5.4 Biological Resources

5.4.1 Setting

This section describes the existing environment for wildlife, botanical, and wetland resources for the Proposed Project and alternatives. In addition to the alignments, the setting considers Proposed Project marshalling areas, access roads, and ancillary facilities (the Proposed Project area), as well as the larger area, including adjacent habitat, that could reasonably be affected by Proposed Project activities (the study area).

The setting information presented herein was compiled from available scientific literature and database searches, coordination with resource experts, in-house staff expertise, and multi-year field surveys. In addition, a field reconnaissance survey of the Proposed Project area was performed by an Environmental Science Associates (ESA) wildlife biologist on December 6, 2013, to verify conditions described in the Proponent's Environmental Assessment (PEA).

Regional Setting

The Proposed Project and alternatives are located in southeast unincorporated Ventura County (the County) in the Conejo Hills, the Las Posas Hills, and the intervening Santa Rosa Valley. Portions of the Proposed Project and alternatives are situated in the cities of Moorpark and Thousand Oaks (see Figure 3-1, *Proposed Project Segments and Substations*) on the Moorpark and Newbury Park United States Geological Survey (USGS) 7.5-minute topographic quadrangles. The Proposed Project region is within the California Floristic Provence, Southwestern California region, which includes portions of the San Gabriel and Tehachapi Mountains within the Western Transverse Ranges and South Coast subregions (Hickman, 1993). Soils are dominated by Gilroy very rocky clay loam, Hambright very rocky loam, and igneous rock land, but also include badland, Castaic-Balcom complex, Cropley clay, Diablo clay, Gilroy clay loam, and San Benito clay loam (SCE, 2013a). The landscape is composed of open, natural areas, agriculture, and urban development set within a hilly topography with elevations that range between 250 and 900 feet above mean sea level. Average annual rainfall for this area is approximately 17 inches (Weatherbase, 2014).

Natural Communities and Wildlife Habitat

Vegetation Community Descriptions

Vegetation communities are assemblages of plant species that occur together in the same area, which are defined by species composition and relative abundance. To characterize plant communities, a 50-foot buffer along each side of the Proposed Project alignment was established as a study area, including staging and laydown areas (BonTerra, 2008; 2010a). Vegetation series within the study area were then mapped by Southern California Edison (SCE) according to the Ventura County vegetation classification system, which closely approximates the Sawyer, et al. (2009) classification system presented in **Table 5.4-1**, *Vegetation Communities along the Study Area*. Table 5.4-1 identifies the 10 vegetation alliances described by Sawyer, et al. (2009) to occur in the study area for the Proposed Project, along with areas classified by Ventura County as

Vegetation Community	Acres
Agriculture	420.7
Purple sage scrub alliance	108.7
Developed	106.0
Coast prickly pear scrub alliance ^a	97.1
Purple sage – black sage scrub ^b	57.7
Laurel sumac scrub alliance	44.5
Big pod ceanothus chaparral alliance	39.2
Needle grass grassland alliance ^{a,c}	27.5
Black sage scrub alliance	14.0
California sycamore woodlands alliance ^a	13.3
California sagebrush – California buckwheat scrub alliance	10.2
Streambed	4.5
Hoary leaf ceanothus alliance	1.7
Total	945.1

TABLE 5.4-1 VEGETATION COMMUNITIES ALONG THE STUDY AREA

^a These Alliances are designated by the California Department of Fish and Wildlife (CDFW) as Sensitive Natural Communities (CDFW, 2010).

^b This Alliance does not appear in Sawyer, et al. (2009) but the vegetation community was described by as a black sage- purple sage shrubland association in the PEA (SCE, 2013a); acreages were also provided in the PEA, and so no attempt was made to redistribute these acreages among the purple sage scrub and black sage scrub Alliances described by Sawyer, et al. (2009).

Ventura County mapped these areas as purple needle grass grassland (SCE, 2013a), which would be classified as purple needle grass grassland alliance and which is designated as a special-status natural community by the CDFW. However, botanical surveys performed for the Proposed Project did not identify purple needle grass in these locations, but identified foothill needle grass and nodding needle grass (SCE, 2013a). The foothill needle grass and nodding needle grass alliances are recognized as sensitive natural communities by the CDFW.

SOURCES: SCE, 2013a; CDFW, 2010

developed (urban), agriculture, and streambed. The acreages for each community type in the study area are also provided in Table 5.4-1. The distribution of these natural communities and developed areas was described in the PEA (SCE, 2013a) and generally verified by the ESA biologist during the biological reconnaissance survey.

Vegetation types in the study area, in order of most to least abundant cover type, are: agriculture (45 percent); purple sage scrub alliance (12 percent); developed (11 percent); coast prickly pear scrub alliance (10 percent); purple sage – black sage scrub (6 percent); laurel sumac scrub alliance (5 percent); big pod ceanothus chaparral alliance (4 percent); purple needle grass grassland alliance (3 percent); black sage scrub alliance (2 percent); California sycamore woodlands alliance (1 percent); California sagebrush – California buckwheat scrub alliance (1 percent); streambed (less than 1 percent); and hoary leaf ceanothus alliance (less than 1 percent) (SCE, 2013a). Vegetation communities identified in the study area are described below and displayed in **Figure 5.4-1**, *Vegetation Communities in the Proposed Project Vicinity for Segments 1 and 2*, and **Figure 5.4-2**, *Vegetation Communities in the Proposed Project Vicinity for Segments 3 and 4*.



SOURCE: SCE, 2013 and 2014

Moorpark-Newbury 66 kV Subtransmission Line Project. 207584.15 Figure 5.4-1 Vegetation Communities in the Proposed Project Vicinity for Segments 1 and 2



SOURCE: SCE, 2013 and 2014

Moorpark-Newbury 66 kV Subtransmission Line Project. 207584.15 Figure 5.4-2 Vegetation Communities in the Proposed Project Vicinity for Segments 3 and 4 These vegetation communities also share a relationship with wildlife habitat types, which were generally classified and evaluated using CDFW's *Guide to Wildlife Habitats of California* (Mayer and Laudenslayer, 1988).

Agriculture

Agricultural areas dominate the landscape in the vicinity of Segment 2 where citrus orchards, avocado orchards, and commercial plant nurseries are prevalent between Los Angeles Avenue and Santa Rosa Road. Approximately 421 acres of agricultural lands occur in the Proposed Project study area (see Table 5.4-1).

Sage scrub

Sage scrub vegetation covers approximately 288 acres in the Proposed Project study area, mostly within the vicinity of Segments 2, 3, and 4 (Table 5.4-1) (SCE, 2013a). Sage scrub along the Proposed Project alignment includes the purple sage scrub alliance, purple sage - black sage scrub, black sage scrub alliance, California sagebrush - California buckwheat scrub alliance, and coast prickly pear scrub alliance. While vegetation alliances indicate which plant species are dominant, the following species are characteristic of sage scrub: purple sage (*Salvia leucophylla*); black sage (*Salvia mellifera*); California sagebrush (*Artemisia californica*); California buckwheat (*Eriogonum fasciculatum*); and coast prickly pear (*Opuntia littoralis*); rosemary flat-top buckwheat (*Eriogonum fasciculatum* var. *polifolium*); gray coast buckwheat (*Eriogonum cinereum*); bladderpod (*Isomeris arborea*); bush sunflower (*Encelia californica*); lemonadeberry (*Rhus integrifolia*); coyote brush (*Baccharis pilularis*); western poison oak (*Toxicodendron diversilobum*); bush monkeyflower (*Mimulus aurantiacus*); laurel sumac (*Malosma laurina*); and deerweed (*Lotus scoparius*).

Developed

Rural residential areas compose most of the developed cover type within the Proposed Project study area, but this cover type also includes the Moorpark and Newbury Substations, and a nearby railroad alignment. Approximately 106 acres within the Proposed Project study area are developed (see Table 5.4-1).

Chaparral

The chaparral cover type within the Proposed Project study area includes the big pod ceanothus chaparral alliance, hoary leaf ceanothus alliance, and laurel sumac scrub alliance. Together these vegetation communities total approximately 85 acres within the Proposed Project study area, and are most prevalent in Segments 3 and 4 (see Table 5.4-1). While vegetation alliances indicate which plant species are dominant, the following species are characteristic of chaparral: big pod ceanothus (*Ceanothus megacarpus*); hoary leaf ceanothus (*Ceanothus crassifolius*); laurel sumac; chamise (*Adenostoma fasciculatum*); lemonadeberry; elderberry (*Sambucus mexicana*); and toyon (*Heteromeles arbutifolia*).

Native Grassland

Native grassland covers approximately 28 acres within the Proposed Project study area (see Table 5.4-1). SCE notes that Ventura County mapped these areas as purple needle grass (*Nassella pulchra*) grassland (SCE, 2013a), which would be classified as purple needle grass grassland

alliance. However, botanical surveys performed in support of the Proposed Project did not identify purple needle grass in these locations, but did identify foothill needle grass (*Nassella lepida*) and nodding needle grass (*Nassella cernua*) (SCE, 2013a). All are native grassland species classified into their own alliances, including: purple needle grass grassland alliance; foothill needle grass grassland alliance; and nodding needle grass grassland alliance.

Streambed and Riparian

Four streambed features are located along the Proposed Project alignment and support varying degrees of riparian vegetation. Riparian vegetation communities are stream-dependent, and within the Proposed Project study area are dominated by the growth of California sycamore (*Platanus racemosa*) and classified as California sycamore woodlands alliance. Ventura County identifies streambed as a land cover type, and it encompassing approximately 5 acres within the Proposed Project study area, while the associated riparian community of California sycamore woodlands alliance comprises approximately 13 acres (see Table 5.4-1) (SCE, 2013a). California sycamore is associated with both perennial and ephemeral streambeds in the Proposed Project study area: Arroyo Santa Rosa in Segment 2, and an unnamed tributary to Conejo Creek in Segment 3. In Arroyo Santa Rosa, willow trees (*Salix* spp.), mule fat (*Baccharis salicifolia*), and giant reed (*Arundo donax*) are co-dominants with the California sycamore woodlands alliance (SCE, 2013a). The other two streambeds do not support riparian vegetation; Arroyo Simi in Segment 2 is an engineered and regularly maintained flood control channel that contains minimal woody vegetation, and also located in Segment 2 is an unnamed drainage ditch with downstream connectivity to Arroyo Simi that supports the growth of coyote brush, an upland species.

Vegetation Communities in the Proposed Project Study Area

Moorpark Substation (Segment 1)

The Moorpark Substation is a developed lot with existing electrical infrastructure and a security fence around the substation. Pine (*Pinus* sp.) and California pepper (*Schinus molle*) trees line the fence perimeter (Figure 5.4-1 *Vegetation Communities in the Proposed Project Vicinity for Segments 1 and 2*). Except for the screening trees lining the perimeter, no vegetation occurs within the substation; the dirt ground between paved access roads is graded and heavily compacted.

Northern Alignment (Segment 2)

The 5-mile Segment 2 alignment begins at the Moorpark Substation and extends south across the Little Simi Valley to the Las Posas Hills, then south across the Santa Rosa Valley to the Calleguas hills. Agricultural and developed areas dominate the Little Simi Valley. Streambeds associated with Arroyo Simi and an unnamed tributary to Arroyo Simi are traversed through Little Simi Valley. Agricultural and developed areas are prevalent in the Las Posas Hills, but the purple sage scrub alliance and the coast prickly pear scrub alliance are also encountered on the south-facing hillslopes. The Santa Rosa Valley is also dominated by agricultural and developed areas, though upon approaching the Calleguas Hills, the following cover types and vegetation communities are encountered: the streambed associated with Arroyo Santa Rosa; the stream-dependent California sycamore woodlands alliance; needle grass grassland alliance; and coast

prickly pear scrub alliance (Figure 5.4-1, Vegetation Communities in the Proposed Project Vicinity for Segments 1 and 2).

Southern Alignment (Segment 3)

Segment 3 begins at the northern base of the Calleguas hills and extends south through their interior towards the Conejo Valley. The Calleguas hills support a rich diversity of vegetation communities, and the proposed alignment would traverse the coast prickly pear scrub alliance, laurel sumac scrub alliance, purple sage scrub alliance, mixed purple and black sage community, big pod ceanothus chaparral alliance, California sagebrush – California buckwheat scrub alliance, and the California sycamore woodlands alliance (Figure 5.4-2, *Vegetation Communities in the Proposed Project Vicinity for Segments 3 and 4*). The California sycamore woodlands alliance is associated with an unnamed tributary to Conejo Creek (streambed).

Southern Alignment to Newbury Substation (Segment 4)

Segment 4 begins in the Calleguas hills and continues south to the Newbury Substation. Within the Calleguas hills, this 1-mile alignment traverses the California sagebrush – California buckwheat scrub alliance, California sycamore woodlands alliance, purple sage scrub alliance, big pod ceanothus chaparral alliance, mixed purple and black sage community, needle grass grassland alliance, and coast prickly pear scrub alliance (Figure 5.4-2 *Vegetation Communities in the Proposed Project Vicinity for Segments 3 and 4*). The Newbury Substation is situated at the base of the Calleguas Hills within an area of extensive rural residential development. The Newbury Substation is a developed lot with existing electrical infrastructure, a security fence around the substation, and a second perimeter fence at the property boundary. California pepper tree and ornamental trees line the fence perimeters, with an herbaceous understory of sparse ruderal vegetation between the substation fence and the property boundary comprised mostly of nonnative wild oat (*Avena* sp.).

