3.4 Biological Resources

This section presents the environmental setting and analysis of potential impacts on biological resources that would result from implementation of the Proposed Project. This section describes the environmental setting, existing biological resources, and applicable federal, state, and local laws and regulations as well as mitigation measures that would be implemented to reduce or avoid potential significant adverse effects that could result from the Proposed Project.

3.4.1 Definitions

Special Status Species

A *special status species* in a species that is legally protected under the California Endangered Species Act (CESA) and/or federal Endangered Species Act (ESA), or under other regulations, as well as any species considered sufficiently rare by the scientific community and/or regulatory agencies to qualify for such status. These species are classified under the following categories:

- Species listed or proposed for listing as threatened or endangered under the federal ESA (50 CFR § 17.12 [listed plants] and § 17.11 [listed animals]) or through notices in the *Federal Register* [FR], referred to in this document as *proposed species*
- Species that are candidates for possible future listing as threatened or endangered under the federal ESA (61 FR § 40, February 28, 1996), referred to in this document as *candidate species*
- Species listed or proposed for listing by the State of California as threatened or endangered under the CESA (14 CCR § 670.5) or that are listed as "fully protected" by the State of California
- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code §§ 1900 et seq.)
- Species that meet the definitions of rare and endangered under CEQA Guidelines section 15380, which provides that a plant or animal species may be treated as "rare or endangered" even if not included in a State or federal lists
- Plant species considered to be rare, threatened, or endangered in California according to the California Native Plant Society's (CNPS's) California Rare Plant Rank (CRPR), with a CRPR of 1A, 1B, 2A, or 2B as well as certain rank 3 and 4 species with local significance (CNPS 2001)
- Species designated by the CDFW as Species of Special Concern (SSC)
- Species designated as *sensitive species* by the USDA Forest Service (USDA Forest Service 2005)
- Species protected under the federal Bald and Golden Eagle Protection Act (BGEPA) (U.S. House of Representatives 1940)
- Species protected under the Migratory Birds Treaty Act (USFWS 2020e)
- Species listed on the U.S. Fish and Wildlife's Service's (USFWS's) Birds of Conservation Concern list, the 2014 State of the Birds Watch List, or the Partners in

Flight Watch List (North American Bird Conservation Initiative [NABCI] 2014; Rosenberg et al. 2016; USFWS 2021)

- Bats considered by the Western Bat Working Group {WBWG) to be "high" or "medium" priority (WBWG n.d.) (Western Bat Working Group, 2023)

Sensitive Natural Communities

Sensitive natural communities are those identified by CDFW's Rarity Ranking (CDFW 2023), which follows NatureServe's Heritage Methodology (Faber-Langendoen et al. 2016), in which communities are given a G (global) and S (state) rank based on their degree of imperilment (as measured by rarity, trends, and threats). Communities with a state rarity ranking of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable) are considered sensitive by CDFW.

Biological Survey Area

The area surveyed for biological resources is referred to as the *biological survey area* (BSA). The BSA covers the Proposed Project site (i.e., the physical limits of all proposed work areas), which comprises a 150-foot survey corridor (approximately 75 feet on either side of the centerline) along the entire Proposed Project subtransmission line alignment and a 100-foot buffer around each existing tower footing location (i.e., known pulling/tensioning sites and laydown areas) as well as access routes, including existing routes to be modified and new access routes. The BSA buffers were designed to (1) cover areas where potential indirect effects on biological resources (e.g., dust, invasive species) could occur and (2) accommodate minor changes in design (such as changes to work areas and/or additions/deletions or changes to the locations of pole/structures) while minimizing the need to conduct additional surveys.

3.4.2 Approach to Data Collection

The biological resources analysis is based on literature review and database queries, vegetation mapping, habitat assessments, focused surveys for special status species, and a delineation of wetlands and other potentially jurisdictional waters of the U.S. and waters of the State, including riparian areas. Appendix D of this IS/MND presents supporting biological resources studies, including the following:

1. Sensitive Species and Habitat Report (Arcadis U.S., Inc. 2021b)
2. Biological Technical Memorandum: Tipton Kangaroo Rat (*Dipodomys nitratoides nitratoides*) Reconnaissance Evaluation (McCormick Biological, Inc. 2022)
3. Protocol-level Blunt-nosed Leopard Lizard Survey Report (MESA Biological LLC 2023)
4. Jurisdictional Delineation Report (ICF, 2024)
5. Tree Assessment Summary Report (Arcadis U.S., Inc. 2021a)
6. Blunt-nosed Leopard Lizard Minimization and Avoidance Strategy (ICF 2024)
7. Tehachapi Slender Salamander and Kern Canyon Slender Salamander Survey Report (ICF, 2024)

Database Review

The following databases and publicly available data sources were reviewed to develop a list of special status plant and wildlife species and other sensitive biological resources that could occur in the Proposed Project area:

- California Natural Diversity Database (CDFW n.d.)
- California Sensitive Natural Community List (CDFW 2023)
- California Native Plant Society's (CNPS's) Inventory of Rare and Endangered Plants of California (CNPS n.d.)
- The Calflora Database (Calflora 2023)
- eBird website (eBird, n.d.) (eBird, 2023)
- California Herps: A Guide to the Amphibians and Reptiles of California website (Nafis 2020)
- U.S. Fish & Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system (USFWS 2023)
- USFWS Critical Habitat GIS dataset (USFWS 2015)
- USFWS recovery plans and status reviews for listed species (USFWS 1998; 2010a; 2010b; 2011; 2013; 2020a; 2020b; 2020c; 2020d; 2020e)
- Habitat modeling for listed species including Tipton Kangaroo rat and blunt nosed-leopard lizard (Prior-Magee and McKerrow 2018)
- USDA Forest Service sensitive plant and animal lists (USDA Forest Service 2013a; 2013b)
- U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey maps (NRCS Staff n.d.)
- USFWS National Wetland Inventory (USFWS 2024)

Field Surveys

Biological surveys were conducted for sensitive plant and wildlife resources in May of 2017, April and May of 2018, and April 2019[1] (Arcadis U.S., Inc. 2021b). Survey efforts focused on species whose geographic range overlapped the Proposed Project area, had potential habitat present, and had extant, accurate records. Conditions assessed for habitat include vegetation communities, elevation, soils, aquatic resources, and other geologic features.

Special Status Plant Surveys

Botanical surveys for special status plants within the BSA were conducted between May 15 and May 19, 2017, and April 29 and May 2, 2018. Botanical surveys near the Gorman substation were conducted between April 15 and April 19, 2019. Surveys were conducted during the

[1] Surveys are more than four years old. Species assumed or likely to be present within the Proposed Project BSA survey area are listed in Table 3.4-2. Subsequent surveys would be required for special status species prior to construction, including protocol-surveys for blunt-nosed leopard lizard.

appropriate blooming season for target special status plant species that were likely to be present along the Proposed Project subtransmission line alignment (Arcadis U.S., Inc. 2021b).

Special Status Wildlife Surveys

The BSA was surveyed by Arcadis for special status wildlife resources between May 15 and May 19, 2017, and April 29 and May 2, 2018. Additional surveys were conducted near the Gorman substation between April 15 and April 19, 2019 (Arcadis U.S., Inc. 2021b). During the 2017 surveys, three separate teams, each consisting of four wildlife biologists and two botanists (six people in total) surveyed the BSA. The wildlife biologists walked parallel transects generally spaced at 33-foot intervals, contingent on terrain and accessibility, while the botanists conducted meandering transects. Each team had a designated senior biologist who served as a team lead to ensure proper coverage of the survey area. During the 2019 surveys, the Gorman substation area was surveyed by a team of three botanists and two wildlife biologists.

Surveys were primarily focused around each transmission tower location as well as known pulling/tension work areas and staging/laydown yards, with additional meandering surveys along the subtransmission line alignment. When observed, special status plant and wildlife species were positively identified, and *global positioning system* (GPS) data for each observation were collected (Arcadis U.S., Inc. 2021b). Teams also recorded the number of individuals for each observation, and phenology (e.g., blooming status) for plants or breeding status (e.g., nesting, denning) for wildlife was noted. When feasible, reference sites of special status plant species were visited prior to or during special status plant surveys to assess blooming status as well as to review plant characteristics to enhance field identification during surveys. Wildlife surveys also included searching for and identifying species' diagnostic signs, including audible calls, prints, scat, nests, skeletal remains, burrows, and habitat features (e.g., rock or debris piles, cavities, snag trees, rock outcrops) that might attract and/or support special status species. Natural communities mapped during the field surveys (as described below) were evaluated for suitability to support listed special status wildlife species and habitat along with elevation, topography, and other environmental variables.

Burrowing Owl Surveys

A Phase 1 burrowing owl habitat assessment (California Burrowing Owl Consortium 1997) was conducted within the BSA. Phase 2 surveys were conducted at 30-foot intervals within the BSA to detect burrowing owls and burrows within the BSA. Visual surveys were also conducted of an additional buffer of 200 feet on either side of the BSA. This additional visual survey included surveyors positioned at the outer widths of the BSA, extending visual coverage using binoculars for burrowing owls and burrows beyond the BSA. Surveyors documented burrowing owl sightings, burrows, and burrowing owl sign (e.g., whitewash, pellets, feathers). The burrowing owl surveys were conducted to evaluate general habitat suitability and establish presence of the species in the area.

Blunt-nosed Leopard Lizard Habitat Assessment and Focused Surveys

Focused surveys for blunt-nosed leopard lizard were completed in accordance with the protocol requirements listed in "Approved Survey Methodology for the Blunt-Nosed Leopard Lizard"

(CDFW 2019). The focused surveys covered 133.3 acres over seven separate areas of suitable blunt-nosed leopard lizard habitat. The focus area for the surveys was defined by evaluating habitat conditions along the Proposed Project alignment. Areas with steeply sloping terrain and hillsides, developed infrastructure, cattle grazed pastures, and active agricultural lands were omitted from the focus areas. Surveys were conducted at 10-meter transects consistent with CDFW protocols due to the height and density of vegetation to ensure visual coverage of the entire study area. Surveys were conducted between May 26 and September 29, 2023, during the blunt-nosed leopard lizard active period of April to September. The results of the focused survey and habitat assessment are provided in Appendix D.

Tipton Kangaroo Rat Reconnaissance Surveys

McCormick Biological, Inc., conducted a reconnaissance survey for federally and state listed Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*) within the BSA on November 15, 16, and 18, 2021 (McCormick Biological, Inc. 2022). The purpose of this reconnaissance survey was to evaluate the potential for suitable habitat for Tipton kangaroo rat to occur within the Proposed Project area. The survey consisted of a windshield evaluation of the entire Proposed Project alignment and meandering transects within potential habitat where necessary to evaluate suitability. Additionally, certain portions of the alignment, due to lack of access, were evaluated using binoculars. Each portion of the alignment traversing undeveloped lands was evaluated based on habitat conditions, the historic range of Tipton kangaroo rat, and habitat requirements for the species. Only Segment 2 of the Proposed Project was determined to have suitable habitat, based on the presence of kangaroo rat burrows, contiguous undeveloped natural lands, and the location of Segment 2 on or near the eastern edge of the published range for Tipton kangaroo rat. The surveys were not conducted at a protocol level and were not intended to establish presence or absence of the species.

