4.3 Biological Resources

This section describes the environmental and regulatory setting and discusses impacts associated with the construction and operation of the Mesa 500-kilovolt (kV) Substation Project (proposed project) proposed by Southern California Edison Company (SCE, or the applicant) with respect to biological resources. Comments received during scoping pertained to:

- Project construction impacts (grubbing and vegetation clearing) on sensitive vegetation communities (oak woodlands and coastal sage scrub);
- Project construction impacts (grading and filling) on wetlands; and
- Project operation impacts (noise of compressors) on sensitive bird species (coastal California gnatcatcher).

These comments were considered when preparing this section.

4.3.1 Environmental Setting

4.3.1.1 Regional Context

Components in the Main Project Area would be constructed within or would cross several incorporated and unincorporated areas of Los Angeles County, as discussed in Chapter 2.0, "Project Description," and shown in Figure 2-1, "Project Overview." Additional components would comprise installation of a transmission structure in the City of Pasadena, north of the Main Project Area, and transmission structure replacement south of the Main Project Area in the Cities of Commerce and Bell Gardens. The region is extensively developed and includes a mixture of residential and commercial developments, industrial and commercial nursery areas, and disturbed habitat. In addition, minor work and equipment testing would occur within the perimeter fence lines of 27 existing satellite substations throughout the Western Los Angeles Basin Electrical Needs Area in southern Los Angeles County and northern Orange County, as shown in Figure 2-2, "Existing Substations and Transmission Lines Associated with the Mesa 500-kV Substation Project."

The proposed Mesa Substation site is located at the southern end of the San Gabriel Valley just north of the Pomona Freeway (State Route 60). Portions of the telecommunications line elements in the Main Project Area would pass through the nearby Montebello Hills, which rise to approximately 550 feet above mean sea level (amsl). Elevations in the region range from approximately 130 feet amsl in the south of the main project area to 700 feet amsl north of the main project area.

Areas around groundwater and surface water sources within the Main Project Area site have been extensively developed and local hydrology altered to allow development. Riparian areas within natural areas along Telecommunications Route 3 present a sharp contrast to the dry and developed landscape of Southern California and can be important habitat for wildlife. Telecommunications Route 3, which would span the Rio Hondo River on existing poles on San Gabriel Boulevard~~Avenue~~, cross a portion of Bosque Del Rio Hondo (a recreational area) and Whittier Narrows Recreation Area on existing poles on Durfee Avenue, and would terminate approximately 500 feet north of the San Gabriel River within the Whittier Narrows Natural Area (see Figures 4.8-2 and 4.13-1). These areas are immediately upstream of the Whittier Narrows, the major component of the Los Angeles County Drainage Area flood control system.

4.3.1.2 Methodology

Information on biological resources in the area of the proposed project was gathered preliminarily through desktop analysis and was supplemented with field surveys conducted by the applicant and its biological consultants. Survey results for the proposed project were reported in several technical reports provided by the applicant, including a biological technical report (Appendix D); a wetland and other waters delineation report (Appendix E); a rare plant survey report (Appendix F); and a Biological Assessment for two endangered and one threatened species (Appendix G). The California Public Utilities Commission (CPUC) reviewed the results of the applicant's analysis and surveys to determine the potential for species to occur in the proposed project area and to be impacted by the proposed project.

Literature Search and Review

Information regarding special-status species occurrences was obtained from review of the following by the CPUC and the applicant:

- California Natural Diversity Database (CNDDB) records search of the following U.S. Geological Survey 7.5-minute quadrangles: Azusa, Mt. Wilson, Pasadena, Baldwin Park, El Monte, Los Angeles, La Habra, Whittier, and South Gate (CNDDB 2015);
- The U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Conservation System was queried for a list of endangered, threatened, and proposed species for the Azusa, Mt. Wilson, Pasadena, Baldwin Park, El Monte, Los Angeles, La Habra, Whittier, and South Gate quadrangles (USFWS 2014);
- California Rare Plant Ranking System (formerly the California Native Plant Society [CNPS] Lists) online Inventory of Rare and Endangered Vascular Plants of California for the Azusa, Mt. Wilson, Pasadena, Baldwin Park, El Monte, Los Angeles, La Habra, Whittier, and South Gate quadrangles (CNPS 2015).

Portions of the proposed project area had been previously surveyed by SCE as a part of the Tehachapi Renewable Transmission Project (TRTP). TRTP Segments 7, 8A, and 11 are within or in close proximity to the components of the proposed Mesa 500-kV Substation Project. Survey methods are described in each report. Results from these surveys were reviewed for information regarding biological resources found in the proposed project area. TRTP survey reports reviewed by the CPUC and the applicant for the Mesa Project included:

- Biotechnical Report for the TRTP Segments 6, 7, 8, and 11 (AMEC Earth & Environmental 2007)
- Revised Biological Resources Specialist Report for the TRTP, Volume 1 (Aspen Environmental Group 2009a)
- Revised Biological Resources Specialist Report for the TRTP, Volume 2 (Aspen Environmental Group 2009b)
- TRTP Biological Assessment (USFS and USACE 2009)
- Burrowing Owl Focused Survey Report for Segments 6 and 11 of the SCE TRTP (AMEC Earth & Environmental 2009a)

- Burrowing Owl Focused Survey Report For Segments 7 and 8 of the SCE TRTP (AMEC Earth & Environmental 2009b)
- Special-Status Plant Species Survey Report for the SCE TRTP Segments 7 and 8 (AMEC Earth & Environmental 2009c)
- SCE TRTP Component 2010 Focused Survey Report for Burrowing Owl Segments 7 and 8 (ICF International 2010a)
- SCE TRTP Component 2010 Focused Survey Report Coastal California Gnatcatcher Segments 7 and 8 (ICF International 2010b)
- SCE TRTP Component 2010 Focused Survey Report for Burrowing Owl Segments 6 and 11 (ICF International 2010c)
- SCE TRTP Component 2010 Focused Survey Report Special-Status Plant Species Segments 7 and 8 (ICF International 2010d)
- Preconstruction Biological Survey and Clearance Sweep Report for Southern California Edison's WP3 Transmission Line Work Segment 7 Transmission Line and 66kV Relocation Los Angeles County, California (ICF International 2011a)
- SCE TRTP Component 2011 Focused Survey Report Coastal California Gnatcatcher Segments 7 and 8 (ICF International 2011b)
- Jurisdictional Delineation Report for the TRTP: Segments 7 and 8 (ICF Jones & Stokes 2010a)
- Jurisdictional Delineation Report for the TRTP: Segments 6 and 11 (ICF Jones & Stokes 2010b)
- TRTP Segment 11A Goodrich to Mesa Transmission Line Jurisdictional Delineation and Impact Analysis Report (ICF International 2011c)
- SCE TRTP Component 2011 Tree Inventory Report for Segments 7 and 8 (ICF International 2012)

Plant surveys included reconnaissance level assessments and protocol-level surveys. Burrowing owl surveys were conducted according to *Burrowing Owl Survey Protocol and Mitigation Guidelines* (California Burrowing Owl Consortium 1993) or the protocol described in the *California Department of Fish and Wildlife's Staff Report on Burrowing Owl Mitigation* (CDFG 1995). Gnatcatcher surveys were done according to *Coastal California Gnatcatcher Presence/Absence Survey Guidelines* (USFWS 1997). The pre-construction survey for TRTP Segment 7 was reconnaissance-level. Wetland delineations were performed in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008).

Surveys for the Proposed Project

SCE conducted several additional surveys in 2015 for the proposed project. Survey methodology varied based on the objective of the survey and is detailed in each survey report. Generally, the survey area consisted of the proposed project area as identified in Section 2.1, "Location of the Proposed Project," and as shown in Figures 2-3a through 2-3g. The survey area contained the main project components and a buffer of approximately 50 to 250 feet around the Mesa Substation,

transmission, and subtransmission components, and approximately 100 feet around the proposed telecommunications lines. The CPUC has integrated information from these reports into the description of the environmental setting. Surveys completed by SCE include:

- *Supplemental Jurisdictional Delineation Report for the Mesa 500-kilovolt Substation Project* (Insignia 2015a): The wetland delineation completed for TRTP was reviewed and updated during surveys completed in 2014. Verification of previous delineations and identification of new areas was done in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008).
- *Rare Plant Survey Report* (NOREAS Environmental Engineering and Science 2015): Surveys for rare plants were conducted in June 2015 during the bloom period for rare annuals and followed the standardized guidelines issued by the California Department of Fish and Wildlife (CDFW) (CDFW 2009) and CNPS (CNPS 2001).
- 2015 *Report for Protocol Coastal California Gnatcatcher Surveys* (RBC 2015): Protocol-level surveys for coastal California gnatcatcher were conducted in areas of potential habitat that was identified during previous monitoring of the Mesa Substation Site during past breeding seasons.
- *Additional Potential Staging Yards Biological Assessment* (SCE 2015a). A SCE biologist visited three potential staging yards to assess any biological issues which may be present. Prior to surveys, a desktop review of the occurrence potential disclosed within the Biological Resources Technical Report, aerial imagery of existing vegetation, and the surrounding land use was completed.

Agency Consultation

CPUC's environmental consultant informally contacted CDFW and USFWS. USFWS responded with several comments (Medak pers. comm. 2015):

- Noted that applicant proposed measures (APMs) may not be sufficient to mitigate impacts to gnatcatcher or least Bell's vireo;
- Provided additional information regarding gnatcatcher habitat within the proposed project area and suggested possible mitigation for impacts to gnatcatchers and their habitat;
- Recommended the incorporation of design features for transmission poles to reduce their use by raptors (to reduce predation on gnatcatcher);
- Requested that the environmental impact report (EIR) clarify if any areas mapped as disturbed or ruderal were disturbed as part of a previous project (i.e., TRTP) and were anticipated to be restored to native habitat as part of that project;
- Recommended that helicopters not be used in the vicinity of gnatcatcher habitat during the breeding season;
- Recommended avoidance of Nevin's barberry; and
- Noted that operations related impacts should be assessed, particularly with respect to the spread of invasive plant species, and recommended an operations and maintenance plan.

CDFW reviewed the Notice of Preparation and had no comment but requested a copy of the Draft EIR when released (Harris pers. comm. 2015).

4.3.1.3 Biological Resources in the Project Area

Vegetation Communities and Special-status Natural Communities

Plant community descriptions and their locations from the TRTP were used for areas that overlapped with the proposed project's survey area. The applicant's consultant, Insignia Environmental, completed follow-up surveys in 2014 to verify TRTP vegetation communities and identify new ones. The majority of the plant communities were characterized according to R.F. Holland's *Preliminary Descriptions of the Terrestrial Natural Communities* (Holland 1986). Vegetation communities are described in Table 4.3-1. The location of each vegetation community is provided in Figure 4.3-1.

Table 4.3-1 Vegetation Communities in the Survey Area

Vegetation Community	Description	Acres in the Survey Area
California Annual Grassland	Dominant grass and forb species are mostly non-native. Native species also occur in this plant community; however, their total percent cover is much lower than that of the non-native species. Typical wildlife species that may use this habitat include mourning dove (*Zenaida macroura*), western meadowlark (*Sturnella neglecta*), and red-tailed hawk (*Buteo jamaicensis*).	17.32
Diegan Coastal Sage Scrub(1)	Diegan coastal sage scrub stands may be dominated by California sagebrush or by California buckwheat (*Eriogonum fasciculatum*). Wildlife species typically found in this vegetation community include California towhee (*Pipilo crissalis*), song sparrow (*Melospiza melodia*), western bluebird (*Siglia mexicana*), western scrub-jay (*Aphelocoma californica*), Audubon's cottontail (*Sylvilagus audubonii*), and California ground squirrel (*Spermophilus beecheyi*). In addition, coastal California gnatcatchers often forage and nest in coastal sage scrub habitat within this region. Coastal sage scrub within the proposed project area is consistent with Diegan coastal sage scrub (Insignia 2015b).	3.22
Disturbed/ Developed Areas	Disturbed/developed areas are generally subject to intensive human use with much of the land paved or covered by structures. Natural vegetation is not established in these areas, but wildlife such as house finch, common raven (*Corvus corax*), northern mockingbird, and nonnative species such as European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), and rock dove (*Columbia livia*) may be present. Public roads, access roads, and staging yards are included in these areas.	304.87
Mulefat Scrub[1]	Riparian scrub community is dominated by mulefat scrub (*Baccharis salicifolia*) and is maintained by frequent flooding. This habitat can support reptile and amphibian species, as well as a number of passerines, such as wintering white-crowned sparrow (*Zonotrichia leucophrys*) and breeding western kingbird (*Tyrannus verticalis*).	14.19
Non-native Giant Reed[2]	Giant reed (*Arundo donax*) dominates non-native giant reed stands; other plant species are often absent. Few wildlife species are found here due to the compact nature of this plant and a lack of lateral branches. Birds may use it for perching along riparian corridors, but it does not provide good forage or cover.	0.15

Table 4.3-1 Vegetation Communities in the Survey Area

Vegetation Community	Description	Acres in the Survey Area
Non-native Vegetation	This vegetation type is dominated by weedy non-native plants that thrive in areas repeatedly disturbed by human activity. In the proposed project area this vegetation type includes crimson fountain grass (*Pennisetum setaceum*), black mustard, short-podded mustard, wild radish, tocalote (*Centaurea melitensis*), prickly lettuce (*Lactuca serriola*), telegraph weed (*Heterotheca grandiflora*), Russian thistle (*Salsola tragus*), woolly mullein (*Verbascum thapsus*), and sweet fennel (*Foeniculum vulgare*). This habitat type typically supports few wildlife species but is used extensively by coastal California gnatcatcher for foraging and breeding to the south of the current Mesa Substation. Non-native vegetation within the proposed project area also supports foraging loggerhead shrike ~~and least Bell's vireo~~.	71.9
Non-native Woodland	Non-native woodland in the proposed project area includes tree stands dominated by eucalyptus (*Eucalyptus* spp.), Brazilian pepper tree, or pine (*Pinus* spp.) and contains few understory species. Non-native woodlands typically support a limited amount of native vegetation. This woodland can provide nesting sites for a variety of raptors, especially if they are adjacent to open spaces.	43.41
Riparian Woodland(1)	Due to the high level of disturbance, the riparian woodland found within the proposed project area does not meet the typical vegetation description. Vegetation in this plant community within the proposed project area consists primarily of non-native trees, including Brazilian pepper tree, date palm (*Phoenix dactylifera*), and Mexican fan palm with a few native riparian species, including Goodding's black willow (*Salix gooddingii*) and mulefat. Wildlife species typically found in this habitat type include European starling, American crow (*Corvus brachyrhy*nchos), and house finch. Least Bell's vireo also typically inhabits structurally diverse woodlands along watercourses, including oak woodlands, mulefat scrub, and cottonwood-willow forests.	1.37
Southern California Walnut Woodland(1)	These woodlands are dominated by California walnut, but can be scattered with coast live oak. Within the proposed project area, the shrub layer often contains blue elderberry (*Sambucus nigra* subsp. *caerulea*), laurel sumac (*Malosma laurina*), and poison oak (*Toxicodendron diversilobum*) while the herbaceous layer is dominated by non-native grasses. Species composition includes the occasional coastal sage scrub species (e.g., California sagebrush [*Artemisia californica*]) and disturbance-adapted species, such as nonnative brome grasses and poison hemlock (*Conium maculatum*). Wildlife species typical of this habitat include house finch (*Carpodacus mexicanus frontalis*), northern mockingbird (*Mimus polyglottos*), and northern flicker (*Colaptes auratus*).	1.87
Southern Coast Live Oak Woodland(1)	Southern coast live oak woodland typically consists of open to relatively closed canopy stands dominated by coast live oak. This vegetation community consists of an open row of coast live oaks intermixed with non-native species, such as Brazilian pepper tree (*Schinus terebenthifolius*) and Mexican fan palm (*Washingtonia robusta*). Non-native grasses dominate the understory. These woodlands can provide nesting sites for a variety of species, including raptors.	0.26

Table 4.3-1 Vegetation Communities in the Survey Area

Vegetation Community	Description	Acres in the Survey Area
Southern Sycamore–Alder Riparian Woodland[(1)]	This vegetation community is dominated by widely spaced California sycamore (*Platanus racemosa*) and white alder (*Alnus rhombifolia)*. Part of this community is under current restoration as mitigation for SCE's TRTP. Willow, mulefat, mugwort (*Artemisia douglasiana*), poison oak and wild grape (*Vitis girdiana*) are also present. Wildlife found in this habitat includes white-crowned sparrow, house finch, and Audubon's cottontail. Least Bell's vireo nest in willow riparian thickets and inhabit mulefat scrub, and may therefore nest in this vegetation community.	2.79
Ephemeral Drainages[(1)]	Local ephemeral drainages are large, mostly unvegetated wash systems that flood during rain events. These areas are generally vegetated with non-native annual grasses or weedy species. Species documented in these drainages include castor bean (*Ricinus communis*), short-podded mustard, slender wild oat, wild radish, and thornapple (*Datura wrightii*). Wildlife found in ephemeral drainages includes mice species and western fence lizards.	3.14
Intermittent Drainage[(1)]	Intermittent drainages are generally dry in the summer months but flow after the start of winter rains. The project's intermittent drainage is sandy and sparsely vegetated with polygonum (*Polygonum* sp.). The banks are vegetated with giant reed, Goodding's black willow, mulefat, castor bean, dwarf nettle (*Urtica urens*), and California buckwheat, among others.	0.99
Human-induced Wetlands[(1)]	Human-induced wetlands in the project area are vegetated by a wide variety of grasses and perennial herbs adapted for growth in saturated soils, including mulefat, broad-leaved cattail (*Typha latifolia*), tall flatsedge (*Cyperus eragrostis*), broadleaf pepperweed (*Lepidium latifolium*), hairy willowherb (*Epilobium ciliatum*), and rabbit's-foot grass (*Polypogon monspeliensis*). These wetlands are all a result of a leaking underground irrigation pipe associated with an adjacent nursery.	0.04

Sources: Insignia 2015a, 2015b.
Notes:
(1) Vegetation community considered sensitive or special status by CDFW.
(2) Non-native giant reed was originally described as exotic giant reed in the *Revised Biological Specialist Report for the Tehachapi Renewable Transmission Project*.

CDFW considers several of these vegetation communities to be special-status natural communities, as denoted in Table 4.3-1. Special-status natural communities are of limited distribution statewide, or within a county or region. These natural communities are often vulnerable to environmental effects from development projects. Communities with a state ranking of S1, S2, or S3 (critically imperiled, imperiled, or vulnerable, respectively) on CDFW's List of Vegetation Alliances and Associations (or Natural Communities List; CDFW 2010) are considered to be of special concern. Special-status natural communities in the survey area include:

- Southern Sycamore–Alder Riparian Woodland (as California sycamore woodlands, S3)
- Southern California Walnut Woodland (as California walnut groves, S3)
- Diegan Coastal Sage Scrub (S3)

Additionally, CDFW considers Southern California live oak woodland to be regionally sensitive because of its limited acreage, high wildlife value, lack of recruitment, and gradual loss to development. Therefore, although Southern coast live oak woodland has a status of S4 (CDFW 2010) this analysis considers Southern coast live oak woodland to be a sensitive natural community.

In addition to ranked vegetation communities, most riparian communities are considered special-status natural communities by CDFW due to their limited distribution in California (CDFW 2010). Riparian communities in the survey area include:

- Ephemeral drainages
- Intermittent drainages
- Human-induced wetlands
- Mulefat scrub
- Riparian woodland
- Southern sycamore–alder riparian woodland

Human-induced wetlands are also included as sensitive communities in this EIR. While all human-induced wetlands in the survey area were created by a leaking irrigation pipe at a plant nursery in SCE's ROW, a wide variety of grasses and perennial herbs adapted to riparian habitat, including mulefat, are present in the human-induced wetlands.

Jurisdictional Waters

Wetland delineations for the TRTP, which included portions of the proposed project area, were performed from 2009 to 2011 in accordance with the United States Army Corps of Engineers (USACE) *Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008). An additional preliminary jurisdictional wetland delineation of the proposed project area was performed in several site visits conducted in June, September, and December 2014. Twenty water features were documented as part of the TRTP surveys, and 17 additional features were mapped as part of the 2014 survey efforts, as shown in Figure 4.8-2. All potentially jurisdictional water features (aquatic features) within the proposed project area are located within the main project area, as shown in Figure 4.8-2. SCE submitted a request to USACE for an Approved Jurisdictional Determination on April 23, 2015; however, SCE has not yet received approval of their preliminary jurisdictional wetland delineation (SCE 2015b). All identified water features are considered to be potentially jurisdictional and subject to regulation by the USACE, Regional Water Quality Control Board (RWQCB), and CDFW for the purposes of this EIR because SCE has not yet received confirmation that jurisdiction had been taken by USACE, RWQCB, or CDFW.