Sensitive Natural Communities

Several vegetation alliances that occur in the Proposed Project study area are designated by CDFW as sensitive natural communities. Sensitive natural communities that occur in the Proposed Project study area are the coast prickly pear scrub alliance, the California sycamore woodlands alliance, and needle grass stands. Botanical surveys have identified foothill needle grass and nodding needle grass in the Proposed Project study area (SCE, 2013a). Though present within the Proposed Project study area, these sensitive natural communities may not necessarily be affected by the Proposed Project. The distribution of these communities within the Proposed Project study area was described previously in the vegetation community descriptions.

Wildlife Movement and Corridors

The concept of wildlife corridors addresses the linkage between large blocks of habitat that allow safe movement of mammals and other ground dwelling wildlife species, birds, and invertebrates from one habitat area to another. Definitions of a wildlife corridor vary but corridors may include large elements such as refuge systems or natural parks as well as small elements such as underpasses, or greenbelts within otherwise urbanized areas. In general, a corridor is described as

a linear habitat, embedded in a dissimilar matrix that connects two or more large blocks of habitat (Beier and Noss, 1998). Wildlife movement corridors are critical for the survivorship of ecological systems for several reasons. Corridors can connect water, food, and cover sources, spatially linking these three resources with wildlife in different areas. In addition, wildlife movement between habitat areas provides for the potential of genetic exchange between wildlife species populations, thereby maintaining genetic variability and adaptability to maximize the success of wildlife responses to changing environmental conditions. This is especially critical for small populations subject to loss of variability from genetic drift and effects of inbreeding. The nature of corridor use and wildlife movement patterns varies greatly among species and geographic regions.

The Proposed Project and alternatives are located within a region that has features conducive to a wildlife corridor connecting larger areas of open space in the north (e.g., the Santa Clara River and Los Padres National Forest), east (e.g., the Simi Hills), west (Las Posas Hills), and south to the Santa Monica Mountains). The regional area within which the Proposed Project is located was described by the South Coast Missing Linkages Project as a potentially important north-south migration corridor for a number of important species indicative of overall ecosystem health (Penrod et al., 2006).

Existing barriers to wildlife movement in proximity to the Proposed Project study area include Los Angeles Avenue, Santa Rosa Road, and Olsen Road. Wildlife movement corridors have also been reduced in the regional area by the conversion of natural lands for agriculture and large scale development projects. The Proposed Project would have a relatively small footprint and would either replace or be located adjacent to existing electrical infrastructure.

Special-Status Species

A comprehensive list of special-status plant and wildlife species that occur in the study area was compiled to assess the likelihood of species occurrence and potential Proposed Project impacts to these species. Some of these receive specific protection defined in federal or state endangered species legislation. Others have been designated as "sensitive" on the basis of adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as "special-status species" in this Environmental Impact Report (EIR), following a convention that has developed in practice but has no official sanction. The various categories encompassed by the term, and the legal status of each, are discussed in the *Regulatory Context* discussion within this section.

Special-status plant and wildlife species that are known or have potential to occur in the Proposed Project study area and their designated critical habitat are discussed below. Critical habitat in the Proposed Project study area is illustrated in **Figure 5.4-3**, *Critical Habitat in the Proposed Project Vicinity*, and is further described in the *Regulatory Setting* discussion. A list of special-status species reported or expected to occur within the Proposed Project study area was compiled on the basis of data in the PEA (SCE, 2013a), biological studies (BonTerra, 2008; 2010a; 2010b; 2010c; 2011a; and 2011b; and Leopold Biological Services, 2014), the California Natural



SOURCE: SCE, 2014; USFWS, 2014

Moorpark-Newbury 66 kV Subtransmission Line Project. 207584.15 Figure 5.4-3 Critical Habitat in the Proposed Project Vicinity Diversity Database (CNDDB) (CDFW, 2015), California Native Plant Society (CNPS)'s Online Inventory of Rare and Endangered Plants (CNPS, 2014), and species data for Ventura County from the U.S. Fish and Wildlife (USFWS) (USFWS, 2014). A list of special-status plant and wildlife species with potential to occur in the Proposed Project and alternatives study areas is presented in **Table 5.4-2**. The list is intended to be comprehensive and the "potential for occurrence" designations apply to species and habitats in the study area that would not necessarily be impacted by the Proposed Project or alternatives. Based upon this information, special-status species that have at least a moderate to high potential to occur in the study area and could be exposed to Proposed Project- or alternative-related impacts (i.e., a species or habitat that is either known or with a high potential to occur in the study area) are described below.

Special-Status Plants

Several special-status plant species have been reported near the Proposed Project and alternatives based on the results of the literature review described above. Eleven federally and/or state-listed Endangered or Threatened species are reported from the Newbury and/or Moorpark 7.5-minute U.S. Geological Survey topographic quadrangles or from the surrounding quadrangles. These include marsh sandwort (Arenaria paludicola), Braunton's milk-vetch (Astragalus brauntonii), San Fernando Valley spineflower (Chrozanthe parryi var. fernandina), Santa Monica dudleya (Dudleya cymosa ssp. ovatifolia), marcescent dudleya (Dudleya cymosa ssp. marcescens), Conejo dudleya (Dudleya parva), Verity's dudleya (Dudleya verityi), Gambel's watercress (Nasturtium gambelii), spreading navarretia (Navarretia fossalis), California orcutt grass (Orcuttia californica), and Lyon's pentachaeta (Pentachaeta lyonii) (see Table 5.4-2). Within the Proposed Project study area there is no suitable habitat for marsh sandwort, Gambel's watercress, spreading Navarretia, and California orcutt grass. Suitable habitat is present for Braunton's milk-vetch, San Fernando Valley spineflower, Santa Monica dudleya, marcescent dudleya, Conejo dudleya, Verity's dudleya, and Lyon's pentachaeta. These species are discussed in greater detail below. Conejo dudleya and Lyon's pentachaeta were identified in the Proposed Project study area. Table 5.4-2 summarizes the status and expected distribution of each special-status plant species reported in the vicinity of the Proposed Project and Alternatives.

In addition to federally- or state-listed plant species, those having a California Rare Plant Rank (CRPR) of 1A, 1B, or 2 are considered to meet the criteria of CEQA Guidelines Section 15380 and effects to these species are considered significant in this EIR. Additionally, plants identified as CRPR 1A, 1B, or 2 meet the definition of Section 1901, Chapter 10 (Native Plant Protection Act) and Sections 2062 and 2067 (California Endangered Species Act [CESA]) of the California Fish and Game Code (FGC) as rare or endangered species. As identified in Table 5.4-2, seven non-listed special-status plants were identified with at least a moderate potential to occur in the study area: round-leaved filaree (*California macrophylla*), Santa Susana tarplant (*Deinandra minthornii*), Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*), Conejo buckwheat (*Eriogonum crocatum*), mesa horkelia (*Horkelia cuneata* ssp. *puberula*), white-veined Monardella (*Monardella hypoleuca* ssp. *hypoleuca*), and Ojai navarretia (*Navarretia ojainensis*). A single CRPR List 4 species, Catalina mariposa lily (*Calochortus catalinae*), was also observed within the Proposed Project study area during botanical surveys.

TABLE 5.4-2 SPECIAL-STATUS SPECIES KNOWN OR WITH POTENTIAL TO OCCUR IN THE STUDY AREA

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Common Name Scientific Name	Listing Status: Fed/State/ CRPR	General Habitat	Potential for Species Occurrence in the Proposed Project Area
Invertebrates			
	FE	DERAL OR STATE THREATENED AND ENDANC	GERED SPECIES
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT/	Vernal pools and roadside ditches in seasonal grasslands, possibly interspersed with chaparral or coastal sage scrub vegetation.	Absent. No habitat. Vernal pools do not occur in the study area. Species is not reported within 5 miles.
Riverside fairy shrimp Streptocephalus woottoni	FE/	Vernal pools, deep long lived pools in seasonal grasslands possibly interspersed with chaparral or coastal sage scrub vegetation.	Absent. No habitat. Vernal pools do not occur in the study area. Species is reported from a vernal pool 2.9 miles east near Tierra Rejada Golf Club.
		STATE SPECIES OF SPECIAL CONCE	ERN
Monarch butterfly Danaus plexippus	/	Overwinters in tree groves, often eucalyptus. (Overwintering sites are protected by the CDFW).	Absent. No habitat. Overwintering groves are distributed along the coast; no inland locations reported.
Fish			
	FE	DERAL OR STATE THREATENED AND ENDANC	GERED SPECIES
Santa Ana sucker Catostomus santaanae	FT/CSC	Small, permanent streams with cool water and gravel, rubble, or boulder substrate.	Absent. No habitat. Introduced to the Santa Clara River, but does not occur in study area drainages.
Unarmored threespine stickleback Gasterosteus aculeatus williamsoni	FE/SE, CFP	Slow-moving reaches and quiet microhabitats of freshwater streams and rivers.	Absent. Does not occur in study area drainages. Occurs in the Santa Clara River headwaters and its tributaries.
Southern steelhead- southern California Distinct Population Segment (DPS) Oncorhynchus mykiss irideus	FE/CSC	Coastal streams and tributaries.	Present. Species is reported from Conejo Creek.
		STATE SPECIES OF SPECIAL CONCE	ERN
Arroyo chub Gila orcuttii	/CSC	Prefers warm water, pool habitats with sand and mud bottoms.	Present. Species is reported from Conejo Creek, which is crossed by the overhead alignment.
Amphibians			
FEDERAL OR STATE THREATENED AND ENDANGERED SPECIES			
California red-legged frog <i>Rana draytonii</i>	FT/CSC	Ponds and slow-moving creeks and streams with adjacent grasslands, oak woodlands.	Low. No seasonal wetlands occur within the study area. Species is not reported within 5 miles.
STATE SPECIES OF SPECIAL CONCERN			
Western spadefoot Spea hammondii	/CSC	Grassland, coastal sage scrub, and other habitats with open sandy or gravely soils. Frequents washes, floodplains, and alkali flats. Breeds in quiet streams and seasonal ponds.	Low. No seasonal wetlands occur within the study area. May breed in Proposed Project area drainages. Species is reported from a vernal pool and constructed pond 4 miles north of Moorpark substation.

TABLE 5.4-2 (Continued) SPECIAL-STATUS SPECIES KNOWN OR WITH POTENTIAL TO OCCUR IN THE STUDY AREA

	Listing		
Common Name Scientific Name	Status: Fed/State/ CRPR	General Habitat	Potential for Species Occurrence in the Proposed Project Area
Reptiles			
		STATE SPECIES OF SPECIAL CONCE	ERN
Silvery legless lizard Anniella pulchra pulchra	/CSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. Occurs in a variety of habitats, including chaparral and riparian. Will not persist in areas of human disturbance.	Moderate. Potentially suitable habitat is present.
Western pond turtle Emys marmorata	/CSC	Lakes, ponds, reservoirs, and slow- moving streams and rivers, primarily in foothills and lowlands.	Present. Species is reported from Conejo Creek, which is crossed by the alignment. High potential near other riparian habitats, which are limited in the Proposed Project area.
Coast horned lizard Phrynosoma blainvillii	/CSC	Scrubland, grasslands, forests and woodlands.	High. Species is reported from chaparral habitat proximate to an unnamed tributary to Conejo Creek, approximately 1,000 feet west of pole location 19.
Two-striped garter snake Thamnophis hammondii	/CSC	Wetlands, freshwater marsh and riparian habitats with perennial water.	Moderate. Species is reported from downstream Conejo Creek (2 miles from alignment) and may occur in riparian habitats crossed by the alignment.
South Coast garter snake <i>Thamnophis sirtalis</i> ssp.	/CSC	Low-gradient areas with perennial surface water and dense riparian vegetation, often within arid landscapes.	Low. May occur in riparian habitats crossed by the alignment. Species is not reported within 5 miles.
Birds			
	FE	DERAL OR STATE THREATENED AND ENDANC	GERED SPECIES
Swainson's hawk Buteo swainsoni	/ST	Forages over grasslands and ruderal vegetation in the region during migration	Absent (nesting). Limited suitable foraging habitat, no nesting habitat.
Western snowy plover Charadrius alexandrinus nivosus	FT/CSC	Nests on beaches, mudflats, salt ponds. Usually coastal but sometimes at interior brackish lakes.	Absent (absent). No habitat.
Western yellow-billed cuckoo Coccyzus americanus occidentalis	FT/SE	Riparian woodlands.	Low (nesting). Nests along the Santa Clara River. Suitable habitat may be present along drainages crossed by the alignment.
Southwestern willow flycatcher Empidonax traillii extimus	FE/SE	Dense riparian woodlands, often in willow thickets.	Low (nesting). Nests along the Santa Clara River. Species not detected in the study area during focused surveys.
California condor Gymnogyps californianus	FE/	Nests in rocky, remote mountains. Forages over grasslands.	Absent (nesting). Sespe Condor Sanctuary is 20 miles north. Suitable foraging habitat is limited in the Proposed Project area and species is unlikely to forage towards human population centers.
Belding's savannah sparrow Passerculus sandwichensis beldingi	/SE	Obligate resident of salt marshes.	Absent. No habitat.