Tehachapi Slender Salamander and Kern Canyon Slender Salamander Surveys

ICF conducted focused surveys for the Tehachapi slender salamander (*Batrachoseps stebbinsi*; TSS), a species listed as threatened under California Endangered Species Act (CESA), and Kern Canyon slender salamander (*Batrachoseps simatus*; KCSS), a species listed as threatened under the CESA and a candidate species for threatened status under the federal Endangered Species Act (FESA). These surveys were conducted within the three focal areas that may contain these sensitive salamanders: Tejon and Stallion Springs, where TSS does or may occur, and the lower Kern River Canyon, where KCSS may occur. Field surveys were conducted between February 12 and March 14, 2024 and efforts were general, non-restricted herpetological surveys within appropriate habitat within the Proposed Project area, generally around the base of towers and along power lines. No TSS were located during the survey efforts. However, KCSS were located at four of the project sites in this area, all representing new localities for the species: M1-T1, M1-T2, M1-T3, and the northern CA 178 Guard Site.

Vegetation Mapping

Vegetation communities were mapped within the BSA using the CDFW-CNPS Protocol for the Combined Vegetation Rapid Assessment (CNPS 2022) and the California Manual of Vegetation, Second Edition (Sawyer, Keeler-Wolf, and Evens 2009), including the updated California

Natural Community List (CDFW 2023). Vegetation was mapped using rapid assessment forms and GPS data collected at the approximate boundary between community types within the BSA. In most cases, the minimum mapping unit followed a 1-acre to 2-acre minimum mapping unit consistent with the National Vegetation Classification Standard for vegetation mapping; however, in some locations, vegetation communities were mapped at a finer scale, especially if a sensitive natural community was observed.

Native Tree Survey

The native tree survey documents the initial assessments conducted by Arcadis between November 15 and 19 and December 7 and 10, 2021, of native trees in all potential disturbance locations within the Proposed Project area as well as associated access roads (Arcadis U.S., Inc. 2021a). Tree assessment data collected includes tree species, locations, number of trunks, *diameter at breast height* (dbh), approximate height, qualitative tree health (i.e., excellent, good, fair, poor, or dead), and current conditions (e.g., fire scars, fungal infestation, trees previously subject to pruning). All native trees with a single trunk at least 8 inches dbh or multiple trunks of greater than 2 inches dbh with a combined dbh of at least 8 inches were documented. The 8-inch dbh size standard was used consistent with the Los Angeles County standard for oak tree permits. A tree was assessed if it occurred within a potential disturbance area or if its canopy touched or overlapped potential disturbance areas or access roads. Non-native trees were not assessed.

Delineation of Wetlands

A delineation of wetlands and other waters of the State was conducted for the BSA in December 2023 and January 2024 (ICF, 2024). The wetland field delineation methodology followed the routine on-site determination method described in the Corps of Engineers Wetland Delineation Manual (USACE 1987) as well as regional approaches identified in the Final Regional Supplement to the Corps of Engineers Wetland Delineation Manual Arid West Region (Version 2.0) (USACE 2008). The boundaries of non-tidal, non-wetland water features were delineated at the OHWM as defined in 33 CFR section 328.3 and in accordance with A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Lichvar and McColley 2008).

3.4.3 Environmental Setting

The description of existing conditions for biological resources is an analysis based on the data collection described in Section 3.4.2 and professional judgment of qualified professionals.

Vegetation Communities

Vegetation communities and other land cover types observed during surveys of the BSA are listed in Table 3.4-1, below. The distribution of vegetation types is determined by topography, soils and geology, hydrology, slope exposure, climate, land use history, and fire history. The vegetation types in and around the BSA consist primarily of upland vegetation types, sometimes partially dissected by desert washes, roadways, or developed areas where all or most of the natural vegetation has been removed. Thirty-three vegetation types were identified on or near the Proposed Project area during the 2017–2019 surveys (Arcadis U.S., Inc. 2021b).

Descriptions and locations of all vegetation communities are provided in the Appendix D: Sensitive Species and Habitat Report (Arcadis U.S., Inc. 2021b).

Sensitive Natural Communities and Habitats

Table 3.4-1, below, lists sensitive natural communities mapped within the BSA during surveys. In addition, sensitive natural communities are shown in Appendix D, "Sensitive Vegetation Communities Mapbook", and are described and mapped in the Sensitive Species and Habitat Report, provided in Appendix D. In some cases, a vegetation community alliance is not sensitive but some vegetation associations within the alliance are considered sensitive even though their rarity ranking is S4 (CDFW 2023). In addition to the sensitive natural communities listed in Table 3.4-1, riparian, ephemeral wash, and wetland communities are generally treated as sensitive in California because of the abundance of special status plant and wildlife species that can occupy these habitats even if they are not ranked S3 or above. These additional communities considered sensitive within the BSA include mulefat thickets (*Baccharis salicifolia* Association), Baltic and Mexican rush marshes (*Juncus arcticus* var. *balticus* Association), and salt grass flats (*Distichlis spicata – Hordeum murinum* Association).

Table 3.4-1 Vegetation Communities in the BSA

Vegetation alliance	Vegetation association (or land cover description)	California State rarity ranking
Fremont cottonwood forest and woodland	*Populus fremontii – Salix lasiolepis* Association	S3.2
	Populus fremontii – Salix (laevigata, lasiolepis, lucida subsp. lasiandra) Association	S3.2
Shining willow groves	*Salix lucida* subsp. *lasiandra* Association	S3.2
	Salix lucida subsp. *lasiandra / Urtica urens – Urtica dioica* Association	S3.2
California buckeye groves	*Aesculus californica* Association	S3
California sycamore – coast live oak riparian woodlands	*Platanus racemosa – Salix laevigata / Salix lasiolepis – Baccharis salicifolia* Association	S3
Valley oak riparian forest and woodland	*Quercus lobata – Salix lasiolepis* Association	S3
	Quercus lobata – Salix laevigata Provisional Association	S3
Valley oak woodland and forest	Quercus lobata / Annual Grass-Herb Woodland Association	S3
Goodding's willow – red willow riparian woodland and forest	*Salix laevigata* Association	S3
	Salix laevigata / Salix lasiolepis Association	S3
Blue oak woodland and forest	*Quercus douglasii – Aesculus californica* / grass Association	S4
	Quercus douglasii – Pinus sabiniana Association	S4

Vegetation alliance	Vegetation association (or land cover description)	California State
	Quercus douglasii – Quercus lobata Association	S4 [1]
	Quercus douglasii / Bromus spp. – *Daucus pusillus* Association	S4
	Quercus douglasii / Eriogonum fasciculatum / herbaceous Association	S4
Mixed oak forest and woodland	*Mixed oak – Aesculus californica* / grass Association	S4
Canyon live oak forest and woodland	*Quercus chrysolepis* Association	S5
Scalebroom scrub	*Lepidospartum squamatum* / ephemeral annuals Association	S3
Acton's and Virgin River brittle brush – net-veined goldeneye scrub	*Encelia actonii* Association	S3
California joint-fir – longleaf joint-fir scrub	*Ephedra californica* / annual – perennial herb Association	S3
Arroyo willow thickets	*Salix lasiolepis – Salix lucida* Association	S3
	Salix lasiolepis Association	S4 [1]
Narrowleaf goldenbush – bladderpod scrub	*Cleome isomeris* Association	S4 [1]
Cheesebush – sweetbush scrub	*Ambrosia salsola* Association	S4
Tucker oak chaparral	*Quercus john-tuckeri* Association	S4
Wedge-leaf ceanothus chaparral, buck brush chaparral	*Ceanothus cuneatus* Association	S4
Mulefat thickets	*Baccharis salicifolia* Association	S5[2]
California buckwheat scrub	*Eriogonum fasciculatum* Association	S5
Rubber rabbitbrush scrub	*Ericameria nauseosa* Association	S5
Tamarisk thickets	*Tamarix* spp. Association	none
Yerba mansa – Nuttall's sunflower – Nevada goldenrod alkaline wet meadows	*Anemopsis californica* Provisional Association	S2
	Solidago (*confinis, spectabilis*) Provisional Association	S2
American bulrush marsh	*Schoenoplectus americanus / Lepidium latifolium* Association	S3.2

Vegetation alliance	Vegetation association (or land cover description)	California State rarity ranking
Ashy ryegrass – creeping ryegrass turfs	*Leymus triticoides – Bromus* spp. – *Avena* spp. Association	S3
Common monkey flower seeps	*Mimulus guttatus* Association	S3
Needle grass – melic grass grassland	*Nassella cernua* Association	S3S4 [1]
Baltic and Mexican rush marshes	*Juncus arcticus* var. *balticus* Association	S4 [2]
Saltgrass flats	*Distichlis spicata – Hordeum murinum* Association	S4 [2]
Wild oats and annual brome grasslands	*Bromus diandrus* – Mixed herbs Association	none
	Bromus hordeaceus – Amsinckia menziesii – Hordeum murinum Association	none
Red brome or Mediterranean grass grasslands	*Bromus rubens* – Mixed herbs Association	none
Cheatgrass – medusahead grassland	*Bromus tectorum – Bromus diandrus* Association	none
Perennial pepper weed – prickly lettuce patches	*Lepidium latifolium* Association	none

Notes:

1. Alliance is not sensitive, but the Association is designated as sensitive on the 2020 CDFW Natural Community List

2. Vegetation community not considered sensitive by state rank but generally considered sensitive in California Alliance rarity rankings (CDFW 2023; Sawyer, Keeler-Wolf, and Evens 2009)

NatureServe state rarity ranks:

S1: Fewer than 6 viable occurrences statewide and/or up to 518 hectares

S2: 6 to 20 viable occurrences statewide and/or 518 to 2,590 hectares

S3: 2 to 100 viable occurrences statewide and/or 2,590 to 12,950 hectares

S4: Greater than 100 viable occurrences statewide, and or more than 12,950 hectares

S5: Demonstrably secure because of its statewide abundance

Additional threat ranks:

.1: Very threatened

.2: Threatened

.3: No current threat known

Source: (Arcadis U.S., Inc. 2021b)

Special Status Species

The full list of potentially occurring special status plant and wildlife species that was developed for the biological field surveys can be found in the Sensitive Species and Habitat Report

contained in Appendix D (Arcadis U.S., Inc. 2021b). Additional assessments for special status plant and wildlife species were conducted with reviews of publicly available databases and subsequent field surveys as described above. The probability of occurrence in the BSA was determined for each of these species using the following criteria:

- **Present:** Species detected during recent surveys within the BSA.
- **High potential:** Species with known recent (i.e., last 25 years) recorded occurrences/populations in the BSA or nearby and for which highly suitable habitat occurs within the BSA. Suitable habitat includes all necessary elements to support the species (e.g., habitat type, cover, food resources).
- **Moderate potential:** Species with known recent (i.e., last 25 years) recorded occurrences/populations nearby but for which suitable habitat in the BSA is moderately disturbed. Suitable habitat could be fragmented or small in size. A "moderate potential" determination was also made when suitable habitat occurs within the BSA but the Proposed Project area is at the edge of the species' range or when there are no reported occurrences nearby.
- **Low potential.** Species with few known recent (i.e., last 25 years) recorded occurrences/populations nearby and for which suitable habitat within the BSA is highly disturbed or extremely limited. "Low potential" was determined when a species has known historical (i.e., more than 25 years) recorded occurrences/populations from the site or nearby but suitable habitat in the BSA has been severely reduced or disturbed since past documentation as well as when a potentially suitable habitat for the species is present within the BSA but the reported extant range is far outside the BSA.
- **Absent.** Species with no known occurrences or suitable habitat in the BSA.

