the utility to
40 communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any
41 non-discretionary local permits."

There are, however, no local laws, regulations, or policies related to utilities and service systems and the proposed project.

2.17.2 Environmental Impacts

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? (No Impact)

Temporary portable restrooms would be used and maintained during construction and removed after the completion of the proposed project; wastewater would be disposed of by a licensed portable restroom vendor at a wastewater treatment facility that has capacity. No impact would occur.

b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (Less than Significant)

Construction

As discussed in Section 1.7.6, approximately 4.5 million gallons of recycled water or local municipal supplies would be required for dust control, compaction, and fire protection/suppression during project construction. However, water would be supplied by existing facilities and entitlements, and as such no new water or treatment facilities or expansion to existing water facilities would be required. The Otay Water District provided a Will-Serve Letter on April 4, 2016 (see Appendix B), stating that it has adequate capacity to provide water required for construction of the proposed project. Temporary portable restrooms would be used and maintained during construction and removed after the completion of the proposed project; wastewater would be disposed of by a licensed portable restroom vendor at a wastewater treatment facility that has capacity.

The proposed project would not require or result in the construction of any new water or wastewater treatment facilities or the expansion of existing facilities. Impacts would be less than significant.

Operations

Operations and maintenance would require routine and periodic equipment testing, pole brushing, herbicide application, and other related ongoing maintenance tasks, similar to those currently conducted by SDG&E. Therefore, because operation and maintenance of the proposed alignment facilities would not increase in duration, intensity, or frequency, and would not require additional water supplies beyond those used currently by SDG&E for operation and maintenance of the alignment, impacts would be less than significant.

c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (Less than Significant)

The proposed project activities primarily involve the removal and replacement of existing pole structures within the TL 649 alignment. The proposed project would remove approximately 132 existing poles and replace them with approximately 117 new poles. Most poles would be installed via direct-bury methods and not result in any additional impervious surface area. Approximately 21 poles would be secured to concrete footings. Concrete footings would increase impervious surface area over the extent of the project alignment; however, the increase in impervious surface in the project area would be minimal and would not

measurably affect groundwater recharge or substantially alter existing off-site drainage systems. Impacts would be less than significant.

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? (Less than significant)

As described in Section 2.17.2b above, the Otay Water District provided a Will-Serve Letter on April 4, 2016, (Otay Water District 2016) stating that it has adequate capacity to provide water required for construction of the proposed project. Additionally, fire hydrants located at Aquatica San Diego and the Sleep Train Amphitheatre may be used to obtain water for dust control purposes. Therefore, water required for operation of the proposed project would be supplied by existing facilities and entitlements. As a result, impacts would be less than significant.

e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments? (Less than Significant)

Temporary portable restrooms would be used and maintained during construction and removed after the completion of the proposed project; wastewater would be disposed of by a licensed portable restroom vendor at a wastewater treatment facility that has capacity.

The proposed project would not require or result in the construction of any new water or wastewater treatment facilities or the expansion of existing facilities. Impacts would be less than significant.

f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? (Less than Significant)

The primary source of solid waste resulting from construction of the proposed project would be wooden poles, 12-kV conductor wire, packaging (e.g., cardboard boxes, plastic wrapping, and trash from consumables), removed vegetation, conductors, insulators, and other pole hardware. The majority of materials removed from the existing alignment would be recycled at a licensed facility within the area. All non-hazardous and non-impacted solid waste would ultimately be transported to Otay Landfill or for proper disposal. Treated wood products would be recycled or disposed of at a licensed landfill. Conductors, hardware, and insulators would be recycled at a licensed metal recycling facility. Excavated soil would be reused on site wherever feasible, including to infill vacant holes created during pole removal. All excess soil not reused on site would be recycled or disposed of at a nearby facility. For any material that cannot be recycled, permanent disposal of waste generated from the proposed project would likely be sent to the Otay Landfill, which has sufficient capacity (see Section 2.17.1, Setting). Because the majority of material to be removed would be recycled, the amount of construction waste to be disposed at a landfill or other permitted facility is expected to be minimal and, therefore, would have a less-than-significant impact on local solid waste facilities and would not result in the need for expansion of a landfill or other disposal site.