TABLE 5.4-2 (Continued) SPECIAL-STATUS SPECIES KNOWN OR WITH POTENTIAL TO OCCUR IN THE STUDY AREA

Common Name Scientific Name	Listing Status: Fed/State/ CRPR	General Habitat	Potential for Species Occurrence in the Proposed Project Area
Birds (cont.)			
	FEDE	RAL OR STATE THREATENED AND ENDANGER	ED SPECIES (cont.)
Coastal California gnatcatcher Polioptila californica californica	FT/CSC	Obligate resident of coastal sage scrub habitats.	Present (nesting). Species detected during focused surveys in Conejo Open Space.
Light-footed clapper rail Rallus longirostris levipes	FE/SE, CFP	Obligate resident of salt marshes.	Absent. No habitat.
Bank swallow Riparia riparia	/ST	Nests colonially in vertical banks, cliffs, and bluffs along ocean, rivers, streams and lakes. Occurs in a variety of open water habitats during migration.	Low (nesting). Presence of potentially suitable habitat along drainages is unknown. Historical record at Lake Sherwood 4 miles south of Thousand Oaks.
California least tern Sternula antillarum browni	FE/SE, CFP	Marine or estuarine shores, sandbar islands in large rivers, exposed tidal flats and beaches.	Absent. No habitat.
Least Bell's vireo Vireo bellii pusillus	FE/SE	Riparian habitats dominated by willows with dense understory.	High (nesting) . Species is reported from riparian habitat along Arroyo Santa Rosa, approximately 1,000 feet east of pole location 25.
		STATE SPECIES OF SPECIAL CONCE	RN
Golden eagle Aquila chrysaetos	/WL, CFP, B&GEPA	Grasslands, deserts, savannas and open forest and shrub habitats. Requires large areas of open country for foraging. Nests primarily restricted to rugged mountain areas with large trees or on cliffs	Low (nesting) . Limited suitable foraging and nesting habitat.
Burrowing owl Athene cunicularia	/CSC	Open dry grasslands, deserts and scrublands with low-growing vegetation. Depends on burrowing mammals, notably California ground squirrel.	Low (nesting/ resident). Limited suitable habitat; species is not reported within 5 miles.
Coastal cactus wren Campylorhynchus brunneicapillus sandiegensis	/CSC	Coastal sage scrub, alluvial sage scrub habitats with appropriate <i>Opuntia</i> spp.	Moderate (nesting) . Suitable habitat present; not reported within 5 miles.
Yellow warbler Setophaga petechia brewsteri (=Dendroica petechia)	/CSC	Nests in sycamore and willow riparian woodlands with dense understory vegetation.	Present. Observed during field surveys (SCE, 2013a).
White-tailed kite Elanus leucurus	/CFP	Nests in oaks, willows, and sycamores, forages in grassland, and open scrub vegetation types.	Low (nesting). Limited suitable foraging and nesting habitat.
American peregrine falcon Falco peregrinus anatum	/CFP	Variety of habitats, particularly wetlands, and coastal areas, prefers high cliffs or building ledges for nesting.	Absent (nesting) . Limited suitable foraging habitat, no nesting habitat.
Loggerhead shrike Lanius ludovicianus	/CSC	Grasslands and other dry open habitats.	High (nesting). Suitable nesting and foraging habitat present.

TABLE 5.4-2 (Continued) SPECIAL-STATUS SPECIES KNOWN OR WITH POTENTIAL TO OCCUR IN THE STUDY AREA

	Listing		
Common Name Scientific Name	Status: Fed/State/ CRPR	General Habitat	Potential for Species Occurrence in the Proposed Project Area
Mammals			
		STATE SPECIES OF SPECIAL CONCE	RN
Pallid bat Antrozous pallidus	/CSC	Deserts, grasslands, shrublands, woodlands and forests. Open dry habitats with rocky areas for roosting. Roost sites must protect bats from high temperature. Sensitive to disturbance of roost sites.	Absent . No roosting habitat. Species is not reported within 5 miles.
Western mastiff bat Eumops perotis	/CSC	Open, semi-arid to arid habitats including conifer and deciduous woodlands, coastal scrub, chaparral. Roosts in crevices in cliff faces, buildings, trees and tunnels.	Absent . No roosting habitat Species is not reported within 5 miles.
Western red bat Lasiurus blossevillii	/CSC	Winter range includes western lowlands. Roosts in forests and woodlands from sea level through mixed conifer forests. Roosts are often in edge habitats near streams, fields, or urban areas.	Absent . No roosting habitat Species is not reported within 5 miles.
San Diego desert woodrat Neotoma lepida intermedia	/CSC	Coastal scrub of southern California, San Diego to San Luis Obispo Counties. Moderate to dense canopies preferred, abundant in areas with rock outcrops and rocky cliffs and slopes.	Present. Species is reported from the railroad alignment near pole location 5 (west from the Moorpark Substation). Suitable habitat is present; preferred sandy soils may be limited.
American badger <i>Taxidea taxus</i>	/CSC	Occurs in a wide variety of habitats, including dry grasslands, deserts, prairies and other treeless areas; occasionally found in open chaparral.	Moderate. Potentially suitable habitat is present. Species is not reported within 5 miles.
Plants	,		
		STATE THREATENED AND ENDANGERED	SPECIES
Marsh sandwort Arenaria paludicola	FE/CE/ 1B.1	Freshwater or brackish marshes and swamps. Sandy soils at 3-170 meters (m) above mean sea level (amsl).	Absent. No suitable habitat. Known from only two extant natural occurrences in Black Lake Canyon and Oso Flaco Lake.
Braunton's milk-vetch Astragalus brauntonii	FE//1B.1	Closed cone coniferous forest, coastal scrub, chaparral, disturbed areas, recent burns gravelly clay soils overlaying granite or limestone at 2-640 m amsl.	Low. Potentially suitable habitat present, but not detected during surveys. 27 extant occurrences in California (CA).
San Fernando Valley spineflower Chorizanthe parryi var. fernandina	FC/SE/ 1B.1	Sandy coastal scrub, valley and foothill grassland at 150-1,220 m amsl.	Low. Potentially suitable habitat present, but not detected during surveys. Three extant occurrences in CA.
Santa Monica dudleya Dudleya cymosa ssp. ovatifolia	FT//1B.2	Chaparral, coastal scrub in volcanic or rocky, sedimentary soils at 150-1,675 m amsl.	Low. Potentially suitable habitat present, but not detected during surveys. Three extant occurrences in CA.
Marcescent dudleya Dudleya cymosa ssp. marcescens	FT//1B.2	Chaparral. Volcanic rocky outcrops at 150-520 m amsl.	Low. Potentially suitable habitat present, but not detected during surveys. Nine extant occurrences in CA.
Conejo dudleya Dudleya abramsii spp. parva	FT//1B.2	Coastal scrub, valley and foothill grassland. Clayey or volcanic soils, rocky slopes and grassy hillsides at	Present. Detected during surveys. Thirteen extant occurrences in CA.

60-450m.

TABLE 5.4-2 (Continued) SPECIAL-STATUS SPECIES KNOWN OR WITH POTENTIAL TO OCCUR IN THE STUDY AREA

Common Name Scientific Name	Listing Status: Fed/State/ CRPR	General Habitat	Potential for Species Occurrence in the Proposed Project Area
Plants (cont.)			
		STATE THREATENED AND ENDANGERED SPE	ECIES (cont.)
Verity's dudleya <i>Dudleya verityi</i>	FT//1B.2	Chaparral, coastal scrub, cismontane woodland. Volcanic rocky outcrops. 60- 120 m amsl.	High. Habitat present, but species not found. Three extant occurrences in CA, near Conejo Mountain.
Gambel's watercress Nasturtium gambelii (=Rorippa gambelii)	FE/CT/ 1B.1	Fresh or brackish marshes and swamps at 5-330 m amsl.	Absent. No suitable habitat. One extant occurrence in CA, at Black Lake Canyon.
Spreading navarretia Navarretia fossalis	FT//1B.1	Vernal pools, playas, freshwater marshes and swamps, chenopod scrub at 30-655 m amsl.	Absent. No suitable habitat. 55 extant occurrences in CA.
California orcutt grass Orcuttia californica	FE/SE/ 1B.1	Vernal pools at 15-660 m amsl.	Absent . No suitable habitat. 31 extant occurrences in CA. Species is reported within 5 miles.
Lyon's pentachaeta Pentachaeta Iyonii	FE/SE/ 1B.1	Chaparral, valley and foothill grassland. Edges of clearings in chaparral, ecotones between shrub and grassland or edges of firebreaks at 30-630 m amsl.	Present. Detected during surveys. Proposed Project is sited within critical habitat. 35 extant occurrences in CA.
		STATE SPECIES OF SPECIAL CONCE	RN
Coulter's saltbush Atriplex coulteri	//1B.2	Alkaline or clay soils in valley and foothill grasslands, coastal scrub at 3-460 m amsl.	Unlikely. Has more of a coastal distribution, and nearest reported occurrence is greater than 5 miles from the Proposed Project area. Not detected during surveys.
Malibu baccharis Baccharis malibuensis	//1B.1	Chaparral, coastal scrub, cismontane and riparian woodland. 150-305m.	Absent. Documented only from the Santa Monica Mountains. This perennial deciduous shrub was not observed during surveys.
Round-leaved filaree California macrophylla	//1B.1	Clay soils in cismontane woodlands and valley and foothill grasslands. 15-1200m.	Moderate. Potentially suitable habitat is present, but not detected during surveys. Species is reported within 5 miles.
Catalina mariposa lily Calochortus catalinae	//4.2 ¹	Coastal scrub, chaparral, valley and foothill grassland. Rocky and sandy sites, of granitic or alluvial material, often common after fire. 90-1600m.	Present. Detected during surveys.
Slender mariposa lily Calochortus clavatus var. gracilis	//1B.2	Chaparral, coastal scrub, valley and foothill grassland at 320-1000 m amsl.	Unlikely. Elevations in the Proposed Project area are lower than reported locations. Not detected during surveys.
Plummer's mariposa lily Calochortus plummerae	//1B.2	Chaparral, Foothill Woodland, Yellow Pine Forest, Coastal Sage Scrub, Valley Grassland.	Moderate. Suitable habitat identified.
Southern tarplant Centromadia parryi ssp. australis	//1B.1	Vernal pools, margins of marshes and swamps, vernally mesic valley and foothill grassland at 0-480 m amsl.	Low. Potentially suitable habitat is present, but species not detected during surveys. Nearest reported occurrence is 0.7 mile.
Orcutt's pincushion Chaenactis glabriuscula var. orcuttiana	//1B.1	Sandy coastal bluff scrub and coastal dunes at 0-100 m amsl.	Absent. Suitable habitat is absent.

¹ Except for observed species, the list of plants in Table 5.4-1 is limited to California Rare Plant Rank (CRPR) rank 1 and 2 plants.

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TABLE 5.4-2 (Continued) SPECIAL-STATUS SPECIES KNOWN OR WITH POTENTIAL TO OCCUR IN THE STUDY AREA

Common Name Scientific Name	Listing Status: Fed/State/ CRPR	General Habitat	Potential for Species Occurrence in the Proposed Project Area
Plants (cont.)			
		STATE SPECIES OF SPECIAL CONCE	RN
Parry's spineflower Chorizanthe parryi var. parryi	//1B.1	Chaparral, coastal scrub, valley and foothill grassland at 275-1220 m amsl.	Low. Not detected during surveys. No occurrences within 5 miles.
Santa Susana tarplant Deinandra minthornii	//1B.2 State Rare	Chaparral, coastal scrub. Sandstone outcrops and crevices in shrubland at 280-760 m amsl.	Moderate. Potentially suitable habitat is present, but species not detected during surveys. Nearest reported occurrence is 4.9 miles.
Blochman's dudleya Dudleya blochmaniae ssp. blochmaniae	//1B.1	Chaparral, coastal scrub, valley and foothill grassland. Rocky soil, often clay or serpentinite at 5-450 m amsl.	Moderate. Potentially suitable habitat is present, but species not detected during surveys. Species is reported within 5 miles.
Conejo buckwheat Eriogonum crocatum	//1B.2 State Rare	Chaparral, coastal sage scrub, valley and foothill grassland. Volcanic rocky outcrops at 50-580 m amsl.	Moderate. Potentially suitable habitat is present, but species not detected during surveys. Species is reported within 5 miles.
Mesa horkelia Horkelia cuneata ssp. puberula	//1B.1	Chaparral, cismontane woodland, coastal sage scrub. Sandy or gravelly sites. 10-810m.	Moderate. Potentially suitable habitat is present, but species not detected during surveys.
Coulter's goldfields Lasthenia glabrata ssp. Coulteri	//1B.1	Coastal salt marshes and swamps, playas, vernal pools at 1-1,220 m amsl.	Absent. No suitable habitat.
White-veined monardella <i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i>	//1B.3	Chaparral, cismontane woodland at 50-1,525 m amsl.	Moderate. Potentially suitable habitat is present, but species not detected during surveys. Species is reported within 5 miles.
Southern curly-leaved monardella <i>Monardella sinuata</i> ssp. <i>sinuata</i>	//1B.2	Chaparral, openings in coastal scrub, cismontane woodland, sandy soils at 0-300 m amsl.	Low. Potentially suitable habitat is present, but species not detected during surveys. Preferred soils may be absent. Species is reported within 5 miles.
Ojai navarretia Navarretia ojaiensis	//1B.1	Openings in chaparral and coastal scrub; valley and foothill grasslands at 275-620 m amsl.	Moderate. Potentially suitable habitat is present, but species not detected during surveys.
Chaparral nolina Nolina cismontana	//1B.2	Chaparral, coastal scrub. Sandstone and shale substrates, also gabbro soils at 140-1,275 m amsl.	Low. Potentially suitable habitat is present, but species not detected during surveys. Preferred soils may be absent.
Nuttall's scrub oak <i>Quercus dumosa</i>	//1B.1	Chaparral, coastal scrub in sandy clay loam at 15-400 m amsl.	Absent. Potentially suitable habitat is present, but this perennial evergreen shrub was not observed during surveys.
Chaparral ragwort Senecio aphanactis	//2B.2	Chaparral, coastal scrub, cismontane woodland. Sometimes alkaline soils at 15-800 m amsl.	Low. Potentially suitable habitat is present. Preferred soils may be absent. Species is reported within 5 miles.
Sonoran maiden fern Thelypteris puberula var. sonorensis	//2B.2	Meadows and seeps at 50-610 m amsl.	Absent. No suitable habitat.
California screw-moss Tortula californica	//1B.2	Chenopod scrub, valley and foothill grassland in sandy soils at 10-1,460 m amsl.	Low. Potentially suitable habitat is present, but species not detected during surveys. Preferred soils may be absent.