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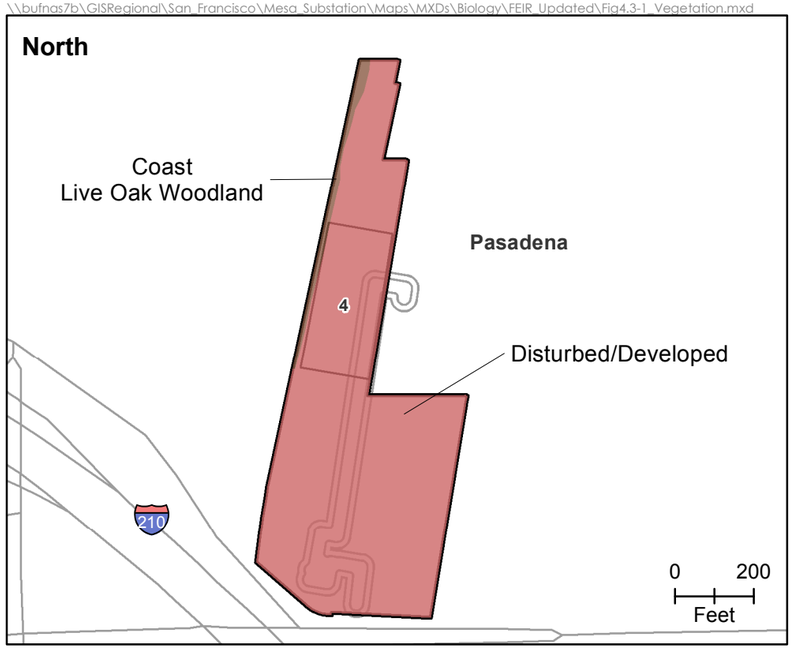

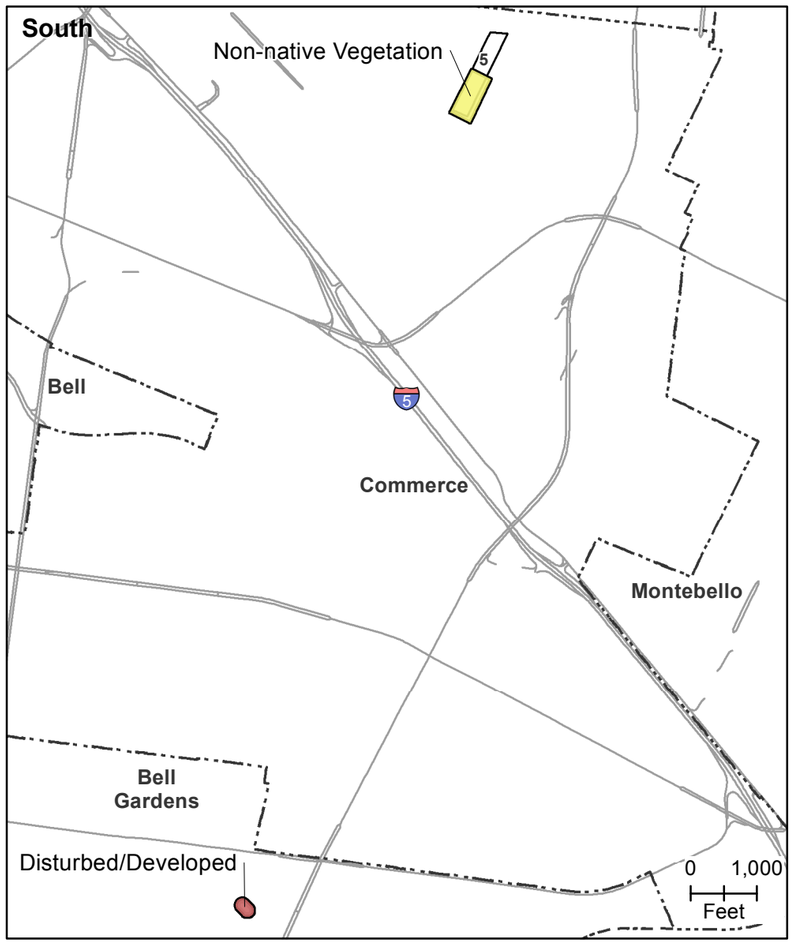

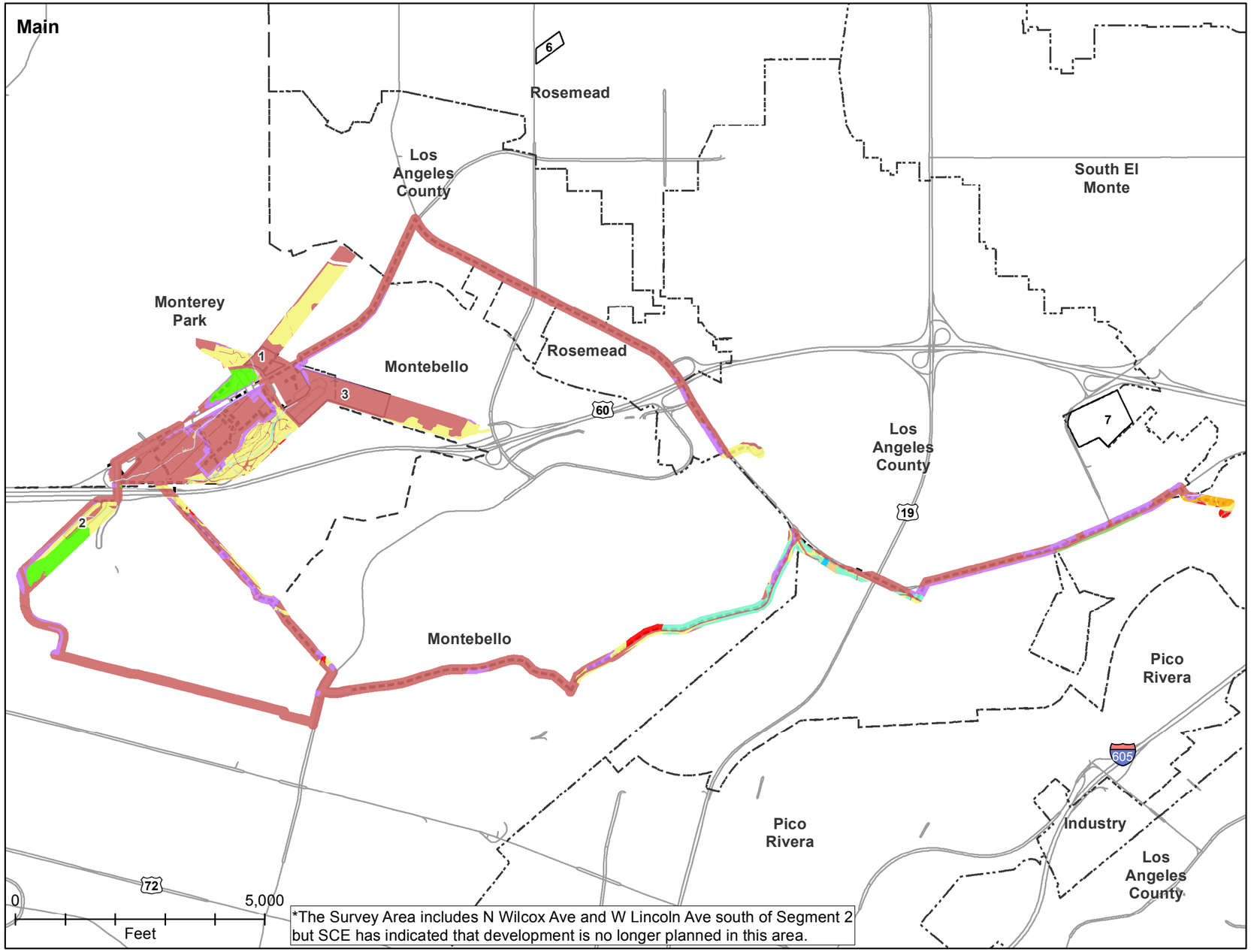

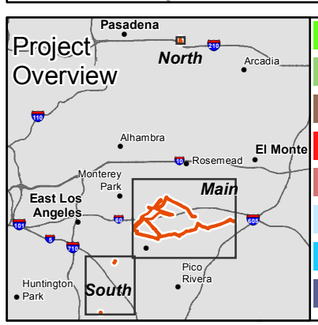

- California annual grassland
- California walnut woodland
- Coast live oak woodland
- Coastal sage scrub
- Disturbed/developed
- Ephemeral drainage
- Intermittent drainage
- Man-induced wetland
- Mulefat scrub
- Non-native giant reed
- Non-native woodland
- Riparian woodland
- Non-native vegetation
- Southern sycamore-alder riparian woodland
- Telecommunications route
- Manholes, vaults, and underground construction
- Staging yard
- Proposed Mesa substation area
- Study Area (North and South)
- City boundary

Sources: SCE 2016 | Basemap: ESRI Media Kit, 2010

Figure 4.3-1
Vegetation Types
Mesa Substation
Los Angeles County, CA

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Special-Status Species

Certain species of plants and wildlife have been accorded various levels of legal protection owing to elevated concern for their conservation status. Analysis in this EIR also considers effects on species which, in the judgment of qualified professionals, meet the CEQA definitions of endangered, rare or threatened. Concern may arise because of dwindling populations or because additional study is needed to determine the population size. In this document, "special-status species" include the following:

- Species listed under the Federal Endangered Species Act of 1973 (FESA) as "Endangered" (FE) or "Threatened" (FT) (Title 50, Code of Federal Regulations [CFR] Section 17.11 or 17.12);
- Species listed under the California Endangered Species Act (CESA) as "Endangered" (SE), "Threatened" (ST), or "Rare" (R) (Sections 670.2 or 670.5, Title 14, California Code of Regulations);
- Species without a formal listing status that meet the definitions of "Endangered" or "Rare" under California Environmental Quality Act (CEQA) Guidelines Section 15380, including CDFW "Species of Special Concern" (SSC); "Candidate" (FC), or species "Proposed" for listing under the FESA; USFWS "Birds of Conservation Concern;" and CNPS rare plant ranks, which are categorized into the following subsections:
  - 1A: Presumed extinct in California
  - 1B: Rare, threatened, or endangered in California and elsewhere
  - 2B: 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[1]

  These are further subcategorized by threat ranks:
  - 0.1: Seriously threatened~~endangered~~ in California
  - 0.2: Moderately threatened~~Fairly endangered~~ in California
  - 0.3: Not very threatened~~endangered~~ in California
- Species designated as "Fully Protected," (FP) and "Watch List" (WL) by CDFW.

[1] CDFW strongly recommends plants constituting California Rare Plant Rank 4 be evaluated for impact significance under CEQA. In addition, the CPUC's qualified professionals agree that the Rank 4 plants in this EIR meet the definition of "Endangered" or "Rare" under CEQA Guidelines Section 15380 and thus are considered special status in this document.

The potential for special-status plant and wildlife species to occur within the survey area was classified as "no," "low," "moderate," or "high" potential to occur or as "present" based on the following criteria using the data sources and survey results, as reviewed and evaluated by qualified professionals and outlined in Section 4.3.1.2:

- **Present:** The species or its sign (e.g., scat, tracks, or feathers) was observed in the proposed project area during field surveys.
- **High Potential:** The proposed project area is located within the geographic range of the species, suitable habitat is present in the project area, and the species has been observed within the last 20 years in the project area or within 1 mile of the proposed project area.
- **Moderate Potential:** The proposed project area is located within the geographic range of the species; suitable habitat is present in the project area; and the species has been recently observed within the last 20 years in the project area or within a 1- to 5-mile radius of the project area.
- **Low Potential:** The proposed project area is located within the geographic range of the species, poor to marginal habitat is present in the proposed project area, and the species has been observed within 5 miles of the proposed project area during the past 20 years; or, the proposed project area is located within the geographic range of the species and suitable habitat is present in the proposed project area, but the species has not been observed within 5 miles of the project area during the past 20 years.
- **No Potential:** No suitable habitat exists in the proposed project area and no occurrences for this species have been recorded during the past 20 years within 5 miles of the proposed project area.

Special-Status Plant Species

Special status plant species present in the proposed project area or with a high or moderate potential to occur in the project area are listed in Table 4.3-2, along with a description of their habitat, an indication of their known presence or assessment of their potential to occur within the project area, and a description of where they would likely occur in relation to the proposed project. Species with low or no potential to occur are included in Appendix D.

Table 4.3-2 Special-Status Plants with the Potential to Occur in the Proposed Project Area

Species	Status (Federal/ California State/CNPS)	Habitat Description	Potential to Occur
Southern California black walnut (*Juglans californica*)	-/-/4.2	Occurs in alluvial chaparral, cismontane woodland, and coastal scrub habitats. Blooms: March–May	*Present:* This species was observed on the Mesa Substation site during botanical surveys conducted in 2009 and 2010. It was subsequently observed in December 2014 adjacent to Telecommunications Route 3 and along Lincoln Boulevard.

Table 4.3-2 Special-Status Plants with the Potential to Occur in the Proposed Project Area

Species	Status (Federal/ California State/CNPS)	Habitat Description	Potential to Occur
Coulter's matilija poppy (*Romney coulteri*)	-/-/4.2	Occurs in chaparral and coastal sage scrub, often in burn areas. Blooms: March – July	*Present*: This species was observed during spring 2015, within the Wittier Narrows Natural Area. The occurrence is located adjacent to a nature trail and existing distribution pole within Telecommunications Route 3 and appears to be a planted population.
Nevin's barberry (*Berberis nevinii*)	FE/CE/ 1B.1	Occurs in sandy or gravelly substrate in chaparral, cismontane woodland, coastal scrub, and riparian habitats. Blooms: March–June	*Present:* This species was observed in Whittier Narrows Natural Area adjacent to an existing distribution pole and paved pathway within the corridor for Telecommunications Route 3 during December 2014 field surveys and spring 2015 protocol surveys; however, it appears to be a planted individual.
Intermediate mariposa-lily (*Calochortus weedii* var. *intermedius*)	-/-/1B.2	Occurs in rocky and calcareous substrate in chaparral, coastal scrub, and valley and foothill grassland habitats. Elevation: 350 to 2,800 feet Blooms: May–July	*Moderate:* Suitable habitat for this species occurs along Telecommunications Route 3 where it parallels East Lincoln Avenue. CNDDB occurrences from 2008-2010 are located in the Puente Hills area, approximately 2.5 miles south of Telecommunications Route 3. Spring 2015 protocol surveys also documented this species in the same Puente Hills area as 2008-2010 CNDDB occurrences.
Plummer's mariposa-lily (*Calochortus plummerae*)	-/-/4.2	Occurs in granitic or rocky substrate in chaparral, cismontane woodland, coastal scrub, lower montane forest, and valley and foothill grassland habitats. Blooms: May–July	*Moderate:* This species has been recorded extensively in the Puente Hills area, approximately 2.5 miles south of Telecommunications Route 3. Suitable habitat occurs along Telecommunications Route 3 where it parallels East Lincoln Avenue. Spring 2015 protocol surveys also documented this species in the Puente Hills area.
Southern tarplant (*Centromadia parryi* ssp. *australis*)	-/-/1B.1	Occurs in the margins of marshes and swamps, vernally mesic valley and foothill grasslands, and vernal pool habitats. Blooms: April–June	*High:* Suitable habitat for this species occurs along the banks of the Rio Hondo River within the proposed corridor for Telecommunications Route 3. A CNDDB occurrence from 2010 documented at least 2,000 plants less than half a mile from Telecommunications Routes 1 and 3. In addition, a Calflora observation entry made in April 2015, documented 12 individuals in the same area as the 2010 CNDDB record. During surveys conducted in May 2015 an additional observation of this species was made east of Telecommunications Route 1. The species

Table 4.3-2 Special-Status Plants with the Potential to Occur in the Proposed Project Area

Species	Status (Federal/ California State/CNPS)	Habitat Description	Potential to Occur
			was sited outside of the survey area within the boundaries of an adjacent gun club.

Sources: Calflora 2015, CNDDB 2015, CNPS 2015, USFWS 2015, Insignia 2015b.

Key:

FE Listed as endangered under the federal Endangered Species Act.

CE Listed as endangered under the California Endangered Species Act.

CNDDB California Natural Diversity Database

1B.1 Rare, threatened, or endangered in California and elsewhere. Seriously threatened~~Extremely endangered~~ in California.

1B.2 Rare, threatened, or endangered in California and elsewhere. Moderately threatened ~~Fairly endangered~~ in California.

4.2 Plants of Limited Distribution. Moderately threatened~~Fairly endangered~~ in California.

Special-Status Wildlife Species

Special-status wildlife species present in the project area or with a moderate or high potential to occur in the project area are listed in Table 4.3-3, along with their habitat requirements and an indication of their known presence or assessment of their potential to occur within the project area. Species with low or no potential to occur are included in Appendix H.

Table 4.3-3 Special-Status Wildlife Species with the Potential to Occur in the Proposed Project Area

Species	Status (Federal/ California)	Habitat Description	Potential to Occur
Amphibians			
Western spadefoot (*Spea hammondii*)	--/SSC	This toad prefers areas of open vegetation and short grasses with sandy or gravelly soils. The western spadefoot frequents washes, floodplains of rivers, and alkali flats, but can range into foothills and mountains. Throughout most of the year, this species resides in underground burrows. It breeds in shallow, temporary pools formed by heavy winter rains.	*Moderate:* Suitable habitat for this species occurs along Telecommunications Route 3 where it parallels East Lincoln, San Gabriel BoulevardAvenue, and Durfee Avenue. One CNDDB occurrence was documented in 1998, approximately 4 miles southeast of Telecommunications Route 3 in the Puente Hills.

Table 4.3-3 Special-Status Wildlife Species with the Potential to Occur in the Proposed Project Area

Species	Status (Federal/ California)	Habitat Description	Potential to Occur
Reptiles			
Belding's orange-throated whiptail (*Aspidoscelis hyperythrus beldingi*)	--/SSC	This species inhabits washes, streams, and sandy areas with rocks, patches of brush, and dry, often rocky hillsides. These lizards can also be found along ridges and valleys that support coastal sage scrub, open chaparral, dry washes, and sparse grasslands mixed with sage scrub species.	*Present:* This species was observed within the survey area for Telecommunications Route 3 during a survey conducted for the proposed project. Habitat for this species exists along Telecommunications Route 3.
Western pond turtle (*Emys marmorata*)	--/SSC	This species is found throughout California west of the Sierra-Cascade crest. It occurs in aquatic habitat with permanent or nearly permanent water in a wide variety of habitat types. Western pond turtle requires basking sites within aquatic habitat such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks.	*High:* The proposed project area contains suitable aquatic and nesting habitat for this species along Telecommunications Route 3 where it parallels East Lincoln Avenue, San Gabriel Boulevard~~Avenue~~, and Durfee Avenue. Natural areas along San Gabriel Boulevard~~Avenue~~ and Durfee Avenue have direct connectivity to known CNDDB occurrences. Habitat also exists east of Telecommunications Route 1. The nearest CNDDB occurrence to the proposed project area is located adjacent to the eastern end of Telecommunications Route 3, within the survey area within the Whittier Narrows Natural Area. Additional CNDDB occurrences have been documented within 5 miles but are considered extirpated due to loss of aquatic habitat in other locations.

Table 4.3-3 Special-Status Wildlife Species with the Potential to Occur in the Proposed Project Area

Species	Status (Federal/ California)	Habitat Description	Potential to Occur
Birds			
Coastal California gnatcatcher (*Polioptila californica californica*)	FT/SSC	The coastal California gnatcatcher is an obligate, permanent resident of coastal sage scrub vegetation. It makes limited use of non-coastal sage scrub for foraging outside of the breeding season. The species typically occurs in areas dominated by California sagebrush and California buckwheat. Other shrubs in the coastal sage scrub vegetation communities occupied by coastal California gnatcatcher include brittlebrush (*Encelia californica*), deerweed (*Lotus scoparius*), black sage (*Salvia mellifera*), and white sage (*Salvia apiana*). The species is restricted to elevations from sea level to approximately 2,000 feet. Coastal California gnatcatchers breed from February to late August.	*Present:* Habitat for this species occurs within the survey area for Telecommunications Route 3 and within the proposed Mesa Substation site. Habitat along Telecommunications Route 3 is designated as critical habitat. Coastal California gnatcatchers were observed foraging and nesting within non-native vegetation at the Mesa Substation site during the TRTP 2010 and 2011 focused coastal California gnatcatcher surveys. They were observed again in 2012, 2013, and in 2015 foraging and nesting at the proposed Mesa Substation site during additional surveys conducted within this site area for the proposed project and other projects. In addition, this species was observed foraging at multiple locations along Telecommunications Route 3. During 2015 surveys, two nesting pairs and their nests were observed adjacent to the Mesa Substation and four nesting pairs were observed north of Lincoln Avenue, along Telecommunications Route 3.

Table 4.3-3 Special-Status Wildlife Species with the Potential to Occur in the Proposed Project Area

Species	Status (Federal/ California)	Habitat Description	Potential to Occur
Least Bell's vireo (*Vireo bellii pusilus*)	FE/CE	The least Bell's vireo is a rare, local summer visitor to the project area that nests between mid-March and the end of August and ranges from sea level in coastal areas to approximately 1,500 feet in the interior areas. Least Bell's vireos breed in willow riparian thickets with good overstory and understory vegetation in Southern California, usually where flowing water is present. This species typically inhabits structurally diverse woodlands along watercourses, including oak woodlands, mulefat scrub, and cottonwood-willow forests. During the breeding season, this species may forage in adjacent upland habitats. Little is known about this species' winter habitat, but it is not exclusively dependent on riparian woodland during winter. In winter, least Bell's vireos primarily occur in mesquite scrub vegetation in arroyos, but some also use palm groves and hedgerows associated with agricultural fields and rural residential areas. Breeding typically occurs from late March to late September.	*Present:* Least Bell's vireos were observed nesting and foraging primarily in riparian areas along Telecommunications Route 3 and foraging ~~within the proposed Mesa Substation site area and~~ within the 500-kV transmission corridor adjacent to the Mesa Substation~~500-kV transmission corridor~~.
Loggerhead shrike (*Lanius ludovicianus*)	--/SSC	Loggerhead shrikes are present year-round throughout California. This species typically breeds in shrublands or open woodlands with a fair amount of grass cover and areas of bare ground. They require tall shrubs, trees, fences, or power lines for hunting perches, nest placement, territorial advertisement, and pair maintenance. They also require open areas of short grasses, forbs, or bare ground for hunting. Impaling sites—such as sharp, thorny plants or barbed wire fences—are important for this species to manipulate and store prey. Breeding in Southern California typically occurs from as early as January to July.	*Present:* Suitable habitat for this species occurs within the proposed project area for Telecommunications Route 3 and foraging habitat exists on the Mesa Substation site. This species was observed within the Mesa Substation site area during surveys conducted for the TRTP. No nest was associated with this species observation.

