4.1 BIOLOGICAL RESOURCES

This section presents the environmental setting and impact analysis for biological resources that would be affected by the Proposed Project or its alternatives. This section addresses baseline biological resources data, applicable regulations, environmental impacts, and mitigation measures to reduce or avoid significant impacts. This section focuses on the effects the Proposed Project would have on sensitive vegetation communities/habitats, federal and State waters and wetlands, and special-status species. Appendix G of this EIR presents supporting information for this section, including:

1. Tables presenting the vegetation communities, other land cover types, and potentially occurring special-status species in the Proposed Project area;
2. Map book figures depicting vegetation communities and rare plant locations in the Proposed Project area
3. Map book figures depicting aquatic habitats and jurisdictional waters of the U.S. and the State; and
4. A copy of SDG&E's Subregional NCCP Operating Protocols.

4.1.1 Definitions

4.1.1.1 Sensitive Vegetation Communities/Habitats

Sensitive vegetation communities/habitats are those identified in local or regional plans, policies, or regulations, or by CDFW or USFWS. CDFW's Rarity Ranking follows NatureServe's Heritage Methodology (Faber-Langendoen et al. 2012) in which communities are given a G (global) and S (State) rank based on their degree of imperilment (as measured by rarity, trends, and threats). Communities with a Rarity Ranking of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable) are considered sensitive by CDFW.

Sensitive habitats include:

1. Areas that provide habitat for locally unique biotic species/communities (e.g., oak woodlands, coastal scrub, maritime chaparral, and indigenous and ancient forests)
2. Habitat that contains or supports rare, endangered, or threatened wildlife or plant species as defined by CDFW and USFWS
3. Habitat that supports CDFW Species of Special Concern
4. Areas that provide habitat for rare or endangered species and that meet the definition of Section 15380 of CEQA Guidelines
5. Coastal tidelands and marshes
6. Coastal and off-shore areas containing breeding or nesting sites and coastal areas used by migratory and resident birds for resting and feeding
7. Dune plant habitats
8. Existing game and wildlife refuges and reserves
9. Lakes, wetlands, estuaries, lagoons, streams, and rivers
10. Riparian corridors

4.1.1.2 Environmentally Sensitive Habitat Areas

Environmentally Sensitive Habitat Areas (ESHA) are the same as "environmentally sensitive area[s]"defined in Section 30107.5 of the California Coastal Act of 1972 (CCA) as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments." Many vegetation communities, when located in the coastal zone, are considered ~~Environmentally Sensitive Habitat Areas~~ ESHA under the CCA. Native vegetation communities within ~~Environmentally Sensitive Habitat Areas~~ ESHA are also considered Sensitive Habitats.

4.1.1.3 Special-Status Species

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

1. Plant and wildlife species listed as endangered, threatened, or candidates for listing under the federal Endangered Species Act (ESA)
2. Plant species listed as endangered, threatened, rare, or candidates for listing under the California Endangered Species Act (CESA)
3. Wildlife species listed as endangered, threatened, or candidates for listing under CESA
4. Wildlife species designated as Fully Protected, as defined in California Fish and Game Code Sections 3511, 4700, 5050, and 5515
5. Wildlife species designated as Species of Special Concern by CDFW
6. Birds species on the CDFW watch list
7. Plant species with a California Rare Plant Rank (CRPR) of 1A, which are species that are presumed Extirpated in California and either rare or extinct elsewhere
8. Plant species with a CRPR 1B, which are species that are rare, threatened, or endangered in California and elsewhere
9. Plant species with a CRPR 2A, which are species that are presumed extirpated in California but more common elsewhere
10. Plant species with a CRPR 2B, which are species that are rare, threatened, or endangered in California, but more common elsewhere
11. Plant species with a CRPR 3, which are species for which information is lacking to assign them to one of the other lists
12. Plant species with a CRPR 4, which are species that have limited distribution and their vulnerability or susceptibility to threat appears low at the time
13. Plant species listed as rare under the Native Plant Protection Act
14. Species covered under the current SDG&E Subregional NCCP (see Section 4.1.2.3)
15. Species which meet the CEQA criteria for endangered, rare, or threatened under CEQA Guidelines Section 15380

4.1.1.4 Biological Survey Area

The physical area surveyed for biological resources is referred to as the biological survey area (BSA) in this section. The BSA covers the Proposed Project area (i.e., the physical limits of all proposed work areas), and also includes a 500-foot-wide survey corridor for the transmission

line alignment, a 20-foot buffer along both sides of access roads, and a 50-foot buffer around staging yards and other work areas in order to cover areas where potential indirect effects to biological resources could occur. The BSA for the Proposed Project covers approximately 1,251 acres. Figure 4.1-1 shows the BSA for the Proposed Project. The surveys that occurred in the BSA are detailed below in the approach to data collection.

4.1.2 Approach to Data Collection

The biological resources analysis is based on literature review; database queries; surveys consisting of general surveys, habitat assessments, and focused surveys for special-status species; delineation of potential jurisdictional waters of the U.S. and State; and professional judgment of qualified professionals.

A master-list of potentially occurring special-status species was developed and can be found in Appendix G, Tables G-2 and G-3. The special-status species list was narrowed down to those with moderate or high potential to occur in the Proposed Project area based on the vegetation communities/habitats present, as well as the results of the focused plant and wildlife surveys.

Literature and Database Review

The following literature sources were reviewed:

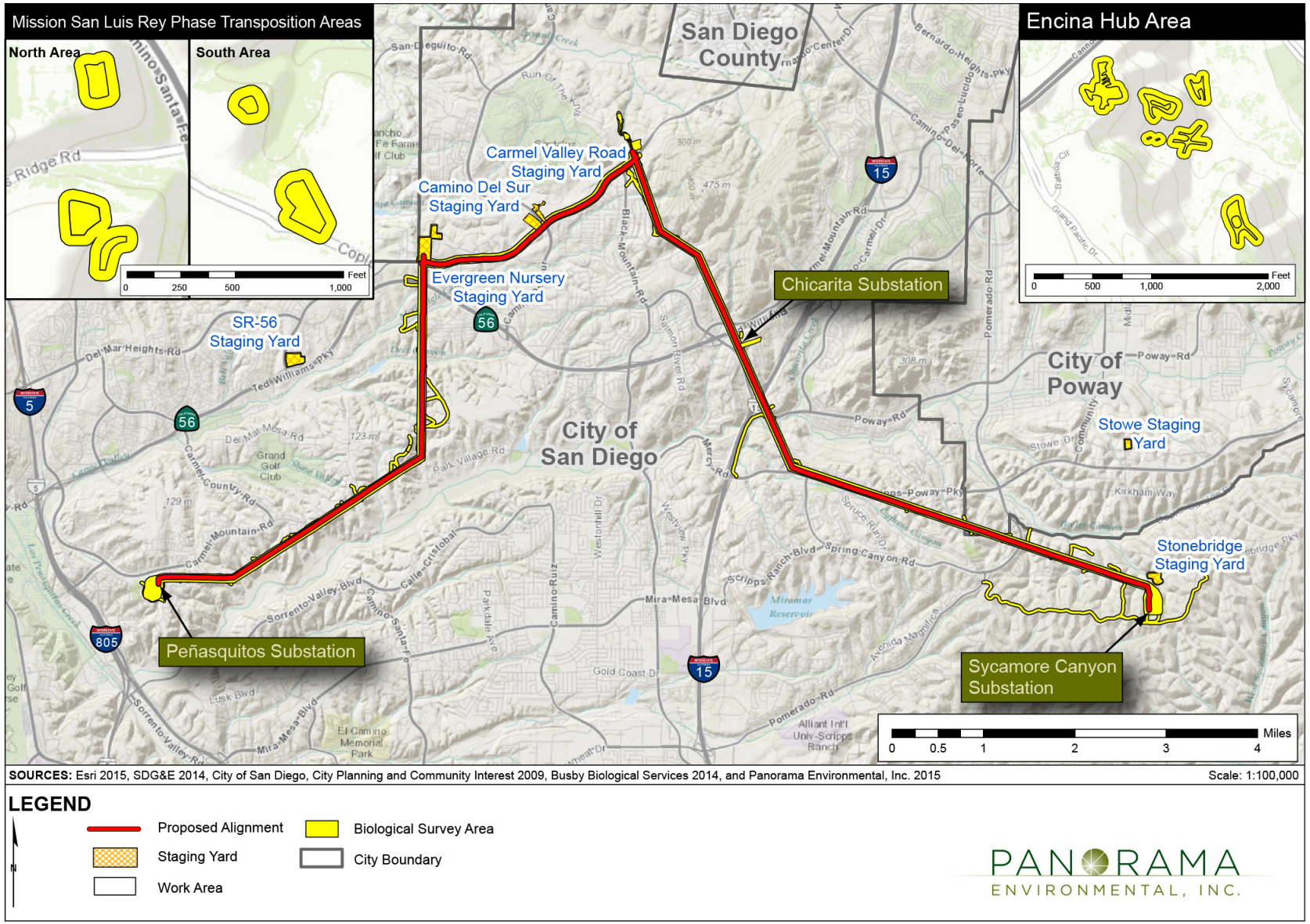
- Current federal, State, and local regulations
- Historical and current aerial photographs
- U.S. Geological Survey (USGS) topographic maps
- U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey maps
- Data from other projects occurring within the vicinity of the Proposed Project
- City of San Diego vernal pool mapping (City of San Diego 2012b)

The USFWS species database and the CDFW's California Natural Diversity Database (CNDDB) were queried to identify potential sensitive habitats, special-status plant species, and special-status wildlife species in the vicinity of the Proposed Project. Queries of the CNDDB were made of the 7.5-minute USGS quadrangles that encompass and surround the Proposed Project as listed in Table 4.1-1.

Table 4.1-1 Summary of 7.5 Minute USGS Quadrangles Reviewed

Work Areas	Quadrangle	Surrounding Quadrangles
Transmission line and staging yards	Del Mar and Poway	Encinitas, Rancho Santa Fe, Escondido, San Pasqual, San Vicente Reservoir, La Jolla, La Mesa, El Cajon
Encina Hub	San Luis Rey	Las Pulgas Canyon, Morro Hill, Bonsall, Oceanside, San Marcos, Encinitas, Rancho Santa Fe
Mission—San Luis Rey Phase Transposition	La Jolla	Del Mar, Poway, La Mesa, Point Loma, National City

Figure 4.1-1 Biological Survey Area for the Proposed Project



The following databases listed below were also reviewed to identify potential sensitive habitats, special-status plant species, and special-status wildlife species in the vicinity of the Proposed Project:

- California Native Plant Society Electronic Inventory of Rare and Endangered Vascular Plants of California
- County of San Diego SanBIOS database
- SanGIS database
- San Diego Natural History Museum

Surveys

Initial surveys (habitat assessments and focused surveys) were performed to determine the baseline biological resource conditions within the Proposed Project area. Initial surveys were performed for the following Proposed Project components:

- Segments A, B, C, and D of the Proposed Project
- Stonebridge staging yard
- Stowe staging yard
- ~~Camino Del Sur staging yard~~

Additional work areas were added to the Proposed Project after the general plant and wildlife surveys, focused plant and wildlife surveys, and jurisdictional delineations were performed. Habitat assessments, focused species surveys, and wetland delineations were performed for the following additional work areas:

- Encina Hub
- Mission—San Luis Rey Phase Transposition
- Evergreen Nursery staging yard
- SR-56 staging yard
- Carmel Valley Road staging yard
- Camino Del Sur staging yard
- Additional or modified access roads
- Additional or modified stringing sites
- SDG&E modified eastern cable pole location

Initial Surveys

The following general and focused plant and wildlife surveys were performed for Segments A through D and the Stonebridge and Stowe staging yards:

- Focused special-status plant and wildlife surveys in late summer/fall 2013 (Busby 2014a)
- Focused special-status plant surveys in September/October 2013, April 2014, and May 2014 (Busby 2014h)
- Jurisdictional delineation in late summer/fall 2013 (Environmental Intelligence, LLC 2014)
- Habitat assessment for California Orcutt grass (Busby 2014g)

- Habitat assessment for thread-leaved brodiaea (Busby 2014e)
- Habitat assessment for willowy monardella (Busby 2014f)
- Quino checkerspot butterfly (QCB) habitat assessment in February 2015 (Helix 2015c)
- Focused coastal California gnatcatcher survey performed in late summer/fall 2013 (Busby 2014b)
- Nuttall's scrub oak inventory performed in January and February 2016 (Helix 2016)

The methods for these surveys are provided in their respective reports. Appendix G contains all of the biological survey reports prepared for the Proposed Project following receipt of SDG&E's PEA and technical appendices. (Note that biological survey report results include two staging yards – Torrey Santa Fe and Chicarita South – that were later removed from the Proposed Project description.)

Surveys for Additional Work Areas

Additional vegetation mapping and habitat assessments were performed for all work areas that were added to the Proposed Project after the initial surveys had been conducted. Reports documenting the results of these assessments are provided in Appendix G of this EIR. The following biological surveys were conducted to assess baseline biological resources conditions in these areas:

- Focused special-status plant surveys for additional work areas (Encina Hub; Mission—San Luis Rey Phase Transposition; and the SR-56, Evergreen Nursery, Camino Del Sur, Stowe, and Stonebridge staging yards) in March/April 2015 (Busby 2015o ~~g~~)
- Vegetation mapping/habitat assessments for additional access roads, stringing sites, Mission—San Luis Rey Phase Transposition, Encina Hub, and Chicarita South and SR-56 staging yards in November and December 2014 (Busby 2014c, 2014d)
- Vegetation mapping/habitat assessments for the Evergreen Nursery staging yard in January 2015 (Busby 2015l ~~d~~)
- Vegetation mapping/habitat assessments for the Camino Del Sur staging yard in February 2015 (Busby 2015h)
- Habitat assessments and identification of potential federal and State jurisdictional features for Mission—San Luis Rey Phase Transposition, Encina Hub, and Chicarita South, SR-56, and Evergreen Nursery staging yards in March 2015 (Helix 2015a)
- Habitat assessment for the Carmel Valley Road staging yard in June 2015 (Chambers Group Inc. 2015e ~~b~~ and 2015f ~~c~~)
- Field verification of habitat assessments for Stonebridge and Carmel Valley Road staging yards in September 2015 (Helix 2015d)
- Jurisdictional delineation for additional work areas (access roads; Encina Hub; Mission—San Luis Rey Phase Transposition; and the SR-56, Evergreen Nursery, Camino Del Sur, Stowe, and Stonebridge staging yards) in January and February 2015 (Busby 2015i ~~a~~, 2015j ~~b~~)

- Jurisdictional delineation for Carmel Valley Road in June 2015 (Chamber Groups Inc. 2015d ~~a~~) and field verification of the site on September 2015 (Helix 2015d)
- Field verification of vernal pool mapping in December 2014 (Helix 2015b)
- Focused burrowing owl habitat assessment in winter 2014 (Busby 2015k ~~e~~). The assessment occurred in all work areas except Encina Hub, Mission—San Luis Rey Phase Transposition, the Evergreen Nursery staging yard, the Camino Del Sur staging yard, and the Carmel Valley Road staging yard
- Focused burrowing owl habitat assessment for Encina Hub in January 2015 (Busby 2015m ~~e~~)
- Focused burrowing owl habitat assessment for the Evergreen Nursery staging yard and the Camino Del Sur staging yard in January and February 2015 (Busby 2015n ~~f~~)
- Focused burrowing owl habitat assessment for the alignment between February and July 2015 (Busby 2015a) and Encina Hub between February and July 2015 (Busby 2015f)
- Focused least bell's vireo survey for Encina Hub in April, May, June, and July 2015 (Busby 2015b) and alignment in April, May, June, and July 2015 (Busby 2015c)
- Focused southwestern willow flycatcher survey for Encina Hub in May, June, and July 2015 (Busby 2015d) and the alignment in May and June 2015 (Busby 2015e)
- Focused coastal California gnatcatcher survey for Encina Hub in February and March 2015 (Busby 2015h) and areas not previously surveys in February, March, and April 2015 (Busby 2015g)
- Focused light-footed ridgeway's rail survey for the alignment and work areas in April and May 2015 (Busby 2015p)
- Focused California orcutt grass survey for the alignment and work areas during spring 2015 (Busby 2015q)
- Focused thread-leaved brodiaea survey for the alignment and work areas during spring 2015 (Busby 2015r)

Vegetation Mapping

Vegetation communities were mapped in the BSA in late summer/fall 2013, September/October 2014, April 2014, May 2014, and during additional habitat assessments and vegetation mapping performed in late 2014 and early 2015. Biologists mapped the vegetation by walking through the BSA, documenting the plant species, and delineating the vegetation communities and land cover types by hand onto aerial imagery. Vegetation community classification followed Holland (1986). Section 4.1.3.1 below provides further detail on the vegetation communities found in the BSA.

4.1.3 Environmental Setting

4.1.3.1 Proposed Project Setting

A total of ~~25~~ 26 vegetation communities and other land cover types were identified within the BSA. Table 4.1-2 provides a summary of the acreages of these communities and land cover types by Proposed Project component. Descriptions for these vegetation communities are provided in

Appendix G, Table G-1, and maps of the vegetation communities are provided in Appendix G, Figure G-1.

Table 4.1-2 Summary of Vegetation Communities in Biological Survey Area

NCCP Vegetation Community	Holland Vegetation Community	Segment A (acres)	Segment B (acres)	Segment C (acres)	Segment D (acres)	Other Work Areas[1] (acres)	TOTAL (acres)
Coastal Sage Scrub	Diegan Coastal Sage Scrub (DCSS)	89.22	10.29	6.24	75.76	5.83	**187.33**
	Diegan Coastal Sage Scrub – Disturbed (DCSS-D)	24.49	0.64	0.07	3.38	8.89	**37.46**
	Baccharis Scrub-Disturbed (BS-D)	-	-	-	-	~~2.57~~ 5.08	~~2.57~~ 5.08
	Coastal Sage Scrub – Revegetated (CSS-R)	29.15	12.54	3.22	17.08	0.51	**62.50**
Coastal Sage/Chaparral Mix	Coastal Sage – Chaparral Scrub (CSCS)	1.43	-	3.59	6.15	0.02	**11.19**
Chaparral	Chamise Chaparral (CC)	28.25	-	25.00	26.18	-	**79.43**
	Chamise Chaparral – Disturbed (CC-D)	4.09	-	1.14	0.51	-	**5.74**
	Southern Mixed Chaparral (SMC)	76.71	-	7.46	16.27	0.40	**100.84**
	Southern Mixed Chaparral – Disturbed (SMC-D)	13.54	-	-	-	0.09	**13.63**
	Scrub Oak Chaparral (SOC)	13.09	-	43.33	25.12	-	**81.54**
Grassland	Native Grassland (NG)	8.67	0.34	-	1.86	0.09	**10.97**
	Non-native Grassland (NNG)	6.66	35.35	29.01	8.89	34.66	**114.56**
Alkali Marsh	Alkali Marsh – Revegetated (AM-R)	-	0.29	-	-	-	**0.29**

NCCP Vegetation Community	Holland Vegetation Community	Segment A (acres)	Segment B (acres)	Segment C (acres)	Segment D (acres)	Other Work Areas[1] (acres)	TOTAL (acres)
Freshwater Marsh	Freshwater Marsh (FWM)	0.24	-	0.07	0.17	-	**0.49**
Inland Water	San Diego Mesa Vernal Pool (SDMVP)	-	-	-	0.09	-	**0.09**
	Open Water (OW)[2]	-	-	-	0.92	-	**0.92**
Riparian Scrub	Southern Riparian Scrub	0.23	-	1.37	-	0.12	**1.72**
	Mule Fat Scrub (MFS)	1.10	0.22	0.21	-	0.08	**1.61**
	Southern Willow Scrub	0.89	1.07	-	1.21	0.24	**3.41**
	Tamarisk Scrub (TAM)	-	0.12	0.27	-	-	**0.40**
Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest (SCLORF)	2.86	-	-	-	-	**2.86**
Eucalyptus Forest	Eucalyptus Woodland (EUC)[2]	0.16	4.40	0.55	-	1.46	**6.57**
Disturbed Habitat	Disturbed Habitat (DIST)[2]	19.78	-	0.19	3.41	25.79	**49.17**
N/A	Developed Lands (DEV)[2]	169.98	73.16	4.78	29.05	42.11	**319.09**
	Ornamental (ORN)[2]	62.95	11.87	3.91	8.28	4.25	**91.26**
	Bare Ground (BG)[2]	30.22	0.92	14.79	12.56	6.96	**65.45**

Notes:

1 Other work areas refers to the staging yards (Stonebridge, Stowe, Evergreen Nursery, SR-56, Camino Del Sur, and Carmel Valley Road) and the work areas (Encina Hub and the Mission—San Luis Rey Phase Transposition)

2 This community does not have a Holland (1986) code

4.1.3.2 Special-status Plants

The potential for special-status plant species to occur in the BSA was initially evaluated by performing a query of the CNDDB. Special-status plant species reported to the CNDDB and their potential for occurrence in the BSA are presented in Appendix G, Table G-2. The

probability of occurrence within the BSA was determined for each of these species using the following criteria:

- **Present.** Species detected during recent surveys within the BSA.
- **High Potential.** Species with known recent (i.e., last 25 years) recorded occurrences/populations in the BSA or nearby and for which highly suitable habitat occurs within or adjacent to the BSA. Suitable habitat includes all necessary elements to support the species (e.g., hydrology, soils).
- **Moderate Potential.** Species with known recent (i.e., last 25 years) recorded occurrences/populations in the BSA or nearby; however, suitable habitat in or adjacent to the BSA is marginal to low quality. Suitable habitat could be fragmented or small in size. A "moderate potential" assessment was also made for species with no or few known recent recorded occurrences/populations but that have highly suitable habitat within or adjacent to the BSA.
- **Low Potential.** Species with few known recent (i.e., last 25 years) recorded occurrences/populations nearby, and suitable habitat within the BSA is of marginal or low quality.
- **Absent.** Species with no suitable habitat in the BSA.

A total of 144 special-status plant species have potential to occur within the ~~10~~ 17 USGS quadrangles sampled based on the ~~literate~~ literature review and database queries. Of these 144 species, 21 are present in the BSA, 44 have moderate or high potential to occur, and 79 are either absent or have low potential to occur in the BSA. Special-status plant species present or with moderate or high potential to occur in at least one Proposed Project segment or in at least one other work area in the BSA are identified in Table 4.1-3. Refer to Appendix G, Figure G-1 for mapped special-status plant species locations.

Table 4.1-3 Special-status Species with Moderate or High Potential to Occur in the Biological Survey Area

Species	Status	Potential to Occur (# of species observed) and (work area)[1]				
		Seg. A	Seg. B	Seg C.	Seg. D	Other Work Areas[2]
Plants						
Chaparral sand-verbena *Abronia villosa var. aurita*	1B.1	M	M	M	M	M (EH)
San Diego thorn-mint *Acanthomintha ilicifolia*	FT, SE, 1B.1, NCCP NE, MSCP	M	M	M	M	M (EH)
Spineshrub *Adolphia californica*	2B.1	P (2,464)	P (673)	P (1,887)	P (2,248)	–~~)~~
Del Mar manzanita *Arctostaphylos glandulosa* ssp. *crassifolia*	FE, NCCP, 1B.1, MSCP	–	–	P (4)	P (2)	–

Species	Status	Potential to Occur (# of species observed) and (work area)[1]				
		Seg. A	Seg. B	Seg C.	Seg. D	Other Work Areas[2]
San Diego sagewort *Artemisia palmeri*	4.2	P (44)	–	P (127)	P (24)	–
Dean's milk-vetch *Astralagus deanei*	1B.1	M	–	M	M	–
South coast saltscale *Atriplex pacifica*	1B.2	–	–	–	–	M (EH)
San Diego County sunflower *(Bahiopsis laciniata)*[3]	4.2	P (230)	P (46)	P (60)	P (574)	P (2 at SB) H (EH, MSL, ST, EV)
San Diego goldenstar *Bloomeria clevelandii*	1B.1, NCCP, MSCP	M	M	~~M~~H	P (50)	M (EH)
Thread-leaved brodiaea *Brodiaea filifolia*	FT, SE, 1B.1, MSCP, NCCP	P (70~~62~~)	–	M	M	–
Orcutt's brodiaea *Brodiaea orcuttii*	1B.1, NCCP, MSCP	–	–	~~M~~H	M	–
Brewer's calandrinia *Calandrinia breweri*	4.2	H	–	H	H	–
Round-leaved filaree *California macrophylla*	1B.1	M	–	–	M	M (EH)
Lewis' evening primrose *Camissoniopsis lewisii*	3	M	–	–	–	M (EH)
Wart-stemmed ceanothus *Ceanothus verrucosus*	2B.2, NCCP, MSCP	M	M	H	P (81)	P (1 at MSL)
Long-spined spineflower *Chorizanthe polygonoides* var. *longispina*	1B.2	–	–	H	H	–
Orcutt's spineflower *Chorizanthe orcuttiana*	FE, SE, 1B.1, NCCP NE	–	–	–	–	M (EH)
Long-spined spineflower *Chorizanthe polygonoides* var. *longispina*	1B.2	–	–	H	H	–
Seaside cistanthe *Cistanthe maritima*	4.2	–	–	–	P (570)	P (1 at EH)

Species	Status	Potential to Occur (# of species observed) and (work area)[1]				
		Seg. A	Seg. B	Seg C.	Seg. D	Other Work Areas[2]
Summer holly *Comarostaphylis diversifolia* ssp. *diversifolia*	1B.2	H	–	P (474)	P (194)	P (3 at MSL, 4 at EV)
Small-flowered morning-glory *Convolvulus simulans*	4.2	P (8)	P (3)	H	P (1)	M (EH)
San Diego sand aster *Corethrogyne flaginifolia* var. *incana*	1B.1	–	–	M	M	–
Del mar mesa sand aster *Corethrogyne flaginifolia* var. *linifolia*	1B.1, NCCP, MSCP	–	–	P (34)	H	–
Paniculate tarplant *Deinandra paniculata*	4.2	–	–	M	M	–
Western dichondra *Dichondra occidentalis*	4.2	P (500)	–	H	P (150)	P (8 at EH)
Variegated dudleya *Dudleya variegata*	1B.2, NCCP, MSCP	~~–~~H	–	M	M	–
San Diego button celery *Eryngium aristulatum* ssp. *parishii*	FE, SE, 1B.1, NCCP, MSCP	–	–	P (79)	P (50)	–
Coast barrel cactus *Ferocactus viridescens*	2B.1, NCCP, MSCP	P (204)	P (23)	P (106)	P (626)	–
Palmer's grapplinghook *Harpagonella palmeri*	4.2, NCCP	P (263)	P (322)	H	P (472)	M (EH)
Graceful tarplant *Holocarpha virgata* ssp. *elongata*	4.2	P (149)	P (67)	P (75)	P (10)	M (EH)
Vernal barley *Hordeum intercedens*	3.2	M	M	M	M	–
Decumbent goldenbush *Isocoma menziesii* var. *decumbens*	1B.2	P (449)	P (1,362)	P (188)	P (651)	P (~~,~~3 at SR-56)
San Diego marsh-elder *Iva hayesiana*	2B.2	P (408)	P (526)	P (52)	H	–
Southwestern spiny rush *Juncus acutus* ssp. *leopoldii*	4.2	P (1)	P (443)	M	M	–

Species	Status	Potential to Occur (# of species observed) and (work area)[1]				
		Seg. A	Seg. B	Seg C.	Seg. D	Other Work Areas[2]
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	1B.1	–	–	M	M	–
Robinson's pepper-grass *Lepidium virginicum* var. *robinsonii*	4.3	M	M	M	P (178)	M (MSL, ST)
Small-flowered microseris *Microseris douglasii ssp. platycarpha*	4.2	M	–	M	M	M (EH)
California spineflower *Mucronea californica*	4.2	–	–	–	–	M (EH)
Little mousetail *Myosurus minimus* ssp. *apus*	3.1, NCCP	–	–	M	M	–
Spreading navarretia *Navarretia fossalis*	FT, 1B.1, NCCP, MSCP	–	–	M	M	–
~~Spreading~~ Prostrate vernal pool navarretia *Navarretia prostrata*	1B.1	–	–	M	M	–
Chaparral nolina *Nolina cismontana*	1B.2	M	M	–	–	–
California adder's tongue *Ophioglossum californicum*	4.2	M	M	H	H	–
Golden-rayed pentachaeta *Pentachaeta aurea* ssp. *aurea*	4.2	M	M	M	M	–
Torrey pine *Pinus torreyana* ssp. *torreyana*	1B.2, NCCP, MSCP	–	–	–	P (30)	P (6 at SR-56)
Chaparral rein orchid *Piperia cooperi*	4.2	M	–	M	M	–
San Diego mesa mint *Pogogyne abramsii*	FE, SE, 1B.1, NCCP, MSCP	–	–	H	H	–
Fish's milkwort *Polygala cornuta var. fishiae*	4.3	M	–	M	M	L (EV, SB, MSL)
Delta woolly-marbles *Psilocarphus brevissimus var. multiflorus*	4.2	–	–	H	H	–

Species	Status	Potential to Occur (# of species observed) and (work area)[1]				
		Seg. A	Seg. B	Seg C.	Seg. D	Other Work Areas[2]
Nuttall's scrub oak *Quercus dumosa*	1B.1	P (57)	–	P (731)	P (872)	P (5 at MSL, 2 at EV)
Ashy spike-moss *Selaginella cinerascens*	4.1	H	H	H	H	P (5 at EH)
Chaparral ragwort *Senecio aphanactis*	2B.2	M	–	H	H	–
Rush like bristelweed *Xanthisma junceum*	4.3	M	–	–	–	–
Wildlife						
Invertebrates						
~~Vernal pool fairy shrimp *Branchinecta lynchi*~~	~~FT~~	~~–~~	~~–~~	~~H~~	~~H~~	~~–~~
San Diego fairy shrimp *Branchinecta sandiegonensis*	FE, NCCP	–	–	H	H	–
Quino checkerspot butterfly *Euphydras editha quino*	FE, QCB HCP	M	L	L	L	M (SB)
Amphibians						
Western spadefoot *Spea hammondii*	SSC, NCCP	–	–	H	H	–
Reptiles						
Silvery legless lizard *Anniella pulchra pulchra*	SSC	M	M	M	M	M (EH)
Belding's orange-throated whiptail *Aspidoscelis hyperythra beldingi*	SSC, NCCP	P (1)	H	H	H	H (EH)
Rosy boa *Charina trivirgata*	NCCP	M	–	M	M	–
Red-diamond rattlesnake *Crotalus ruber*	SSC, NCCP	H	M	H	H	M (EH)
San Diego banded gecko *Coleonyx variegatus abbotti*	NCCP	M	M	M	M	–
San Diego ringneck snake *Diadophis punctatus similis*	NCCP	H	H	H	H	–
Coast horned lizard *Phrynosoma blainvillii*	SSC, NCCP	H	H	H	H	H (EH)
Coronado skink *Plestiodon skiltonianus interparietalis*	SSC, NCCP	H	H	H	H	–

Species	Status	Potential to Occur (# of species observed) and (work area)[1]				
		Seg. A	Seg. B	Seg C.	Seg. D	Other Work Areas[2]
Coast patch-nosed snake *Salvadora hexalepis virgultea*	SSC, NCCP	H	H	H	H	–
Two-striped garter snake *Thamnophis hammondii*	SSC, NCCP	M	M	H	H	M (EH)
California red-sided gartersnake *Thamnophis sirtalis infernalis*	SSC	–	–	–	M	–
Birds						
Cooper's hawk *Accipiter cooperii*	WL, NCCP	P (5)	H	P (1)	P (3)	H
Sharp-shinned hawk *Accipiter striatus*	WL	M	M	M	M	M (all work areas)
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	WL, NCCP	P (13)	P (2)	P (4)	P (26)	H (EH)
Grasshopper sparrow *Ammodramus savannarum*	SSC, NCCP	M	P ~~M~~	M	–	–
Bell's sage sparrow *Amphispiza belli belli*	WL, NCCP	H	H	H	H	–
Burrowing owl *Athene cunicularia*	SSC, NCCP	M	M	–	M	–
Coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	SSC, NCCP	M	M	M	M	–
Vaux's swift *Chateura vauxi*	SSC	H	H	P (1)	P (1)	H
Northern harrier *Circus cyaneus*	SSC, NCCP	H	H	H	H	H (all work areas except EV)
Clark's marsh wren *Cistothorus palustris clarkae*	SSC	–	–	–	M	P (EH)–
Yellow warbler *Dendroica petechia brewsteri*	SSC	P–	–	P~~M~~	M	P (EH)–
White-tailed kite *Elanus leucurus*	CFP	M	H	H	M	–

Species	Status	Potential to Occur (# of species observed) and (work area)[1]				
		Seg. A	Seg. B	Seg C.	Seg. D	Other Work Areas[2]
California horned lark *Eremophila alpestris actia*	WL	H	H	H	P	H (all work areas except EV)
Merlin *Falco columbarius*	WL	M	M	M	M	M (all work areas except EV)
Yellow-breasted chat *Icteria virens*	SSC	P–	–	M	M	P (EH)–
Loggerhead shrike *Lanius ludovicianus*	SSC	P (1)	M	M	M	M (EH)
Coastal California gnatcatcher *Polioptila californica californica*	FT, SSC, NCCP	P (56-6042-46 throughout Segments A thru D)				P H (12-13 at EH, 1 at SR-56)
Western bluebird *Sialia mexicana*	NCCP	P (1)	M	M	M	M (all work areas except EV)
Least bell's vireo *Vireo bellii pusillus*	FE, SE, NCCP	–	–	M	M	H (EH)
Mammals						
Pallid bat *Antrozous pallidus*	SSC	M	M	M	M	M (all work areas except EV)
Dulzura pocket mouse *Chaetodipus californicus femoralis*	SSC, NCCP	H	–	H	H	M (EH)
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	SSC, NCCP	H	H	H	H	H (EH)
Western mastiff bat *Eumops perotis*	SSC	M	M	M	M	M
Western red bat *Lasiurus blossevillii*	SSC	M	M	M	M	M (all work areas except EV)
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	SSC, NCCP	H	P H	H	H	H (EH)
San Diego desert woodrat *Neotoma lepida intermedia*	SSC, NCCP	H	–	H	H	–
Big free-tailed bat *Nyctinomops macrotis*	SSC	–	–	–	M	–

Species	Status	Potential to Occur (# of species observed) and (work area)[1]				
		Seg. A	Seg. B	Seg C.	Seg. D	Other Work Areas[2]
Southern mule deer *Odocoileus hemionus*	NCCP	P (1)	M	H	H	–
Southern grasshopper mouse *Onychomys torridus ramona*	SSC, NCCP	H	H	H	H	H (EH)
Mountain lion *Puma concolor*	NCCP	M	M	M	M	–

Status:

NCCP = Current SDG&E Natural Community Conservation Plan Covered Species (Subregional NCCP coverage may ~~is assumed to~~ be inapplicable; see *Section 4.1.2.3*)

NE = SDG&E Narrow Endemic Species

HCP = SDG&E Low-Effect Habitat Conservation Plan for Quino checkerspot butterfly

MSCP = Covered species under the Multiple species Conservation Plan

Federal/State Listed:

FE: Federally listed as endangered

FT: Federally listed as threatened

SE: State-listed as endangered

SR: State rare

Other:

CFP = California Department of Fish and Wildlife Fully Protected Species

SSC = California Department of Fish and Wildlife Species of Special Concern

WL = California Department of Fish and Wildlife Watch List

California Rare Plant Ranks:

1B: Plants Rare, Threatened, or Endangered in California and Elsewhere

2B: Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere

3: Plants About Which We Need More Information – A Review List

4: Plants of Limited Distribution – A Watch List

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

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

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

Notes:

[1] General Findings:

P (present) – Species detected during Proposed Project surveys.

A (absent) – Not detected during Proposed Project surveys, and suitable habitat not present.

L (low potential) – Not detected during Proposed Project surveys, and extent of potentially suitable habitat is very limited.

M (moderate potential) – Not detected during Proposed Project surveys. Potentially suitable habitat is present (and may be limited), and species is not known to occur within the vicinity.

H (high potential) – Not detected during Proposed Project surveys. Suitable habitat present and species known to occur within the vicinity.

[2] Other work areas includes Encina Hub (EH), Mission—San Luis Rey Phase Transposition (MSL), Evergreen Nursery staging yard (EV), SR-56 staging yard (SR-56), Camino Del Sur staging yard (CDS), Carmel Valley road staging yard (CVR) Stonebridge staging yard (SB), and Stowe staging yard (ST). Note that the work area is specified when the potential for a species to occur is different than other work areas. If no work area is specified, the potential to occur is the same in all work areas.

[3] A synonym for this species is San Diego County viguiera (*Viguiera laciniata*)

Focused Special-status Plant Habitat Assessments
In addition to the focused special-status plant surveys in late summer/fall 2013, September/October 2013, April 2014, and May 2014, there were habitat assessments performed for three special-status plants: California Orcutt grass; thread-leaved brodiaea; willowy monardella. Additional assessments for these three species were performed because potentially suitable habitat for each species was identified in reconnaissance-level surveys.

The results for these assessments are discussed below.

California Orcutt Grass
The database query showed a single CNDDB occurrence for California Orcutt grass adjacent to the westernmost portion of the BSA, southeast of the Peñasquitos Substation. This occurrence may be related to vernal pool restoration activities that included the introduction of California Orcutt grass. The last known observation of the California Orcutt grass at this reported location was in 2007 (CNDDB 2014), and this population is presumed to be extant although there is no current data to support this (Busby 2014g).

A focused search for California Orcutt grass within the BSA, was conducted during the 2013 and 2014 plant surveys. The area around the Peñasquitos substation was given additional attention in the search because the CNDDB showed a location for this species at the western end of the alignment, and a vernal pool was mapped at the western end of the alignment. In fall 2014, it was determined that only one vernal pool immediately east of the Peñasquitos Substation provides potentially suitable habitat for California Orcutt grass. That pool was re-visited on October 21, 2014. It was determined that the pool provides very low quality habitat for the species, and no evidence of California Orcutt grass was present. Therefore, it was determined that there is low potential for this species to occur within the BSA (Busby 2014g).

Thread-leaved Brodiaea
Suitable habitat for thread-leaved brodiaea was mapped according to the results of the focused habitat assessment. Approximately 4.49 acres of suitable habitat for thread-leaved brodiaea was identified within the BSA in two primary locations within Segment A: (1) within the Black Mountain Open Space Preserve, and (2) near the junction of Carmel Valley Road and Black Mountain Road (Busby 2014e). A total of 62 flowering individuals were documented in the BSA in spring 2014 within the suitable habitat mapped within the Black Mountain Open Space Preserve. There is also moderate potential for this species to occur within Segments C and D.

A focused thread-leaved brodiaea survey was conducted during spring 2015 (Busby 2015r). Eight additional thread-leaved brodiaea individuals were identified in Segment A of the Proposed Project alignment.

Willowy Monardella
No willowy monardella were observed during any of the surveys, and there was no additional potentially suitable habitat identified found (Busby 2014f). Therefore, this species is not expected to occur within the BSA (Busby 2014f).

4.1.3.3 Special-status Wildlife

The potential for special-status wildlife species to occur in the BSA was initially evaluated by performing a query of the CNDDB. Special-status wildlife species reported to the CNDDB within the 10 USGS quadrangles surrounding the BSA, and their potential for occurrence in the BSA, are presented in Table 4.1-3. The probability of occurrence within the BSA was determined for each of these species using the following criteria:

- **Present.** Species detected during recent surveys within the BSA.
- **High Potential.** Species with known recent (i.e., last 25 years) recorded occurrences/populations in the BSA or nearby and for which highly suitable habitat occurs within or adjacent to the BSA. Suitable habitat includes all necessary elements to support the species (e.g., vegetation composition and structure)
- **Moderate Potential.** Species with known recent (i.e., last 25 years) recorded occurrences/populations in the BSA or nearby; however, suitable habitat in or adjacent to the BSA is marginal to low quality. Suitable habitat could be fragmented or small in size. A "moderate potential" assessment was also made for species with no known recent recorded occurrences/populations but that have highly suitable habitat within or adjacent to the BSA.
- **Low Potential.** Species with no known recent (i.e., last 25 years) recorded occurrences/populations nearby, and suitable habitat within the BSA is of marginal or low quality.
- **Absent.** Species with no suitable habitat in the BSA.

A total of 129 special-status wildlife species have potential to occur within the ~~10~~ 17 sampled USGS quadrangles based on the ~~literate~~ literature review and database queries. Of these 129 species, nine are present in the BSA, 48 have moderate or high potential to occur, and 72 are either absent or have low potential to occur (or are migratory only or winter visitors that do not breed in the BSA).

Special-status wildlife species present, or with moderate or high potential to occur in at least one Proposed Project segment or in at least one other work area of the BSA are identified in Table 4.1-3.

Focused Special-status Wildlife Surveys

In addition to general sensitive wildlife surveys performed in late summer/fall 2013 and spring 2014, focused special-status wildlife surveys were performed. The results for these focused surveys are discussed below.