TABLE 5.4-2 (Continued) SPECIAL-STATUS SPECIES KNOWN OR WITH POTENTIAL TO OCCUR IN THE STUDY AREA

Common Name Scientific Name	Listing Status: Fed/State/ CRPR	General Habitat	Potential for Species Occurrence in the Proposed Project Area
Plants (cont.)			

CDFW SENSITIVE NATURAL COMMUNITIES

Vegetation Alliance	Occurrence in the Project Area
California sycamore woodlands alliance (=Southern Riparian Forest)	Present. Occurs in the vicinity of pole locations 25, 26, 37, 39, 40, and 41.
Coast prickly pear scrub alliance	Present. Occurs in the vicinity of pole locations 26, 27, 28, 32-37, and 53-63.
Purple needle grass grassland alliance	Present. Occurs in the vicinity of pole locations 26, 27, and 47-53.
Nodding needle grass grassland alliance	Present. Occurs in the vicinity of pole locations 26, 27, and 47-53.
Foothill needle grass grassland alliance	Present. Occurs in the vicinity of pole locations 26, 27, and 47-53.

STATUS CODES:

Federal (U.S. Fish and Wildlife Service):

- B&GEPA = Golden and Bald Eagle Protection Act
- Listed as Endangered by the Federal Government FE = FΤ Listed as Threatened by the Federal Government
- = Federal Candidate for Listing
- FC CT = =
- Candidate Species for listing as Threatened under the FESA Birds on CDFW Watch List WL =

State (California Department of Fish and Wildlife):

- SE = Listed as Endangered by the State of California
- ST Listed as Threatened by the State of California
- CSC = California Species of Special Concern
- CFP = California fully protected species
- Rare = California

California Rare Plant Rank (CRPR):

- Rank 1B.1 = Rare, threatened, or endangered in CA and elsewhere; serious threat in CA
- Rank 1B.2 = Rare, threatened, or endangered in CA and elsewhere; moderate threat in CA
- Rank 1B.3 = Rare, threatened, or endangered in CA and elsewhere; low threat in CA
- Rank 2B.2 = Rare, threatened, or endangered in CA; more common elsewhere
- Rank 4.2 = Limited distribution; moderate threat in CA

SOURCES: CDFW, 2015; CNPS, 2014; Hovey and O'Brien, 2013; BonTerra, 2008; 2010a; 2010b; 2010c; 2011a; 2011b; and SCE, 2013a

Habitat evaluations and focused botanical surveys for Conejo dudleya and Lyon's pentachaeta were performed on the Moorpark and Newbury substation sites and proposed subtransmission alignment (BonTerra, 2008; 2010b). All plants encountered were identified to species and the results compiled in a compendium attached to the focused survey reports. Survey results are incorporated into Table 5.4-2. The botanical study area also encompassed the areas covered by No Project Alternative 1 and No Project Alternative 2.

Braunton's milk-vetch

Braunton's milk-vetch is a federally-listed Endangered species and a CRPR 1B.1 species. This perennial herb occurs in disturbed areas in carbonate soils in chaparral at elevations below 457 meters (m) (1,500 feet) above mean sea level (amsl) (Munz, 1968). This species has been reported from Oakbrook Regional Park, approximately 7 miles east from the Proposed Project area. A general plant and wildlife survey was completed during the typical January through August blooming period for this species and botanical surveys were also conducted during the blooming period (BonTerra, 2008; 2010b). This species was not observed. On November 14, 2006, the USFWS designated as critical habitat for Braunton's milk-vetch approximately 3,300 acres in Ventura, Los Angeles, and Orange Counties, California (USFWS, 2006). The Proposed Project and alternatives are not within designated critical habitat for this species.

San Fernando Valley Spineflower

San Fernando Valley Spineflower is a federal candidate species for listing as Threatened under the Federal Endangered Species Act (FESA), a state endangered species, and a California CRPR List 1B.1 species. This annual herb grows in sandy coastal scrub at elevations between 150 m and 1,220 m (492 feet to 4,003 feet) amsl. This species has been reported from Laskey Mesa in Calabasas, approximately 14 miles east of the Proposed Project area. A general plant and wildlife survey was completed during the April through July blooming period for this species and focused botanical surveys were also conducted during the blooming period (BonTerra, 2008; 2010b). This species was not observed. As a candidate for listing under the FESA, no critical habitat has been designated for this species.

Marcescent Dudleya

Marcescent dudleya is a federally-listed Threatened species, a State Rare plant, and a CRPR 1B.2 species. This perennial herb occurs in volcanic or rocky soils in chaparral at elevations between 150 m and 520 m (492 feet to 1,706 feet) amsl. This species has been reported from Boney Mountain approximately 4 miles south of the Proposed Project area. A general plant and wildlife survey was completed during the typical April through July blooming period for this species and botanical surveys were also conducted during the blooming period (BonTerra, 2008; 2010b). This species was not observed. Critical habitat has not been designated for the species.

Conejo Dudleya

Conejo dudleya is a federally-listed Threatened species and a CRPR 1.B.2 species. This perennial herb generally occurs in rocky soils and rock outcrops between 37 m and 412 m (120 feet to 1,350 feet) amsl in coastal sage scrub and valley and foothill grasslands. During focused botanical

surveys performed for the Proposed Project (BonTerra, 2010b), this species was observed within the study area of the alignment through Conejo Open Space. Critical habitat has not been established for the species.

Verity's Dudleya

Verity's dudleya is a federally-listed Threatened species and a CRPR 1.B.1 species. This perennial herb generally occurs in volcanic or rocky soils between 60 m and 120 m (197 feet to 394 feet) amsl in chaparral, coastal scrub, and cismontane woodland. This species is known from only three occurrences near Conejo Mountain, located approximately 1.5 miles west of the Proposed Project. Critical habitat has not been established for the species.

Lyon's Pentachaeta

Lyon's pentachaeta is a federal and state-listed Endangered species and a CRPR 1B.1 species. This annual herb occurs in rocky, clay soils in chaparral, coastal sage scrub, and valley and foothill grasslands between 31 m and 610 m (100 feet to 2,000 feet) amsl. During focused botanical surveys performed for the Proposed Project (BonTerra, 2010b), this species was observed within the study area of the alignment within Conejo Open Space.

On November 14, 2006, the USFWS published the Final Rule designating critical habitat for Lyon's pentachaeta (USFWS, 2006). This designation includes approximately 3,396 acres in Ventura, Los Angeles, and Orange counties, California. The Proposed Project is located within Subunit 2b of the Southern Simi Hills Critical Habitat Unit for this species.

Special-Status Wildlife

The following federal and/or state-listed Endangered or Threatened species have been reported in or near the study area: Riverside fairy shrimp (Streptocephalus wootonii), southern steelheadsouthern California Distinct Population Segment (DPS) (Oncorhynchus mykiss irrideus), western yellow-billed cuckoo (Coccyzus americanus occidentalis), southwestern willow flycatcher (Empidonax traillii extimus), coastal California gnatcatcher (Polioptila californica californica), bank swallow (Riparia riparia), and least Bell's vireo (Vireo bellii pusillus) (Table 5.4-2). Suitable habitat for Riverside fairy shrimp does not occur within the study area. Conejo Creek is known to support a population of southern steelhead (Hovey and O'Brien). Western yellow-billed cuckoo and southwestern willow flycatcher both nest along the Santa Clara River, and potentially suitable habitat may be present in California sycamore woodlands and other riparian zones in the study area. Coastal California gnatcatcher is documented to nest within the study area (BonTerra 2010b; Leopold Biological Services, 2014). Bank swallow historically nested at Sherwood Lake in the City of Thousand Oaks, but no contemporary occurrences are reported within 5 miles; potentially suitable habitat may be present along study area drainages. Least Bell's vireo nests exist in riparian habitat along Arroyo Santa Rosa approximately 1,000 feet east of pole location 25. These species are discussed in further detail below.

In addition to wildlife species listed under federal and state endangered species acts, multiple species reported near the study area are designated as Species of Special Concern (SSC) by CDFW

and/or granted protection as "special-status species" under Section 15380 of CEQA (see the *Regulatory Context* discussion). As described in Table 5.4-2, the following non-listed special-status species may be encountered in portions of the Proposed Project and alternatives study areas due to the presence of suitable habitat and known species distribution: arroyo chub (*Gila orcuttii*), silvery legless lizard (*Anniella pulchra pulchra*), western pond turtle (*Actinemys marmorata*), coast horned lizard (*Phrynosoma blainvillii*), two-striped garter snake (*Thamnophis sirtalis*), coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), northern harrier (*Circus cyaneus*), yellow warbler (*Dendroica petechia brewsteri*), white tailed-kite (*Elanus leucurus*), loggerhead shrike (*Lanius ludovicianus*), pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis*), western red bat (*Lasiurus blossevillii*), San Diego desert woodrat (*Neotoma lepida intermedia*), and American badger (*Taxidea taxus*).

Riverside Fairy Shrimp

Riverside fairy shrimp is a federally-listed Endangered species. This invertebrate species inhabits deep, long-lived pools in seasonal grasslands, some of which are interspersed among chaparral or coastal sage scrub vegetation (Eriksen and Belk, 1999). Riverside fairy shrimp are reported from a vernal pool in the Tierra Rejada Valley approximately 4 miles east of the Proposed Project (CDFW, 2015). No suitable habitat for this species occurs in the study area.

On April 12, 2005, the USFWS published a Final Rule designating approximately 306 acres of land in Ventura, Orange, and San Diego counties as critical habitat for Riverside fairy shrimp (USFWS, 2005). The Proposed Project and alternatives are not within designated critical habitat for this species.

Southern Steelhead- Southern California DPS

Southern steelhead is a federally-listed Endangered species and a California SSC. The southern California DPS of this fish species inhabits coastal rivers and streams from the Santa Maria River in southern San Luis Obispo County south to the Tijuana River at the U.S.-Mexico Border. Southern steelhead is documented to occur in Arroyo Simi and Conejo Creek, both of which would be crossed by Segment 2 of the proposed subtransmission line (NMFS, 2005; Hovey and O'Brien, 2013). A single southern steelhead was incidentally discovered in Conejo Creek in 2013 by CDFW biologists (Hovey and O'Brien, 2013). Regular steelhead runs are reported in drainages north and south of Conejo Creek, such as Arroyo Simi (north) and Big Sycamore Canyon Creek (south), but spawning habitat in Conejo Creek is considered marginal and juvenile holding habitat is sustained only by manmade flows (Hovey and O'Brien, 2013).

On September 2, 2005, the National Marine Fisheries Service (NMFS) published a Final Rule designating approximately 708 miles of riverine habitat as critical habitat for southern steelhead (NMFS, 2005). The Proposed Project and alternatives are not within designated critical habitat for this species.

Western Yellow-billed Cuckoo

Western yellow-billed cuckoo is federally listed as Threatened and is a California Endangered species. This species nests in riparian woodlands, and is documented to occur in riparian habitat

along the Santa Clara River approximately 8 miles north of the Proposed Project (CDFW, 2015). Potentially suitable habitat for western yellow-billed cuckoo may be present in California sycamore woodlands and other riparian communities in the study area. This species was not observed during focused surveys for least Bell's vireo conducted within similar suitable habitat (BonTerra, 2010c).

No critical habitat has been designated for this species.

Southwestern Willow Flycatcher

Southwestern willow flycatcher is a federal and state-listed Endangered species. This species nests in dense riparian woodlands, often in willow thickets, and is documented to occur in riparian habitat along the Santa Clara River approximately 8 miles north of the Proposed Project. Potentially suitable habitat for southwestern willow flycatcher may be present in California sycamore woodlands and other riparian communities in the study area. This species was not observed during focused surveys for least Bell's vireo conducted within similar suitable habitat (BonTerra, 2010c).

On January 3, 2013, the USFWS published a Final Rule designating segments of the Ventura River in Ventura County as critical habitat for southwestern willow flycatcher (USFWS, 2013). The Proposed Project and alternatives are not within designated critical habitat for this species.