Table 4.3-3 Special-Status Wildlife Species with the Potential to Occur in the Proposed Project Area

Species	Status (Federal/ California)	Habitat Description	Potential to Occur
Peregrine falcon (*Falco peregrinus anatum*)	--/FP	This species is a year-round resident in California and is found in a variety of habitats. This species nests on vertical structures, such as niches in cliffs, steep banks, and ledges in close proximity to water. This species prefers to nest on coastal cliffs and bluffs; however, American peregrine falcons also nest in urban areas on tall buildings and bridges. This species generally occurs in areas where an abundant food source is present, such as seabird colonies, waterfowl concentrations, or urban rock doves. This species typically forages in open habitats. Breeding generally occurs in mountainous and coastal areas, and it typically lays its eggs between February and March.	*Present:* This species was observed flying at four locations above the proposed Mesa Substation site and along Telecommunications Route 3. No nest was associated with these observations. Foraging habitat is present within the proposed project area. Because tall vertical structures and large open water habitats are limited near the proposed project area, only marginal nesting habitat for American peregrine falcon occurs. There is low potential for nesting within the proposed project area.
Swainson's hawk (*Buteo swainsoni*)	--/CT	Swainson's hawks breed in the western U.S. and Canada, and winter in South America. This species breeds in trees within mature riparian forests, oak groves, and in mature roadside trees usually close to large, open expanses of suitable foraging habitat. Over 85 percent of documented Swainson's hawk nests in California are found in riparian systems; therefore, this habitat type is likely very important. Suitable foraging habitat includes native grassland or lightly grazed dryland pasture, alfalfa and other hay crops, and row crops. Swainson's hawks do not forage in vineyards, orchards, or cotton fields because their prey are not available in these areas during most of the breeding season.	*Present:* Foraging. Marginal habitat for nesting Swainson's hawks occurs in the proposed project area primarily within non-native woodland; however, nesting populations in the Los Angeles Basin are now considered extremely rare. This species was observed within the Mesa Substation site during surveys conducted for the TRTP. No nest was associated with this species observation; this species was likely foraging in or flying through the proposed project area during migration.

Table 4.3-3 Special-Status Wildlife Species with the Potential to Occur in the Proposed Project Area

Species	Status (Federal/ California)	Habitat Description	Potential to Occur
Western burrowing owl (*Athene cunicularia*)	--/SSC	Western burrowing owls live in dry, open areas with no trees and short, sparse grass. They nest in burrows made by small mammals, especially the California ground squirrel, and use these burrows for shelter year round. The species can be found in golf courses, agricultural areas, cemeteries, airports, vacant lots, pastures, and some other human-altered environments. Western burrowing owl is generally found at elevations from approximately 200 to 5,000 feet. This species breeds from February through August.	*Moderate:* Suitable habitat for this species occurs in areas of grassland vegetation within the proposed Mesa Substation site. No Western burrowing owls or Western burrowing owl signs (i.e., feathers, pellets, or whitewash) were observed during the 2009 and 2010 focused burrowing owl surveys conducted for the TRTP, or during the 2014 habitat assessment surveys for the proposed project. The nearest CNDDB occurrence was located approximately 2.25 miles south/southeast of Telecommunication Route 3.
White-tailed kite (*Elanus leucurus*)	--/FP	The White-tailed kite is a year-round resident, albeit rare, in Los Angeles County. This species occupies grasslands, oak woodlands, agricultural, or other open habitat types, foraging on small mammals.	*Present (Foraging); Low Potential for Nesting:* Rare and local breeder with no confirmed breeding. Observed in Puente Hills Landfill Native Habitat Preservation Authority lands (located southeast of Telecommunications Route 3) in 2000, 2002, and 2005. eBird records show this species has been observed approximately one mile east of the Mesa Substation area as recently as 2012 and 2013.
Yellow warbler (*Setophaga petechia*)	--/SSC	Yellow warblers occur as a migrant and summer resident in California. This species generally occupy riparian vegetation in close proximity to water along streams and wet meadows. They are often associated with willow and cottonwood trees in riparian areas. Breeding generally occurs from April to late July.	*Present (Foraging); Moderate Potential for Nesting:* Suitable nesting habitat for yellow warbler occurs along the eastern portions of Telecommunications Routes 1 and 3; however, the habitat is fragmented. This species was observed within the Mesa Substation site, and the eastern portions of Telecommunications Routes 1 and 3. No nests were associated with these observations.

Table 4.3-3 Special-Status Wildlife Species with the Potential to Occur in the Proposed Project Area

Species	Status (Federal/ California)	Habitat Description	Potential to Occur
Mammals			
Southern grasshopper mouse (*Onychomys torridus ramona*)	--/SSC	The Southern grasshopper mouse occurs in desert and grassland areas, especially in scrub habitats with friable soils for digging. This species' preferred habitat consists of alkali desert scrub and desert scrub habitat; however, it can also be found in succulent shrub, wash, riparian, coastal scrub, mixed chaparral, sagebrush, low sage, and bitterbrush habitat. This species is uncommon in valley foothill and montane riparian habitats. The peak breeding season for this species is from May to July, but it may start breeding as early as January under ideal conditions.	*Moderate:* Suitable habitat for this species occurs in the Montebello Hills, southeast of the proposed Mesa Substation site, and north of Telecommunications Route 3.

Sources: CNDDB 2015, eBird 2015, Insignia 2015b, Shuford and Giraldi 2008.
Key:
CE Listed as endangered under the California Endangered Species Act.
CNDDB California Natural Diversity Database
CT Listed as threatened under the California Endangered Species Act.
FE Listed as endangered under the federal Endangered Species Act.
FP Fully Protected
FT Listed as threatened under the federal Endangered Species Act.
kV kilovolt
SSC Species of Special Concern
TRTP Tehachapi Renewable Transmission Project

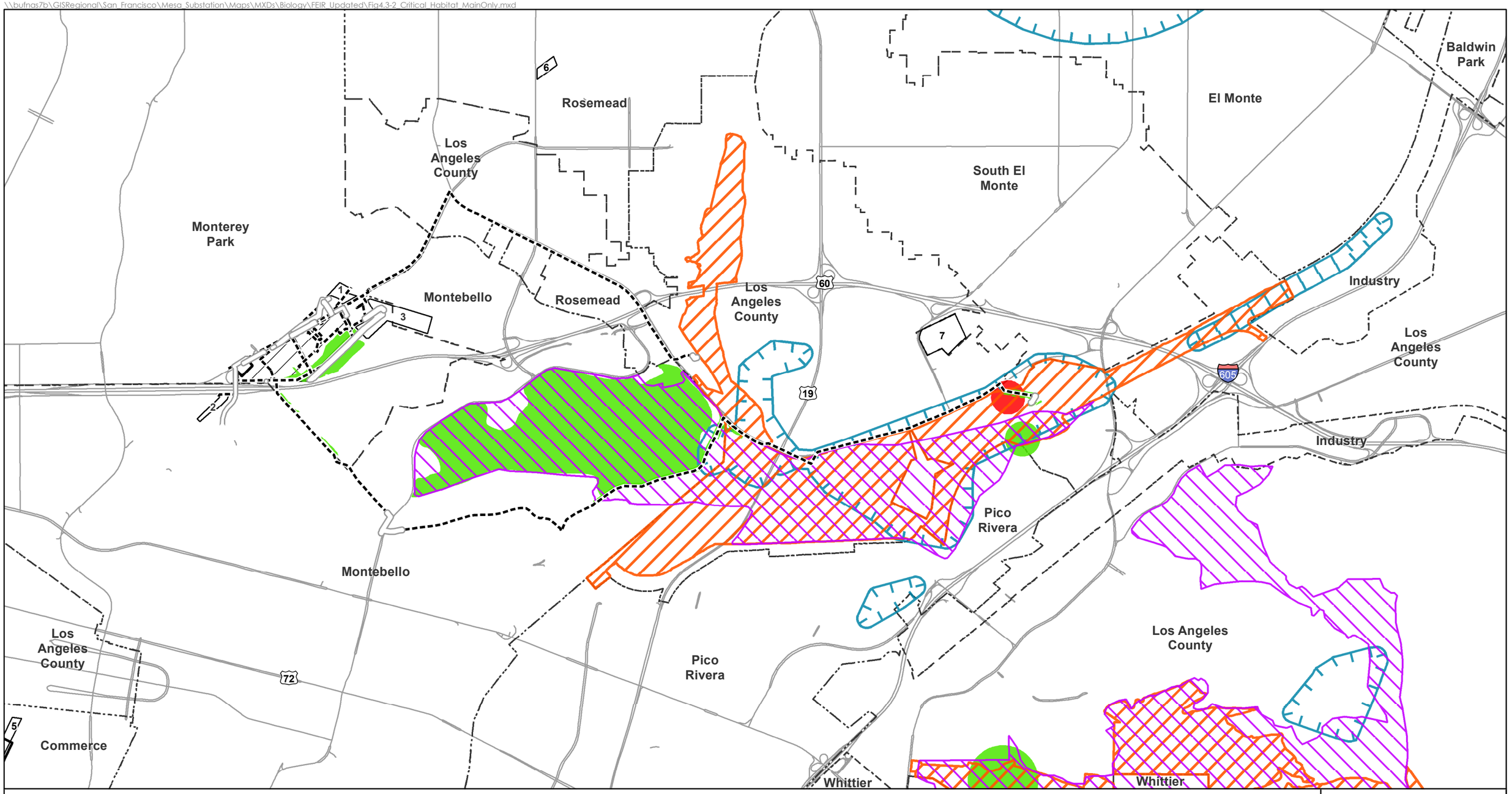
Critical Habitat

The National Marine Fisheries Service and USFWS designate critical habitat for species that are listed as threatened or endangered under the FESA. Critical habitat for coastal California gnatcatcher is present within the proposed work areas along Telecommunications Route 3, as shown in Figure 4.3-2.

Significant Ecological Areas in Los Angeles County

The Los Angeles County General Plan policy promotes the conservation of Significant Ecological Areas (SEAs) in as viable and natural a condition as possible, without prohibiting development. SEAs are areas where the county deems it important to facilitate a balance between new development and resource conservation. Projects potentially impacting an SEA are reviewed by a Technical Advisory Committee appointed by the county. The SEA program is a resource identification tool used to conserve and manage the county's valuable biological resources and habitat connectivity (Los Angeles Department of Regional Planning 2014). The eastern portion Telecommunications Route 3 would cross through the Puente Hills SEA (Figure 4.3-2).

\\bufnas7b\GISRegional\San_Francisco\Mesa_Substation\Maps\MXDs\Biology\FEIR_Updated\Fig4.3-2_Critical_Habitat_MainOnly.mxd



USFS Critical Habitat - Coastal California Gnatcatcher

Puente Hills SEA

Federally Listed Species Occurrences

Least Bell's vireo

California gnatcatcher

Nevin's barberry

Telecommunications route

Manholes, vaults, and underground construction

Staging yard

Proposed Mesa substation area

Study Area (North and South)

City boundary

0 5,000

Feet

Sources: CNDDB 2015, LA County GIS 2015, SCE 2016, USFS 2014 | Basemap: ESRI Media Kit, 2010

Figure 4.3-2
Critical Habitat and Occurrences
Mesa Substation
Los Angeles County, CA

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Wildlife Migration Corridors

A wildlife corridor is defined as a linear landscape feature, such as a waterway, that allows animal movement between two patches of habitat or between habitat and geographically discrete resources. These connections are integral to maintaining regional biological diversity and population viability. Areas that serve as wildlife movement corridors are considered biologically sensitive because they can facilitate the persistence of special-status species. In the absence of corridors, habitats become fragmented and isolated islands surrounded by development; this separation hinders persistence of special-status species that rely on ability to move freely between habitat areas.

Terrestrial wildlife species tend to travel along natural drainages or stretches of land that simultaneously provide protective cover from predators and a foraging source. The proposed project area contains drainages supporting riparian habitat that could provide cover for migrating wildlife.

Habitat for the coastal California gnatcatcher, including some habitat designated as critical habitat, is located within the proposed project area, which has direct connectivity to larger stretches of similar habitat between the Montebello Hills and areas supporting the northernmost populations in the San Gabriel and Santa Susana Mountains. According to USFWS, there is very little habitat left for the gnatcatcher between these areas (Medak pers. comm. 2015). The remaining habitat patches, such as the area within the proposed substation footprint, provide for connectivity between gnatcatcher populations and are important for maintaining a viable population within the northern range of the species. Maintaining connectivity between populations, particularly in the northern portion of the species' range, is critical for achieving resiliency in response to changes in vegetation and local climatic conditions associated with global climate change (Medak pers. comm. 2015).

The proposed project would also be located in the Pacific Flyway for migratory waterfowl, shorebirds, and songbirds. The Pacific Flyway is a major north-south migratory corridor that generally follows a path through the coastal region of North America and into South America. This region provides suitable foraging and nesting habitat for many resident and migratory bird species, though field survey data indicates it is not a critical stopover on the Pacific Flyway due to the limited number of species observed. Proposed project areas, particularly areas along Telecommunications Route 3, support a number of avian species that utilize the Pacific Flyway during spring and fall migration.

4.3.2 Regulatory Setting

4.3.2.1 Federal

Federal Endangered Species Act

The FESA was enacted to conserve threatened and endangered species and the ecosystems upon which they depend. The FESA makes it unlawful to "take" (i.e., harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in such conduct) a listed wildlife or fish species without a permit. It is also unlawful to remove, cut, dig up, damage or destroy listed plant species from areas under federal jurisdiction, or in knowing violation of state law or regulation without a permit. The terms "harm" and "harass" are further defined in 50 CFR Part 17. "Harm" means an act that actually kills or injures wildlife including acts causing significant habitat

modification or degradation that significantly impair essential behavioral patterns of wildlife (USFWS 2013). "Harass" means intentional or negligent acts creating likelihood of injury by significantly disrupting normal behavioral patterns such as breeding, feeding, or sheltering. The USFWS maintains the national list of protected species and implements the FESA. Federal agencies are required to consult with USFWS if any action they authorize, carry out, or fund may affect species listed under the FESA.

Provisions under the FESA allow USFWS to authorize "incidental" take of listed species occurring as a result of otherwise lawful activities under certain terms and conditions. Consultation under Section 7 of the FESA would apply to the proposed project because the applicant will need to obtain federal Clean Water Act (CWA) Section 404 clearance from the USACE (refer to "Clean Water Act," below). To obtain incidental take authorization through Section 7, the USFWS must prepare a Biological Opinion in conjunction with the federal agency and the applicant that identifies impacts likely to result from the incidental take, steps to minimize and mitigate impacts, and funding for plan implementation. The plan must be reviewed by the USFWS and a determination must be made that the taking will be incidental and not appreciably reduce the survivability and recovery of the species, that the impacts mitigated as fully practicable, and that adequate funding for mitigation would be provided.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 (16 United States Code §§ 703–712) provides protection for the majority of bird species occurring in the United States, as it applies to nearly all migratory species. The MBTA implements treaties with several other nations and makes it unlawful to pursue, hunt, take, capture, kill, possess, or sell birds listed under the MBTA without appropriate permits. Some non-native species are not covered under the MBTA, including the European starling (*Sturnus vulgaris*) and the house sparrow (*Passer domesticus)*, as well as non-migratory species such as grouse and turkey. The statute does not discriminate between live or dead birds and grants full protection to any bird parts, including feathers, eggs, and nests regardless of conservation status.

Clean Water Act

The CWA regulates restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. The CWA authorizes the USACE to regulate the discharge of dredged or fill material into waters of the U.S. and adjacent wetlands. In combination with current regulations and policies, waters delineation methods help define the area of federal jurisdiction under the CWA. The agencies attempt to minimize the impacts of a proposed project to the physical, chemical, and biological integrity of the nation's waters. In determining jurisdiction under the CWA, the USACE is governed by federal regulations (33 CFR §§ 320–330) that define the presence and boundaries of wetlands and other waters of the U.S. The USACE Wetlands Delineation Manual is the accepted standard for delineating wetlands pursuant to the Section 404 regulatory program. The USACE released an Interim Regional Supplement to the USACE Wetlands Delineation Manual for the Arid West Region in December 2006, and *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* in August 2008, which are the accepted standards for delineating waters of the U.S. in this region at present.

The USACE evaluates permit applications for essentially all construction activities that occur in the nation's waters, including wetlands. The USACE either performs or receives delineations of waters of the U.S. that are within the potential area of impacts for proposed developments, and provides or

verifies a Jurisdictional Determination. The jurisdictional review performed by the USACE may require modifications of development plans and specifications in order to reduce or avoid impacts on waters of the U.S.

Section 401 of the CWA requires that activities resulting in discharge of materials into Waters of the U.S. also obtain a Water Quality Certification from the state to certify that the activity complies with applicable water standards.

4.3.2.2 State

California Endangered Species Act

The CESA is similar to the FESA and is administered by the CDFW under California Fish and Game Code Section 2050 et seq. The CESA, as amended, protects endangered and threatened species and their habitats, and prohibits the take of CESA-listed species. Take is defined under Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" a state-protected species. This act allows for incidental take associated with otherwise lawful development projects, after obtaining authorization from CDFW via a state Incidental Take Permit (ITP). A project applicant is responsible for consulting with the CDFW early in project planning stages to: avoid potential impacts on rare, endangered, and threatened species and to develop appropriate mitigation planning, if applicable; to preclude activities that are likely to jeopardize the continued existence of any CESA-listed threatened or endangered species, or destroy or adversely affect habitat essential for any given species; and to ensure authorized take is minimized and fully mitigated.

Alternatively, where a proposed project is likely to impact species that are listed under both the FESA and CESA, the provisions of Section 2080.1 allow the CDFW to review the federal document in support of the federal Incidental Take Statement (i.e., the Biological Opinion) for consistency with the CESA. If the federal Biological Opinion addresses the substantial requirements of the CESA, the CDFW may determine that it is consistent with the CESA and state requirements and issue a Consistency Determination. This mechanism of an integrated approach to CESA/FESA compliance would preclude the need for a separate state ITP under Section 2081(b).

Under the CESA, endangered, rare or threatened species are those listed in Sections 670.2 (plants), and 670.5 (animals), Title 14, California Code of Regulations. The protections of the CESA also apply to species designated as candidate species.

Stream Protection (California Fish and Game Code §§ 1600–1616)

The CDFW regulates activities that would interfere with the natural flow of or substantially alter the channel, bed, or bank of a lake, river, or stream. These activities are regulated under California Fish and Game Code sections 1600 to 1616 and require a Lake or Streambed Alteration Agreement (LSAA). Requirements to protect the integrity of biological resources and water quality are often conditions of LSAAs. CDFW may require avoidance or minimization of vegetation removal, use of standard erosion control measures, limitations on the use of heavy equipment, limitations on work periods to avoid impacts on fisheries and wildlife resources, and requirements to restore degraded sites or compensate for permanent habitat losses.

Wildlife Protection (California Fish and Game Code §§ 3503, 3503.5, 3511, 3513, 4700, 5050, and 5515)

Section 3503 of the California Fish and Game Code contains the following general provision for birds: "it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." CDFW considers disturbance that results in the incidental loss of fertile eggs or nestlings, or otherwise leads to nest abandonment and/or loss of reproductive effort to be "take." Section 3513 provides for consistency with rules and regulations implementing the MBTA. As with the MBTA, this state code offers no statutory or regulatory mechanism for obtaining an ITP for the loss of non-game migratory birds.

Sections 3511, 4700, 5050, and 5515 govern the protection of bird, mammal, reptile, amphibian, and fish species identified as "fully protected." Take of fully protected animals may be for "scientific research"; incidental take of fully protected species may be authorized through an approved Natural Community Conservation Plan (Fish and Game Code § 2835). The classification of "fully protected" was the state's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Most of the species on these lists have subsequently been listed under FESA or CESA.

California Native Plant Protection Act of 1977 (California Fish and Game Code §§ 1900–1913, 2062 and 2067)

The California Native Plant Protection Act identifies the types of plant species eligible for state listing. Eligible species include those identified on CNPS Rare Plant Ranks 1A, 1B, and 2, and meet the definitions of Sections 1901, Chapter 10 (Native Plant Protection Act). Under California Fish and Game Code Section 2062, any plant species determined by the California Fish and Game Commission (Commission) as "endangered" on or before January 1, 1985 is an endangered species under CESA and under Section2067 any plant species determined by the Commission as "rare" is a "threatened species" under CESA.

Porter–Cologne Water Quality Control Act (Porter–Cologne Act)

Article 4 of the Porter-Cologne Water Quality Control Act (California Water Code § 13260 et seq.) states that discharge of waste in an area that could affect Waters of the State requires filing a report of discharge with the RWQCB. Waters of the State include surface water and groundwater in the state. Dischargers must obtain Waste Discharge Requirements. If waters are also Waters of the U.S., then the Waste Discharge Requirement is covered by the section 401 Water Quality Certification, discussed above under the CWA.

4.3.2.3 Regional and Local

Los Angeles County General Plan

The Los Angeles County General Plan policy promotes the conservation of SEAs in as viable and natural a condition as possible, without prohibiting development. SEAs are areas where the county deems it important to facilitate a balance between new development and resource conservation (County of Los Angeles 2015). Portions of Telecommunications Route 3 are located adjacent to existing roads abutting the Puente Hills SEA.

The following goal and policies are identified in the Los Angeles County General Plan's Conservation and Natural Resources Element and Parks and Recreation Element (County of Los Angeles 2015):

- ***Conservation and Natural Resources Element Goal C/NR 3:*** *Permanent, sustainable preservation of genetically and physically diverse biological resources and ecological systems including: habitat linkages, forests, coastal zone, riparian habitats, streambeds, wetlands, woodlands, alpine habitat, chaparral, shrublands, and SEAs.*
- ***Policy C/NR 3.8:*** *Discourage development in areas with identified significant biological resources, such as SEAs.*
- ***Policy C/NR 3.9:*** *Consider the following in the design of a project component that is located within an SEA, to the greatest extent feasible:*
  - *Preservation of biologically valuable habitats, species, wildlife corridors, and linkages;*
  - *Protection of sensitive resources on the site within open space;*
  - *Protection of water sources from hydromodification in order to maintain the ecological function of riparian habitats;*
  - *Placement of the development in the least biologically sensitive areas on the site (prioritize the preservation or avoidance of the most sensitive biological resources);*
  - *Design required open spaces to retain contiguous undisturbed open space that preserves the most sensitive biological resources onsite and/or serves to maintain regional connectivity;*
  - *Maintenance of watershed connectivity by capturing, treating, retaining, and/or infiltrating stormwater flows on site; and*
  - *Consideration of the continuity of onsite open space with adjacent open space in project design.*
- ***Policy C/NR 3.10:*** *Require environmentally superior mitigation for unavoidable impacts on biologically sensitive areas, and permanently preserve mitigation sites.*
- ***Policy C/NR 3.11:*** *Discourage development in riparian habitats, streambeds, wetlands, and other native woodlands in order to maintain and support their preservation in a natural state, unaltered by grading, fill, or diversion activities.*
- ***Parks and Recreation Element Policy 5.3:*** *Protect and conserve natural resources on County park properties, including natural areas, sanctuaries, and open space preserves.*

City of Montebello General Plan

The following objectives and policy outlined in the City of Montebello General Plan's Conservation and Open Space Element (City of Montebello 1973) are relevant to the proposed project:

- ***Conservation Objective 5:*** *Preserve outstanding and unique plant life in the community.*
- ***Conservation Objective 6:*** *Preserve habitats for desirable or non-objectionable birds and mammals in the area.*
- ***Open Space Policy 2:*** *Ecologically important areas should be viewed as areas of critical concern and should be preserved wherever possible.*

The city has an adopted tree policy, which includes provisions to keep tree removal to a minimum and to replace trees that are removed with trees on the Approved Tree List maintained by the city of South El Monte in coordination with the city personnel (Ordinance No. 2791, § 2, 3-20-2012).