In addition, as described in Section 1.7.1, Site Preparation and Earthwork, vegetation and trees may be trimmed, and one tree would be removed to provide a safe working environment during construction. All trimmed vegetation and trees would be chipped and left on site for the landowner, or would be hauled to a green recycling center, if necessary. No removed vegetation would be disposed of in a landfill. Therefore, impacts to landfill capacity due to vegetation and tree removal would be less than significant.

Upon completion of construction activities, operation and maintenance activities of the proposed project alignment would be the same as those currently administered by SDG&E for the existing TL 649 alignment,

1 and activities would not increase in duration, intensity, or frequency. Therefore, impacts would be less than
2 significant.

3 ***g. Comply with federal, state, and local statutes and regulations related to solid waste? (No***
4 ***Impact)***

5 Solid waste (as described in Section 2.17.2) would be disposed of at approved sites in compliance with
6 federal, State, and county regulations. In addition, the proposed project would generate a small amount of
7 solid waste during operation and maintenance activities from crew lunches, packaging materials, and old
8 parts that would be replaced. The proposed project would generate a relatively small amount of solid waste
9 during construction and operation and maintenance. All waste would be recycled or disposed of in
10 accordance with all applicable federal, State, and local laws regarding solid and hazardous waste disposal,
11 and would be likely transported off site to the Otay Landfill. Proposed project activities would be conducted
12 in compliance with all applicable statutes and regulations. As such, the proposed project would not adversely
13 affect San Diego County's or the Cities of San Diego's and Chula Vista's existing abilities for meeting
14 reduction, reuse, and recycling mandate of 50 percent under the California Integrated Waste Management
15 Act. No impact would occur.

2.18 Mandatory Findings of Significance

Does the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.18.1 Environmental Impacts

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? (Less than Significant with Mitigation)

Fish and Wildlife Habitat and Populations

Over the short term, construction would have some potential for adverse impacts on special-status plants, special-status animals, critical habitat, sensitive vegetation communities, and wetlands in the project area through impacts related to construction-related disturbance, as discussed in Section 2.4, Biological Resources. Implementation of Mitigation Measures BIO-1 through BIO-7 would reduce potential impacts to special-status plants. Mitigation Measures BIO-2 through BIO-4, and BIO-8 through BIO-15 would reduce potential impacts to special-status mammals. Mitigation Measures BIO-2 through BIO-4, BIO-9, BIO-13, BIO-14, BIO-16, and BIO-17 would reduce potential impacts to special-status birds and birds protected under the MBTA, such as CAGN, LBVI, and BUOW. Mitigation Measures BIO-2 through BIO-4, BIO-8 through BIO-10, and BIO-13 would reduce potential impacts to special-status reptiles. Mitigation Measures BIO-2 through BIO-4, BIO-8 through BIO-10, BIO-13, and BIO-18 would reduce potential impacts to special-status amphibians. Mitigation Measures BIO-3, BIO-4, BIO-14, BIO-19 through BIO-23 would reduce potential impacts to special-status invertebrates, such as San Diego fairy shrimp and QCB. Mitigation Measures BIO-24 and BIO-25 would reduce potential impacts to sensitive vegetation communities, and Mitigation Measures BIO-26 and BIO-27 would avoid or minimize potential impacts to federally protected wetlands. With implementation of these mitigation measures, impacts on wildlife habitat

and rare and endangered species would be reduced to a level that is less than significant. Ongoing operational activities associated with the proposed project would be similar to existing operation and maintenance activities and would not be anticipated to reduce habitat quality and/or disturb wildlife. Impacts would be less than significant with the mitigation measures described above.

Important Examples of California History or Prehistory

As discussed in Section 2.5, Cultural Resources, three existing wood poles of TL 649 are located within the site boundaries of archaeological site CA-SDA-9976, which was previously determined eligible for the NRHP/CRHR. These poles are expected to be replaced with three new steel poles, and excavation work has the potential to impact portions of this archaeological site. Implementation of Mitigation Measure CR-1 would minimize potential impacts by preparing and implementing an archaeological treatment plan for the archaeological site. It is possible that undiscovered historical resources of an archaeological and/or paleontological nature may be present in the project area and, if present, these resources could be impacted during the ground-disturbing activities associated with the proposed installations. In order to maintain these potential impacts to a less-than-significant level, Mitigation Measure CR-2 and Mitigation Measure CR-3 would be implemented during construction. Therefore, impacts to historical resources that are archaeological and/or paleontological sites would be less than significant with mitigation.