Coastal California Gnatcatcher

A focused survey for coastal California gnatcatcher was conducted by USFWS-permitted biologists in the late summer/fall 2013 along Segments A through D and the Stowe and Stonebridge staging yards (Busby 2014b). The survey identified a total of 343.78 acres of potentially suitable habitat within the BSA. During the focused survey, an estimated 42 and 46 individual gnatcatchers were observed along Segments A through D. This species was not

observed in the Stowe and Stonebridge staging yards. There is very low potential for this species to occur at the Stowe and Stonebridge staging yards because of limited suitable habitat.

Since that survey, the Encina Hub work area, Mission—San Luis Rey Phase Transposition site, Carmel Valley Road, Camino Del Sur, SR-56, and Evergreen nursery staging yards were added to the Proposed Project. A focused survey for coastal California gnatcatcher was conducted by USFWS-permitted biologists at all of those sites, except for Encina Hub in February, March, and April 2015 (Busby 2015g). A total of 14 additional individuals were observed on Segments A through D and one individual was observed at the SR-56 staging yard.

~~There is a high potential for the coastal California gnatcatcher to occur in the Encina Hub site because this site supports the species' Diegan coastal sage scrub habitat.~~ Coastal California gnatcatcher are present within the Encina Hub Site (Busby 2015h). There is very low potential for this species to occur at Mission—San Luis Rey Phase Transposition work areas because of limited suitable habitat. This species is considered absent from the Evergreen, Camino Del Sur, and Carmel Valley Road~~, and SR-56~~ staging yards because there is no suitable habitat for this species.

Quino Checkerspot Butterfly

A habitat assessment for the QCB was performed by Helix Environmental Planning, Inc. (Helix) in February 2015. Helix found a total of 110.4 acres of potentially suitable habitat for the QCB. This is a conservative estimate because portions of the BSA could not be accessed during the on-the-ground field work, and those areas were assumed to be potentially suitable. California plantain (*Plantago erecta*), a larval host plant species for the QCB, was documented in two locations and consisted of hundreds to thousands of individuals.

Burrowing Owl

A burrowing owl habitat assessment was performed in winter of 2014 along Segments A, B, C, D, and Stowe, Stonebridge, and SR-56 staging yards (Busby 2015k~~e~~). Approximately 303 acres of potentially suitable habitat was identified along Segments A, B, C, and D of the Proposed Project alignment and at the SR-56 staging yard; no suitable habitat was identified at the Stowe or Stonebridge staging yards. No burrowing owls or burrowing owl signs were observed during the habitat assessment.

A burrowing owl habitat assessment was performed in the Encina Hub in January 2015 (Busby 2015me). The Encina Hub site has 4.05 acres of suitable habitat for burrowing owl.

A burrowing owl habitat assessment was performed in the Evergreen Nursery and Camino Del Sur staging yards in January and February 2015 (Busby 2015n~~f~~). The entire Camino Del Sur staging yard has suitable habitat for burrowing owl. No suitable burrowing owl habitat was identified within the Evergreen Nursery staging yard; however, some suitable habitat is located within the vicinity of the Evergreen Nursery staging yard.

A burrowing owl habitat assessment was not performed in the area near the Mission—San Luis Rey Phase Transposition site or the Carmel Valley Road staging yard. It is assumed that both

the ~~Based on the vegetation communities mapped~~ Mission—San Luis Rey Phase Transposition work areas and the Carmel Valley Road staging yard site provide suitable habitat for burrowing owl based on the vegetation communities mapped in the area (i.e., non-native grassland and disturbed habitat)~~, these locations are considered to support potentially suitable burrowing owl habitat~~. Wintering surveys will be performed during the 2015/2016 winter season at the Mission—San Luis Rey Phase Transposition site and Carmel Valley Road staging yard.

Overall, there is low to moderate potential for the burrowing owl to use potentially suitable habitat within the entire BSA.

4.1.3.4 Sensitive Habitat

Of the 25 vegetation communities and land cover types identified in the BSA, 18 vegetation communities and land cover types are classified as sensitive habitat.

The following sensitive habitats are present in the BSA:

- Alkali Marsh – Revegetated
- Chamise Chaparral
- Chamise Chaparral – Disturbed
- Coastal Sage – Chaparral Scrub
- Coastal Sage Scrub – Revegetated
- Diegan coastal sage scrub
- Diegan Coastal Sage Scrub – Disturbed
- Freshwater Marsh
- Mule Fat Scrub
- Native Grassland
- Non-native Grassland
- San Diego Mesa Vernal Pool
- Scrub Oak Chaparral
- Southern Mixed Chaparral
- Southern Mixed Chaparral – Disturbed
- Southern Coast Live Oak Riparian Forest
- Southern Riparian Scrub
- Southern Willow Scrub

Table 4.1-2 summarized the area of these sensitive habitats within the BSA. The locations of these sensitive habitats are mapped in Appendix G, Figure G-1.

4.1.3.5 Environmentally Sensitive Habitat Areas

Nine of the 18 vegetation communities within the Proposed Project BSA that are classified as sensitive habitat are also classified as ~~Environmentally Sensitive Habitat Areas~~ potential ESHA in the coastal zone, as follows:

- Chamise Chaparral
- Coastal Sage – Chaparral Scrub
- Coastal Sage Scrub – Revegetated
- Diegan coastal sage scrub
- Native Grassland
- Non-native Grassland
- Scrub Oak Chaparral
- Southern Mixed Chaparral
- Southern Willow Scrub

Table 4.1-2 summarized the acreages of these ~~Environmentally Sensitive Habitat Areas~~potential ESHA within the BSA. The locations of ~~Environmentally Sensitive Habitat Areas~~ potential ESHA are mapped in Appendix G, Figure G-1.

4.1.3.6 Jurisdictional Waters and Wetlands

Jurisdictional Delineation

Aquatic resources under the regulation of USACE, CDFW, CCC, and RWQCB were identified within the BSA, which includes a 500-foot-wide survey corridor for the transmission line alignment, a 20-foot buffer along both sides of access roads, and a 50-foot buffer around staging yards and other work areas. No potentially jurisdictional waters were observed in the survey areas for other staging yards or the Mission—San Luis Rey Phase Transposition site. The acreages of potentially jurisdictional waters and wetlands occurring in the BSA are listed in Table 4.1-4.

Table 4.1-4 Potential Jurisdictional Waters and Wetlands in BSA

Dominant Vegetation Type	Segment A	Segment B	Segment C	Segment D	Encina Hub	Camino Del Sur staging yard	TOTAL
USACE							
Alkali marsh	–	0.17	–	–	–	–	**0.17**
Freshwater marsh	0.05	–	0.04	0.17	–	–	**0.26**
Open water	–	–	–	0.91	–	–	**0.91**
Southern riparian scrub	0.05	–	0.16	–	0.05	–	**0.26**
Mule Fat scrub	0.15	0.01	0.06	–	–	–	**0.22**
Southern willow scrub	0.19	0.21	–	0.71	–	–	**1.10**
Southern coast live oak riparian forest	1.75	–	–	–	–	–	**1.75**
Jurisdictional drainages	1.67	0.94	0.80	1.13	0.01	<0.01	**4.56**
TOTAL	**3.86**	**1.33**	**1.07**	**2.92**	**0.06**	**<0.01**	**9.23**
RWQCB							
Alkali marsh	–	0.17	–	–	–	–	**0.17**
Freshwater marsh	0.05	–	0.04	0.17	–	–	**0.26**
San Diego Mesa Vernal Pool	–	–	–	0.03	–	–	**0.03**
Open water	–	–	–	0.91	–	–	**0.91**

Dominant Vegetation Type	Segment A	Segment B	Segment C	Segment D	Encina Hub	Camino Del Sur staging yard	TOTAL
Southern riparian scrub	0.05	–	0.16	–	0.05	–	**0.26**
Mule Fat scrub	0.15	0.01	0.06	–	–	–	**0.22**
Southern willow scrub	0.19	0.21	–	0.71	–	–	**1.10**
Southern coast live oak riparian forest	1.75	–	–	–	–	–	**1.75**
Jurisdictional drainages	1.69	0.94	0.85	1.38	0.01	<0.01	**4.88**
TOTAL	**3.88**	**1.33**	**1.12**	**3.20**	**0.06**	**<0.01**	**9.59**
CDFW							
Alkali marsh	–	0.17	–	–	–	–	**0.17**
Freshwater marsh	0.05	–	0.06	0.17	–	–	**0.28**
Open water	–	–	–	0.92	–	–	**0.92**
Southern riparian scrub	0.22	–	1.16	–	0.12	–	**1.50**
Mule Fat scrub	0.80	0.20	0.11	–	–	–	**1.11**
Southern willow scrub	0.54	0.57	–	0.98	–	–	**2.09**
Southern coast live oak riparian forest	2.35	–	–	–	–	–	**2.35**
Jurisdictional drainages	2.11	1.10	1.95	2.10	0.01	<0.01	**7.27**
TOTAL	**6.07**	**2.04**	**3.27**	**4.16**	**0.14**	**<0.01**	**15.68**
CCC							
Southern riparian scrub	–	–	–	–	0.12	–	**0.12**
Mule Fat scrub	–	–	–	–	0.08	–	**0.08**
Southern willow scrub	–	–	–	0.02	–	–	**0.02**

Dominant Vegetation Type	Segment A	Segment B	Segment C	Segment D	Encina Hub	Camino Del Sur staging yard	TOTAL
Jurisdictional drainages	–	–	–	1.64	0.02	–	**1.66**
TOTAL	**–**	**–**	**–**	**1.66**	**0.22**	**–**	**1.88**

Notes:

[1] Includes Chamise Chaparral, Coastal Sage Scrub – Revegetated, Diegan Coastal Sage Scrub, Diegan Coastal Sage Scrub – Disturbed, Native Grassland, So. Mixed Chaparral, and Scrub Oak Chaparral

[2] Includes Eucalyptus Woodland, Nonnative Grassland, and Tamarisk Scrub

[3] Includes Bare Ground, Developed Lands, Disturbed Habitat, and Ornamental

Vernal Pools and Road Pools

In addition to the jurisdictional features described above, other jurisdictional features (vernal pools ~~and road pools~~) and potential jurisdictional features (road pools) were mapped in Segments C and D of the Proposed Project during CPUC's field verification of the wetland delineation, but the areas for these jurisdictional features were not recorded (Helix 2015~~jb~~). A total of 143 potential vernal pools and road pools were identified within the Segments C and D of the BSA, 43 of which were dry, 33 of which were moist, and 46 of which contained ponded water. Figure G-2 in Appendix G presents the locations and concentrations of the vernal pools and road pools within the Proposed Project BSA.

4.1.3.7 Critical Habitat

Critical habitat under the federal ESA generally consists of: (1) the specific areas within the geographic area, occupied by the federally threatened or endangered species at the time of listing, that contain the physical or biological features that are essential to the conservation of the listed species and that may require special management consideration or protection, and (2) specific areas outside the geographic area occupied by a federally threatened or endangered species at the time of listing that are essential for the conservation of the listed species (USFWS 2014a).

Critical habitat within a 5-mile buffer of the Proposed Project alignment and associated Proposed Project components including the Encina Hub work area, the Mission—San Luis Rey Phase Transposition sites, staging yards, and access roads were considered. Table 4.1-5 summarizes the closest proximities of critical habitat to the Proposed Project alignment and associated components within the 5-mile buffer.

Figure 4.1-2 shows a map of the critical habitat within a 5-mile buffer of the Proposed Project. The Mission—San Luis Rey Phase Transposition work areas are not pictured in Figure 4.1-2 because there is no critical habitat located within these work areas.

Table 4.1-5 Proximity of Critical Habitat to Proposed Project

Species	Distance from Proposed Project Alignment/Component
Plants	
San Diego thornmint *Acanthomintha ilicifolia*	0.25 mile north of Segment A and south of Segment D, and 3 miles east of Segment A
Willowy monardella *Monardella viminea*	2.5 miles southeast of the Sycamore Substation
Spreading navarretia *Navarretia fossalis*	5 miles southeast of Segment D
Wildlife	
San Diego fairy shrimp *Branchinecta sandiegonensis*	Located within Segment C
Western Snowy Plover *Charadrius alexandrinus nivosus*	2 miles northwest of the Peñasquitos Substation
Least Bell's Vireo *Vireo bellii pusillus*	4.5 miles south of the Sycamore Substation
Coastal California gnatcatcher *Polioptila californica californica*	Located approximately 1 mile east of ~~within~~ the Encina Hub work area

4.1.3.8 Preserve Areas

Preserve areas within the Proposed Project region are shown on Figure 4.1-3. Portions of Segments A and B lie within the Black Mountain Open Space Preserve. The southern portion of Segment C falls within the Deer Canyon Environmental Mitigation Preserve LLC and Del Mar Mesa Preserve, and most of Segment D lies within the Los Peñasquitos Canyon Preserve~~.~~ under the City of San Diego's MSCP. Preserve areas are mostly purchased with grant-funds for conservation or with mitigation funds from development projects. The Proposed Project would occur within an existing transmission line corridor through these preserve areas.

4.1.3.9 Wildlife Corridors

Wildlife corridors are landscape features that connect suitable habitat in regions otherwise fragmented by rugged terrain, changes in vegetation, or human development. There are two types of wildlife corridors: local and regional. Local corridors provide animals with access to resources such as food, water, and shelter. Wildlife can use these corridors to travel from riparian to upland habitats and back, for example. Regional corridors allow for wildlife movement between large core areas of habitat that are regionally important. They include major creeks and rivers, ridges, valleys, and large swaths of undeveloped land.

Wildlife corridors are essential to maintain populations of healthy and genetically diverse plant and wildlife species. At a minimum, wildlife corridors promote colonization of habitat by, and genetic variability for, both plant and wildlife species by connecting fragments of habitat that

Figure 4.1-2 Critical Habitat within the Proposed Project Vicinity (Revised)

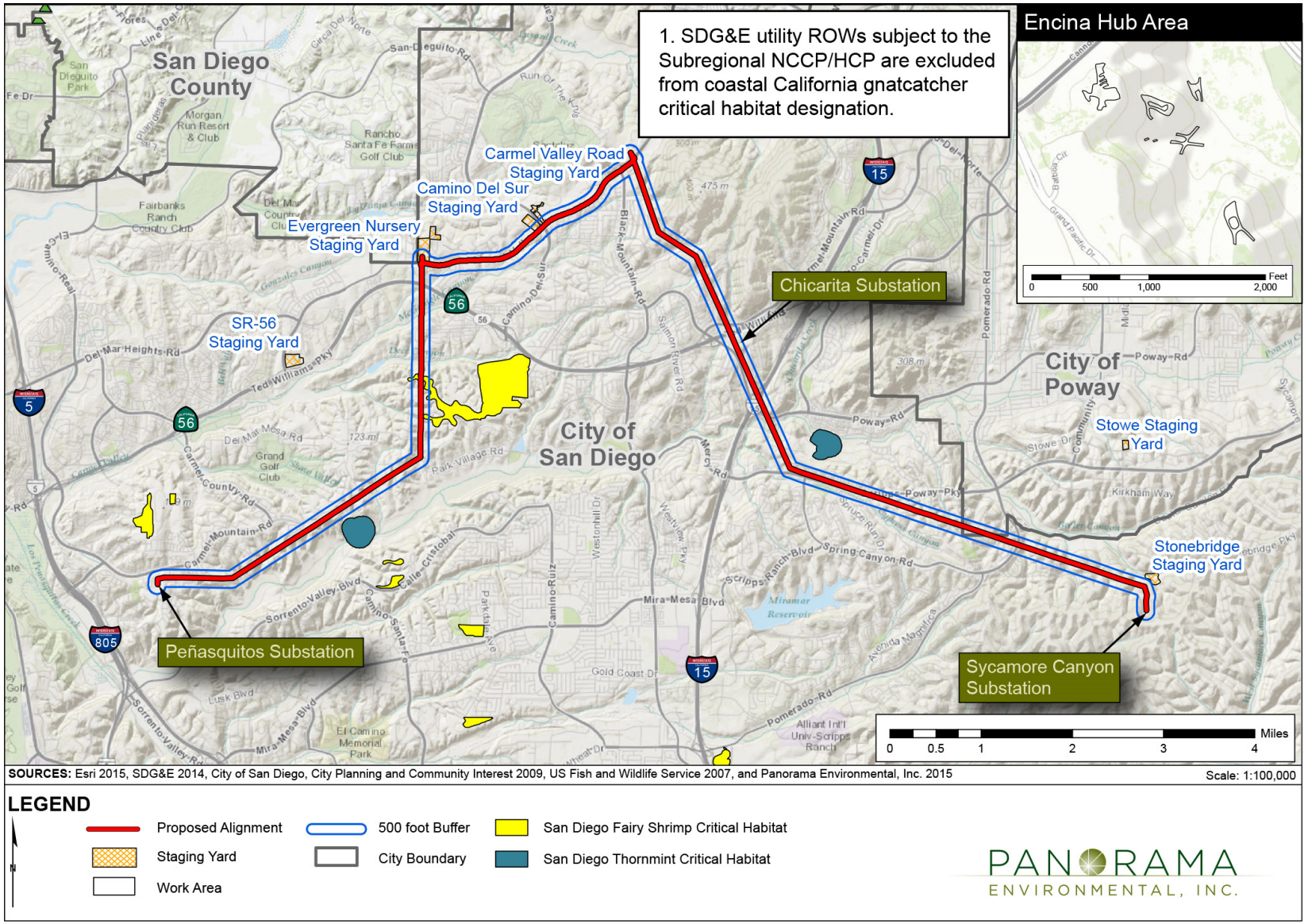
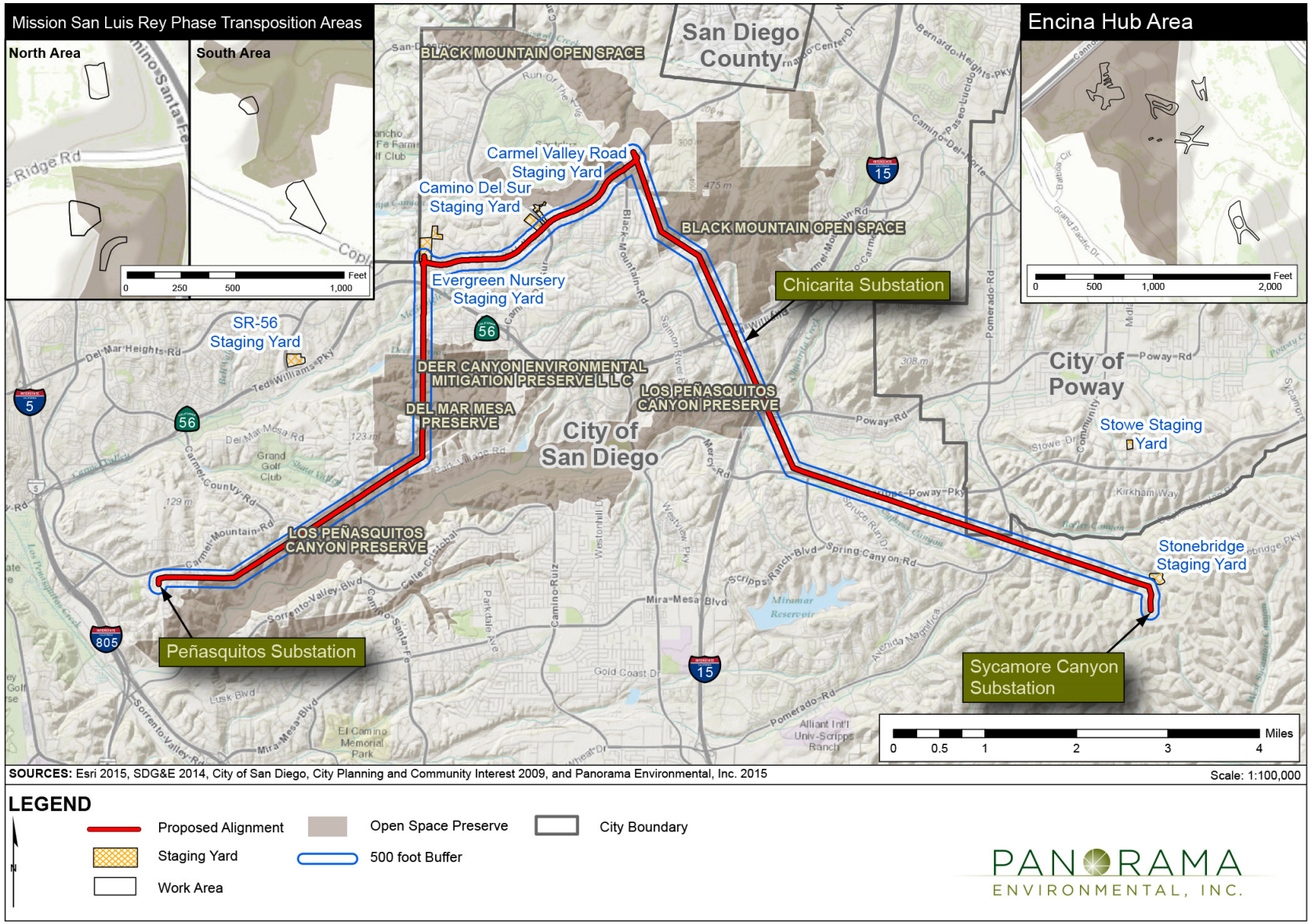


Figure 4.1-3 Preserve Area within the Proposed Project Vicinity



are separated by otherwise unsuitable habitats. Because the isolation of plant and wildlife populations can have harmful effects on local and regional species' populations and may contribute significantly to local species extinctions, wildlife corridors are important to sustain species distributions within these habitat fragments. Wildlife corridors are considered sensitive by local, State, and federal resource and conservation agencies because these corridors allow wildlife to move between adjoining open space areas that are becoming increasingly isolated.

Black Mountain Open Space Preserve is considered a core resource area, and one wildlife corridor links to the Black Mountain Open Space Preserve. That corridor includes Del Mar Mesa Preserve (City of San Diego ~~2014~~2012a). Black Mountain Open Space Preserve and Del Mar Mesa Preserve, along with other corridors connecting to Black Mountain Open Space Preserve ultimately allow for wildlife connections to Poway, Del Mar, Carlsbad, Santa Fe Valley, and other core resource areas (City of San Diego ~~2014~~2012a). As stated in Section 4.1.3.8, portions of Segments A and B traverse through the southwestern edges of Black Mountain Open Space Preserve, and the southern half of Segment C is within the Del Mar Mesa Preserve (Figure 4.1-3).

Wildlife corridors also exist between Del Mar Mesa Preserve and surrounding areas including Deer Canyon that connects with other core resource/and corridor areas farther north such as McGonigle Canyon, which ultimately facilitate movement into Black Mountain Open Space Preserve. A portion of Segment C of the Proposed Project crosses Deer Canyon (Figure 4.1-3). Continuing eastward from Deer Canyon is Carmel Valley that connects with the southwest corner of the Del Mar Mesa Preserve that connects with Los Peñasquitos Canyon Preserve (RECON Environmental, Inc. 2011) to the south. Los Peñasquitos Canyon is a regional corridor linking coastal habitats to inland habitats on Black Mountain and in Poway (City of San Diego 1997). Most of Segment D of the Proposed Project travels along the northern edge of Los Peñasquitos Canyon Preserve (Figure 4.1-3).

4.1.4 Applicable Regulations, Plans, and Standards

4.1.4.1 Federal

Endangered Species Act

The federal ESA provides protection for plants and animals listed as threatened or endangered by USWFS and the National Oceanic and Atmospheric Administration (NOAA) Marine Fisheries Service. Section 9 of the ESA (50 CFR 17.3) prohibits the take, possession, sale, or transport of any federal ESA-listed species. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, capture, collect, or attempt to engage in any such conduct" (16 U.S. Code [USC] Section 1532(19)). Federal regulation 50 CFR 17.3 further defines the term harm in the take definition to mean any act that actually kills or injures a federally listed species, including significant habitat modification or degradation. For plants, the federal ESA prohibits removing, possessing, maliciously damaging, or destroying any listed plant on areas under federal jurisdiction, and removing, cutting, digging up, damaging, or destroying any listed plant on non-federal land in knowing violation of state law (16 USC Section 1538(a)(2)(B)).

The federal ESA requires the federal government to designate critical habitat for any species listed under the federal ESA but also allows areas to be excluded from critical habitat (16 USC Section 1533(b)(2)). Critical habitat is a specific area(s) that is essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may also include specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation.

Section 7 of the federal ESA requires federal agencies to consult with USFWS and/or NOAA Marine Fisheries Service for any federal activity that may affect any federally listed species or its critical habitat. Informal consultation may precede, and obviate the need for formal consultation if USFWS and/or NOAA Marine Fisheries Service concur that the proposed agency action is not likely to adversely affect listed species. In the formal consultation process, USFWS and/or NOAA Marine Fisheries Service must issue a Biological Opinion as to the potential for effect to listed species. USFWS and/or NOAA Marine Fisheries Service may issue an incidental take permit, allowing take of the species that is incidental to an authorized activity, provided that the action will not jeopardize the continued existence of the species.

Section 10(a) of the ESA provides for issuance of incidental take permits for private actions that have no federal involvement, through the development of a Habitat Conservation Plan (HCP). The process for obtaining an incidental take permit has three primary phases: (1) the HCP development phase; (2) the formal permit processing phase; and (3) the post-issuance phase. During the HCP development phase, the project applicant prepares a plan that integrates the Proposed Project or activity with the protection of listed species. An HCP submitted in support of an incidental take permit application must include the following information:

- Impacts likely to result from the proposed taking of the species for which permit coverage is requested
- Measures that will be implemented to monitor, minimize, and mitigate impacts
- Funding that will be made available to undertake such measures and procedures to deal with unforeseen circumstances
- Alternative actions considered that would not result in take
- Additional measures USFWS may require as necessary or appropriate for purposes of the plan

Effects to federally listed species with no lead federal agency require preparation of an HCP, management agreement, and an analysis prepared in compliance with NEPA.

SDG&E has an approved subregional HCP under the current NCCP referred to as SDG&E's Subregional NCCP that covers various plants and wildlife species and sensitive habitats. SDG&E also has a Low-effect HCP specifically for the QCB. These HCPs are discussed further in Section 4.1.4.3.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) provides protection for migratory birds. Conditions for permits to "take" migratory birds (as defined in the MBTA) are set forth in 50 CFR Part 13

[General Permit Procedures] and 50 CFR Part 21 [Migratory Bird Permits]). Unless expressly authorized in the regulations or by permit, activities such as hunting, pursuing, capturing, killing, selling, and shipping migratory birds are prohibited. The MBTA allows USFWS to issue permits to qualified applicants for the following types of activities:

- Falconry
- Raptor propagation
- Scientific collecting
- Special purposes (rehabilitation, education, migratory game bird propagation, and salvage)
- Take of predatory birds, taxidermy, and waterfowl sale and disposal

This protection extends to all migratory birds, parts, nests, and eggs. The full list of species protected under this act is found in 50 CFR 10.13.

Bald Eagle and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 USC 668-668c), prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

"Disturb" means: "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment. Bald and golden eagles are considered absent from the BSA (see Appendix G, Table G-3).

Clean Water Act of 1977

The Clean Water Act (CWA) is intended to restore and maintain the chemical, physical, and biological integrity of the nation's waters (33 CFR 1251). The regulations implementing the CWA protect "Waters of the United States," including streams and wetlands (33 CFR 328.3). USACE and the EPA have jurisdiction over waters of the U.S. Waters of the U.S. include areas classified as Wetlands, Navigable Water, or Other Waters and include marine waters, tidal areas, stream channels, and associated wetlands. Under federal regulations, wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a

frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3(b)).

Section 404 of the CWA requires an Individual Permit for significant impacts to waters of the U.S., and the USACE has issued 52 separate Nationwide Permits for different types of projects with minor impacts to waters of the U.S. It is anticipated that the Proposed Project would qualify for use of one or more Nationwide Permits.

Coastal Zone Management Act of 1972
The Coastal Zone Management Act of 1972 (CZMA; 16 USC 1451 through 1464, Chapter 33) is administered by NOAA's Office of Ocean and Resource Management and was established as a national policy to preserve, protect, develop, and – where possible – enhance or restore the coastal zone in the U.S. The federal consistency provision, Section 307 of the CZMA, encourages states to join the Coastal Zone Management Program (CZMP), which takes a comprehensive approach to coastal resource management by balancing the competing and/or conflicting demands of coastal resource use, economic development, and conservation and allows states to issue the applicable permits. California has a federally approved CZMP, and the CZMA is administered by the CCC. Therefore, the CZMP and permit requirements are discussed further in CCA and CZMP below.

4.1.4.2 State

California Endangered Species Act
CESA provides protection for candidate plants and animal species as well as those listed as threatened or endangered by CDFW. The Act prohibits the take of any such species unless authorized; however, California case law has not interpreted habitat destruction, alone, as included in the state's definition of take. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" (Cal. Fish and Game Code §86). CDFW administers the act and authorizes take through Section 2081 agreements, Section 2080.1 consistency determinations (for species that are also listed under the federal ESA) or NCCPs.

California Fish and Game Code
California Fish and Game Code requires State agencies to comply with regulations that promote the protection and conservation of threatened and endangered species. Regulations in place include:

- **California Species Preservation Act.** Provides for the protection and enhancement of listed species in California
- **Raptor Protection.** Prohibits killing or raptor species and destruction of raptor nests
- **Protection for Birds.** Makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird; it is also unlawful to take possess or destroy of birds of prey or their nests or eggs; CDFW prepared draft regulations (published August 14, 2015) to guide its implementation of Fish and Game Code Sections 3503 and 3503.5,

which prohibits the take, possession, or destruction of bird nests or eggs. SDG&E would follow the regulations guiding Fish and Game Code Sections 3503 and 3503.5 during implementation of the project, if the draft regulations are adopted.

- **Native Plant Protection Act.** Prohibits the take of rare, threatened, or endangered plants
- **Protection for Wetland and Riparian Habitats.** Requires a lake or streambed alteration agreement for activities that impact these habitats
- **Take of Rare Plants.** CDFW may issue permits, plans, or programs that authorize rare plant impacts
- **Fully Protected Species.** Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code provide guidelines to protect wildlife species that are designated as "fully protected" by the CDFW. Before the implementation of CESA and ESA, the State of California designated species as "fully protected" to provide protection for species that were rare or threatened with possible extinction/extirpation. Many of these "fully protected" species have since been listed under CESA as threatened or endangered species. While most "fully protected" species cannot be harmed, taken, or possessed at any time because the designation as "fully protected" provides the same level of protection as a listed species, CDFW may permit the incidental take of "fully protected" species pursuant to a NCCP plan approved by CDFW, as long as the plan's conservation and management guidelines adequately protect these species, and the species is covered under the plan.

Porter-Cologne Water Quality Control Act and Clean Water Act Section 401

The State Water Resources Control Board administers the Porter-Cologne Water Quality Control Act and Section 401 of the CWA, typically through its RWQCBs. The Porter-Cologne Water Quality Control Act, Water Code Section 13260, requires that, "any person discharging waste, or proposing to discharge waste, within any region that could affect the 'waters of the state' to file a report of discharge" with the RWQCB. Waters of the State as defined in the Porter-Cologne Act (Water Code Section 13050 (e)) are "any surface water or groundwater, including saline waters, within the boundaries of the state."

California Coastal Act

The CCA is the primary legislation that provides the standards for balancing development and conservation of resources within the coastal zone, which includes approximately 1.5 million acres along the Pacific Coast of the U.S. The CCA is administered by the CCC to regulate the short- and long-term conservation and use of coastal resources through responsible development. Pursuant to Section 30240 of the CCA, ~~Environmentally Sensitive Habitat Areas (~~ESHAs~~)~~ "shall be protected against any significant disruption of habitat values and only uses dependent on those resources shall be allowed within those areas." In addition, development adjacent to ESHAs must be located and designed to prevent significant impacts to the functions and values of the ESHA.

Coastal Zone Management Program
California has a federally approved CZMP (see Coastal Zone Management Act of 1972, above), which is administered through a partnership between State and local governments. Within southern California, the two State coastal management agencies include the California Coastal Conservancy and the CCC. The California Coastal Conservancy is responsible for purchasing, protecting, restoring, and enhancing coastal resources, while the CCC manages the development within the coastal zone. The CCA encourages local governments to establish Local Coastal Programs (LCPs) to govern decisions on behalf of the CCC and to protect public access and coastal resources on a local level. After certification of a LCP, authority to issue Coastal Development Permits is delegated to the local government, but the CCC maintains permit jurisdiction over certain specified lands (e.g., tidelands, submerged islands, and public trust lands) and can appeal permits approved by local governments in specified geographic areas. Development within the coastal zone may not occur until the CCC or a local government with a CCC-certified LCP has issued a Coastal Development Permit. When federal activities or federally licensed, permitted, or assisted activities are proposed that are likely to affect land use, water use, or natural resources within the coastal zone, a federal consistency review is performed pursuant to Section 307 of the CZMA, which gives the CCC or approved local government regulatory control over the proposed federal activities. The CCC uses this review authority to facilitate cooperation and coordination between the local, state, and/or federal agencies and to authorize Coastal Development Permits. The western portion of Proposed Project Segment D and the Encina Hub modifications work areas are located within the coastal zone.

4.1.4.3 Local

SDG&E Subregional Natural Community Conservation Plan
The SDG&E Subregional NCCP was approved in December 1995 and was established according to the federal ESA, the CESA, and the NCCP Act. The NNCP authorizes certain levels of take of 110 covered species that may be affected by SDG&E's ongoing activity impacts including installation, use, maintenance, and repair operations and expansion of its systems. SDG&E implements the NCCP's "operational protocols" in conducting covered activities within the plan area; compliance with the NCCP supports the authorized take of species covered under the NCCP. The NCCP operational protocols include various protection, mitigation, and conservation measures to ensure the survivability and conservation of protected species and their habitat. The operational protocols provided in SDG&E's NCCP include provisions for personnel training, pre-activity studies; and for maintenance, repair, and construction of facilities including access roads, survey work, and emergency repairs. Under the NCCP, compensatory mitigation for take impacts may be mitigated through a conservation bank or through habitat enhancement measures.

The Proposed Project area is located within areas included in the City of San Diego and City of Poway MSCP Subarea Plan. SDG&E's public utility activities, such as the Proposed Project, are not subject to the regulatory jurisdiction of local governments and are therefore not governed by the terms and conditions of the City of San Diego and Poway MSCP Subarea Plan. However,

in implementing its NCCP, SDG&E may coordinate with the City and other jurisdictions to achieve consistency with the local MSCP mitigation to the extent feasible.

The Proposed Project is located within the area where SDG&E's utility operations are currently covered by the current NCCP. Under the terms of SDG&E's Subregional NCCP Implementing Agreement, take[1] authorization is quantified in acres of habitat temporarily or permanently modified or impacted from construction and operational activities up to an established maximum impact acreage. Take authorization under the current NCCP is nearing the maximum impact acreage cap. Take authorization for all of SDG&E's activities associated with this Proposed Project, including maintenance activities, may not be available through the current NCCP. SDG&E could apply to amend the current NCCP to add new area; cover additional species, subspecies, or populations; or increase the take authorization levels. The process to amend the NCCP would be conducted over a minimum of one year. The amended NCCP could be in place by as early as late summer 2016, or later (Hollenbeck 2015).

~~In lieu of utilizing the current or an amended NCCP~~ If the current NCCP cannot be used because take is unavailable or if the amended NCCP is not available during construction, federal take authorization would occur through new project-specific ESA Section 10 and CESA Section 2081 permits and authorizations.

SDG&E Low-effect Habitat Conservation Plan for the Quino Checkerspot Butterfly
The SDG&E's Low-effect HCP for the QCB was approved in May 2007 and authorizes incidental take of federally endangered QCB. The HCP for the QCB authorizes the loss of 33 acres of QCB habitat. The HCP requires SDG&E to implement general and QCB-specific operational protocols to avoid ~~or~~ and minimize take of QCB. The QCB HCP requires SDG&E to implement the protocols established in ~~and relies on~~ the 1995 Subregional NCCP. However, the HCP states that should the 1995 Subregional NCCP become ineffective (i.e., is no longer being implemented), the protocols therein will still be implemented whenever a covered activity takes place in QCB habitat. Therefore, SDG&E may rely upon the Subregional NCCP for take authorization for covered activities associated with the Proposed Project as it relates to the QCB.

City of San Diego and City of Poway Multiple Species Conservation Program Subarea Plans
The City of San Diego and the City of Poway are two of several jurisdictions participating in the County of San Diego Multiple Species Conservation Program (MSCP), which was developed to protect biodiversity and enhance the quality of life in the region through the preservation of a network of habitats and open space areas. The City of San Diego and the City of Poway each

[1] Under the NCCP, both the federal and state definition of take are used. Federal take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, capture, collect, or attempt to engage in any such conduct" (16 USC Sections 1532(19), 1538) and state take is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" (California Fish and Game Code §86).

have a Subarea Plan (City of San Diego 1997; Ogden Environmental and Energy Services Co., Inc. 1996) that was developed in conjunction with USFWS and CDFW (Wildlife Agencies) and identifies core biological resource areas that are targeted for conservation. The City of San Diego Subarea Plan also includes the City of San Diego Multi-Habitat Planning Area (MHPA), which delineates core biological resource areas and habitat corridors that are targeted for conservation and within which limited development may occur. The City of Poway equivalent is defined as Mitigation Area within which land development zones and requirements are defined. Portions of the Proposed Project are located within the City of San Diego MHPA. The portion of the Proposed Project located within the City of Poway is within the South Poway Planned Community land use category, which includes habitat areas protected for sensitive species.

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

North County Multiple Habitat Conservation Program

The Multiple Habitat Conservation Program (MHCP) is a comprehensive conservation planning process that addresses the needs of multiple plant and animal species in Northwestern San Diego County. The MHCP encompasses the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. Its goal is to conserve approximately 19,000 acres of habitat, of which roughly 8,800 acres (46 percent) are already in public ownership and contribute toward the habitat preserve system for the protection of more than 80 rare, threatened, or endangered species. The Encina Hub modifications would be located within the North County MHCP.

Marine Corps Air Station Miramar Integrated Natural Resources Management Plan

The MCAS Miramar Integrated Natural Resources Management Plan (INRMP; MCAS Miramar 2011) summarizes the baseline information for MCAS Miramar that ensures compliance with the regulatory and planning process required by the Sikes Act, NEPA, federal ESA, and the CWA. It also fulfills other responsibilities pursuant to U.S. DoD and Marine Corps policies as well as other legal requirements. The INRMP integrates MCAS Miramar's land use needs, in support of the military mission, with the management and conservation of natural resources on MCAS Miramar. The INRMP is a tool that provides MCAS Miramar's guidelines and approaches to natural resource management and conservation. While the INRMP does not dictate land use decisions, it does inform the planning process by providing important resource information to support land use decisions and natural resource management. The INRMP identifies that "there are instances when SDG&E may perform activities requiring excavation that could affect sensitive habitat." Furthermore, the INRMP identifies that "SDG&E performs these activities in conformance with guidelines and procedures of the company's Habitat Conservation Plan and Subregional Natural Community Conservation Plan."

Local Coastal Program
Local governments, in partnership with the ~~Coastal Commission~~ CCC, use LCPs as basic planning tools to guide development in the coastal zone consistent with the ~~Coastal Act~~ CCA. LCPs provide the requirements for future development and protection of coastal resources in the coastal zone. For the Proposed Project, the Encina Hub is located within the boundaries of and subject to the City of Carlsbad LCP, and the western extent of the transmission line Segment D in Carmel Valley is within the boundaries of and subject to the City of San Diego LCP.

City of San Diego Urban Forestry Section
The City of San Diego General Services Department, Urban Forestry Section, issues permits for tree trimming, removal, planting, or root pruning following inspection by City of San Diego staff pursuant to City Council Policy 200-5.

City of San Diego Land Development Code – Environmentally Sensitive Lands Regulations and Biology Guidelines
The City of San Diego Biology Guidelines have been formulated by the City's Development Services Department to aid in the implementation and interpretation of the Environmentally Sensitive Lands (ESL) Regulations of the San Diego Land Development Code (Chapter 14, Division 1, Section 143.0101 et seq.), and the Open Space Residential (OR-1-2) Zone, Chapter 13, Division 2, Section 131.0201 et seq. Section III of the Biology Guidelines (Biological Impact Analysis and Mitigation Procedures) also serve as standards for the determination of impact and mitigation under CEQA and the CCA.

The Biology Guidelines are the baseline biological standards for processing Neighborhood Development Permits, Site Development Permits and Coastal Development Permits issued pursuant to the ESL. The ESL Regulations are intended to guide development located in the vicinity of sensitive biological resources including MSCP/MHPA, wetlands, floodplains, steep hillsides, and coastal bluffs and beaches.

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

Other Preserves and Conserved Areas
The Proposed Project crosses areas that are designated as mitigation/preserve areas as well as conserved lands that have adopted conservation plans. These areas have a variety of classifications, including (but not limited to) open space, preserve, park, mitigation land, wildlife refuge, home owners association land, and private land.

4.1.5 Applicant Proposed Measures

SDG&E has proposed measures to reduce environmental impacts. The significance of the impact is first considered prior to application of the APM and a significance determination is made. The implementation of the APM is then considered as part of the project when determining whether impacts would be significant and thus would require mitigation. These APMs would be incorporated as part of any CPUC approval of the project, and SDG&E would be required to adhere to the APMs as well as any identified mitigation measures. The APMs are included in the MMRP for the project (refer to Chapter 9 of this EIR), and the implementation of the measures would be monitored and documented in the same manner as mitigation measures. The APMs that are applicable to the biological resources analysis are provided in Table 4.1-6.