City of Pasadena General Plan

The City of Pasadena General Plan (2015) was reviewed for relevant goals and policies related to biological resources. The Open Space and Conservation Element and the Green Space, Parks, and Recreation Element of the General Plan contain goals to protect and enhance Pasadena's trees on public and private land; protect, restore, and maintain native wildlife and areas of native vegetation; and preserve open spaces including natural open areas, watersheds, and environmentally sensitive areas.

City of Pasadena Municipal Code

Pasadena's Tree and Tree Protection Ordinance (Ord. 6896, § 2) contains measures to preserve and increase the city's canopy cover, protect and maintain healthy trees, and provide a framework for regulating the pruning or removing of native trees covered in the ordinance.

Other General Plans

General plans for the following jurisdictions were also reviewed, but none of the goals and policies related to biological resources contained in these documents were found to be applicable to the proposed project:

- City of Bell Gardens (1995) General Plan
- City of Commerce General Plan (2008)
- City of Monterey Park (2011) General Plan
- City of Rosemead (2010) General Plan
- City of South El Monte (2000) General Plan

4.3.3 Impact Analysis

4.3.3.1 Methodology and Significance Criteria

The impact analysis for biological resources was conducted by: (1) gathering and evaluating information obtained from the applicant and numerous other sources; and (2) assessing the potential temporal and spatial effects on habitats and organisms within the project area as well as the region as a whole. Recent survey data provided by the applicant were assessed for accuracy and appropriate implementation of resource agency protocols. Calculations for temporary and permanent disturbance to habitat were based on the applicant's projections of land disturbance from project features.

The significance are based on the sample questions in Appendix G of the CEQA Guidelines. An impact is considered significant if the project 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 the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service, or species that meet the criteria for endangered, rare or threatened in CEQA Guidelines Section 15380

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service

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

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan

The proposed project area is not located within Habitat Conservation Plan or Natural Community Conservation Plan areas. Therefore, the proposed project would have no impact under criterion (f) and impacts under this criterion are not discussed further herein.

4.3.3.2 Applicant Proposed Measures

The applicant has committed to the following APMs as part of the design of the proposed project:

- **APM-BIO-01: Special Status Plant Species.** During the appropriate phenological periods, formal pre-construction surveys for rare plants would be conducted in areas where special-status plants have the potential to occur within the construction areas. Prior to construction, the locations of special-status plants identified during the surveys would be marked or flagged for avoidance. This boundary would be maintained during work at these locations and would be avoided during all construction activities to the extent possible. Impacts to Nevin's barberry would be avoided. Where disturbance to these areas cannot be avoided, SCE would develop and implement a Revegetation Plan. The Revegetation Plan would include measures for transplanting and replacing special-status plant species that may be impacted by construction of the proposed project. This plan would also include general measures in the event that special-status plant species are encountered prior to construction of the proposed project, as well as post-construction invasive weed management measures, where necessary, to ensure successful revegetation back to pre-construction conditions or to equivalent conditions of representative habitat immediately adjacent to the affected area.
- **APM-BIO-02: Revegetation Plan.** To the extent feasible, SCE would minimize impacts and permanent loss to riparian habitat, native trees, and other vegetation that is regulated by federal, State, or local agencies, and/or that provides suitable habitat for special-status species. Impacts would be minimized at construction sites by flagging native vegetation to be avoided. If unable to avoid impacts to protected vegetation, a Revegetation Plan would be prepared in coordination with the appropriate agencies for areas of native habitat

temporarily and/or permanently impacted during construction. The Revegetation Plan would describe, at a minimum, which vegetation restoration method (e.g., natural revegetation, planting, or reseeding with native seed stock in compliance with the proposed project's Stormwater Pollution Prevention Plan) would be implemented in the proposed project area. The Revegetation Plan would also include the species or habitats that could be impacted, the replacement or restoration ratios (as appropriate), the restoration methods and techniques, and the monitoring periods and success criteria, as identified in each measure.

- **APM-BIO-03: Biological Monitoring.** To the extent feasible, biological monitors would monitor construction activities in areas with special-status species, native vegetation, wildlife habitat, or unique resources to ensure such resources are avoided.
- **APM-BIO-04: Coastal California Gnatcatcher Protection.** A USFWS-approved biologist would conduct pre-construction surveys for coastal California gnatcatcher no more than seven days prior to the start of ground-disturbing activities, if this would commence between February 1 and August 30. Surveys for coastal California gnatcatcher would be conducted in suitable habitat within 500 feet of the proposed project area. If a breeding territory or nest is confirmed, the USFWS would be notified and, in coordination with the USFWS, an exclusionary buffer would be established around the nest. Construction activities in occupied coastal California gnatcatcher habitat would be monitored by a full-time USFWS-approved biologist. Unless otherwise authorized by the USFWS, no proposed activities would occur within the established buffer until it is determined by the biologist that the young have left the nest. Temporary and permanent impacts to coastal California gnatcatcher and their habitat would be mitigated as required by the USFWS.
- **APM-BIO-05: Least Bell's Vireo Protection.** SCE would avoid ground-disturbing activities within suitable habitat for least Bell's vireo during the nesting season to the extent possible. In the event that activities within least Bell's vireo nesting habitat are unavoidable, a USFWS-approved biologist would conduct pre-construction surveys for least Bell's vireo no more than seven days prior to the start of ground-disturbing activities, if this work would commence between March 15 and September 30. Surveys for least Bell's vireo would be conducted in suitable nesting habitat within 500 feet of the proposed project area. If a breeding territory or nest is confirmed, the USFWS and CDFW would be notified and, in coordination with the USFWS and CDFW, an exclusion buffer would be established around the nest. Construction activities in occupied least Bell's vireo habitat would be monitored by a full-time USFWS- and CDFW-approved biologist. Unless otherwise authorized by the USFWS and CDFW, no proposed project activities would occur within the established buffer until it is determined by the biologist that the young have left the nest. Temporary and permanent impacts to least Bell's vireo, and their habitat, would be mitigated as required by the USFWS and CDFW.
- **APM-BIO-06: Nesting Birds.** SCE would conduct pre-construction clearance surveys no more than seven days prior to construction, to determine the location of nesting birds and territories during the nesting bird season (typically February 1 to August 31, earlier for species such as raptors). An avian biologist would establish a buffer area around active nest(s) and would monitor the effects of construction activities to prevent failure of the active nest(s). The buffer would be established based on construction activities, potential noise disturbance levels, and behavior of the species. Monitoring of construction activities that have the potential to affect active nests would continue until the adjacent construction activities are completed or until the nests are no longer active.

- **APM-BIO-07: Avian Protection.** Electrical facilities would be designed in accordance with Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines: the State of the Art in 2006* (APLIC 2006).
- **APM-BIO-08: Compensation for Permanent Impacts.** Permanent impacts to all jurisdictional water resources would be compensated at a 1-to-1 ratio, or as required by the USACE, CDFW, and RWQCB.

4.3.3.3 Environmental Impacts

The applicant is independently required to comply with the federal and state endangered species acts. Specific biological resource mitigation measure requirements in this EIR may be satisfied through compliance with permit conditions, or other authorizations obtained by the applicant, if these requirements are equally or more effective than the mitigation identified in this EIR. The applicant shall provide the CPUC with copies of permits or other authorizations, and supporting documentation, 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 would also satisfy the mitigation measures in this EIR, the applicant shall submit reports to the CPUC documenting compliance, consistent with the reporting requirements of the equivalent mitigation measure or measures.

Impact BR-1: Substantial adverse direct or indirect effect on special-status species.

Construction

LESS THAN SIGNIFICANT WITH MITIGATION

Special-Status Plants

Direct impacts on special-status plants and their habitat would result from vegetation trimming, removal, or crushing, and compaction or excavation of soils. These activities could result in the death or injury of individual plants, or the loss or substantial degradation of populations or habitat. Indirect impacts on special-status plants could result from the generation of fugitive dust, which can reduce plant photosynthesis; habitat fragmentation, which can result in reduced seed load and/or altered soil chemistry or composition; or the introduction or spread of noxious and invasive weed species, which can out-compete native plants.

Permanent impacts to special-status plants could occur in areas:

- Where structures related to the proposed Mesa Substation and associated transmission, subtransmission, distribution, and telecommunications lines are proposed
- Used for operations (e.g., access roads)

Temporary impacts to special-status plants could occur:

- From the use of areas for staging yards, lay down yards, tower removals and pull and tensioning sites

- Due to any other ground disturbances that would be restored after construction has been completed

For temporarily disturbed areas that are restored, grasses and herbs would be expected to re-establish within the next one to three growing seasons after construction, while other plants may take several growing seasons to re-establish.

The majority of the proposed project would be sited in previously disturbed areas and, therefore, would not significantly fragment contiguous habitat for most special-status plant species. Construction activities also have the potential to degrade surrounding habitats by introducing or spreading populations of noxious or invasive weed species that could out-compete native special-status plants. As a result, the establishment of such species has the potential to result in the loss of special-status plants and, in general, limit the functionality of plant communities by significantly altering native species composition. Impacts due to the temporal loss of special-status plant species could occur; the ecosystem function of the community, including its contribution to breeding, feeding, and cover habitat for wildlife, would be compromised during the time period it would take to restore or mitigate for the species. These impacts would be significant.

The applicant would implement APM-BIO-01, APM-BIO-02, APM-BIO-03, and APM-AIR-01. These APMs require conducting surveys for special-status plants prior to construction in some work areas (APM-BIO-01), preparing a Revegetation Plan for unavoidable effects to special-status plants (APM-BIO-02), biological monitoring during construction to the extent feasible (APM-BIO-03), and measures to suppress fugitive dust during construction (APM-AIR-01) that would reduce the level of impacts to special-status plants. However, impacts would still be significant because the APMs do not adequately describe specific methods for completing surveys by certified biologists and suggest relocation of special-status plants when avoidance is the preferred mitigation by the USFWS.

Implementation of Mitigation Measure (MM) BR-1 would require that the applicant retain a qualified biologist to conduct pre-construction surveys for sensitive biological resources, including special-status plant species, in all areas of temporary and permanent disturbance. These surveys would verify that any special-status species that may be present in work areas are identified prior to construction. MM BR-2 would require that project work areas be clearly delineated to prevent inadvertent encroachment that could impact sensitive species or their habitat. A buffer would be required between identified sensitive resources and construction work and laydown areas in order to avoid impacts to these sensitive resources unless previously approved.

MM BR-3 would require the preparation of a Habitat Restoration Plan for all areas of temporary impact. MM BR-3 also provides specifications for what must be included in the plan. MM BR-4 would require the preparation of a Noxious and Invasive Species Management Plan. Per MM BR-5, SCE would also implement a Worker Environmental Awareness Program (WEAP) to inform workers of the sensitive biological resources with a potential to be impacted by the project and relevant permits. Along with APM-BIO-01, APM-BIO-02, APM-BIO-03, and APM-AIR-01, MM BR-1 through MM BR-4 would be applied to reduce impacts to less than significant for special-status plants that have a low potential to occur in the area.

Additional mitigation measures specific to individual special-status species that have a moderate to high potential for presence, and may be impacted as a result of construction activities, are discussed in further detail below, by species. Special-status plants that are known to be present in the project area include Nevin's barberry, and Southern California black walnut, and Coulter's Matilija poppy.

The Southern tarplant, Plummer's mariposa-lily, and intermediate mariposa-lily have a moderate potential to occur.

Nevin's Barberry

Nevin's barberry is listed as endangered under the CESA and FESA and has a CNPS rare plant ranking of 1B.1, meaning that it is rare, threatened, or endangered in California and elsewhere and is ~~extremely endangered~~seriously threatened in California. One Nevin's barberry plant was found during surveys for the proposed project in December 2014 within the study area for Telecommunications Route 3 in vegetation classified as Southern Sycamore–Alder Riparian Woodland. This occurrence is located along a paved trail leading from the Whittier Narrows Nature Center near the eastern end of Telecommunications Route 3 and is part of a curated landscape.

Work planned approximately 25 to 30 feet from the individual plant includes the installation of telecommunications line on an existing pole. Construction activities within the vicinity of this occurrence also include trenching activities to install underground conduit and telecommunications line approximately 600 feet south of the known Nevin's barberry plant. SCE would utilize an existing access road and paved Nature Center trail to install the cable on an existing pole as well as on a long-term basis for maintenance activities. Although no permanent ground disturbance or vegetation removal is planned in the location of this known Nevin's barberry plant, direct impacts to this species could occur during construction as a result of disturbance from activities associated with the installation of telecommunications line such as stringing, pulling, or driving over the plant if it is not properly flagged with a protective buffer. In addition, planned construction activities within the vicinity could impact undiscovered occurrences of the species. Indirect impacts could occur from the generation of fugitive dust, as a result of nearby ground disturbing activities, and the spread of invasive weeds that prevent the establishment of new individuals or cause the mortality of the existing individual after ground disturbance activities are complete. These impacts would be significant.

APM-BIO-01 commits to conducting pre-construction surveys in areas where special-status species could occur, the establishment of buffers to avoid impacts to special-status species to the extent feasible, and the preparation of a Revegetation Plan if impacts to special-status species cannot be avoided. APM-BIO-02 further discusses the Revegetation Plan, which would include measures for transplanting and replacing special-status plants, if special-status species cannot be avoided. However, USFWS has indicated that transplantation of rare plant species is rarely successful due to a general lack of understanding about the suite of conditions that allows a rare plant species to grow in a particular location (Medak pers. comm. 2015). APM-AIR-01 would reduce excessive fugitive dust build up in the vicinity of the occurrence of Nevin's barberry. Given the rarity of this species and the fact that, based on input from USFWS, transplantation of this species may not be successful, APM-BIO-01, APM-BIO-02, and APM-AIR-01would not reduce impacts to less than significant. Implementation of MM BR-2 would require sensitive resources to be clearly marked and avoided during construction. MM BR-4 would require the preparation of a Noxious and Invasive Weed Control Plan and outlines requirements that must be included in the plan in order to reduce impacts associated with the spread of noxious and invasive weeds. MM BR-5 would require that workers receive training in plant identification, the proposed project's environmental commitments, and how best to avoid impacting sensitive plant species. MM BR-6 would require that the proposed project be designed to avoid direct and indirect impacts on individual Nevin's barberry plants. Implementation of MM BR-2, MM BR-4, MM BR-5, and MM BR-6 in combination with the APMs identified above would reduce impacts to a less than significant level.

Southern California Black Walnut

The Southern California black walnut ~~is ranked as an S3 species, indicating that the species is vulnerable (CDFW 2010). In addition, it~~ is ranked by the CNPS as 4.2, indicating that the species is of limited distribution and is ~~fairly endangered~~ moderately threatened in California (CNPS 2015).

Six black walnut trees were observed on the proposed Mesa Substation site and seven were observed along Lincoln Boulevard within the survey area for proposed Telecommunications Route 3. Work along Telecommunications Route 3 consists of installation of telecommunications cable on existing poles. No ground disturbing activities are planned in the locations where the seven black walnut trees along Lincoln Boulevard are known to occur; however, as part of telecommunication construction and operation and maintenance, these trees may be trimmed. However, the six black walnut trees present at the proposed Mesa Substation site would be removed as part of the proposed project. Although these six black walnut trees are located in vegetation primarily dominated by non-native species, these trees and surrounding vegetation provide foraging habitat for the loggerhead shrike (a California species of special concern) and foraging and breeding habitat for the coastal California gnatcatcher (listed as federally threatened under the FESA and by CDFW as a California species of special concern), among other species observed over the course of several surveys conducted within this survey area. These trees likely contribute to the overall quality of foraging and breeding habitat of the site. In addition, the openness of the canopy and presence of an adjacent drainage provide the environmental conditions that may encourage recruitment of more black walnut trees over time. Therefore, impacts from the removal of these trees during construction would be significant.

To reduce impacts to the California black walnut, SCE would implement APM-BIO-01 and APM-BIO-02, requiring pre-construction surveys for special-status plants and preparation of a Revegetation Plan. However, implementation of these APMs would not reduce impacts to less than significant because the area from which the trees would be removed would not be revegetated. MM BR-1 would require pre-construction surveys in all areas of the temporary and permanent disturbance. This would ensure that all occurrences of Southern California black walnut within the proposed work areas are properly documented. MM BR-2 would ensure that black walnut trees are clearly marked for avoidance where possible, such as along Telecommunications Route 3. MM BR-5 would require that workers receive training in plant identification, the proposed project's environmental commitments, and how best to avoid impacting sensitive plant species. MM BR-7 would require avoidance of these individual trees wherever feasible and, where not feasible, would require replacement of Southern California black walnut trees removed as part of the proposed project at a 2:1 ratio onsite or within an area offsite, as approved by CPUC, in coordination with CDFW. With implementation of the APMs identified above, and MM BR-1, MM BR-2, MM BR-5, and MM BR-7, impacts to California black walnut would be less than significant.

Coulter's Matilija Poppy

Coulter's Matilija poppy is not listed under FESA or CESA. However, Coulter's Matilija poppy is a CNPS rare plant ranked 4.2, meaning it is of limited distribution and moderately threatened in California. This species was identified during 2015 protocol rare plant surveys within the project survey area. During these surveys, a small patch (three individuals) of the poppy was observed within the Whittier Narrows Natural Area adjacent to a nature trail near Telecommunications Route 3. The report generated from the surveys (Appendix F) concludes that the species occurrence

was planted and would be outside of the proposed project area. There are no other known occurrences of this species within a 5-mile radius of the proposed project area.

No project activities, including ground disturbance, equipment use, or vegetation removal, are planned that would impact the known poppy occurrence. The nearest work activities would consist of installing telecommunications line on an existing pole approximately 100 feet away. SCE would utilize an existing access road and paved Nature Center trail south of the occurrence to install the cable and for maintenance activities during operations. While not expected, if an individual of this species were to be found in an area that would be impacted during construction, construction activities may result in direct impacts to the species. Indirect impacts could occur from the generation of fugitive dust or the spread of invasive weeds. These impacts to the poppy would be significant.

APM-BIO-01 and APM-BIO-02 would reduce impacts to this species by requiring pre-construction surveys for special-status plants and the development of a Revegetation Plan, and APM-AIR-01 would reduce excessive dust build-up that could indirectly impact this species; however, impacts would still be significant. Implementation of MM BR-1 would require pre-construction surveys in all areas of temporary and permanent disturbance. MM BR-2 would require that project work areas be clearly delineated to prevent inadvertent encroachment that would impact sensitive species or their habitat. MM BR-4 would require the preparation of a Noxious and Invasive Weed Control Plan and outlines requirements that must be included in the plan in order to reduce impacts associated with the spread of noxious and invasive weeds. MM BR-5 would require workers receive training in plant identification, the proposed project's environmental commitments, and how best to avoid impacting sensitive plant species. If a Coulter's Matilija poppy is found within the proposed project area, MM BR-8 would require avoidance or mitigation. Implementation of identified APMs, MM BR-1, MM BR-2, MM BR-4, MM BR-5, and MM BR-8 would reduce impacts on Coulter's Matilija poppy to a less than significant level.

Southern Tarplant

Southern tarplant is not listed under FESA or CESA. However, it has a CNPS rare plant ranking of 1B.1, meaning that it is rare, threatened, or endangered in California and elsewhere and is ~~extremely~~seriously ~~endangered~~threatened in California. This species is known to emerge readily after disturbance creates openings in the herbaceous layer. The species also contributes substantially to the soil seedbank (CCBER n.d.). Habitat for this species exists along Telecommunications Route 3 and at the eastern terminus of Telecommunications Route 1 which abuts the Rio Hondo River. The closest known occurrences of the species are approximately 0.3 miles upstream of the proposed project, east of Telecommunications Route 1 and north of Telecommunications Route 3 (CNDDB 2015).

Work within suitable habitat where this species has high~~moderate~~ potential to occur primarily includes installation of telecommunications cable on existing poles. A 275-foot segment of telecommunications cable at the eastern terminus of Telecommunications Route 1 would also be installed underground in new conduit. In addition, access and spur road improvement or rehabilitation may be required for construction and operations and could include clearing, grubbing, widening, and constructing drainage improvements. Although no permanent ground disturbance or vegetation removal is planned in the location of known individual Southern tarplant occurrences, direct impacts to known or unknown occurrences of this species could occur if they are present in the proposed work area. Indirect impacts could also occur if the species is present within or adjacent to work areas. Indirect impacts could result from dust settling on plants and

from the spread of invasive weeds that prevent the establishment of new individuals or cause the mortality of existing individuals. Impacts to Southern tarplant would be significant.

APM-BIO-01 and APM-BIO-02 would reduce impacts to this species by requiring pre-construction surveys for special-status plants and the development of a Revegetation Plan, and APM-AIR-01 would reduce excessive dust build-up that could indirectly impact this species; however, impacts would still be significant. Implementation of MM BR-1 would require pre-construction surveys in all areas of temporary and permanent disturbance. MM BR-2 would require that project work areas be clearly delineated to prevent inadvertent encroachment that would impact sensitive species or their habitat. MM BR-4 would require the preparation of a Noxious and Invasive Weed Control Plan and outlines requirements that must be included in the plan in order to reduce impacts associated with the spread of noxious and invasive weeds. MM BR-5 would require workers receive training in plant identification, the proposed project's environmental commitments, and how best to avoid impacting sensitive plant species. If a Southern tarplant is found within the proposed project area, MM BR-8 would require avoidance or mitigation. Implementation of identified APMs, MM BR-1, MM BR-2, MM BR-4, MM BR-5, and MM BR-8 in combination with the APMs identified above would reduce impacts on Southern tarplant to a less than significant level.