In addition, 41 existing poles along TL 649 are located in an area with high paleontological sensitivity rating and 59 poles are located in an area with moderate paleontological sensitivity rating. Since the replacement poles would be installed in close proximity to the existing poles, approximately 100 new poles would be in locations with moderate or high paleontological sensitivity. As described in Section 2.5, the proposed excavation methods such as drilling could be destructive of paleontological resources, a potentially significant impact. Implementation of Mitigation Measure CR-4 would ensure that construction activities are halted in the event that any fossils are encountered and would reduce this impact to a level that is less than significant.

Human remains are not known to exist within the project area; but in the event that any are encountered during project construction, Mitigation Measure CR-5 would be implemented. This measure would require that construction is halted and that the San Diego County coroner is notified in the event that human remains are encountered. Adherence to these procedures and other procedures outlined in Measure CR-4 would reduce potential impacts on human remains to a less-than-significant level.

Consultation with tribes who have a traditional and cultural affiliation with the proposed project area did not result in the identification of TCRs; therefore, CPUC has determined that no TCRs are known to exist in the proposed project area. If TCRs are identified within the proposed project area at a later date, the CPUC would work with the tribe(s) to avoid or mitigate any impacts that might affect TCRs. If TCRs are identified within the proposed project area, with implementation of Mitigation Measure CR-6, any potential impacts would be less than significant with mitigation.

In conclusion, this impact would be less than significant with mitigation.

b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

A cumulative impact refers to the combined effect of “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (CEQA Guidelines Section 15355). Cumulative impacts reflect “the change in the environment which results from

the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time” (CEQA Guidelines Section 15355[b]).

Lead agencies may use a “list” approach to identify related projects, or may base the identification of cumulative impacts on a summary of projections in an adopted general plan or related planning document (CEQA Guidelines Section 15130[b]), also known as the “projection” approach. This document utilizes a combination of the list and projection approaches. Project contributions to localized cumulative impacts (air quality, biological resources, noise and vibrations) are evaluated using the list approach, while proposed project contributions to regional cumulative impacts (greenhouse gas emissions and traffic) are evaluated using the projection approach.

Projects with the potential to contribute to the same cumulative impacts as the proposed project are to a large extent within close geographic proximity to the project area. Several of these projects may have construction activities occurring at the same time as the proposed project.

Table 2.18-1 lists past, current, and probable future projects in the proposed project vicinity identified during preparation of this IS/MND. The geographic scope used in the search for past, current, or probable future projects was limited to the direct vicinity of the proposed project (i.e., within approximately 2 miles). The list of projects used for this analysis was developed by identifying projects posted on CEQAnet and review of projects posted on the City of San Diego, City of Chula Vista, and County of San Diego websites. Projects with the potential to contribute to the same cumulative impacts as the proposed project are in close geographic proximity to the project site. Several of these projects may have construction activities occurring at the same time as the proposed project. While not every possible cumulative project is likely listed, the list of cumulative projects is believed to be comprehensive and representative of the types of impacts that would be generated by other projects related to the proposed project. The cumulative impact evaluation assumes that the impacts of past and present projects are represented by baseline conditions, and cumulative impacts are considered in the context of baseline conditions alongside reasonably foreseeable future projects.

Table 2.18-1. Past, Current, and Probable Future Projects in Proposed Project Vicinity

Project Title	Brief Project Description	Distance from Proposed Project Area (miles)
Otay Water District 870-2 Pump Station Project	Construction and operation of a new pump station and associated sewer force main alignment that would replace two existing pump stations. The project is located near Alta Road on District-owned land, approximately 175 feet south of the District's Roll Reservoir site in the unincorporated San Diego County community of Otay Mesa. The project was approved and an MND was certified in 2016. Construction began in the Fall of 2017 and will end in late 2019.	0.7
Pham Village Dwelling Group	Construction of 4 single-family dwelling units in addition to the existing 2 single-family homes on a 0.98 acre site, located west of Palm Avenue and north of the Otay River; construction status is unknown.	1.4