APM BIO-2 includes implementation of SDG&E's current NCCP operational protocols, which can be found in Appendix G. Compliance includes following the guidelines outlined in Section 7.1, Operational Protocols, and Section 7.2, Habitat Enhancement Measures, of the SDG&E Subregional NCCP.

Table 4.1-6 Applicant Proposed Measures for Biological Resources Impacts

APM Number	Requirements
APM BIO-1: Minimization of Impacts to Special-Status Plants	Implementation of the following measures will ensure impacts to special-status plant species remain less than significant: • Prior to construction, SDG&E shall retain a qualified biologist to conduct focused, special-status plant surveys during the spring and summer 2015 in suitable habitats where focused plant surveys were not previously conducted. ~~2014 in all habitats that may support the special-status plant species with a potential to occur in the Proposed Project Survey Area.~~ • Locations of special-status plants shall be identified and inventoried. • The qualified biologist shall supervise construction activities within the vicinity of areas identified as having special-status plant species. • Impacts to special-status plant species shall be avoided to the maximum extent possible by installing fencing or flagging, marking areas to be avoided in construction areas, and limiting work in areas identified as having special-status plant species to periods of time when the plants have set seed and are no longer growing. Where impacts to special-status plant species are unavoidable, the impact shall be quantified and compensated through off-site land preservation, plant salvage, transplantation, or other appropriate methods as determined by the qualified biologist. Alternatively, if the special-status plant species in question is a *SDG&E Subregional NCCP* covered species, mitigation consistent with measures established in the NCCP and discussed in the *SDG&E Subregional NCCP*, above, shall be provided.
APM BIO-2: SDG&E NCCP	The Proposed Project will avoid and minimize impacts to biological resources through implementation of the SDG&E Subregional NCCP. The SDG&E Subregional NCCP establishes a mechanism for addressing biological resource impacts incidental to the development, maintenance, and repair of SDG&E facilities within the SDG&E Subregional NCCP coverage area. The Proposed Project is located within the SDG&E Subregional NCCP coverage area. The SDG&E Subregional NCCP includes a Federal Endangered Species Act (ESA) Section 10(A) permit and a California ESA Section 2081 memorandum of understanding (for incidental take) with an Implementation Agreement with the United States Fish and Wildlife Service (USFWS) and the California

APM Number	Requirements
	Department of Fish and Wildlife (CDFW – formerly the California Department of Fish and Game), respectively, for the management and conservation of multiple species and their associated habitats, as established according to the Federal and State ESAs and California's NCCP Act. The NCCP's Implementing Agreement confirms that the mitigation, compensation, and enhancement obligations contained in the Agreement and the SDG&E Subregional NCCP meet all relevant standards and requirements of the California ESA, the Federal ESA, the NCCP Act, and the Native Plant Protection Act with regard to SDG&E's activities in the Subregional Plan Area. Pursuant to the SDG&E Subregional NCCP, SDG&E will conduct pre-construction studies for all activities occurring off of existing access roads in natural areas. An independent biological consulting firm will survey all Proposed Project impact areas and prepared a Pre-activity Study Report (PSR) outlining all anticipated impacts related to the Proposed Project. The Proposed Project will include monitoring for all project components, as recommended by the PSR and outlined in the SDG&E Subregional NCCP, as well as other avoidance and minimization measures outlined in the NCCP's Operational Protocols. The PSR will be submitted to the CDFW and USFWS for review. Prior to the commencement of construction, a verification survey will be conducted of the Proposed Project disturbance areas, as required by the SDG&E Subregional NCCP. Biological monitors will be present during construction to assure implementation of the avoidance and minimization measures. If the previously-delineated work areas must be expanded or modified during construction, the monitors will survey the additional impact area to determine if any sensitive resources will be impacted by the proposed activities, to identify avoidance and minimization measures, and to document any additional impacts. Any additional impacts are included in a Post-construction Report (PCR) for purposes of calculating the appropriate mitigation, which generally includes site enhancement or credit withdrawal from the SDG&E mitigation bank. When construction is complete, the biological monitor will conduct a survey of the entire line to determine actual impacts from construction. The PCR will determine how much site enhancement and credit withdrawal from the SDG&E mitigation bank will be required to address impacts from project related activities. These impact and mitigation credit calculations are submitted to the USFWS and the CDFW as part of the NCCP Annual Report pursuant to requirements of the NCCP and the NCCP Implementing Agreement. Specific operating restrictions that are incorporated into the Proposed Project design to comply with the SDG&E Subregional NCCP include the following: • Vehicles would be kept on access roads and limited to 15 miles per hour (Section 7.1.1, 1.). • No wildlife, including rattlesnakes, may be harmed, except to protect life and limb (7.1.1, 2.). • Feeding of wildlife is not allowed (Section 7.1.1, 4.). • No pets are allowed within the ROW (Section 7.1.1, 5.). • Plant or wildlife species may not be collected for pets or any other reason. (Section 7.1.1, 7.). • Littering is not allowed, and no food or waste would be left on the ROW or adjacent properties (Section 7.1.1, 8.). • Measures to prevent or minimize wild fires would be implemented, including exercising care when driving and not parking vehicles where catalytic converters can ignite dry vegetation (Section 7.1.1, 9.). • Field crews shall refer all environmental issues, including wildlife relocation, dead, or sick wildlife, or questions regarding environmental impacts to the Environmental Surveyor. Biologists or experts in wildlife handling may be necessary to assist with wildlife relocations (Section 7.1.1, 10.).

APM Number	Requirements
	• All SDG&E personnel would participate in an environmental training program conducted by SDG&E, with annual updates (Section 7.1.2, 11.). • The Environmental Surveyor shall conduct pre-activity studies for all activities occurring in natural areas, and will complete a pre-activity study form including recommendations for review by a biologist and construction monitoring, if appropriate. The form will be provided to CDFW and USFWS but does not require their approval (Section 7.1.3, 13.). • The Environmental Surveyor shall flag boundaries of habitats to be avoided and, if necessary, the construction work boundaries (Section 7.1.3, 14.). • The Environmental Surveyor must approve of activity prior to working in sensitive areas where disturbance to habitat may be unavoidable (Section 7.1.4, 25.). • In the event SDG&E identifies a covered species (listed as threatened or endangered by the federal or state) of plant within the temporary work area (10 foot radius) surrounding a power pole, SDG&E would notify the USFWS (for Federal ESA listed plants) and CDFW (for California ESA listed plants) (Section 7.1.4, 28.). • The Environmental Surveyor shall conduct monitoring as recommended in the pre-activity study form (Section 7.1.4, 35.). • Supplies, equipment, or construction excavations where wildlife could hide (e.g., pipes, culverts, pole holes, trenches) shall be inspected prior to moving or working on/in them (Section 7.1.4, 37, and 38.). • Fugitive dust will be controlled by regular watering and speed limits (Section 7.1.4, 39.). • During the nesting season, the presence or absence of nesting species (including raptors) shall be determined by a biologist who would recommend appropriate avoidance and minimization measures (Section 7.1.6, 50). • Maintenance or construction vehicle access through shallow creeks or streams is allowed. However, no filling for access purposes in waterways is allowed (Section 7.1.7, 52). • Staging/storage areas for equipment and materials shall be located outside of riparian areas (Section 7.1.7, 53.).
APM BIO-3: QCB HCP	SDG&E will implement the SDG&E QCB HCP, which was developed to protect the Quino Checkerspot Butterfly and its habitat through implementation of both general and Quino Checkerspot Butterfly-specific operational protocols that were designed to avoid or minimize take of the species.
APM BIO-4: Vernal Pool Avoidance and Minimization	SDG&E will implement the following measures to avoid and minimize impacts to vernal and road pools. • The boundaries of all vernal pools located within the immediate vicinity of any project related work shall be mapped by a qualified biological monitor to assist in avoidance. The biological monitor will determine and delineate an appropriate exclusion/buffer zone for each vernal pool. • A qualified biological monitor shall be present during all project related activities in areas containing delineated vernal pools in order to avoid and minimize potential impacts to sensitive resources. • Any project related work scheduled to occur within the exclusion/buffer zone of delineated vernal pools shall be conducted when vernal pools are dry as determined by the qualified biological monitor. • Vehicle trips in areas that contain delineated vernal pools shall be limited, to the extent feasible. Crews shall carpool and/or walk in to limit trips. Helicopters should be utilized wherever possible to limit vehicle access in areas containing delineated vernal pools. Guidance shall be provided by the qualified biological

APM Number	Requirements
	monitor. • Steel plates and/or geotextile mats shall be placed over delineated vernal pools, where feasible, in order to avoid and minimize potential impacts or temporary disturbance to vernal pools from project vehicles. • No project-related staging, parking or storage shall occur within or directly adjacent to delineated vernal pools. • No fueling or repair of project vehicles or equipment shall occur within 150 feet of delineated vernal pools.

4.1.6 CEQA Significance Criteria

Appendix G of CEQA Guidelines (14 CCR 15000 *et seq.*) provides guidance on assessing whether a project would have significant impacts on the environment. Consistent with Appendix G, the Proposed Project would have a significant impact on biological resources if it would:

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 CDFW or USFWS;
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or USFWS;
c. Have a substantial adverse effect on federal protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marshes, vernal pools, and coastal areas) or any state-protected jurisdictional areas not subject to regulation under Section 404 of the CWA through direct removal, filling, hydrological interruption, or other means;
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy, or ordinance; or
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.

More specifically, for Significance Criterion a:

- Any impact on one or more individuals of a federal- or State-listed threatened or endangered species or its habitat would typically be significant because these species are highly sensitive and any impact would significantly affect the population of these species.
- Any impact on CRPR 1B and 2B species that would cause a reduction in numbers of individuals that could have significant impacts on the populations of these species in the vicinity of the proposed Project would be significant.

- Impacts on State Species of Special Concern and State Fully Protected species would be potentially significant.
- Temporary or permanent disturbance of designated critical habitat for federal listed species would be significant.
- Activities that result in the killing of migratory birds or destruction or abandonment of migratory bird nests and/or eggs (Migratory Bird Treaty Act and California Fish and Game Code) would be significant.

4.1.7 Approach to Impact Assessment

This impact analysis considers whether implementation of the Proposed Project or alternatives would result in significant impacts to biological resources. The analysis focuses on reasonably foreseeable effects of the Proposed Project and alternatives as compared with baseline conditions. The analysis uses significance criteria based on the CEQA Appendix G Guidelines. The potential direct and indirect effects of the Proposed Project and alternatives are addressed; cumulative effects are addressed in Chapter 5: Cumulative Impacts. Effects that would result from operation and maintenance of the Proposed Project and alternatives are also addressed. Applicable APMs are identified and mitigation is defined to avoid or reduce significant impacts to biological resources.

Impact categories are defined as follows:

- **Direct.** Direct impacts are caused by the project and occur at the same time and place as the 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 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 reasonably 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.

4.1.7.1 Species Take Authorization

SDG&E, in its CPCN application, identified compliance with its 1995 Subregional NCCP, which provides take authorization under the federal and state endangered species acts, as protective of special-status species and habitat impacts resulting from the Proposed Project. Under the terms of SDG&E's Subregional NCCP Implementing Agreement, take authorization is quantified in acres of habitat temporarily or permanently modified or impacted from construction and operational activities up to an established maximum impact acreage. In a recent audit of NCCP habitat impacts, the USFWS and CDFW (collectively, the wildlife agencies) determined that SDG&E's habitat take is nearing the maximum impact acreage authorized under their 1995

NCCP (Goebel and Sevrens June 2015). Based on this audit, the wildlife agencies determined that 129.4 acres of take authorization remain available within the NCCP for pending and future projects including four SDG&E projects proposed for construction in 2016 and 2017, consisting of the Sycamore-Peñasquitos 230-kV Transmission Line, the South Orange County Reliability Project, the Salt Creek Substation Project, and the Cleveland National Forest Master Special Use Permit. Utilizing project impact information provided to the wildlife agencies by SDG&E, these four projects were estimated to impact 122 acres of NCCP sensitive habitats, which would leave a remainder of 7.4 acres of available take under the 1995 NCCP for other purposes. Of the 122 total acres, SDG&E estimated that the Proposed Project's impacts would be 29.4 acres.

SDG&E's impact assessment and that of the CPUC's environmental consultant were substantially different; the CPUC assessment of Proposed Project impacts, which was based on the SDG&E PEA and data request responses, was more than twice that of SDG&E's estimate. In order to reduce Proposed Project impacts to what was reported to the wildlife agencies, SDG&E submitted revised work space data to the CPUC in July 2015 that reduced the size of select work spaces such that only ~~29.8~~ 29.4 acres of NCCP sensitive habitats would be impacted; the most notable reductions were at staging yards, one of which (the Chicarita South Staging Yard) was removed completely from the Proposed Project. Subsequent to SDG&E's reduction in the Proposed Project area, the CPUC verified the habitat areas at the Stonebridge staging yard and found that there was 2.5 acres of sensitive habitat (disturbed baccharis scrub), which was previously classified by SDG&E as disturbed area. The resulting habitat impacts including the habitat area within the Stonebridge staging yard is 31.9 acres. SDG&E's revised work space data, however, did not account for access road impacts identified in the PEA to accommodate construction equipment and materials access to individual pole sites (per page 3-41 of the PEA: "smoothing or refreshing of the existing access roads and/or vegetation clearing would be necessary to improve some existing access roads and to re-establish unmaintained access roads"), nor did it account for temporary passing locations that SDG&E determined would be needed for Proposed Project construction (refer to SDG&E Partial Response #3 to Data Request #2, Question #19). ~~Based on location, condition, topography of the existing access roads, and the need to accommodate construction equipment, the CPUC and its environmental consultant have determined it is not reasonable to assume that no new access road impacts would occur as a result of the Proposed Project.~~

In order to account for these construction access needs, access road impacts were calculated by the CPUC's environmental consultant assuming a ~~14-foot width along all unpaved access as the PEA notes that new spur roads would be 12 to 14 feet wide in order to ensure safe movement of construction equipment and vehicles. An additional~~ 2-foot buffer ~~was also included~~ on either side of the existing 14-foot wide access routes (for a total width of 18 feet) to account for potential road widening for equipment access, mapping inaccuracies, and edge effects that may occur during construction ~~grading~~ thereby providing a reasonably conservative assessment of habitat loss for consideration and disclosure in the EIR biological resources analysis. ~~Therefore, analysis in the EIR presumes existing access roads with a width narrower than 14 feet would be expanded to 14 feet and the habitat impacts associated with that expansion would be included~~

~~in the EIR analysis.~~ Where existing unpaved access roads are between 14 and 18 feet wide, habitat loss ~~would be presumed and calculated only for the additional~~ was calculated only for the habitat areas located within the 2-foot buffer area. Where existing unpaved access exceeds 18 feet in width, ~~there would be~~ no ~~additional~~ habitat loss was calculated. Based on this formula, an additional ~~5.32~~ 3.3 acres of habitat impacts (compared with SDG&E's calculations) would result from construction access improvements and temporary access roads, and total habitat impacts (permanent, temporary, and access road impacts) from Proposed Project construction would be ~~34.97~~ 35.2 acres.

The CPUC has considered whether SDG&E's compliance with the NCCP would feasibly and reliably mitigate biological resource impacts of the Proposed Project, and whether it is reasonable to expect compliance. Where compliance with the NCCP would not reduce an impact to less than significant, mitigation is identified to ensure impacts would be less than significant. The CPUC has determined that SDG&E's compliance with the 1995 NCCP over the life of the Proposed Project is uncertain and cannot be relied upon because:

- when construction access road impacts are accounted for, a commitment to limit the Proposed Project to 29.4 acres of habitat impacts is infeasible;
- assuming the wildlife agencies would consider and account for construction access road impacts as take under the NCCP, the remaining allowable habitat impact acreage would only be ~~2.2~~ 2.0 acres, and if the wildlife agencies exclude access road impacts from NCCP take accounting, only 7.4 acres, leaving little flexibility for unknown contingencies;
- NCCP impact coverage is required by three other current SDG&E projects that may have increased habitat impact coverage requirements over the estimates provided by SDG&E; and
- other SDG&E projects and operation and maintenance activities could also reduce the available NCCP habitat impact coverage depending on the timing of such activities relative to implement of the four projects noted above.

SDG&E will be required to comply with the mitigation measures identified in the EIR. Independently, SDG&E is also required to comply with applicable federal and state laws enforced by the wildlife agencies protecting species and the environment. SDG&E must maintain valid take authorization throughout the duration of construction for all state and/or federally listed threatened or endangered species documented in the Proposed Project area (e.g., Coastal California gnatcatcher, thread-leaved brodiaea, ~~vernal pool fairy shrimp,~~ San Diego fairy shrimp, and least bell's vireo). SDG&E could apply to amend its NCCP to increase the take authorization levels. If the NCCP is amended at any time prior to the completion of construction, SDG&E would submit a copy of the amended NCCP to CPUC upon signing of the implementing agreement and would follow the protocols in the amended NCCP.

Another potentially available option to SDG&E would be to seek take coverage under the City of San Diego MSCP coverage in lieu of waiting on their own NCCP amendment process to be completed. This would require a separate development permit from the City of Diego

supported by a determination that the Proposed Project is consistent with the policies and guidelines of the MSCP Subarea Plan. A Subarea Plan consistency analysis has been drafted and is included in Appendix K of this EIR. Based on that analysis, it appears that the Proposed Project would be consistent with the City of San Diego MSCP.

Mitigation measures are specified in this EIR to mitigate for Proposed Project impacts to biological resources in lieu of NCCP-prescribed operational protocols and habitat mitigation or MSCP-prescribed protocols and habitat mitigation requirements, though mitigation measures are consistent with these plans whenever feasible and appropriate. Specific biological resource mitigation measure requirements may be satisfied through compliance with the existing SDG&E NCCP, an amended NCCP, individual ESA permit conditions, or other authorizations obtained by SDG&E, if these requirements are equally or more effective than the mitigation identified in this EIR. SDG&E shall provide the CPUC with copies of permits or other authorizations, including any future amendments to the NCCP and supporting documentation, to show that compliance with permitting conditions would be equal to or more effective as mitigation for biological resource impacts. The CPUC shall have sole discretion to determine whether compliance with permit conditions would also satisfy the performance standards or requirements identified in mitigation measures in this EIR. If the CPUC determines that compliance with permit conditions would also satisfy the mitigation measures in this EIR, SDG&E shall submit reports to the CPUC documenting compliance consistent with the reporting requirements of the equivalent mitigation measure(s).

4.1.8 Proposed Project Impacts and Mitigation Measures

Table 4.1-7 provides a summary of the significance of biological resources impacts prior to application of APMs, after application of APMs and before implementation of mitigation measures, and after the implementation of mitigation measures.

Table 4.1-7 Summary of Proposed Project Impacts to Biological Resources

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance After Mitigation
Impact Bio-1: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-1 APM BIO-2 APM HYDRO-2 APM HAZ-1 APM HAZ-2	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-1e MM Biology-1f MM Biology-1g MM Biology-2 MM Biology-3 MM Fire-1 MM Fire-2 MM Fire-3 MM Fire-4

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance After Mitigation
Impact Bio-2: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any invertebrate species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM BIO-3 APM BIO-4 APM HYDRO-2 APM HAZ-1 APM HAZ-2	Less than significant MM Biology-3 MM Biology-4 MM Biology-5
Impact Bio-3: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any amphibian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM BIO-4 APM HYDRO-2 APM HAZ-1 APM HAZ-2	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-3 MM Biology-4 MM Biology-6
Impact Bio-4: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any reptile species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2,	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-3 MM Biology-4 MM Biology-6
Impact Bio-5: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any avian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2	Less than significant MM Biology-3 MM Biology-7 MM Biology-8
Impact Bio-6: Potential to have a substantial adverse effect from project construction, either directly or through habitat modifications, on any mammalian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-3 MM Biology-9 MM Biology-10

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance After Mitigation
Impact Bio 7: Potential to have a substantial adverse effect from project operation and maintenance, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Operation and Maintenance	Significant	Significant APM BIO-2	Less than significant ~~MM Biology-1a~~ ~~MM Biology-1e~~ MM Biology-3 MM Biology-7
Impact Bio-8: Potential to cause a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM-BIO-4 APM HYDRO-2	Less than significant MM Biology-3 MM Biology-4 MM Biology-6 MM Biology-11
	Operation and Maintenance	Significant	Significant	Less than significant MM Biology-3
Impact Bio-9: Potential to cause a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.), or on state-protected jurisdictional areas not subject to regulation under Section 404 of the CWA through direct removal, filling, hydrological interruption, or other means	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM HYDRO-2	Less than significant MM Biology-3 MM Biology-4 MM Biology-6 MM Biology-11
	Operation and Maintenance	Less than significant	---	---
Impact Bio-10: Potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites	Construction	Less than significant	---	---
	Operation and Maintenance	Less than significant	---	---
Impact Bio-11: Potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---
Impact Bio-12: Potential to conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---

Overview of Impacts to Special-Status Plants and Wildlife

Special-Status Plants

Special-status plants that would be directly and permanently affected by the Proposed Project are shown in Table 4.1-8. Table 4.1-8 summarizes the direct impacts to individual special-status plants that were observed during surveys. Table 4.1-8 defines impacts to individual special-status plants located within permanent work areas, temporary work areas, and access road refreshing areas.

Table 4.1-8 Direct and Permanent Impacts to Individual Special-status Plants from the Proposed Project Area

Species	Status[1]	Estimated Individuals Affected by the Proposed Project					NCCP Covered Species?	MSCP Covered Species	Total Estimated Affected Individuals
		Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[2]			
Ashy spike moss	4.1	–	–	1	3	2	No	No	**6**
Coast barrel cactus	2B.1	2	–	–	60	–	Yes	Yes	**62**
Decumbent goldenbush	1B.2	98	–	72	169	2	No	No	**341**
Del Mar Mesa Sand Aster	1B.1	–	–	1	–	–	Yes	Yes	**1**
Graceful tarplant	4.2	139	–	35	–	–	No	No	**174**
Long-spined spineflower	1B.2	–	–	18	–	–	No	No	**18**
Nuttall's scrub oak	1B.1	38	–	~~111~~ 397	12	–	No	No	**~~161~~ 447**
Palmer's grapplinghook	4.2	–	–	–	40	–	Yes	No	**40**
San Diego sagewort	4.2	1	–	–	–	–	No	No	**1**
Robinson's pepper-grass	4.3	–	–	–	100	–	No	No	**100**
San Diego button-celery	FE, SE, 1B.1	–	–	1	–	–	Yes	Yes	**1**
San Diego marsh-elder	2B.2	3	–	–	1	–	No	No	**4**
San Diego sunflower	4.2	51	–	10	7	1	No	No	**69**
Spiny rush	4.2	–	1	–	–	–	No	No	**1**
Spineshrub	2B.1	425		39	127	–	No	No	**591**
Thread-leaved brodiaea	FT, SE, 1B.1	0.07 acre[3]	–	–	–	–	Yes	Yes	**0.07 acre**
Summer holly	1B.2	–	–	28	1	–	No	No	**29**

Species	Status[1]	Estimated Individuals Affected by the Proposed Project					NCCP Covered Species?	MSCP Covered Species	Total Estimated Affected Individuals
		Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[2]			
Wart stemmed ceanothus	2B.2	–	–	–	–	1 (MSL)	Yes	Yes	**1**

Notes:

[1] Status:

Federal/State Listed:

FT: Federally listed as threatened

SE: State-listed as endangered

California Rare Plant Ranks:

1B: Plants Rare, Threatened, or Endangered in California and Elsewhere

2B: Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere

4: Plants of Limited Distribution – A Watch List

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

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

[2] Impacts to Ashy Spike Moss would occur at Encina Hub, impacts to decumbent goldenbush would occur at the SR-56 staging yard, impact to one San Diego sunflower would occur at the Stonebridge staging yard, and impact to one wart-stemmed ceanothus would occur at the Mission—San Luis Rey Phase Transposition south work site.

[3] A habitat assessment for thread-leaved brodiaea was conducted to determine the area of potential suitable habitat (Busby 2014e). The effect to this species is in acreage and not in number of individuals. No impact was identified to the eight thread-leaved brodiaea individuals observed in the surveys conducted in spring 2015 (Busby 2015r). ~~because no species were observed in Proposed Project work areas; however, highly suitable potential habitat was observed.~~

Special-status plant species located within the Proposed Project area could be directly impacted by construction activities including vegetation removal, grading, and excavation.

Special-status plant species may also be indirectly impacted through the introduction and/or spread of invasive non-native plant species that can out-compete the special-status, native species and through temporary impacts associated with dust, erosion, and sedimentation during construction. For example, dust can adversely affect photosynthesis; erosion can expose plant roots resulting in plant damage or mortality, and sedimentation can bury small plants and seedlings.

Special-status plant species could also be impacted by operation and maintenance activities including inspections where access made by vehicles may crush plants; by vegetation management, including herbicide application that could cause plant mortality; and equipment maintenance that could result in crushed plants or the release of toxic substances that could harm plants or cause mortality.

Inspections would occur at the same frequency as inspections for the existing power lines in the utility corridor. There would be additional maintenance activities for new structure operation

work pads, spur roads, and splice vault manholes. There would be additional vegetation management activities around the structure operation work pads and spur roads, including the use of herbicides to manage vegetation. Annual inspections would be performed for the overhead transmission and power lines. Inspection of the underground transmission line as well as the splice vault manholes would be conducted approximately every three years. Maintenance would occur on an as-needed basis and could directly or indirectly impact special-status plant species located near the work areas through crushing by vehicle, vegetation removal, and herbicide use.

Special-Status Wildlife

Special-status wildlife species that could be affected by the Proposed Project are shown in Table 4.1-9. Table 4.1-9 does not quantify the total number of individuals that would actually be impacted; rather, it presents the number that was observed during field surveys in areas that would be impacted.

Special-status wildlife species and potentially suitable habitat located within the Proposed Project area would be directly impacted by construction activities, including vegetation removal, grading, excavation, vehicle travel, equipment travel, trash, and accidental spills of hazardous materials. These activities would result in loss of suitable breeding habitat or foraging habitat, destruction of nests or burrows, and could cause mortality or injury to species located in the proposed work areas or access routes. Species located within the buffer area may be indirectly impacted by noise and air emissions generated from vehicles and equipment in the Proposed Project area. Special-status wildlife species may also be indirectly impacted through the introduction and proliferation of invasive nonnative plant species and temporary impacts associated with dust, sedimentation, and erosion during construction. These impacts could cause adverse alterations to habitat, making it less suitable or unsuitable for the special-status wildlife species.

Special-status wildlife species could be impacted by operation and maintenance activities including inspections, vegetation management, herbicide application, equipment maintenance, accidental spills of hazardous materials, and from trash generated during operation and maintenance activities. These activities could also result in loss of or damage to suitable breeding habitat or foraging habitat, destruction of nests or burrows, and could cause mortality or injury to species located in the proposed work areas or access route. Inspections would occur at the same frequency as inspections for the existing power lines in the utility corridor. There would be additional maintenance activities for new structure operation work pads, spur roads, and splice vault manholes. There would be additional vegetation management activities around the structure operation work pads and spur roads, including the use of herbicides to manage vegetation. Annual inspections would be performed for the overhead transmission and power lines. Inspection of the underground transmission line as well as the splice vault manholes would be conducted approximately every three years. Maintenance would occur on an as needed basis and could directly or indirectly impact wildlife species located near the work areas through equipment noise, exhaust, vegetation removal, and herbicide use.

Table 4.1-9 Special-status Wildlife located in the Proposed Project Area and Potential for Effect

Species	Status[1]	Number of Individuals in Proposed Project BSA Or Potential to Occur[2]					NCCP Covered Species?	MSCP Covered Species?
		Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[3]		
Invertebrates								
~~Vernal pool fairy shrimp~~	~~FT~~	~~–~~	~~–~~	~~H~~	~~H~~	~~–~~	~~No~~	~~No~~
San Diego Fairy Shrimp	FE	–	–	H	H	–	Yes	Yes
Quino Checkerspot Butterfly	FE	M	–	–	–	M (SB)	No	No
Amphibians								
Western Spadefoot	SSC	–	–	H	H	–	Yes	No
Reptiles								
Silvery legless lizard	SSC	M	M	M	M	M (EH)	No	No
Belding's orange-throated whiptail	SSC	1	H	H	H	H (EH)	Yes	Yes
Rosy boa	NCCP	M	–	M	M	–	Yes	No
Red diamond rattlesnake	SSC	H	M	H	H	M (EH)	Yes	No
San Diego banded gecko	NCCP	M	M	M	M	–	Yes	No
San Diego ringneck snake	NCCP	H	H	H	H	–	Yes	No
Coast horned lizard	SSC, MSCP	H	H	H	H	H (EH)	Yes	No
Coronado skink	SSC	H	H	H	H	–	Yes	No
Coast patch-nosed snake	SSC	H	H	H	H	–	Yes	No

Species	Status[1]	Number of Individuals in Proposed Project BSA Or Potential to Occur[2]					NCCP Covered Species?	MSCP Covered Species?
		Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[3]		
Two-striped garter snake	SSC	M	M	H	H	M (EH)	Yes	No
Birds								
Cooper's hawk	WL	5	H	1	3	H (all work areas)	Yes	Yes
Sharp-shinned hawk	WL	M	M	M	M	M (all work areas)	No	No
Southern California rufous-crowned sparrow	WL	13	2	4	26	H (EH)	Yes	Yes
Grasshopper sparrow	SSC	M	P ~~M~~	M	–	–	Yes	No
Bell's sage sparrow	WL	H	H	H	H	–	Yes	No
Burrowing owl	SSC	M	M	–	M	–	Yes	Yes
Coastal cactus wren	SSC	M	M	M	M	–	Yes	Yes
Vaux's swift	SSC	H	H	1	1	H (all work areas)	No	No
Northern harrier	SSC	H	H	H	H	H (all work areas except EV)	Yes	Yes
Clark's marsh wren	SSC	–	–	–	M	P (EH)–	No	No
Yellow warbler	SSC	P–	–	P~~M~~	M	P (EH)–	No	No
White-tailed kite	CFP	M	H	H	M	–	No	No
California horned lark	WL	H	H	H	P	H (all work areas except EV)	No	No

Species	Status[1]	Number of Individuals in Proposed Project BSA Or Potential to Occur[2]					NCCP Covered Species?	MSCP Covered Species?
		Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[3]		
Merlin	WL	M	M	M	M	M (all work areas except EV)	No	No
Yellow-breasted chat	SSC	P–	–	M	M	P (EH)–	No	No
Loggerhead shrike	SSC	1	M	M	M	M (EH)	No	No
Coastal California gnatcatcher	FT, SSC	56 – 60 42 – 26 throughout Segments A – D[4]				P H (12 – 13 at EH, 1 at SR-56)	Yes	Yes
Western bluebird	NCCP	1	M	M	M	M (all work areas except EV)	Yes	Yes
Least bell's vireo	FE, SE	–	–	M	M	H (EH)	Yes	Yes
Mammals								
Pallid bat	SSC	M	M	M	M	M (all work areas except EV)	No	No
Dulzura pocket mouse	SSC	H	–	H	H	M (EH)	Yes	No
Northwestern San Diego pocket mouse	SSC	H	H	H	H	H (EH)	Yes	No
Western mastiff bat	SSC	M	M	M	M	M (all work areas)	No	No
Western red bat	SSC	M	M	M	M	M (all work areas except EV)	No	No
San Diego black-tailed jackrabbit	SSC	H	P H	H	H	H (EH)	Yes	No

Species	Status[1]	Number of Individuals in Proposed Project BSA Or Potential to Occur[2]					NCCP Covered Species?	MSCP Covered Species?
		Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[3]		
San Diego desert woodrat	SSC	H	–	H	H	–	Yes	No
Big free-tailed bat	SSC	–	–	–	M	–	No	No
Southern mule deer	NCCP	1	M	H	H	–	Yes	Yes
Southern grasshopper mouse	SSC	H	H	H	H	H (EH)	Yes	No
Mountain lion	NCCP	M	M	M	M	–	Yes	Yes

Notes:

[1] Status:

NCCP = SDG&E Natural Community Conservation Plan Covered Species (Subregional NCCP coverage may ~~is assumed to~~ be inapplicable; see *Section 4.1.2.3*)

Federal/State Listed:

FE: Federally listed as endangered

FT: Federally listed as threatened

SE: State-listed as endangered

Other:

CFP = California Department of Fish and Wildlife Fully Protected Species

SSC = California Department of Fish and Wildlife Species of Special Concern

WL = California Department of Fish and Wildlife Watch List

[2] Special-status wildlife detected during surveys outside of the 500-foot buffer are not included in the count of species detected.

Potential to Occur:

M (moderate potential) – Not detected during Proposed Project surveys. Potentially suitable habitat is present (and may be limited), and species is not known to occur within the vicinity.

H (high potential) – Not detected during Proposed Project surveys. Suitable habitat present and species known to occur within the vicinity.

[3] Other work areas includes Encina Hub (EH), Mission—San Luis Rey Phase Transposition (MSL), Evergreen Nursery staging yard (EV), SR-56 staging yard (SR-56), Camino Del Sur staging yard (CDS), Carmel Valley Road staging yard (CVR), Stonebridge staging yard (SB), and Stowe staging yard (ST). Note that the work area is specified when the potential for a species to occur is different than other work areas. If no work area is specified, the potential to occur is the same in all work areas.

[4] There are an estimated 56-60~~42-46~~ individuals of coastal California gnatcatcher throughout the ~~entire Proposed Project~~ BSA surrounding Segments A-D.

Impact Bio-1: Would construction of the Proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Direct Impacts to Special-status Plants

Special-status plant species would be damaged or removed during construction of the Proposed Project. Table 4.1-8 provides the number of individuals (or habitat acreage when number of individuals is not known) that would be affected. Special-status plant species could be directly impacted by construction access, vegetation removal, grading, and use of staging yards. Vegetation removal and grading would occur at pole work areas. Ashy spike moss, coast barrel cactus, decumbent goldenbush, Del Mar Mesa san aster, graceful tarplant, Nuttall's scrub oak, San Diego marsh-elder, spineshrub, spiny rush, summer holly, Palmer's grapplinghook, San Diego sunflower, and wart stemmed ceanothus would be directly impacted during these construction activities. In addition, suitable habitat for the thread-leaved brodiaea, which is assumed to be present, would be impacted by use of a temporary work area within Segment A

Thread-leaved Brodiaea and San Diego Button-celery

Thread-leaved brodiaea is listed as federally threatened and State endangered and is ranked as CRPR 1B.1, which means it is rare, threatened, or endangered in California and elsewhere. It is also an NCCP-covered species. A total of 0.07 acre of potentially suitable habitat for thread-leaved brodiaea is located in a temporary work area in Segment A. It is assumed that thread-leaved brodiaea is present throughout this potentially suitable habitat, and impacts to thread-leaved brodiaea from the use of the temporary work area would be significant due to the species' federal and State listing status. Any impact to an individual of this species would be significant because the impact would significantly affect the population of this species due to the low numbers and limited occurrence of the species.

San Diego button-celery is listed as federally endangered and State endangered and is ranked as CRPR 1B.1, which means it is rare, threatened, or endangered in California and elsewhere. It is also an NCCP and MSCP-covered species. There is one individual that can be potentially impacted by maintenance of an access road located along Segment C. An impact to this species would be significant due to the species' federal and State listing status. Any impact to an individual of this species would be significant because the impact would significantly affect the population of this species due to the low numbers and limited occurrence of the species.

SDG&E would implement APMs BIO-1 and BIO-2 as part of the Proposed Project. APM BIO-1 requires that SDG&E avoid impacts to special-status plant species to the maximum extent possible by installing fencing or flagging to avoid impacts and requiring compensation in the form of off-site land preservation, plant salvage, or plant transplantation in the case of unavoidable impacts. APM BIO-2 requires the implementation of the current SDG&E NCCP operational protocols and habitat enhancement measures for special-status plant species covered under the current NCCP. Current NCCP protocols include preconstruction surveys, delineation of sensitive habitats, and worker training, and would reduce impacts to this species;

however, NCCP protocols and measures may not apply at the time of Proposed Project construction. Therefore, after implementation of APMs, impacts to thread-leaved brodiaea and San Diego button-celery would remain significant because the operational protocols and habitat compensation may not be implemented if the NCCP is not applied. Mitigation Measures Biology-1a, Biology-1b, Biology-1c, Biology-1d, Biology-1e, Biology-1f, Biology-1g, and Biology-2 are required to reduce impacts to thread-leaved brodiaea. Mitigation Measures Biology-1a through Biology-1g require pre-activity surveys, delineation of sensitive habitats, delineation of work areas, and worker training. Mitigation Measure Biology-2 requires compensatory mitigation for impacts to special-status plant species. The impacts to thread-leaved brodiaea and San Diego button-celery would be less than significant with mitigation.

(Note: Impacts to vernal pools, a sensitive habitat that supports San Diego button-celery, are addressed in Impact Bio-2. The individual San Diego button-celery that would be potentially impacted by the Proposed Project is located in an area where access would be restricted as described in Impact Bio-2.)

Del Mar Mesa Sand Aster, Long-spined spineflower, Nuttall's Scrub Oak, Decumbent Goldenbush, and Summer Holly

Del Mar Mesa sand aster and Nuttall's scrub oak are ranked as CRPR 1B.1. Decumbent goldenbush, long-spined spineflower, and summer holly are ranked as CRPR 1B.2. Each species is considered rare throughout its range. Construction of the Proposed Project would impact:

- 1 Del Mar Mesa sand aster
- 18 long-spined spineflower
- ~~95~~ 447 Nuttall's scrub oak
- ~~357~~ 341 decumbent goldenbush
- ~~15~~ 29 summer holly

~~Impacts to Del Mar Mesa sand aster, Nuttall's scrub oak, decumbent goldenbush, and summer holly would be significant because these species are considered rare throughout their range. An impact to any of these species would significantly impact the species population, since species numbers are already low.~~ Impacts on Del Mar Mesa sand aster would be less than significant because the loss of one out of 34 individuals would not have a significant effect on the population of Del Mar Mesa sand aster in the vicinity of the Proposed Project. Impacts to Nuttall's scrub oak (447 individuals), decumbent goldenbush (341 individuals), summer holly (29 individuals), and long-spined spineflower (18 individuals) would be significant as the loss of these individuals would cause potentially significant impacts to the populations of these CRPR Rank 1B species in the vicinity of the Proposed Project. SDG&E would implement APM BIO-1 as part of the Proposed Project, which requires that SDG&E avoid impacts to special-status species to the maximum extent possible by installing fencing or flagging. APM BIO-1 also requires compensation in the form of off-site land preservation, plant salvage, or plant transplantation in the case of unavoidable impacts. Impacts to these species would still be significant after implementation of APM BIO-1 because APM BIO-1 does not provide details on appropriate habitat compensation. Mitigation Measure Biology-2 (compensatory mitigation) is

required to address these significant impacts. The impacts to Del Mar Mesa sand aster, Nuttall's scrub oak, decumbent goldenbush, and summer holly would be less than significant with mitigation.

Spineshrub, Coast Barrel Cactus, San Diego Marsh-elder, and Wart Stemmed Ceanothus
Spineshrub and coast barrel cactus are ranked as CRPR 2B.1 and are highly threatened in California but common outside of California. There would be ~~751~~ 591 individuals of Spineshrub and 62 coast barrel cacti directly impacted by construction of the Proposed Project. Impacts on ~~these four species~~ spineshrub and coast barrel cactus would be significant, as the loss of these individuals would cause potentially significant impacts to the populations of these CRPR Rank 2B species in the vicinity of the Proposed Project. San Diego marsh-elder and wart stemmed ceanothus are ranked as CRPR 2B.2 and are moderately threatened in California but common outside of California. There would be ~~ten (10)~~ four (4) individuals of San Diego marsh-elder and one (1) individual of wart stemmed ceanothus impacted during construction of the Proposed Project. Impacts to these two ~~four~~ species would be less than significant as the loss of these individuals would not cause potentially significant impacts to the populations of these CRPR Rank 2B species in the vicinity of the Proposed Project ~~because these species are moderately to highly threatened in California~~. SDG&E would implement APMs BIO-1 and BIO-2 as part of the Proposed Project. APM BIO-1 requires that SDG&E avoid impacts to special-status species to the maximum extent possible by installing fencing or flagging. APM BIO-1 also requires compensation in the form of off-site land preservation, plant salvage, or plant transplantation in the case of unavoidable impacts. Impacts would remain significant after implementation of APM BIO-1 because APM BIO-1 does not provide details on appropriate habitat compensation. APM BIO-2 requires the implementation of the SDG&E NCCP operational protocols and habitat enhancement measures for special-status plant species covered under the current NCCP. NCCP protocols include preconstruction surveys, delineation of sensitive habitats, and worker training, and would reduce impacts to coast barrel cactus, a NCCP covered species; however, NCCP protocols and measures may not apply at the time of Proposed Project construction. Therefore, even after implementation of APMs, impacts would remain significant because the operational protocols and habitat compensation may not be implemented if the NCCP is not applied. Mitigation Measures Biology-1a through Biology-1g (activity protocols) and Biology-2 (compensatory mitigation) would be implemented to reduce impacts to special-status plants. Impact would be less than significant with mitigation.