Special status plant and wildlife species with a moderate or high potential to occur in the BSA are identified in Table 3.4-2, below. Descriptions of these species and their habitat requirements are provided in Appendix D, "Special Status Species Considered within the Proposed Project Area". Details about observed special status species, including habitat requirements, species descriptions, and life history are provided in Appendix D: Sensitive Species and Habitat Report (Arcadis U.S., Inc. 2021b). Locations of special status species observations are provided in Appendix D, "Biological Resources Mapbook".

Table 3.4-2 Special Status Species with Moderate to High Potential to Occur in the Proposed Project BSA

Species	Conservation status	Habitat requirements	Number observed or nearest occurrence	Potential to occur
Plants				
Adobe yampah (*Perideridia pringlei*)	CRPR4.3	Serpentinite soils in chaparral, cismontane woodland, coastal scrub, and pinyon juniper woodland at elevations ranging from 300 to 1,800 feet Blooming period: April–June	Three observations totaling 50 individuals in Segment 4	Present
Bakersfield cactus (*Opuntia basilaris* var. *treleasei*)	FE CE CRPR1B.1	Sandy or gravelly substrate in chenopod scrub, cismontane woodland, and valley and foothill grassland at elevations ranging from 400 to 4,760 feet Blooming period: March–May	Two observations totaling 300 individuals in Segment 1	Present
Calico monkeyflower *(Mimulus pictus)*	CRPR 1B.2	Open areas in granitic soils between 440 and 4,100 feet, often with blue oak and oak gooseberry nearby. Blooming period: March–May	Seven observations totaling 15 individuals in Segment 4	Present
Comanche Point layia *(Layia leucopappa)*	CRPR 1B.1	Vernally wet, whitish clay soils on flats in chenopod scrub and grassland vegetation at elevations ranging from 330 to 1,050 feet Blooming period: March–April	Nine CNDDB records in the southern end of the San Joaquin Valley within 1 mile of the Proposed Project area; one occurrence recorded 0.25 mile east of the BSA in 2016	Moderate
Fort Tejon woolly sunflower *(Eriophyllum lanatum* var. *hallii)*	USFS-S CRPR 1B.1	Rocky soils in foothill woodland and chaparral at elevations ranging from 3,500 to 4,670 feet Blooming period: May–August	Nearest occurrence recorded 2004, 4 miles east of Segments 2 and 3, northeast of Castac Lake	Moderate
Kern mallow (*Eremalche parryi* subsp. *kernensis*)	FE CRPR 1B.2	Dry sandy to clay soils in pinyon juniper woodlands, foothill, and valley grasslands and at the edges of chenopod scrublands at elevations ranging from 330 to 3,300 feet Blooming period: March–May	One observation in Segment 1 with 150 individuals and a second observation of one individual located near Comanche Point in Segment 4	Present

Species	Conservation status	Habitat requirements	Number observed or nearest occurrence	Potential to occur
Palmer's mariposa lily (*Calochortus palmeri* var. *palmeri*)	USFS S CRPR 1B.2	Moist areas in chaparral, lower montane coniferous forest, and meadows and seeps at elevations ranging from 2,330 to 7,200 feet Blooming period: April–July	One 2014 CNDDB record approximately 0.75 mile southeast of Segment 2 at Comanche Point, and one 2013 record 0.65 mile southwest of the Gorman substation in Segment 3	Moderate
Piute Mountains navarretia *(Navarretia setiloba)*	USFS S CRPR 1B.1	Depressions in gravelly loam to clay soils in valley and foothill grasslands, oak and foothill woodlands, and pinyon juniper woodlands at elevations ranging from 1,640 to 6,900 feet Blooming period: April–July	Seven observations totaling 313 individuals, located within Segments 1, 2, and 4	Present
San Joaquin adobe sunburst *(Pseudobahia peirsonii)*	FT CE CRPR 1B.1	Heavy adobe clay soils in grasslands and woodlands along the eastern and southern margins of the San Joaquin Valley and adjacent foothills at elevations ranging from 320 to 3,000 feet Blooming period: March–May	One 2016 CNDDB record 3 miles southeast of Segment 4 in the western Tehachapi Mountains east of Comanche Point; additional observations in this portion of the Tehachapi Mountains reported in CCH	Moderate
San Joaquin bluecurls *(Trichostema ovatum)*	CRPR 4.2	Disturbed sites in chenopod scrub and valley and foothill grassland at elevations from 215 to 1,050 feet Blooming period: June–October	Over 7,500 individuals observed in 17 locations in Segment 1 near the Kern River drainage	Present
Tejon poppy (*Eschscholzia lemmonii* subsp. *kernensis*)	CRPR 1B.1	Heavy clay soils in grasslands and chenopod scrub at elevations ranging from 650 to 3,300 feet Blooming period: March–May	Six CNDDB records within 2 miles of the Proposed Project area; one 2002 record overlapping Segment 2 within Fort Tejon State Historic Park; Two records reported within 0.7 mile east of Segment 2 on slopes above Comanche Point: one in 2012 and one in 2017	High

Species	Conservation status	Habitat requirements	Number observed or nearest occurrence	Potential to occur
Tracy's eriastrum *(Eriastrum tracyi)*	USFS-S CRPR 3.2	Rocky shale or clay soils in chaparral and woodlands at elevations ranging from 1,310 to 5,840 feet Blooming period: April–June	Five 2007 CNDDB records northeast and southeast of Castac Lake, mostly upslope from Segment 3, with closest occurrence within 0.5 mile of Segment 3 near the Crane Valley	Moderate
Invertebrates				
Crotch's bumble bee (*Bombus crotchii*)	SC	Suitable habitat for the Crotch's bumble bee includes grasslands and shrublands supporting their preferred pollinator plants including buckwheat (*Eriogonum*), milkweed (*Asclepias*), lupine (*Lupinus*), poppy (*Eschscholzia*), and pincushion (*Chaenactis*)	Historic locations include the Cummings and Tehachapi Valleys, the area near Grapevine, Fort Tejon State Historic Park, and near the Gorman substation.	High
Monarch butterfly-California Overwintering Population *(Danaus plexippus plexippus)*	FC USFS S	Suitable roosting habitat includes eucalyptus or other roost trees with similar structure that enables the monarch butterflies to cluster and remain warm through the winter months, with a nearby source of nectar. Requires milkweed (*Asclepias* spp.) as host plants for caterpillars.	One individual was observed in the southern portion of Segment 2 north of the mouth of Grapevine Canyon.	Present
Amphibians				
Tehachapi slender salamander *(Batrachoseps stebbinsi)*	CT	Wet canyons supporting woodlands and forests on north-facing slopes and near streambanks that are seasonally shaded	Recent CNBBD record approximately 0.02 mile northeast of the BSA, along Grapevine Creek in Segment 2	High
Kern Canyon slender salamander (*Batrachoseps simatus*)	CT, FC	Inhabit north-facing riparian areas in narrow canyons shaded with willows and cottonwoods, as well as wooded hillsides supporting oaks and pines near wet creek margins, seeps, talus and exposed chaparral	Four observed in Segment 1 along the Kern River within the Kern River Canyon. Overlaps with the BSA.	Present

Species	Conservation status	Habitat requirements	Number observed or nearest occurrence	Potential to occur
Western spadefoot *(Spea hammondii)*	SSC FC	Primarily, grassland habitats in open areas within woodlands, shrublands, washes, and floodplains in sandy or gravelly soils; vernal pools and seasonal ponds essential for breeding	Two western spadefoot adults observed in Segment 4 at the edge of a stock pond located 0.01 mile away	Present
Yellow-blotched salamander (*Ensatina eschscholtzii croceater*)	USFS-S WL	Evergreen and deciduous forests, under rocks, logs, and other surface debris, especially on shaded north-facing areas near creeks or streams	Recent occurrences overlapping the BSA within Fort Tejon State Historic Park and 2 miles north of the Gorman substation.	High
Reptiles				
Bakersfield legless lizard *(Anniella grinnelli)*	SSC	Moist, loose soils within leaf litter and debris coverings; sparsely vegetated areas of dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks	Recent CNDDB record reported approximately 0.2 mile east of the BSA in Caliente Creek in the Sand Ridge Preserve	Moderate
Blunt-nosed leopard lizard *(Gambelia sila)*	FE CE CFP	Rodent burrows for utilization as shelter and sparse vegetation in grassland and low scrub habitat with low topographic relief for forage; often along washes and drainages in well-drained soils	Recent occurrences within 0.5 to 1 mile; suitable habitat in the BSA in annual grassland and open scrub habitat in the San Joaquin Valley, foothills of the Tehachapi Mountains north and south of Comanche Point, and near the California aqueduct between Wheeler Ridge and Grapevine. No BNLL were observed during focused surveys in 2023.	High
California legless lizard *(Anniella pulchra)*	SSC	Cool, moist sandy or loamy substrates, especially with a layer of leaf litter, such as open stream terraces with deciduous overstory	Recent CNDDB occurrence record 1.8 miles east of the Gorman substation	Moderate

Species	Conservation status	Habitat requirements	Number observed or nearest occurrence	Potential to occur
Coastal whiptail (*Aspidoscelis tigris stejnegeri*)	SSC	Desert to semi-arid areas with sparse vegetation, including chaparral, woodland, and riparian habitats	Recent CNDDB occurrence record of an adult approximately 1.8 miles east of the BSA in the Tehachapi Mountains east of the Gorman substation	Moderate
Coast horned lizard (*Phrynosoma blainvillii*)	SSC	Sandy washes and friable soils in areas with scattered low shrubs in a variety of vegetation types, including grasslands, shrublands, and woodlands	Recent CNDDB occurrence record 0.1 mile east of the alignment in the Tehachapi Mountains between Castac Lake and the Gorman substation	Moderate
San Joaquin coachwhip (*Masticophis flagellum ruddocki*)	SSC	Open, dry, and treeless areas with little or no cover, including valley grassland and saltbush scrub	Two San Joaquin coachwhips were observed during focused BNLL surveys conducted in spring 2023. One individual was found on Comanche Point Front and the other on Comanche T-Segment.	Present
Southern California legless lizard (*Anniella stebbinsi*)	USFS-S SSC	Moist warm loose soil with plant cover; sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks	Recent CNDDB occurrence record in 2008 reporting one individual 0.7 mile south of Mt. Adelaide summit, east of Segment 1	Moderate
San Bernadino ringneck snake (*Diadophis punctatus modestus*)	USFS-S	Moist habitats such as wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, woodlands	One adult observed in 2000 in Live Oak Canyon, Pastoria Creek near Segment 2	Moderate