Project Title	Brief Project Description	Distance from Proposed Project Area (miles)
University and Innovation District	Construction of a four-year University and Innovation District on 375-acres of City-owned land in Eastern Chula Vista; construction status is unknown.	1.2
Millenia	Construction on 210 acres in in eastern Chula Vista that will include nearly 3,000 homes, commercial and retail centers, a hotel, library, school, parks and outdoor spaces, a fire station, and transit station. Construction is ongoing.	1.75
BMW Dealership	Construction of a two-story 37,600 square foot auto dealership and a 1,000-square foot carwash, tower sign, associated parking and landscaping near in a vacant lot, near the intersection of Main Street and Maxwell Road. Application filed on September 14, 2017; construction status is unknown.	0.4
Otay 250- Sunroad East Otay Mesa Business Park Specific Plan Amendment	Approval of the project would allow for the development of a maximum of 3,158 dwelling units, 84,942 square feet of general commercial uses, 1,389,564 square feet of employment uses and approximately 51.3 acres of biological open space on a 253.1 acre project site. The project site is located generally at the northeastern corner of Otay Mesa Road and Harvest Road/SR-125, within unincorporated San Diego County. TL-649 would traverse through the project. Construction start date is unknown; however, construction is anticipated to occur in phases over a period of approximately ten years, with build-out expected to occur in 2027.	0.0
Parkside at Dennery Ranch	Construction of 73 condominiums and a 9-acre park on a 22.1-acre vacant lot at 360 1/3 Dennery Road. The development project would abut the Otay River Valley to the north, Dennery Road to the south, and Dennery Canyon to the east. The project was approved and EIR was certified in November 2014; construction status is unknown.	0.2
Heritage Road Bridge Improvement Project	Construction of an interim bridge to better accommodate existing peak traffic, pedestrian use, a 100-year storm event, and future growth. The City of Chula Vista's General Plan indicates that Heritage Road is planned as a six-lane major arterial between Olympic Parkway to the boundary with the City of San Diego. Anticipated construction schedule: 2015 through 2018.	0.4
Otay Ranch University Village 3 North and Portion of Village 4	Mixed use development of 436 acres southeast of the Otay Landfill and north of Main Street. Uses include 28.2 acres of industrial uses, 1,597 residential units, office space, parks, open space and preserve, and a school. Anticipated construction schedule: late 2014 through 2018.	0.6

Project Title	Brief Project Description	Distance from Proposed Project Area (miles)
Pio Pico Energy Center Gas Line	Construction of an approximately 11,000-linear-foot, 16-inch gas pipeline below Otay Mesa Road. According to the Proponent's Environmental Assessment prepared by San Diego Gas & Electric, construction was completed in March 2016.	0.3
Level II Infill Correctional Facilities Project	Construction of a 792-bed facility on a 35-acre vacant site southeast of the Richard J. Donovan Correctional Facility in southern San Diego County. Construction was completed in December 2016.	0.5
Otay Ranch University Village 8 East	Construction of a mixed use development of approximately 575.3 acres west of SR 125 and north of the Otay River Valley. This village would include 3,560 dwelling units, commercial/retail use, an elementary school, parks, and open space. Anticipated construction schedule: 2016 through 2024.	0.6
Otay Ranch Village 8 West	Construction of a mixed use development of a mixed-use Town Center, Community Park, town square parkland, middle school site, community purpose facility, neighborhood park, elementary school site, and 2,050 multi-and single family residential units. Anticipated construction schedule: 2017 through 2030.	0.6
Otay Ranch Village 9	Construction of a mixed-use community with 1,745 residential units centered around a university-oriented town center. Construction schedule is unknown.	1.3
Otay Ranch University Village 10	Mixed use development of approximately 363 acres with 1,740 residential units, an elementary school, private open space, a neighborhood park, open space and preserve. Anticipated construction schedule: 2023 through 2029.	0.6
Otay River Restoration Project Habitat Mitigation and Monitoring Plan	Restoration of more than 100 acres of hydrologic and sediment transport processes and native habitats in the Otay River Valley on approximately 300 acres. Activities include establishment, re-establishment and rehabilitation of upstream habitat, channel habitat, terraces, seasonal ponds, and upland habitat. Anticipated construction schedule: summer/fall 2016 through 2021.	0.0 (overlaps the eastern portion of the project area [near replacement Pole No. 76])
Otay Valley Manhole Improvements Phase 3	Replacement or rehabilitation of 69 existing manholes in the Otay Valley area. Project was started in 2017 and will be completed in 2018.	0.1
Runway 8L-26R Rehabilitation Project	As-needed improvements within the City of San Diego's Brown Field Airport, including pavement, drainage, striping, and signage condition assessments for scheduled rehabilitation. Phase 1 of this project was completed in 2016; Phase 2 is expected to begin in 2017.	0.8