Plummer's Mariposa-lily

Plummer's Mariposa-lily is not listed under FESA or CESA. However, it has a CNPS rare plant ranking of 4.2, which means that it is a species of limited distribution and moderately threatened~~fairly endangered~~ in California. Potential habitat for this species occurs along Telecommunications Route 3; however, this habitat is not of high quality. Recent CNDDB occurrences indicate that this species is frequently observed in the Puente Hills area south of Telecommunication Route 3 but the closest occurrence is approximately 2.5 miles south of Telecommunications Route 3. Therefore, the potential for this species to occur within the proposed project area is moderate. However, if a Plummer's Mariposa-lily were found within the proposed project area, impacts to this species would be significant. Although the applicant has committed to implementing APM-BIO-01, APM-BIO-02, and APM-BIO-03, these APMs would not reduce impacts to this species to less than significant. Plummer's Mariposa-lilies, if found on site, may be damaged or destroyed if pre-construction surveys are not completed closer to construction. Therefore, the applicant would be required to implement MM BR-1, which requires pre-construction surveys; MM BR-2, which would require delineating work areas; MM BR-5, which would require that workers receive training in plant identification, the proposed project's environmental commitments, and how best to avoid impacting sensitive plant species; and MM BR-8, which would require mitigation for impacts to Plummer's Mariposa lily at a minimum 1.5:1 ratio. With the implementation of applicable APMs, and MM BR-1, MM BR-2, MM BR-5, and MM BR-8, impacts would be reduced to less than significant.

Intermediate Mariposa-lily

The intermediate Mariposa-lily is not listed under the CESA or FESA; however, it has a CNPS rare plant ranking of 1B.2, which means that it is rare, threatened, or endangered in California and elsewhere. Suitable habitat for this species exists along Telecommunications Route 3; however, there have been no documented occurrences of this species within the proposed project area or the immediate vicinity. There have been four historic CNDDB occurrences, which were documented between 2008 and 2010, within 5 miles of the proposed project area. The closest occurrence was approximately 2.5 miles south of Telecommunications Route 3. The potential for this species to be present within the proposed project area is considered moderate. If this species is found in the

proposed project area and damaged or removed, impacts to this species would be significant. Although the applicant has committed to implementing APM-BIO-01, APM-BIO-02, and APM-BIO-03, these APMs would not reduce impacts to this species to less than significant because success criteria for replanting and replacement ratios are not included, and worker training to identify the resource is not included. Therefore, the applicant would be required to implement MM BR-1, which would require pre-construction surveys; MM BR-2, which requires delineating work areas occurring in the vicinity of sensitive species; MM BR-5, which require that workers receive training in plant identification, the proposed project's environmental commitments, and how best to avoid impacting sensitive plant species; and MM BR-8, which would require mitigation for impacts to intermediate mariposa lily at a minimum 1.5:1 ratio. With the implementation of MM BR-1, MM BR-2, MM BR-5, and MM BR-8, in combination with the APMs identified above, impacts would be reduced to less than significant.

Special-Status Wildlife

Construction activities could result in direct impacts on special-status species through mortality or injury to individual animals resulting from collisions with vehicles and equipment, hazardous material spills, or fires caused by construction crews. Noise and visual disturbances during construction could result in direct impacts on birds and other wildlife through nesting avoidance or nest abandonment within work areas or in adjacent areas. Although loss of individual animals is permanent, small losses of individuals would not likely be significant in terms of a species' broader population health, unless the species is very rare.

Indirect impacts on special-status species would primarily result from the loss of suitable habitats (e.g., vegetation, burrows, rock piles), degradation of habitats through fragmentation and edge effects, and degradation through the introduction or spread of noxious and invasive weed species that would alter native plant species' compositions and densities. These effects could lead to adverse impacts on special-status wildlife species and their habitats, including increased predation, lower reproductive success, loss of foraging habitat, habitat avoidance, lower carrying capacities of remaining suitable habitats, and altered fire regime. Indirect impacts at the work areas surrounding new structures, tower removal sites, laydown yards, pull and tensioning sites, and any areas with ground disturbance that would be restored post-construction would be temporary in nature, although re-growth of some wildlife habitats, such as shrubs and trees, could be long-term in duration. Given that many special-status wildlife species are considered rare or have reduced range sizes, indirect impacts resulting from habitat loss or degradation could result in significant impacts on a species. These impacts are discussed in detail below by type of wildlife species and, where appropriate, specific species.

Amphibians

Western Spadefoot

Western spadefoot is a state species of special concern. It may be present in floodplains along:

- Telecommunications Route 3 where Telecommunications Route 3 parallels San Gabriel Boulevard and Durfee Avenue
- Open areas of scrub habitat where puddles may form after rain along East Lincoln Avenue where it parallels Telecommunications Route 3
- At the easternmost segment of Telecommunications Route 1 east of San Gabriel Boulevard~~Avenue~~

Along the majority of the Telecommunications Routes 1 and 3, no ground disturbing activities are planned; telecommunications cable would be installed on existing poles located along existing roadways. Trenching would occur at the easternmost terminus of both Telecommunications Routes 1 and 3 were approximately 275 feet of the telecommunications cable and new conduit would be placed underground on each route. A CNDDB search identified one documented occurrence of this species within 5 miles of the proposed project, which was located more than 4 miles southeast of Telecommunications Route 3. Throughout most of the year, this species resides in underground burrows making detection of individuals difficult. The floodplains along the proposed project components may be used by the western spadefoot for breeding or burrowing. The potential for western spadefoot to occur in the proposed project area is moderate; however, if the species is found within the proposed project area, construction activities would have the potential to adversely impact this species through direct mortality. This would be a significant impact.

Although SCE has committed to implementing APM-AIR-01 and APM-BIO-03, which commits to speed limits of 15 miles per hour (mph) and biological monitoring if feasible, implementation of these APMs would not reduce impacts to less than significant. These APMs would not provide training for the identification of sensitive resources, or require pre-construction surveys to inform the biological monitoring effort as to what is already on-site, ensure biological monitoring of all appropriate construction activities, and do not provide direction as to what should be done if a spadefoot is observed during construction. Therefore, SCE would implement MM BR-1, which requires pre-construction surveys; MM BR-2, which requires installation of exclusionary fencing to delineate the designated work areas and avoid sensitive resources, such as western spadefoot, as necessary and appropriate; MM BR-5, which requires implementation of a WEAP to inform workers of the sensitive biological resources with a potential to be impacted by the project and relevant permits; MM BR-9, which requires the appropriate level of construction monitoring by a qualified biologist; and MM BR-10, which requires covering steep walled trenches and excavations at the end of each work day. Per. Implementation of MM BR-1, MM BR-2, MM BR-5, MM BR-9, and MM BR-10, in combination with the APMs identified above, would reduce impacts to western spadefoot to less than significant.

Reptiles

Belding's Orange-throated Whiptail

Belding's orange-throated whiptail is a state species of special concern. One whiptail was observed along proposed Telecommunications Route 3 adjacent to East Lincoln Avenue. Habitat exists along the eastern two-thirds of Telecommunications Route 3 and the far eastern portion of Telecommunications Route 1 east of San Gabriel Boulevard. Along the majority of the Telecommunications Routes 1 and 3 no ground disturbing activities are planned; telecommunications cable would be installed on existing poles located along existing roadways. Trenching would occur at the easternmost terminus of both Telecommunications Routes 1 and 3, where approximately 275 feet of the telecommunications line and new conduit would be placed underground on each route.

Direct impacts to Belding's orange-throated whiptail, including injury or mortality, could occur if the species is present within the proposed project area during construction activities. Such impacts to this state species of special concern would be significant. APM-AIR-01 would require speed limits of 15 mph on all unpaved roads. APM-BIO-03 would require a biological monitor to be present to the extent feasible while construction activities are taking place in areas with special-status species

and wildlife habitat. However, implementation of APM-AIR-01 and APM-BIO-03 would not reduce impacts to a less than significant level because these APMs would not provide training for the identification of sensitive resources, require pre-construction surveys to inform the biological monitoring effort as to what is already on site, do not ensure biological monitoring of all appropriate construction activities, and do not provide direction as to what should be done if a whiptail is observed during construction. Therefore, the applicant would be required to implement MM BR-1, which would require pre-construction surveys; MM BR-2, which would require delineation of work areas and establishment of buffers to protect sensitive resources; MM BR-5, which would require implementation of a WEAP to inform workers of the sensitive biological resources with a potential to be impacted by the project and relevant permits; MM BR-9, which would require the appropriate level of construction monitoring by a qualified biologist; and MM BR-10, which requires covering steep walled trenches and excavations at the end of each work day. With the implementation of the APMs identified above, and MM BR-1, MM BR-2, MM BR-5, MM BR-9, and MM BR-10, impacts to Belding's orange throated whiptail would be less than significant.

Western Pond Turtle

Western pond turtle is a state species of special concern. Suitable habitat for the western pond turtle occurs along Telecommunications Route 3 in locations where it parallels East Lincoln Avenue, San Gabriel Boulevard~~Avenue~~, and Durfee Avenue as well as at the eastern terminus of proposed Telecommunications Route 1, east of San Gabriel Boulevard ~~Avenue~~. One CNDDB occurrence of this species within the vicinity of proposed Telecommunications Route 3 within the Whittier Narrows Natural Area is considered extant. There have been other occurrences of this species within 5 miles of the proposed project; however, these CNDDB occurrences are considered to be extirpated due to habitat changes within those areas. Direct impacts to this species or its habitat, including mortality or injury or damage to burrows, could occur if the species or its burrows are present in the proposed project area during construction. Impacts to this species of special concern would be significant.

Implementation of APM-AIR-01 would require speed limits of 15 mph and APM-BIO-03 would require a biological monitor to be present to the extent feasible while construction activities are taking place in areas with special-status species and wildlife habitat. However, implementation of APM-AIR-01 and APM-BIO-03 would not reduce impacts to a less than significant level, these APMs would not provide training for the identification of sensitive resources, would not require pre-construction surveys to inform the biological monitoring effort as to what is already on site, do not ensure biological monitoring of all appropriate construction activities, and do not provide direction as to what should be done if a western pond turtle is observed during construction. Therefore, the applicant would be required to implement MM BR-1, which would require pre-construction surveys to identify whether the species is present within the work area; MM BR-2, which would require delineation of work areas and establishment of a buffer if the species is present; MM BR-5, which would require implementation of a WEAP to inform workers of the sensitive biological resources with a potential to be impacted by the project and relevant permits; MM BR-9, which would require the appropriate level of construction monitoring by a qualified biologist if the species is present; and MM BR-10, which requires covering steep walled trenches and excavations at the end of each work day. With the implementation of these APMs and MM BR-1, MM BR-2, MM BR-5, MM BR-9, and MM BR-10, impacts to the western pond turtle would be reduced to less than significant.

Mammals

Southern Grasshopper Mouse

Southern grasshopper mouse, which is a state species of special concern, is not known to be present in the project area but has a moderate potential to occur within natural areas along Telecommunications Route 3. If present during construction, human presence and noisy construction activities as well as ground disturbing activities could directly or indirectly impact the southern grasshopper mouse. These impacts would be significant. SCE has committed to implementing APM-AQ-01 and APM-BIO-03, which commits to speed limits of 15 mph on unpaved roads and monitoring to the extent feasible if a special-status species is present. These APMs would not reduce impacts to southern grasshopper mouse to less than significant, and they would not provide training for the identification of sensitive resources, would not require pre-construction surveys to inform the biological monitoring effort as to what is already on site, do not ensure biological monitoring of all appropriate construction activities, and do not provide direction as to what should be done if a southern grasshopper mouse is observed during construction. Therefore, SCE would also implement MM BR-1, which would require pre-construction surveys to identify whether the species is present within the work area; MM BR-2, which would require delineation of work areas and establishment of a buffer if the species is present; MM BR-5, which would require implementation of a WEAP to inform workers of the sensitive biological resources with a potential to be impacted by the project and relevant permits; MM BR-9, which would require the appropriate level of construction monitoring by a qualified biologist if the species is present; and MM BR-10, which requires covering steep walled trenches and excavations at the end of each work day. Implementation of MM BR-1, MM BR-2, MM BR-5, MM BR-9, and MM BR-10 in combination with the APMs identified above, would reduce impacts to the southern grasshopper mouse to a less than significant level.

Special Status Birds

The proposed project area contains suitable habitat for several special-status birds as well as those protected by the MBTA and Fish and Game Code. Raptor species, such as the peregrine falcon, white-tailed kite, and Swainson's hawk, were observed within the main project area during surveys and may have been foraging or flying through. Due to limited habitat, nesting of any of these raptor species in the proposed project area would be rare. Raptors likely would only occur during migration and/or foraging. In addition, coastal California gnatcatcher, least Bell's vireo, loggerhead shrike, and yellow warbler have been observed within the proposed project area and are therefore assumed to be present. In addition, coastal California gnatcatcher, least Bell's vireo, loggerhead shrike, and yellow warbler have been observed within the proposed project area and are therefore assumed to be present. Moderate potential also exists for western burrowing owl at the proposed project site. Several other species protected under the MBTA and Fish and Game Code may also be present.

Construction activities could result in direct impacts on birds through mortality or injury of individual birds, removal or disturbance of active nests, visual disturbance (e.g., night lighting), or noise disturbance which results in nest abandonment. Construction disturbance that results in loss of individual birds, or during the general bird breeding season for the region that results in loss of fertile eggs or nestlings, or that otherwise leads to nest abandonment, would be significant for special-status birds.

Vegetation clearing or trimming, grading, and other ground-disturbing activities would result in indirect impacts on birds by removing nesting habitat, by removing foraging habitat, by degrading

adjacent habitat through fragmentation, and by the introduction or spread of noxious or invasive wildlife and plant species. Indirect impacts to birds listed as "threatened," "endangered," or other otherwise listed as species of special concern, would further jeopardize the species existence and reduce total habitat. This would be a significant impact for special-status birds.

SCE may require night lighting during construction which would impact avian species. Additionally, SCE would implement APM-BIO-03, which commits to biological monitoring to the extent feasible as well as APM-BIO-06, which commits to conducting pre-construction clearance surveys within seven days prior to construction during the avian nesting season, establishing a buffer around active nests, and monitoring of active nests. SCE would also implement APM-AIR-01 which would require a speed limit of 15 mph on unpaved project roads, reducing the impacts from fugitive dust creation, and direct bird strikes. Implementation of APM-BIO-03, APM-BIO-06, and APM-AIR-01 would reduce construction related impacts to special-status avian species and their nests, but would not reduce impacts to a less than significant level because survey sweeps would not necessarily identify all nesting birds prior to construction, workers would not be trained in identification and avoidance of special-status birds, APMs would not ensure proper monitoring protocols are followed, and revegetation may not adequately replace habitat used by special-status birds.

To further protect avian species and their nests, MM BR-1 would require that a pre-construction survey be conducted in all areas of temporary and permanent disturbance prior to construction as well as a pre-construction sweep within 24 hours prior to beginning construction in new work areas. MM BR-2 would require delineation of work areas and establishment of a buffer to protect any special-status species, including protected avian species. MM BR-5 would require implementation of a WEAP to inform workers of the sensitive biological resources with a potential to be impacted by the project and relevant permits. MM BR-9 would require the appropriate level of construction monitoring by a qualified biologist. MM BR-11 would require that SCE prepare a Nesting Bird Management Plan in coordination with USFWS, CDFW, and CPUC before the start of construction if any portion of the proposed project is scheduled to occur during the general bird nesting season. MM AES-6 would require lights be oriented downward and shielded to eliminate off-site light spill and be controlled by either motion-sensors or timers. With implementation of MM BR-1, MM BR-2, MM BR-5, MM BR-9, MM BR-11, and MM AES-6, in combination with the APMs identified above, impacts to most special-status avian species, including those protected under the MBTA and Fish and Game Code, would be reduced to less than significant. Additional specific mitigation measures for species known to be present within the proposed project area are discussed in further detail below.

Coastal California Gnatcatcher (Including USFWS-Designated Critical Habitat)

The coastal California gnatcatcher is federally threatened and a state species of special concern. It has been observed foraging within the proposed Mesa Substation site area, adjacent to 500-kV and 220-kV transmission corridors southwest of the proposed substation site area, along Telecommunications Route 3, and at the eastern terminus of Telecommunications Route 1 east of San Gabriel Boulevard. Nesting pairs have been observed within the Proposed Mesa Substation site area and along Telecommunication Route 3. Additional suitable habitat for this species exists within other transmission and subtransmission corridors adjacent to the proposed Mesa substation site as well as along Telecommunications Route 2a. However, there are no documented occurrences of the species within these areas.

During habitat assessments, suitable habitat was considered to be coastal sage scrub with greater than 50 percent cover, consisting of species such as California sagebrush and/or California buckwheat, or areas consisting of a matrix of sparse, scattered coastal sage scrub shrubs and annual/biennial vegetation with sufficient morphological structure and density to support coastal California gnatcatcher nesting and provide foraging opportunities (Insignia 2015b).

Direct impacts to this species or its nest could occur as a result of vehicular collision and nest failure or abandonment due to noise and human presence during construction; this would be a significant impact. APM-BIO-03 commits SCE to monitoring construction activities to the extent feasible. APM-BIO-04 commits SCE to conducting pre-construction surveys for the coastal California gnatcatcher if construction activities occur during the avian nesting season; establishing an exclusionary buffer, in coordination with USFWS, if a nest is observed,; and full-time monitoring of construction activities in occupied habitat. Direct impacts would still be significant because APM-BIO-3 does not ensure proper monitoring protocols are followed and APM-BIO-04 would not require the established protocol to be used for gnatcatcher surveys.

Indirect impacts to this species could result from habitat modifications through vegetation trimming, clearing of vegetation, and other ground-disturbing activities. The proposed project would include removal of approximately 14.23 acres of coastal California gnatcatcher habitat. As described further in Table 4.3-4, temporary impacts to 1.89 acres of USFWS designated gnatcatcher critical habitat along Telecommunications Route 3 may occur. Impacts due to the temporal loss of designated gnatcatcher critical habitat could occur; the ecosystem function of the community, including its contribution to breeding, feeding, and cover habitat for coastal California gnatcatcher, would be compromised during the time period it would take to restore or mitigate for the habitat. Indirect impacts would be significant.

Table 4.3-4 Areas of Potential Impact on Coastal California Gnatcatcher Habitat and Critical Habitat

Project Component	Approximate Impact Area (acres)	Approximate Temporary Impacts (acres)	Approximate Permanent Impacts (acres)
Proposed Mesa Substation	21.54	7.45	14.09
Associated transmission, subtransmission, and distribution lines	2.06	1.92	0.14
Telecommunication Route 2a	0.43	0.43	0.0
Telecommunications Route 3	2.28	2.28	0.0
Total	**26.31**	**12.08**	**14.23**
Impacts within USFWS Critical Habitat	**1.89**	**1.89**	**0.0**

Source: Insignia 2015b.

APM-BIO-02 commits to minimizing impacts and permanent loss to vegetation that is regulated by federal, state, or local agencies, and/or that provides suitable habitat for special-status species. It also commits to preparing a Revegetation Plan if impacts could not be avoided for areas of native habitat temporarily and/or permanently impacted during construction. Implementation of APM-BIO-02, APM-BIO-03, and APM-BIO-04 would reduce impacts to coastal California gnatcatcher and its habitat, but impacts would still be significant because these APMs may not adequately mitigate the spread of invasive species, do not mitigate fully for temporal loss of gnatcatcher habitat, and do not provide training for workers with regards to identifying coastal California gnatcatcher.

As discussed above, the applicant would be required to implement MM BR-2, requiring protective buffers be established to restrict construction activities around sensitive resources; MM BR-3, which would require all impacts to gnatcatcher habitat be restored and trimming of vegetation within gnatcatcher habitat be monitored by a qualified biologist; MM BR-5, which would require a WEAP be presented to workers to inform them of the sensitive biological resources with a potential to be impacted by the project and relevant permits; MM BR-9, requiring the appropriate level of construction monitoring by a qualified biologist; and MM BR-11, which would require the preparation of a Nesting Bird Management Plan. In addition, to reduce impacts to coastal California gnatcatcher, the applicant would be required to implement MM BR-12, which requires that the applicant retain a USFWS-approved biologist to conduct protocol level pre-construction surveys for the coastal California gnatcatcher in accordance with USFWS 1997 protocol, maintain a buffer from occupied territory, and restricts use of helicopters during the avian nesting season.

With the implementation of MM BR-2, MM BR-3, MM BR-5, MM BR-9, MM BR-11, and MM BR-12, in combination with the APMs identified above, impacts to coastal California gnatcatcher and its habitat would be less than significant.

Least Bell's Vireo

Least Bell's vireo is a federally and state endangered species. It has been observed foraging within ~~the proposed Mesa Substation site area and adjacent~~ the 500-kV transmission line corridor adjacent to the Mesa Substation as well as nesting along portions of Telecommunications Route 3. Construction activities, such as clearing vegetation and grading ~~within the proposed Mesa Substation site~~ in the transmission corridor and along Telecommunications Route 3, could result in direct impacts including injury or mortality to an individual least Bell's vireo or the loss of a nest as a result of human presence, dust, or noise. Construction activities could also result in indirect impacts such as the disruption of nesting or foraging behaviors or the loss of habitat. Impacts to least Bell's vireo would be significant.

To reduce indirect impacts to least Bell's vireo associated with loss of habitat, SCE would implement APM-BIO-02, which commits to minimizing impacts and permanent loss to vegetation that is regulated by federal, state, or local agencies, and/or that provides suitable habitat for special-status species. It also commits to preparing a Revegetation Plan if impacts could not be avoided for areas of native habitat temporarily and/or permanently impacted during construction. Direct impacts to the species or its nest could also occur if the species is present and/or nesting in close proximity to construction activities and appropriate protective measures were not taken. APM-BIO-03 commits to monitoring construction activities to the extent feasible. APM-BIO-05 commits to conducting pre-construction surveys for least Bell's vireo if construction activities would commence between March 15 and September 30; establishing an exclusionary buffer, in coordination with USFWS, if a nest is observed; full-time monitoring of construction activities in occupied habitat by a USFWS and CDFW approve biological monitor; and additional mitigation for habitat, as required by USFWS and CDFW. However, implementation of APM-BIO-02, APM-BIO-03, and APM-BIO-05 would not reduce impacts to least Bell's vireo or its habitat to a less than significant level because they do not require the established least Bell's vireo survey protocol in pre-construction surveys; they may not adequately mitigate the spread of invasive species; they do not ensure proper monitoring protocols are followed; and they do not provide training for workers with regards to identifying least Bell's vireo.