Ashy Spike Moss, Graceful Tarplant, Robinson's pepper-grass, Spiny Rush, San Diego sagewort, San Diego Sunflower, and Palmer's Grapplinghook
The number of ashy spike moss, graceful tarplant, Robinson's pepper-grash, spiny rush, San Diego sagewort, San Diego sunflower, and Palmer's grapplinghook that would be impacted by the Proposed Project are summarized in Table 4.1-8. Graceful tarplant, spiny rush, San Diego sagewort, and San Diego sunflower, and Palmer's grapplinghook are ranked as CRPR 4.2, which means they are of limited distribution or are infrequent throughout a broad area of California. Ashy spike moss is ranked CRPR 4.1, which means that this species is moderately threatened and is of limited distribution in California. Robinson's pepper-grass is ranked CRPR

4.3, which means that this species is not very threatened in California. Because of the lower sensitivity of these species, and low number of individuals impacted by the Proposed Project, impacts would be less than significant. Impacts from the Proposed Project would not significantly impact the populations of these species. No mitigation is required.

Direct Impacts to Special-status Plants Not Observed in the BSA

There is some potential for special-status plant species that were not observed during Proposed Project surveys to occur within the Proposed Project work areas because of drought conditions during survey years (see Table 4.1-3); however, the multiple surveys for the Proposed Project conducted in 2014 and 2015 were comprehensive, so the potential for missed species is low.

There is some potential for special-status plant species ranked CRPR 3 or 4 to occur at the Proposed Project site. Information about plants with a CRPR 3 is lacking to designate it as a rare species and plants with a CRPR 4 have limited distribution and their vulnerability or susceptibility to threat appears low at the time of CRPR evaluation. Because these species are not considered rare or particularly sensitive, impacts to these species would be considered less than significant because the impacts would not significantly affect the population of these species. No mitigation would be required.

If unanticipated occurrences of special-status plant species that are federal or State listed ~~and/or ranked CRPR 1 or 2~~ were to occur in a work area and were to be impacted by the Proposed Project, impacts would be significant because plants that are federal or State listed ~~and/or ranked CRPR 1 or 2~~ are considered very ~~sensitive~~ 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 or 2 were to occur in a work area and were to be impacted by the Proposed Project, impacts would be potentially significant because plants that are ranked CRPR 1 or 2 are rare. Impacts to a substantial number of individuals that are ranked CRPR 1 or 2 would be significant because the impact would significantly affect the population of this species. SDG&E would implement APMs BIO-1 and BIO-2 as part of the Proposed Project. APM BIO-1 requires that SDG&E avoid impacts to special-status species to the maximum extent possible by installing fencing or flagging. APM BIO-1 also requires compensation in the form of off-site land preservation, plant salvage, or plant transplantation in the case of unavoidable impacts. Impacts would remain significant after implementation of APM BIO-1 because APM BIO-1 does not provide details on appropriate habitat compensation. APM BIO-2 requires the implementation of the current SDG&E NCCP operational protocols and habitat enhancement measures for special-status plant species covered under the NCCP. NCCP protocols include preconstruction surveys, delineation of sensitive habitats, and worker training, and would reduce impacts to NCCP covered species; however, NCCP protocols and measures may not apply at the time of Proposed Project construction. Therefore, even after implementation of APMs, impacts would remain significant because the operational protocols and habitat compensation may not be implemented if the NCCP is not applied. Implementation of Mitigation Measures Biology-1a through Biology-1g (operational protocols) and Mitigation Measure Biology-2 (compensatory mitigation) would reduce potential impacts to special-status plants not observed in the BSA. Impacts would be less than significant with mitigation.

Indirect Impacts to Special-status Plants

Construction disturbance could indirectly impact special-status plants through increased erosion and sedimentation, fugitive dust, release of toxic substances (e.g., oil), and introduction and/or spread of invasive, non-native plant species (weeds), resulting in a significant impact. Increased erosion can adversely affect plant growth and success by removing valuable topsoil and exposing roots. Sedimentation can bury small special-status plants or seedlings. Construction activities such as grading and driving of heavy equipment on unpaved roadways can 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, resulting in a significant impact. SDG&E would implement APM AIR-1 and APM HYDRO-2 as part of the Proposed Project to control fugitive dust and erosion, respectively. Furthermore, SDG&E would implement APMs HAZ-1 and HAZ-2 as part of the Proposed Project, which address the handling of hazardous materials. Potential impacts from increased erosion (and subsequent sedimentation), fugitive dust, and release of toxic substances would, therefore, be less than significant after implementation of APMs.

Invasive, non-native plants pose a threat to special-status plant populations and the communities in which they live. Invasive, non-native plants can spread when seeds (or, rarely, vegetative propagules) are brought in on the soles of shoes or on the tires and undercarriages of vehicles or equipment. They can also be brought in if soil containing the seeds 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 the associated land disturbance would result in a significant impact to special-status plants. Mitigation Measure Biology-3 defines methods to identify and control invasive, non-native plant species within the Proposed Project area. Mitigation Measures Fire-1, Fire-2, Fire-3, and Fire-4 include fire prevention and fire suppression requirements to reduce the potential for a catastrophic fire in the Proposed Project area. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-1a, Biology-1b, Biology-1c, Biology-1d, Biology-1e, Biology-1f, Biology-1g, Biology-2, and Biology-3; Fire -1, Fire-2, Fire-3, and Fire-4 (refer to Section 4.12: Fire and Fuels Management)

Mitigation Measure Biology-1a: General Field Personnel Behavior Requirements. All field personnel shall abide by the following general behavior requirements:

1. Vehicles must be kept on approved access roads. A 15 mile-per-hour speed limit shall be observed on dirt access roads. Vehicles shall be turned around in established or designated areas only.
2. No wildlife, including rattlesnakes, may be harmed, except to protect life and limb.

3. Firearms shall be prohibited except for those used by security personnel.
4. Feeding of wildlife shall not be allowed.
5. SDG&E personnel shall not bring pets to work areas in order to minimize harassment or killing of wildlife and to prevent the introduction of destructive domestic animal diseases to native wildlife populations.
6. Parking or driving underneath oak trees shall not be allowed in order to protect root structures except in established traffic areas.
7. Plant or wildlife species shall not be collected for pets or any other reason.
8. Littering shall not be allowed. SDG&E shall not deposit or leave any food or waste in any work area.
9. Wildfires shall be prevented or minimized by exercising care when driving and by not parking vehicles where catalytic converters can ignite dry vegetation. In times of high fire hazard, trucks shall carry water and shovels, or fire extinguishers in the field. The use of shields, protective mats, or other fire prevention methods shall be used during grinding and welding to prevent or minimize the potential for fire. Care shall be exhibited when smoking in permitted areas. Smoking is not permitted within the City of San Diego Open Space.
10. Field crews shall refer environmental issues including wildlife relocation, dead or sick wildlife, hazardous waste, or questions about avoiding environmental impact to a biologist(s) approved by the CPUC and the USFWS and CDFW. Other CPUC- and USFWS- or CDFW-biologists or experts in wildlife handling may need to be brought in for assistance with wildlife relocations.

Mitigation Measure Biology-1b: Environmental Training Program. An environmental training program shall be developed and presented to all crew members prior to the beginning of all project construction. The training shall describe special-status plant and wildlife species and sensitive habitats that could occur within project work areas, protection afforded to these species and habitats, and avoidance and minimization measures required to avoid and/or minimize impacts from the project. Penalties for violations of environmental laws shall also be incorporated into the training session. Each crewmember shall be provided with an informational training handout and a decal to indicate that he/she has attended the training. The roles and responsibilities of CPUC-, USFWS-, and CDFW-approved biologist(s) and other environmental representatives shall be identified in the Mitigation Monitoring, Compliance, and Reporting Program and discussed during the training. All new construction personnel shall receive this training before beginning work on this project.

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 environmental compliance supervisor or a qualified individual who shall be identified by SDG&E's Project Biologist, or initial training shall be recorded and replayed for new personnel.

Mitigation Measure Biology-1c: Pre-Activity Surveys. The CPUC-, USFWS-, and CDFW-approved biologist(s) shall conduct a pre-activity survey for all activities occurring off of access roads in sensitive habitats. The pre-activity survey shall be conducted no earlier than 30 days prior to surface disturbance. The results of the pre-activity survey shall be documented by the Qualified Biologist in a pre-activity survey report. The pre-activity survey report shall be submitted to the CPUC for review and approval prior to the start of construction, and the results shall be submitted to CDFW and USFWS as required by any regulatory permits or approvals. The pre-activity 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 which will be used to avoid or minimize ground disturbance, including biological monitoring during construction
- Anticipated impacts and proposed mitigation
- Map of location of work area

In those situations where the Qualified Biologist cannot make a definitive species identification, the Qualified Biologist shall make a determination based on the available evidence and professional expertise.

In order to ensure that habitats are not inadvertently impacted, the CPUC-, USFWS-, and CDFW-approved biologist shall flag boundaries of habitat which must be avoided. When necessary, the CPUC-, USFWS-, and CDFW-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, augers, etc. When appropriate, the CPUC-, USFWS-, and CDFW-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. Avoidance of habitat for thread-leaved brodiaea is prioritized over minimization and mitigation.

SDG&E shall maintain a library of special-status plant species locations, known to SDG&E, occurring within the project BSA. "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 Habitat Conservation Plans, pre-activity surveys, or biological surveys conducted for environmental compliance of the project. Plant inventories shall be consulted as part of pre-activity survey procedures.

Mitigation Measure Biology-1d: Maintenance, Repair, and Construction of Facilities. SDG&E shall implement the following measures pertaining to maintenance, repair, and construction of facilities:

1. Maintenance, repair and construction activities shall be designed and implemented to minimize new disturbance, erosion on manufactured and other slopes, and off-site degradation from accelerated sedimentation, and to reduce maintenance and repair costs.
2. Routine maintenance of all facilities shall include visual inspections on a regular basis, conducted from vehicles driven on the project access roads where possible. If it is necessary to inspect areas which cannot be seen from the roads, the inspection shall be done on foot or from the air.
3. Erosion shall be minimized on access roads and other locations primarily with water bars. The water bars are mounds of soil shaped to direct flow and prevent erosion.
4. Hydrologic impacts shall be minimized through the use of state-of-the-art technical design and construction techniques to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water by use of Best Management Practices.
5. When siting new facilities, every effort shall be made to cross wetland habitat perpendicular to the watercourse, spanning the watercourse to minimize the amount of disturbance to riparian area.
6. During repair or maintenance of facilities in a streambed, water may be temporarily diverted as long as the natural drainage patterns are restored after disturbance to minimize the impact of the disturbances and to help re-establish or enhance the native habitat. Erosion control during construction in a streambed in the form of intermittent check dams and culverts shall also be considered to prevent alteration to natural drainage pattern and prevent siltation.
7. Impact to wetlands shall be minimized by avoiding pushing soil or brush into washes or ravines.
8. During work on facilities, all trucks, tools, and equipment shall be kept on existing access roads or cleared areas, to the extent possible.

9. The CPUC-, USFWS-, and CDFW-approved biologist shall approve of an activity prior to working in any natural area where disturbance to habitat may be unavoidable.
10. Insulator washing shall be allowed from access roads if other applicable protocols in this mitigation measures are followed.
11. Brush clearing around facilities for fire protection shall not be conducted from January 15 through August 31 (to avoid the general bird nesting season) without prior approval by the CPUC-, USFWS-, and CDFW-approved biologist. The CPUC-, USFWS-, and CDFW-approved biologist shall make sure that the habitat contains no active nests, burrows, or dens prior to clearing.
12. In the event that a special-status plant species is located within the area required to be cleared for fire protection purposes, SDG&E shall notify the USFWS (for ESA-listed plants), and CDFW (for CESA-listed plants), in writing, of the plant's identity and location and of the proposed activity, which will result in a take of such plant. Notification shall occur ten 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) with the ten 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 ESA- or CESA-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-activity survey and notification procedures in Mitigation Measure Biology-1c, above. Wire stringing shall be allowed year-round in sensitive habitats if the conductor is not allowed to drag on the ground or in brush and vehicles remain on access roads.
13. Maintenance of cut and fill slopes shall consist primarily of erosion repair. In situations where revegetation would improve the success of erosion control, planting or seeding with native hydroseed mix may be done on slopes.
14. Spoils created during maintenance operations shall be disposed of only on previously disturbed areas designated by the CPUC-, USFWS-, and CDFW-approved biologist, or used immediately to fill eroded areas. Cleared vegetation shall be hauled to a permitted disposal location.
15. The CPUC-, USFWS-, and CDFW-approved biologist shall be contacted to perform a pre-activity survey when vegetation trimming is planned in sensitive habitats. Whenever possible, trees in sensitive habitats such as native riparian, woodland, or scrub

vegetation shall be scheduled for trimming in non-sensitive times (i.e., outside of breeding or nesting seasons).

16. No new facilities and activities shall be planned that would disturb vernal pools, their watersheds, or impact their natural regeneration. Continued historic maintenance of existing infrastructure utilizing existing access roads shall be allowed to continue in areas containing vernal pool habitat, provided no such habitat located within these roads would be impacted by project activities. New construction of overhead infrastructure which spans vernal pool habitats shall be allowed as long as the placement of facilities or the associated construction activities in no way impact the vernal pools.
17. If any previously unidentified dens, burrows, nests, or special-status plants are located on any project site after the pre-activity survey, the CPUC-, USFWS-, and CDFW-approved biologist shall be contacted. The CPUC-, USFWS- and CDFW-approved biologist shall determine how to best avoid or minimize impacting the resource by considering such methods as project or work plan redevelopment, equipment placement or construction method modification, seasonal/time of day limitations, etc.
18. The CPUC-, USFWS-, and CDFW-approved biologist(s) shall conduct monitoring as recommended in the pre-activity survey report. At completion of work, the CPUC-, USFWS-, and CDFW-approved biologist(s) shall check to verify compliance, including observing that flagged areas have been avoided and that reclamation has been properly implemented. Also at completion of work, the CPUC-, USFWS-, and CDFW-approved biologist(s) shall be responsible for removing all habitat flagging from the construction site.
19. The CPUC-, USFWS-, and CDFW-approved biologist(s) shall conduct checks on mowing procedures to ensure that mowing is limited to a 12-foot wide area on straight portions of the road (slightly wider on radius turns), and that the mowing height is no less than four inches.
20. Supplies or equipment where wildlife could hide (e.g., pipes, culverts, pole holes) shall be inspected prior to moving or working on them to reduce the potential for injury to wildlife. Supplies or equipment that cannot be inspected, or from which animals cannot be removed, shall be capped or otherwise covered at the end of each work day to avoid animal entrapment. Old piping or other supplies that have been left open shall not be capped until inspected and any species found in them allowed to escape. Ramping shall be provided in open trenches when necessary. If an animal is found entrapped in supplies or equipment, such as a pipe section, the

supplies or equipment shall be avoided and the animal(s) left to leave on its own accord, except as otherwise authorized by the CPUC-, USFWS- and CDFW-approved biologist. Refer to Mitigation Measure 1a, Item 10 for wildlife relocations.

21. All steep-walled trenches or excavations used during construction shall be inspected twice daily (early morning and evening) to protect against wildlife entrapment. If wildlife is located in the trench or excavation, the CPUC, USFWS-, and CDFW-approved biologist(s) shall be called immediately to remove it if it cannot escape unimpeded.
22. Large amounts of fugitive dust could interfere with photosynthesis. Fugitive dust created during clearing, grading, earth-moving, excavation or other construction activities shall be controlled by regular watering. At all times, fugitive dust emissions will be controlled by limiting on-site vehicle speed to 15 miles per hour.
23. Before using pesticides in areas where burrowing owls may be found, a pre-activity survey shall be conducted.

Mitigation Measure Biology-1e: Maintenance of Access Roads. Maintenance of access roads shall consist of:

1. Repairing erosion by grading, adding fill, and compacting it. In each case of repair, the total area of disturbance shall be minimized by careful access and use of appropriately sized equipment. Repairs shall be done after pre-activity surveys conducted by the CPUC-, USFWS-, and CDFW-approved biologist(s).
2. Controlling vegetation through grading, which shall be used only where the vegetation obscures the inspection of facilities, access may be entirely lost, or the threat of facility failure or fire hazard exists. The graded access road width shall not exceed 12 feet on straight portions (radius turns may be slightly wider).
3. Maintenance work on access roads shall not expand the existing road bed.
4. Material for filling in road ruts shall never be obtained from the sides of the road, which contain habitat, without approval from CPUC-, USFWS-, and CDFW-approved biologist.

Mitigation Measure Biology-1f: Construction of New Access Road Protocols. Construction of new permanent spur roads shall comply with the following:

1. New spur roads shall be designed in coordination with the wildlife agencies and preserve managers and priority shall be given to placement of spur roads in previously disturbed areas and areas which require the least amount of construction grading.

2. Construction of new access roads shall be allowed year-round, providing the soil is dry and no natural ponding has occurred. Every effort shall be made to avoid constructing roads during the nesting season. During the nesting season, the presence or absence of nesting species shall be determined by the CPUC-, USFWS-, and CDFW-approved biologist. If nesting birds are detected, appropriate avoidance and minimization recommendations, as described in Mitigation Measures Biology-7 and Biology-8, shall be followed.

Mitigation Measure Biology-1g: Survey Work Protocols. SDG&E shall implement the follow measures during survey work:

1. 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 will ensure the brush clearing activity, does not adversely affect a special-status species or nesting birds.
2. SDG&E survey personnel shall keep vehicles on existing access roads. No clearing of brush shall be allowed from February through September without prior approval from the CPUC-, USFWS-, and CDFW-approved biologist, who will ensure the brush clearing activity, does not adversely affect a special-status species or nesting birds.
3. Hiking off roads or paths for survey data collection shall be allowed year round as long as other protocols are met.

Mitigation Measure Biology-2: Compensatory Mitigation for Special-Status Plants. All ~~special-status~~ federal and/or State listed and/or CRPR Rare Plant Rank 1B or 2B species plant populations (i.e., thread-leaved brodiaea, San Diego button-celery, Nuttall's scrub oak, decumbent goldenbush, summer holly, long-spined spineflower, spineshrub, and coast barrel cactus) shall be staked or flagged by a qualified biologist approved by the CPUC, USFWS, and CDFW if they fall within the limits of work. All stakes, flagging, or fencing shall be removed no later than 30 days after construction is complete. Impacts to special-status plant species shall be avoided to the extent feasible. Where impacts to special-status plant species are unavoidable, the impact shall be quantified and compensated through off-site land preservation and/or plant salvage and relocation per the direction of the USFWS and/or CDFW. Where off-site land preservation is biologically preferred, the land shall contain comparable special-status plant resources as the impacted 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 12 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-, USFWS-, and CDFW-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 ~~and~~ or until success criteria are met. If the salvage and relocation fails 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 at the receiver site.),
- Less than 5 percent cover of invasive weeds within the restoration area, and
- Eradication of any noxious invasive weeds.

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

Mitigation Measure Biology-3: Weed Control Plan. SDG&E shall prepare and implement a comprehensive, adaptive Weed Control Plan for pre-construction and long-term invasive, non-native species abatement. Developed land shall be excluded from weed control. Where SDG&E owns the property, the Weed Control Plan shall include specific weed abatement methods, practices, and treatment timing developed specifically for the Project area by qualified individuals with at least 5 years of weed control experience within San Diego County. The Weed Control Plan shall address control methods and issues controlling invasive non-native species within all vegetation communities and land cover types found along the Project alignment ~~in consultation with the San Diego County Agriculture Commissioner's Office and the California Invasive Plant Council (Cal IPC)~~. On ROW easement on MCAS Miramar, the Weed Control Plan shall incorporate all appropriate and legal U.S. Marine Corps-stipulated regulations. The Weed Control Plan shall be submitted to MCAS Miramar for final authorization of weed control methods, practices, and timing prior to implementation of weed control on MCAS Miramar. The Weed Control Plan shall be submitted to the City of San Diego for final authorization of weed control methods, practices, and timing prior to implementation of any weed control within the City of San Diego MHPA.

The Weed Control Plan shall include the following:

- A pre-construction weed inventory shall be conducted by surveying the entire ROW and areas immediately adjacent to the ROW where access permission is obtained, as well as at all ancillary facilities associated with the Project ~~project~~ for weed populations that: (1) are considered by the San Diego County Agriculture Commissioner ~~or~~, MCAS Miramar (for ROW on MCAS Miramar), or City of San Diego (for ROW within the City of San Diego MHPA) as being a priority for control, (2) are weed populations that are rated High or Moderate for negative ecological impact in the California Invasive Plant Inventory (online) Database (Cal-IPC 2006 [and 2007 update]; http://www.cal-ipc.org/ip/inventory/index.php) or are weed species of concern to MCAS Miramar (for ROW on MCAS Miramar), and (~~2~~3) aid and promote the spread of wildfires in San Diego County. Prolific wildfire promoting species such as brome grasses (*Bromus* sp.) shall be mapped but not targeted for control outside of Project impact areas. These populations shall be mapped and described according to density and area covered. These plant species shall be treated prior to construction or at a time when treatments would be most effective based on phenology according to control methods and practices for invasive weed populations included in the Weed Control Plan ~~designed in consultation with the San Diego County Agriculture Commissioner's Office and Cal IPC~~, or required by MCAS Miramar~~,~~ or City of San Diego ~~as appropriate~~.
- ~~A pre-construction weed inventory shall also be conducted by surveying areas that will be directly impacted by the project for weed populations that are rated High or Moderate for negative ecological impact in the California Invasive Plant Inventory (online) Database (Cal-IPC 2006 [and 2007 update]; http://www.cal-ipc.org/ip/inventory/index.php) or are weed species of concern to MCAS Miramar (for ROW on MCAS Miramar). These plant species shall be treated prior to construction or at a time when treatments would be most effective based on phenology according to control methods and practices for invasive weed populations designed in consultation with Cal IPC and MCAS Miramar (for treatment in ROW on MCAS Miramar).~~
- Weed control treatments shall include all legally permitted methods to be used in the following prioritized order: preventative, manual, mechanical, and chemical. All treatments shall be applied with the authorization of the ~~San Diego County Agriculture Commissioner and~~, MCAS Miramar~~,~~ and City of San Diego as appropriate. The application of herbicides shall be in compliance with all state and

federal laws and regulations under the prescription of a Pest Control Advisor (PCA) and implemented by a Licensed Qualified Applicator. Where manual and/or mechanical methods are used, disposal of the plant debris will be within an approved landfill area within San Diego County ~~follow the regulations set by the San Diego County Agriculture Commissioner~~ . The timing of the weed control treatment shall be determined for each plant species in consultation with the PCA for the Project, ~~San Diego County Agriculture Commissioner, Cal-IPC,~~ and with MCAS Miramar~~,~~ and City of San Diego as appropriate, with the goal of controlling populations before they start producing seeds. For the lifespan of the project (i.e., as long as the project is physically present), long-term measures to control the introduction and spread of weeds in the project area shall be taken as follows.

- From the time construction begins until 2 years after construction is complete, annual surveying for new invasive weed populations and the monitoring of identified and treated populations shall be required in the survey areas described above. After this time, surveying for new invasive weed populations and monitoring of identified and treated populations shall be required at an interval of every two years. However, the treatment of weeds shall occur on a minimum annual basis, unless otherwise approved by the PCA, ~~the San Diego County Agriculture Commissioner, Cal-IPC, and~~ MCAS Miramar, and City of San Diego as appropriate.
- During project construction and operation/maintenance, all seeds and straw materials shall be certified weed free, and all gravel and fill material shall also be certified weed free ~~by the San Diego County Agriculture Commissioner's Office~~.
- During project construction, vehicle and boot wash stations shall be provided.

Significance after mitigation: Less than significant.

Impact Bio-2: Would construction of the Proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any invertebrate species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Direct Impacts to Special-status Invertebrates

San Diego fairy shrimp~~, vernal pool fairy shrimp,~~ and QCB could occur in the Proposed Project area. San Diego fairy shrimp is covered by SDG&E's NCCP, and QCB is covered by SDG&E's low-effect HCP for QCB.

San Diego Fairy Shrimp ~~and Vernal Pool Fairy Shrimp~~

San Diego fairy shrimp ~~and vernal pool fairy shrimp are~~ is a federally listed species and has ~~have~~ a high potential to occur in vernal pool and road rut pool habitats within Segments C and D of the Proposed Project (Appendix G, Figure G-2). San Diego fairy shrimp is also known to occur within its USFWS-designated critical habitat, some of which is located in Segment C. There are no permanent structures that would be built on potentially suitable habitat for San Diego fairy shrimp ~~and vernal pool fairy shrimp~~. However, there is potential for permanent impacts to pools and San Diego fairy shrimp if SDG&E repairs access roads and fills in road rut pools containing suitable habitat in Segments C and D. Vehicle and equipment access on roads containing vernal pools or road rut pools could also degrade the quality of the pool or crush San Diego fairy shrimp cysts. These impacts would be significant~~.~~ because any impact to one or more individuals of a federal listed species would significantly affect the population of this species.

SDG&E would implement APM BIO-4 as part of the Proposed Project, which requires measures to avoid and minimize impacts to vernal and road rut pools that provide suitable habitat for San Diego fairy shrimp. However, the measures in APM BIO-4 are not considered adequate to reduce the potential impacts to listed San Diego fairy shrimp ~~species~~ to less than significant levels because APM BIO-4 does not require full avoidance of vernal pools or road rut pools; as a result, the quality of the pools could be degraded and cysts could be crushed, resulting in a significant impact. APM BIO-2 requires the implementation of the current SDG&E NCCP. NCCP protocols include measures to minimize impacts to vernal pools and road pools and requirements for compensatory mitigation in the event that a vernal pool or road pools is permanently impacted. NCCP protocols and measures may not apply at the time of Proposed Project construction. Therefore, even after implementation of APMs, impacts would remain significant because compensatory mitigation for vernal pools and road pools would not be implemented if the NCCP is not applied. Mitigation Measure Biology-4 specifies further requirements for avoidance or compensation of impacts to vernal and road rut pools to reduce impacts to special-status San Diego fairy shrimp. Implementation of Mitigation Measure Biology-4 would reduce potential impacts to San Diego ~~and vernal pool~~ fairy shrimp to a less-than-significant level.

Quino Checkerspot Butterfly

There are approximately 110.6 acres of suitable QCB habitat within the BSA (Helix 2015c) and there is a moderate potential for this species to occur within the vicinity of the work areas in suitable habitat during construction. Proposed Project construction would result in temporary impacts to 9.14 acres of suitable QCB habitat, permanent impacts to 1.28 acres of suitable QCB habitat, and access road impacts to 3.19 acres of suitable QCB habitat in Segment A and the Stonebridge staging yard. The Proposed Project would have a substantial adverse effect on QCB if the Proposed Project caused mortality or injury to QCB or impacted suitable or occupied habitat; this impact would be significant.

SDG&E would implement APM BIO-3 as part of the Proposed Project. APM BIO-3 requires SDG&E to implement SDG&E's HCP for the QCB. The HCP for the QCB requires

implementation of measures in SDG&E's Subregional NCCP to provide compensatory mitigation for impacts to QCB-suitable and QCB-occupied habitat. Compensatory mitigation would be applied at the ratios described in the HCP for the QCB: a 2:1 ratio for occupied habitat and a 1:1 ratio for suitable habitat. According to the HCP for the QCB, SDG&E must implement one of the following measures:

1. Pay into a QCB habitat fund that will be used to benefit QCB through acquisition, restoration, or enhancement of QCB habitat;
2. Enhance an unallocated portion of SDG&E's existing mitigation parcel for the benefit of QCB;
3. Purchase credits from a to-be-established QCB bank, should one be approved by USFWS in the future; or
4. Acquire a mitigation parcel that supports or could support QCB (Moser and Skaggs LLP 2007).

Under the HCP for the QCB, SDG&E is not required to perform pre-activity surveys for the Proposed Project because the Proposed Project is outside of the SDG&E QCB Mapped areas as shown in the HCP (Moser and Skaggs LLP 2007). Impacts to QCB would, therefore, remain significant after implementation of APM BIO-3 because the Proposed Project would be within the potential range of the QCB, and there is suitable habitat for QCB in the Proposed Project area. Mitigation Measure Biology-5 requires pre-activity surveys for the QCB within the current USFWS survey area for the species (as defined in USFWS 2014b) and mitigation for suitable and occupied QCB habitat consistent with the HCP. Impacts to QCB would be less than significant with mitigation.

Critical Habitat

Critical habitat for San Diego fairy shrimp is located within transmission line Segment C of the Proposed Project alignment. No permanent structures will be built within San Diego fairy shrimp critical habitat. However, there is potential for SDG&E to fill in pools or degrade the quality of the pools that provide habitat for San Diego fairy shrimp during access road refreshing or use and permanently impact critical habitat. SDG&E would implement APM BIO-4 as part of the Proposed Project, which requires measures to avoid and minimize impacts to vernal pools and road pools and, therefore, San Diego fairy shrimp critical habitat. However, the measures in APM BIO-4 are not considered adequate to reduce the potential impacts to the critical habitat to less than significant levels because it does not provide measures to compensate for impacts to vernal pools. Impacts would remain significant after implementation of APM BIO-4. Consequently, Mitigation Measure Biology-4, which includes additional or more restrictive measures for vernal pools and road rut pools, is required to reduce the potential impacts to less than significant levels. Impacts to San Diego fairy shrimp critical habitat would be less than significant with mitigation.

Indirect Impacts to Special-status Invertebrates
Construction disturbance would indirectly impact special-status invertebrates through increased erosion and sedimentation; fugitive dust; release of toxic substances (e.g., oil), and invasive, non-native plant species (weeds) introduction and/or spread.

Sedimentation associated with erosion would adversely affect San Diego fairy shrimp in vernal and road rut pools, for example, by increasing turbidity and adversely affecting water quality and/or by filling the pools and reducing their depth or surface area, resulting in a significant impact. Construction activities such as grading and driving of heavy equipment on unpaved roadways can result in increased levels of blowing dust that may settle on surrounding vegetation, for example, adversely affecting the plants (see Impact Bio-1) and adversely affecting special-status invertebrates (QCB) dependent on the plants, resulting in a significant impact. Listed San Diego fairy shrimp ~~species~~ could be adversely affected by decreased water quality or suffer mortality if a toxic substance spilled or flowed into a pool, resulting in a significant impact. SDG&E would implement APM AIR-1 and APM HYDRO-2 as part of the Proposed Project to control fugitive dust and erosion/sedimentation, respectively. Furthermore, SDG&E would implement APMs HAZ-1 and HAZ-2 as part of the Proposed Project, which address the handling of hazardous materials. Impacts from erosion, fugitive dust, and toxic substances would be less than significant. No mitigation is required.

Special-status invertebrates could be adversely affected through habitat degradation from invasive, non-native plant species. If non-native, invasive species were introduced to QCB habitat, these non-native species could out-compete native species that QCB depend upon and result in a significant impact. Mitigation Measure Biology-3 (weed control) is required to reduce the impacts from invasive, non-native plant species to a less-than-significant level.

Mitigation Measures: Biology-3 (refer to Impact Bio-1), Biology-4, and Biology-5

Mitigation Measure Biology-4: Compensatory Mitigation for Vernal Pools. SDG&E shall implement the following measures to avoid and minimize impacts to San Diego ~~and vernal pool~~ fairy shrimp and their potential vernal pool and road pool habitats:

- SDG&E shall presume presence of San Diego ~~and vernal pool~~ fairy shrimp in all vernal pools and road pools within and outside of the transmission line Segments C and D BSA and avoid the access roads with these pools to the maximum extent practicable.
- If complete avoidance is not feasible, SDG&E may perform a survey of the pools during the wet season, identify the number and size of pools, and record whether they support indicator vernal pool plant species.
- All impacts to vernal pools, with or without special-status species present, shall be mitigated at a 3:1 ratio. Mitigation may occur on-site provided a sufficient number of degraded pools exist in the vicinity and SDG&E receives approval from CPUC, USFWS, and CDFW for

restoration and/or enhancement of the degraded pools. Otherwise, mitigation shall be implemented off-site at a pre-approved vernal pool restoration area. Mitigation credits, as approved by CPUC, CDFW, and USFWS, may be accumulated and used through advance creation, restoration, and enhancement of vernal pool basin area. The areas pre-approved by CPUC, USFWS, and CDFW for creation, restoration, and/or enhancement of vernal pool basin area shall be of high quality (e.g., Carmel Mesa or Otay Mesa) and shall support special-status species impacted by the project. Pre-approved vernal pool mitigation areas shall be managed and monitored pursuant to a Management Plan approved by CPUC, CDFW, and USFWS.

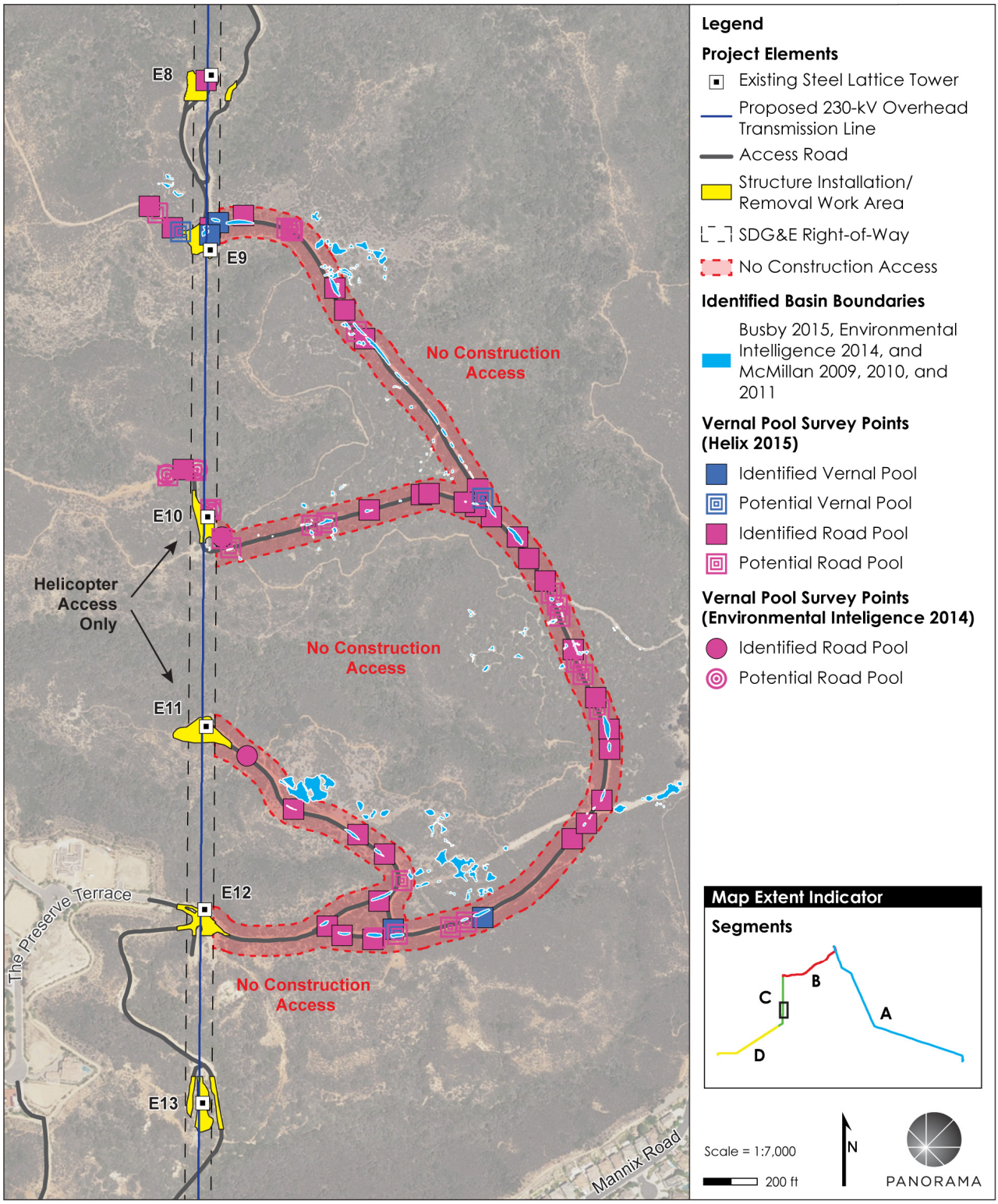
If SDG&E does not mitigate at a pre-approved vernal pool restoration area, then CPUC, CDFW, and USFWS concurrence on an acceptable mitigation site is required prior to any impacts to vernal pools. Recognizing that restoration efforts may vary somewhat, SDG&E shall prepare a detailed vernal pool restoration plan based on a generalized approach for vernal pool restoration which has been previously approved by USFWS and CDFW in SDG&E's NCCP. If further refinements to this generalized approach are necessary, CPUC, USFWS, and CDFW will respond to the restoration plan within 30 days.

- No 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 CPUC, CDFW, and USFWS for any mitigation outside of pre-approve vernal pool restoration areas.
- No construction access shall be allowed at any time on the access road in transmission line Segment C between poles E9 and E12 as shown in Figure 4.1-4 due to the substantial number of existing vernal pools and road rut pools present within and immediately adjacent to the access road. ~~Orange construction~~ Green snow fencing shall be installed at the end points of the restricted access with a moveable post that allows for a 4-foot wide opening. Temporary signage shall be posted on the fencing stating, "No construction access permitted." The no construction access area shall be monitored by a CPUC-, USFWS-, and CDFW-approved biologist to ensure no vehicle access or entry occurs throughout the duration of construction.
- Rather than assume listed San Diego fairy shrimp presence, SDG&E may conduct a USFWS protocol, wet season survey of the vernal pools and road rut pools for listed San Diego fairy shrimp. The survey shall be conducted by an individual that holds a recovery

permit for San Diego ~~and vernal pool~~ fairy shrimp pursuant to section 10(a)(1)(A) of the ESA. If these surveys are conducted, impacts to vernal pools ~~fairy shrimp shall require mitigation through an off-site approved vernal pool restoration area or restoration plan as described above,~~ (with or without San Diego fairy shrimp), and road rut pools supporting listed San Diego fairy shrimp shall require mitigation through an off-site approved vernal pool restoration area or restoration plan as described above and no mitigation would be required for road ruts pools that do not support special status species

- Where access roads containing pools are used and the roads are not first repaired under the scenarios listed above, the following measures shall apply during project construction and operation/maintenance:
  - The delineation of all pool boundaries (i.e., the pool exclusion/buffer zone noted in APM BIO-4) shall be staked/flagged prior to the start of work.
  - A qualified biological monitor (see APM BIO-4), who holds a recovery permit for San Diego ~~and vernal pool~~ fairy shrimp pursuant to section 10(a)(1)(A) of the ESA, shall be present to monitor access road use.
  - Helicopters shall be used where vehicle access is restricted by the exclusion zone(s) of the delineated pool(s) as determined by the qualified biological monitor.
  - The qualified biological monitor shall have the authority to halt any project activity that is deemed to be impacting, or potentially impacting, 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 work.
  - A minimum of 150 feet shall be provided between pools and all staging, parking, and storage areas.

Figure 4.1-4 Construction Access Road Restrictions within Segment C of the Proposed Project



Mitigation Measure Biology-5: Pre-Activity Surveys for QCB. SDG&E shall conduct a pre-activity survey for QCB in all project work areas and along all project access roads within the current USFWS survey area for QCB (USFWS 2014b) to determine areas of suitable QCB habitat.

In areas where no suitable QCB habitat is found during the pre-activity survey, construction may occur at any time, consistent with the HCP for the QCB (i.e., the operational protocols in the 1995 Subregional NCCP), and no QCB mitigation shall be required.

If suitable QCB habitat is present, and construction cannot avoid the suitable habitat, then one of the following shall occur:

- A USFWS protocol, adult, flight-season survey for the QCB shall be conducted by an individual that holds a recovery permit for the QCB pursuant to section 10(a)(1)(A) of the ESA. The survey shall be conducted within suitable QCB habitat areas to determine whether or not the habitat is occupied by QCB. In areas where there is no QCB detected, construction activities may proceed without further review, and the suitable QCB habitat shall be mitigated at a 1:1 ratio per the methods in the HCP for the QCB.
- If QCB are detected, efforts shall be made to avoid impacts to the occupied habitat. Impacts to occupied habitat shall be mitigated at a 2:1 ratio per the methods in the HCP for the QCB.
- If the timing of the project will not allow for an adult, flight-season surveys to determine the presence or absence of QCB, presence of QCB will be assumed in all suitable habitats, and mitigation for impacts shall occur at a 2:1 ratio per the methods in the HCP for the QCB.
- If impacts to occupied QCB habitat (as determined by surveys or where QCB presence is assumed) are greater than one acre, SDG&E shall confer with USFWS to ensure that the activity's impact will not cause the permanent loss of QCB habitat.

Significance after mitigation: Less than significant.

Impact Bio-3: Would construction of the Proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any amphibian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Direct Impacts to Special-status Amphibians

There is high potential for western spadefoot to occur within transmission line Segments C and D of the Proposed Project because of the presence of suitable aquatic habitat. Vernal pools, road

rut pools, freshwater marsh, southern riparian scrub, and southern willow scrub habitats are located within the Segments C and D of the BSA.