Project Title	Brief Project Description	Distance from Proposed Project Area (miles)
Taxiway A Rehabilitation and Run-up Pads	Involves rehabilitating pavement at Taxiway A and Run-Up Pads, which includes areas for engine warm-up and instrument checks. Project is needed to meet Federal Aviation Administration (FAA), state, and local engineering and construction standards. The project would allow smoother and quicker use of the taxiway, and increase the size of the engine run-up areas. Construction status is unknown.	0.8
SDG&E Salt Creek Substation Project	Construction of a new 120 MVA 69/12-kV distribution substation at Hunte Parkway and Exploration Falls Drive in Chula Vista, and a new 69-kV single circuit powerline (approximately 5 miles long) running between the new substation and the existing Miguel Substation. Construction anticipated to begin June 2016 and be complete by the end of 2018.	1.7

Sources: City of San Diego 2014, 2017, City of Chula Vista 2014, 2015, 2017a, 2017b, 2017c, County of San Diego 2016, California Department of Corrections and Rehabilitation 2013, SDG&E 2015, CPUC 2016, ICF International 2016, RWQCB 2017, and Reiter, pers. comm., 2016.

Detailed analysis of a project's contribution to cumulative impacts is required when (1) a cumulative impact to which a project may contribute is expected to be significant, and (2) the project's contribution to the cumulative impact is expected to be cumulatively considerable, or significant in the context of the overall (cumulative) level of effect.

Resource Topics Considered and Dismissed

The proposed project has been determined to have the potential to make a considerable contribution to cumulative impacts related to the following resource topics: aesthetics, air quality, biological resources, cultural resources, hazards and hazardous materials, noise, and traffic/transportation. Greenhouse gas emissions are a cumulative issue and are already addressed in Section 2.7, Greenhouse Gas Emissions; therefore, this topic is not discussed further in this section. For all other resource topics, as shown in **Table 2.18-2**, either significant cumulative impacts do not exist or the proposed project would not have the potential to make a considerable contribution to any significant cumulative impacts. These resource topics have been dismissed from consideration in the analysis of cumulative impacts and are not discussed further.

Table 2.18-2. Resource Topics Dismissed from Further Consideration in the Analysis of Cumulative Impacts

Resource Topic Not Discussed Further	Rationale
Agricultural Resources	As described in Section 2.2, the proposed project would not convert agricultural lands or forest lands to non-agricultural uses; therefore, it would not have the potential to contribute to any cumulative impacts related to agricultural resources or forestry uses.
Geology, Soils, and Seismicity	Similar to the proposed project, nearby development projects would be required to withstand seismic hazards (e.g., liquefaction) and expansive and corrosive soils. As such, there would be no cumulative geologic or seismic impacts.

Resource Topic Not Discussed Further	Rationale
Land Use and Planning	The proposed project would not result in impacts that involve the division of an established community. This topic has been dismissed from the cumulative analysis because, similar to the proposed project, other major projects are subject to planning, environmental review, and a permitting process. Through these processes, inconsistencies with relevant plans and policies would be resolved before project implementation. Therefore, consistency with local plans and policies would not apply in the cumulative context.
Mineral Resources	As described in Section 2.11, the proposed project would not involve activities that could directly affect mineral production sites or prevent future availability of mineral resources; therefore, the proposed project would not have the potential to contribute to any cumulative impacts on mineral resources.
Population and Housing	Information collected during the preparation of this environmental document suggests that substantial population growth is not an issue in the project area, and that sufficient housing exists to accommodate construction employees. As such, there is no cumulative impact to which the proposed project could contribute.
Public Services	The proposed project would not substantially increase population and, therefore, would not increase demand for public services such as police and fire protection. Thus, there is no cumulative public services impact to which the project could contribute.
Recreation	As described in Section 2.15, the proposed project would not substantially increase population and, therefore, would not increase demand for recreational facilities. For this reason, there is no cumulative recreation impact to which the proposed project could contribute.
Utilities and Service Systems	As described in Section 2.17, the proposed project would not result in increased demands for wastewater or water treatment, nor would it require construction of such facilities. The Otay Water District also provided a Will-Serve Letter stating that it has sufficient water supplies available to provide water during project construction. In addition, the proposed project would comply with local and state regulations and would recycle excess solid waste to the extent possible. Other cumulative projects would also be required to adhere to the same local and state regulations regarding solid waste disposal. For these reasons, there would be no cumulative impact regarding utilities and service systems.