To further protect avian species and their nests, the applicant would be required to implement avian protection measures, as discussed above, including MM BR-2, requiring protective buffers be established to restrict construction activities around sensitive resources; MM BR-3, which would require all impacts to gnatcatcher habitat be restored and trimming of vegetation within gnatcatcher habitat be monitored by a qualified biologist; MM BR-5, which would require the implementation of a WEAP to inform workers of the sensitive biological resources with a potential to be impacted by the project and relevant permits; MM BR-9, requiring construction monitoring at the appropriate level by a qualified biologist; and MM BR-11, which would require the preparation of a Nesting Bird Management Plan. In addition, MM BR-13 would require that protocol level pre-construction surveys be conducted in areas of potential habitat for least Bell's vireo, as determined by an appropriate biologist, in accordance with USFWS's Least Bell's Vireo Survey Guidelines (USFWS 2001). With implementation of the APMs identified above and MM BR-2, MM BR-3, MM BR-5, MM BR-9, MM BR-11, and MM BR-13, impacts to least Bell's vireo would be reduced to a less than significant level.

Loggerhead Shrike

Loggerhead shrike is a state species of special concern. This species was observed foraging in the Mesa Substation area of the proposed project within non-native habitat and in disturbed areas. Loggerhead shrike are present within this area year round and direct impacts to loggerhead shrike could occur if this species is present during construction activities, particularly during vegetation removal, grading, and activities requiring helicopter use within the vicinity of suitable habitat. Although no nesting loggerhead shrike have been observed within the proposed project area, suitable habitat is present for nesting. Direct or indirect impacts to nests could occur as a result of vegetation removal, grading, or noise. Impacts to this species or its nest would be significant. SCE would implement APM-BIO-03, which commits to monitoring to the extent feasible, and APM-BIO-06, which commits to conducting pre-construction nesting bird surveys, establishing buffers, and monitoring around active nests. Although implementation of these APMs would reduce impacts to loggerhead shrike, impacts would still be significant because they do not provide qualifications for the biologists completing the pre-construction surveys, they do not ensure proper monitoring protocols are followed, or provide training to the workers regarding the identification of special-status species, including loggerhead shrike.

Therefore, to further reduce impacts to avian species and their nests, MM BR-1 would require that a preconstruction survey be conducted in all areas of temporary and permanent disturbance prior to construction. In addition, a pre-construction sweep would be conducted within 24 hours prior to beginning construction each day in all construction areas during nesting bird season. MM BR-2 would require delineation of work areas and establishment of a buffer to restrict work activities occurring near sensitive resources. MM BR-5 would require SCE to implement a WEAP to inform workers of the sensitive biological resources with a potential to be impacted by the project and relevant permits. MM BR-9 would require construction monitoring at the appropriate level by a qualified biologist, and MM BR-11 would require that SCE prepare a Nesting Bird Management Plan in coordination with agencies. With the implementation of these APMs and MM BR-1, MM BR-2, MM BR-5, MM BR-9, and MM BR-11, impacts to loggerhead shrike would be reduced to less than significant.

Western Burrowing Owl

Western burrowing owl is a state species of special concern. Suitable habitat for western burrowing owl exists within, and adjacent to, the proposed Mesa Substation site area in annual grassland/non-

native habitat areas. No burrowing owls or signs of burrowing owls were observed within the proposed project area during 2009 and 2010 protocol-level surveys, and no burrowing owls or signs were observed during general biological surveys during 2014 (Section 4.3.1.2). During construction, areas of potential habitat would be graded and compacted by heavy equipment and construction vehicles. Impacts in some of these areas would be permanent (e.g., areas where transmission poles or access roads would be permanently located). If burrowing owls are present within work areas during construction they could be directly or indirectly impacted by the presence of construction equipment, human presence, or loss of habitat. These impacts would be significant. SCE would implement APM-BIO-03, which commits to monitoring to the extent feasible, and APM-BIO-06, which commits to conducting pre-construction nesting bird surveys, establishing buffers, and monitoring around active nests. While these APMs would reduce impacts to all special-status bird species, impacts to burrowing owls would still be significant because these measures do not provide any mitigation specific to western burrowing owl, do not provide qualifications for the biologists completing the pre-construction surveys, do not ensure biological monitoring of all appropriate construction activities, do not require survey protocol approved by the CDFW, and do not provide training to the workers regarding the identification of special-status species, including burrowing owl.

Therefore, to further reduce impacts to avian species and their nests, MM BR-1 would require that a general pre-construction survey be conducted in all areas of planned temporary and permanent disturbance prior to construction. In addition, a pre-construction sweep would be conducted within 24 hours prior beginning construction in new works areas. These surveys would help identify burrowing owls if they move into an area after the more extensive protocol-level survey. MM BR-2 would require delineation of work areas and establishment of a buffer to restrict work activities where sensitive resources occur. MM BR-5 would require implementation of a WEAP to inform workers of the sensitive biological resources with a potential to be impacted by the project and relevant permits. MM BR-9 would require construction monitoring by a qualified biologist. Finally, MM BR-11 would require that SCE prepare a Nesting Bird Management Plan, which requires protocol-level burrowing owl surveys and CDFW-recommended burrowing owl specific mitigation in the event burrowing owls are confirmed within the proposed project area. With implementation of APMs, and MM BR-1, MM BR-2, MM BR-5, MM BR-9, and MM BR-11, impacts to western burrowing owl would be less than significant.

Yellow Warbler

The yellow warbler is a state species of special concern. This species was observed within the Proposed Mesa Substation footprint and along Telecommunications Routes 1 and 3. While no active nests were observed in the proposed project area, suitable habitat for nesting is present along Telecommunications Route 3 along East Lincoln Avenue, San Gabriel Boulevard~~Avenue~~, and Durfee Avenue. Loss of suitable foraging and nesting habitat would occur as a result of the removal and trimming of vegetation with the proposed Mesa Substation footprint and if trimming is required during construction along these telecommunications routes. In addition, direct impacts could occur as a result of a collision with construction equipment or as a result of human presence and construction activities that could impact nests or nesting behavior. These impacts could be significant. SCE would implement APM-BIO-03, which commits to monitoring to the extent feasible, and APM-BIO-06, which commits to conducting pre-construction nesting bird surveys, establishing buffers, and monitoring around active nests. While these APMs would reduce impacts to yellow warbler, impacts would still be significant because they do not provide qualifications for the biologists completing the pre-construction surveys or provide training to the workers regarding the identification of special-status species, including yellow warbler.

To further reduce impacts to avian species and their nests, MM BR-1 would require that a pre-construction survey be conducted in all areas of temporary and permanent disturbance prior to construction. In addition, a pre-construction sweep would be conducted within 24 hours prior to beginning construction in new work areas. MM BR-2 would require delineation of work areas and establishment of a buffer. MM BR-5 would require SCE implement a WEAP to inform workers of the sensitive biological resources with a potential to be impacted by the project and relevant permits. MM BR-9 would require construction monitoring. MM BR-11 would require that SCE prepare and implement a Nesting Bird Management Plan. With implementation of MM BR-1, MM BR-2, MM BR-5, MM BR-9, and MM BR-11, in combination with the APMs identified above, impacts would be less than significant.

Operation and Maintenance

LESS THAN SIGNIFICANT WITH MITIGATION

Operation of the proposed project would be similar to ongoing maintenance activities of existing electrical infrastructure and would include O&M activities related to MWD's relocated Middle Feeder. There would be no increase in the number of employees or level of service required to maintain the proposed infrastructure. Ongoing activities would include, at a minimum, inspection of transmission, subtransmission, and distribution components at least once a year; pole or tower replacement, access road maintenance, and hardware replacement on an as needed basis; emergency infrastructure repair, if required; and brush clearing to maintain adequate fire setbacks required by applicable permits. CPUC General Order 95, Rule 35, establishes minimum brush clearance requirements around overhead electrical supply and communication facilities. Maintaining adequate setbacks may require brush clearing and weeding. Operations and maintenance activities would be infrequent, confined to previously disturbed areas, and of much lower intensity than the construction-related activities described above. However, direct or indirect impacts could still occur on individual Nevin's barberry plants, a species listed as endangered under the CESA and FESA. MM BR-6 would require that operation and maintenance activities associated with the proposed project avoid impacts on individual Nevin's barberry plants. With the implementation of MM BR-6, impacts on any candidate, sensitive, or special-status species from operation and maintenance activities would be less than significant.

In addition, direct or indirect impacts on nesting birds protected by the MBTA, Fish and Game Code, FESA, or CESA could occur during operation and maintenance of the proposed project. SCE has procedures in place to prevent or minimize impacts on nesting birds. SCE has committed to the following avoidance and minimization measures as needed: pre-activity nesting bird surveys, delaying work when nests are present, limiting O&M activities during nesting season, monitoring nests, and performing vegetation management activities outside nesting season (SCE 2016). Because these measures would be in place during O&M, impacts on nesting bird species would be less than significant.

Construction of the proposed Mesa 500-kV Substation Project would involve installation of new transmission and subtransmission structures to replace existing structures. The orientation of the line would be similar and the project would not introduce new transmission facilities into a location where none existed previously. During operations, direct impacts on avian species could result from collisions with these new structures. The possibility for collision would be especially great at night and during inclement weather. Electrocution on the transmission, subtransmission, distribution, and telecommunications lines, as well as some components of the substation, could

also occur if vertical and horizontal separation between components is not sufficient, allowing larger birds to touch components simultaneously with their wings or other body parts, or if energized parts are not covered. APM-BIO-07, commits to designing electrical facilities in accordance with APLIC's *Suggested Practices for Avian Protection on Power Lines: the State of the Art in 2006* (APLIC 2006). In addition, the applicant would evaluate the potential of collisions of avian species with the proposed transmission features, in accordance with the APLIC's guidance as described in *Reducing Avian Collisions with Power Lines: The State of Art in 2012* (APLIC 2012). While APM-BIO-07 states electrical facilities would be designed in accordance with APLIC's suggested standards and the applicant committed to evaluate the potential of collisions in accordance with APLIC's guidance, these measures do not commit the applicant to documenting specifics or demonstrating that APLIC standards are being properly implemented specifically for the proposed project. Should standards to reduce the risk of collision and electrocution not be effectively applied, impacts to birds would be significant. The project's Avian Protection Plan, required under MM BR-15, would describe how the APLIC suggested standards would be followed and implemented. Implementation of this mitigation measure would reduce impacts associated with avian collision and electrocution to less than significant and ensure that risk of electrocution and collision are minimized to the greatest extent possible. Therefore, impacts under this criterion would be less than significant with the implementation of APM-BIO-07 and MM BR-15.

Impact BR-2: Substantial adverse effect on riparian habitat or other sensitive natural community.
LESS THAN SIGNIFICANT WITH MITIGATION

Construction

Construction of the proposed project would temporarily impact approximately 172.09 acres and permanently impact approximately 76.72 acres of land. The extent of permanent and temporary impacts to vegetation in the project area is detailed by vegetation type in Table 4.3-5.

Table 4.3-5 Vegetation Impacts from Permanent and Temporary Impacts

Vegetation Community	Approximate Survey Area (acres)	Approximate Temporary Impacts (acres)	Approximate Permanent Impacts (acres)
Mesa Substation			
Coastal sage scrub	0.16	0.16	0.00
Disturbed/developed areas	54.63	4.5	50.13
Ephemeral drainages	2.50	0.68	1.82
Mulefat scrub	0.33	0.13	0.20
Non-native woodland	9.17	1.08	8.09
Non-native vegetation	19.24	9.14	10.10
Riparian woodland	0.18	0.04	0.14
North Area			
Coast live oak woodland	0.26	0.00	0.00
Disturbed/developed areas	8.80	1.48	0.00
South Area			
Disturbed/developed areas (Street Light Source Conversion)	1.22	0.00	0.00
Non-native vegetation (Tower Replacement)	5.40	1.11	0.00

Table 4.3-5 Vegetation Impacts from Permanent and Temporary Impacts

Vegetation Community	Approximate Survey Area (acres)	Approximate Temporary Impacts (acres)	Approximate Permanent Impacts (acres)
Telecommunications Routes			
California annual grassland	17.32	15.72	1.56
California walnut woodland	1.87	0.00	0.00
Coastal sage scrub	3.06	0.33	0.00
Disturbed/developed areas	240.22	92.39	2.92
Mulefat scrub	13.86	1.41	0.00
Non-native giant reed	0.15	0.00	0.00
Non-native woodland	34.24	8.59	0.27
Riparian woodland	1.19	0.37	0.02
Non-native vegetation	47.26	33.98	1.46
Southern sycamore-alder riparian woodland	2.79	0.37	0.00
Ephemeral drainages	0.64	0.57	0.01
Intermittent drainages	1.98	0.00	0.00
Man-induced wetlands	0.04	0.04	0.00
Total	**466.51**	**172.09**	**76.72**

Source: Insignia 2015b.

Riparian Habitat

Riparian communities, including ephemeral drainages, mulefat scrub, and riparian woodlands are located within the proposed Mesa Substation area and adjacent transmission corridors, along Telecommunications Routes 2 and 3, and within Staging Yards 1, 2, and 3. The proposed project includes grading and alteration of several drainages for access roads and construction of the proposed Mesa Substation as well as trimming of vegetation along Telecommunications Routes 2 and 3. As detailed in Table 4.3-6, 3.61 acres of riparian habitat would be temporarily impacted during construction activities and 2.19 acres would be permanently disturbed. Impacts due to the temporal loss of riparian vegetation community could occur; the ecosystem function of the community, including its contribution to breeding, feeding, and cover habitat for wildlife, would be compromised during the time period it would take to restore or mitigate for the community. Indirect impacts may also occur through the generation of fugitive dust that hinders vegetation's ability to photosynthesize and through the introduction of non-native species that outcompete native riparian species. The movement of construction vehicles in and around riparian habitats has the potential to introduce and spread invasive species. The direct removal of riparian habitat through grading, alteration, or trimming, and indirect impacts from the introduction of invasive species and fugitive dust accumulation would be significant.

Table 4.3-6 Direct Impacts to Sensitive Natural Communities during Construction and Operation

Sensitive Natural Community	Approximate Temporary Impacts (acres)	Approximate Permanent Impacts (acres)
Mesa Substation		
Ephemeral Drainages	0.68	1.82
Mulefat Scrub	0.13	0.20
Riparian Woodland	0.04	0.14
Coastal Sage Scrub	0.16	0.00

Table 4.3-6 Direct Impacts to Sensitive Natural Communities during Construction and Operation

Sensitive Natural Community	Approximate Temporary Impacts (acres)	Approximate Permanent Impacts (acres)
North Area		
Southern Coast Live Oak Woodland	0.26	0.00
Telecommunications Routes 2 and 3		
Ephemeral Drainages	0.57	0.01
Human-Induced Wetlands(1)	0.04	0.00
Mulefat Scrub	1.41	0.00
Riparian Woodland	0.37	0.02
Southern Sycamore–Alder Riparian Woodland	0.37	0.00
Coastal Sage Scrub	0.33	0.00
Total	**4.32**	**2.19**

Source: Insignia 2015b.
Note:
(1) Human-Induced Wetlands were found to contain riparian vegetation and may be considered Waters of the United States.

To reduce impacts to riparian habitat, SCE would implement APM-BIO-02, APM-BIO-03, and APM-AIR-01, requiring biological monitoring, minimizing impacts on sensitive natural communities as feasible, restoring sensitive vegetation impacted by the proposed project, and reducing fugitive dust. These impacts, however, would still be significant because monitoring may not be extensive enough to prevent impacts on sensitive communities during construction, sufficient restoration may not occur for all impacted riparian areas, and construction activities may encourage the spread of invasive species into sensitive habitats due to a lack of proper prevention methods. SCE would be required to implement MM BR-2, limiting construction to designated areas where sensitive resources (e.g., riparian habitat) are present; MM BR-3, requiring the implementation of a Habitat Restoration Plan; MM BR-4, requiring implementation of a Noxious and Invasive Weed Program; MM BR-5 would require SCE to implement a WEAP to inform workers of the sensitive biological resources with a potential to be impacted by the project and relevant permits; MM BR-9, which would require a qualified biologist to be present during construction within 100 feet of sensitive habitat; and MM BR-14, which would require that the applicant minimize impacts to riparian habitat to the extent feasible. If impacts to riparian habitat cannot be avoided, MM BR-14 would require that the applicant consult with CDFW to determine if a LSAA, pursuant to California Fish and Game Code Section 1600, would be necessary. If CDFW determines that an LSAA is necessary, the applicant would be required to obtain an LSAA in accordance with Section 1600 of the California Fish and Game Code. Implementation of MM BR-2, MM BR-3, MM BR-4, MM BR-5, MM BR-8, and MM BR-14 would reduce impacts on riparian habitat to less than significant.

Southern Sycamore–Alder Riparian Woodland

Southern sycamore–alder woodland is a CDFW recognized sensitive natural community. This community occurs along Telecommunications Route 3 within the Whittier Narrows Natural Area south of Durfee Avenue. The proposed project would result in approximately 0.37 acres of temporary disturbance to Southern sycamore-alder riparian woodland vegetation community in areas where Telecommunications Route 3 would be installed on existing poles and undergrounded within new conduit within the Whittier Narrows Natural Area. Pending final project engineering, these activities may occur in areas that were previously temporarily disturbed and currently undergoing restoration for TRTP.

Direct impacts from the removal of this community would be significant. Impacts due to the temporal loss of Southern sycamore-alder riparian woodland vegetation community could occur; the ecosystem function of the community, including its contribution to breeding, feeding, and cover habitat for wildlife, would be compromised during the time period it would take to restore or mitigate for the community. Indirect impacts from disturbance that encourages non-native species recruitment ~~and~~ from air emissions and dust that cover plants in this community and decrease their ability to photosynthesize, and impacts due to the temporal loss of the community, would be significant.

To reduce impacts from the removal of Southern sycamore–alder riparian woodland, SCE would implement APM-AIR-01, APM-BIO-02, and APM-BIO-03, requiring dust suppression, biological monitoring, avoidance of sensitive natural communities, and restoration of sensitive communities impacted by the proposed project. These impacts, however, would still be significant. Implementation of MM BR-2, MM BR-3, MM BR-4, MM BR-5, and MM BR-9 would require limiting construction activities around sensitive resources (e.g., Southern sycamore–alder riparian woodland), avoiding natural vegetation communities where possible and replacement of those communities that cannot be avoided, implementing a Noxious and Invasive Weed Control Plan, educating all crew members about sensitive resources (WEAP), and requiring construction monitoring in all appropriate areas by a qualified biologist. MM BR-3 also requires that areas being restored for TRTP are identified and avoided if possible; however, if impacted, restoration plans for these areas would be required to be consistent with the goals and criteria of TRTP restoration. With implementation of MM BR-2, MM BR-3, MM BR-4, MM BR-5, and MM BR-9, in combination with the APMs identified above, impacts to Southern sycamore-alder woodland would be less than significant.

Southern California Walnut Woodland

California walnut woodland occurs within the survey area in an approximately 0.35-mile long strip on the southern side of Durfee Avenue along Telecommunications Route 3. However, all work areas along this portion of the route would be located on the north side of Durfee Avenue. Therefore, no direct or indirect impacts would occur to Southern California walnut woodland during construction or operation of the proposed project.

Southern Coast Live Oak Woodland

Southern coast live oak woodland occurs along the western border of proposed Staging Yard 4. No tree removal is planned within this area. However, direct impacts to coast live oak woodland could result from trimming or vegetation removal, and grading or grubbing within the staging yard can damage plant roots. Indirect impacts on southern coast live oak woodland could also result from fugitive dust deposition from staging yard preparation and use, which can reduce a plant's ability to metabolize. Staging yard activities can also introduce the spread of non-native and invasive plant species, which could impact the woodland community. Impacts due to the temporal loss of Southern coast live oak woodland vegetation community could occur; the ecosystem function of the community, including its contribution to breeding, feeding, and cover habitat for wildlife, would be compromised during the time period it would take to restore or mitigate for the community. Direct and indirect impacts would be significant.

Impacts on woodlands throughout the proposed project component areas would be avoided and reduced by APM-BIO-02, APM-BIO-03, and APM-AIR-01, committing SCE to perform biological

monitoring, avoid sensitive natural communities, restore sensitive communities impacted by the proposed project, and reduce fugitive dust. These impacts, however, would still be significant because the extent of construction monitoring may not be sufficient to protect sensitive vegetation communities during construction, restoration may not be sufficient, and construction activities may encourage the spread of invasive species into sensitive habitats due to a lack of proper prevention methods.

Implementation of MM BR-2, MM BR-3, MM BR-4, MM BR-5, and MM BR-9 would require limiting construction activities around sensitive resources (e.g., Southern coast live oak woodland), avoiding natural vegetation communities where possible and replacement of those communities that cannot be avoided, implementing a Noxious and Invasive Weed Control Plan, requiring WEAP training, and requiring construction monitoring by a qualified biologist. The implementation of the above APMs, as well as MM BR-2, MM BR-3, MM BR-4, MM BR-5, and MM BR-9 would ensure that impacts on Southern coast live oak woodland would be reduced to less than significant.

Diegan Coastal Sage Scrub

Diegan coastal sage scrub occurs in small patches within the proposed Mesa Substation site and along Telecommunications Routes 2 and 3 within the survey area. The proposed project would result in approximately 0.16 acres of temporary impacts to coastal sage scrub within the proposed Mesa Substation site area and approximately 0.33 acres of temporary impacts along Telecommunications Route 3. Direct impacts could include the crushing or removal of coastal sage scrub. Indirect impacts on coastal sage scrub could result from fugitive dust deposition, which can reduce a plant's ability to metabolize, and from the spread of invasive species from equipment that has not been properly cleaned before entering the project area, which could degrade this special-status community. Coastal sage scrub within the proposed project area provides habitat for coastal California gnatcatcher, a federally and California endangered species. Impacts due to the temporal loss of coastal sage scrub vegetation community could occur; the ecosystem function of the community, including its contribution to breeding, feeding, and cover habitat for wildlife (e.g., coastal California gnatcatcher), would be compromised during the time period it would take to restore or mitigate for the community. Direct and indirect impacts to Diegan coastal sage scrub would be significant.