Species	Conservation status	Habitat requirements	Number observed or nearest occurrence	Potential to occur
Birds				
Bald eagle (*Haliaeetus leucocephalus*)	USFS-S CE CFP	Large trees, snags, and sometimes cliffs for nesting, along large rivers, lakes, and reservoirs	Recent CNDDB occurrence records overlapping the BSA near Edmonston Pumping Plant Road and the California Aqueduct, including wintering eagles; numerous eBird observations within Kern River Canyon, Caliente Creek, Brite Lake, Grapevine Creek, Castac Lake, and Quail Lake to the east of the Gorman substation; no occurrence records of nesting	High
Burrowing owl (*Athene cunicularia*)	BCC SSC	Gently sloping to flat, open terrain with sparse low-growing vegetation, often in association with burrowing mammals	One burrowing owl and two active burrow observations in Segment 4 southeast of Arvin and east of the California Aqueduct	Present
California condor (*Gymnogyps californianus*)	FE CE CFP	Large areas of open foothill grassland, oak savannas and woodlands, rocky shrublands, and coniferous forests below 9,000 feet; caves and cliff ledges, often in deep canyons, for nesting	Recent CNDDB and eBird occurrence records within the BSA, including a 2015 eBird observation of 19 condors less than 0.6 mile south of Segment 4 near Stallion Springs as well as in Grapevine Canyon; no nesting habitat within 2.5 miles; critical habitat occurs within portions of the Proposed Project area	High
California horned lark (*Eremophila alpestris actia*)	WL	Inhabits open grassland or herbaceous dominated vegetation areas or within scattered low shrubs; nests generally found on the ground in depressional areas	One observation within the BSA in an agricultural field north of the California Aqueduct at the southern end of the San Joaquin Valley	Present

Species	Conservation status	Habitat requirements	Number observed or nearest occurrence	Potential to occur
Cooper's hawk (*Accipiter cooperii*)	WL	Forest species, generally among woodlands; nest sites mainly in riparian growths of deciduous trees, such as canyon bottoms on river floodplains and live oaks	Two separate individuals observed flying within the BSA, one near Castac Lake and the other in the San Joaquin Valley at the base of the Grapevine	Present
Costa's hummingbird *(Calypte costae)*	BCC	Mostly dry and open habitats having a good variety of plant life, such as washes and streams in deserts, lower parts of dry canyons, and coastal sage scrub	One individual observed within the BSA in an open area in mixed oak woodland north of Fort Tejon State Historic Park	Present
Ferruginous hawk (*Buteo regalis*)	WL	Very open and dry country, including dry grassland, sagebrush plains, saltbush and greasewood flats, rangeland, and desert; in winter, also agricultural country, including over plowed fields	One CNDDB occurrence record from 2004 in the BSA east of Segment 5 on Tejon Ranch	High
Golden eagle (*Aquila chrysaetos*)	CFP WL	Cliff-walled canyons for nesting; large trees and open areas within foothills, mountain areas, sage-juniper flats, and deserts	One eagle and one active, occupied nest observed in a tower located on an adjacent alignment within 0.1 mile of the BSA; two individuals observed in Crane Canyon along Segment 3	Present
Grasshopper sparrow (*Ammodramus savannarum*)	SSC	Rather dry fields and prairies, especially those with fairly tall grass and weeds and a few scattered shrubs; also, nesting in overgrown pastures and hayfields and sometimes in fields of other crops	One CNDDB occurrence record from 2004 in the BSA west of Quail Lake near the Gorman substation	High
Loggerhead shrike (*Lanius ludovicianus*)	SSC	Lowlands and foothills; open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches	Two loggerhead shrikes observed within the BSA: one foraging in Blue Oak Woodland above Little Sycamore Canyon in the western Tehachapi Mountains and one foraging in a wash supporting mulefat thickets just southeast of Grapevine	Present

Species	Conservation status	Habitat requirements	Number observed or nearest occurrence	Potential to occur
Northern harrier (*Circus hudsonius*)	BCC SSC	Freshwater and coastal salt marshes as well as grasslands and open scrub habitats	One individual observed foraging within the BSA west of Castac Lake	Present
Oregon vesper sparrow (*Pooecetes gramineus affinis*)	BCC SSC	In winter, primarily lowlands such as those south of San Francisco Bay and west of the Sierra Nevada; for foraging, grasslands, meadows, pastures, and roadsides	One adult observed foraging in a mosaic of annual brome grasslands and scattered bladderpod shrubs southeast of Grapevine at the base of the Tehachapi Mountains	Present
Prairie falcon (*Falco mexicanus*)	WL	Wide variety of habitats including perennial grasslands, rangeland, agricultural fields, and desert areas; require sheltered cliff ledges for cover and will usually nest on cliff ledges that overlook large, open areas	Four prairie falcons observed flying over the BSA; two observed south of the Kern River and northeast of Edison, one southeast of Arvin and west of Bear Valley Springs, and one near Grapevine	Present
Purple martin *(Progne subis)*	SSC	Woodland edges, clearings in mountain forest, and lowland desert with giant saguaro; for nesting, cavities in trees, often in old woodpecker holes, or large cactus	One individual observed sitting on a power line 2.4 miles southeast of Power Line Road in Arvin; nearest nest to the BSA observed near Grapevine Peak less than 1 mile to the east	Present
Swainson's hawk (*Buteo swainsoni*)	CT	For foraging, grasslands with scattered trees, riparian areas, savannas, and agricultural fields that support rodent populations; for nesting, solitary trees or small groves of trees along streams or fields	One individual observed flying over the BSA near Tejon Creek in Segment 2; numerous eBird observation records within the BSA near Segment 1 between Kern River Canyon and Arvin, around Stallion Springs in Segment 4, and from Wheeler Ridge to Gorman in Segments 2 and 3	Present

Species	Conservation status	Habitat requirements	Number observed or nearest occurrence	Potential to occur
Tri-colored blackbird *(Agelaius tricolor)*	BCC CT SSC	Wetlands, swamps, and cattail or tule marshes; for foraging, fields and farms; for nesting, marsh habitats in bulrushes, willows, or other riparian vegetation at the water's edge, sometimes in tall growth in drier fields	Eight individuals observed in marshes along Grapevine Creek in Segment 2	Present
White-faced ibis *(Plegadis chihi)*	WL	For foraging, marshes, flooded pastures, and irrigated fields, including salt marsh but with preference for freshwater marsh; for nesting, dense marsh or low shrubs and trees over water	One individual observed north of Castac Lake in Segment 2	Present
Vaux's swift (*Chaetura vauxi*)	BCC SSC	For nesting, typically coniferous or mixed hardwood forest; for foraging, forest openings, especially above streams and in old growth stands with large hollow trees and snags	One individual observed foraging on the west side of Castac Lake in Segment 3	Present
Yellow warbler (*Setophaga petechia*)	SSC	For foraging, shrubby thickets and woodlands, particularly along watercourses and in wetlands; for nesting, trees including willows, alders, and cottonwoods	One individual observed foraging on the west side of Castac Lake in Segment 3	Present
Mammals				
American badger *(Taxidea taxus)*	SSC	Grasslands, shrub steppe, desert, dry forest, parkland, and agricultural areas; for denning, friable soils that allow the excavation of den sites and support burrowing prey species	No individuals observed within the BSA; three active dens observed: one near a tributary to Cottonwood Creek in Segment 1 and two on the north-facing slopes of the Tehachapi Mountains in Segment 3	Present

Species	Conservation status	Habitat requirements	Number observed or nearest occurrence	Potential to occur
Pallid bat (*Antrozous pallidus*)	USFS S, SSC	Rocky outcrop areas in open, desert, grassland, shrubland, woodland, and forest communities where they commonly roost in rock crevices, caves, and mine tunnels and man-made structures	Observed roosting under the railroad trellis over Caliente Creek 2 miles upstream of Hwy 58 near Segment 1.	Moderate
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE, CT	Desert and grasslands such as those found in California's San Joaquin Valley, with preference for minimal shrubs and grasses; for denning, may use dens constructed by other animals or human-made structures such as culverts or abandoned pipelines	Potential active burrow observed within the BSA at the base of the western foothills of the Tehachapi Mountains in Segment 2; one individual observed in the BSA in Crane Canyon in Segment 3	Present
Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*)	FE, CE	Grasslands and scrub communities; soft friable soils in areas not subject to seasonal flooding areas	One recent CNDDB occurrence record from 1999, 0.8 mile from the BSA; burrows observed within the BSA, in Segments 1 and 2	Moderate

Notes:

Federal/state listing abbreviations:

- FE: Federally listed as endangered
- FT: Federally listed as threatened
- FC: Candidate for federal listing
- CE: State of California listed as endangered
- CT: State of California listed as threatened
- BCC: USFWS Bird of Conservation Concern
- USFS-S: USDA Forest Service sensitive
- CFP: CDFW fully protected
- SSC: CDFW Species of Conservation Concern
- SC: Candidate for State listing
- WL: CDFW Watch List

California Rare Plant rarity rankings:

- 1B: Rare, threatened, or endangered in California and elsewhere
- 2B: Rare, threatened, or endangered in California, but more common elsewhere
- 4: Limited distribution
- X.1: Seriously threatened in California (>80% threatened/high degree of threat)
- X.2: Fairly threatened in California (20%–80% threatened/moderate degree of threat)
- X.3: Not very threatened in California (<20% threatened/low degree of threat)

SOURCE: (CDFW n.d.; Arcadis U.S., Inc. 2021b; Calflora 2023; eBird, n.d.; McCormick Biological, Inc. 2022; MESA Biological LLC 2023; USFWS 2023; WBWG n.d.)

Wetlands and Riparian Areas

The total area of wetlands and riparian areas that were observed within the BSA are summarized in Table 3.4-3. In addition to wetlands, riparian areas occur along streams and tributaries within the BSA, as shown in Appendix D, "Jurisdictional Waters Mapbook". Additional information on wetlands and riparian areas is provided in the Wetlands and Other Waters Jurisdictional Delineation Report, provided in Appendix D (ICF, 2024).