1 The following sections provide a detailed analysis of the proposed project's contribution to existing
2 significant cumulative impacts.

3 **Aesthetics**

4 Construction of the proposed project could overlap with the construction schedules of up to seventeen
5 projects listed in **Table 2.18-1**. However, construction of other projects would not likely be visible within
6 the same viewshed as the proposed project due to distance and intervening topography and existing
7 structures. It is possible that residents in the Dennery Canyon neighborhoods may have temporary views of
8 both the Parkside at Dennery Ranch Project and the proposed project while activities take place in the
9 western portion of the alignment. Similarly, motorists on Heritage Road may have temporary views of
10 construction activities associated with both the proposed project and the Heritage Road Bridge Replacement

Project. Additionally, motorists on California State Route 125, Lonestar Road, Otay Mesa Road and Harvest Road, as well as some of the surrounding businesses and people at the Richard J. Donovan Correctional Facility may have temporary views of construction activities of both the proposed project and the Otay 250- Sunroad East Otay Mesa Business Park Specific Plan Amendment. Because construction would be short-term at any given location for the proposed project, temporary cumulative aesthetics impacts would be less than significant.

With respect to permanent cumulative visual impacts, the proposed project and sixteen of the development projects listed in **Table 2.18-1** would alter the visual character of the project area. As described in Section 2.1, Aesthetics, the proposed project would involve incremental changes in pole heights and color. In many areas, the proposed project would not be in the same viewshed as other cumulative projects due to intervening topography. In many cases, views of the cumulative development projects would result in a greater visual change relative to the proposed project. For this reason and because the proposed project would represent a minor permanent change to the combined urban-open space landscape, the proposed project's contribution to cumulative aesthetics impacts would not be considerable (i.e., considered less than significant).

Air Quality

San Diego County is located in a non-attainment area for ozone, PM₁₀, and PM_{2.5}. Construction of the proposed project could overlap with seventeen of the nearby projects listed in **Table 2.18-1**. In the event that all of these projects were under construction simultaneously, a cumulative air quality impact would occur. As described in Section 2.3, Air Quality, construction of the proposed project would involve ground-disturbing activities and vehicle usage that would generate daily emissions greater than the City of Chula Vista's NO_x daily significance thresholds. However, with implementation of Mitigation Measure AQ-1, the project's contribution to construction-related emissions of criteria pollutants (including NO_x) would not be considerable (i.e., considered less than significant).

Biological Resources

Construction of the proposed project could overlap with seventeen of the projects listed in **Table 2.18-1**. Cumulative impacts to biological resources including special-status plant and animal species, critical habitat, sensitive vegetation communities, and wetlands could occur due to ground-disturbing activities associated with the project and other nearby construction projects. When considered in conjunction with the proposed project, other projects anticipated to result in greater ground-disturbing impacts include the Otay Water District 870-2 Pump Station Project, Pham Village Dwelling Group, University and Innovation District, Millenia, BMW Dealership, Otay 250- Sunroad East Otay Mesa Business Park Specific Plan Amendment, Parkside at Dennerly Ranch, Otay Ranch University Village 3 North and Portion of Village 4, Otay Ranch University Village 8 East, Otay Ranch Village 8 West, Otay Ranch Village 9, Otay Ranch University Village 10, and SDG&E Salt Creek Substation Project. Many of these projects could potentially affect habitats that also support special-status species that occur or have potential to occur within the project area, as well as sensitive vegetation communities and wetlands. Thus, for the purposes of this analysis, cumulative impacts to special-status species, their habitats, sensitive vegetation communities, and wetlands are considered significant. Similar to the proposed project, these development projects would be subject to the same CEQA and permitting requirements. Implementation of Mitigation Measures BIO-1 through BIO-27 would reduce the proposed project's contribution to biological resources impacts. To offset permanent impacts to habitat, many of the other development projects would be subject to mitigation requirements under the MSCP documents such as the City of San Diego MSCP, the County of San Diego MSCP and the City of Chula Vista MSCP.