Coastal California Gnatcatcher

Coastal California gnatcatcher is a federally-listed Threatened species and a California SSC. In California, this subspecies is an obligate resident of coastal sage scrub vegetation types. Focused surveys were conducted to determine species presence within suitable habitat in the Proposed Project study area. Within 500 feet of the Proposed Project right-of-way (ROW), Leopold Biological Services (2014) mapped 113.53 acres of suitable California gnatcatcher habitat (see Figure 5.4-4, California Coastal Gnatcatcher (CAGN) Suitable Habitat in the Proposed Project Vicinity). This included 7.25 acres of suitable habitat in Segment 2 on the south side of Santa Rosa Valley; 62.24 acres of suitable habitat in Segment 3; and 44.04 acres in Segment 4. Within these areas, 10 coastal California gnatcatchers were observed in four occupied territories totaling 32.44 acres. Active gnatcatcher territories were described in association with coastal sage scrub habitat near the northernmost two towers in Segment 4, throughout Segment 3, and in the southernmost portion of Segment 2 (Leopold Biological Services, 2014) (see Figure 5.4-4). Native vegetation in these areas includes rosemary flat-topped buckwheat, California sagebrush, black sage, gray coast buckwheat, coastal prickly pear, purple sage, bladderpod (Isomeris arborea), bush sunflower (Encelia *californica*), lemonadeberry, coyote brush, western poison oak, bush monkeyflower, laurel sumac, and deerweed. Three nesting pairs were identified near the alignment within the Conejo Open Space (BonTerra, 2008; 2010b; 2011a; Leopold Biological Services, 2014).

On December 19, 2007, the USFWS designated 197,303 acres of critical habitat for the coastal California gnatcatcher in Ventura, Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties, California (USFWS, 2007). The nearest designated critical habitat is located



SOURCE: SCE, 2013 and 2014; Leopold Biological Services, 2014

Moorpark-Newbury 66 kV Subtransmission Line Project. 207584.15 Figure 5.4-4 California Coastal Gnatcatcher (CAGN) Suitable Habitat in the Proposed Project Vicinity approximately 3.5 miles east from the Proposed Project near Tierra Rejada Valley. The Proposed Project and alternatives are not within designated critical habitat for this species.

Bank Swallow

Bank swallow is a state-listed Threatened species. This species breeds in lowland areas along coasts, rivers, streams, lakes, reservoirs, and wetlands. Bank swallows forage over wetlands, open water, grasslands, riparian woodlands, agricultural areas, shrublands, and occasionally upland woodlands. The species is reported from an historical record in the vicinity of Lake Sherwood located approximately 4 miles south of the City of Thousand Oaks, and from six other records of now-extirpated populations occurring between the Santa Clara River valley to the north and the City of Pasadena to the east. It is unknown whether there is potentially suitable habitat along study area drainages, but the species is unlikely to be encountered in the study area, as known nesting sites within 50 miles having been abandoned (CDFW, 2015). As the species is not federally listed, there is no designated critical habitat for bank swallow.

Least Bell's Vireo

Least Bell's vireo is a federal and state-listed Endangered species. The least Bell's vireo breeds primarily in riparian habitats dominated by willows with dense understory vegetation. A dense shrub layer 2 to 10 feet above the ground is the most important habitat characteristic for this species (Kus, 2002; Franzreb, 1989). In addition to numerous contemporary nesting records from the Santa Clara River valley located approximately 8 miles north, this species was documented nesting in riparian habitat along Arroyo Santa Rosa approximately 1,000 feet east of pole location 25 (CDFW, 2015). Potentially suitable habitat within the Proposed Project study area was identified within an unnamed blueline drainage that bisects the subtransmission line alignment at the southern end of Segment 2 and within two side channels which serve as tributaries to the drainage. Native vegetation within this area includes willows (*Salix* sp.), mule fat, western sycamore, coast live oak (*Quercus agrifolia*), California sagebrush, bush sunflower, and western poison oak. Protocol surveys were conducted within this area between May and July, 2010, and no least Bell's vireos were detected (BonTerra, 2010c).

On February 2, 1994, the USFWS published a final critical habitat for the least Bell's vireo, designating approximately 37,560 acres of land in Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, and San Diego counties, including land along the Santa Clara River in Ventura County (USFWS, 1994). The Proposed Project and alternatives are not within designated critical habitat for this species.

Jurisdictional Waters of the U.S., Including Wetlands

Wetlands are ecologically productive habitats that support a rich variety of both plant and animal life. They are recognized as important natural systems because of their value to fish and wildlife, and their functions as storage areas for flood flows, groundwater recharge, nutrient recycling and water quality improvement. Wetlands are defined as areas that are periodically or permanently inundated by surface or ground water and support vegetation adapted to saturated soils.

An assessment of potential state and federal jurisdictional resources was conducted for the Proposed Project in 2011 (BonTerra, 2011c; 2011d) and a preliminary jurisdictional delineation was conducted in 2013 (SCE, 2013b). Based on the preliminary jurisdictional delineation report, three significant drainage features/systems were identified to cross the proposed subtransmission line alignment (i.e., Arroyo Santa Rosa, Arroyo Simi, and an unnamed tributary to Conejo Creek), along with seven small jurisdictional features including ephemeral channels, erosional features, and agricultural ditches.

Regulatory Setting

Biological resources in California are protected and regulated by a variety of laws and policies administered by federal, state, and local agencies. This section summarizes the biological resource-related agencies, regulations, and policies relevant to the Proposed Project and alternatives.

Federal

U.S. Fish and Wildlife Service

The USFWS administers the FESA (16 U.S. Code [USC] 153 et seq.), the Migratory Bird Treaty Act (MBTA) (16 USC 703–711), and the Bald and Golden Eagle Protection Act (16 USC 668).

Federal Endangered Species Act. Under the FESA, the Secretary of the Interior and the Secretary of Commerce have joint authority to list a species as Threatened or Endangered (16 USC§1533(c)). Two federal agencies oversee the FESA: the USFWS has jurisdiction over plants, wildlife, and resident fish, while the National Oceanic and Atmospheric Administration/National Marine Fisheries Service (NOAA Fisheries/NMFS) has jurisdiction over anadromous fish and marine fish and mammals. FESA Section 7 mandates that all federal agencies consult with the USFWS and NOAA Fisheries/NMFS to ensure that federal agency actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species. The FESA prohibits the "take"² of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery.

FESA Section 10 requires the issuance of an "incidental take" permit before any public or private action may be taken that would potentially harm, harass, injure, kill, capture, collect, or otherwise hurt (i.e., take) any individual of an endangered or threatened species. The permit requires preparation and implementation of a habitat conservation plan that would offset the take of individuals that may occur, incidental to implementation of a project by providing for the overall preservation of the affected species through specific mitigation measures.

Critical Habitat. USFWS designates critical habitat for listed species under FESA. Critical habitat designations are specific areas within a geographic region that are occupied by a species and determined to be critical to its survival in accordance with FESA. Agencies that propose, fund, or issue a permit for a project that may affect a federally listed species or critical habitat

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² The FESA definition of the term "take" is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in any such conduct.

must prepare a Habitat Conservation Plan as part of an application for a permit from the USFWS. Figure 5.4-3 identifies designated critical habitat in the Proposed Project study area, which has been designated for coastal California gnatcatcher.

Protection of Nesting Birds - Migratory Bird Treaty Act. The MBTA (16 USC §703 Supp. I, 1989) prohibits the killing, possessing, or trading of migratory birds, bird parts, eggs, or nests, except in accordance with regulations prescribed by the Secretary of the Interior.

U.S. Army Corps of Engineers

Clean Water Act, Section 404. The U.S. Army Corps of Engineers (Corps) administers Section 404 of the Clean Water Act (CWA). Section 404 regulates activities in wetlands and "other waters of the United States (U.S.)." Wetlands are a subset of "waters of the U.S." that are defined in the Code of Federal Regulations (CFR) (33 CFR 328.3[a]; 40 CFR 230.3[s]) as:

- 1. All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide.
- 2. All interstate waters including interstate wetlands. (Wetlands are defined by the federal government [33 CFR 328.3(b), 1991] as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances support, a prevalence of vegetation typically adapted for life in saturated soil conditions.)
- 3. All other waters—such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds—the use, degradation, or destruction of which could affect interstate or foreign commerce. This includes any waters with the following current or potential uses:
 - a. That are or could be used by interstate or foreign travelers for recreational or other purposes,
 - b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce, or
 - c. That are used or could be used for industrial purposes by industries in interstate commerce.
- 4. All impoundments of waters otherwise defined as waters of the United States under the definition.
- 5. Tributaries of waters identified in paragraphs (1) through (4).
- 6. Territorial seas.
- 7. Wetlands next to waters identified in paragraphs (1) through (6).
- 8. Waters of the U.S. do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding the Clean Water Act jurisdiction remains with the U. S. Environmental Protection Agency (328.3[a][8] added 58 CFR 45035, August 25, 1993).

State

CEQA Guidelines Section 15380

CEQA Guidelines Section 15380(b) provides that a species not listed by FESA or CESA may be considered rare or endangered if it can be shown to meet certain criteria for rarity. These criteria have been modeled after the definition of FESA and the section of FGC discussing rare or endangered plants or animals. This section was included in the CEQA Guidelines primarily for situations in which a public agency is reviewing a project that may have a significant effect on a candidate species that has not yet been listed by CDFW or USFWS. CEQA provides the ability to protect species from potential project impacts until the respective agencies have the opportunity to designate the species protection.

CEQA also specifies the protection of other locally or regionally significant resources, including natural communities or habitats. Although natural communities do not presently have legal protection, CEQA requires an assessment of such communities and potential project impacts. Natural communities identified by CDFW as sensitive are considered to be significant resources and fall under the CEQA Guidelines for addressing impacts. Local planning documents such as general and area plans often identify natural communities.

California Department of Fish and Wildlife

The CDFW administers a number of laws and programs designed to protect fish and wildlife resources under FGC, such as the CESA (FGC §2050, et seq.), Fully Protected Species (FGC §3511), Native Plant Protection Act (FGC §§1900–1913), and Lake and Streambed Alteration Agreement Program (FGC §§1600–1616), as well as manages the California Species of Special Concern list.

California Endangered Species Act. In 1984, California implemented the CESA, which prohibits the take of state-listed Endangered and Threatened species; although, habitat destruction is not included in the state's definition of take. Section 2090 requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. The CDFW administers the act and authorizes take through FGC Section 2081 agreements (except for designated "Fully Protected Species"). Unlike its federal counterpart, CESA protections apply to candidate species that have been petitioned for listing.

Regarding listed rare and endangered plant species, CESA defers to the California Native Plant Protection Act (see below).

Fully Protected Species - Fish and Game Code Section 3511. Fully Protected Species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. The designation of Fully Protected status was the state's initial effort in the 1960s to identify and provide additional protection to those animals that were rare or faced possible extinction. Its "no take" provision is still applicable.

Native Plant Protection Act. FGC Sections 1900–1913, also known as the Native Plant Protection Act, is intended to preserve, protect, and enhance endangered or rare native plants in California. The act directs CDFW to establish criteria for determining what native plants are rare or endangered. Under Section 1901, a species is endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more cause. A species is rare when, although not threatened with immediate extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens. The act also directs the California Fish and Game Commission to adopt regulations governing the taking, possessing, propagation, or sale of any endangered or rare native plant.

Riparian Communities in California. Riparian communities have a variety of functions, including providing high-quality habitat for resident and migrant wildlife, streambank stabilization, and runoff water filtration. Throughout the U.S., riparian habitats have declined substantially in extent and quality compared with their historical distribution and condition. These declines have increased concerns about dependent plant and wildlife species, leading federal agencies to adopt policies to arrest further loss.

Lake and Streambed Alteration Program. 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. FGC Section 1602 requires notification of CDFW for lake or stream alteration activities. If, after notification is complete, the CDFW determines that the activity may substantially adversely affect an existing fish and wildlife resource, the CDFW has authority to issue a Lake and Streambed Alteration Agreement under Section 1603 of the FGC. Requirements to protect the integrity of biological resources and water quality are often conditions of streambed alteration agreements. These may include avoidance or minimization of heavy equipment use within stream zones, limitations on work periods to avoid impacts to wildlife and fisheries resources, and measures to restore degraded sites or compensate for permanent habitat losses.

Species of Special Concern. CDFW maintains lists for candidate-endangered species and candidate-threatened species. California candidate species are afforded the same level of protection as listed species. California also designates Species of Special Concern, which are species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. These species do not have the same legal protection as listed species or Fully Protected Species, but may be added to official lists in the future. CDFW intends the Species of Special Concern list to be a management tool for consideration in future land use decisions.

Fish and Game Code Section 3503. FGC Section 3503.5 provides that it is unlawful to take, possess, or destroy any birds in the orders 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. Construction activities that result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment and/or reproductive failure are considered a "take" by CDFW. Any loss of eggs, young, or active nests, or any activities resulting in nest abandonment would constitute a significant project impact.

Local

California Public Utilities Commission (CPUC) General Order No. 131-D explains that local land use regulations would not apply to the Proposed Project. However, for informational purposes, the goals and policies of local general plans and other planning documents pertaining to biological resources that would otherwise be relevant to the Proposed Project and alternatives are described below.

Ventura County General Plan

For information purposes, the following goal and policies identified in the Ventura County General Plan were considered to inform the significance determination related to the protection of biological resources in the study area (County of Ventura, 2013):

1.5.1 Goal: Preserve and protect significant biological resources in Ventura County from incompatible land uses and development. Significant biological resources include endangered, threatened or rare species and their habitats, wetland habitats, coastal habitats, wildlife migration corridors and locally important species/communities.