Western spadefoot would be injured or killed, if present, and suitable habitat would be affected during vegetation removal and vehicle and equipment travel on access roads. Construction would result in temporary impacts to 0.01 acre of freshwater marsh. Construction would also permanently impact potential vernal or road rut pool habitat for access road repair and vehicle and equipment travel. Because no focused surveys were performed for western spadefoot, it is not possible to fully and accurately quantify impacts to western spadefoot; therefore, it is assumed that construction of the Proposed Project could significantly impact western spadefoot. SDG&E would implement APMs BIO-2 and BIO-4 as part of the Proposed Project, which would reduce impacts to western spadefoot. APM BIO-2 requires the implementation of the current SDG&E NCCP protocols, which includes compensatory mitigation for vernal pools and freshwater marsh. The NCCP protocols and mitigation measures may not apply to the Proposed Project at the time of construction, and appropriate habitat compensation may therefore not be implemented. APM BIO-4 requires measures to avoid and minimize impacts to vernal pools and road rut pools; however, this measure does not require full avoidance or compensation for impacts to vernal or road rut pools, or western spadefoot toad. Impacts to suitable western spadefoot habitat would remain significant after implementation of APMs. Mitigation Measures Biology-1a, Biology-1b, Biology-1c, and Biology-1d would minimize direct impacts to western spadefoot, including injury and mortality by requiring reduced speeds, worker training, pre-construction surveys, delineation of sensitive habitats, and inspection of trenches. Mitigation Measure Biology-4 requires additional protection of vernal and road rut pool habitats and compensatory mitigation for impacts), and Mitigation Measure Biology-6 requires compensation for impacts to freshwater marsh. Impacts to western spadefoot would be less than significant with mitigation.

Indirect Impacts to Special-status Amphibians

Construction disturbance would indirectly impact special-status amphibians through increased erosion and sedimentation, fugitive dust, release of toxic substances (e.g., oil), and invasive, non-native plant species introduction and/or spread.

Sedimentation associated with erosion would adversely affect special-status amphibians (e.g., western spadefoot) in vernal and road rut pools, for example, by filling pool habitat and reducing available habitat and increasing turbidity, which adversely affect water quality, resulting in a significant impact. Construction activities such as grading and driving of heavy equipment on unpaved roadways can result in increased levels of blowing dust that may settle on aquatic habitats adversely affecting water quality and special-status amphibians dependent on the habitat, resulting in a significant impact. Special-status amphibians 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. SDG&E would implement APM AIR-1 and APM HYDRO-2 as part of the Proposed Project to control fugitive dust and erosion/sedimentation, respectively. Furthermore, SDG&E would implement APMs HAZ-1 and HAZ-2 as part of the Proposed Project, which address the handling of hazardous materials.

Impacts from erosion, fugitive dust, and toxic substances would be less than significant with implementation of APMs. No mitigation is required.

Special-status amphibians would be adversely affected through habitat degradation from invasive, non-native plant species, which can invade aquatic habitats and displace open water used by the amphibians. Each of these indirect impacts would be significant. Mitigation Measure Biology-3 would implement weed control. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-1a, Biology-1b, Biology-1c, Biology-1d, and Biology-3 (refer to Impact Bio-1); Biology-4 (refer to Impact Bio-2); and Biology-6

Mitigation Measure Biology-6: Compensatory Mitigation for Impacts to Habitat. SDG&E shall restore temporarily impacted areas ~~to pre-construction conditions~~ following construction according to the performance criteria described below and/or shall purchase/dedicate suitable habitat for preservation to off-set permanently impacted areas. Restoration of some vegetation communities in temporarily impacted areas may not be possible if those areas are subject to vegetation management to maintain proper clearance between transmission lines and vegetation, for example. In those instances, the mitigation shall consist of off-site acquisition and preservation of the vegetation community. Restoration of temporarily impacted areas involves recontouring the land, replacing the topsoil (if it was collected), planting seed and/or container stock, maintaining (i.e., weeding, replacement planting, supplemental watering, etc.), and monitoring the restored area for a period of 5 years ~~and~~ or until year 5 success criteria are met.

SDG&E shall prepare a Habitat Restoration Plan that shall be subject to approval by the CPUC, USFWS, CDFW, City of San Diego (for restoration within City of San Diego MHPA), and MCAS Miramar (for restoration on MCAS Miramar) prior to habitat impacts. Required mitigation ratios are provided by habitat type in Table 4.1-10. In cases where the impacts to sensitive vegetation communities occur in the City of San Diego MHPA, the mitigation shall also occur in the MHPA. The Habitat Restoration Plan shall also identify, if applicable, the ~~need~~ potential for reintroduction and/or increasing MSCP-covered species populations within habitat restoration areas if those covered species were affected by the Proposed Project.

Table 4.1-10 Required Habitat Mitigation Ratios

Vegetation Community	Mitigation Ratio	
	Temporary	Permanent
Diegan Coastal Sage Scrub		
Diegan coastal sage scrub	1:1	1:1
Diegan coastal sage scrub in the MHPA	1:1	2:1
Diegan coastal sage scrub-Disturbed	1:1	1:1
Diegan coastal sage scrub-Disturbed in the MHPA	1:1	2:1
Diegan coastal sage scrub-Revegetated	1:1	1:1
Diegan coastal sage scrub-Revegetated in the MHPA	---	2:1
Coastal Sage Scrub		
Coastal sage-chaparral scrub	0.5:1	1:1
Coastal sage-chaparral scrub in the MHPA	1:1	2:1
Chaparral		
Chamise chaparral	0.5:1	1:1
Chamise chaparral in the MHPA	1:1	2:1
Chamise chaparral-disturbed	0.5:1	1:1
Chamise chaparral-disturbed in the MHPA	1:1	2:1
Scrub oak chaparral	1:1	1:1
Scrub oak chaparral in the MHPA	2:1	2:1
Southern mixed chaparral	0.5:1	1:1
Southern mixed chaparral in the MHPA	1:1	2:1
Southern mixed chaparral-disturbed	0.5:1	1:1
Southern mixed chaparral-disturbed in the MHPA	1:1	2:1
Grassland		
Native grassland	1:1	1:1
Native grassland in the MHPA	2:1	2:1
Non-native grassland	0.5:1	1:1
Non-native grassland in the MHPA	---	2:1
Freshwater Marsh		
Freshwater marsh	---	1:1
Vernal Pool		
San Diego Mesa Vernal Pool	3:1	3:1
Riparian		
Southern riparian scrub	---	1:1
Mule fat scrub	---	1:1

Vegetation Community	Mitigation Ratio	
	Temporary	Permanent[1]
Mulefat scrub in MHPA	---	2:1
Southern willow scrub	---	1:1
Southern willow scrub in MHPA	---	2:1
Tamarisk scrub in MHPA	---	2:1
Southern coast live oak riparian forest	---	1:1
Southern coast live oak riparian forest in MHPA	---	2:1

Note:

[1] Mitigation ratios for permanent impacts are consistent with SDG&E's NCCP; 1:1 for permanent impacts outside a preserve and 2:1 for permanent impacts inside a preserve.

The Restoration Plan shall include the following performance criteria:

- Percent cover and composition shall be similar to the conditions of a nearby reference site, defined as variation of no more than 10 percent absolute cover from the reference site cover and species composition condition.
- Maintenance and monitoring for restoration shall be for ~~a minimum of~~ 5 years or until success criteria are met~~, even if established success criteria are met before the end of 5 years~~. Compensation planting areas shall be monitored eight times in Year 1, six times per year in Years 2 and 3, and 4 times per year in Years 4 and ~~5~~ above.
- Compensation planting areas shall be monitored for invasive plants in the first 5 years following replanting. Invasive plant monitoring shall occur eight times in Year 1, six times per year in Years 2 and 3, and 4 times per year in Years 4 and 5. If invasive plants are found during the 5-year monitoring period, they shall be removed as necessary to support meeting the cover and vegetation composition success criteria.
- If the restoration fails to meet the established success criteria after the maintenance and monitoring period, maintenance and monitoring shall extend beyond the 5-year period until the criteria are met or unless otherwise approved by the CPUC.
- Maintenance and monitoring shall be conducted following a prescribed schedule to assess progress and identify potential problems with the restoration. Remedial action (e.g., additional planting, weeding, erosion control, use of container stock, supplemental watering, etc.) shall be taken by an experienced, licensed Habitat Restoration Contractor during the maintenance and monitoring period if necessary to ensure the success of the restoration.

Any impacts associated with unauthorized activity (e.g., exceeding approved construction footprints or implementing the Habitat Management Plan after the allowed timeframe of 18 months following the initiation of any vegetation disturbing activities) shall be mitigated at a 5:1 ratio. Restoration of the unauthorized impacts shall be credited at a 1:1 ratio (i.e., mitigated by in-place habitat restoration); the remaining 4:1 shall be acquired and preserved off-site.

For areas where habitat restoration cannot meet mitigation requirements, as determined by the Habitat Restoration Specialist in coordination with CPUC, USFWS, CDFW, and MCAS Miramar (for restoration on MCAS Miramar), off-site purchase and dedication of habitat (or as otherwise prescribed by MCAS Miramar for restoration on MCAS Miramar) shall be provided at the mitigation ratios provided in Table 4.1-10.

Mitigation Parcels/Habitat Management Plans. All off-site mitigation parcels shall be approved by the CPUC, USFWS, CDFW and MCAS Miramar (as applicable) and must be acquired, or their acquisition must be assured~~, before the line is energized~~. To demonstrate that such parcels will be acquired, SDG&E shall submit a Habitat Acquisition Plan at least 120 days prior to any ground disturbing activities for CPUC, USFWS, CDFW, and MCAS Miramar (as applicable) review and approval. The Habitat Acquisition Plan shall include, but shall not be limited to:

- Legal descriptions and maps of all parcels to be acquired;
- Schedule that includes phasing relative to impacts;
- Documentation demonstrating that the mitigation parcel(s) provides high quality habitat roughly equivalent in composition to the habitats that would be impacted by the project and at appropriate acreages;
- Timing of conservation easement recording;
- Initiation of habitat management activities relative to acquisition; and
- Assurance mechanisms (e.g., performance bonds to assure adequate funding) for any parcels not actually acquired prior to vegetation disturbing activities.

A Habitat Management Plan shall be prepared by a biologist and approved by the CPUC, USFWS, CDFW, and MCAS Miramar (as applicable) for all acquired off-site mitigation parcels. The Habitat Management Plan must be approved in writing by these agencies (as applicable) within 18 months of ~~prior to~~ the initiation of any vegetation disturbing activities. The Habitat Management Plan shall provide direction for the preservation and in-perpetuity management of all acquired, off-site mitigation parcels. The Habitat Management Plan shall include, but shall not be limited to:

- Adequate SDG&E funding for the preparation and implementation of the HMP
- Legal descriptions of all mitigation parcels approved by the CPUC, USFWS, CDFW, and MCAS Miramar (for mitigation parcels to be acquired for MCAS Miramar impacts)
- Baseline biological data for all mitigation parcels
- Designation of a land management entity approved by the CPUC, USFWS, CDFW, and MCAS Miramar (for mitigation parcels to be acquired for MCAS Miramar impacts) to provide in-perpetuity management
- A Property Analysis Record prepared by the designated land management entity that explains the amount of funding required to implement the Habitat Management Plan
- Designation of responsible parties and their roles (e.g., provision of endowment by SDG&E to fund the Habitat Management Plan and implementation of the Habitat Management Plan by the designated land management entity)
- Management specifications including, but not limited to, regular biological surveys to compare with the baseline data; invasive, non-native species control; fence/sign replacement or repair; public education; trash removal; and annual reports to CPUC, USFWS, CDFW, and MCAS Miramar (for mitigation parcels to be acquired for MCAS Miramar impacts)

Significance after mitigation: Less than significant.

Impact Bio-4: Would construction of the Proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any reptile species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Direct Impacts to Special-Status Reptiles

Belding's Orange Throated Whiptail, Red Diamond Rattlesnake, Rosy Boa, San Diego Ringneck Snake, San Diego Banded Gecko, Coronado Skink, Two-striped Garter Snake, Coast Horned Lizard, Coast Patch-Nosed Snake

The Belding's orange-throated whiptail was the only reptile species detected in the BSA; one individual was observed in transmission line Segment A. The species has high potential to occur in transmission line Segments B, C and D of the Proposed Project, and a moderate potential to occur in the Proposed Project staging yards, Mission—San Luis Rey phase transposition work areas, and Encina Hub.

The following special-status reptile species were not observed during biological surveys but have high or moderate potential to occur because of presence of potentially suitable habitat:

- Red diamond rattlesnake
- San Diego ringneck snake
- Coast patch-nosed snake
- Rosy boa

- Coronado skink
- Coast horned lizard
- San Diego banded gecko
- Two-striped garter snake

Proposed Project construction would result in direct impacts to special-status reptile species if the species were injured or killed during construction activities. This would occur primarily during vegetation removal and grading and from use of access roads. Construction would also result in direct permanent and temporary loss of suitable habitat for special-status reptiles as shown in Table 4.1-11.

Table 4.1-11 Summary of Proposed Project Impacts to Potentially Suitable Habitat for Special-status Reptile Species

Species	Potentially Suitable Habitat in the Project Area	Impact			
		Temporary	Permanent	Existing Access Road Improvement (Permanent) ~~Access Roads~~	Temporary Access Road and Passing (Temporary)
Belding's orange-throated whiptail	Coastal sage scrub, chaparral, grassland	~~25.68~~ 27.89	3.96	~~5.27~~ 3.37	0.28
Red diamond rattlesnake	Coastal sage scrub, chaparral, grassland	~~25.68~~ 27.89	3.96	~~5.27~~ 3.37	0.28
San Diego ringneck snake	Chaparral, grassland, oak riparian forest, riparian scrub vernal pool	~~12.46~~ 12.16	1.81	~~2.34~~ 1.53	0.28
Coronado skink	Coastal sage, chaparral, riparian scrub	~~19.45~~ 21.68	3.62	~~4.72~~ 2.80	0.26
Coast horned lizard	Coastal sage scrub, chaparral, grassland	~~25.68~~ 27.89	3.96	~~5.27~~ 3.37	0.28
Coast patch-nosed snake	Coastal sage scrub, chaparral, grassland	~~25.68~~ 27.89	3.96	~~5.27~~ 3.37	0.28
Rosy boa	Coastal sage scrub, chaparral, riparian scrub	~~19.45~~ 21.68	3.62	~~4.72~~ 2.80	0.26
San Diego banded gecko	Coastal sage scrub, chaparral	~~19.45~~ 21.68	3.62	~~4.65~~ 2.78	0.26
Two-striped garter snake	Coastal sage scrub, chaparral, riparian scrub, vernal pool, freshwater marsh	~~19.45~~ 21.68	3.62	~~4.73~~ 2.80	0.26

Impacts to ~~each of these species~~ red-diamond rattlesnake, Coronado skink, coast horned lizard, coast patch-nosed snake, and two-striped garter snake through potential injury or mortality and loss of suitable habitat would be significant. Because no focused surveys were performed for these species, it is not possible to fully and accurately quantify impacts; therefore, it is assumed that construction of the Proposed Project could significantly impact these species. These special-status reptile species are covered under SDG&E's NCCP. APM BIO-2 requires the implementation of the SDG&E NCCP protocols for special-status reptile species covered under the current NCCP. NCCP protocols include avoidance measures and compensatory mitigation. The NCCP protocols and mitigation measures may not apply to the Proposed Project at the time of construction; therefore, impacts to red-diamond rattlesnake, Coronado skink, coast horned lizard, coast patch-nosed snake, and two-striped garter snake ~~special-status~~ reptiles would still be significant after implementation of APM BIO-2. Mitigation Measures Biology-1a, Biology-1b, Biology-1c, and Biology-1d would reduce impacts to red-diamond rattlesnake, Coronado skink, coast horned lizard, coast patch-nosed snake, and two-striped garter snake ~~special-status reptiles~~ by requiring reduced speeds, worker training, pre-construction surveys, delineation of sensitive habitats, and inspection of trenches. Mitigation Measure Biology-4 requires avoidance and compensation for impacts to vernal pool habitats, and Mitigation Measure Biology-6 requires compensation for impacts to other habitat areas. Impacts to these special-status reptile species would be less than significant with mitigation.

Impacts to San Diego ringneck snake, rosy boa, and San Diego banded gecko would be less than significant because these special-status reptile species occur in higher numbers in the region. These species are not federal or State listed as endangered or threatened, State Species of Special Concern, or State Fully Protected. Impacts from the Proposed Project to a small number of individuals would not significantly affect the species.

California Legless Lizard

There is high potential for the California legless lizard to occur in transmission line Segments A, C, and D and a moderate potential for it to occur in Segment B. Impacts to this species through potential injury or mortality and loss of habitat would be significant. Construction would result in temporary and permanent impacts to the following potential habitats: coastal sage scrub, chaparral, riparian scrub habitat, and oak riparian forest. Approximately 3.62 acres of suitable habitat would be permanently impacted by construction, approximately 21.68 ~~19.11~~ acres of suitable habitat would be temporarily impacted, and approximately 2.80 ~~4.72~~acres of habitat would be impacted by maintenance of access roads, resulting in a significant impact to California legless lizard. Mitigation Measure Biology-1a, Biology-1b, Biology-1c, and Biology-1d would reduce impacts to special-status reptiles by requiring reduced speeds, worker training, pre-construction surveys, delineation of sensitive habitats, and inspection of trenches. Mitigation Measure Biology-6 requires compensation for habitat impacts. Impacts to California legless lizard would be less than significant with mitigation.

Indirect Impacts to Special-status Reptiles

Construction disturbance would indirectly impact special-status reptiles through fugitive dust and invasive, non-native plant species introduction and/or spread.

Construction activities such as grading and driving of heavy equipment on unpaved roadways in dry conditions would result in increased levels of blowing dust that may settle on surrounding vegetation, adversely affecting plants (see Impact Bio-1) and special-status reptiles dependent on the plants or the prey they consume that are dependent on the plants. This impact would be significant. SDG&E would implement APM AIR-1 as part of the Proposed Project to control fugitive dust. Impacts from erosion and fugitive dust would be less than significant after implementation of APM AIR-1.

Special-status reptiles would also be adversely affected through habitat degradation from invasive, non-native plant species, which, if introduced, could out-compete native species and change the habitat structure that the reptiles require (for example, change an open, native shrub community to one dominated by non-native grasses). Each of these impacts would be significant. Implementation of Mitigation Measure Biology-3 (weed control) would reduce impacts to special-status reptiles from invasive, non-native plant species to a less-than-significant level.

Mitigation Measures: Biology-1a, Biology-1b, Biology-1c, Biology-1d, and Biology-3 (refer to Impact Bio-1); Biology-4 (refer to Impact Bio-2); and Biology-6 (refer to Impact Bio-3)

Significance after mitigation: Less than significant.

Impact Bio-5: Would construction of the Proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any avian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Direct Impacts to Special-status Birds

The following special-status bird species were detected in the BSA:

- Cooper's hawk
- Coastal California gnatcatcher
- California horned lark
- Clark's marsh wren
- Yellow-breasted chat
- Southern California rufous-crowned
- sparrow
- Vaux's swift
- Loggerhead shrike
- Western bluebird
- Grasshopper sparrow
- Yellow warbler

The following special-status bird species were not observed during biological surveys but have high and moderate potential to occur in the BSA because of presence of suitable habitat:

- Bell's sage sparrow
- Northern harrier
- ~~Grasshopper sparrow~~
- Coastal cactus wren
- Least bell's vireo
- Sharp-shinned hawk
- ~~Yellow warbler~~
- Merlin

- White-tailed kite
- Burrowing owl
- ~~Yellow-breasted chat~~
- ~~Clark's marsh wren~~

Proposed Project construction would result in direct impacts to special-status bird species if the species were injured or killed during construction activities, including through nest destruction (for all MBTA- and California Fish and Game Code-protected species), nest abandonment, and/or through substantial loss of nesting or foraging habitat. Less of nesting or foraging habitat would occur primarily during vegetation removal and grading and potentially from use of access roads. Table 4.1-12 presents the temporary and permanent impacts to suitable habitats for these species from construction.

Table 4.1-12 Summary of Proposed Project Impacts to Potentially Suitable Habitat for Special-status Bird Species Covered by the Subregional NCCP[1]

Species	Potentially Suitable Habitat in the Project Area	Impact			
		Temporary	Permanent	Existing Access Road Improvement (Permanent) ~~Access Roads~~	Temporary Access Road and Passing (Temporary)
Cooper's hawk	All habitats	~~25.69~~ 27.92	3.96	~~5.32~~ 3.06	0.28
Southern California rufous-crowned sparrow	Coastal sage scrub, chaparral	~~19.45~~ 21.68	3.62	~~4.65~~ 2.78	0.26
Coastal California gnatcatcher	Coastal sage scrub	~~12.53~~ 15.04	2.16	~~2.46~~ 1.45	—
Western bluebird	Grassland, riparian scrub	~~6.22~~ 6.20	0.35	~~0.69~~ 0.27	0.02
Bell's sage sparrow	Coastal sage scrub, chaparral	~~19.45~~ 21.68	3.62	~~4.65~~ 2.78	0.26
Northern harrier	Grassland, freshwater marsh	~~6.23~~ 6.21	0.35	~~0.62~~ 0.25	0.02
Grasshopper sparrow	Grassland	~~6.22~~ 6.20	0.35	~~0.62~~ 0.25	0.02
Coastal cactus wren	Coastal sage scrub	~~12.53~~ 15.04	2.16	~~2.46~~ 1.45	—
Least bell's vireo	Riparian scrub	<0.01	—	~~0.07~~ 0.02	—
Burrowing owl	Grassland	~~6.22~~ 6.20	0.35	~~0.62~~ 0.25	0.02
Vaux's swift	Migrant through coastal lowlands of San Diego County (does not nest)	—	—	—	—
California horned lark	Grasslands	~~6.22~~ 6.20	0.35	~~0.62~~ 0.25	0.02

Species	Potentially Suitable Habitat in the Project Area	Impact			
		Temporary	Permanent	Existing Access Road Improvement (Permanent) ~~Access Roads~~	Temporary Access Road and Passing (Temporary)
Loggerhead shrike	Coastal sage scrub, chaparral, grassland	~~25.68~~ 27.89	3.96	~~5.27~~ 3.37	0.28
White tailed kite	Grassland, riparian scrub	~~6.22~~ 6.20	0.35	~~0.69~~ 0.27	0.02
Sharp shinned hawk	Fall migrant and uncommon winter visitor (does not nest)	—	—	—	—
Yellow warbler	Riparian scrub	<0.01	—	~~0.07~~ 0.02	—
Merlin	Rare winter visitor in grassland	~~6.22~~ 6.20	0.35	~~0.62~~ 0.25	0.02
Yellow-breasted chat	Riparian scrub	<0.01	—	~~0.07~~ 0.02	—
Clark's marsh wren	Freshwater Marsh	0.01	—	—	—

Impacts to special-status bird species through potential injury or mortality and nest abandonment or destruction would be significant. Excessive noise would adversely affect the breeding activities of special-status birds. If construction ~~or operation/maintenance~~ noise ~~was~~ were to ~~meet or~~ exceed the existing baseline noise level for a site by more than 3 dB hourly average or an hourly average threshold of 60 decibels, whichever is higher, at the edge of the occupied habitat of these species during their breeding seasons and cause nest abandonment or failure, the impact would be significant. SDG&E would implement AMP BIO-2 as part of the Proposed Project to reduce impacts to NCCP covered species. APM BIO-2 requires the implementation of the SDG&E NCCP protocols; however impacts to NCCP covered bird species would still be significant because the current NCCP may not be available during construction, and the NCCP does not define construction buffers or monitoring requirements for avian species. Mitigation Measure Biology-7 specifies pre-construction survey requirements and no disturbance buffers for bird species. With implementation of Mitigation Measure Biology-7, the impacts to special-status bird species, with the exception of the burrowing owl, would be less than significant.

Impacts to suitable habitat for special-status bird would be dispersed over the 16-mile Proposed Project ~~area~~ alignment. Habitat impacts would occur at each pole work area, and there would be suitable foraging and nesting habitat surrounding the Proposed Project that would not be impacted during construction. Bird species also have the ability to travel to use suitable habitat areas around the Proposed Project. Therefore, the impact to special-status bird species from habitat loss as a result of the Proposed Project would be less than significant.

Burrowing Owl

Significant impacts to burrowing owl can consist of destruction of burrows/burrow entrances, and owl mortality. "Occupied" is defined as a burrow that shows sign of burrowing owl occupancy (e.g., a burrowing owl, molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance) within the last 3 years (CDFW 2012; The California Burrowing Owl Consortium 1993). Suitable burrowing owl habitat occurs in transmission line Segments A, B, C, and D; SR-56 staging yard; and Camino Del Sur staging yard (Busby 2015k~~e~~). Ground-disturbing activities such as grading and vegetation removal could result in the destruction of burrow/burrow entrances, resulting in a significant impact. Mitigation Measure Biology-8 requires preparation and implementation of a Burrowing Owl Mitigation and Monitoring Plan (BOMMP). The BOMMP will follow CDFW guidelines (2012) and requires a pre-construction take avoidance survey, monitoring of burrowing owls during construction, and any necessary mitigation of impacts from the Proposed Project. Direct impacts to burrowing owl would be less than significant with implementation of mitigation.

Indirect Impacts to Special-status Birds

Construction disturbance would indirectly impact special-status birds through fugitive dust; invasive, non-native plant species introduction and/or spread; and excessive construction noise.

Construction activities such as grading and driving of heavy equipment on unpaved roadways in dry conditions would result in increased levels of blowing dust that may settle on surrounding vegetation adversely affecting plants (see Impact Bio-1) thereby adversely affecting special-status birds dependent on the plants (or the prey they consume that are dependent on the plants). This impact would be significant. SDG&E would implement APM AIR-1 as part of the Proposed Project to control fugitive dust. Implementation of APM AIR-1 would reduce impacts to less than significant. No mitigation is required.

Special-status birds would also be adversely affected through habitat degradation that may result from invasive, non-native plant species, which can out-compete native species and, for example, change the species composition and habitat structure that a bird species prefers or is dependent upon. This impact would be significant. Mitigation Measure Biology-3 (weed control) would reduce the impacts from invasive, non-native plant species to a less-than-significant level.

Mitigation Measures: Biology-3 (refer to Impact Bio-1), Biology-7, and Biology-8

> **Mitigation Measure Biology-7: Mitigation for Bird Species.** This measure applies to all work areas in which any construction-related activities must be conducted 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).
>
> ***Nesting Bird Survey Requirements***. If work is scheduled to occur during the avian nesting season, nesting bird surveys shall be conducted according to the following provisions:

1. Nest surveys shall occur within ~~48 hours~~ 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.
2. Surveys shall be conducted with sufficient survey duration and intensity of effort necessary for the identification of active nests, which is defined as once birds begin constructing, preparing, or using a nest for egg-laying. 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 ~~a~~ the following buffers of active work areas: ~~1 mile buffer for golden eagle, 0.5-mile buffer for Swainson's hawk,~~ 0.25-mile buffer for white-tailed kite; ~~and~~ 500-foot buffer for other ~~avian and~~ raptor species.
3. 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.
4. The surveys shall be conducted by a CPUC, USFWS-, and CDFW-approved qualified biologist.
5. Survey results shall be provided to CPUC, USFWS, and CDFW prior to initiating construction activities.
6. 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., operating switches, driving on access roads, normally occurring activities at substations, 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.

Avoid Impacts on Nesting Birds. During the nesting season (generally between January 15 and August 31) raptor nests that are located within a 500-foot buffer from a work location ~~and a 1-mile buffer for golden eagle and 0.5-mile buffer for Swainson's hawk,~~ shall be evaluated by a CPUC-, USFWS-, and CDFW-approved qualified biologist to determine whether the raptor nest is active. No trees with active raptor nests shall be removed during nesting season.

No additional measures shall be implemented if active nests are more than the following distances from the nearest work areas: ~~(a) 1 mile for golden eagle, (b)~~

~~0.5 mile for Swainson's hawk,~~ (~~c~~ a) 0.25 mile for white-tailed kite, (~~d~~ b) 500 feet for raptors, Coastal California gnatcatcher, and least bell's vireo, (~~e~~ c) 250 feet for passerine birds in open space areas, or (~~f~~ d) 150 feet for common (non-special-status) passerine birds in residential, commercial, and industrial areas. Buffers shall not apply to construction-related traffic using existing roads where the use of such roads is not limited to project-specific use (i.e., county roads, highways, farm roads, or other private roads). 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-, USFWS-, and CDFW-approved qualified biologist that implementation of a specified smaller buffer distance will 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-, USFWS-, and CDFW-approved qualified biologist(s) who requested the buffer reduction and will conduct subsequent monitoring
- Proposed frequency and methods of monitoring necessary for the nest given the type of bird and surrounding conditions

CPUC's independent biologist 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-, USFWS-, and CDFW-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.

Specific Requirements for Coastal California Gnatcatcher and Least Bell's Vireo. Where there is potential nesting habitat for the coastal California gnatcatcher or least Bell's vireo within or adjacent to the MHPA, construction or operation/maintenance noise that exceeds the existing baseline noise level for a site by more than 3 dB hourly average or an hourly average threshold of 60 decibels, whichever is higher, shall be avoided during these species' breeding seasons as follows: coastal California Gnatcatcher March 1 through August 15, and least Bell's vireo March 15 through September 15. If avoidance is not possible during the breeding season, SDG&E shall work with a qualified acoustician approved by the CPUC, USFWS, and CDFW to develop and implement noise attenuation measures. The following measures shall be adhered to when project activities during the breeding season occur within riparian habitats that may support vireo and flycatcher:

- A biologist knowledgeable of vireo and/or flycatcher biology and ecology, approved by the CPUC, USFWS, and CDFW, will survey within the project impact footprint and a 300-foot buffer (within riparian scrub) before clearing vegetation or project construction to check for vireo and/or flycatcher nesting activity. Should an active nest be located in the impact footprint, then work will be suspended until the nest is vacated.

- Biological buffers of at least 100 feet will be maintained adjacent to active nests.

For project activities during the breeding season adjacent to known occupied vireo and/or flycatcher nesting habitat, the biologist will monitor nesting bird activity. If the biologist determines that nesting birds are being disrupted by project activities, then work will 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.

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

Avian Protection on Power Lines. The project shall include collision-reducing techniques for transmission lines (based on Reducing Avian Collisions with Power Lines: The State of the Art in 2012; Avian Power Line Interaction Committee [APLIC] 2012).

Monitoring and Reporting. All nests with a reduced buffer shall be monitored on a daily basis during construction activities by a CPUC-, USFWS-, and CDFW-approved qualified biologist until the qualified biologist has determined that the young have fledged or until one week after construction ends within the reduced buffer/work area (whichever occurs first).

Nest locations and exclusion buffers shall be mapped (using geographic information systems [GIS]) for all nests identified. This information shall be maintained in a database and shall be provided to CPUC, CDFW, and USFWS. A monthly written report shall be submitted to CPUC, CDFW, and USFWS for construction within a reduced buffer and shall include the following: information included in buffer reduction requests, work conducted within the work site, duration of work activities and related buffer reduction, information on nest success (eggs, young, and adults). No avian reporting shall be required for construction occurring outside of the nesting season and if construction activities do not occur within a reduced buffer during any calendar month. A final report shall be submitted to CPUC, CDFW, and USFWS at the end of each nesting season summarizing all avian-related monitoring results and outcomes for the duration of project construction. Nests located in areas of existing human presence and disturbance, such as in yards of private residences, or within commercial and or industrial properties, are likely acclimated to disturbance and do not need to be monitored, as determined by the CPUC-, USFWS-, and CDFW-approved qualified biologist and approved by CPUC's independent biologist.

Mitigation Measure Biology-8: Burrowing Owl Monitoring and Mitigation Plan. SDG&E shall prepare a Burrowing Owl Monitoring and Mitigation Plan (BOMMP) consistent with the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012). SDG&E shall submit the Draft 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 Staff Report on Burrowing Owl Mitigation (CDFW 2012) and CDFW-approved BOMMP, SDG&E shall conduct a pre-construction take avoidance survey for the burrowing owl prior to initiating ground disturbance activities. In areas where owl presence is not found, construction may proceed without further mitigation. If western burrowing owl occupancy on site is confirmed during pre-construction take avoidance surveys, SDG&E shall implement the CDFW-approved Burrowing Owl Monitoring and Mitigation Plan in coordination with CDFW.

Significance after mitigation: Less than significant.

Impact Bio-6: Would construction of the Proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any mammalian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Direct Impacts to Special-status Mammals

Southern Mule Deer, Northwestern San Diego Pocket Mouse, San Diego Black-tailed Jackrabbit, San Diego Desert Woodrat, Southern Grasshopper Mouse, Mountain Lion

Southern mule deer and San Diego black-tailed jackrabbit are ~~is~~ the only special-status mammal species detected in the BSA. The following special-status mammal species were not observed during biological surveys but have high and moderate potential to occur because of presence of potentially suitable habitat:

- Dulzura pocket mouse
- Northwestern San Diego pocket mouse
- ~~San Diego black-tailed jackrabbit~~
- San Diego desert woodrat
- Southern grasshopper mouse
- Mountain lion

Proposed Project construction would result in direct impacts to special-status mammal species if the species were injured or killed during construction activities. Injury or mortality would occur primarily during vegetation removal and grading and potentially from use of access roads. Direct injury or mortality to the southern mule deer and mountain lion are not expected. Construction would also result in direct permanent and temporary loss of suitable habitat as shown in Table 4.1-13.

Table 4.1-13 Summary of Proposed Project Impacts to Potentially Suitable Habitat for Special-status Mammal Species Covered by the Subregional NCCP

Species	Potentially Suitable Habitat in the Project Area	Impact (acres)			
		Temporary	Permanent	~~Access Roads~~ Existing Access Road Improvement (Permanent)	Temporary Access Road and Passing (Temporary)
Southern mule deer	Coastal sage scrub, chaparral, grassland	~~25.68~~ 27.89	3.96	~~5.27~~ 3.37	0.28
Dulzura pocket mouse	Coastal sage scrub, chaparral	~~19.45~~ 21.68	3.62	~~4.65~~ 2.78	0.26
Northwestern San Diego pocket mouse	Coastal sage scrub, chaparral, grassland	~~25.68~~ 27.89	3.96	~~5.27~~ 3.37	0.28
San Diego black-tailed jackrabbit	Coastal sage scrub, chaparral, grassland	~~25.68~~ 27.89	3.96	~~5.27~~ 3.37	0.28
San Diego desert woodrat	Coastal sage scrub, chaparral	~~19.45~~ 21.68	3.62	~~4.65~~ 2.78	0.26
Southern grasshopper mouse	Coastal sage scrub, grassland	~~18.75~~ 21.24	2.51	~~3.08~~ 1.70	0.02
Mountain lion	Coastal sage scrub, chaparral, grassland, riparian scrub, oak riparian forest	~~25.68~~ 27.89	3.96	~~5.31~~ 3.06	0.28

Injury or mortality of the other ~~these~~ species during construction (i.e., northwestern San Diego pocket mouse, San Diego black-tailed jackrabbit, San Diego desert woodrat, dulzura pocket mouse, and southern grasshopper mouse) would be a significant impact because they are all State Species of Special Concern and rare in the region. 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. Construction could also result in the destruction of a San Diego desert woodrat nest, which would be a significant impact. SDG&E would implement APM BIO-2 as part of the Proposed Project, which requires the implementation of the SDG&E NCCP protocols for special-status mammal species covered under the NCCP. NCCP protocols include avoidance measures and compensatory mitigation. The current NCCP protocols and mitigation measures may not apply to the Proposed Project at the time of construction; therefore, impacts would remain significant after implementation of APM BIO-2. Mitigation Measures Biology-1a, Biology-1b, Biology-1c, and Biology-1d would reduce impacts to special-status mammals by requiring reduced speeds, worker training, pre-construction surveys, delineation of sensitive habitats, and inspection of trenches. Mitigation Measure Biology-9 requires pre-construction surveys and impact minimization measures for

San Diego desert woodrat. With implementation of these mitigation measures, impacts to special-status mammal species, with the exception of bats, would be less than significant.

Impacts to suitable habitat for special-status mammals would be dispersed over the 16-mile Proposed Project ~~area~~ alignment. Habitat impacts would occur at each pole work area and there would be suitable foraging and breeding habitat surrounding the Proposed Project that would not be impacted during construction. Mammal species have large ranges and would be able to use suitable habitat areas around the Proposed Project. Therefore, the impact to special-status mammals from habitat loss (other than bat roosts or woodrat nest destruction) as a result of the Proposed Project would be less than significant. No mitigation is required.

Bats

The following special-status bat species were not observed in the BSA but have moderate potential to occur because of presence of potentially suitable habitat:

- Big free-tailed bat
- Pallid bat
- ~~Pocketed free-tailed bat~~
- Western mastiff bat
- Western red bat

Direct impacts to these species would occur through injury or mortality of individuals from collision with equipment, disruption or destruction of a roost during vegetation removal (including tree trimming/removal), earthwork, or work on or near a bridge. Construction would involve work on a bridge, which could support bat roosts. The disturbance of a special-status maternal bat roost during breeding season would be a significant impact. Because no focused surveys were performed for these species, it is not possible to fully and accurately quantify impacts to bats; therefore, it is assumed that construction of the Proposed Project could significantly impact these species.

Mitigation Measures Biology-1a, Biology-1b, Biology-1c, and Biology-1d would minimize direct impacts to bats, including injury and mortality by requiring reduced speeds, worker training, pre-construction surveys, delineation of sensitive habitats, and inspection of trenches. Mitigation Measure Biology-10 includes assessing and surveying bat roosting habitat and providing protection for any roosts found. With implementation of Mitigation Measure Biology-10, impacts to special-status bat species would be less than significant.

Indirect Impacts to Special-status Mammals

Construction disturbance would indirectly impact special-status mammals through fugitive dust and invasive, non-native plant species introduction and/or spread, resulting in a significant impact. Construction activities such as grading and driving of heavy equipment on unpaved roadways would result in increased levels of blowing dust that may settle on surrounding vegetation adversely affecting plants (see Impact Bio-1) thereby adversely affecting special-status mammals dependent on the plants (or the prey they consume that are dependent on the plants). SDG&E would implement APM AIR-1 as part of the Proposed Project to control

fugitive dust. Implementation of APM AIR-1 would reduce impacts to less than significant. No mitigation is required.

Special-status mammals would also be adversely affected through habitat degradation from invasive, non-native plant species, which can out-compete the native species and, for example, change the species composition or habitat structure that a mammal species prefers or is dependent upon. This impact would be significant. Mitigation Measure Biology-3 (weed control) is required to reduce the impacts from invasive, non-native plant species to a less-than-significant level.

Mitigation Measures: Biology-1a, Biology-1b, Biology-1c, Biology-1d, and Biology-3 (refer to Impact Bio-1); Biology-9; and Biology-10

Mitigation Measure Biology-9: San Diego Desert Woodrat Mitigation. A CPUC-approved qualified biologist shall conduct a preconstruction survey to identify potential San Diego desert woodrat houses within the project work areas and within 5 feet of the edge of the work areas to avoid direct take of woodrats. All woodrat houses shall be documented and reported through the MMCRP. Woodrat houses found within the work site or within 5 feet from a work site shall be flagged or fenced for avoidance. If impacts to a woodrat house located within a work site are unavoidable, a CPUC-approved qualified biologist, prior to construction and outside of the breeding season (April through June), shall dismantle the house by hand, removing the materials layer by layer to allow for adult woodrats to escape. If young are present and found during the disassembling process, the CPUC-approved qualified biologist shall leave the site for at least 24 hours to allow for the rats to relocate their young on their own. This step shall be repeated as needed until the young have been relocated by the parent woodrats. Once the nest is vacant, the disassembly process shall be completed and the nest sticks shall be collected and moved to another suitable nearby location to allow for nest reconstruction. Piles of cut vegetation/slash shall be retained near the work site prior to nest dismantling to provide refuge for woodrats that may become displaced.

Mitigation Measure Biology-10: Mitigation for Special-Status Bat Species. Prior to construction, suitable special-status bat habitat shall be assessed by a CPUC- and CDFW-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 such roads is not limited to project-specific use (i.e., county roads, highways, farm roads, or other private roads) and 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 MMCRP.

Significance after mitigation: Less than significant.

Impact Bio 7: Would the Proposed Project have a substantial adverse effect from operation and maintenance, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Operation

There would be the potential for impacts to individual birds from collision with and/or electrocution on the new transmission line or related structures. Bird collisions can occur with transmission towers or lines, especially in spring migration when strong winds and storms are more likely to force birds to fly at relatively low altitudes. Most of this migration takes place at night. Electrocution occurs when a perching bird (typically large aerial perching birds such as hawks and eagles) simultaneously contacts two energized phase conductors or an energized conductor and grounded hardware.