In conclusion, with implementation of Mitigation Measures BIO-1 through BIO-27, the proposed project's contribution to cumulative impacts regarding special-status species, habitats, and wetlands would not be considerable (i.e., considered less than significant).

Cultural Resources

A portion of the proposed project alignment and a portion of the area within the Otay 250- Sunroad East Otay Mesa Business Park Specific Plan Amendment physically overlap. Because there are cultural resources in both aforementioned areas, there could potentially be significant cumulative cultural resource impacts if the projects were being constructed at the same time. Similar to the proposed project, the Otay 250- Sunroad East Otay Mesa Business Park Specific Plan Amendment and other construction projects in the Cities of San Diego and Chula Vista and the County of San Diego would be required to implement mitigation measures in the event that any archaeological resources or human remains are encountered during construction. Implementation of Mitigation Measures CR-1 through CR-5 would reduce the proposed project's contributions to cultural resource impacts; therefore, cumulative impacts could be reduced to a less than significant level.

Hazards and Hazardous Materials

As discussed in Section 2.8, the proposed project would involve routine use of hazardous materials such as fuel, oils, and lubricants for vehicles and equipment. Other projects under construction nearby including the Heritage Road Bridge Project and the Parkside at Dennerly Ranch Project would involve use of similar hazardous materials. These projects, the proposed project, and others that may be under construction during the same time as the proposed project have the potential to result in temporary impacts from accidental releases of diesel and gasoline fuel, hydraulic fluids, and other hazardous materials. Like the proposed project, these projects would also be subject to relevant federal, State and local regulations. Currently, the nearest cumulative project is located approximately 0.2 mile from the proposed project; therefore, accidental releases are not expected to affect the same geographic areas. Should construction of the Otay 250- Sunroad East Otay Mesa Business Park Specific Plan Amendment occur during the same time as the proposed project construction, there is a possibility of significant cumulative impacts pertaining to hazards and hazardous materials. Implementation of Mitigation Measures HAZ-1, HAZ-2, HAZ-3, and HAZ-4 for the proposed project as well as measures detailed in the Supplemental EIR for the Otay 250- Sunroad East Otay Mesa Business Park Specific Plan Amendment would reduce these impacts to less than significant.

Hydrology and Water Quality

Of the projects listed in **Table 2.18-1**, construction of the Otay Water District 870-2 Pump Station Project, Pham Village Dwelling Group, University and Innovation District, Millenia, BMW Dealership, Otay 250- Sunroad East Otay Mesa Business Park Specific Plan Amendment, Parkside at Dennerly Ranch, Heritage Road Bridge Improvement Project, Otay Ranch University Village 3 North and Portion of Village 4, Otay Ranch University Village 8 East, Otay Ranch Village 8 West, Otay Ranch Village 9, Otay River Restoration Project Habitat Mitigation and Monitoring Plan, Otay Valley Manhole Improvements Phase 3, Runway 8L-26R Rehabilitation Project, Taxiway A Rehabilitation and Run-up Pads, and SDG&E Salt Creek Substation Project could overlap with the proposed project's schedule. Cumulative impacts could occur due to substantial grading, which could alter drainage patterns, contribute to increased runoff, or result in degradation of water quality. Construction activities associated with the other projects could also affect the same water courses. Similar to the proposed project, many of these cumulative projects would likely disturb more than 1 acre and would be required to obtain a Construction General Permit, which requires implementation of a SWPPP and other construction BMPs. Implementation of Mitigation Measures HYD/WQ-1, HYD/WQ-2, HYD/WQ-3, and HAZ-2 (which would incorporate a SWPPP that includes appropriate spill prevention and construction BMPs), would ensure that the proposed project's contribution to cumulative impacts to water resources would not be considerable (i.e., considered less than significant).