Table 3.4-3 Wetlands and Riparian Areas within the BSA

Wetlands and riparian areas	Acres
Wetlands	1.718
Riparian areas	18.706

Source: (ICF, 2024)

Native Trees

Native trees documented in the Proposed Project area and along associated access roads are summarized in Table 3.4-4 (Arcadis U.S., Inc. 2021a). Native tree locations are shown in Appendix D, "Biological Resources Mapbook".

Table 3.4-4 Native Trees in the Proposed Project BSA and Work Areas

Species	Total native trees in the BSA	Live trees within anticipated work areas	Dead trees within anticipated work areas	Trees rooted outside work areas
Arroyo willow (*Salix lasiolepis*)	47	44	none	3
Blue elderberry *(Sambucas nigra* subsp. *caerulea)*	17	14	none	3
Blue oak (*Quercus douglasii*)	1,008	629	50	329
Box elder (*Acer negundo*)	4	4	none	none
California buckeye (*Aesculus californica*)	43	19	none	24
California juniper (*Juniperus californica*)	6	6	none	none
California sycamore *(Platanus racemosa)*	13	10	none	3
Canyon live oak (*Quercus chrysolepis*)	8	1	1	6
Common buttonbush (*Cephalanthus occidentalis*)	1	none	none	1

Species	Total native trees in the BSA	Live trees within anticipated work areas	Dead trees within anticipated work areas	Trees rooted outside work areas
Foothill pine (*Pinus sabiniana*)	21	16	none	5
Fremont cottonwood *(Populus fremontii)*	91	73	3	15
Goodding's black willow *(Salix gooddingii)*	6	5	none	1
Interior live oak (*Quercus wislizeni var. wislizeni*)	32	26	2	4
Red willow (*Salix laevigata*)	203	157	27	19
Shining or yellow willow *(Salix lucida* or *S. lasiandra)*	4	2	1	1
Valley oak (*Quercus lobata*)	152	87	9	56
Velvet ash (*Fraxinus velutina*)	7	7	none	none
Unknown oak (*Quercus* spp.)	11	1	10	none
Unknown willow (*Salix* spp.)	8	none	8	none
Unknown dead tree	7	none	7	none
TOTAL	**1,689**	**1,101**	**118**	**470**

Source: (Arcadis U.S., Inc. 2021a)

Critical Habitat

Critical habitat designated for the California condor (*Gymnogyps californianus*) overlaps part of Segment 2 in the Tehachapi Mountains north of Fort Tejon State Historic Park, and a small portion overlaps Segment 3 in Crane Canyon (USFWS 2015). Additional critical habitat for the California condor occurs south of Segments 4 and 5 west of Cummings Mountain but does not overlap the Proposed Project area. Proposed critical habitat for the Kern Canyon slender salamander (*Batrachoseps simatus*) and the relictual slender salamander (*Batrachoseps relictus*) is located in Kern River Canyon, near the Kern River substation and northern terminus in Segment 1 but does not overlap with the Proposed Project area. Figure 3.4-1 shows the locations of designated and proposed critical habitats within 5 miles of the Proposed Project area.

Habitat Conservation Plans and Natural Community Conservation Plans

Tehachapi Uplands Multiple Species Habitat Conservation Plan

The Tehachapi Uplands Multiple Species Habitat Conservation Plan (TUMSHCP) is intended to protect wildlife habitat and enhance species conservation on 141,866 acres of Tejon Ranch lands and is the first such plan to focus primarily on conserving habitat for the California condor. It includes a conservation strategy intended to avoid, minimize, and mitigate to the maximum

extent practicable any impacts that would occur to covered species as the result of the covered activities. The plan covers 27 listed and unlisted species that may be taken or otherwise affected by ongoing ranch activities and future low-density residential and commercial development activities on a portion of the Tejon Ranch. Under the plan, and consistent with the Tejon Ranch Conservation and Land Use Agreement between Tejon Ranch and the Sierra Club, National Audubon Society, Natural Resources Defense Council, Endangered Habitats League, and Planning and Conservation League, no land development would be allowed within approximately 93,522 acres of covered lands, including a designated California condor study area. The areas covered by the TUMSHCP include Tejon Ranch lands and the areas of preserve lands defined for Tejon Ranch, as shown in Figure 3.4-2 are consistent with the TUMSHCP preserve areas. The TUMSHCP assumed development would be clustered near I-5.

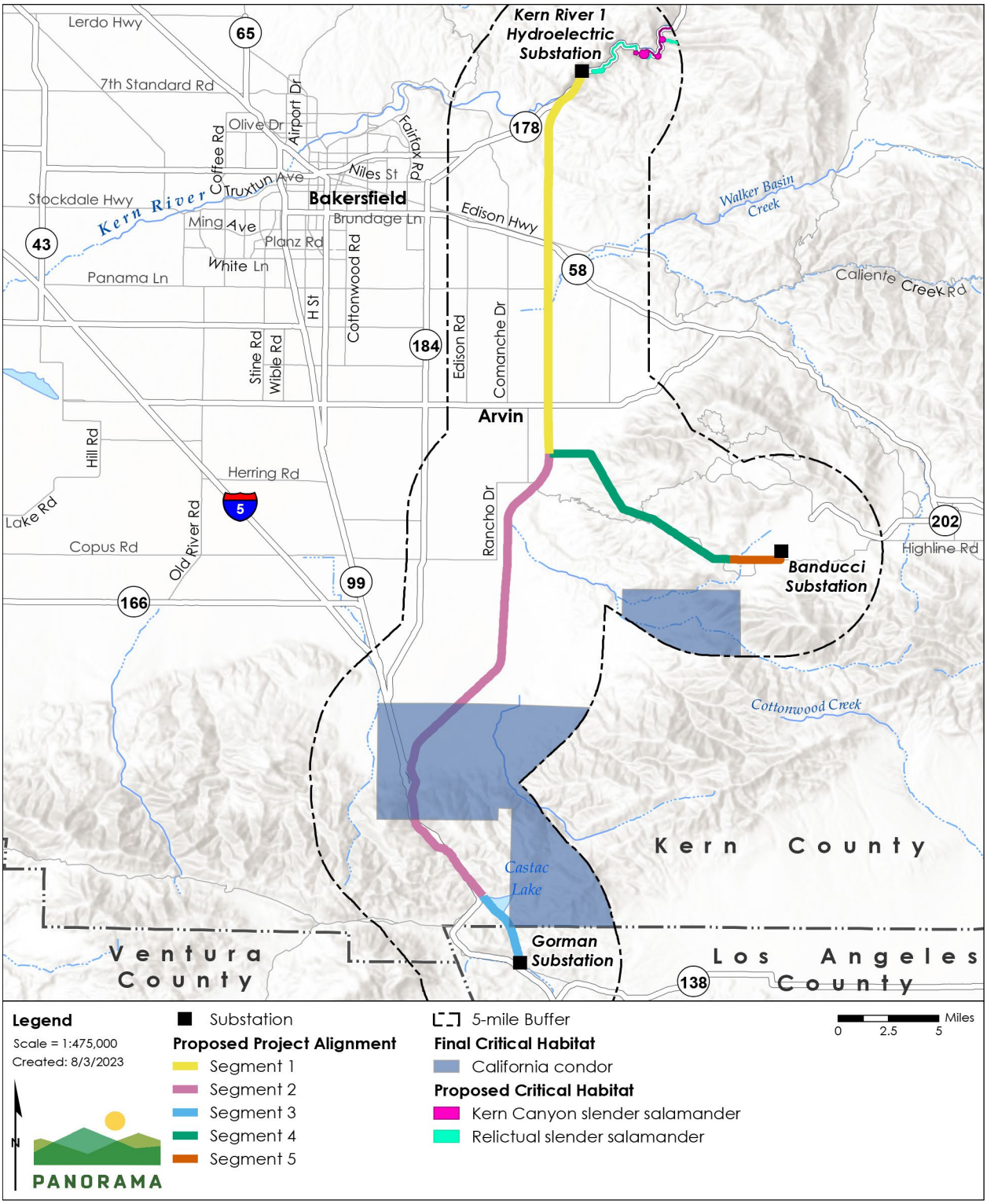
Preserve Areas

Preserve areas and conservation easements within the Proposed Project area and vicinity are shown in Figure 3.4-2. Portions of Segment 1 are located in the Bakersfield Cactus Ecological Reserve and Sand Ridge Reserve. A portion of Segment 1 near the Kern River substation is within a Sequoia Riverlands Trust conservation easement, and a Portion of Segment 3 is within the Tejon Ranch Conservancy.

Wildlife Corridors

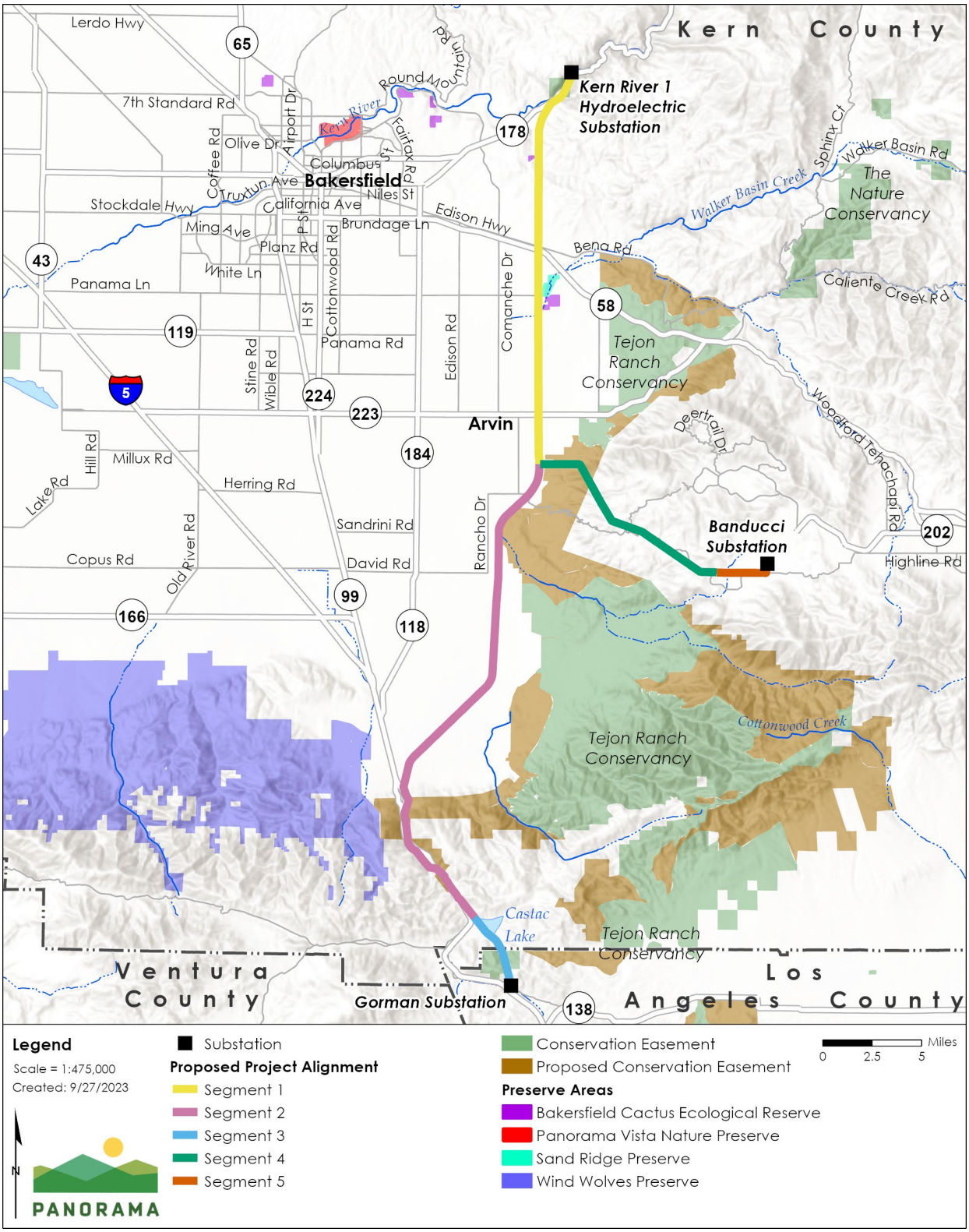
A *wildlife corridor* is a landscape feature that connect suitable habitat in regions otherwise fragmented by rugged terrain, changes in vegetation, or human development.