SCE would implement APM-BIO-02, APM-BIO-03, and APM-AIR-01, which would reduce impacts to coastal sage scrub by requiring biological monitoring, require flagging of special-status vegetation during construction and developing a Revegetation Plan in the event impacts cannot be avoided, and reducing fugitive dust due to construction. Impacts, however, would still be significant because workers may inadvertently impact coastal sage scrub during construction if they are not trained to avoid them, monitoring may not be extensive enough to prevent impacts on coastal sage scrub during construction, restoration may not be sufficient, and construction activities may encourage the spread of invasive species into sensitive habitats due to a lack of proper prevention methods. MM BR-2 limits construction activities occurring in the vicinity of sensitive resources. MM BR-3 would require a survey of vegetation, including gnatcatcher habitat, and implementation of a Habitat Restoration Plan for those areas that cannot be avoided during construction. MM BR-3 specifies requirements for mitigation of coastal sage scrub and other vegetation that provides habitat for coastal California gnatcatcher. MM BR-4 would require the preparation of a Noxious and Invasive Weed Avoidance Plan, MM BR-5 would require the preparation and implementation of a WEAP to inform workers of the sensitive biological resources with a potential to be impacted by the project and relevant permits and MM BR-9 would require construction monitoring in all appropriate areas by a qualified biologist. With the implementation of these APMs and MM BR-2,

MM BR-3, MM BR-4, MM BR-5, and MM BR-9, impacts to coastal sage scrub would be reduced to less than significant.

Operation and Maintenance

Operation and maintenance of the proposed project would involve periodic inspection of the power line structures, conductors, telecommunications cables, and substation infrastructure. Ongoing activities would include, at a minimum, inspection of transmission, subtransmission, and distribution components at least once a year; pole or tower replacement and hardware replacement on an as needed basis; emergency infrastructure repair, if required; access road maintenance; and brush clearing to maintain adequate fire setbacks required by applicable permits. CPUC General Order 95, Rule 35 establishes minimum brush clearance requirements around overhead electrical supply and communication facilities. Maintaining adequate setbacks may require brush clearing and weeding of or adjacent to habitat for special-status natural communities. However, operation and maintenance activities would be infrequent, confined to previously disturbed areas, and of much lower intensity than the construction-related activities described above. Therefore, impacts from operation and maintenance of electrical infrastructure would be less than significant.

Impact BR-3: Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
LESS THAN SIGNIFICANT WITH MITIGATION

The applicant has identified 37 potentially jurisdictional water features during field surveys in the project area (Figure 4.8-2) (Insignia 2015b). SCE has submitted a request for an approved jurisdictional determination, regarding formal wetland delineations completed in June, September, and December 2014; however, USACE has yet to approve the request. As such, this EIR analysis assumes that all waters are jurisdictional and subject to regulation by the USACE (Section 404 of the CWA), RWQCB (Section 401 of the CWA), and CDFW (Section 1600 of the California Fish and Game Code). Water quality impacts to federally protected waters are discussed in the context of CWA Section 401 in Section 4.8, "Hydrology and Water Quality," of this document. The formal wetland delineation report is included in Appendix E.

Construction

Construction activities within the proposed Mesa Substation site area, adjacent power line corridors, and work within staging yards would result in direct, permanent impacts on wetlands (including drainages) as defined by Section 404 of the CWA. Of the potentially jurisdictional aquatic features within the proposed project area, approximately ~~3.7~~ 0.37 acres of waters of the US (USACE/RWQCB) and 2.66 acres of jurisdictional streambed and associated riparian habitat (CDFW) may be permanently impacted, and much of these impacts would occur within the footprint of the new Mesa Substation (~~Insignia 2015b~~ SCE 2016). These impacts would result from grading associated with construction of the new 220-kV substation infrastructure on the western portion of the substation site, ground disturbance associated with site preparation and construction of the 500-kV substation infrastructure on the eastern portion of the substation site, installation of new fence around substation perimeter, constructing new access roads, and construction of a new retention basin in the southwest portion of the substation site. Construction of the proposed Mesa Substation site would include substantial cut and fill, including filling and rerouting of waterways. The clearing of vegetation along stream banks, which exposes topsoil to weathering and erosion,

may also occur as a result of the proposed project, and would increase turbidity and sediment loads within the drainages during rain events, resulting in indirect impacts from the proposed project. Impaired water quality may also occur due to hazardous materials (i.e., hydraulic fluid, gasoline, motor oil) being transported into hydrologic features, especially during rain events. Temporary impacts from clearing vegetation, access road improvement, and other construction activities would comprise approximately 1.6 acres of temporary impacts (Insignia 2015b).

These impacts to potentially jurisdictional water features (aquatic features) would be significant. Implementation of APM-BIO-02, APM-BIO-03, and APM-BIO-08—which commit the applicant to development of a Revegetation Plan, biological monitoring, and compensation for permanent impacts to wetlands at a 1-to-1 ratio, respectively—would reduce impacts to water features. However, these impacts may still be significant because revegetation success criteria are not currently identified and monitoring construction activities may not be extensive enough to avoid impacts on riparian areas. Implementation of MM BR-2 would require SCE to ensure work is completed in designated work zones to avoid sensitive resources; MM BR-5 would require SCE to develop and implement a WEAP to inform workers of the sensitive biological resources with a potential to be impacted by the project and relevant permits; and MM BR-9 would require construction monitoring by a qualified biologist in all appropriate areas. Prior to working in potentially jurisdictional waters, SCE would consult with USACE, RWQCB, and CDFW, per MM BR-14. MM BR-14 requires that restoration details and success criteria for impacts be defined and approved in the Habitat Restoration and Mitigation Plan (MM BR-3). In addition, MM HY-1 would implement a Stormwater Pollution Prevention Plan, including construction BMPs. With the implementation of MM BR-2, MM BR-3, MM BR-5, MM BR-9, MM BR-14, and MM HY-1, in combination and with the APMs identified above, impacts to jurisdictional water features would be reduced to less than significant.

Operation and Maintenance

Operation and maintenance of the proposed Mesa Substation and associated transmission and subtransmission lines would be similar to existing ongoing activities at the existing substation facilities. These activities would include periodic inspections and maintenance of the above-ground facilities and replacing damaged structures, which may require the use of pulling and tensioning sites in previously undisturbed areas. Maintenance of some of these structures would also involve periodic washing. Access roads would also be subject to periodic inspections and maintenance, which would involve clearing vegetation for fire prevention and grading damaged or eroded areas. Maintenance of these access roads could also include cleaning ditches, establishing berms, repairing culverts, and installing new stormwater diversion devices. Maintenance of the proposed telecommunications routes would include testing, repairing, and replacing damaged cables and hardware. These activities would generally involve access from existing roads; however, conductor pulling could occur from previously undisturbed areas. There would be no fill of federally jurisdictional waters during operation and maintenance. Indirect impacts due to operation and maintenance activities could include increased erosion and sedimentation of streams from the trimming or removal of vegetation, and runoff of contaminants into the adjacent waterways. Any operation and maintenance activities that may impact jurisdictional waters would be permitted by the appropriate regulatory agencies (USACE, RWQCB, and/or CDFW) and would contain conditions to protect waters during operation and maintenance activities (e.g., operational SWPPP). Impacts would be less than significant.

Impact BR-4: Substantial interference with the movement of any native resident or migratory fish or wildlife species or within established native resident or migratory wildlife corridors, or impedance of the use of native wildlife nursery sites.

LESS THAN SIGNIFICANT WITH MITIGATION

Construction

There are no known native wildlife nursery sites within the survey area. Therefore, there would be no impacts to native wildlife nursery sites as a result of the proposed project.

Terrestrial wildlife species tend to travel along natural drainages or stretches of land that simultaneously provide protective cover from predators and a foraging source. The proposed project area contains drainages supporting riparian habitat that could provide cover for migrating wildlife. However, movement of terrestrial species within the proposed project area is already constrained by fragmented habitat areas due to extensive development within the area, including the existing Mesa Substation, which covers a portion of the proposed Mesa Substation site area, and other existing electrical infrastructure within the area. The proposed project would not substantially interfere with the movement of terrestrial species within the area.

Although the proposed project is not located within a designated wildlife corridor for the coastal California gnatcatcher, habitat for this species, including some designated as critical habitat, within the proposed project area has direct connectivity to larger stretches of similar habitat. According to USFWS, there is very little habitat left for the gnatcatcher between the Montebello Hills and areas supporting the northernmost populations in the San Gabriel and Santa Susana Mountains (Medak pers. comm. 2015). The remaining habitat patches, such as the area within the substation footprint, provide for connectivity between populations of gnatcatchers and are important for maintaining a viable population within the northern range of the species. Maintaining connectivity between populations, particularly in the northern portion of the species' range, is critical for achieving resiliency in response to changes in vegetation and local climatic conditions associated with global climate change (Medak pers. comm. 2015). Impacts to coastal California gnatcatcher habitat would substantially interfere with the movement of this species and viability of the northern population and be considered a significant impact. MM BR-3 requires the preparation of a Habitat Restoration Plan, which would include replacement of gnatcatcher habitat on or near the site. With the implementation of MM BR-3, impacts associated with the interference of coastal California gnatcatcher movement would be less than significant.

The proposed project would be located in the Pacific Flyway for migratory waterfowl, shorebirds, and songbirds. The Pacific Flyway is a major north-south migratory corridor that generally follows a path through the coastal region of North America and into South America. This region provides some suitable foraging and nesting habitat for resident and migratory bird species. Proposed project areas, particularly areas along Telecommunications Route 3, support a number of avian species that utilize the Pacific Flyway during spring and fall migration. The majority of heavy work would take place at the proposed Mesa Substation site, an area which is primarily urbanized with only patches of suitable habitat. Little ground disturbance along Telecommunications Route 3 would occur and impacts would be short in duration while stringing of telecommunication line takes place. Therefore, the proposed project would not substantially interfere with the movement within the migratory corridor and impacts under this criterion would remain less than significant.

Operation and Maintenance

Operations-related activities may cause native resident or migratory wildlife species to temporarily be displaced due to noise or human activities. This may affect wildlife movements in known migratory corridors and may affect the movement of native resident wildlife species. These impacts are expected to be isolated and temporary and, therefore, locally adverse but minor. Operations-related activities will be infrequent and would result in less than significant impacts from the proposed project.

Construction of the proposed Mesa 500-kV Substation Project would involve installation of new transmission and subtransmission structures. The orientation of the line would be similar and the project would not introduce new transmission facilities into a location where there currently are none. During operations, direct impacts could result from collisions with these new structures during avian movement. The possibility for collision would be especially great at night and during inclement weather. Electrocution on the transmission, subtransmission, distribution, and telecommunications lines, as well as some components of the substation, could also occur if horizontal and vertical separation between components is not sufficient, allowing larger birds to touch them simultaneously with their wings or other body parts, or if energized parts are not covered. APM-BIO-07 commits to designing electrical facilities in accordance with APLIC's *Suggested Practices for Avian Protection on Power Lines: the State of the Art in 2006* (APLIC 2006). In addition, the applicant would evaluate the potential of collisions of avian species with the proposed transmission features, in accordance with the APLIC's guidance as described in *Reducing Avian Collisions with Power Lines: The State of Art in 2012* (APLIC 2012). While APM-BIO-07 states electrical facilities would be designed in accordance with APLIC's suggested standards and the applicant committed to evaluate the potential of collisions in accordance with APLIC's guidance, these measures do not commit the applicant to documenting specifics or demonstrating that APLIC standards are being properly implemented specifically for the proposed project. Should standards to reduce the risk of collision and electrocution not be effectively applied, impacts to birds would be significant. The project's avian protection plan, required under MM BR-15, would describe how the APLIC suggested standards would be followed and implemented. Implementation of this mitigation measure would reduce impacts associated with avian collision and electrocution to less than significant. Therefore, impacts under this criterion would be less than significant with the implementation of APM-BIO-07 and MM BR-15.

Impact BR-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
LESS THAN SIGNIFICANT WITH MITIGATION

Replacement of protected species and natural communities are discussed under Impact BR-1 and Impact BR-2. This discussion focuses on the physical effects on the environment where inconsistencies or conflicts with local policies or ordinances are identified.

Construction

City of Monterey Park

The majority of vegetation removal activities would take place within the City of Monterey Park within the boundaries of the proposed Mesa Substation site area and adjacent SCE ROW. Planned tree removal within this area includes ornamental trees located along Potrero Grande Drive and several trees within the proposed Mesa Substation site area, including Southern California black

walnut trees. The City of Monterey Park has no ordinance requiring replacement of native trees; therefore, there would be no conflict.

Vegetation, including trees, may also be removed or trimmed along Telecommunications Routes 1, 2, and 3 within Los Angeles County, Rosemead, Montebello, and Monterey Park to maintain appropriate clearance under lines for fire safety. The cities of Monterey Park and Rosemead do not have goals or policies that relate to this construction activity.

City of Montebello

The City of Montebello General Plan Conservation Objective 6 is to preserve habitats for desirable or non-objectionable birds and mammals in the area. Vegetation removed for fire safety clearance would be minimal and would not have a noticeable impact on available habitat for avian and mammal species. Additional vegetation removal of habitat utilized by special-status wildlife and native wildlife would occur to accommodate construction along telecommunications routes (e.g., at the eastern terminus of Telecommunications Routes 1 and 3) or for the preparation of staging yards. This habitat removal would conflict with the City of Montebello's stated policy and result in a significant impact. The applicant will minimize the removal of vegetation that provides habitat for species, and will develop a Revegetation Plan to mitigate for impacts per APM-BR-2. However, as stated in Impact BR-2, impacts to habitat for special-status species would remain significant after APM-BR-2 is considered; therefore, the conflict with the City of Montebello's stated policy would still result in a significant impact. However, with the implementation of MM BR-2, MM BR-3, MM BR-4, MM BR-9, and MM BR-5, in combination with APM-BR-2, impacts to habitat utilized by special-status and native wildlife would be reduced to less than significant, and the proposed project would be consistent with the City of Montebello General Plan.

South El Monte

The City of South El Monte has an adopted tree policy which requires that no tree be removed without prior approval of the General Services Director. However, only a very minor segment of Telecommunications Route 3 would cross through the City of South El Monte and this segment would be within a developed commercial area. No trees would be removed for construction or operation of the proposed project within the City of South El Monte. There would be no impact.

Los Angeles County

A portion of Telecommunications Route 3 would also cross through unincorporated areas of Los Angeles County. Activities along this route would include installation of telecommunications lines on existing poles. Portions of Telecommunications Route 3 would be located adjacent to existing roads abutting and within the Puente Hills SEA (County of Los Angeles 2015). A segment at the eastern end of Telecommunications Route 3 within the Puente Hills SEA would be installed underground in a new underground conduit, which will require trenching. The Los Angeles County General Plan policy promotes the conservation of SEAs in as viable and natural a condition as possible, without prohibiting development. SEAs are areas where the county deems it important to facilitate a balance between new development and resource conservation. Policy C/NR 3.8 of the General Plan's Conservation and Natural Resources element discourages development in SEAs and Policy C/NR 3.9 requires consideration of specific criteria in the design of project components located within SEAs. Policy C/NR 3.8 discourages development within SEAs; however, it is not prohibited. Further, Policy C/NR 3.9 provides specific criteria to be considered to the greatest extent feasible when designing projects in SEAs, including: preservation of biologically valuable habitats, species, wildlife corridors, and linkages and maintenance of watershed connectivity.

Construction within an SEA that does not incorporate criteria in Policy C/NR 3.9 would conflict with Policy C/NR 3.8 and Policy C/NR 3.9. Under APM-BIO-02, SCE has committed to minimizing impacts to native vegetation and revegetating temporarily disturbed areas. However, as stated in Impact BR-2, impacts to habitat for special-status species would remain significant after APMs are considered; therefore, the proposed project would conflict with the Los Angeles County's stated policies. However, with the incorporation of MM BR-2, MM BR-3, MM BR-4, MM BR-9, and MM BR-5, impacts to habitat utilized by special-status and native wildlife would be reduced to less than significant and the proposed project would be consistent with the Los Angeles County General Plan.

Policy C/NR 3.10 of the Conservation and Natural Resources Element requires that development mitigate "in-kind" for unavoidable impacts on biologically sensitive areas. Policy C/NR 3.12 discourages development in order to preserve riparian habitats, stream beds, and wetlands in a natural state. Permanent vegetation removal would occur in biologically sensitive areas, including riparian areas and jurisdictional waters, and wetlands would be filled as part of construction—activities that conflict with both policies. APM-BIO-02 commits the applicant to minimizing impacts and permanent loss of riparian habitat, native trees, and other regulated vegetation. The minimization of impacts to riparian areas, stream beds, and wetlands will result in the smallest impact feasible and meet the objective of Policy C/NR 3.11 to preserve the stated habitats; therefore, the proposed project would not be inconsistent with this policy. Under APM-BIO-08, SCE commits to compensation of permanent impacts to jurisdictional waters. However, APMs do not include "in-kind" mitigation for all impacts; therefore, impacts would remain significant. MM BR-3 requires habitat restoration and mitigation for all temporary and permanent impacts on sensitive natural communities, meeting the "'in-kind" mitigation requirement of Policy C/NR 3.10. Implementation of MM BR-3 would ensure the proposed project does not conflict with Policy C/NR 3.10.

Further, Policy 5.3 of the Parks and Recreation Element protects and conserves natural resources on county park properties, including natural areas. The Whittier Narrows Recreation Area is crossed by Telecommunication Route 3. As discussed under Impacts BR-1 and BR-2, impacts to sensitive species and sensitive natural habitats would be mitigated to a level of less than significant through the implementation of APMs, and MM BR-2, MM BR-3, MM BR 4, MM BR-5, and MM BR-9. Therefore, the proposed project would also be consistent with the County of Los Angeles General Plan.

City of Pasadena

Work in the North Area would occur within the City of Pasadena. The City of Pasadena General Plan requires the protection of natural open areas, watersheds, and environmentally sensitive areas such as Hahamonga, Eaton Canyon, riparian areas, and other open spaces. Eaton Canyon wash runs in a north-south alignment immediately west of the existing Goodrich Substation and proposed Staging Yard 4 where construction activities would occur. This portion of the wash is concrete lined and does not provide riparian habitat; therefore, no impact would occur from the proposed project.

In addition, the General Plan includes goals to protect, restore, and maintain native wildlife and areas containing important native vegetation resources within the city as well as a goal to protect and enhance Pasadena's trees on public and privately owned land. Although no trees are planned for removal, activities in Staging Yard 4 may include grubbing activities and could result in impacts to coast live oak woodland. Direct impacts to Southern coast live oak woodland could result from trimming or vegetation removal and grading or grubbing within the Staging Yard the can damage plant roots. Indirect impacts on Southern coast live oak woodland could also result from fugitive

dust deposition from staging yard preparation and use, which can reduce a plant's ability to metabolize. Staging yard activities can also introduce the spread of non-native and invasive plant species, which could impact the woodland community. This would be a conflict with the General Plan policy; effects on Southern coast live oak woodland associated with this inconsistency would be a significant impact.

Impacts on Southern coast live oak woodland in the proposed project component areas in the City of Pasadena would be avoided and reduced by APM-BIO-02, APM-BIO-03, and APM-AIR-01, which commit SCE to perform biological monitoring, avoid sensitive natural communities, restore sensitive communities impacted by the proposed project, and reduce fugitive dust. These impacts, however, would still be significant because the extent of construction monitoring may not be sufficient to protect this sensitive vegetation community during construction, restoration may not be sufficient, and construction activities may encourage the spread of invasive species into sensitive habitats due to a lack of proper prevention methods. MM BR-2, MM BR-3, MM BR-4, and MM BR-9, would require limiting construction activities around sensitive resources (e.g., Southern coast live oak woodland), avoiding natural vegetation communities where possible and replacement of those communities that cannot be avoided, implementing a Noxious and Invasive Weed Control Plan, and construction monitoring by a qualified biologist. The implementation of the above APMs and MM BR-2, MM BR-3, MM BR-4, MM BR-9, and MM BR-5 would ensure that the proposed project would be consistent with Chapter 8.52, City Tree and Tree Protection Ordinance (Ordinance 6896 §2) of the City of Pasadena Municipal Code.

Operation and Maintenance

Operation and maintenance of the proposed Mesa Substation and associated transmission and subtransmission lines would be similar to existing ongoing activities at the existing substation facilities. These activities would include periodic inspections and maintenance of the above-ground facilities and replacing damaged structures, which may require the use of pulling and tensioning sites in previously undisturbed areas. Maintenance of some of these structures would also involve periodic washing. Access roads would also be subject to periodic inspections and maintenance, which would involve clearing vegetation for fire prevention and grading damaged or eroded areas. Maintenance of these access roads could also include cleaning ditches, establishing berms, repairing culverts, and installing new stormwater diversion devices. Maintenance of the proposed telecommunications routes would include testing, repairing, and replacing damaged cables and hardware. These activities would generally involve access from existing roads; however, conductor pulling could occur from previously undisturbed areas. There would be no fill of federally jurisdictional waters during operation and maintenance. Indirect impacts due to operation and maintenance activities include increased erosion and sedimentation of streams from the trimming or removal of vegetation, and runoff of contaminants into the adjacent waterways. No additional development or expansion of the proposed project would occur and impacts to adjacent natural areas would not be appreciably disrupt habitats, ecologically sensitive areas, SEAs, or trees. Therefore, the proposed project would not conflict with local policies or ordinances. No impact would occur.

4.3.4 Mitigation Measures

MM BR-1: Pre-construction Surveys. Prior to construction and activities in a new work area that may include vegetation clearing, staging, and stockpiling, or other activities with the potential to directly or indirectly affect wildlife, the applicant shall retain a qualified biologist approved by the CPUC to conduct pre-construction surveys for sensitive biological resources, including special-

status plant species and special-status wildlife, and nesting birds in all areas of temporary and permanent disturbance. Pre-construction surveys shall be species and resource appropriate and typically conducted a maximum of 14 days prior to construction, as approved by the CPUC~~.~~. If there is no work in an area for 14 days or more, the area shall be considered a "new work area" if construction begins again. ~~n~~Nesting bird and burrowing owl pre-construction surveys shall be consistent with the timing specified in the Nesting Bird Management Plan required by MM BR-11. Additional western spadefoot pre-construction surveys shall be conducted at any time of year where project activities cause vibrations and where artificial wetting of ground surface may result in spadefoot emergence. Western pond turtle pre-construction surveys shall include live trapping in areas where visual observation may be compromised due to water depth or dense vegetation growth near water. The information gathered from these surveys shall be used to develop site- and resource- specific actions to minimize impacts on sensitive resources from project-related activities.