1 **Noise**

2 Construction of the proposed project and up to seventeen other projects could occur simultaneously. Of the
3 nearby cumulative projects, seven of the construction timeframes are currently unknown. As described in
4 Section 2.12, Noise, construction activities that could exceed applicable noise thresholds, include stringing
5 activities that occur at Sea Lavender Way, micropile foundation or direct-bury construction activities for
6 replacement of Pole Nos. 4 through 7, and the use of a jackhammer or drill rig in the event that such work
7 is necessary. In the event that construction activities with other projects occur simultaneously as the
8 proposed project's stringing activities, temporary cumulative noise impacts could occur and affect nearby
9 residents. Under the proposed project, implementation of Mitigation Measures NOI-1 through NOI-6 would
10 restrict construction work periods, require notification of adjacent residences, require the applicant to
11 respond to noise complaints, and implement noise reduction measures to minimize noise effects to nearby
12 residences, respectively. With implementation of these mitigation measures and because proposed project's
13 construction activities would be temporary and short-term at a given location, the proposed project's
14 contribution to cumulative noise impacts would not be considerable (i.e., considered less than significant).

15 **Transportation/Traffic**

16 In the event that construction of other nearby projects overlap with the proposed project's construction
17 timeframe, cumulative traffic impacts would occur. Construction of the proposed project could potentially
18 overlap with up to seventeen projects listed in **Table 2.18-1**. Traffic volumes could increase in the project
19 vicinity during concurrent construction of these projects. As described in Section 2.16, Transportation and
20 Traffic, a maximum of 70 to 80 vehicle trips would result during peak construction work phases.
21 Approximately 20 to 27 truck trips per day would be generated during the construction phase and up to 10
22 trips per day would be required for water delivery to the staging yards. Some roads in the project area are
23 subject to congestion, including Heritage Road/Otay Valley Road (LOS F) and Palm Avenue from I-805 to
24 Dennery Road (LOS C). In the event that the Heritage Road Bridge Improvement Project overlaps with the
25 proposed project's construction phase and requires temporarily closure, increased congestion on other
26 roadways would likely occur. Alternate roadways can be used by construction personnel to access the
27 proposed project. In addition, as described in Section 2.16, Mitigation Measure TRA-2 would require that
28 a traffic control plan be prepared and implemented and Mitigation Measure TRA-3 would require that
29 construction BMPs be implemented. These measures would help ensure that construction traffic does not
30 result in substantial delays or congestion. With implementation of these mitigation measures and because
31 of the proposed project's short-term construction schedule, the proposed project's contribution to
32 cumulative transportation and traffic impacts would not be considerable (i.e., considered less than
33 significant).

34 ***c. Does the project have environmental effects which will cause substantial adverse effects on***
35 ***human beings, either directly or indirectly? (Less than Significant with Mitigation)***

36 As discussed under the applicable resource areas above, the proposed project would not result in significant
37 and unavoidable impacts on human beings, either directly or indirectly. Mitigation measures identified
38 throughout this document would ensure that impacts on human beings are reduced to a level that is less
39 than significant.

3.0 Consultation, Coordination, Public Review, and List of Preparers

3.1 Agencies and Persons Contacted

The following agencies were consulted during the preparation of the IS/MND:

- CDFW

3.2 List of Preparers

California Public Utilities Commission

- John E. Forsythe, Project Manager

Horizon Water and Environment, LLC

- Tom Engels, Ph.D., Project Manager
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- Allison Chan, Aesthetics/Land Use and Planning/Mandatory Findings of Significance
- Megan Giglini, Air Quality/Greenhouse Gas Emissions/Noise
- Paul Glendening, GIS
- Robin Hunter, Biological Resources
- Janis Offermann, Cultural Resources
- Brian Piontek, Geology and Soils/Hydrology and Water Quality/Mineral Resources
- Laura Prickett, Transportation and Traffic
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Baseline Environmental Consulting, Inc.

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- Lisa Luo, Cultural Resources/Hazards and Hazardous Materials/Noise

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- Joanne Dramko, Biological Resources/Air Quality/Greenhouse Gas Emissions/Noise
- Shelby Howard, Biological Resources/Air Quality/Greenhouse Gas Emissions/Noise
- Charles Terry, Biological Resources/Air Quality/Greenhouse Gas Emissions/Noise

Parus Consulting, Inc.

- Tom Lagerquist, Paleontological Resources/Biological Resources
- Andrew Miller, Paleontological Resources
- Jackie Putnam, Paleontological Resources/Biological Resources

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