Figure 3.4 1 Critical Habitat within the Proposed Project Vicinity



Source: (USFWS 2015)

Figure 3.4-1 Preserve Areas within the Proposed Project Vicinity



Source: (GreenInfo Network 2022b); Preserve Areas (GreenInfo Network 2022a)

Migrating avian species use habitats within the Proposed Project area as stopovers on their journey to wintering sites and nesting areas. Other terrestrial species utilize canyons and natural drainages that intersect the Proposed Project area and extend from the San Joaquin Valley to higher elevations in the Tehachapi Mountains. Kern River Canyon at the northern end of Segment 1 and Crane Canyon through the Tehachapi Mountains at the southern end of Segment 2 are also significant migration corridors for many species. The northwestern end of the San Andreas Significant Ecological Area (SEA) also overlaps the southern portion of Segment 3 (as shown in Figure 3.4-3). The San Andreas SEA is an important habitat linkage between the Santa Clara River Watershed, San Gabriel Mountains, Antelope Valley, and Tehachapi Mountains (Los Angeles County Department of Regional Planning 2022).

3.4.4 Applicable Regulations, Policies and Standards

Federal, state, and local regulations were reviewed for applicability to the Proposed Project.

Federal

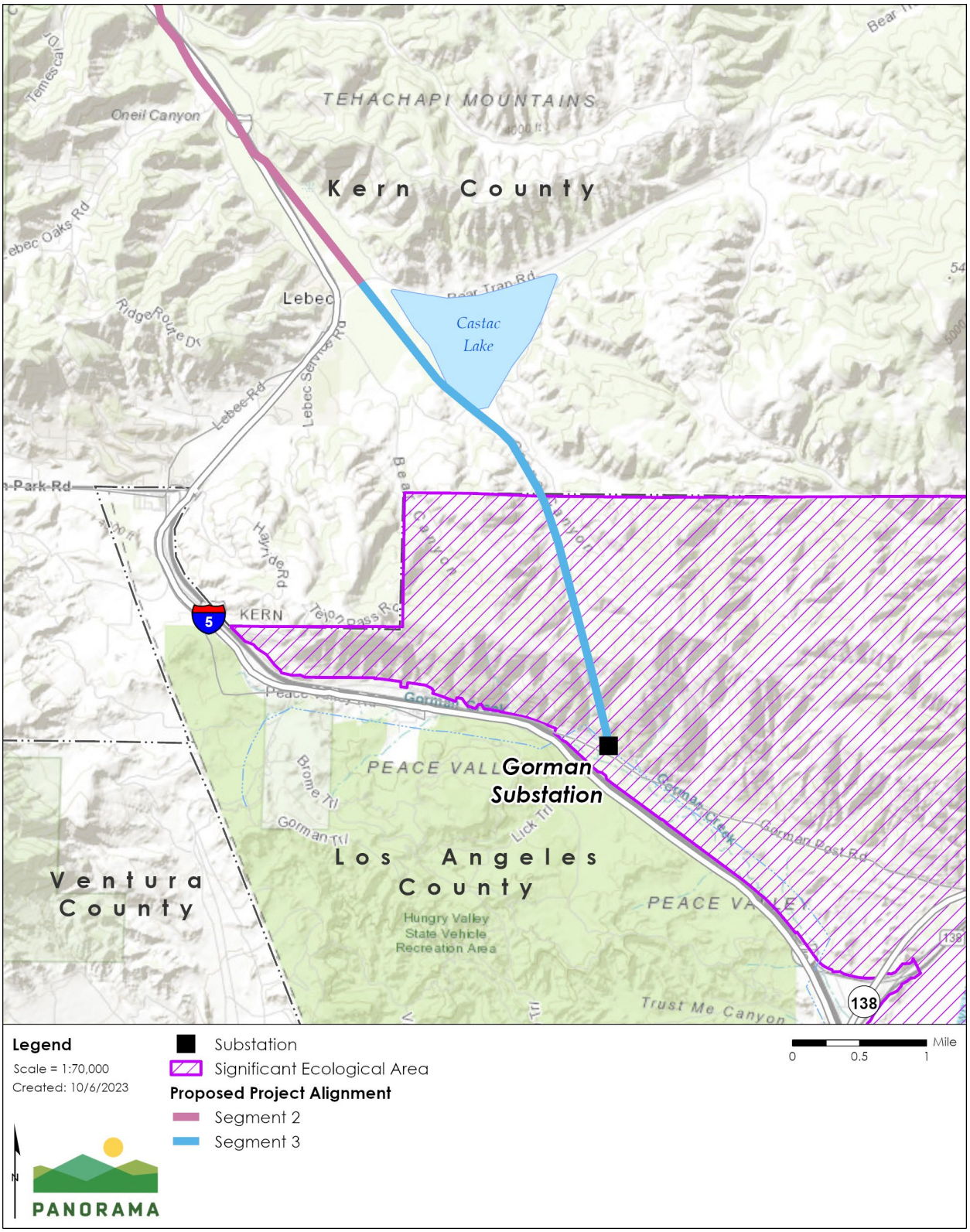
Endangered Species Act

The federal ESA (16 U.S.C. §§ 1531 et seq.) provides protection for plants and animals listed as threatened or endangered by USFWS and the National Marine Fisheries Service (NMFS). Section 9 of the ESA (50 CFR § 17.3) prohibits the take, possession, sale, or transport of any federal ESA-listed species. *Take* is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct" (16 U.S.C. § 1532(19)). Code of Federal Regulation title 50 part 17.3 further defines the term *harm* in the definition of *take* to mean any act that actually kills or injures a federally listed species, including significant habitat modification or degradation. (50 C.F.R. § 17.3(c)(3)). For endangered species of plants, the federal ESA prohibits removing, cutting, digging up, damaging, or destroying any listed plant on areas under federal jurisdiction as well as on non-federal land in knowing violation of state law. (16 U.S.C. § 1538(a)(2)(B).)

The federal ESA requires the federal government to designate critical habitat for any species listed under the federal ESA but also allows areas to be excluded from critical habitat. (16 U.S.C. § 1533(b)(2)). *Critical habitat* is a specific area occupied by the species that is "essential for the conservation" of a threatened or endangered species and that "may require special management considerations or protection." (16 U.S.C. § 1532(5)(A)(i)). Critical habitat may also include specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation. (16 U.S.C. § 1532(5)(B)).

Section 7 of the federal ESA requires federal agencies to consult with USFWS and/or NMFS for any federal activity that may affect any federally listed species or its critical habitat. (16 U.S.C. § 1536.) Section 10 of the ESA provides for issuance of incidental take permits for private actions that have no federal involvement through the development of a Habitat Conservation Plan (HCP). (16 U.S.C. § 1539.) Effects to federally listed species with no lead federal agency require preparation of an HCP, management agreement, and an analysis prepared in compliance with NEPA.

Figure 3.4-2 Significant Ecological Areas within the Proposed Project Vicinity



Source: (Los Angeles County Department of Regional Planning 2019)

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. §§ 703 et seq.) prohibits the take of protected migratory bird species without prior authorization by the USFWS. *Take* is defined broadly under the MBTA to include actions to pursue, hunt, capture, kill, collect, possess, sell, barter, and/or transport migratory birds, or to attempt such activities. (16 U.S.C. § 703(a).) *Take* refers to both live and deceased birds and their parts, including feathers, nests, and eggs. The list of migratory bird species protected by the law is published by USFWS and was most recently updated in 2020. (50 CFR § 10.13) (USFWS 2020e) All federal project actions must comply with this act; therefore, they cannot result in unauthorized take of migratory birds.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. § 668), enacted in 1940, provides for the protection of the bald eagles and the golden eagles by prohibiting, except under certain specified conditions, the take, possession, and commerce of such birds (U.S. House of Representatives 1940). The 1972 amendments increased penalties for violating provisions of the Eagle Act or regulations issued pursuant thereto and strengthened other enforcement measures. Under the Eagle Act, the destruction of a nest or take of any eagle or egg is prohibited. This prohibition includes the possession, sale, purchase, barter, offer to sell, purchase, or barter, transport, export, or import of any bald or golden eagle, alive or dead, including any part, nest, or egg unless allowed by permit. (16 U.S.C. §§ 668–668d). *Disturb* means to agitate or bother a bald or golden eagle to a degree that causes or is likely to cause (1) injury to an eagle; (2) a decrease in its productivity by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior. (50 C.F.R. § 22.)

Clean Water Act

The Clean Water Act of 1972 (CWA) (33 U.S.C. §§ 1251 et seq.) establishes the basic structure for regulating discharges of pollutants into the waters of the United States (WOTUS) and regulating water quality standards for surface waters. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs, such as setting wastewater standards for industry, and has developed national water quality criteria recommendations for pollutants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters unless a permit is obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges.

Waters of the United States

On August 29, 2023, the EPA and Department of the Army issued a final rule to amend the final "Revised Definition of 'Waters of the United States'" rule, published in the *Federal Register* on January 18, 2023. This final rule conforms the definition of "waters of the United States" to the U.S. Supreme Court's May 25, 2023, decision in the case of *Sackett v. Environmental Protection Agency.* Parts of the January 2023 final rule are invalid under the Supreme Court's interpretation of the Clean Water Act in the *Sackett* decision. Therefore, the agencies have amended key aspects of the regulatory text to conform to the Court's decision.