1.5.2 Policies

- 1. Discretionary development which could potentially impact biological resources shall be evaluated by a qualified biologist to assess impacts and, if necessary, develop mitigation measures.
- 2. Discretionary development shall be sited and designed to incorporate all feasible measures to mitigate any significant impacts to biological resources. If the impacts cannot be reduced to a less than significant level, findings of overriding considerations must be made by the decision-making body.
- 3. Discretionary development that is proposed to be located within 300 feet of a marsh, small wash, intermittent lake, intermittent stream, spring, or perennial stream (as identified on the latest USGS 7½ minute quad map), shall be evaluated by a County approved biologist for potential impacts on wetland habitats. Discretionary development that would have a significant impact on significant wetland habitats shall be prohibited, unless mitigation measures are adopted that would reduce the impact to a less than significant level; or for lands designated "Urban" or "Existing Community," a statement of overriding considerations is adopted by the decision-making body.
- 4. Discretionary development shall be sited a minimum of 100 feet from significant wetland habitats to mitigate the potential impacts on said habitats. Buffer areas may be increased or decreased upon evaluation and recommendation by a qualified biologist and approval by the decision-making body. Factors to be used in determining adjustment of the 100 foot buffer include soil type, slope stability, drainage patterns, presence or absence of endangered, threatened or rare plants or animals, and compatibility of the proposed development with the wildlife use of the wetland habitat area. The requirement of a buffer (setback) shall not preclude the use of replacement as a mitigation when there is no other feasible alternative to allowing a permitted use, and if the replacement results in no net loss of wetland habitat. Such replacement shall be "in kind" (i.e., same type and acreage), and provide wetland habitat of comparable biological value. On-site replacement shall be preferred

wherever possible. The replacement plan shall be developed in consultation with California Department of Fish and Game.

- 5. The CDFW, USFWS, National Audubon Society and the CNPS shall be consulted when discretionary development may affect significant biological resources. The National Park Service shall also be consulted regarding discretionary development within the Santa Monica Mountains or Oak Park Area.
- 6. Based on the review and recommendation of a qualified biologist, the design of road and floodplain improvements shall incorporate all feasible measures to accommodate wildlife passage.

Thousand Oaks Area Plan

For information purposes, the following goals and policies identified in the Thousand Oaks Area Plan of the Ventura County General Plan are relevant to the Proposed Project and alternatives (County of Ventura, 2010):

1.3.1 Goals:

- 1. Protect to the maximum extent feasible the biological resources of the Thousand Oaks Area of Interest in order to maintain natural ecosystems and also preserve the natural beauty of the area (e.g., volcanic outcrops, meadows, thin-soiled volcanic substrate slopes, wetlands areas, etc.).
- 2. Preserve and protect rare, threatened, endangered and candidate plant and animal species and their habitats.
- 3. Protect wildlife habitat and ensure viable wildlife movement corridors between open lands, including parklands, within the study area and surrounding the Conejo Valley.
- 4. Protect the significant stands of the major plant communities of Thousand Oaks: Southern oak woodland, oak savannah, chaparral, coastal and inland sage scrub, riparian woodland, and grassland.
- 5. Preserve natural vegetation by restricting grading on hillsides and in canyons to preserve its intrinsic value for wildlife habitat, for slope stability, and for scenic beauty.
- 6. Protect sources of water vital to wildlife, such as springs, ponds, and streams.
- 7. Encourage revegetation or landscaping that incorporates indigenous native plant species in order to restore habitat in already disturbed or urbanized areas.
- 8. Recognize the role of fire in local ecosystems in order that it be taken into account in all planning efforts.

1.3.2 Policies

1. A biological field reconnaissance report detailing the composition of species at the site, the presence of rare, threatened, endangered or candidate plant or animal species, the presence of important wildlife movement corridors and wetlands, and suitable mitigation measures shall be prepared by the County's biological consultant

as part of the environmental assessment of all discretionary development permits involving earth movement or construction on previously undeveloped land (i.e., where the natural vegetation still exists).

- 2. The City of Thousand Oaks, the Conejo Open Space Conservation Agency (COSCA), the California Department of Parks and Recreation, the Santa Monica Mountains Conservancy, and the Santa Monica Mountains National Recreation Area shall be consulted during the initial 30-day project review period for discretionary development proposals when proposals which may adversely affect the biological resources under their purview are submitted.
- 3. Standard Conditions for Projects Incorporating Permanent Open Space/Recreation (see Section 5.1) shall be imposed, as appropriate, on all discretionary development adjoining or affecting significant habitat and wetland areas.
- 4. Deed restrictions, conservation easements and/or parkland/open space dedications to an appropriate public agency (e.g., Conejo Open Space Conservation Agency (COSCA), California Department of Parks and Recreation, National Park Service, Conejo Recreation and Park District, Nature Conservancy, a Homeowners Association or other entity approved by the County) shall be employed on portions of properties with severe environmental constraints, in order to protect significant natural areas by preserving them as permanent open space/recreation areas while permitting property owners to develop less constrained portions of property (see Section 5.1).
- 5. Discretionary development shall be located to avoid the loss or damage to protected trees. Removal of protected trees shall only occur after review of the necessity of such removal, and in accordance with the provisions of the County's Scenic Resource Protection Overlay Zone (Zoning Ordinance), the County's Tree Protection Ordinance (Zoning Ordinance), and the Guidelines for the Preservation and Protection of Trees (see Section 5.2).
- 6. Discretionary development within high fire hazard areas shall be reviewed with attention to the environmental impact of required brush clearance to biological resources, particularly on moderate to steep slopes. Brush clearance that reduces fuel volumes while allowing the selective retention of native shrubs a minimum of 20' apart should be encouraged, as permitted by the Ventura County Fire Protection District.

Ventura County Tree Protection Ordinance

Ventura County identifies the following trees in its Tree Protection Ordinance: alder (*Alnus* spp.), ash (*Fraxinus* spp.), bay (*Umbellularia californica*), cottonwood (*Populus* spp.), elderberry (*Sambucus* spp.), big cone Douglas fir (*Pseudotsuga macrocarpa*), white fir (*Abies concolor*), juniper (*Juniperus californica*), maple (*Acer macrophyllum*), oak, pine, sycamore (*Platanus* spp.), and walnut (*Juglans* spp.). Size requirements for protected status vary by species. The ordinance designates trees with a single trunk 90 inches in diameter or with multiple trunks totaling 72 inches in diameter as heritage trees. In addition, the ordinance designates any trees identified by the County or a city as a landmark, or identified on the Federal or California Historic Resources Inventory to be of historical or cultural significance (i.e., historical trees).

The Ventura County Tree Protection Ordinance includes permit exemptions for tree pruning and trimming by public utilities for purposes of protecting the public and maintaining adequate clearance from public utility conduits and facilities. In addition, the ordinance provides for ministerial permits for tree removal or alteration when a tree interferes with public utilities facilities (County of Ventura, 2009).

City of Thousand Oaks General Plan

For information purposes, the following Recreational, Parks, and Natural Open Space Policies and Additional Policies identified in the City of Thousand Oaks General Plan would be relevant to the Proposed Project and alternatives (City of Thousand Oaks, 1996):

- The majority of natural open space acreage will be in public ownership.
- Wildlife corridors and sensitive ecological systems within the City's Planning Area should be protected.
- The City shall preserve and protect the unique biodiversity of the City's open spaces and wetlands, including natural arroyos and oak trees.

City of Moorpark General Plan

For information purposes, the following goal and policies identified in the City of Moorpark General Plan would be relevant to the Proposed Project and alternatives (City of Moorpark, 1992):

Goal 15: Maintain a high quality environment that contributes to and enhances the quality of life and protects public health, safety, and welfare.

Policy 15.1: Public and private projects shall be designed so that significant vegetation shall be maintained and protected, including riparian and oak woodland vegetation and mature trees (as defined in the City code).

Policy 15.2: Ecologically sensitive habitats shall be protected and preserved or replaced with no net loss of habitat so long as there is substantial public benefit to any relocation program.

Policy 15.5: The City shall require developers to maintain wildlife corridors to allow for the passage of animals between designated open space or recreation areas.

5.4.2 Significance Criteria

According to Appendix G of the CEQA *Guidelines*, a project would result in significant biological resources effects on the environment if it would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS (including List 1A, 1B, and 2 plant species of the CNPS Inventory);

- b) Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFW or USFWS;
- 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; or
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, other approved local, regional, or state habitat conservation plan.

CEQA Section 15380 provides that a plant or animal species may be treated as "Rare or Endangered" even if not on one of the official lists if, for example, it is likely to become endangered in the foreseeable future. As species of plants and animals become restricted in range and limited in population numbers, species may become listed or candidates for listing as Endangered or Threatened and become recognized under CEQA as a significant resource. Examples of such species are vernal pool fairy shrimp and burrowing owl; the former is listed by the federal government and the latter is considered a California Species of Special Concern.

In conducting the following impact analysis, three principal components of the CEQA Guidelines outlined above were considered:

- Magnitude of the impact (e.g., substantial/not substantial);
- Uniqueness of the affected resource (i.e., rarity of the resource); and
- Susceptibility of the affected resource to perturbation (i.e., sensitivity of the resource).

The evaluation of the significance of the following impacts considered the interrelationship of these three components. For example, a relatively small magnitude impact to a federal or statelisted species would be considered significant because the species is very rare and is believed to be very susceptible to disturbance. Conversely, a plant community such as California annual grassland is not necessarily rare or sensitive to disturbance. Therefore, a much larger magnitude of impact would be required to result in a significant impact.

5.4.3 Applicant Proposed Measures

The following applicant proposed measures (APMs) would be implemented during future construction activities to reduce environmental impacts. The impact analysis assumes that these APMs would be implemented to reduce biological impacts as discussed below.

APM BIO-1: General.

- Where wood subtransmission poles have been replaced with LWS poles during past construction activities, the previously-installed poles would be retrofitted to be aviansafe with newly available equipment and consistent with the *Suggested Practices for Avian Protection on Power Lines: the State of the Art in 2006* (Avian Power Line Interaction Committee 2006).
- During future construction activities, newly-installed LWS poles would be designed to be avian-safe with newly available equipment and consistent with the *Suggested Practices for Avian Protection on Power Lines: the State of the Art in 2006* (Avian Power Line Interaction Committee 2006).
- Clearance surveys, including avian species, will be conducted no more than 30 days prior to the start of construction in a particular area to identify potential plant and animal species that could be present during construction activities. Clearance surveys will be conducted by a qualified botanist and wildlife biologist and will be limited to areas directly impacted by construction activities.
- A qualified biologist will be present during clearing and restoration activities to ensure that native habitat (coastal sage scrub) removal will be minimized.
- Restoration activities in disturbed areas of native habitat (coastal sage scrub) will continue to be implemented in accordance the CDFW SAA and HRMP requirements, as applicable.
- Implement Worker Environmental Awareness Training (See [PEA] Section 3.9.7).
- Surveys for protected trees will be conducted by a certified arborist to identify trees meeting regulatory protection standards. When applicable, the proper permit will be obtained for trimming and/or removal of protected trees.

APM BIO-2: Special Status Plants.

- Focused surveys for Lyon's pentachaeta and Conejo dudleya to be conducted no more than 30 days prior to start of construction in areas with potentially suitable habitat.³
- Areas supporting Lyon's pentachaeta will be flagged prior to project activities by a qualified biologist and avoided during construction. In addition, a biological monitor will be present during project activities occurring within the vicinity of these resources to ensure that no sensitive species will be impacted.⁴
- Areas supporting Conejo dudleya will be flagged prior to project activities by a qualified biologist and avoided during construction. In addition, a biological monitor will be present during project activities occurring within the vicinity of these resources to ensure that no sensitive species will be impacted.⁵
- When digging holes for pole replacements within Lyon's pentachaeta critical habitat the upper six (6) inches of topsoil will be salvaged/stockpiled within Lyon's

³ August 30, 2010 letter from SCE to Ms. Diane K. Noda, Field Supervisor, Ventura Fish and Wildlife Office in [PEA] Appendix F.

 $[\]frac{4}{Ibid}$.

⁵ *Op cit.* 6

pentachaeta critical habitat in order to maintain the native seed bank. The topsoil will be stored on a protective surface (such as a tarp), piled no more than three feet high, and was replaced (within two weeks) as the top layer when ground disturbing work was completed.⁶

• Where applicable, disturbed areas within Lyon's pentachaeta habitat will continue to be restored in accordance with the CDFW SAA and HRMP requirements.⁷

APM BIO-3: Special Status Birds.⁸

- Focused protocol surveys to be conducted prior to construction for the coastal California gnatcatcher (*Polioptila californica californica*).
- During the breeding season (February 15 through August 30), a protocol survey for the coastal California gnatcatcher will be conducted prior to construction by a wildlife biologist possessing a valid recovery permit from the USFWS for the coastal California gnatcatcher.
- If project activities occur during the breeding season (February 15 through August 30), a 500-foot buffer will be established around coastal California gnatcatcher nest sites, and this area will be avoided until the young fledged or until the birds abandoned the nest.
- No grading of habitat occupied by nesting coastal California gnatcatchers (including a 500-foot buffer area in all direction from the nest) will occur during the breeding season (February 15 through August 30).
- Project activities that will occur within 500 feet of a mapped coastal California gnatcatcher territory will be monitored by a qualified biologist who possesses a valid recovery permit for the species.