Additionally, a CPUC-approved qualified biologist shall conduct pre-construction clearance sweeps for special-status species at all access, staging, and laydown/work areas where suitable habitat is present within approximately 24 hours of construction activities each day.

MM BR-2: Limits of Construction Activities: Project Boundaries and Sensitive Areas Clearly Marked. In all locations of the project, construction activities, vehicular traffic (including movement of all equipment), and storage of construction materials shall be restricted to approved access roads and established construction areas indicated by flagging, fencing, and/or signage. The applicant shall ensure that exclusionary fencing is installed prior to the start of construction activities around laydown and work and staging areas, where necessary and appropriate, to prevent inadvertent encroachment into the project area by special status species and the inadvertent encroachment by project activities into habitat ~~adjacent to areas of impact~~. Identified sensitive resources such as aquatic features, special-status plants and natural communities, and known wildlife habitat of special-status species (e.g., nests, burrows, or dens) shall be assigned a buffer as appropriate and clearly marked (e.g., with signs, flagging, ropes, and/or fencing) to ensure they are avoided unless disturbance was previously approved. A CPUC-approved qualified biologist shall determine the appropriate buffer depending on the species and the construction activity. The CPUC-approved qualified biologist shall perform or supervise flagging and fencing to ensure that these activities are conducted without harm to sensitive species or habitat.

If special-status wildlife, or evidence of special-status wildlife or special-status plant species not previously analyzed in this document, is found at any time, the applicant shall immediately halt work and contact the appropriate wildlife agency(ies) and the CPUC. Work will resume once the CPUC provides approval.

MM BR-3: Habitat Restoration and Mitigation. Prior to construction of the proposed project the applicant shall ensure that seasonally-appropriate surveys of vegetation are completed by a qualified botanist familiar with these vegetation associations. SCE shall develop a Habitat Restoration and Mitigation Plan that shall include an estimate of the total area of sensitive natural communities, including all coastal California gnatcatcher habitat and riparian habitat. With the consultation, ~~and~~ review, and comment from ~~of~~ the USFWS, CDFW, and CPUC, SCE shall prepare the plan to ensure restoration of all temporary impact areas and to ensure mitigation for permanent impacts on sensitive natural communities and coastal California gnatcatcher habitat. The plan must be submitted 60 days prior to the planned start of construction. CPUC approval is required before the plan is implemented. Required plan details include but are not limited to:

- All temporarily impacted areas shall be restored. All temporary disturbances to sensitive natural communities shall be restored with the pre-disturbance natural community (except for areas burned in the 2015 "Lincoln" fire, which shall be restored to the pre-fire natural community). All other temporarily impacted areas observed to be utilized by the coastal California gnatcatcher shall be restored with the appropriate coastal sage scrub community if feasible ~~and appropriate~~. Temporary impacts on sensitive natural communities and habitat utilized by gnatcatchers shall be mitigated by restoration at a minimum ratio of 1.5:1; if restoration is not feasible within 1 mile of the project area, SCE shall purchase credits and/or mitigation lands at a minimum ratio of 2.5:1 from an entity approved by CDFW and USFWS, as appropriate. Areas that do not provide habitat to coastal California gnatcatcher, other special-status species, or sensitive resources may be restored to the conditions agreed upon between the landowner and the applicant.
- The restoration plan shall specify how each type of vegetation community, including sensitive natural communities, shall be addressed in terms of the following restoration details: topsoil segregation and conservation; vegetation treatment and removal; revegetation methods, including seed mixes, rates, and transplants; criteria to monitor and evaluate revegetation success (minimum of four years of monitoring and 80% ~~cover for sensitive natural communities~~successful native plant establishment); and compensation and remedial measures to be implemented as needed.
- For sensitive natural communities, mitigation of permanent impacts shall occur after construction at a minimum level of 1.5:1. In addition, permanent disturbances to coastal California gnatcatcher habitat that is not coastal sage scrub or another sensitive natural community shall be mitigated at a minimum 1.5:1 ratio with appropriate coastal sage scrub. Mitigation for permanent impacts shall be completed through one of the following methods:
    1. Establishing the natural community within the proposed project areas (onsite);
    2. Establishing the natural community outside the proposed project areas (within one mile of the project area); or
    3. If Options 1 and 2 are not feasible, SCE shall purchase credits and/or mitigation lands at a minimum ratio of 2.5:1 from an entity approved by CDFW and USFWS, as appropriate.

    For Options 1 and 2 (onsite and offsite), the plan shall specify restoration details, including that post-construction monitoring shall be performed for a minimum of four years, a success criteria of 80% ~~cover~~ successful native plant establishment shall be met, and remedial measures shall be implemented if success criteria are not met.
- Impacts on areas that were previously restored for SCE's TRTP shall be avoided if possible. The plan shall identify any impacts on areas that were previously restored for TRTP and provide detailed restoration plans for these areas. Restoration in these areas shall follow restoration criteria that are consistent with the goals and criteria of TRTP restoration, per TRTP Mitigation Measure B-1a: Provide restoration/compensation for impacts to native vegetation communities.

With CPUC approval, requirements described in this mitigation measure and the Habitat Restoration and Mitigation Plan may be satisfied through compliance with permit conditions, if these requirements are equally or more effective.

SCE shall also minimize the removal of coastal sage scrub or other suitable coastal California gnatcatcher habitat, particularly within designated critical habitat for the coastal California gnatcatcher. To minimize the removal of vegetation in habitat areas of the coastal California gnatcatcher, SCE shall ensure that trimming of all native vegetation, riparian vegetation, and vegetation that provides potential habitat for coastal California gnatcatcher is monitored by a qualified biologist approved by the CPUC. Trimming of native trees and native arborescent shrubs shall be completed outside of the nesting bird season and shall be monitored by a qualified arboristbiologist.

MM BR-4: Noxious and Invasive Weed Control Plan. Prior to construction, the applicant shall submit a Noxious and Invasive Weed Control Plan that shall be implemented before, during, and after construction, including during the project restoration phase. This plan shall include measures designed to avoid the introduction and spread of noxious weeds and invasive plant species designated by the state, the counties, and local weed control boards. This plan shall be developed in consultation with CDFW and the CPUC and shall be provided to these agencies for review and comment. The plan must be submitted to the CPUC 60 days prior to the planned start of construction. CPUC approval is required before the plan is implemented.

At a minimum, this plan shall include the following measures:

- Pre-construction surveys for special-status plant species (APM-BIO-01 and MM BR-1) shall include surveys for state-, county-, and locally-designated noxious weed species. The applicant shall coordinate with the appropriate agencies, including the CPUC, to determine appropriate species-specific measures to implement, or whether control or treatment of a species is feasible and preferable.
- All vehicles and equipment shall be clean and free of dirt, mud, and any debris that may carry invasive plant seeds or parts prior to arrival at the project location, including prior to use of access roads.
- Vehicle and equipment wash stations (mobile or built in place) shall be erected at strategic locations on the ROW where designated weed species have been detected, and where doing so would help prevent the spread of these species.
- Straw, hay, gravel, soil, or other construction or erosion control materials that could inadvertently contain unwanted plant propagules shall come from state-cleared sources that are free of invasive weeds.
- All seeds to be used in revegetation and reclamation activities shall come from weed-free sources.
- All temporary disturbance areas that will be restored post-construction shall be monitored for invasive species establishment on a monthly basis during the growing season and on a quarterly basis outside of the growing season for at least one year after project restoration is completed. If evidence of the expansion or increase in abundance of a known invasive species or introduction of a new invasive species is found, the applicant shall initiate appropriate control measures, which may include mowing or trimming of weeds prior to seed set, as outlined in the plan.

MM BR-5: Worker Environmental Awareness Program. The applicant shall develop and implement a WEAP for all project personnel. The program must be submitted to the CPUC at least 30 days prior to the start of construction for review. CPUC approval is required before the program

is implemented. All project personnel shall undergo training prior to entering the ROW. The training shall include a description of the species of concern and their habitats, the general provisions of applicable environmental regulations, the need to adhere to the provisions of the regulations, the penalties associated with violating the provisions of the regulations, the general measures that are being implemented to conserve the species of concern as they relate to the project, the access routes to the project, and project boundaries within which the project-related activities must be accomplished. This training shall include a detailed review of how project personnel can identify sensitive biological resources in the project area which need to be avoided or where work activities will be restricted.

MM BR-6: Avoidance of Nevin's barberry. The project shall be designed to avoid impacts on occurrences of Nevin's barberry during construction and operation and maintenance. Prior to the start of construction, the applicant's CPUC-approved qualified biologist shall complete pre-construction surveys in suitable habitat ~~during the appropriate blooming period~~ to identify any occurrences. Where Nevin's barberry occurs, all construction and operation and maintenance activities shall occur outside a restrictive buffer, which shall be established by a CPUC-approved qualified biologist. Vehicles and crew members shall be prohibited from coming within 200 feet of identified Nevin's barberry unless a buffer reduction is approved by the CPUC after ~~consultation~~ coordination with USFWS. A reduced buffer shall be a minimum of 15~~25~~ feet ~~or greater~~ from a Nevin's barberry plant. A qualified biologist approved by the CPUC shall monitor crew members and the Nevin's barberry to ensure all project activities stay away from Nevin's barberry within the buffer. The biologist shall have the authority to halt work if it is determined that Nevin's barberry could be impacted.

In the event that previously unknown occurrences of Nevin's barberry are discovered during pre-construction surveys or during construction or operations, a 200-foot buffer shall be established and the USFWS and CPUC shall be contacted within 24 hours.

MM BR-7: Restoration of Southern California Black Walnut. SCE shall take measures to avoid and minimize impacts on Southern California black walnut resulting from project construction activities, and shall plant replacement trees for any impacted or removed specimens. Prior to construction (after completion of final engineering design of project features), black walnut tree evaluation surveys shall be completed by a qualified arborist (an arborist with extensive local or regional expertise in the planting, care, and maintenance of black walnut trees). The arborist must be approved by the CPUC. The arborist shall record a brief description (e.g., location, height, diameter at breast height, condition) of each black walnut tree with a dripline within 25 feet of construction activities. All construction activities that take place within the driplines of black walnut trees (i.e., the outermost extent of the canopy) that are not being intentionally removed shall be monitored by a qualified arborist to reduce, to the extent feasible, impacts on the tree, including roots.

California black walnut trees that are impacted within the drip line or intentionally removed shall be replaced at a 2~~3~~:1 ratio. If the diameter at breast height of the tree to be removed is 24 inches or less, it shall be replaced with a 24-inch box tree. If the diameter at breast height of the tree to be removed is greater than 24 inches, it shall be replaced with a 36-inch box tree. Replacement trees shall be planted on site as near to the original location as feasible and biologically appropriate, and shall be monitored by a qualified arborist who will ensure the replacement trees are placed in a suitable area. Replacement trees shall be monitored for seven years after the initial planting or until the arborist determines that 80 percent of trees are successfully established. If onsite replacement

is not feasible, SCE shall plant replacement trees offsite as near to the proposed project as is appropriate and feasible. The same monitoring requirements and success criteria would apply as for those trees planted onsite. If neither of the two options above are feasible, SCE shall purchase credits and/or mitigation lands from an entity approved by CDFW such that a restoration ratio of 4:1 is achieved.

Tree removal shall not be permitted until a detailed plan for restoration, including identification of planting location, or offsite mitigation lands, is approved by the CPUC, and in consultation with USFWS and CDFW. Replacement trees shall be planted before tree removal, or if not feasible or if potentially harmful to the replacement trees, as soon as possible after removal.

MM BR-8: Restoration of Special-status Plants. The applicant shall complete pre-construction surveys during the appropriate blooming period to identify special-status plants, including Coulter's Matilija poppy, Plummer's mariposa lily, intermediate mariposa lily, and Southern ~~California~~ tarplant populations in the proposed project component areas where suitable habitat is present. Special-status plants shall be identified by a qualified biologist and flagged or surrounded with fencing in such a way that disturbance of the populations or individuals shall be avoided. In the event that populations or individuals of special-status plants (other than Southern California black walnut—see MM BR-7) cannot be avoided, the applicant shall develop and implement a restoration plan for each plant which will be submitted to CPUC and CDFW for review and comment no less than 60 days prior to construction activities within the work area where impacts would occur. The CPUC will coordinate with~~and~~ CDFW, and CPUC approval is required before the plan is implemented. In the case of Southern California black walnut trees, a restoration plan will be completed and approved as described in MM BR-7.

For temporary impacts to special-status plants, restoration shall occur after construction at a minimum ratio of 1.5:1 ~~and to an extent such that "no net loss" is ensured~~ for all special-status plants in the proposed project component areas. The number of plants at seven years will be a minimum of 1.5 times~~equal to or greater than~~ the number destroyed.

Mitigation for temporary and permanent impacts shall be completed by:

1. Establishing individual plants within the proposed project areas (onsite);
2. Establishing individual plants outside the project areas (offsite); or
3. Purchase of credits and/or mitigation lands at a ratio of 2.5:1 from an entity approved by CDFW.

For Options 1 and 2 (establishing plants onsite or offsite), the plan shall include the following elements: planting/seeding palettes; monitoring and contingency program; monitoring schedule, including duration (seven years) and performance criteria (~~no net loss~~minimum of 1.5 times the number destroyed); and any specific measures that will be required to ensure success of the restoration effort. This mitigation measure may be coordinated with areas restored for MM BR-3 if appropriate.

MM BR-9: Construction Monitoring. The applicant shall ensure that a qualified biologist approved by the CPUC serves as a construction monitor during periods when construction activities occur near active nest areas, or within 100 feet of native vegetation or vegetation that has the potential, or is known, to provide habitat for special-status species. The monitor shall have the authority to temporarily stop work that they determine threatens a special-status species or sensitive resource. The monitor shall determine what appropriate action to take, and work will resume once the monitor determines there is no longer a threat to the special-status species or sensitive resource, or consultation has occurred with the appropriate wildlife agencies which determines appropriate steps have been taken and a threat is no longer present.

MM BR-10: Open Trenches and Pipes. To prevent entrapment of wildlife, SCE shall ensure that all steep-walled trenches, auger holes, open-ended piping, or other excavations are covered at the end of each day or completely fenced off at night in such a way that wildlife cannot become entrapped. For open trenches only, these may instead have wildlife escape ramps within the trench maintained at intervals of no greater than 100 feet. These ramps shall have a maximum slope not to exceed 2:1. SCE's biological monitor, approved by the CPUC, shall inspect all trenches, auger holes, or other excavations a minimum of three times per day and immediately prior to backfilling. During working hours all construction materials with open-ended piping, including but not limited to pipe sections and fencing supports, shall be left capped when not planned for use the same day. During active construction, open piping shall be inspected for wildlife by SCE's biological monitor before the material is moved, buried, or capped. All non-special-status wildlife species found will be safely removed and relocated out of harm's way, through the use of suitable tools such as a pool net when applicable. For safety reasons, under no circumstance will biological monitors enter open excavations.

MM BR-11: Nesting Bird Management Plan. To address potential conflicts between construction activities and the activities of nesting birds in the project component areas, SCE shall develop a nesting bird management plan in consultation with USFWS, CDFW, and CPUC, and shall submit the final plan to the CPUC no less than 60 days prior to construction. CPUC approval is required before the plan is implemented. The nesting bird management plan shall include measures and an adaptive management program to avoid and minimize impacts to special-status and MBTA- or California Fish and Game Code-protected bird species during nesting periods during project construction. Specifically, the nesting bird management plans shall contain:

- Appropriate survey timing, extents, methods, and surveyor qualifications; approved nest deterrent methods, including areas where vegetation will be cleared for the purpose of deterring nesting; monitoring and reporting protocols during construction; protocol for determining whether a nest is active; protocol for documenting, reporting, and protecting active nests within construction areas. If pre-construction survey protocols exist for a certain species, the plan shall identify the species-specific protocol that will be followed and outline how SCE will comply with the protocol~~outline the implementation of these protocols.~~
- Guidelines for determining appropriate and effective buffer distances that will account for specific project settings, bird species, stage of nesting cycle, and construction work type. Language for buffer reduction process will be included in the plan, which shall include coordination with the appropriate wildlife agencies and the CPUC if reducing the buffer of a ~~raptor or~~ special-status species.

- Language specifying that the determination of appropriate and effective buffers between construction activities and identified nests shall be site- and species/guild-specific and data-driven, and will not be based on generalized assumptions regarding all nesting birds.
- Language specifying that determinations of appropriate and effective buffers between construction activities and identified nests can be made in the project construction area by the CPUC-approved biological monitor (qualified in accordance with nesting bird plan standards, which will include specific requirements for education and experience in conducting biological surveys and with specific birds in the project area).
- Vertical buffers shall be put in place in those areas where helicopters will be used, and they will be based on anticipated effects of rotor wash and noise for the class of helicopter being used by SCE. Surveys and monitoring of the active buffer areas will be performed by a CPUC-approved biologist before, during, and after helicopter use in the vicinity of active buffers.
- Burrowing owl pre-construction surveys shall adhere to the current burrowing owl survey protocol identified by CDFW (i.e., CDFW's Staff Report on Burrowing Owl Mitigation [CDFG 2012]). If pre-construction burrowing owl surveys confirm the presence of burrowing owl, SCE shall submit a Burrowing Owl Compensation Plan, in consultation with CDFW and the CPUC, which is consistent with mitigation guidelines in the Staff Report, prior to construction. The final Burrowing Owl Compensation Plan shall be implemented, as specified, throughout construction and restoration. The plan shall describe the compensatory measures that will be undertaken to address the loss of burrowing owl burrows within the project area. This will include mitigation for permanent impacts on nesting, occupied, and satellite burrows and occupied burrowing owl habitat with (a) permanent conservation of similar vegetation communities comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals.

SCE shall notify CDFW, USFWS, and the CPUC of all project-related bird injuries or mortalities within 12 hours of discovery and will follow the agencies' recommended actions, if any. Reporting of nesting bird activities, buffer reductions, and monitoring results shall be provided to the USFWS, CDFW, and the CPUC on a regular basis.

MM BR-12: Gnatcatcher Surveys. Prior to the start of construction, SCE shall ensure that protocol-level pre-construction surveys are conducted by a qualified biologist approved by the CPUC for the coastal California gnatcatcher in project component areas where suitable habitat exists in accordance with the Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Guidelines (USFWS 1997). In the event that coastal California gnatcatchers are observed during pre-construction surveys, a qualified biologist must identify the boundaries of the pair's territory and SCE must not conduct construction activities within 500 feet of the territory, or as otherwise approved by the CPUC, in consultation with USFWS~~ and CDFW~~. SCE shall notify USFWS and ~~CDFW~~the CPUC in the event gnatcatcher territory or nest sites are confirmed by surveys, immediately upon return from the field. If infeasible to maintain a buffer of 500 feet (or a distance otherwise approved by USFWS~~ and CDFW~~), by installing temporary flagging or fencing, from an active gnatcatcher territory, construction activities within or near these areas will be performed outside the breeding and nesting season (coastal California gnatcatcher breeding/nesting season is approximately February 1 through August 30). SCE may conduct construction activities in gnatcatcher habitat during the breeding and nesting season if protocol-level surveys (conducted within one year prior to construction activities per protocol) confirm the

absence of breeding gnatcatchers, or if the 500-foot protective buffer from all active gnatcatcher territories can be maintained.

MM BR-13: Pre-Construction Surveys for Least Bell's Vireo. Prior to construction and within their breeding season (generally April 10-August 31). SCE shall complete protocol-level surveys for least Bell's vireo in areas of suitable or potentially suitable riparian and other habitat within the proposed component areas. Surveys will be conducted by a qualified biologist approved by the CPUC according to the survey protocol for least Bell's vireo (USFWS 2001). In the event that least Bell's vireo territory or nest sites are confirmed, SCE shall notify the USFWS and CDFW ~~immediately upon~~ within 24 hours of returning return from the field. If individuals or their nests are observed, biologists will establish and maintain a minimum 500-foot (or a distance otherwise approved buffer from USFWS and CDFW) exclusionary buffer by installing temporary flagging or fencing between the nest territory and construction activities. If infeasible to maintain a buffer of 500 feet (or a distance otherwise approved by USFWS and CDFW), from an active vireo territory, construction activities within or near these areas will be performed outside the breeding and nesting season.

MM BR-14: Minimize Impact on Riparian Habitat and Aquatic Features. SCE shall complete the following:

1. In those areas where riparian vegetation is required to be removed, SCE shall work with a qualified botanist to determine the minimum amount of vegetation required to be removed in order to accommodate project construction, and the correct trimming procedures to employ.
2. Temporary impacts to riparian habitat or aquatic features shall be fully restored according to the Habitat Restoration and Mitigation Plan described in MM BR-3. All permanently impacted areas shall be mitigated using methods described in MM BR-3.
3. Where riparian vegetation or aquatic features would be impacted by project construction activities, SCE shall also consult with USACE, RWQCB, and CDFW to determine if a CWA Section 404 permit, CWA Section 401 permit, and LSAA pursuant to California Fish and Game Code Section 1600 would be necessary, respectively. If USACE, RWQCB, or CDFW determines a permit is required, the permit will be obtained prior to impacts and SCE will comply with all terms and conditions of the agreement. In addition, the USACE, RWQCB, and CDFW shall be provided the opportunity to review and comment on the Habitat Restoration and Mitigation Plan if impacts will occur in an area that may be under their jurisdiction.
4. Mitigation requirements described under number 2 above for impacts to riparian habitat or aquatic features may be satisfied by demonstrating compliance with equal or more effective permit conditions, with approval by the CPUC.

MM BR-15: Avian Protection Plan. SCE shall adhere to recommendations published by APLIC (*Reducing Avian Collisions with Power Lines: The State of the Art in 2012* (APLIC 2012). In addition, SCE shall develop and implement an Avian Protection Plan according to Avian Protection Plan Guidelines (APLIC and USFWS 2005). The plan shall include provisions to reduce impacts on avian species during operation of the proposed project, and shall provide for the adaptive management of project-related issues. The plan shall be submitted for review to CDFW, USFWS, and the CPUC at least 60 days prior to construction. CPUC approval is required before the plan is implemented.