WOTUS are defined as (40 C.F.R., § 120.2(a)):

1. Waters which are:
   a. Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
   b. The territorial seas; or
   c. Interstate waters;
2. Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;
3. Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;
4. Wetlands adjacent to the following waters:
   a. Waters identified in paragraph (a)(1) of this section; or
   b. Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;
5. Intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.

WOTUS do not include prior converted cropland (40 C.F.R., § 120.2(b)(2)). 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 Clean Water Act jurisdiction remains with the EPA.

Section 401 – Water Quality Certification

Under Section 401 of the CWA, a federal agency may not issue a permit or license to conduct any activity that may result in any discharge into WOTUS unless either a Section 401 water quality certification is issued or the certification requirement is waived. States and authorized tribes where the discharge would originate are generally responsible for issuing water quality certifications. In cases where a state or tribe does not have authority, the EPA is responsible for issuing certification.

Section 404 – Permitting for Dredge and Fill Activities in Wetlands and Waters of the U.S.

Section 404 of the CWA authorizes USACE to regulate the discharge of dredged or fill material to wetlands and other WOTUS. The USACE issues individual site-specific or general (Nationwide) permits for such discharges. Nationwide permits are a type of general permit issued to cover activities that the USACE has determined to have minimal adverse effects, such as routine maintenance (e.g., Nationwide Permit 3) or utility line activities (e.g., Nationwide Permit 12). Each NWP specifies particular conditions that must implemented by the permittee.

Forest Service Manual 2670 Sensitive Species
Forest Service Manual (FSM) 2670 provides direction and policy for the protection of sensitive species and calls for the development and implementation of management practices to ensure that species do not become threatened or endangered because of Forest Service actions (USDA Forest Service 2005). It requires a review of all activities or programs that are planned, funded, executed, or permitted for possible effects on federally listed or Forest Service sensitive (FSS) species (FSM 2672.4) (USDA Forest Service 2005).

State

California Endangered Species Act
The CESA (Cal. Fish & G. Code §§ 2050 et seq.) establishes the policy of the state to conserve, protect, restore, and enhance rare, threatened, or endangered species and their habitats. Section 2052 require that "mitigation measures or alternatives to address a particular impact on a candidate species, threatened species, or endangered species…shall be roughly proportional in extent to any impact on those species that is caused." Section 2080 prohibits the take of a species listed by CDFW as threatened or endangered under the CESA. The state definition of *take* is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" (Cal. Fish & G. Code § 86.) Pursuant to section 2081 of the code, CDFW "authorize, by permit, the take of endangered species, threatened species, and candidate species" when that take is "incidental to an otherwise lawful activity" and the "impacts of the authorized take shall be minimized and fully mitigated".

California Environmental Quality Act Guidelines, Section 15380
Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. Pursuant to its rarity status, any impacts to rare species could be considered a significant effect on the environment. (CEQA Guidelines § 15382.) This section was included in CEQA primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a candidate species that has not been listed by either USFWS or CDFW. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agencies have an opportunity to designate the species as protected, if warranted. CEQA also calls for the protection of other locally or regionally significant resources, including natural communities.

California Native Plant Protection Act
California's Native Plant Protection Act (Cal. Fish & G. Code, §§ 1900–1913) requires all State agencies to use their authority to carry out programs to conserve endangered and rare native plants. Provisions of the act prohibit the taking of listed plants from the wild and require notification to CDFW at least 10 days in advance of any change in land use in order to allow CDFW to salvage listed plant species that otherwise would be destroyed.

Project proponents are required to conduct botanical inventories and consult with CDFW during project planning to comply with the provisions of this act and sections of CEQA that

apply to rare or endangered plants. Removal of rare plants by publicly or privately owned public utilities may occur in compliance with certain provisions of the NPPA (Cal. Fish & G. Code § 1913; 14 C.C.R. § 786.9(d)).

California Desert Native Plants Act

The purpose of the CDNPA (Cal. Food & Agr. Code §§ 80001 et seq.) is to protect certain species of California desert native plants from unlawful harvesting on both public and privately owned lands. The CDNPA only applies within the boundaries of the counties of Imperial, Inyo, Kern, Los Angeles, Mono, Riverside, San Bernardino, and San Diego. Within these counties, the CDNPA prohibits the harvest, transport, sale, or possession of specific native desert plants unless a valid permit or wood receipt and required tags and seals are obtained from the sheriff or commissioner of the county where collecting will occur.

State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State

In 2019, the State Water Resources Control Board (SWRCB) adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures). The Procedures consist of four major elements: 1) a wetland definition; 2) a framework for determining if a wetland feature is a water of the state; 3) wetland delineation procedures; and 4) procedures for the submittal, review, and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities. On April 6, 2021, the State Water Resources Control Board adopted a resolution to confirm that the "State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State" is in effect as state policy for water quality control.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1967 (Cal. Wat. Code §§ 13000 et seq.) requires the SWRCB and the nine Regional Water Quality Control Boards (RWQCBs) to adopt water quality criteria to protect waters of the State. These criteria include the identification of beneficial uses, narrative and numerical water quality standards, and implementation procedures. Under the act, the RWQCB must prepare and periodically update water quality control basin plans. Each basin plan sets forth water quality standards for surface water and groundwater as well as actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Projects that affect wetlands or waters must meet waste discharge requirements of the RWQCB, which may be issued in addition to a water quality certification or waiver under Section 401 of the CWA. The Proposed Project site is under the jurisdiction of the Central Valley RWQCB and Los Angeles RWQCB and associated basin plans.

California Fish and Game Code §§ 1600–1617, Lake and Streambed Alteration Agreement

If a project includes alteration of the bed, banks, or channel of a stream or of the adjacent riparian vegetation, then a Lake and Streambed Alteration Agreement (LSAA) may be required from CDFW. California Fish and Game Code sections 1600 through 1616 regulate activities that could alter the flow, bed, banks, channel, or associated riparian areas of a river, stream, or lake, which are considered "waters of the State." Altered or artificial watercourses valuable to fish

and wildlife are also subject to CDFW jurisdiction, as are dry washes that carry water during storm events. The law requires any person, state, or local governmental agency or public utility to notify CDFW before beginning an activity that may do one or more of the following:

- Divert or obstruct the natural flow of any river, stream, or lake
- Change the bed, channel, or bank of any river, stream, or lake
- Use material from any river, stream, or lake
- Deposit or dispose of material into any river, stream, or lake

Additional California Fish and Game Code for Species Protection

The California Fish and Game Code requires State agencies to comply with regulations that promote the protection and conservation of threatened and endangered species. Regulations in place relevant to the Proposed Project are described below.

Migratory Birds and Raptors

It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, take or possess any birds of prey, and take or possess any migratory non-game bird as designated under the MBTA pursuant to Sections 3503, 3503.5, and 3513 of California Fish and Game Code, respectively.

Fully Protected Species

California Fish and Game Code sections 3511, 4700, 5050 and 5515 designate 37 species of wildlife as fully protected in California. The classification of fully protected provides additional protection to those animals that are rare or face possible extinction. Most fully protected species have also been listed as threatened or endangered species under CESA. 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 collection necessary for scientific research or relocation of the species for the protection of livestock, or if they are a covered species whose conservation and management is provided for in a Natural Community Conservation Plan (NCCP).

Fur-bearing Mammals

The following are fur-bearing mammals: pine marten, fisher, mink, river otter, gray fox, red fox, kit fox, raccoon, beaver, badger, and muskrat. Under section 4000 and 4001 of the California Fish and Game Code, notwithstanding any other provision of this code or regulations adopted pursuant to this code, it is unlawful for any person to trap any fur-bearing mammal for purposes of recreation or commerce in fur. The raw fur of a fur-bearing mammal otherwise lawfully taken pursuant to this code or regulations adopted pursuant to this code may not be sold.

Local and Regional

The CPUC has sole and exclusive jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order 131-D, Section XIV.B, "Local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies

regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the counties' and cities' regulations are not applicable as the counties and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local biological resource laws, regulations, and policies is provided for informational purposes only.

Kern County General Plan

The Kern County General Plan Land Use, Open Space, and Conservation Element guides the long-term conservation of natural resources and preservation of available open space areas (Kern County Planning Department 2009). The Conservation and Open Space Element contains a number of goals and policies relevant to the analysis of biological resources for the Proposed Project, as described below.

Threatened or Endangered Species

- Threatened or endangered plant and wildlife species should be protected in accordance with State and federal laws.
- The County should work closely with State and federal agencies to assure that discretionary projects avoid or minimize impacts to fish, wildlife, and botanical resources.
- The County will seek cooperative efforts with local, State, and federal agencies to protect listed threatened and endangered plant and wildlife species through the use of conservation plans and other methods promoting management and conservation of habitat lands.
- Riparian areas will be managed in accordance with USACE and CDFW rules and regulations to enhance the drainage, flood control, biological, recreational, and other beneficial uses while acknowledging existing land use patterns.

Oak Tree Conservation

- Oak woodlands and large oak trees shall be protected where possible and incorporated into project developments.
- Promote the conservation of oak tree woodlands for their environmental value and scenic beauty.

Surface Water

- Discretionary projects shall analyze watershed impacts and mitigate for construction-related and urban pollutants, as well as alterations of flow patterns and introduction of impervious surfaces as required by CEQA, to prevent the degradation of the watershed to the extent practical.

Los Angeles County General Plan

The Los Angeles County General Plan Conservation and Natural Resources Element guides the long-term conservation of natural resources and preservation of available open space areas (Los Angeles County Department of Regional Planning 2022). The Conservation and Natural Resources Element contains a number of goals and policies relevant to the analysis of biological resources for the Proposed Project, as described below.

Regional Habitat Linkages
Biological resources and important habitat areas in the unincorporated areas are part of a greater habitat linkage that extends beyond Los Angeles County boundaries. Significant Ecological Areas (SEAs) provide important habitat linkages.

Riparian Habitats, Streambeds, and Wetlands
The County is dedicated to preserving its remaining wetlands and supports the wetland reclamation and conservation efforts of other public agencies and numerous non-profit organizations. In addition to County policy and regulation, projects that are subject to CEQA and located in a wetland are forwarded to applicable state and federal agencies for further review and permitting requirements.

Woodlands
The County's oak woodlands are an important resource that provides an abundance of aesthetic, ecological, and economic benefits to residents. Oak woodland habitats are the most diverse terrestrial ecosystems in California. Similarly, riparian woodlands, California walnut, juniper, and Joshua tree woodlands provide habitat for multiple species within a concentrated area.