The Proposed Project could potentially cause an increase in bird mortality from collision, which would be a potential significant impact for special-status species. The Proposed Project would involve the use of aviation obstruction lighting on P34 through P36 to meet FAA standards. The lighting would typically consist of a red flashing light at the top towers and steady-burning red lights mid-way on the tower. The lighting would be located in or adjacent to the Black Mountain Open Space Park. Overall, the proposed installation of marker balls and aviation obstruction lighting would not reduce the risk of bird collisions to a less-than-significant level where they are installed; this impact would remain significant. Mitigation Measure Biology-7 requires collision-reducing techniques for transmission lines based on Reducing Avian Collisions with Power Lines: The State of the Art in 2012 to reduce the potential for bird collisions (APLIC 2012). Impacts would be less than significant with mitigation.

Permanent Pad and Access Road Maintenance

A permanent pad of approximately 700 square feet would be maintained free of vegetation around each pole. Vegetation removal and maintenance activities would also occur along access roads. Herbicides would be applied as needed for the prevention of wildfire and to maintain access to the permanent structure pads.

Permanent pad and access road maintenance would cause impacts to special-status plants and wildlife if the vegetation removal and access road clearing were conducted outside of previously cleared and disturbed areas. Impacts to special-status plant species outside the maintenance area would occur as a result of herbicide drift. Additionally, impacts to nesting birds would occur if access road maintenance or herbicide application occur during bird nesting season (February through September) if a nest is located near the work area. Each of these impacts would be significant. SDG&E would implement APM BIO-2 as part of the Proposed Project, which requires implementation of NCCP protocols, including minimizing impacts during access road maintenance. While APM BIO-2 would reduce impacts, the current NCCP may not be available during operation of the Proposed Project, and APM BIO-2 may therefore not be implemented. Therefore, impacts would still be significant even with APM BIO-2. ~~Mitigation Measure Biology-1e defines protocols for access road maintenance, and~~ Mitigation Measure Biology-3 defines weed control requirements.~~)~~ Implementation of Mitigation Measure~~s Biology-1e and~~ Biology-3 would reduce or avoid these impacts. Impacts would be less than significant with mitigation.

Inspection and Transmission Line Maintenance

Inspection activities along transmission line Segments A, C, and D would involve continued annual inspections by helicopter and by ground patrols. Maintenance of transmission line Segments A, C, and D would involve repairs of transmission facilities within areas that would be permanently disturbed by construction including pole work areas; however, there is the potential that special-status wildlife species could enter a maintenance work area and be injured or killed during maintenance of the transmission line. The greatest risk of impact would be from vehicular travel on access roads~~, which would be a significant impact. SDG&E would implement APM BIO-2, which requires implementation of NCCP protocols to reduce impacts to covered species. While APM BIO-2 would reduce impacts to special-status species, the current NCCP may not be available during operation of the Proposed Project, and APM BIO-2 may therefore not be implemented. Therefore, impacts would still be significant even with APM BIO-2. Mitigation Measure Biology-1a requires SDG&E to implement operational protocols, including speed limits for machinery and vehicles, within the Proposed Project area. Impacts would be less than significant with mitigation.~~ However, the Proposed Project would be constructed within existing SDG&E ROW in Segments A, C, and D. The frequency of maintenance activities and associated vehicle travel on access roads would not measurably increase as a result of the Proposed Project. The impact to special-status species from maintenance activities would be less than significant.

Transmission line Segment B would involve ~~annual~~ inspections that would be conducted approximately every three years and would last one day. Segment B would be located

underground, beneath a previously disturbed road. Special-status species are unlikely to occur within the road during inspection activities; therefore, there would be no impacts to special-status species from the inspection and maintenance of transmission line Segment B. No mitigation is required.

Mitigation Measures: ~~Biology-1a, Biology-1e, and~~ Biology-3 (refer to Impact Bio-1); and Biology-7 (refer to Impact Bio-5)

Significance after mitigation: Less than significant.

Impact Bio-8: Would the Proposed Project cause a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS? (*Less than significant with mitigation*)

Construction

Impacts on riparian habitat and sensitive natural vegetation communities are summarized in Table 4.1-14.

Table 4.1-14 Impacts to Vegetation Communities within the Proposed Project Area

NCCP Vegetation Community	Holland Vegetation Community	Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas	TOTAL
Permanent Impacts (acres)							
Coastal Sage Scrub	Diegan Coastal Sage Scrub	0.50	–	–	0.08	–	0.58
	Diegan Coastal Sage Scrub - Disturbed	0.82	–	–	0.38	–	1.20
	Coastal Sage Scrub - Revegetated	0.38	–	–	–	–	0.38
Chaparral	Coastal Sage - Chaparral Scrub	<0.01	–	–	0.06	–	0.07
	Chamise Chaparral	0.28	–	0.13	0.23	–	0.64
	Chamise Chaparral - Disturbed	0.12	–	–	–	–	0.12
	Southern Mixed Chaparral	0.51	–	–	0.01	–	0.52
	Scrub Oak Chaparral	<0.01	–	0.01	0.10	–	0.11

NCCP Vegetation Community	Holland Vegetation Community	Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas	TOTAL
Grassland	Native Grassland	0.15	–	–	–	–	0.15
	Nonnative Grassland	0.13	–	0.07	<0.01	–	0.20
Total Permanent Impacts		**2.89**	**–**	**0.21**	**0.86**	**–**	**3.96**
Temporary Impacts (acres)							
Coastal Sage Scrub	Diegan Coastal Sage Scrub	4.52	–	–	2.21	0.10	6.83
	Diegan Coastal Sage Scrub - Disturbed	2.07	–	–	1.27	0.59	3.93
	Coastal Sage Scrub – Revegetated	1.01	0.47	<0.01	0.15	0.14	1.77
Coastal Sage/ Chaparral Mix	Coastal Sage - Chaparral Scrub	0.03	–	<0.01	0.63	0.02	0.68
	Baccharis Scrub-Disturbed[1]	–	–	–	–	2.51	2.51
Chaparral	Chamise Chaparral	~~1.37~~ 1.33	–	0.48	~~0.90~~ 0.67	–	~~2.75~~ 2.48
	Chamise Chaparral - Disturbed	0.45	–	–	<0.01	–	0.45
	Southern Mixed Chaparral	1.57	–	0.02	0.20	–	1.79
	Southern Mixed Chaparral - Disturbed	<0.01	–	–	–	0.01	0.01
	Scrub Oak Chaparral	0.04	–	0.64	0.56	–	1.24
Grassland	Native Grassland	~~0.70~~ 0.69	–	–	0.01	0.01	~~0.72~~ 0.71
	Nonnative Grassland	0.99	0.04	~~1.81~~ 1.80	0.35	2.31	~~5.50~~ 5.49
Freshwater Marsh	Freshwater Marsh	0.01	–	–	–	–	0.01

NCCP Vegetation Community	Holland Vegetation Community	Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas	TOTAL
Riparian Scrub	Mulefat Scrub	–	–	–	–	<0.01	<0.01
	Southern Willow Scrub	–	<0.01	–	–	–	<0.01
Total Temporary Impacts		~~12.76~~ 12.72	**0.51**	~~2.95~~ 2.94	~~6.29~~ 6.06	~~2.83~~ 5.69	~~25.69~~ 27.92
Permanent Impacts – Existing Access Road Improvements (acres)[2] ~~Access Road Impacts (acres)~~							
Coastal Sage Scrub	Diegan Coastal Sage Scrub	~~0.60~~ 0.35	–	~~0.04~~ 0.02	~~0.41~~ 0.23	~~0.18~~ 0.13	~~1.23~~ 0.73
	Diegan Coastal Sage Scrub - Disturbed	~~0.62~~ 0.36	–	0.01	~~0.08~~ 0.03	~~0.09~~ 0.07	~~0.80~~ 0.47
	Coastal Sage Scrub – Revegetated	~~0.17~~ 0.09	–	~~0.07~~ 0.05	~~0.19~~ 0.10	-	~~0.43~~ 0.24
Coastal Sage/ Chaparral Mix	Coastal Sage - Chaparral Scrub	~~0.07~~ 0.03	–	~~0.04~~ 0.03	~~0.02~~ 0.01	-	~~0.13~~ 0.07
Chaparral	Chamise Chaparral	~~0.12~~ 0.05	–	~~0.35~~ 0.23	~~0.26~~ 0.16	-	~~0.73~~ 0.44
	Chamise Chaparral - Disturbed	~~0.02~~ 0.01	–	<0.01	<0.01	-	~~0.02~~ 0.01
	Southern Mixed Chaparral	~~0.48~~ 0.28	–	~~0.07~~ 0.05	~~0.13~~ 0.07	-	~~0.68~~ 0.40
	Southern Mixed Chaparral - Disturbed	~~0.15~~ 0.10	–	–	–	-	~~0.15~~ 0.10
	Scrub Oak Chaparral	~~0.01~~ <0.01	–	~~0.42~~ 0.28	~~0.05~~ 0.03	-	~~0.48~~ 0.31
Grassland	Native Grassland	~~0.07~~ 0.04	–	–	<0.01	-	~~0.07~~ 0.04
	Nonnative Grassland	~~0.06~~ 0.04	–	~~0.40~~ 0.13	~~0.05~~ 0.03	0.01	~~0.52~~ 0.21
Inland Water	San Diego Mesa Vernal Pool	–	–	–	≤0.01	-	≤0.01

NCCP Vegetation Community	Holland Vegetation Community	Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas	TOTAL
Riparian Scrub	Southern Riparian Scrub	<0.01	–	–	–	-	<0.01
	Mulefat Scrub	<0.01	–	~~0.05~~ 0.02	–	<0.01	~~0.05~~ 0.02
	Southern Willow Scrub	<0.01	–	–	–	-	<0.01
	Tamarisk Scrub	–	–	~~0.02~~ <0.01	–	-	~~0.02~~ <0.01
Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	<0.01	–	–	–	-	<0.01
Eucalyptus Forest	Eucalyptus Woodland	–	–	<0.01	–	-	<0.01
Total Existing Access Road Improvements Permanent Impacts **~~Total Access Road Impacts~~**		~~2.37~~ 1.36	-	~~1.47~~ 0.82	~~1.20~~ 0.67	~~0.28~~ 0.21	~~5.32~~ 3.06
Temporary Access Road and Passing – Temporary impacts (acres)[3]							
Chaparral	Chamise Chaparral	0.04	–	0.10	0.13	–	0.26
Grassland	Native Grassland	0.01	–	–	–	–	0.01
	Nonnative Grassland	–	–	0.01	–	–	0.01
Total Temporary Access Road and Passing Temporary impacts		**0.04**	**-**	**0.10**	**0.13**	**-**	**0.28**

Notes:

[1] This vegetation community would be temporarily impacted at the Stonebridge staging yard. This vegetation community was reclassified from bare ground to disturbed baccharis scrub at the Stonebridge staging yard according to a field assessment conduced in September 2015 (Helix 2015d). The impacts to this vegetation community were not initially accounted for in the Draft EIR and are presented in the Final EIR to correct the area of vegetation communities that would be temporarily impacted by the proposed project. The impact to this vegetation community would be mitigated similar to all other temporary impacts from construction of the proposed project (see Mitigation Measure Biology-6).

[2] Permanent impacts are anticipated when existing access roads are reestablished and "refreshed" prior to construction. To conservatively account for potential permanent impacts, existing access road improvements were determined using a 2-foot buffer around all existing 14-foot wide access roads, which accounts for potential widening as a result of construction activities. The impacts within that 2-foot buffer are considered permanent.

[3] Temporary impacts include the temporary access roads required to access P20 and P21 and avoid road rut vernal pools in the areas of P45 and P46. Temporary impacts also include passing areas for large machinery and vehicles.

Direct Impacts

Table 4.1-14 summarizes the impacts to sensitive vegetation communities in the Proposed Project. Temporary and permanent impacts to riparian habitat and sensitive vegetation communities would be significant.

Some of the temporary and permanent impacts to sensitive vegetation communities would be located within the City of San Diego MHPA. Table 4.1-15 provides a summary of the impacts to sensitive vegetation communities within the MHPA. A total of ~~1.55~~ 1.54 acres of MHPA would be permanently impacted, a total of ~~22.03~~ 21.77 acres of sensitive vegetation communities within the MHPA would be temporarily impacted, ~~and 3.34~~ 1.90 acres of sensitive vegetation communities within the MHPA would be permanently impacted from improvements to existing access roads ~~maintenance~~, and 0.26 acres of sensitive vegetation communities within the MHPA would be temporarily impacted from temporary access roads and passing during construction of the Proposed Project. Impacts to riparian habitat and sensitive vegetation communities in the MHPA would be significant. APM BIO-2 requires the implementation of the current SDG&E NCCP. NCCP protocols include requirements for compensatory mitigation for habitat. NCCP protocols and measures may not apply at the time of Proposed Project construction. Therefore, even after implementation of APMs, impacts would remain significant because compensatory mitigation for habitat would not be implemented if the NCCP were not applied.

Mitigation Measure Biology-6 would reduce the impacts to sensitive vegetation communities, including those in the MHPA, by requiring restoration of temporarily disturbed areas and

Table 4.1-15 Summary of Proposed Project Impacts to MHPA Preserve Area

Preserve Area Component	Seg. A	Seg B.	Seg C.	Seg. D	Other Work Areas	Total
Permanent Impacts (acres)						
Black Mountain Open Space	0.32	–	–	–	–	0.32
Los Peñasquitos Preserve	–	–	<0.01	0.48	–	0.48
Unnamed MHPA Preserve	0.58	–	0.13	0.04	–	~~0.75~~ 0.74
TOTAL	**0.89**	**–**	**0.13**	**~~0.52~~ 0.51**	**–**	**~~1.55~~ 1.54**
Temporary Impacts (acres)						
Black Mountain Open Space	~~3.18~~ 3.17	–	–	–	–	~~3.18~~ 3.17
Del Mar Mesa Preserve	–	–	~~0.38~~ 0.28	~~0.15~~ 0.02	–	~~0.53~~ 0.30

Preserve Area Component	Seg. A	Seg B.	Seg C.	Seg. D	Other Work Areas	Total
Los Peñasquitos Preserve	–	–	0.20	3.58	–	3.78
Unnamed MHPA Preserve	~~2.44~~ 2.43	0.39	~~1.82~~ 1.81	0.30	9.59	~~14.54~~ 14.53
TOTAL	**~~5.62~~ 5.60**	**0.39**	**~~2.40~~ 2.29**	**~~4.03~~ 3.90**	**9.59**	**~~22.03~~ 21.77**
Permanent Impacts – Existing Access Road Improvements (acres)[1] ~~Access Road Impacts (acres)~~						
Black Mountain Open Space	~~0.62~~ 0.37	–	–	–	–	~~0.62~~ 0.37
Del Mar Mesa Preserve	–	–	~~0.75~~ 0.49	~~0.22~~ 0.13	–	~~0.97~~ 0.62
Los Peñasquitos Preserve	0.02	–	–	~~0.79~~ 0.44	–	~~0.81~~ 0.46
Unnamed MHPA Preserve	~~0.22~~ 0.13	–	~~0.67~~ 0.28	~~0.05~~ 0.03	–	~~0.94~~ 0.44
TOTAL	**~~0.86~~ 0.52**	**–**	**~~1.42~~ 0.78**	**~~1.06~~ 0.60**	**–**	**~~3.34~~ 1.90**
Temporary Access Road and Passing – Temporary impacts (acres)[2]						
Black Mountain Open Space	0.01	–	–	–	–	0.01
Del Mar Mesa Preserve	–	–	–	0.23	–	0.23
Unnamed MHPA Preserve	**0.01**	**–**	**0.01**	–	**–**	**0.02**
TOTAL	**0.02**	**–**	**0.01**	**0.23**	**–**	**0.26**

Notes:

These calculations do not include impacts to the following land classifications: developed lands, ornamental, eucalyptus, and bare ground. Impacts to these areas are not considered because they are not considered sensitive and do not require mitigation. Information of the location of MHPA areas was obtained from SanGIS (2003).

1 Permanent impacts are anticipated when existing access roads are reestablished and "refreshed" prior to construction. To conservatively account for potential permanent impacts, existing access road improvements were determined using an additional 2-foot buffer around all existing 14-foot access roads, which accounts for potential widening as a result of construction activities. The impacts within that 2-foot buffer are considered permanent.

2 Temporary impacts include the temporary access roads required to access P20 and P21 and avoid road rut vernal pools in the areas of P45 and P46. Temporary impacts also include passing areas for large machinery and vehicles.

specifying habitat preservation and mitigation ratios for each type of habitat impact. Impacts to riparian and sensitive vegetation communities would be less than significant with mitigation.

In addition, the Proposed Project would involve the use of vehicles and equipment along access roads that would damage vernal pools. Damage to vernal pools would be a significant impact. SDG&E would implement APM BIO-4 as part of the Proposed Project to avoid or minimize impacts; however, APM BIO-4 does not take into account mitigation in the scenario where a vernal pool is impacted by the Proposed Project. Impacts would therefore remain significant even after implementation of APM BIO-4. APM BIO-2 requires the implementation of the current SDG&E NCCP. NCCP protocols include measures to minimize impacts to vernal pools and road pools and requirements for compensatory mitigation in the event that a vernal pool or road pools is permanently impacted. NCCP protocols and measures may not apply at the time of Proposed Project construction. Therefore, even after implementation of APMs, impacts would remain significant because compensatory mitigation for vernal pools and road pools would not be implemented if the NCCP were not applied. Mitigation Measure Biology-4 would provide additional protection for vernal pools, including compensatory mitigation for impacts to vernal pools and avoidance areas. Impacts would be less than significant with mitigation.

Indirect Impacts

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

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 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; these would also be significant impacts. SDG&E would implement APM AIR-1 and APM HYDRO-2 as part of the Proposed Project to control fugitive dust and erosion, respectively. Impacts from erosion and fugitive dust would be less than significant. No mitigation is required.

Invasive, non-native plants pose a threat to sensitive vegetation communities. Invasive, non-native plant species can spread when seeds (or, rarely, vegetative propagules) are brought in on the soles of shoes or on 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 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. Vegetation maintenance described in Impact Bio-7 would reduce the fire risk and the risk of type conversion but not to a less-than-significant level. Therefore, Mitigation Measure Biology-3 (weed control) and Mitigation Measure Biology-11 (re-seed after a transmission line-caused fire) are required to reduce the impact to a less-than-significant level.

Operation and Maintenance

Vegetation maintenance activities including trimming and herbicide application would occur around the proposed transmission poles for the prevention of wildfire. Vegetation maintenance would also occur at structure work pads and along spur roads for access. These potential effects, as they apply to operation/maintenance, are addressed above under the direct impacts of construction.

Impacts to adjacent sensitive vegetation would occur during herbicide application if herbicide applications drift, which would be a significant impact. Mitigation Measure Biology-3 (weed control) is required to reduce this potential impact. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-3 (refer to Impact Bio-1), Biology-4 (refer to Impact Bio-2), Biology-6 (refer to Impact Bio-3), and Biology-11

> **Mitigation Measure Biology-11: Reseeding for Fires.** Should a fire occur and be determined by the CPUC's Consumer Protection and Safety Division or the California Department of Forestry and Fire Protection (Cal Fire) to be caused by the project, SDG&E shall reseed all natural areas — both public and private — that are burned as a result of the project-caused fire. Reseeding shall continue until the native vegetation community is reestablished. For example, arid chaparral requires a minimum 10-year period to reestablish an adequate seed bank and thereby resist vegetation type conversion. A reseeding plan shall be developed with input from Cal Fire ~~and~~, CPUC, and City of San Diego (for ROW within and adjacent to City of San Diego MHPA) based on a native seed mix. Seeds shall be raked into the soil to avoid seed consumption, and reseeding shall be carried out once to coincide with the rainy season (October 1 through April 1) to increase the likelihood of germination success. SDG&E shall provide a written report documenting all reseeding activities to the CPUC. SDG&E shall make a good faith effort to obtain approval to reseed on private lands, as appropriate,

and documentation of this good faith effort shall be submitted to the CPUC upon request. Specific reseeding requirements stipulated in this mitigation measure shall be subject to approval and modification by any public land-owning agency.

Significance after Mitigation: Less than significant.

Impact Bio-9: Would the Proposed Project cause a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.), or on state protected waters, through direct removal, filling, hydrological interruption, or other means? (*Less than significant with mitigation*)

Construction

Direct Impacts

Transmission Line. Table 4.1-16 provides a summary of the potential impacts to waters along transmission line Segments A through D. The Proposed Project would result in permanent impacts to <0.01 acre of potentially jurisdictional waters from new poles and permanent work pads, 0.06 acres of temporary impacts to potentially jurisdictional waters from temporary work areas (e.g. temporary pole work areas and stringing sites), and 0.05 acres of temporary and permanent access road impacts to potentially jurisdictional waters. Impacts to jurisdictional features include impacts to unnamed tributaries, creeks, and vernal pools. These impacts would be significant. Mitigation Measure Biology-6 requires restoration or compensatory habitat mitigation for wetland and riparian habitat impacts. Impacts would be less than significant with mitigation.

Furthermore, there are additional vernal pools and road rut pools that were mapped on access roads within Segments C and D of the Proposed Project. The areas for these vernal pools and road rut pools were not recorded (Appendix G, Figure G-2). There is potential for permanent impacts to additional vernal pool areas if SDG&E repairs access roads and fills vernal pools in Segments C and D. Vehicle and equipment access on roads containing vernal pools or road rut pools could also degrade the quality of the pool. The NCCP (APM BIO-2) includes procedures to avoid and mitigate for impacts to vernal pools; however, the NCCP may not be available at the time of project construction. The impact to vernal pools would be significant. Mitigation Measure Biology-4 requires avoidance of vernal pool areas or compensatory mitigation for impacts to vernal pool habitats.

In addition to the requirements in this EIR, SDG&E is required to obtain permits from USACE, CDFW, RWQCB, and CCC prior to impacting any jurisdictional waters. The permits from USACE, CDFW, RWQCB, and CCC 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 MMCRP.

Encina Hub. Table 4.1-16 shows the potential impacts to jurisdictional waters at the Encina Hub work site. Less than 0.01 acres of potentially jurisdictional CCC waters occur within the Proposed Project work area. There would be no filling of these jurisdictional resources within

Table 4.1-16 Potential Impacts to Waters within the Proposed Project Area

Jurisdiction	Segment A	Segment B	Segment C	Segment D	Encina Hub	TOTAL
Permanent Impacts (acres)						
USACE, RWQCB, and CDFW	<0.01	–	<0.01	–	–	<0.01
RWQCB and CDFW	–	–	–	<0.01	–	<0.01
CDFW only	–	–	–	–	–	-
CCC	–	–	–	–	–	-
					Grand Total	**<0.01**
Temporary Impacts (acres)						
USACE, RWQCB, and CDFW	0.01	–	0.03	<0.01	–	0.04
RWQCB and CDFW	–	–	–	<0.01	–	<0.01
CDFW only	–	–	<0.01	<0.01	–	<0.01
CCC	–	–	–	0.02	<0.01	0.02
					Grand Total	**0.06**
Temporary Access Road and Passing and Existing Access Road Improvements – Temporary and Permanent Impacts ~~Access Road Impacts (acres)~~						
USACE, RWQCB, and CDFW	<0.01	–	0.01	0.01	<0.01	0.02
RWQCB and CDFW	–	–	–	–	–	-
CDFW only	<0.01	–	0.02	<0.01	–	0.02
CCC	–	–	–	–	<0.01	<0.01
					Grand Total	**0.05**

Sources: Environmental Intelligence 2014, Busby 2015i, Busby 2015j, Chamber Groups Inc. 2015d

the Encina Hub work area due to the limited nature of work in the area (relocation of transmission lines using bucket trucks and helicopters). There would be no impact to jurisdictional waters.

Mission—San Luis Rey Phase Transposition. No potential jurisdictional waters are present in the Mission—San Luis Rey Phase Transposition sites. Therefore, there would be no impact to these resources.

Camino Del Sur
Less than 0.01 acres of jurisdictional water were mapped within the survey area of the Camino Del Sur staging yard. This jurisdictional feature is located outside of the staging yard and would, therefore, not be impacted by the Proposed Project. There would be no impact to jurisdictional waters from the Camino Del Sur staging yard.

Carmel Valley Road, Evergreen Nursery, SR-56, Stonebridge, and Stowe Staging Yards. No potentially jurisdictional waters are present in these staging yards. Therefore, there would be no impact to jurisdictional waters.

Indirect Impacts
Indirect impacts to jurisdictional waters would occur as a result of construction-related activities. These impacts are the same as those addressed above under Impact Bio-8 for riparian habitats and other sensitive natural communities. SDG&E would implement APMs AIR-1 and HYDRO-2 as part of the Proposed Project; however, impacts would remain significant following their implementation. Mitigation Measure Biology-3, and Mitigation Measure Biology-11 would reduce impacts to less than significant, as described in Impact Bio-8.

Operation and Maintenance
Operation and maintenance activities would not directly impact jurisdictional waters because permanent structures would not be within these waters. Operation and maintenance of the Proposed Project would be similar to existing operation and maintenance activities within the existing transmission corridor. Impacts from operation and maintenance of the Proposed Project would be less than significant. No mitigation is required.

Mitigation Measures: Biology-3 (refer to Impact Bio-1), Biology-4 (refer to Impact Bio-2), Biology-6 (refer to Impact Bio-3), and Biology-11 (refer to Impact Bio-8)

Significance after mitigation: Less than significant.

Impact Bio-10: Would the Proposed 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; no mitigation required*)

Significant impacts would occur if a wildlife movement corridor is interrupted by a feature that physically blocks wildlife movement (i.e., a housing development) or if substantial connected habitat suitable to support wildlife in the movement corridor is removed. Table 4.1-15 provides a summary of the total impacts that the Proposed Project would have on the Black Mountain Open Space Preserve core resource area and the Del Mar Mesa Preserve, Deer Canyon Environmental Mitigation Preserve LLC, and Los Peñasquitos Canyon Preserve corridors, along with other un-named MHPA areas. Impacts to suitable wildlife habitat within a movement corridor would be dispersed along the corridor with impacts focused at each pole work area and temporary work area (e.g., string site). The Proposed Project would not add linear areas of disturbance that would interrupt habitat or wildlife movement corridors. Wildlife would be

able to move around the temporary work areas and permanent pads during construction and after construction is complete. The overhead transmission line is a linear component; however, the transmission line would not block wildlife movement because wildlife could move uninterrupted below the transmission line. Impacts from construction and operation of the transmission line would be less than significant. No mitigation is required.

Mitigation Measures: None required.

Impact Bio-11: Would the Proposed Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (*No impact*)

The CPUC has jurisdiction over the siting and design of the Proposed Project because the CPUC regulates and authorizes the construction of investor-owned public utility facilities. Such projects are exempt from local land use and zoning regulations and permitting in accordance with General Order No. 131-D, which is applicable to all components of a project including but not limited to the transmission lines and staging yards. However, Section XIV.B 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 part of the environmental review process, local biological resource policies and ordinances were considered as addressed below.

Construction

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

The City of San Diego General Services Department, Urban Forestry Section, issues permits for tree trimming, removal, planting, or root pruning following inspection by City of San Diego staff pursuant to City Council Policy 200-5. SDG&E would coordinate with the City and obtain any necessary permits for tree work associated with Proposed Project construction; therefore, there would be no conflicts with this policy.

City of San Diego Land Development Code (Environmentally Sensitive Lands Regulations and Biology Guidelines)

Any ministerial or discretionary permit issued by the City of San Diego for the Proposed Project construction (e.g., a right-of entry permit for access across City-owned open space) requires the City to confirm that the activity(ies) subject to the permit are consistent with the City's Land Development Code Environmentally Sensitive Lands (ESL) Regulations and Biology Guidelines.

Proposed Project construction would be consistent with the ESL regulations and Biology Guidelines in that SDG&E would:

1. Obtain permits when required for any listed species and wetland impacts including authorizations from the USFWS, USACE, CDFW, RWQCB, and the CCC,
2. Avoid and minimize wetland impacts to the extent feasible and mitigate impacts where needed,
3. Be consistent with the MSCP Subarea Plan including mitigation ratios and MSCP Land Use Adjacency Guidelines (See Draft EIR Appendix K),

4. Minimize encroachment into steep hillsides, and
5. Minimize the alteration of natural landforms and would not result in undue risk from geologic and erosional forces, flood hazards, and fire hazards.

ESL regulations also require impacts within the City of San Diego to be mitigated within the City, preferably within an MHPA. Temporary impacts would be restored in place as required by Mitigation Measure Biology-6, consistent with the ESL regulations and Biology Guidelines. Off-site mitigation for Proposed Project temporary and permanent habitat impacts (i.e., purchase and dedication) may not occur within the City of San Diego MHPA as SDG&E has other mitigation lands at its disposal through the SDG&E Subregional NCCP/HCP. Overall, the Proposed Project would not conflict with this regulation.

City of Poway Urban Forestry Ordinance

The City of Poway has an Urban Forestry Ordinance (Poway Municipal Code, Chapter 12.32) that supports urban forestry practices for planting, trimming, and removing trees. A tree removal permit, issued by the Public Works Department, is required before removing a tree on public property or from Development Services before removing certain tree species located on private property. SDG&E would coordinate with the City and obtain any necessary permits for any tree work associated with Proposed Project construction; therefore, there would be no conflicts with this ordinance.

Operation and Maintenance

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

The City of San Diego General Services Department, Urban Forestry Section, issues permits for tree trimming, removal, planting, or root pruning following inspection by City of San Diego staff pursuant to City Council Policy 200-5. SDG&E would coordinate with the City and obtain any necessary permits for any tree work associated with Proposed Project operation and maintenance; therefore, there would be no conflicts with this policy.

City of San Diego Land Development Code (Environmentally Sensitive Lands Regulations and Biology Guidelines)

Any ministerial or discretionary permit issued by the City of San Diego for the Proposed Project operation and maintenance (e.g., a right-of entry permit for access across City-owned open space) requires the City to confirm that the activity(ies) subject to the permit are consistent with the City's Land Development Code ESL Regulations and Biology Guidelines.

Operation and maintenance of the Proposed Project would be consistent with the ESL regulations and Biology Guidelines in that SDG&E would:

1. Obtain permits, when required, for any listed species and wetland impacts including authorizations from the USFWS, USACE, CDFW, RWQCB, and the CCC,
2. Avoid and minimize wetland impacts to the extent feasible and mitigate impacts where needed,
3. Be consistent with the MSCP Subarea Plan including mitigation ratios and MSCP Land Use Adjacency Guidelines (See Draft EIR Appendix K),

4. Minimize encroachment into steep hillsides, and
5. Minimize the alteration of natural landforms and would not result in undue risk from geologic and erosional forces, flood hazards, and fire hazards.

There would be no conflicts with this policy; therefore, there would be no impact. The Proposed Project would not conflict with this policy.

City of Poway Urban Forestry Ordinance

The City of Poway has an Urban Forestry Ordinance (Poway Municipal Code, Chapter 12.32) that supports urban forestry practices for planting, trimming, and removing trees. A tree removal permit, issued by the Public Works Department, is required before removing a tree on public property or from Development Services before removing certain tree species located on private property. SDG&E would coordinate with the City and obtain any necessary permits for any tree work associated with Proposed Project operation and maintenance; therefore, there would be no conflicts with this ordinance.

Mitigation Measures: None required.

Impact Bio-12: Would the Proposed Project conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan? (*No Impact*)

The Proposed Project is within the SDG&E Subregional NCCP area. The SDG&E NCCP addresses potential impacts to sensitive resources associated with SDG&E's ongoing installation, use, maintenance, and repair of its gas and electric systems and typical expansion to those systems throughout SDG&E's existing service area. The SDG&E NCCP includes mitigation measures and Operational Protocols designed to avoid and/or minimize impacts on biological resources and to provide appropriate mitigation where impacts are unavoidable to ensure the protection and conservation of Covered Species. The NCCP Operational Protocols would be applied to the Proposed Project to avoid and/or minimize potential impacts resulting from proposed project implementation. SDG&E would follow the habitat enhancement and reclamation measures described within the NCCP for consistency with the NCCP and to ensure that Proposed Project impacts on biological resources remain less than significant. The CPUC has prescribed mitigation measures that parallel the NCCP requirements in the event the current NCCP cannot be relied on for mitigation (refer to Section 4.1.7.1: Incidental Take Authorization). These measures were designed to be consistent with the NCCP; therefore, there would be no impact.

Specific biological resource mitigation measure requirements may be satisfied through compliance with NCCPs or HCPs obtained by SDG&E if these requirements are equally or more effective than the mitigation identified in this EIR. SDG&E shall provide the CPUC with copies of permits or other authorizations including any HCPs or NCCPs applicable to the Proposed Project such as the City of San Diego MSCP, and may be required to provide additional information to show that compliance with permitting conditions will be equally or more effective as mitigation for impacts to biological resources. The CPUC shall have sole discretion

to determine whether compliance with permit conditions will also satisfy the performance standards or requirements identified in mitigation measures in this EIR. If the CPUC determines that compliance with permit conditions will also satisfy the mitigation measures in this EIR, SDG&E shall submit reports to the CPUC documenting compliance consistent with the reporting requirements of the equivalent mitigation measure or measures.

City of San Diego MSCP Subarea Plan
The Proposed Project would be consistent with the MSCP Subarea Plan General Policies and Design Guidelines (Policy 1.4.2) as presented in Appendix K of this EIR; therefore, there would be no impact.

City of Poway HCP/NCCP
A portion of Proposed Project transmission line Segment A travels through the southwestern corner of the City of Poway. This portion of the transmission line is located in natural open space within the Mitigation Area as identified in the City of Poway's HCP/NCCP and South Poway Specific Plan (Ogden Environmental and Energy Service, Inc. 1996 and City of Poway 2014). Section 7.4.3 of the HCP/NCCP requires mitigation for (permanent) removal of natural vegetation in the Mitigation Area at specified ratios. The Proposed Project, however, would not result in the permanent removal of natural vegetation in the Mitigation Area, and temporary impacts resulting from the installation of two poles would be restored in accordance with Mitigation Measure Biology-6. Furthermore, existing access roads would be used for Proposed Project construction and operation/maintenance. Therefore, the Proposed Project would be consistent with Section 7.4.3 of the Poway HCP/NCCP. There would be no impact.

Marine Corps Air Station Miramar Integrated Natural Resources Management Plan
A portion of the Proposed Project transmission line Segment A travels through existing ROW located in MCAS Miramar. The INRMP addressed potential impacts to biological resources from the Proposed Project by noting that SDG&E would perform those activities is conformance with the SDG&E NCCP. A discussion of SDG&E's NCCP is provided above. The Proposed Project would be consistent with the MCAS Miramar INRMP. There would be no impact.

Mitigation Measures: None required.

4.1.9 Alternative 1: Eastern Cable Pole at Carmel Valley Road (Avoids Cable Pole in Black Mountain Ranch Community Park)

Alternative 1 would involve installation of a new cable pole immediately south of and adjoining Carmel Valley Road within existing SDG&E ROW, transitioning the Segment A overhead transmission line directly into the proposed Carmel Valley Road Segment B underground alignment. Alternative 1 would avoid installation of a cable pole and underground duct bank within the Black Mountain Ranch Community Park. This alternative is described in more detail in Chapter 3: Alternatives.

4.1.9.1 Alternative 1 Environmental Setting

Alternative 1 is adjacent to Black Mountain Ranch Open Space Preserve on a previously graded and revegetated hill slope within the City of San Diego road ROW.

Sensitive Natural Communities

Alternative 1 is located adjacent to Carmel Valley Road on a constructed slope. The habitat in the Alternative 1 area is revegetated coastal sage scrub.

Riparian Areas and Wetlands

There are no riparian areas or wetlands in the Alternative 1 area or vicinity.

Special-Status Species

There are decumbent goldenbush individuals, spineshrub individuals, and suitable habitat for thread-leaved brodiaea ~~no special-status plants~~ in the Alternative 1 area. The Alternative 1 area contains revegetated coastal sage scrub. There is potential for special-status species that use revegetated coastal sage scrub to occur in the Alternative 1 work area. The special-status reptile species listed in Table 4.1-9 could occur in the Alternative 1 area. The following special-status birds could use the habitat in the Alternative 1 area or vicinity:

- Bell's sage sparrow
- Coastal cactus wren
- Coastal California gnatcatcher
- Cooper's hawk
- Loggerhead shrike
- Sharp shinned hawk
- Vaux's swift
- Southern California rufous-crowned sparrow

Special-status mammals listed in Table 4.1-9, with the exception of bats, could use the habitat in the Alternative 1 area. The special-status bats would not occur in the Alternative 1 area because there are no roosting sites in the Alternative 1 area or vicinity. There is no habitat for special-status invertebrates or amphibians in the Alternative 1 area or vicinity.

4.1.9.2 Alternative 1 Environmental Impacts and Mitigation Measures

Table 4.1-17 summarizes the impacts to biological resources from Alternative 1.

Table 4.1-17 Summary of Impacts of Alternative 1 to Biological Resources

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance After Mitigation
Impact Bio-1: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM BIO-1 APM BIO-2 APM HYDRO-2 APM HAZ-1 APM HAZ-2	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-1e MM Biology-1f MM Biology-1g MM Biology-2 MM Biology-3
Impact Bio-2: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any invertebrate species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	No impact	---	---
Impact Bio-3: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any amphibian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	No impact	---	---
Impact Bio-4: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any reptile species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM BIO-2	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-3

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance After Mitigation
Impact Bio-5: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any avian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM BIO-2	Less than significant MM Biology-3 MM Biology-7
Impact Bio-6: Potential to have a substantial adverse effect from project construction, either directly or through habitat modifications, on any mammalian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM BIO-2	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-3 MM Biology-9
Impact Bio 7: Potential to have a substantial adverse effect from project operation and maintenance, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Operation and Maintenance	No impact	---	---
Impact Bio-8: Potential to cause a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS	Construction	Significant	Significant APM BIO-2	Less than significant MM Biology-3 MM Biology-6 MM Biology-11
	Operation and Maintenance	No impact	---	--
Impact Bio-9: Potential to cause a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.), or on state-protected jurisdictional areas not subject to regulation under Section 404 of the CWA through direct removal, filling, hydrological interruption, or other means	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance After Mitigation
Impact Bio-10: Potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---
Impact Bio-11: Potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---
Impact Bio-12: Potential to conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---

Alternative 1 would have no impact on seven CEQA significance criteria for biological resources: Impacts Bio-2, -3, -7, -9, -10, -11, and -12, as indicated in Table 4.1-17 above. There would be no impact to special-status invertebrate species from Alternative 1 because there are no vernal pools or suitable habitat for special-status invertebrate species (San Diego fairy shrimp ~~and vernal pool fairy shrimp~~) in the vicinity. There are no water bodies, riparian areas, or vernal pools affected by construction of Alternative 1; therefore Alternative 1 would avoid impacts to special-status amphibians, riparian areas, and wetlands. Alternative 1 involves construction of a cable pole along a roadside and would not block any migration.

Alternative 1 would involve the installation of a single pole; therefore, Alternative 1 would have no impacts to special-status birds from collisions or electrocution with transmission lines. Alternative 1 does not involve the construction of additional overhead transmission line.

Alternative 1 would not conflict with any policies or ordinances for the protection of biological resources or an HCP because the CPUC is exempt from local land use and zoning regulations and permitting in accordance with CPUC GO No. 131-D and because Alternative 1 is within the SDG&E Subregional NCCP area. The CPUC has prescribed mitigation measures that parallel the NCCP requirements in the event compliance with the current NCCP cannot be relied on for mitigation. These measures were designed to be consistent with the NCCP. Specific biological resource mitigation measure requirements may be satisfied through compliance with new or amended NCCPs or HCPs obtained by SDG&E if these requirements are equally or more effective than the mitigation identified in this EIR.

Impact Bio-1: Would construction of Alternative 1 have a substantial adverse effect, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 1 would directly impact decumbent goldenbush individuals, spineshrub, and suitable habitat for thread-leaved brodiaea. Table G-4 in Appendix G includes the number of species and area of suitable habitat for thread-leaved brodiaea that would be impacted by Alternative 1. Direct impacts to these species would be significant because these three species are considered rare throughout their range. Impacts to these species would significantly impact the population of the species, since the numbers of species are already low. In addition, indirect impacts from increased erosion and sedimentation, fugitive dust, release of toxic substances (e.g., oil), and introduction and/or spread of invasive, non-native plant species (weeds) would result in a significant impact.