APM BIO-4: Nesting Bird Protection. SCE will develop and implement a projectspecific nesting bird management plan (the plan) addressing nesting birds in collaboration with the CDFW and USFWS as needed. The plan would be an adaptive management plan to be updated as needed improvements are identified or conditions in the field change. Conditions typically implemented in this plan would include: nest management and avoidance, field approach (survey methodology, reporting, and monitoring), and the Project avian biologist qualifications. The avian biologist would be responsible for oversight of the avian protection activities including the biological monitors. In order to minimize impacts to nesting birds (common or special status), ongoing preconstruction surveys and daily sweep surveys of active construction areas by a qualified biologist would focus on breeding behavior and a search for active nests, as defined by CDFW and USFWS, within 500 feet of the Project. At a minimum, the plan would include the following:

• For vegetation clearing that needs to occur during the typical nesting bird season (February 1 to August 31; as early as January 1 for raptors) qualified biologists would conduct nesting bird surveys. If an active nest were located, the appropriate avoidance and minimization measures from the management plan would be

 $[\]stackrel{6}{=}$ Op cit. 6

⁷ February 16, 2010 California Department of Fish and Wildlife Streambed Alteration Agreement for the Moorpark Newbury Park 66kV Line Area Notification #1600-2011 0325-R5 Revision 2; contained in [PEA] Appendix F.

⁸ *Op cit.* 6

implemented. If active nest removal is required, SCE would consult with CDFW and USFWS;

- During the typical nesting bird season, SCE would conduct preconstruction clearance surveys no more than 14 days prior to construction and in accordance with the adaptive management plan, to determine the location of nesting birds and territories. Preconstruction sweeps would be conducted within 3 days before construction begins at a given project location;
- Nest monitoring would be conducted by Project biological monitors with knowledge of bird behavior;
- Nesting deterrents (e.g., mooring balls, netting, etc.) would be used for inactive nests at the direction of the Project avian biologist in consultation with CDFW and USFWS;
- A Project avian biologist would determine the appropriate buffer area around active nest(s) and provisions for buffer exclusion areas (e.g., highways, public access roads, etc.) along with construction activity limits. The Project avian biologist would determine, evaluate, and modify buffers as appropriate based on species tolerance and behavior, the potential disruptiveness of construction activities, and surrounding conditions; and,
- The Project biological monitor would ensure implementation of appropriate buffer areas around active nest(s) during project activities. The active nest site and applicable buffer would remain in place until nesting activity concluded. Nesting bird status reports would be submitted according to the management plan.

APM WET-1: Worker Environmental Awareness Training. Prior to the start of past construction activities, a Worker Environmental Awareness Plan (WEAP) was developed. A presentation was prepared by SCE and used to train site personnel prior to the commencement of work. A record of all trained personnel was kept. This process would be repeated prior to and during the future construction activities.

The WEAP training included a list of phone numbers of SCE environmental specialist personnel associated with the Project (archaeologist, biologist, environmental compliance coordinator, and regional spill response coordinator), and covered the following topics:

- Biological Resources Training. Workers were informed of general and Projectspecific biological impact reduction measures, including:
 - Keep vehicles on existing roads and pads
 - Avoid impacts to drainages
 - Minimize clearing of vegetation
 - Avoid trapping animals by covering trenches/holes at the end of each day
 - Workers informed of requirements and actions under Migratory Bird Treaty Act
 - Workers informed of protected plant and wildlife species that may be found in the Project Area, where they have been identified during past surveys, and protection measures that may be implemented

5.4.4 Impacts and Mitigation Measures

Approach to Analysis

This section identifies potential impacts to biological resources from implementation of the Proposed Project while Section 5.4.5, *Alternatives*, below, identifies potential impacts associated with the alternatives. For both sections, the impact analysis focuses on foreseeable changes to baseline conditions in the context of the significance criteria presented herein. This analysis includes an evaluation of the potential direct and indirect impacts of the Proposed Project and alternatives. Definitions and examples of these effects within the context of biological resources are provided below.

- **Direct Impacts.** Direct impacts are those caused by a project, occurring at the same time and place (CEQA Guideline §15358). Examples of these types of impacts on biological resources include incidental take during construction and habitat removal.
- **Indirect Impacts.** Indirect impacts are those caused by a project, occurring later in time or farther removed in distance, but still reasonably foreseeable (CEQA Guideline §15358). Examples of these types of impacts on biological resources include the discharge of sediment or chemicals that adversely affect water quality downstream of a project site, and an increase in human activity during project operations.

The Proposed Project has the potential for direct and indirect impacts on biological resources. These potential impacts include disturbance of special-status plant and wildlife species and their natural habitats during Proposed Project construction and operation. The impact analysis assumes that the APMs identified by SCE would be implemented to avoid or minimize environmental impacts. Where needed, additional mitigation measures are proposed to reduce potential impacts to a less-than-significant level.

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 CDFW or USFWS (including List 1A, 1B, and 2 plant species of the CNPS Inventory).

Construction

Impact 5.4-1: Construction activities could result in adverse impacts to rare plants. *Less than significant with mitigation* (Class II)

Focused rare plant surveys for Conejo dudleya and Lyon's pentachaeta were conducted during 2008 and 2010 within 50 feet of each tower and following access routes between the main dirt access road and each tower (BonTerra, 2008; 2010b). Surveys detected a population of approximately 25 flowering Conejo dudleya plants and one flowering Lyon's pentachaeta in the Proposed Project study area in the Conejo Canyons Open Space Area. Ground disturbance in the Conejo Canyons Open Space Area would occur at two proposed guard structure locations measuring approximately 0.1 acre at each location as well as at a 250-foot spur road to be rehabilitated at pole location 32 in Segment 3. Several access roads would also be rehabilitated in

Segment 4; if special-status plants were present in these locations, they could be subject to direct loss and habitat degradation during grading activities. Indirect impacts could also feasibly occur as a result of non-native weeds or invasive plants becoming established within areas disturbed by Proposed Project activities and/or transported into the Proposed Project area on vehicles and construction equipment, respectively. As shown in Section 5.4.3, *Applicant Proposed Measures*, SCE has committed to implementing APM BIO-2, which was developed in consultation with the USFWS to reduce impacts on Lyon's pentachaeta and Conejo dudleya (SCE, 2013a).

No ground disturbance would occur in previously unsurveyed areas. Ground disturbance would occur within Lyon's pentachaeta critical habitat in support of access road rehabilitation (e.g., brushing and light grading) in Segment 4.⁹ However, ground disturbance in the Conejo Canyons Open Space Area would occur as discussed above. Conejo dudleya is a perennial herb that would be recognizable during all seasons of the year, and preconstruction surveys would identify any new plants that have established in the work area since 2010 surveys. Lyon's pentachaeta is an annual herb that blooms between March and August, and may or may not be recognizable during pre-construction surveys. Recognizable plants would be flagged and avoided, and otherwise the seed bank would be preserved. Implementation of APM BIO-2 would avoid adverse impacts to Conejo dudleya and Lyon's pentachaeta and no further mitigation would be required to protect these plant species because botanical surveys and protection measures are adequate to avoid or minimize potential impacts to Conejo dudleya and Lyon's pentachaeta.

Botanical surveys performed by BonTerra in spring 2008 and 2010 focused on the potential presence of Lyon's pentachaeta and Conejo dudleya and did not assess the potential presence for all special-status plant species that could occur on-site (BonTerra, 2008; 2010). While many rare plant species potentially present either share an overlapping blooming period with Conejo dudleya and Lyon's pentachaeta or are perennial species recognizable throughout the year, there remain some annual or perennial bulb species that do not have overlapping blooming periods and may not have been detectable during the focused surveys conducted for Conejo dudleya and Lyon's pentachaeta. In particular, the following three non-listed late-blooming species were identified for which further surveys would be needed to characterize their presence or absence on-site: Plummer's mariposa lily; white rabbit tobacco; and chaparral ragwort.

Mitigation Measure 5.4-1a, below, would require that surveys be conducted over an adequate number of visits during the blooming period of each potential plant species consistent with CDFW's 2009 Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities. This would reduce the potentially significant impact to Plummer's mariposa lily, white rabbit tobacco, and chaparral ragwort to a less-than-significant level by ensuring that these and other rare plants are adequately surveyed for so that, if present, they can be flagged and avoided during construction. Mitigation Measure 5.4-1b, would reduce

⁹ The PEA and supplemental Data Responses state that future ground-disturbance would occur in conjunction with guard locations, road rehabilitation areas, and stringing sites (SCE, 2013, p.3-60; SCE, 2014). No guard locations or stringing sites are located along Project Segment 4 where Lyon's pentachaeta critical habitat occurs, and 2 guard locations and a spur road to be rehabilitated are located within suitable Lyon's pentachaeta habitat within Segment 3. These areas were surveyed in 2008 and 2010 (BonTerra, 2008; 2010b).

potentially significant impacts related to the inadvertent introduction or spread of invasive weeds upon rare plants and natural communities in off-road areas.

Mitigation Measure 5.4-1a: Areas of future ground disturbance shall be surveyed for rare plants, including Plummer's mariposa lily, white rabbit tobacco, and chaparral ragwort, in accordance with CDFW's 2009 *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities*, unless otherwise agreed to by CDFW. If no rare plants are encountered, no further mitigation is required. If rare plants are found, the applicant proposed measures related to special-status plants shall be implemented for any identified CRPR Rank 1 or Rank 2 species.

Mitigation Measure 5.4-1b: To reduce the potential for introduction or spread of invasive weeds in sensitive habitats during ground-disturbing activities, SCE shall prepare and implement a Weed Control Plan. The Weed Control Plan shall address the following:

- 1) A pre-construction weed inventory to be conducted by surveying all areas subject to ground-disturbing activity, including, but not limited to, pole installation sites and construction areas, tower removal sites, pulling and tensioning sites, guard structures, and areas subject to grading for new or improved access and spur roads.
- 2) During construction of the Project, implement measures to control the introduction and spread of noxious weeds in the Project work area. These shall include:
 - a. washing vehicles (including wheels, undercarriages, and bumpers) at existing construction yards, commercial car washes, or similar suitable sites prior to commencing work in off-road areas;
 - b. washing tools such as chainsaws, hand clippers, pruners, etc., prior to use in off-road areas;
 - c. ensuring that all seeds and erosion-control materials used in off-road areas are weed-free, and any imported gravel or fill material are certified weed free by the county Agriculture Commissioners' Offices before use; and
 - d. during Proposed Project operation and maintenance activities, clearing invasive weeds from helicopter landing areas, assembly and laydown areas, spur and access roads, staging areas, and other weed-infested areas; and disposing of weeds in appropriate off-site locations.

Significance after mitigation: Less than significant.

Impact 5.4-2: Construction activities could result in adverse impacts to special-status reptiles. *Less than significant with mitigation* (Class II)

The following five California Species of Special Concern reptiles have potential to occur in the Proposed Project area based on the known ranges of each species and the presence of suitable habitat: silvery legless lizard; western pond turtle; coast horned lizard; two-striped garter snake; and South Coast garter snake. Western pond turtle, two-striped garter snake, and South Coast

garter snake are strongly associated with aquatic features and may occur in association with the four drainages that would be spanned by the Proposed Project. The likelihood of encountering these species at the few work areas near these drainages is considered low. It is unlikely they would be encountered throughout the rest of the Proposed Project area due to the absence of aquatic habitat. There is greater potential to encounter silvery legless lizard and/or coast horned lizard in the more abundant sage scrub, chaparral, and grassland vegetation communities traversed by the Proposed Project. Coast horned lizard is reported from sandy foothills 0.4 mile west of pole location 19 (CDFW, 2015). Silvery legless lizards reside sub-surface below humid coverings of leaf litter; coast horned lizards also favor areas of leaf litter and surface debris in proximity to the mounds of native ants they consume.

Construction activities that would be associated with the Proposed Project could result in significant impacts to special-status reptiles including western pond turtle, coast horned lizard, silvery legless lizard, two-striped garter snake, and South Coast garter snake. However, implementation of Mitigation Measure 5.4-2 would reduce this potentially significant impact to a less-than-significant level.

Mitigation Measure 5.4-2: Within areas that provide potentially suitable habitat for special-status reptiles, SCE and/or its contractors shall perform preconstruction surveys within 24 hours of initial ground disturbance to identify the potential presence of western pond turtle, coast horned lizard, silvery legless lizard, two-striped garter snake, and South Coast garter snake within work areas. If any of these species are identified during surveys of the immediate construction area footprint, individuals shall be relocated from work areas by an individual who is authorized by CDFW to undertake species relocation. A suitable relocation area shall be identified and confirmed in advance with CDFW prior to preconstruction surveys.

Significance after mitigation: Less than significant.