Implementation of APMs BIO-1 (minimization of impacts to special-status plants), BIO-2 (SDG&E NCCP), HYDRO-2 (erosion control), HAZ-1 (SEAP), and HAZ-2 (consistency with state and federal regulations) would reduce impacts. Impacts would remain significant after implementation of APMs because the NCCP operational protocols and habitat compensation may not apply to Alternative 1 at the time of construction. Further, APM BIO-1 does not provide details on appropriate habitat compensation and the APMs do not address potential impacts from the introduction of invasive weeds. Mitigation Measures Biology-1a (general field personnel behavior requirements), Biology-1b (environmental training program), Biology-1c (pre-activity surveys), Biology-1d (operational protocols), Biology-1e (maintenance of access roads), Biology-1f (construction of new access road protocols), Biology-1g (survey work protocols), Biology-2 (compensatory mitigation for special status plants), and Biology-3 (preparation and implementation of a Weed Control Plan) would reduce significant impacts to special-status plants. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-1a, Biology-1b, Biology-1c, Biology-1d, Biology-1e, Biology-1f, Biology-1g, Biology-2, and Biology-3 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-4: Would construction of Alternative 1 have a substantial adverse effect, either directly or through habitat modifications, on any reptile species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 1 has the potential to impact the same special-status reptile species as the Proposed Project (see Table 4.1-9) because Alternative 1 would impact coastal sage scrub and grassland, which provides suitable habitat for the special-status reptile species listed in Table 4.1-9. Table G-5 in Appendix G provides a summary of the vegetation communities that would be impacted by Alternative 1. Direct impacts to special-status reptiles from injury or mortality and indirect impacts from habitat loss associated with invasive weeds would be significant. Implementation

of APM BIO-2 (SDG&E NCCP) would reduce impacts. Impacts would remain significant even after implementation of APM BIO-2 because the NCCP protocols and mitigation measures may not apply to Alternative 1 at the time of construction and the APM does not address potential impacts associated with the introduction of invasive weeds. Mitigation Measures Biology-1a (general field personnel behavior requirements), Biology-1b (environmental training program), Biology-1c (pre-activity surveys), Biology-1d (operational protocols), and Biology-3 (preparation and implementation of a Weed Control Plan) would reduce impacts to special-status reptiles. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-1a, Biology-1b, Biology-1c, Biology-1d, and Biology-3 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-5: Would construction of Alternative 1 have a substantial adverse effect, either directly or through habitat modifications, on any avian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 1 has the potential to directly impact the following avian species that would use the revegetated coastal sage scrub habitat:

- Cooper's hawk
- Bell's sage sparrow
- Coastal California gnatcatcher
- Southern California rufous-crowned sparrow
- Coastal cactus wren
- Vaux's swift
- Loggerhead shrike
- Sharp shinned hawk

Direct impacts associated with injury or mortality and nest disturbance, and indirect impacts to habitat from invasive weed introduction would be significant. Implementation of APM BIO-2 (SDG&E NCCP would reduce impacts. Impacts would remain significant even after implementation of APM BIO-2 because the current NCCP may not apply to Alternative 1 at the time of construction and the NCCP does not define construction buffers or monitoring requirements for avian species. Further, the APM does not address indirect impacts associated with invasive weeds. Mitigation Measures Biology-3 (preparation and implementation of a Weed Control Plan) and Biology-7 (mitigation for bird species)would reduce impacts to special-status avian species through nest buffers, monitoring and weed control. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-3 and Biology-7 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-6: Would construction of Alternative 1 have a substantial adverse effect, either directly or through habitat modifications, on any mammalian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 1 has the potential to directly impact special-status mammal species identified in Table 4.1-9, with the exception of bats, due to the presence of suitable habitat (i.e., coastal sage scrub) in the Alternative 1 area (see Table G-5 in Appendix G for a summary of impacts to sensitive vegetation communities). Direct impacts to special-status mammals from injury or mortality, and indirect impacts to habitat from invasive weeds would be significant. Implementation of APM BIO-2 (SDG&E NCCP) would reduce impacts. Impacts would remain significant even after implementation of APM BIO-2 because the current NCCP may not apply to Alternative 1 at the time of construction and because the NCCP does not require surveys for San Diego desert woodrat or adequately describe the methods of mitigation. Further, the APM does not address indirect impacts associated with invasive weeds. Mitigation Measures Biology-1a (general field personnel behavior requirements), Biology-1b (environmental training program), Biology-1c (pre-activity surveys), Biology-1d (operational protocols), Biology-3 (preparation and implementation of a Weed Control Plan) and Biology-9 (San Diego desert woodrat mitigation) would reduce impacts to special-status mammals. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-1a, Biology-1b, Biology-1c, Biology-1d, Biology-3, and Biology-9 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-8: Would Alternative 1 cause a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS? (*Less than significant with mitigation*)

Construction

Alternative 1 would permanently and temporarily impact Diegan coastal sage scrub, revegetated coastal sage scrub, and native grassland. Table G-5 in Appendix G provides a summary of the area that would be impacted. Sensitive habitat near Alternative 1, specifically Black Mountain Ranch Open Space Preserve, could be indirectly impacted by invasive, non-native plant species introduction and/or spread as a result of Alternative 1. Impacts to sensitive vegetation communities would be significant. Implementation of APM BIO-2 (SDG&E NCCP) would reduce impacts. Impacts would remain significant even after implementation of APM BIO-2 because the current NCCP may not apply to Alternative 1 at the time of construction. Further, APM BIO-2 does not address indirect impacts associated with invasive weeds. Mitigation Measures Biology-3 (preparation and implementation of a Weed Control Plan), Biology-6 (compensatory mitigation for impacts to habitat), and Biology-11 (reseeding following fires) would reduce impacts to sensitive natural communities. Impacts would be less than significant with mitigation.

Operation and Maintenance
The Alternative 1 cable pole would be located on a graded pad adjacent to Carmel Valley Road. As such vegetation maintenance activities would not be required at the cable pole location. There would be no operation and maintenance impacts to sensitive natural communities.

Mitigation Measures: Biology-3, Biology-6, and Biology-11 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

4.1.10 Alternatives 2a and 2b: Eastern Cable Pole at Pole P40 and Underground Alignment through City Open Space or City Water Utility Service Road (Avoids Cable Pole in Black Mountain Ranch Community Park)

Alternative 2 would involve installation of a new cable pole in the same location for both Alternatives 2a and 2b, approximately 300 feet south of Carmel Valley Road within existing SDG&E ROW, transitioning the Segment A overhead transmission line into the proposed Carmel Valley Road Segment B underground alignment via one of two underground alignment options. Alternative 2a would locate the underground duct bank west of SDG&E ROW through City of San Diego open space and into Carmel Valley Road. Alternative 2b would locate the underground duct bank east of SDG&E ROW through a City of San Diego water utility service road and into Carmel Valley Road. Both Alternative 2a and 2b would avoid installation of a cable pole and underground duct bank within the Black Mountain Ranch Community Park. This alternative is described in more detail in Chapter 3: Alternatives.

4.1.10.1 Alternative 2 Environmental Setting

Alternative 2 is located in the Black Mountain Ranch Open Space Preserve. The option 2a underground alignment is located in dedicated park land. The alternative 2b underground alignment is located in dedicated park land and a City of San Diego water utility service road.

Sensitive Natural Communities
The following vegetation communities are found adjacent to the Alternative 2a underground alignment: native grassland, nonnative grassland, Diegan coastal sage scrub, revegetated coastal sage scrub, and bare ground.

The following vegetation communities are found adjacent to the Alternative 2b underground alignment: Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, and nonnative grassland.

Riparian Areas and Wetlands
There are no riparian areas or wetlands in the Alternative 2a or 2b area or vicinity.

Special-Status Species
The City of San Diego has identified the area of park land and MSCP open space area where the underground alignment would be located as an area with suitable habitat for variegated dudleya (*Dudleya variegata*). There is a high potential for this species to occur in the Alternative 2a area. Focused special-status plant surveys conducted for the Proposed Project

were used to identify which special-status plants are present in the Alternative 2 work areas. In addition, a focused special-status plant survey in the Alternative 2 work areas was conducted in May and June 2015 (Chambers Group 2015c). ~~In addition, there~~ There are coast barrel cactus, decumbent goldenbush, graceful tarplant, palmer's grapplinghook, San Diego sunflowers, spineshrub, and suitable habitat for thread-leaved brodiaea located within the Alternative 2~~a~~ work areas.

The Alternative 2 area provides suitable habitat for special-status species. The special-status reptile species listed in Table 4.1-9 with a moderate or high potential to occur could occur in the Alternative 1 area. The following special-status birds could potentially use the habitat in Alternative 2:

- Cooper's hawk
- Coastal California gnatcatcher
- Bell's sage sparrow
- Grasshopper sparrow
- Coastal cactus wren
- Burrowing owl
- Vaux's swift
- Southern California rufous-crowned sparrow
- Merlin
- Northern harrier
- Western bluebird
- Sharp shinned hawk
- White tailed kite
- Loggerhead shrike
- California horned lark

Special-status mammals listed in Table 4.1-9, with the exception of bats, could use the habitat in the Alternative 2 area. The special-status bats would not occur in the Alternative 2 area because there are no roosting sites in the Alternative 2 area or vicinity. There is no habitat for special-status invertebrates or amphibians in the Alternative 2 area or vicinity.

4.1.10.2 Alternative 2 Environmental Impacts and Mitigation Measures

Table 4.1-18 summarizes the impacts to biological resources from Alternative 2.

Table 4.1-18 Summary of Impacts of Alternative 2 to Biological Resources

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance After Mitigation
Impact Bio-1: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM BIO-1 APM BIO-2 APM HYDRO-2 APM HAZ-1 APM HAZ-2	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-1e MM Biology-1f MM Biology-1g MM Biology-2 MM Biology-3

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance After Mitigation
Impact Bio-2: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any invertebrate species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	No Impact	---	---
Impact Bio-3: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any amphibian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	No Impact	---	---
Impact Bio-4: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any reptile species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM BIO-2 APM HYDRO-2	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-3
Impact Bio-5: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any avian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM HYDRO-2	Less than significant MM Biology-3 MM Biology-7 MM Biology-8
Impact Bio-6: Potential to have a substantial adverse effect from project construction, either directly or through habitat modifications, on any mammalian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM HYDRO-2	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-3 MM Biology-9

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance After Mitigation
Impact Bio 7: Potential to have a substantial adverse effect from project operation and maintenance, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Operation and Maintenance	Significant	Significant ~~APM BIO-2~~	Less than significant ~~MM Biology-1a~~ ~~MM Biology-1e~~ MM Biology-3
Impact Bio-8: Potential to cause a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS	Construction	Significant	Significant APM BIO-2 APM HYDRO-2	Less than significant MM Biology-3 MM Biology-6 MM Biology-11
	Operation and Maintenance	Significant	Significant	Less than significant MM Biology-3
Impact Bio-9: Potential to cause a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.), or on state-protected jurisdictional areas not subject to regulation under Section 404 of the CWA through direct removal, filling, hydrological interruption, or other means	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---
Impact Bio-10: Potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---
Impact Bio-11: Potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---
Impact Bio-12: Potential to conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---

Alternative 2 would have no impact on six CEQA significance criteria for biological resources: Impacts Bio-2, -3, -9, -10, -11, and -12, as indicated in Table 4.1-23 above. Alternative 2 would have no impact to special-status invertebrate species because there are no vernal pools or suitable habitat for special status invertebrate species (San Diego fairy shrimp ~~and vernal pool fairy shrimp~~) in the Alternative 2 area or vicinity. There are no water bodies, riparian areas, or vernal pools affected by construction of Alternative 2; therefore, Alternative 2 would avoid impacts to special-status amphibians, riparian areas, and wetlands. Alternative 2 involves construction of a cable pole and underground transmission line and would not block any migration. Alternative 2 would have no impacts to special-status birds from collisions or electrocution with transmission lines because Alternative 2 does not involve the construction of additional overhead transmission line; Alternative 2 would only involve the installation of a single pole.

Alternative 2 would not conflict with any policies or ordinances for the protection of biological resources or an HCP because the CPUC is exempt from local land use and zoning regulations and permitting in accordance with General Order No. 131-D and because Alternative 2 is within the SDG&E Subregional NCCP area. The CPUC has prescribed mitigation measures that parallel the NCCP requirements in the event compliance with the current NCCP cannot be relied on for mitigation. These measures were designed to be consistent with the NCCP. Specific biological resource mitigation measure requirements may be satisfied through compliance with new or amended NCCPs or HCPs obtained by SDG&E if these requirements are equally or more effective than the mitigation identified in this EIR.

Impact Bio-1: Would construction of Alternative 2 have a substantial adverse effect, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 2a

Alternative 2a would directly impact decumbent goldenbush, graceful tarplant, Palmer's grapplinghook, small-flowered morning-glory, spineshrub, and suitable habitat for thread-leaved brodiaea during construction. Table G-4 in Appendix G includes the number of species and area of suitable habitat for thread-leaved brodiaea that would be impacted by Alternative 2a. In addition, Alternative 2a has the potential to impact variegated dudleya during construction. Direct impacts to these special-status plant species would be significant. In addition, indirect impacts from increased erosion and sedimentation, fugitive dust, release of toxic substances (e.g., oil), and introduction and/or spread of invasive, non-native plant species (weeds) would result in a significant impact.

Implementation of APMs BIO-1 (minimization of impacts to special-status plants), BIO-2 (SDG&E NCCP), and HYDRO-2 (erosion control), HAZ-1 (SEAP), and HAZ-2 (consistency with state and federal regulations) would reduce impacts. Impacts would remain significant after implementation of APMs because the NCCP operational protocols and habitat compensation may not apply to Alternative 2a at the time of construction. Further, APM BIO-1 does not

provide details on appropriate habitat compensation and the APMs do not address potential impacts from the introduction of invasive weeds. Mitigation Measures Biology-1a (general field personnel behavior requirements), Biology-1b (environmental training program), Biology-1c (pre-activity surveys), Biology-1d (operational protocols), Biology-1e (maintenance of access roads), Biology-1f (construction of new access road protocols), Biology-1g (survey work protocols), Biology-2 (compensatory mitigation for special status plants), and Biology-3 (preparation and implementation of a Weed Control Plan) would reduce significant impacts to special-status plants. Impacts would be less than significant with mitigation.

Alternative 2b

Alternative 2b would directly impact decumbent goldenbush, small-flowered morning-glory, spineshrub, and suitable habitat for thread-leaved brodiaea. Table G-4 in Appendix G includes the number of species and area of suitable habitat for thread-leaved brodiaea that would be impacted by Alternative 2b. Direct impacts to these special-status plant species would be significant. Implementation of APMs BIO-1 (minimization of impacts to special-status plants), BIO-2 (SDG&E NCCP), HYDRO-2 (erosion control), HAZ-1 (SEAP), and HAZ-2 (consistency with state and federal regulations) would reduce impacts. Impacts would remain significant after implementation of APMs because the NCCP operational protocols and habitat compensation may not apply to Alternative 2 at the time of construction. Further, APM BIO-1 does not provide details on appropriate habitat compensation and the APMs do not address potential impacts from the introduction of invasive weeds. Mitigation Measures Biology-1a (general field personnel behavior requirements), Biology-1b (environmental training program), Biology-1c (pre-activity surveys), Biology-1d (operational protocols), Biology-1e (maintenance of access roads), Biology-1f (construction of new access road protocols), Biology-1g (survey work protocols), Biology-2 (compensatory mitigation for special status plants), and Biology-3 (preparation and implementation of a Weed Control Plan) would reduce significant impacts to special-status plants. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-1a, Biology-1b, Biology-1c, Biology-1d, Biology-1e, Biology-1f, Biology-1g, Biology-2, and Biology-3 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-4: Would construction of Alternative 2 have a substantial adverse effect, either directly or through habitat modifications, on any reptile species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 2 has the potential to impact the same special-status reptile species as the Proposed Project (see Table 4.1-9) because Alternative 2 would impact suitable habitat, including coastal sage scrub and grassland. Table G-5 in Appendix G provides a summary of the vegetation communities that would be impacted by Alternative 2a and 2b.

Direct and indirect impacts associated with injury, mortality, and impacts to habitat would be significant. Implementation of APMs BIO-2 (SDG&E NCCP) and HYDRO-2 (erosion control)

would reduce impacts. Impacts would remain significant even after implementation of APMs because the NCCP protocols and mitigation measures (APM BIO-2) may not apply to Alternative 2 at the time of construction and the APMs do not address potential impacts associated with the introduction of invasive weeds. Mitigation Measures Biology-1a (general field personnel behavior requirements), Biology-1b (environmental training program), Biology-1c (pre-activity surveys), Biology-1d (operational protocols) and Biology-3 (preparation and implementation of a Weed Control Plan) would reduce impacts to special-status reptiles. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-1a, Biology-1b, Biology-1c, Biology-1d, and Biology-3 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-5: Would construction of Alternative 2 have a substantial adverse effect, either directly or through habitat modifications, on any avian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 2 has the potential to directly or indirectly the following special-status avian species that could use habitats in the vicinity of the work area:

- Bell's sage sparrow
- Burrowing owl
- California horned lark
- Coastal cactus wren
- Coastal California gnatcatcher
- Cooper's hawk
- Grasshopper sparrow
- Southern California rufous-crowned sparrow
- Loggerhead shrike
- Merlin
- Northern harrier
- Sharp shinned hawk
- Vaux's swift
- Western bluebird
- White tailed kite

Direct and indirect impacts associated with injury, mortality, nest disturbance, and impacts to habitat would be significant. Table G-5 in Appendix G provides a summary of impacts to vegetation communities. Implementation of APMs AIR-1 (fugitive dust control), BIO-2 (SDG&E NCCP), and HYDRO-2 (erosion control) would reduce impacts. Impacts would remain significant even after implementation of APMs because the current NCCP (APM BIO-2) may not apply to Alternative 2 at the time of construction and the NCCP does not define construction buffers or monitoring requirements for avian species. Further, the APMs do not address indirect impacts associated with invasive weeds. Mitigation Measures Biology-3 (preparation and implementation of a Weed Control Plan), Biology-7 (mitigation for bird

species), and Biology-8 (burrowing owl monitoring and mitigation plan) would reduce impacts to special-status avian species. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-3, Biology-7, and Biology-8 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-6: Would construction of Alternative 2 have a substantial adverse effect, either directly or through habitat modifications, on any mammalian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 2 would not impact any special-status bat species because there are no bridges or other potential roost sites that provide roosting sites and that would be worked on as part of Alternative 2. There would be no impact to special-status bats.

Alternative 2 has the potential to directly impact special-status mammal species identified in Table 4.1-9, with the exception of bats, due to the presence of suitable habitat in the Alternative 2a and 2b areas. Table G-5 in Appendix G provides a summary of impacts to vegetation communities. Direct and indirect impacts associated with injury, mortality, and impacts to habitat would be significant. Implementation of APMs AIR-1 (fugitive dust control), BIO-2 (SDG&E NCCP), and HYDRO-2 (erosion control) would reduce impacts. Impacts would remain significant even after implementation of APMs because the NCCP (APM BIO-2) may not apply to Alternative 2 at the time of construction, and the APMs do not address indirect impacts associated with invasive weeds. Mitigation Measures Biology-1a (general field personnel behavior requirements), Biology-1b (environmental training program), Biology-1c (pre-activity surveys), Biology-1d (operational protocols), Biology-3 (preparation and implementation of a Weed Control Plan) and Biology-9 (San Diego desert woodrat mitigation) would reduce impacts to special-status mammals. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-1a, Biology-1b, Biology-1c, Biology-1d, Biology-3, and Biology-9 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio 7: Would Alternative 2 have a substantial adverse effect from operation and maintenance, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 2 would have no impacts to special-status birds from collisions or electrocution with transmission lines because Alternative 2 would not include the construction of a transmission line and would involve the construction of a single pole. Alternative 2 would, however, require herbicide application for weed control and to maintain vegetation clearance around the new constructed pole, which could potentially result in a significant impact. ~~In addition, Alternative 2 would require road maintenance, which could potentially result in a significant impact. Implementation of APM BIO-2 (SDG&E NCCP) would reduce impacts; however,~~

~~impacts would remain significant after implementation of APM BIO-2 because the NCCP may not apply to Alternative 2 during operation and maintenance. Furthermore, APM BIO-2 does not address impacts associated with herbicide application.~~ Mitigation Measure~~s Biology-1a (general field personnel behavior requirements), Biology-1e (maintenance of access roads), and~~ Biology-3 (preparation and implementation of a Weed Control Plan) would reduce impacts to special-status species during operation and maintenance. Impacts would be less than significant with mitigation.

Mitigation Measures: ~~Biology-1a, Biology-1e, and~~ Biology-3 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-8: Would Alternative 2 cause a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS? (*Less than significant with mitigation*)

Construction

Both Alternative 2 options (2a and 2b) would permanently and temporarily impact Diegan coastal sage scrub, revegetated coastal sage scrub, native grassland, and nonnative grassland habitats. Table G-5 in Appendix G provides a summary of impacts to vegetation communities. These vegetation communities are sensitive and the impacts would be significant. Sensitive habitat for both Alternative 2a and 2b would also be indirectly impact by increased erosion and sedimentation; fugitive dust; and invasive, non-native plant species introduction and/or spread. Direct and indirect impacts to sensitive vegetation communities would be significant.

Implementation of APMs BIO-2 (NCCP operational protocols) and HYDRO-2 (erosion control) would reduce impacts; however, impacts would remain significant after implementation of APMs because the current NCCP may not be available at the time of construction. Furthermore, the APMs do not address impacts associated with invasive weeds and biological impacts associated with fires. Mitigation Measures Biology-3 (preparation and implementation of a Weed Control Plan), Biology-6 (compensatory mitigation for impacts to habitat), and Biology-11 (reseeding following fires) would reduce impacts to sensitive natural communities. Impacts would be less than significant with mitigation.

Operation and Maintenance

Vegetation maintenance activities including trimming and herbicide application would occur around the Alternative 2 cable pole for the prevention of wildfire. Vegetation maintenance would also occur at structure work pad and along spur roads for access. Impacts to adjacent sensitive vegetation would occur during herbicide application if herbicide applications drift, which would be a significant impact. Mitigation Measure Biology-3 (weed control) is required to reduce this potential impact. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-3, Biology-6, and Biology-11 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

4.1.11 Alternative 3: Los Peñasquitos Canyon Preserve-Mercy Road Underground Alternative (Avoids Overhead in Northern Half of Segment A, Underground in Segment B, and Overhead in Segment C)

Alternative 3 would include installing an underground alignment starting at a new cable pole where the existing SDG&E ROW crosses Ivy Hill Road and ending at a new cable pole approximately 550 feet west of the Peñasquitos Junction (i.e., where Proposed Project Segments C and D meet). The underground alignment would follow Scripps Poway Parkway, Mercy Road, Black Mountain Road, and finally Park Village Road. Alternative 3 would bypass the northern half of Proposed Project Segment A and all of Proposed Project Segments B and C. This alternative is described in more detail in Chapter 3: Alternatives.

4.1.11.1 Alternative 3 Environmental Setting

Sensitive Natural Communities

A small portion of the underground transmission line, at the beginning and end of the Alternative 3 underground alignment would be located within unpaved access roads. There is ornamental vegetation, disturbed chamise chaparral, and revegetated coastal sage scrub located adjacent to the access road near Ivy Hill Drive at the start of the underground alignment. There is southern mixed chaparral, chamise chaparral, and scrub oak chaparral located adjacent to the access road near Peñasquitos Junction where the underground alignment ends.

With the exception of the cable pole and short segment of underground alignment within unpaved access roads, the underground transmission line would be located under previously disturbed roads. The following habitats are adjacent to the underground transmission line route:

- Scrub oak chaparral
- Chaparral
- Chamise chaparral
- Southern maritime chaparral
- Diegan coastal sage scrub
- Ornamental vegetation
- Southern riparian woodland
- Southern arroyo willow riparian forest
- Southern sycamore-alder riparian forest
- Southern riparian forest
- Valley foothill grassland
- Nonnative grassland

Riparian Areas and Wetlands

Southern riparian woodland, southern arroyo willow riparian forest, southern sycamore-alder riparian forest, and southern riparian forest are located adjacent to the underground alignment of Alternative 3.

Special-Status Species

There are no special-status plants located in Alternative 3. In addition, there is no suitable vernal pool habitat for special-status San Diego fairy shrimp ~~and vernal pool fairy shrimp~~ and no suitable QCB habitat for QCB; therefore, there are no special-status invertebrate species in Alternative 3.

The sensitive vegetation communities located near Alternative 3 provides habitat for special-status reptile, bird, and mammal species. All the special-status reptile, bird, and mammal species identified as having a moderate and high potential to occur in Table 4.1-9 could potentially occur in Alternative 3 because of the presence of potentially suitable habitat.

4.1.11.2 Alternative 3 Environmental Impacts and Mitigation Measures

Table 4.1-19 summarizes the impacts to biological resources from Alternative 3.

Table 4.1-19 Summary of Impacts of Alternative 3 to Biological Resources

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance after Mitigation
Impact Bio-1: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM BIO-1 APM BIO-2 APM HYDRO-2 APM HAZ-1 APM HAZ-2	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-1e MM Biology-1f MM Biology-1g MM Biology-2 MM Biology-3
Impact Bio-2: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any invertebrate species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	No impact	No impact	---	---
Impact Bio-3: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any amphibian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM BIO-2 APM HYDRO-2 APM HAZ-1 APM HAZ-2	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-3
Impact Bio-4: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any reptile species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM BIO-2 APM HYDRO-2	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-3

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance after Mitigation
Impact Bio-5: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any avian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM BIO-2 APM HYDRO-2	Less than significant MM Biology-3 MM Biology-7 MM Biology-8
Impact Bio-6: Potential to have a substantial adverse effect from project construction, either directly or through habitat modifications, on any mammalian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM BIO-2 APM HYDRO-2	Less than significant MM Biology-3 MM Biology-9 MM Biology-10
Impact Bio 7: Potential to have a substantial adverse effect from project operation and maintenance, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Operation and Maintenance	Significant	Significant ~~APM BIO-2~~	Less than significant ~~MM Biology-1a~~ ~~MM Biology-1e~~ MM Biology-3
Impact Bio-8: Potential to cause a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM HYDRO-2	Less than significant MM Biology-3 MM Biology-6 MM Biology-11
	Operation and Maintenance	Significant	Significant	Less than significant MM Biology-3
Impact Bio-9: Potential to cause a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.), or on state-protected jurisdictional areas not subject to regulation under Section 404 of the CWA through direct removal, filling, hydrological interruption, or other means	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance after Mitigation
Impact Bio-10: Potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---
Impact Bio-11: Potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---
Impact Bio-12: Potential to conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---

Alternative 3 would have no impact on five CEQA significance criteria for biological resources: Impacts Bio-2, -9, -10, -11, and -12, as indicated in Table 4.1-24 above. Alternative 3 would have no impact to special-status invertebrate species because Alternative 3 does not have vernal pools within the area to support special-status invertebrate species (San Diego fairy shrimp ~~and vernal pool fairy shrimp~~) and there is no QCB habitat in the area. Alternative 3 would be located underground within existing roadways and would have no impact to federally protected wetlands or migratory wildlife corridors because none of these resources are located within the construction area and the alternative would be constructed underground within existing roadways.

Alternative 3 would not conflict with any policies or ordinances for the protection of biological resources or an HCP because the CPUC is exempt from local land use and zoning regulations and permitting in accordance with General Order No. 131-D and because Alternative 3 is within the SDG&E Subregional NCCP area. The CPUC has prescribed mitigation measures that parallel the NCCP requirements in the event compliance with the current NCCP cannot be relied on for mitigation. These measures were designed to be consistent with the NCCP. Specific biological resource mitigation measure requirements may be satisfied through compliance with new or amended NCCPs or HCPs obtained by SDG&E if these requirements are equally or more effective than the mitigation identified in this EIR.

Impact Bio-1: Would construction of Alternative 3 have a substantial adverse effect, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 3 would directly impact coast barrel cactus and spineshrub. Table G-4 in Appendix G includes the number of species that would be impacted by Alternative 3. Spineshrub and coast barrel cactus are ranked as CRPR 2B.1 and are highly threatened in California but common outside of California. Impacts to these species would be significant because these species are moderately to highly threatened in California. In addition, indirect impacts from increased erosion and sedimentation, fugitive dust, release of toxic substances (e.g., oil), and introduction and/or spread of invasive, non-native plant species (weeds) would result in a significant impact.

Implementation of APMs BIO-1 (minimization of impacts to special-status plants), BIO-2 (SDG&E NCCP), HYDRO-2 (erosion control), HAZ-1 (SEAP), and HAZ-2 (consistency with state and federal regulations) would reduce impacts. Impacts would remain significant after implementation of APMs because the NCCP operational protocols and habitat compensation may not apply to Alternative 3 at the time of construction. Further, APM BIO-1 does not provide details on appropriate habitat compensation and the APMs do not address potential impacts from the introduction of invasive weeds. Mitigation Measures Biology-1a (general field personnel behavior requirements), Biology-1b (environmental training program), Biology-1c (pre-activity surveys), Biology-1d (operational protocols), Biology-1e (maintenance of access roads), Biology-1f (construction of new access road protocols), Biology-1g (survey work protocols), Biology-2 (compensatory mitigation for special status plants), and Biology-3 (preparation and implementation of a Weed Control Plan) would reduce significant impacts to special-status plants. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-1a, Biology-1b, Biology-1c, Biology-1d, Biology-1e, Biology-1f, Biology-1g, Biology-2, and Biology-3 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-3: Would construction of Alternative 3 have a substantial adverse effect, either directly or through habitat modifications, on any amphibian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 3 has the potential to impact western spadefoot due to the presence of southern riparian woodland, which provides suitable habitat for wester spadefoot, in the work area for Alternative 3. Direct impacts from injury or mortality to this species would be a significant impact. In addition, indirect impacts to habitat areas from increased erosion and sedimentation, release of toxic substances (e.g., oil), and invasive, non-native plant species introduction and/or spread would be significant.

Implementation of APMs BIO-2 (SDG&E NCCP), HYDRO-2 (erosion control), HAZ-1 (SEAP), and HAZ-2 (consistency with state and federal regulations) would reduce impacts; however, impacts would remain significant after implementation of APMs because the current NCCP protocols and mitigation measures (APM BIO-2) may not apply to Alternative 3 at the time of construction. Mitigation Measures Biology-1a (general field personnel behavior requirements), Biology-1b (environmental training program), Biology-1c (pre-activity surveys), Biology-1d (operational protocols), and Biology-3 (preparation and implementation of a Weed Control Plan) would reduce significant impact to special-status invertebrates. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology 1a, Biology 1b, Biology 1c, Biology 1d, and Biology-3 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-4: Would construction of Alternative 3 have a substantial adverse effect, either directly or through habitat modifications, on any reptile species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 3 has the potential to impact special-status reptile species listed in Table 4.1-9 with a moderate or high potential to occur because Alternative 3 would impact potential habitat for these species, including southern mixed chaparral, chamise chaparral, disturbed chamise chaparral, scrub oak chaparral, nonnative grassland, and southern riparian woodland. Table G-5 in Appendix G provides a summary of impacts to vegetation communities. In addition, special-status reptile species would potentially be indirectly impacted by increased erosion and sedimentation, and introduction and/or spread of invasive, non-native plant species.

Direct and indirect impacts associated with injury, mortality, and impacts to habitat would be significant. Implementation of APMs BIO-2 (SDG&E NCCP)and HYDRO-2 (erosion control) would reduce impacts; however, impacts would remain significant after implementation of APMs because the NCCP protocols (APM BIO-2) may not apply to Alternative 3 at the time of construction and the APMs do not address potential impacts associated with the introduction of invasive weeds. Mitigation Measures Biology-1a (general field personnel behavior requirements), Biology-1b (environmental training program), Biology-1c (pre-activity surveys), Biology-1d (operational protocols), and Biology-3 (preparation and implementation of a Weed Control Plan) would reduce impacts to special-status reptiles. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-1a, Biology-1b, Biology-1c, Biology-1d, and Biology-3 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-5: Would construction of Alternative 3 have a substantial adverse effect, either directly or through habitat modifications, on any avian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 3 has the potential to impact the special-status avian species listed in Table 4.1-9 because Alternative 3 would impact potential habitat for these species, including southern mixed chaparral, chamise chaparral, disturbed chamise chaparral, scrub oak chaparral, nonnative grassland, and southern riparian woodland. Table G-5 in Appendix G provides a summary of impacts to vegetation communities. Direct and indirect impacts associated with injury, mortality, and impacts to habitat would be significant. Implementation of APMs BIO-2 (SDG&E NCCP)and HYDRO-2 (erosion control) would reduce impacts; however, impacts would remain significant even after implementation of APMs because the NCCP (APM BIO-2) may not apply to Alternative 3 at the time of construction and the NCCP does not define construction buffers or monitoring requirements for avian species. Further, the APMs do not address indirect impacts associated with invasive weeds. Mitigation Measures Biology-3 (preparation and implementation of a Weed Control Plan), Biology-7 (mitigation for bird species), and Biology-8 (burrowing owl monitoring and mitigation plan) would reduce impacts to special-status avian species. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-3, Biology-7, and Biology-8 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-6: Would construction of Alternative 3 have a substantial adverse effect, either directly or through habitat modifications, on any mammalian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 3 has the potential to impact the special-status mammal species listed in Table 4.1-9 because Alternative 3 would impact potential habitat for these species, including southern mixed chaparral, disturbed chamise chaparral, and southern riparian woodland. Table G-5 in Appendix G provides a summary of impacts to vegetation communities. Alternative 3 also involves construction on roadway bridges, which could provide suitable roosting habitat for special-status bats. Direct and indirect impacts associated with injury, mortality, and impacts to habitat would be significant. Implementation of APMs BIO-2 (SDG&E NCCP), and HYDRO-2 (erosion control) would reduce impacts; however, impacts would remain significant after implementation of APMs because the NCCP (APM BIO-2) may not apply to Alternative 3 at the time of construction. Furthermore, the APMs do not address indirect impacts associated with invasive weeds, or provide adequate protection for San Diego desert woodrat or bats. Mitigation Measures Biology-3 (preparation and implementation of a Weed Control Plan), Biology-9 (San Diego desert woodrat mitigation), and Biology-10 (mitigation for bat species) would reduce impacts to special-status mammals. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-1a, Biology-1b, Biology-1c, Biology-1d, Biology-9, and Biology-10 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio 7: Would Alternative 3 have a substantial adverse effect from operation and maintenance, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 3 would have no impacts to special-status birds from collisions or electrocution with transmission lines because Alternative 3 would not include the construction of an overhead transmission line. Alternative 3 would, however, require herbicide application for the new cable poles, which could potentially result in a significant impact to individual special-status species. ~~In addition, Alternative 3 would require road maintenance, which could potentially result in a significant impact. Implementation of APM BIO-2 (SDG&E NCCP) would reduce impacts; however, impacts would remain significant after implementation of APM BIO-2 because the NCCP may not apply to Alternative 3 at the time of construction and APM BIO-2 does not address impacts to special-status birds associated with herbicide application, including herbicide exposure to special-status birds.~~ Mitigation Measure~~s Biology-1a (general field personnel behavior requirements), Biology-1c (maintenance of access roads), and~~ Biology-3 (preparation and implementation of a Weed Control Plan) would reduce impacts to special-status species during operation and maintenance. Impacts would be less than significant with mitigation.

Mitigation Measures: ~~Biology-1a, Biology-1c, and~~ Biology-3 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-8: Would Alternative 3 cause a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS? (*Less than significant with mitigation*)

Construction

Alternative 3 would permanently impact chamise chaparral, disturbed chamise chaparral, southern mixed chaparral, and scrub oak chaparral and would temporarily impact chamise chaparral, disturbed chamise chaparral, southern mixed chaparral, scrub oak chaparral, nonnative grassland and southern riparian woodland. Table G-5 in Appendix G provides a summary of impacts to vegetation communities. Increased erosion and sedimentation; fugitive dust; and invasive, non-native plant species introduction and/or spread would indirectly impact sensitive habitats. Direct and indirect impacts to sensitive vegetation communities would be significant.

Implementation of APMs AIR-1 (fugitive dust control) and HYDRO-2 (erosion control) would reduce impacts; however, impacts would remain significant after implementation of APMs

because APMs do not address impacts associated with invasive weeds and biological impacts associated with fires. APM BIO-2 requires the implementation of the current SDG&E NCCP. NCCP protocols include requirements for compensatory mitigation for habitat. NCCP protocols and measures may not apply at the time of Proposed Project construction. Therefore, even after implementation of APMs, impacts would remain significant because compensatory mitigation for habitat would not be implemented if the NCCP were not applied. Mitigation Measures Biology-3 (preparation and implementation of a Weed Control Plan), Biology-6 (compensatory mitigation for impacts to habitat), and Biology-11 (reseeding following fires) would reduce impacts to sensitive natural communities. Impacts would be less than significant with mitigation.

Operation and Maintenance

Vegetation maintenance activities including trimming and herbicide application would occur around the proposed cable poles for the prevention of wildfire. Vegetation maintenance would also occur at structure work pads and along spur roads for access. Impacts to adjacent sensitive vegetation would occur during herbicide application if herbicide applications drift, which would be a significant impact. Mitigation Measure Biology-3 (weed control) is required to reduce this potential impact. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-3, Biology-6, and Biology-11 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

4.1.12 Alternative 4: Segment D 69-kV Partial Underground Alignment (Reduces New TSPs in Segment D)

Alternative 4 would include the installation of a double 69-kV underground alignment starting at two new cable poles (P48AA and P48BB) in Proposed Project Segment D near existing lattice tower E17. The underground alignment would follow Carmel Mountain Road and East Ocean Air Drive, ending at the Peñasquitos Substation. Within Proposed Project Segment D, an existing 69-kV line would be removed from the existing steel lattice towers, and a second 69-kV power line on existing H-frame structures would be de-energized and left in place. Construction within Proposed Project Segment D would be reduced under Alternative 4. The 230-kV transmission line would be installed on the existing steel lattice towers similar to the Proposed Project; however, the H-frame structures would not be removed, and no new TSPs would be installed between lattice tower E17 and the Peñasquitos Substation. This alternative is described in more detail in Chapter 3: Alternatives.

4.1.12.1 Alternative 4 Environmental Setting

Sensitive Natural Communities

There is bare ground, revegetated coastal sage scrub, chamise chaparral, southern maritime chaparral, and scrub oak chaparral located adjacent to the access road where the overhead 69-kV power lines would connect to Carmel Mountain Road. Most of the underground power

line would be located under existing roads. The following vegetation communities are located adjacent to the road:

- Scrub oak chaparral
- Chamise chaparral
- Chaparral
- Nonnative grassland
- Diegan coastal sage scrub
- Revegetated Diegan coastal sage scrub
- Revegetated coastal sage scrub
- Ornamental vegetation

Riparian Areas and Wetlands
There are no riparian areas or wetlands in the Alternative 4 area or vicinity.

Special-Status Species
There are no special-status plant species located in the underground alignment of Alternative 4.

Special-status plants in the area where the 230-kV line would be installed would be the same as that of the Proposed Project. There is no QCB habitat in Alternative 4; therefore, this species is absent from the Alternative 4 area. There are road pools located in the area where the 230-kV line would be installed; therefore, there is potential for special status San Diego fairy shrimp~~, vernal pool fairy shrimp,~~ and western spadefoot to occur in the Alternative 4 area. The sensitive vegetation communities located near Alternative 4 provides habitat for special-status reptile, bird, and mammal species. All the special-status reptile, bird, and mammal species identified as having a moderate and high potential to occur in Table 4.1-9 could potentially occur in Alternative 4 because of the presence of potentially suitable habitat. Focused surveys for coastal California gnatcatcher and least bell's vireo were conducted in the Alternative 4 area on June 2015 and April-July 2015, respectively (Chambers Group 2015a, 2015b). Three (3) pairs of coastal California gnatcatcher individuals were observed during surveys and no least bell's vireo were observed during surveys.

4.1.12.2 Alternative 4 Environmental Impacts and Mitigation Measures
Table 4.1-20 summarizes the impacts to biological resources from Alternative 4.

Table 4.1-20 Summary of Impacts of Alternative 4 to Biological Resources

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance after Mitigation
Impact Bio-1: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM BIO-1 APM BIO-2 APM HYDRO-2 APM HAZ-1 APM HAZ-2	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-1e MM Biology-1f MM Biology-1g MM Biology-2 MM Biology-3
Impact Bio-2: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any invertebrate species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM BIO-4 APM HYDRO-2 APM HAZ-1 APM HAZ-2	Less than significant MM Biology-3 MM Biology-4
Impact Bio-3: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any amphibian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM BIO-2 APM BIO-4 APM HYDRO-2 APM HAZ-1 APM HAZ-2	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-3 MM Biology-6
Impact Bio-4: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any reptile species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM HYDRO-2	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-3 MM Biology-6

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance after Mitigation
Impact Bio-5: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any avian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM HYDRO-2	Less than significant MM Biology-3 MM Biology-7 MM Biology-8
Impact Bio-6: Potential to have a substantial adverse effect from project construction, either directly or through habitat modifications, on any mammalian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM HYDRO-2	Less than significant MM Biology-3 MM Biology-9 MM Biology-10
Impact Bio 7: Potential to have a substantial adverse effect from project operation and maintenance, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Operation and Maintenance	Significant	Significant ~~APM BIO-2~~	Less than significant ~~MM Biology-1a~~ ~~MM Biology-1e~~ MM Biology-3
Impact Bio-8: Potential to cause a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM HYDRO-2	Less than significant MM Biology-3 MM Biology-6 MM Biology-11
	Operation and Maintenance	Significant	Significant	Less than significant MM Biology-3

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance after Mitigation
Impact Bio-9: Potential to cause a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.), or on state-protected jurisdictional areas not subject to regulation under Section 404 of the CWA through direct removal, filling, hydrological interruption, or other means	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM BIO-4 APM HYDRO-2	Less than significant MM Biology-3 MM Biology-4 MM Biology-11
	Operation and Maintenance	Less than significant	---	---
Impact Bio-10: Potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---
Impact Bio-11: Potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---
Impact Bio-12: Potential to conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---

Alternative 4 would have no impact on three CEQA significance criteria for biological resources: Impacts Bio-10, -11, and -12, as indicated in Table 4.1-25 above. Alternative 4 is located below ground and is not located in proximity to migratory wildlife corridors and would therefore not impact that resource.

Alternative 4 would not conflict with any policies or ordinances for the protection of biological resources or an HCP because the CPUC is exempt from local land use and zoning regulations and permitting in accordance with General Order No. 131-D and because Alternative 4 is within the SDG&E Subregional NCCP area. The CPUC has prescribed mitigation measures that parallel the NCCP requirements in the event compliance with the current NCCP cannot be relied on for mitigation. These measures were designed to be consistent with the NCCP. Specific biological resource mitigation measure requirements may be satisfied through compliance with new or amended NCCPs or HCPs obtained by SDG&E if these requirements are equally or more effective than the mitigation identified in this EIR.

Impact Bio-1: Would construction of Alternative 4 have a substantial adverse effect, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 4 would directly impact decumbent goldenbush individuals and one San Diego sunflower individual. Table G-4 in Appendix G includes the number of species that would be impacted by Alternative 4.

San Diego sunflower is ranked as CRPR 4.2, which means that this species is of limited distribution or is infrequent throughout a broad area of California. Because of the lower sensitivity of these species and low number of individuals impacted ~~by the Proposed Project~~, impacts would be less than significant. No mitigation is required.

Direct impacts to decumbent goldenbush would be significant because this species is considered rare throughout their range. An impact to this species would significantly impact the population of the species, since the numbers of species are already low. In addition, indirect impacts from increased erosion and sedimentation, fugitive dust, release of toxic substances (e.g., oil), and introduction and/or spread of invasive, non-native plant species (weeds) would result in a significant impact.

Implementation of APMs BIO-1 (minimization of impacts to special-status plants), BIO-2 (SDG&E NCCP), HYDRO-2 (erosion control), HAZ-1 (SEAP), and HAZ-2 (consistency with state and federal regulations) would reduce impacts. Impacts would remain significant after implementation of APMs because the NCCP operational protocols and habitat compensation may not apply to Alternative 4 at the time of construction. Further, APM BIO-1 does not provide details on appropriate habitat compensation and the APMs do not address potential impacts from the introduction of invasive weeds. Mitigation Measures Biology-1a (general field personnel behavior requirements), Biology-1b (environmental training program), Biology-1c (pre-activity surveys), Biology-1d (operational protocols), Biology-1e (maintenance of access roads), Biology-1f (construction of new access road protocols), Biology-1g (survey work protocols), Biology-2 (compensatory mitigation for special status plants), and Biology-3 (preparation and implementation of a Weed Control Plan) would reduce significant impacts to special-status plants. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-1a, Biology-1b, Biology-1c, Biology-1d, Biology-1e, Biology-1f, Biology-1g, Biology-2, and Biology-3 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-2: Would construction of Alternative 4 have a substantial adverse effect, either directly or through habitat modifications, on any invertebrate species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

There is no suitable habitat for QCB in the Alternative 4 area; therefore, there would be no impacts to this species.

Alternative 4 would potentially impact ~~the vernal pool fairy shrimp and~~ San Diego fairy shrimp. There are road pools located in the area where the 230-kV line would be installed that provide potentially suitable habitat for ~~vernal pool fairy shrimp and~~ San Diego fairy shrimp. ~~Vernal pool fairy shrimp and~~ San Diego fairy shrimp could be directly affected if a road pool is damaged by a construction vehicle that damages the pool or indirectly from increased erosion and sedimentation, fugitive dust, release of toxic substances (e.g., oil), and introduction and/or spread of invasive, non-native plant species (weeds). Direct and indirect impacts would be significant. Implementation of APMs AIR-1 (fugitive dust control), BIO-2 (SDG&E NCCP), BIO-4 (vernal pool avoidance and minimization), HYDRO-2 (erosion control), HAZ-1 (SEAP), and HAZ-2 (consistency with state and federal regulations) would reduce impacts; however, impacts would remain significant after implementation of APMs because APM BIO-4 does not require full avoidance of vernal pools or road rut pools and the APMs do not address potential impacts associated with the introduction of invasive weeds. Mitigation Measures Biology-3 (preparation and implementation of a Weed Control Plan) and Biology-4 (compensatory mitigation for vernal pools) would reduce impacts on special-status invertebrates. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-3 and Biology-4 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-3: Would construction of Alternative 4 have a substantial adverse effect, either directly or through habitat modifications, on any amphibian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 4 has the potential to impact the western spadefoot due to the presence of potentially suitable aquatic habitat (road pools) within the vicinity of Alternative 4. Direct impacts from injury or mortality to this species would be a significant impact. In addition, indirect impacts from increased erosion and sedimentation, fugitive dust, release of toxic substances (e.g., oil), and invasive, non-native plant species introduction and/or spread would be significant.

Implementation of APMs BIO-2 (SDG&E NCCP), BIO-4 (vernal pool avoidance and minimization), HYDRO-2 (erosion control), HAZ-1 (SEAP), and HAZ-2 (consistency with state and federal regulations) would reduce impacts; however, impacts would remain significant after implementation of APMs because the NCCP protocols and mitigation measures (APM

BIO-2) may not apply to Alternative 4 at the time of construction. Mitigation Measures Biology-1a (general field personnel behavior requirements), Biology-1b (environmental training program), Biology-1c (pre-activity surveys), Biology-1d (operational protocols), Biology-3 (preparation and implementation of a Weed Control Plan), and Biology-6 (compensatory mitigation for impacts to habitat) would reduce significant impact to special-status invertebrates. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology 1a, Biology 1b, Biology 1c, Biology 1d, Biology-3, and Biology-6 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-4: Would construction of Alternative 4 have a substantial adverse effect, either directly or through habitat modifications, on any reptile species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 4 has the potential to impact special-status reptile species listed in Table 4.1-9 with a moderate or high potential to occur because Alternative 4 would impact potential habitat for these species, including Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, revegetated coastal sage scrub, chamise chaparral, southern mixed chaparral, scrub oak chaparral, southern maritime chaparral, and maritime succulent scrub. Table G-5 in Appendix G provides a summary of impacts to vegetation communities. In addition, special-status reptile species would potentially be indirectly impacted by increased erosion and sedimentation, fugitive dust, and introduction and/or spread of invasive, non-native plant species.

Direct and indirect impacts associated with injury, mortality, and impacts to habitat would be significant. Implementation of APMs AIR-1 (fugitive dust control), BIO-2 (SDG&E NCCP), and HYDRO-2 (erosion control) would reduce impacts; however, impacts would remain significant after implementation of APMs because the NCCP protocols and mitigation measures (APM BIO-2) may not apply to Alternative 4 at the time of construction and the APMs do not address potential impacts associated with the introduction of invasive weeds. Mitigation Measures Biology-1a (general field personnel behavior requirements), Biology-1b (environmental training program), Biology-1c (pre-activity surveys), Biology-1d (operational protocols), Biology-3 (preparation and implementation of a Weed Control Plan), and Biology-6 (compensatory mitigation for impacts to habitat) would reduce impacts to special-status reptiles. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-1a, Biology-1b, Biology-1c, Biology-1d, Biology-3, and Biology-6 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-5: Would construction of Alternative 4 have a substantial adverse effect, either directly or through habitat modifications, on any avian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 4 has the potential to impact the special-status avian species listed in Table 4.1-9 that have a moderate or high potential to occur because Alternative 4 would impact potential habitat for these species, including chamise chaparral, southern mixed chaparral, scrub oak chaparral, maritime succulent scrub, and revegetated coastal sage scrub. Table G-5 in Appendix G provides a summary of impacts to vegetation communities. Implementation of APMs AIR-1 (fugitive dust control), BIO-2 (SDG&E NCCP), and HYDRO-2 (erosion control) would reduce impacts; however, impacts would remain significant even after implementation of APMs because the NCCP (APM BIO-2) may not apply to Alternative 4 at the time of construction and the NCCP does not define construction buffers or monitoring requirements for avian species. Further, the APMs do not address indirect impacts associated with invasive weeds. Mitigation Measures Biology-3 (preparation and implementation of a Weed Control Plan), Biology-7 (mitigation for bird species), and Biology-8 (burrowing owl monitoring and mitigation plan) would reduce impacts to special-status avian species. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-3, Biology-7, and Biology-8 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-6: Would construction of Alternative 4 have a substantial adverse effect, either directly or through habitat modifications, on any mammalian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 4 has the potential to impact the special-status mammal species listed in Table 4.1-9 that have a moderate or high potential to occur because Alternative 4 would impact potential habitat for these species, including chamise chaparral, southern mixed chaparral, scrub oak chaparral, and maritime succulent scrub, and revegetated coastal sage scrub. Table G-5 in Appendix G provides a summary of impacts to vegetation communities. Implementation of APMs AIR-1 (fugitive dust control), BIO-2 (SDG&E NCCP), and HYDRO-2 (erosion control) would reduce impacts; however, impacts would remain significant even after implementation of APMs because the NCCP (APM BIO-2) may not apply to Alternative 4 at the time of construction, and the APMs do not address indirect impacts associated with invasive weeds. Mitigation Measures Biology-3 (preparation and implementation of a Weed Control Plan), Biology-9 (San Diego desert woodrat mitigation), and Biology-10 (mitigation for bat species) would reduce impacts to special-status mammals. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-1a, Biology-1b, Biology-1c, Biology-1d, Biology-9, and Biology-10 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio 7: Would Alternative 4 have a substantial adverse effect from operation and maintenance, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 4 would not have impacts to special-status birds from collisions or electrocution with transmission lines because Alternative 4 would not include the construction of an overhead transmission line. Alternative 4 would, however, require herbicide application for the new cable poles, which could potentially result in a significant impact. ~~In addition, Alternative 4 would require access road maintenance, which could potentially result in a significant impact. Implementation of APM BIO-2 (SDG&E NCCP) would reduce impacts; however, impacts would remain significant even after implementation of APM BIO-2 because the NCCP may not apply to Alternative 3~~ 4 ~~at the time of construction and APM BIO-2 does not address impacts associated with herbicide application.~~ Mitigation Measure~~s Biology-1a (general field personnel behavior requirements), Biology-1e (maintenance of access roads), and~~ Biology-3 (preparation and implementation of a Weed Control Plan) would reduce impacts to special-status species during operation and maintenance. Impacts would be less than significant with mitigation.

Mitigation Measures: ~~Biology-1a, Biology-1e, and~~ Biology-3 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-8: Would Alternative 4 cause a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS? (*Less than significant with mitigation*)

Construction

Alternative 4 would permanently impact disturbed Diegan coastal sage scrub, chamise chaparral, and southern maritime chaparral and would temporarily impact Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, revegetated coastal sage scrub, chamise chaparral, southern mixed chaparral, scrub oak chaparral, southern maritime chaparral, and maritime succulent scrub. Table G-5 in Appendix G provides a summary of impacts to vegetation communities. In addition, Alternative 4 would temporarily impact habitats in the Los Peñasquitos Canyon Preserve during construction of the underground alignment on unpaved access roads. Sensitive habitat would also be indirectly impact by increased erosion and sedimentation; fugitive dust; and invasive, non-native plant species introduction and/or spread. Direct and indirect impacts to sensitive vegetation communities would be significant.

Implementation of APMs AIR-1 (fugitive dust control) and HYDRO-2 (erosion control) would reduce impacts; however, impacts would remain significant even after implementation of APMs because APMs do not address impacts associated with invasive weeds and biological impacts associated with fires. APM BIO-2 requires the implementation of the current SDG&E NCCP. NCCP protocols include requirements for compensatory mitigation for habitat. NCCP protocols and measures may not apply at the time of Proposed Project construction. Therefore, even after implementation of APMs, impacts would remain significant because compensatory mitigation

for habitat would not be implemented if the NCCP were not applied. Mitigation Measures Biology-3 (preparation and implementation of a Weed Control Plan), Biology-6 (compensatory mitigation for impacts to habitat), and Biology-11 (reseeding following fires) would reduce impacts to sensitive natural communities. Impacts would be less than significant with mitigation.

Operation and Maintenance

Vegetation maintenance activities including trimming and herbicide application would occur around the proposed cable poles for the prevention of wildfire. Vegetation maintenance would also occur at the structure work pads and along the spur road for access to the cable poles. Impacts to adjacent sensitive vegetation would occur during herbicide application if herbicide applications drift, which would be a significant impact. Mitigation Measure Biology-3 (weed control) is required to reduce this potential impact. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-3, Biology-6, and Biology-11 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-9: Would Alternative 4 cause a substantial adverse effect on federally protected wetlands and waters as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) or waters of the State through direct removal, filling, hydrological interruption, or other means? (*Less than significant with mitigation*)

There are potentially jurisdictional road pools located in the area where the cable poles would be installed and along the access road where the underground line would be installed. These road pools could potentially be affected directly if a road pool is damaged by a construction vehicle that damages the pool or indirectly from increased erosion and sedimentation or from a fire.

Implementation of APMs AIR-1 (fugitive dust control) and HYDRO-2 (erosion control) would reduce indirect impacts. The NCCP (APM BIO-2) includes procedures to avoid and mitigate for impacts to vernal pools; however, the NCCP may not be available at the time of project construction. Implementation of APM BIO-4 (vernal pool avoidance and minimization) would avoid the ~~two~~ vernal pools located along the overhead alignment. Impacts to jurisdictional waters would, however, remain significant because APMs do not address permanent impacts or potential impacts from weeds or fires and because APM BIO-4 does not require full avoidance of vernal pools or road rut pools. Mitigation Measures Biology-3 (preparation and implementation of a Weed Control Plan), Biology-4 (compensatory mitigation for vernal pools), and Biology-11 (reseeding following fires) would reduce impacts to potentially jurisdictional road pools. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-3, Biology-4, and Biology-11 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

4.1.13 Alternative 5: Pomerado Road to Miramar Area North Combination Underground/Overhead (Avoids All Proposed Project Segments)

Alternative 5 would include underground installation of the transmission line with the exception of the east and west ends where the transmission line would be installed in an overhead position within existing SDG&E ROWs. Under this alternative, the alignment would exit the Sycamore Canyon Substation at MCAS Miramar an overhead line and travel westerly within an existing SDG&E ROW toward Stonebridge Parkway. The transmission line would transition to underground beneath Stonebridge Parkway in the vicinity of Greenstone Court, then continue underground on Pomerado Road, Miramar Road, Kearny Villa Road, Black Mountain Road, Activity Road, Camino Ruiz, Miralani Drive, Arjons Drive, Trade Place, Camino Santa Fe, Carroll Road/Carroll Canyon Road and Scranton Road. The transmission line would either remain underground within the Pomerado/Miramar bridge or temporarily transition to an overhead alignment via two new cable poles and potentially two new interset poles, where it would cross I-15. At the western end of the underground portion, the line would transition back to overhead structures located within an existing SDG&E ROW heading northward into the Peñasquitos Substation. Alternative 5 would avoid construction within the Proposed Project alignment with the exception of approximately 3,400 feet of existing SDG&E ROW in Segment A connecting to the Sycamore Canyon Substation. SDG&E may use up to eight other staging yards during construction of Alternative 5 in addition to the Proposed Project staging yards. The Alternative 5 staging yards would be located within the Conrock and Hanson Aggregates Pacific Southwest quarries north of the Alternative 5 underground alignment, within the cul-de-sac west of Birch Canyon Place, off of Summers Ridge Road, and behind the Sorrento Canyon Golf Center. This alternative is described in more detail in Chapter 3: Alternatives.

4.1.13.1 Alternative 5 Environmental Setting

Sensitive Natural Communities

A small portion of the underground transmission line, at the beginning of the underground alignment, would be located under an unpaved access road. There is southern mixed chaparral, revegetated coastal sage scrub, and bare ground located adjacent to the access road where the overhead transmission line on Segment A would connect to City of San Diego roads. Most of the underground transmission line, however, would be located under existing roads with chamise chaparral, chaparral, southern mixed chaparral, Diegan coastal sage scrub, eucalyptus woodland, nonnative grassland, southern riparian scrub, southern riparian woodland, and southern coast Live Oak riparian forest located adjacent to the underground alignment. The overhead transmission line between Carroll Canyon Road and Peñasquitos Substation would span the following vegetation communities: native grassland, non-native grassland, eucalyptus woodland, Diegan coastal sage scrub, southern riparian scrub, southern arroyo willow riparian forest, mulefat scrub, maritime succulent scrub, and revegetated coastal sage scrub. Portions of the overhead transmission line would cross potentially jurisdictional waters including Los Peñasquitos Creek.

The Alternative 5 staging yards would be located on disturbed and paved sites. Alternative 5 staging yards 1A, 1B, 3, 4A, and 4C would be located on bare ground; staging yards 2 and 4B would be located on paved sites. There is non-native grassland at the Alternative 5 staging yard 5 site, which was previously disturbed by grading.

Riparian Areas and Wetlands

There are some areas of southern riparian scrub, southern riparian woodland, and southern coast Live Oak riparian forest adjacent to the Alternative 5 underground alignment and Alternative 5 staging yards 1A and 1B. There are also two road rut pools located on access roads along the western overhead alignment and there are other potential jurisdictional waters located along the western overhead alignment, including a portion of the Los Peñasquitos Canyon.

Special-Status Species

There are no special-status plants located in Alternative 5. The sensitive vegetation communities located near Alternative 5 provides habitat for special-status reptile, bird, and mammal species. All the special-status reptile, bird, and mammal species identified as having a moderate and high potential to occur in the Proposed Project could potentially occur in Alternative 5 because of the presence of potentially suitable habitat.

4.1.13.2 Alternative 5 Environmental Impacts and Mitigation Measures

Table 4.1-21 summarizes the impacts to biological resources from Alternative 5.

Table 4.1-21 Summary of Impacts of Alternative 5 to Biological Resources

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance after Mitigation
Impact Bio-1: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Less than significant	---	---
Impact Bio-2: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any invertebrate species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM BIO-3 APM BIO-4 APM HYDRO-2 APM HAZ-1 APM HAZ-2	Less than significant MM Biology-3 MM Biology-5

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance after Mitigation
Impact Bio-3: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any amphibian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM BIO-2 APM BIO-4 APM HYDRO-2 APM HAZ-1 APM HAZ-2	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-3 MM Biology-6
Impact Bio-4: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any reptile species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM HYDRO-2	Less than significant MM Biology-1a MM Biology-1b MM Biology-1c MM Biology-1d MM Biology-3 MM Biology-6
Impact Bio-5: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any avian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM HYDRO-2	Less than significant MM Biology-3 MM Biology-7 MM Biology-8
Impact Bio-6: Potential to have a substantial adverse effect from project construction, either directly or through habitat modifications, on any mammalian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM HYDRO-2	Less than significant MM Biology-3 MM Biology-9 MM Biology-10
Impact Bio 7: Potential to have a substantial adverse effect from project operation and maintenance, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	Operation and Maintenance	Significant	Significant ~~APM BIO-2~~	Less than significant ~~MM Biology-1a~~ ~~MM Biology-1c~~ MM Biology-3 MM Biology-7

Significance Criteria	Project Phase	Significance Prior to APMs	Significance after APMs and before Mitigation	Significance after Mitigation
Impact Bio-8: Potential to cause a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM HYDRO-2	Less than significant MM Biology-3 MM Biology-6 MM Biology-11
	Operation and Maintenance	Significant	Significant	Less than significant MM Biology-3
Impact Bio-9: Potential to cause a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.), or on state-protected jurisdictional areas not subject to regulation under Section 404 of the CWA through direct removal, filling, hydrological interruption, or other means	Construction	Significant	Significant APM AIR-1 APM BIO-2 APM-BIO-4 APM HYDRO-2	Significant MM Biology-3 MM Biology-6 MM Biology-11
	Operation and Maintenance	Less than significant	---	---
Impact Bio-10: Potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites	Construction	Less than significant	---	---
	Operation and Maintenance	Less than significant	---	---
Impact Bio-11: Potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---
Impact Bio-12: Potential to conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan	Construction	No impact	---	---
	Operation and Maintenance	No impact	---	---

Alternative 5 would have no impact on two CEQA significance criteria for biological resources: Impacts Bio-11, and -12, as indicated in Table 4.1-26 above. Alternative 5 would not impact special-status plants because there are no special-status plants located in the Alternative 5 alignment. Alternative 5 is not located in or near a migratory wildlife corridor and would therefore not impact that resource.

Alternative 5 would not conflict with any policies or ordinances for the protection of biological resources or an HCP because the CPUC is exempt from local land use and zoning regulations

and permitting in accordance with General Order No. 131-D and because Alternative 5 is within the SDG&E Subregional NCCP area. The CPUC has prescribed mitigation measures that parallel the NCCP requirements in the event compliance with the current NCCP cannot be relied on for mitigation. These measures were designed to be consistent with the NCCP. Specific biological resource mitigation measure requirements may be satisfied through compliance with new or amended NCCPs or HCPs obtained by SDG&E if these requirements are equally or more effective than the mitigation identified in this EIR.

Impact Bio-1: Would construction of Alternative 5 have a substantial adverse effect, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant*)

Alternative 5 would directly impact one San Diego sunflower individual during construction. San Diego sunflower is ranked as CRPR 4.2, which means that this species is of limited distribution or is infrequent throughout a broad area of California. Because of the lower sensitivity of these species, and low number of individuals impacted, impacts would be less than significant. No mitigation is required.

Mitigation Measures: None required.

Impact Bio-2: Would construction of Alternative 5 have a substantial adverse effect, either directly or through habitat modifications, on any invertebrate species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 5 would potentially impact ~~the vernal pool fairy shrimp,~~ San Diego fairy shrimp~~,~~ and QCB.

There is suitable habitat for QCB in the Alternative 5 eastern overhead alignment. Impacts to QCB would be significant because QCB could be killed by construction activities. Implementation of APMs AIR-1 (fugitive dust control), BIO-3 (QCB HCP), HYDRO-2 (erosion control), HAZ-1 (SEAP), and HAZ-2 (consistency with state and federal regulations) would reduce impacts. Impacts would remain significant even after implementation of APMs because APM BIO-3 does not require surveys for QCB and there is suitable habitat for QCB in the Alternative 5 area. Further, the APMs do not address potential impacts associated with the introduction of invasive weeds. Mitigation Measures Biology-3 (preparation and implementation of a Weed Control Plan) and Biology-5 (pre-activity surveys for QCB) would reduce impacts to special-status invertebrates. Impacts to QCB would be less than significant with mitigation.

In addition, there is one potential road rut pool and one definite road rut pool with San Diego fairy shrimp habitat located on access roads along the western overhead alignment. The two road rut pools are located on access roads that could potentially be used during construction. There would be a significant impact to ~~vernal pool fairy shrimp and~~ San Diego fairy shrimp if a

vehicle drove over one of these road rut pools and injured or killed San Diego fairy shrimp. Implementation of APMs AIR-1 (fugitive dust control), BIO-2 (SDG&E NCCP), BIO-4 (vernal pool avoidance and minimization), HYDRO-2 (erosion control), HAZ-1 (SEAP), and HAZ-2 (consistency with state and federal regulations) would reduce impacts. Direct impacts to ~~vernal pool fairy shrimp and~~ San Diego fairy shrimp would be less than significant after implementation of APMs because the two road rut pools would be completely avoided per APM BIO-4 (avoid roads where the two road rut pools are located). Indirect impacts would remain significant even after implementation of APMs because APMs do not address potential impacts associated with the introduction of invasive weeds. SDG&E would implement Mitigation Measure Biology-3 (preparation and implementation of a Weed Control Plan) to reduce impacts. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-3 and Biology-5 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-3: Would construction of Alternative 5 have a substantial adverse effect, either directly or through habitat modifications, on any amphibian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 5 has the potential to impact the western spadefoot because there is suitable habitat within the vicinity of Alternative 5, including one definite road rut pool, one potential road rut pool, coastal and valley freshwater marsh, and southern riparian woodland. Direct impacts from injury or mortality to this species would be a significant impact. In addition, indirect impacts from increased erosion and sedimentation, fugitive dust, release of toxic substances (e.g., oil), and invasive, non-native plant species introduction and/or spread would be significant.

Implementation of APMs BIO-2 (SDG&E NCCP), BIO-4 (vernal pool avoidance and minimization), HYDRO-2 (erosion control), HAZ-1 (SEAP), and HAZ-2 (consistency with state and federal regulations) would reduce impacts; however, impacts would remain significant after implementation of APMs because the NCCP protocols and mitigation measures (APM BIO-2) may not apply to Alternative 5 at the time of construction. Mitigation Measures Biology-1a (general field personnel behavior requirements), Biology-1b (environmental training program), Biology-1c (pre-activity surveys), Biology-1d (operational protocols), Biology-3 (preparation and implementation of a Weed Control Plan), and Biology-6 (compensatory mitigation for impacts to habitat) would reduce significant impact to special-status invertebrates. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology 1a, Biology 1b, Biology 1c, Biology 1d, Biology-3, and Biology-6 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-4: Would construction of Alternative 5 have a substantial adverse effect, either directly or through habitat modifications, on any reptile species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 5 has the potential to impact special-status reptile species listed in Table 4.1-9 that have a moderate or high potential to occur because Alternative 5 would impact potential habitat for these species, including Diegan coastal sage scrub, revegetated coastal sage scrub, chamise chaparral, southern mixed chaparral, nonnative grassland, coastal and valley freshwater marsh, southern riparian woodland, southern riparian forest, and maritime succulent scrub Table G-5 in Appendix G provides a summary of impacts to vegetation communities. In addition, special-status reptile species would potentially be indirectly impacted by increased erosion and sedimentation, fugitive dust, and introduction and/or spread of invasive, non-native plant species.

Direct and indirect impacts associated with injury, mortality, and impacts to habitat would be significant. Implementation of APMs AIR-1 (fugitive dust control), BIO-2 (SDG&E NCCP), and HYDRO-2 (erosion control) would reduce impacts; however, impacts would remain significant even after implementation of APMs because the NCCP protocols and mitigation measures (APM BIO-2) may not apply to Alternative 5 at the time of construction and the APMs do not address potential impacts associated with the introduction of invasive weeds. Mitigation Measures Biology-1a (general field personnel behavior requirements), Biology-1b (environmental training program), Biology-1c (pre-activity surveys), Biology-1d (operational protocols), Biology-3 (preparation and implementation of a Weed Control Plan), and Biology-6 (compensatory mitigation for impacts to habitat) would reduce impacts to special-status reptiles. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-1a, Biology-1b, Biology-1c, Biology-1d, Biology-3, and Biology-6 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-5: Would construction of Alternative 5 have a substantial adverse effect, either directly or through habitat modifications, on any avian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 5 has the potential to impact the special-status avian species listed in Table 4.1-9 that have a moderate or high potential to occur because Alternative 5 would impact potential habitat for these species, including Diegan coastal sage scrub, revegetated coastal sage scrub, chamise chaparral, southern mixed chaparral, nonnative grassland, coastal and valley freshwater marsh, southern riparian woodland, southern riparian forest, and maritime succulent scrub. Table G-5 in Appendix G provides a summary of impacts to vegetation communities. Direct and indirect impacts associated with injury, mortality, and impacts to habitat would be significant. Implementation of APMs AIR-1 (fugitive dust control), BIO-2 (SDG&E NCCP), and HYDRO-2

(erosion control) would reduce impacts; however, impacts would remain significant even after implementation of APMs because the NCCP (APM BIO-2) may not apply to Alternative 5 at the time of construction and the NCCP does not define construction buffers or monitoring requirements for avian species. Further, the APMs do not address indirect impacts associated with invasive weeds. Mitigation Measures Biology-3 (preparation and implementation of a Weed Control Plan), Biology-7 (mitigation for bird species), and Biology-8 (burrowing owl monitoring and mitigation plan) would reduce impacts to special-status avian species. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-3, Biology-7, and Biology-8 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-6: Would construction of Alternative 5 have a substantial adverse effect, either directly or through habitat modifications, on any mammalian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 5 has the potential to impact the special-status mammal species listed in Table 4.1-9 that have a moderate or high potential to occur because Alternative 5 would impact potential habitat for these species, including Diegan coastal sage scrub, revegetated coastal sage scrub, chamise chaparral, southern mixed chaparral, nonnative grassland, coastal and valley freshwater marsh, southern riparian woodland, southern riparian forest, and maritime succulent scrub. Table G-5 in Appendix G provides a summary of impacts to vegetation communities. Direct and indirect impacts associated with injury, mortality, and impacts to habitat would be significant. Implementation of APMs AIR-1 (fugitive dust control), BIO-2 (SDG&E NCCP), and HYDRO-2 (erosion control) would reduce impacts; however, impacts would remain significant even after implementation of APMs because the NCCP (APM BIO-2) may not apply to Alternative 5 at the time of construction, and the APMs do not address indirect impacts associated with invasive weeds. Mitigation Measures Biology-3 (preparation and implementation of a Weed Control Plan), Biology-9 (San Diego desert woodrat mitigation), and Biology-10 (mitigation for bat species) would reduce impacts to special-status mammals. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-3, Biology-9, and Biology-10 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio 7: Would Alternative 5 have a substantial adverse effect from operation and maintenance, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS? (*Less than significant with mitigation*)

Alternative 5 could impact special-status birds from collisions or electrocution with the overhead transmission line. Alternative 5 would also require herbicide application for the new

constructed poles, which could potentially result in a significant impact. ~~In addition, Alternative 5 would require road maintenance, which could potentially result in a significant impact. Implementation of APM BIO-2 (SDG&E NCCP) would reduce impacts; however, impacts would remain significant after implementation of APM BIO-2s because the NCCP may not apply to Alternative 5 at the time of construction and APM BIO-2 does not address impacts associated with herbicide application.~~ Mitigation Measures ~~Biology-1a (general field personnel behavior requirements), Biology-1e (maintenance of access roads),~~ Biology-3 (preparation and implementation of a Weed Control Plan), and Biology-7 (mitigation for bird species) would reduce impacts to special-status species during operation and maintenance. Impacts would be less than significant with mitigation.

Mitigation Measures: ~~Biology-1a, Biology-1e,~~ Biology-3, and Biology-7 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-8: Would Alternative 5 cause a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS? (*Less than significant with mitigation*)

Construction

Alternative 5 would permanently impact revegetated coastal sage scrub and southern mixed chaparral and would temporarily impact Diegan coastal sage scrub, revegetated coastal sage scrub, chamise chaparral, southern mixed chaparral, disturbed southern mixed chaparral, mixed chaparral, nonnative grassland, coastal and valley freshwater marsh, southern riparian woodland, southern riparian forest, eucalyptus forest, and maritime succulent scrub. Table G-5 in Appendix G provides a summary of impacts to vegetation communities. Sensitive habitat would also be indirectly impact by increased erosion and sedimentation; fugitive dust; and invasive, non-native plant species introduction and/or spread. Direct and indirect impacts to sensitive vegetation communities would be significant.

Implementation of APMs AIR-1 (fugitive dust control), and HYDRO-2 (erosion control) would reduce impacts; however, impacts would remain significant after implementation of APMs because APMs do not address impacts associated with invasive weeds and biological impacts associated with fires. APM BIO-2 requires the implementation of the current SDG&E NCCP. NCCP protocols include measures to minimize impacts to vernal pools and road pools and requirements for compensatory mitigation in the event that a vernal pool or road pools is permanently impacted. NCCP protocols and measures may not apply at the time of Proposed Project construction. Therefore, even after implementation of APMs, impacts would remain significant because compensatory mitigation for vernal pools and road pools would not be implemented if the NCCP were not applied. Mitigation Measures Biology-3 (preparation and implementation of a Weed Control Plan), Biology-6 (compensatory mitigation for impacts to habitat), and Biology-11 (reseeding following fires) would reduce impacts to sensitive natural communities. Impacts would be less than significant with mitigation.

Operation and Maintenance

Vegetation maintenance activities including trimming and herbicide application would occur around the proposed cable poles for the prevention of wildfire. Vegetation maintenance would also occur at structure work pads and along the spur road for access to the cable poles. Impacts to adjacent sensitive vegetation would occur during herbicide application if herbicide applications drift, which would be a significant impact. Mitigation Measure Biology-3 (weed control) is required to reduce this potential impact. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-3, Biology-6, and Biology-11 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-9: Would Alternative 5 cause a substantial adverse effect on federally protected wetlands and waters as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) or waters of the State through direct removal, filling, hydrological interruption, or other means? (*Less than significant with mitigation*)

The potentially jurisdictional waters that would be impacted by the Alternative 5 would be located along the western overhead alignment. There are two road rut pools located on access roads along the western overhead alignment and there are other potential jurisdictional waters located along the western overhead alignment, including a portion of the Peñasquitos Canyon. Because no permanent work areas would be constructed on the western overhead alignment, there would be no permanent impact to potentially jurisdictional waters from Alternative 5 construction between Carroll Canyon Road and Peñasquitos Substation. The jurisdictional waters located near Alternative 5, including the two road rut pools, could be impacted temporarily by sediment or a potential fire. These temporary impacts would also be significant. Implementation of APMs AIR-1 (fugitive dust control) and HYDRO-2 (erosion control) would reduce indirect impacts. The NCCP (APM BIO-2) includes procedures to avoid and mitigate for impacts to vernal pools; however, the NCCP may not be available at the time of project construction. APM BIO-4 (vernal pool avoidance and minimization) would be implemented to avoid the two vernal pools located along the overhead alignment. Impacts to jurisdictional waters would, however, remain significant because APMs do not address permanent impacts or potential impacts from weeds. Mitigation Measures Biology-3 (preparation and implementation of a Weed Control Plan), Biology-6 (compensatory mitigation for impacts to habitat), and Biology-11 (reseeding following fires) would reduce impacts on potential wetlands and potentially jurisdictional waters. Impacts would be less than significant with mitigation.

Mitigation Measures: Biology-3, Biology-6, and Biology-11 (refer to Section 4.1.8)

Significance after mitigation: Less than significant.

Impact Bio-10: Would the Proposed 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; no mitigation required*)

Significant impacts would occur if a wildlife movement corridor is interrupted by a feature that physically blocks wildlife movement (i.e., a housing development) or if substantial connected habitat suitable to support wildlife in the movement corridor is removed. The western overhead alignment would cross the Los Peñasquitos Canyon Preserve within an existing SDG&E ROW that is occupied by existing transmission poles and lattice structures. This portion of Alternative 5 would only require conductor stringing on existing poles and structures; therefore, Alternative 5 would not add linear areas of disturbance that would interrupt habitat or wildlife movement corridors. Wildlife would be able to move around the temporary work areas during construction and after construction is complete. The overhead transmission line is a linear component; however, the transmission line would not block wildlife movement because wildlife could move uninterrupted below the transmission line. Impacts from construction and operation of Alternative 5 would be less than significant. No mitigation is required.

Mitigation Measures: None required.

4.1.14 No Project Alternative

The No Project Alternative would include construction of the CAISO approved Mission—Peñasquitos 230-kV transmission line, ~~and~~ Second Poway—Pomerado 69-kV power line, Second Miguel—Bay Boulevard 230-kV transmission line, and Second Sycamore Canyon—Scripps 69-kV power line, and upgrades of the Miguel—Mission 230-kV, Bernardo—Felicita Tap—Felicita 69-kV, and Artesian—Bernardo 69-kV lines. ~~The No Project Alternative would also involve installation of a series reactor at Sycamore Canyon Substation.~~ This alternative is described in more detail in Chapter 3: Alternatives. The No Project Alternative would have ~~less~~ greater impact to biological resources than the Proposed Project because the No Project Alternative would ~~avoid construction within Black Mountain Ranch and Del Mar Mesa Preserves~~ require construction on over 85 miles of power and transmission lines located in sensitive habitat areas including Preserve areas and the San Diego National Wildlife Refuge.

4.1.14.1 Mission—Peñasquitos 230-kV Transmission Line

Construction of the 11.7 mile segment of the 230-kV transmission line between Mission Substation and Peñasquitos Junction would require replacement of 56 wood H-frame structures with 56 steel H-frame within and near MCAS Miramar. Replacing these structures within MCAS Miramar would occur within suitable habitat for special-status plant and wildlife species. Ground disturbance and construction activities for pole removal and new pole installation would result in significant impacts to special-status species and sensitive habitats.

Construction of the 3.3 mile segment of the 230-kV transmission line between Peñasquitos Junction and Peñasquitos Substation would require installation of 17 new double-circuit 69-kV TSPs to replace 15 existing 69-kV wood H-frame structures and five wood monopoles. The new

poles would be installed within Los Peñasquitos Canyon Preserve in areas that provide suitable habitat for special-status plant and wildlife species. Ground disturbance, noise, fugitive dust, and erosion from installation of the new line would result in significant impacts to special-status species, vernal pools, preserve areas, and sensitive vegetation communities. Operation and maintenance of the Mission—Peñasquitos 230-kV transmission line would also result in impacts to sensitive vegetation communities due to the need to maintain clearances around the new poles. These impacts could be reduced to less than significant through implementation of standard mitigation measures similar to those defined for the Proposed Project.

4.1.14.2 Second Poway—Pomerado 69-kV Power Line

Construction of the Second Poway—Pomerado 69-kV power line would involve installation of new poles to accommodate the additional 69-kV line on approximately 2.6 miles of the existing line. The Poway—Pomerado line occurs within mostly undisturbed habitat areas in SDG&E's ROW. Installation of new poles and conductor would result in loss of suitable habitat for special-status species as well as creation of noise, fugitive dust, and erosion. The impacts to special-status plants and wildlife as well as sensitive vegetation communities would be significant. Operation and maintenance of the Second Poway—Pomerado 69-kV power line would also result in impacts to sensitive vegetation communities due to the need to maintain vegetation clearances around the new poles. These impacts could be reduced to less than significant through implementation of standard mitigation measures similar to those defined for the Proposed Project.

4.1.14.3 Second Miguel—Bay Boulevard 230-kV Transmission Line

Construction of the Second Miguel—Bay Boulevard 230-kV transmission line would involve installation of new poles to accommodate the additional 230-kV line on approximately 10 miles of the existing line. The Second Miguel—Bay Boulevard 230-kV transmission line occurs within mostly developed areas in SDG&E's ROW. There are some potential wetland areas located adjacent to homes within the SDG&E ROW. Because most of the area located within and near the Second Miguel—Bay Boulevard 230-kV transmission line is developed, the impacts to biological resources would mostly be less than significant. However, construction of the Bay Second Miguel—Bay Boulevard 230-kV transmission line would have some significant impacts, such as potentially permanent and temporary impacts to habitats and impacts to special-status species from noise, fugitive dust, and erosion. Operation and maintenance of the Second Miguel—Bay Boulevard 230-kV transmission line would also result in impacts to sensitive vegetation communities due to the need to maintain vegetation clearances around the new poles. These impacts could be reduced to less than significant through implementation of standard mitigation measures similar to those defined for the Proposed Project.

4.1.14.4 Second Sycamore Canyon—Scripps 69-kV Power Line

Construction of the Second Sycamore Canyon—Scripps 69-kV power line would involve installation of new poles to accommodate the additional 69-kV line on approximately 7 miles of the existing line. The Second Sycamore Canyon—Scripps 69-kV power line occurs within a mix of developed and undeveloped areas in SDG&E's ROW. There is one park and some potential wetland areas located on the Second Sycamore Canyon—Scripps 69-kV power line ROW. The

impacts associated with the installation of new poles, includes potentially permanent and temporary impacts to habitats and impacts to special-status species from noise, fugitive dust, and erosion. The existing power line also transitions underground and travels through open space area. Construction of the second line may require substantial trenching in open space areas to construct an underground line. Operation and maintenance of the Second Sycamore Canyon—Scripps 69-kV power line would also result in impacts to sensitive vegetation communities due to the need to maintain vegetation clearances around the new poles. These impacts could be reduced to less than significant through implementation of standard mitigation measures similar to those defined for the Proposed Project.

4.1.14.5 Reconductoring of Three Existing Lines

Reconductoring of the three new lines would potentially require the construction of new poles within the existing ROW. In addition, to the temporary impacts associated with reconductoring, including impacts to biological resources from staging and use of vehicles and helicopters during construction; construction of these three new lines would also result in permanent impacts.

The Artesian—Bernardo 69-kV line is located within developed areas; therefore, impacts to biological resources would be less than significant. The Bernardo—Felicita Tap—Felicita 69-kV line runs through both developed areas and undeveloped areas adjacent to Lake Hodges. The Miguel—Mission 230-kV line is primarily located in undeveloped areas or areas adjacent to developed areas and runs through both the San Diego National Wildlife Refuge and Mission Trails Regional Parks. The construction of new poles within these natural areas would result in permanent impacts to habitat. Reconductoring of the Bernardo—Felicita Tap—Felicita 69-kV line and the Miguel—Mission 230-kV line would also result in the temporary loss of suitable habitat for special-status species as well as creation of noise, fugitive dust, and erosion. These impacts could be reduced to less than significant through implementation of standard mitigation measures similar to those defined for the Proposed Project.

~~4.1.14.6 Series Reactor at Sycamore Canyon Substation~~

~~Installation of a series reactor at Sycamore Canyon Substation would not impact biological resources because the upgrades would be conducted in the previously disturbed substation where there is no suitable habitat for plant or wildlife species. Installation of the series reactor would not involve new areas of ground disturbance.~~

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