Impact 5.4-3: Construction activities could result in adverse impacts to coastal California gnatcatcher and its habitat. *Less than significant* (Class III)

In 2014, four active coastal California gnatcatcher territories were identified in the Proposed Project area in association with coastal sage scrub habitat near the northernmost two towers in Segment 4, throughout Segment 3, and in the southernmost portion of Segment 2 (Leopold Biological Services, 2014). In all, 113.53 acres of suitable California gnatcatcher habitat was identified within 500 feet of Proposed Project activities; however, habitat impacts would be limited to a fraction of this area. As identified in Impact 5.4-5, 2.38 acres of temporary ground disturbance is anticipated within native grassland and sage scrub vegetation habitat. Within this area of native vegetation disturbance, 0.07 acre of coastal sage scrub habitat (370 linear feet) in Segment 4 would be disturbed by the Proposed Project in support of access road rehabilitation. On the basis of survey findings, the Proposed Project would cause the temporary loss of potential coastal California gnatcatcher habitat in the vicinity of pole locations 45 and 46, in areas there were unoccupied by gnatcatcher in 2014 (see Figure 5.4-4, *California Coastal Gnatcatcher* (*CAGN*) *Suitable Habitat in the Proposed Project Vicinity*) (Leopold Biological Services, 2014). Coastal California gnatcatchers could breed within the unoccupied habitat at a later date, prior to disturbance; however, this species was not detected and is presently considered absent from disturbance areas within potentially suitable habitat. No disturbance is proposed within active territories. Because the gnatcatcher was not identified in disturbance sites during protocol-level surveys and the Proposed Project is outside of designated critical habitat for this species, no compensatory mitigation is proposed for coastal California gnatcatcher habitat losses. Note that disturbances to sage scrub habitat are separately addressed by APM BIO-1, which provide that restoration activities in disturbed areas of native habitat (coastal sage scrub) will be implemented in accordance the CDFW SAA and HRMP requirements, and Mitigation Measure 5.4-5.

The implementation of APM BIO-4, presented in Section 5.4.3, would avoid potential significant impacts to protected common and special-status birds and their nests, including coastal California gnatcatcher. The measure includes focused protocol-level surveys to be conducted by a USFWS-permitted individual prior to construction within suitable habitat; the establishment of 500-foot no-work buffers around habitat occupied by coastal California gnatcatchers between February 15 through August 31, and monitoring of activities within 500 feet of identified coastal California gnatcatcher territories by a USFWS-permitted biologist. Active nest sites and applicable buffers would remain in place until nesting activity is concluded and with advance concurrence from the USFWS. Implementation of APM BIO-4 would ensure the potential impact to coastal California gnatcatcher would be less than significant.

Mitigation: None required.

Impact 5.4-4: Construction activities may impact common or protected nesting migratory birds. *Less than significant* (Class III)

Construction

Construction activities associated with the Proposed Project, such as grading, preparation of temporary work areas, pull and tension sites, and access roads; operation of heavy equipment; installation and removal of poles/towers; and conductor installation, could disturb nesting birds and cause nest site abandonment and/or reproductive failure through an increase in noise, human presence, and/or removal of habitat. Special-status birds that may nest in the Proposed Project area include burrowing owl, loggerhead shrike, and coastal cactus wren, though the protective provisions of the Migratory Bird Treaty Act also apply to common bird species.

Indirect impacts from human disturbances and construction noise could cause nest abandonment, death of young, or loss of reproductive potential at active nests located near the Proposed Project sites. However, implementation of APM BIO-4, presented in Section 5.4.3, would avoid potential significant impacts to protected common and special-status birds and their nests. The measure includes preconstruction surveys for avian species within 500 feet of the Proposed

Project and ongoing avian surveys during construction during the typical nesting bird season (February 1 to August 31; as early as January 1 for raptors). Non-work buffer areas would be established if nests are identified during surveys. Active nest sites and applicable buffers would remain in place until nesting activity would be concluded. Implementation of the APM would ensure the potential impact to common or protected nesting migratory birds would be less than significant.

Operation and Maintenance

Existing poles and power lines that would be replaced under the Proposed Project pose a risk to raptors as a result of electrocution and collision hazards. Such hazards are a recognized source of raptor mortality. Power line electrocution is the result of two interacting factors: raptor behavior and pole design. Raptors are opportunistically attracted to power lines because they provide perch sites for hunting, resting, feeding, territorial defense, or as nesting structures. Many standard designs of electrical industry hardware place conductors and groundwires close enough together that raptors can touch them simultaneously with their wings or other body parts, causing electrocution. Raptors and other birds may also collide with power lines, which can be difficult for birds to detect for various reasons such as during night flight or during inclement weather conditions. The type and magnitude of such impacts, and strategies to avoid conflicts between birds and new transmission lines have been well described by the Edison Electric Institute's Avian Power Line Interaction Committee (APLIC). The Proposed Project will comply with APLIC "avian-safe" standards, as provided in APM BIO-1, and reduce the potential for raptor electrocution hazards. This would result in a beneficial effect to raptors relative to baseline conditions.

Mitigation: None required.

b) Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFW or USFWS.

Impact 5.4-5: Construction could impact native grassland and sage scrub vegetation communities. *Less than significant with mitigation* (Class II)

In total, 2.38 acres of temporary ground disturbance is anticipated at 14 guard locations and two stringing sites, and 0.54 acre of ground disturbance would occur associated with existing access/spur road rehabilitation (SCE, 2014). Native grassland and sage scrub vegetation communities could overlap with the guard locations, stringing sites, and access/spur road rehabilitation sites, and removal of such vegetation would constitute a significant impact. The rehabilitation of the existing access/spur roads would permanently remove vegetation that has become established on roads since prior road maintenance activities, and revegetation requirements would not apply to these areas. Additionally, even if sensitive natural communities do not occur in the area of ground disturbance but do occur nearby, the potential introduction of disturbance-favorable noxious weeds would pose an indirect impact to natural vegetation communities.

SCE has committed to avoiding and minimizing impacts on sensitive natural communities by hiring a botanist to perform pre-construction clearance surveys; by conducting Worker Environmental Awareness Training and instructing workers to keep vegetation clearing to a minimum and keep vehicles on existing roads and pads; and to revegetate temporarily disturbed areas immediately following construction to encourage the reestablishment of sensitive natural communities (see APMs BIO-1 and WET-1 presented in Section 5.4.3, *Applicant Proposed Measures*). However, no prescriptions are described relative to the proposed revegetation activities. To ensure that temporarily disturbed areas would be suitably restored after construction, implementation of Mitigation Measure 5.4-5 would be required. Mitigation Measure 5.4-1b, would reduce potentially significant impacts related to the inadvertent introduction or spread of invasive weeds upon sensitive natural communities.

Mitigation Measure 5.4-5: Revegetation of native habitat areas will follow the prescriptions identified in the 2012 revegetation plan prepared by Wildscape Restoration for the Proposed Project, included as PEA Appendix F5, *Habitat Restoration and Monitoring Plan.* The revegetation plan, which was subject to CDFW review and approval, proposes the use of native revegetation for temporary impacts created by the Proposed Project. Implementation of the plan in disturbed areas will ensure that the functions and values of the disturbed habitat are restored by protecting and restoring soil conditions, restoring topography and topsoil following construction, using local native plants, and controlling aggressive non-native plant species.

Significance after mitigation: Less than significant.

c) 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. (No Impact)

No wetlands were identified in the study area, but as described in Section 5.4.1, *Setting*, four streambed features are located along the Proposed Project alignment: Arroyo Santa Rosa and Arroyo Simi in Segment 2; an unnamed drainage ditch with downstream connectivity to Arroyo Simi, also located in Segment 2; and an unnamed tributary to Conejo Creek in Segment 3. The proposed subtransmission line alignment would span these creeks. Pole locations are in upland areas, and the staging and activities related to stringing electrical lines would also be located in upland areas. SCE would comply with a General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, which would incorporate Stormwater Pollution Prevention Program (SWPPP) and other common construction Best Management Practices (BMPs) including erosion control/soil stabilization, sediment control, wind erosion control, tracking control, stormwater management, and waste management and materials pollution controls. With direct impacts to wetlands and waters avoided through Proposed Project design, and potential indirect impacts avoided through implementation of SWPPP measures and construction BMPs, no aspects of the Proposed Project are expected to directly or indirectly impact jurisdictional wetlands (No Impact).

d) Interfere 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.

Impact 5.4-6: Interference with the movement of a native upland wildlife species or with established native resident or migratory wildlife corridors. *Less than significant* (Class III)

The Proposed Project is located within an area that has natural features conducive to a wildlife corridor connecting larger areas of open space in the north, east, and west. The Proposed Project area was identified by the South Coast Missing Linkages Project (Penrod et al., 2006) as a potentially important north-south migration corridor for a number of important species indicative of overall ecosystem health. Given the small ground footprint of the Proposed Project and colocation of proposed facilities with existing facilities, it is not expected to hinder regional wildlife movement between these larger areas of open space or to significantly alter current patterns of wildlife movement. The impact would be less than significant.

Mitigation: None required.

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

Impact 5.4-7: Tree removal and pruning. Less than significant (Class III)

Tree protection ordinances have been identified by Ventura County, the City of Moorpark, and the City of Thousand Oaks. SCE has identified the following tree removal and pruning activities that would occur with implementation of the Proposed Project (SCE, 2013a; SCE, 2014):

- *Segment 1*: No anticipated vegetation clearance.
- Segment 2: Some tree trimming and/or removal depending on the type and size of trees, and location relative to construction work areas and/or interference with GO 95. It is anticipated that one eucalyptus tree north of Los Angeles Avenue) would be removed; approximately 12 carrotwood trees along Montair Drive would be trimmed; and approximately 3 pine trees would be removed.
- *Segment 3*: No trees would be removed or trimmed.
- *Segment 4*: Approximately 40 trees on the Newbury Substation property would be trimmed or removed including myoporum, eucalyptus, Brazilian pepper, California pepper, and Chinese elm. No oaks would be trimmed or removed.

As described in APM BIO-1, SCE has committed to hiring a certified arborist to conduct a tree survey for the purpose of identifying protected trees, and acquiring applicable ministerial permits from Ventura County, the City of Moorpark, and the City of Thousand Oaks. With these actions, tree removal and pruning would not conflict with local tree protection policies or ordinances and the associated impact would be less than significant.

Mitigation: None required.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan. (No Impact)

No habitat conservation plans or natural community conservation plans apply to areas that would be traversed by the Proposed Project. The Proposed Project would traverse the Conejo Canyons Open Space area managed by COSCA, which is a joint powers agency between the City of Thousand Oaks and the Conejo Recreation and Park District. Area management is guided by COSCA's *Conejo Canyons Open Space Management Plan* (COSCA, 2010). The plan describes SCE's electrical distribution lines and towers as located just beyond and parallel to the western boundary of the plan area, with portions of the access road rights-of-way for the transmission lines crossing the western plan boundary and local distribution lines and access easements crossing the southern plan boundary. Utility access roads sometimes serve as multi-purpose trails for recreational users. The Proposed Project would not conflict with the Conejo Canyons Open Space Management Plan because SCE has an easement through this area that is identified and described in the management plan, and that provides for construction and maintenance activities within the utility corridor (No Impact).

5.4.5 Alternatives

No Project Alternative 1

Under No Project Alternative 1, the construction, operation, and maintenance related impacts that would result under the Proposed Project, as discussed in Section 5.4.4, *Impacts and Mitigation Measures*, would not occur. There would be no impact under No Project Alternative 1 (No Impact).

No Project Alternative 2

Under No Project Alternative 2, the Proposed Project would not be constructed and the infrastructure already constructed for the Moorpark-Newbury 66 kV Subtransmission line would be removed, with the exception of the previously installed LWS poles and energized conductor. Previously disturbed work areas would be regraded and/or cleared of vegetation as required for access, but otherwise no additional ground disturbing activity would occur. Infrastructure removal would potentially affect many of the same botanical, wildlife, and wetland resources as the Proposed Project, as removal would occur within the same alignment as the Proposed Project. Impacts under No Project Alternative 2 would be similar to those under the Proposed Project, and the same APMs and mitigation measure identified for impacts under the Proposed Project would be applied such that potential impacts to biological resources would be reduced to less than significant. Grading and clearing activities could encounter special-status plants, potentially

including Conejo dudleya or Lyon's pentachaeta (Impact 5.4-1), but would be less than significant with implementation of Mitigation Measures 5.4-1a and 5.4-1b (Class II). Equipment and workers could encounter and potentially harm special-status reptiles whose distribution includes the No Project Alternative 2 area (silvery legless lizard; western pond turtle; coast horned lizard; two-striped garter snake; and South Coast garter snake), or disturb habitat for these species (Impact 5.4-2), but would be less than significant with implementation of Mitigation Measure 5.4-2 (Class II). With implementation of Mitigation Measure 5.4-5, disturbance to native grassland and sage scrub vegetation communities from infrastructure removal (Impact 5.4-5) would be less than significant (Class II).

As described for the Proposed Project, no wetlands occur in the study area, nor do habitat conservation plans or natural community conservation plans apply to areas that would experience infrastructure removal activities under No Project Alternative 2. Thus, No Project Alternative 2 would have no impact under significance criteria c) and f) (No Impact). Also, the alternative would not hinder movement of a native upland wildlife species or interfere with established native resident or migratory wildlife corridors (Impact 5.4-6, Class III). APMs identified by SCE would ensure that potential impacts would be less than significant to coastal California gnatcatcher, common and protected nesting migratory birds during project construction (Impacts 5.4-3 and 5.4-4). APMs also provide consistency with local policies or ordinances protecting biological resources, with no additional mitigation required to address potential impacts to these species (Impact 5.4-7, Class III).

There would be no operation or maintenance activities associated with No Project Alternative 2, and thus there would be no impacts related to operations or maintenance.

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