Los Angeles County Code of Ordinances

Significant Ecological Areas (Ordinance 2019-0072)
This ordinance establishes regulations to conserve the unique biological and physical diversity of the natural communities found within SEAs by requiring development to be designed to avoid and minimize impacts to SEA resources. These requirements will help ensure the long-term survival of the SEAs and their connectivity to regional natural resources. This ordinance regulates development within SEAs with Protected Tree Permits (22.102.080), Development Standards (22.102.090), and Natural Open Space Preservation Requirements (22.102.100). SEA protected trees are as follows:

- All Joshua trees (*Yucca brevifolia*) and California juniper (*Juniperus californica*) are protected, regardless of size.
- Native riparian species and trees listed as rare by California Native Plant Society are protected at 3-inch dbh.
- Native coniferous species are protected at 5-inch dbh.
- Native upland hardwood species are protected at 6-inch dbh.
- Additionally, for all listed native trees with multiple trunks, the tree is protected if the combined diameter of the two largest trunks equals 8 inches or more (LA County Planning, 2023).

This ordinance does not apply to legally required fuel modification and brush clearance activities (approved by the Fire Department) associated with existing legal structures for the purpose of fire protection or to emergency or routine maintenance by a public utility necessary to protect or maintain essential components of an existing utility or transmission system.

Oak Tree Permit (Ordinance 2019-0004)

The Oak Tree Permit is established: (a) to recognize oak trees as significant historical, aesthetic, and ecological resources, and as one of the most picturesque trees in Los Angeles County, lending beauty and charm to the natural and manmade landscape, enhancing the value of property and the character of the communities in which they exist; and (b) to create favorable conditions for the preservation and propagation of this unique, threatened plant heritage, particularly those trees which may be classified as heritage oak trees, for the benefit of current and future residents of the County. Damaging or removing certain oak trees under this ordinance is prohibited (with exemptions), and a person shall not cut, destroy, remove, relocate, inflict damage, or encroach into a protected zone of any tree of the oak genus that meets the following criteria:

- 25 inches or more in circumference (eight inches in diameter) as measured four and one-half feet above mean natural grade; in the case of an oak with more than one trunk, whose combined circumference of any two trunks is at least 38 inches (12 inches in diameter) as measured four and one-half feet above mean natural grade, on any lot within the unincorporated area of the County.
- Any tree that has been provided as a replacement tree, pursuant to section 22.174.070 (Conditions of Approval), on any lot within the unincorporated area of the County, unless an Oak Tree Permit is first obtained as provided by this Chapter.

This ordinance does not apply to emergency or routine maintenance by a public utility necessary to protect or maintain an electric power or communication line or other property of a public utility.

Metropolitan Bakersfield General Plan

The Metropolitan Bakersfield General Plan Conservation Element addresses the conservation and management of biological and other natural resources (City of Bakersfield 2002). The Conservation Element contains goals and policies relevant to the analysis of biological resources for the Proposed Project, including the following:

- Goal 1: Conserve and enhance Bakersfield's biological resources in a manner which facilitates orderly development and reflects the sensitivities and constraints of these resources.
- Goal 2: Conserve and enhance habitat areas for designated "sensitive" animal and plant species.
- Policy 1: Direct development away from "sensitive biological resource" areas, unless effective mitigation measures can be implemented.
- Policy 2: Preserve areas of riparian vegetation and wildlife habitat within floodways along rivers and streams, in accordance with the Kern River Plan Element and channel maintenance programs designed to maintain flood flow discharge capacity.
- Policy 3: Discourage, where appropriate, the use of off-road vehicles to protect designated sensitive biological and natural resources.

- Policy 4: Determine the feasibility of enhancing sensitive biological habitat and establishing additional wildlife habitat in the study area with State and/or Federal assistance.
- Policy 5: Determine the locations and extent of suitable habitat areas required for the effective conservation management of designated "sensitive" plant and animal species.
- Policy 6: Investigate the feasibility of including natural areas selected for the habitat conservation plan as a component of the regional park system.

City of Arvin General Plan

The City of Arvin General Plan Conservation and Open Space Element guides the preservation and management of natural resources and open space (City of Arvin 2012). The Conservation and Open Space Element contains goals and policies relevant to the analysis of biological resources for the Proposed Project, including the following:

- Goal 6: Preserve wildlife, endangered and/or rare species and natural habitats and eco-systems in the Arvin Planning area.
- Policy CO-6.1 Protect sensitive and significant ecological areas of unique vegetation and wildlife.
- Policy CO-6.2 Protect from extinction the identified endangered species which recognize the Arvin area as part of their natural range.
- Policy CO-6.3 Consider the establishment of protected open space areas, planted with native valley vegetation, to serve as wildlife habitat and natural laboratory for public education purposes.
- Policy CO-6.4 Implement a relocation program for any rare and/or endangered animal species found in urbanized areas.

3.4.5 Applicant Proposed Measures

SCE proposed certain measures to reduce environmental impacts. In those instances where the CPUC has determined an applicant proposed measure (APM) would not reduce potential impacts to below the level of significance, the Draft IS/MND identifies mitigation measures that would reduce potential impacts to below the level of significance. SCE has agreed to implement all such mitigation measures in place of the relevant APM(s). Those APMs that the CPUC has determined would reduce the potential impacts of the Proposed Project to below the level of significance are discussed below. In such cases, the significance of the impact is first considered prior to application of the APM(s), and a significance determination is made. The implementation of APMs is considered as part of Proposed Project when determining whether impacts would be potentially significant and thus would require mitigation. These APMs would be incorporated as part of any CPUC project approval, and SCE would be required to adhere to the APMs as well as any identified mitigation measures. The APMs are included in the Mitigation Monitoring and Reporting Program (MMRP) for the Proposed Project, and the implementation of the measures would be monitored and documented in the same manner as mitigation measures. The APMs that are applicable to the biological resources analysis are provided in Table 3.4-5, below.

Table 3.4-5 Applicant Proposed Measures for Biological Resources Impacts

APM number	Requirements
BIO-HERP-5	**Tehachapi Slender Salamander** **Pre-construction survey/Construction monitoring.** Prior to initial ground-disturbing activities, a qualified Tehachapi Slender Salamander (TSS) biologist will conduct focused surveys within areas identified as habitat for this species. Biological monitors shall monitor construction activities impacting areas identified as occupied or potentially occupied TSS habitat. If TSS are observed and relocation is required, SCE will obtain the necessary permits or authorizations to relocate salamander individuals to the closest habitat area containing talus, as required by California Department of Fish and Wildlife (CDFW) in applicable permits or habitat conservation plans. **Avoid and minimize impacts**. All project activities located within areas identified as TSS habitat shall implement the following avoidance and minimization measures: • Limited Operating Period. If occupied habitat is identified, no construction activities will occur during the TSS active period without coordination with CDFW, February through April, in work areas impacting TSS occupied habitat. • Project activities occurring in habitat located within oak woodlands and ravines shall avoid displacing rocks, logs, bark, and other debris in thick leaf litter, near talus slopes. Trapped Animal Prevention. All auger holes, trenches, pits, or other steep-sided excavations that may pose a hazard to TSS will be either constructed with escape ramps (earthen or wooden) or securely covered when unattended to prevent entrapment. At the start and end of each workday, and just before backfilling, all excavations will be inspected for trapped animals. If found, trapped animals will be removed by the qualified biologist and relocated to outside the Project footprint, as required in all applicable permits or habitat conservation plans.
BIO-MAM-2	**San Joaquin kit fox** **Pre-construction survey/Construction monitoring.** Within 30 days prior to initial ground-disturbing activities, a qualified biologist will conduct surveys within areas identified as habitat for San Joaquin kit fox. Known and potential dens shall be monitored for evidence of kit fox use by placing an inert tracking medium or an infra-red beam camera at the entrance and monitoring for at least five consecutive nights. A qualified biologist will monitor construction activities within occupied kit fox habitat. If SJKF occupancy is determined at a given site during pre-construction surveys, SCE will follow all take permit conditions and resource management plan requirements to address SJKF; USFWS and CDFW will be consulted prior to conducting work as required by the permits **Agency consultation and den avoidance** If there are known or potential SJKF dens within project impact areas or project activities within den exclusion zone distances, CDFW and U.S. Fish and Wildlife Service (USFWS) will be consulted to ensure project activities will not impact the species. The following exclusion zones will be established for SJKF dens in accordance with the 2011 USFWS Standardized Recommendations for Protection of the San Joaquin Kit Fox: • Potential and atypical dens. An exclusion zone with a minimum radius of 50 feet as measured outward from the entrance or cluster of entrances will be maintained. Potential dens include any hole of any appropriate size for SJKF. Atypical dens may include any man-made structure, pipes, culverts, and similar structures with a diameter of approximately 4-inches or greater. • Known/occupied dens. An exclusion zone with a minimum radius of 100 feet as measured outward from the entrance or cluster of entrances will be maintained.

APM	Requirements
	• Natal/pupping dens. If a den is identified as known/occupied during the breeding season (February through September), the den will be demarcated with a 200-foot buffer. • Actions within exclusion zones will be limited to essential vehicle and equipment travel on authorized roads and foot traffic and will be monitored by a qualified biologist. No modification to existing occupied or natal dens can occur without authorization from USFWS and/or CDFW and in accordance with the 2011 USFWS Standardized Recommendations for Protection of the San Joaquin Kit Fox. Natal/pupping dens will not be destroyed until the pups and adults have vacated. If a den can be avoided by construction, but the exclusion zone can't be, then the den can have a one-way door installed or the entrance plugged once confirmed not to be occupied; one-way doors will be removed at the end of construction. If a den cannot be avoided by construction, the den might be able to be removed but may require additional mitigation, such as the creation of artificial dens. Dens in which no activity was detected may be closed by a qualified biologist following agency guidelines. **Avoid and minimize impacts**. The following avoidance and minimization measures shall be implemented for all project activities located within areas identified as SJKF habitat: • Limited Operating Period. Within occupied SJKF areas, SCE shall restrict work to daylight hours, except during an emergency, in order to avoid nighttime activities when kit fox may be present on access roads. • Disposal of Trash. Trash and food items will be contained in closed containers and removed daily to reduce attractiveness to opportunistic predators. • Pets Prohibited. Employees will not bring pets or other animals to the GKR Project area, unless the animal is ADA compliant. • Vehicle Travel. During construction-related activities, motor vehicles will be limited to maintained roads, designated routes, and areas identified as being permanently or temporarily affected by construction within the Project footprint. Motor vehicle speeds along Project routes and access roads within areas identified as habitat for SJKF will not exceed 20 miles per hour. • Trapped Animal Prevention. All auger holes, trenches, pits, or other steep-sided excavations that may pose a hazard to SJKF will be either constructed with escape ramps (earthen or wooden) or securely covered when unattended to prevent entrapping SJKF. At the start and end of each workday, and just before backfilling, all excavations will be inspected for trapped animals. Any SJKF found will be allowed to escape unimpeded. If a SJKF is trapped and does not leave on its own, a qualified biologist will move the animal according to agency authorizations, if there is no agency authorization, the fox shall not be moved (unless in imminent danger) until the USFWS and/or CDFW has been contacted and further guidance has been received. Cover Construction Materials. All construction pipes, culverts, or similar structures with a diameter of approximately four (4) inches or greater that are stored for one or more overnight periods will be thoroughly inspected for SJKF before the pipe is subsequently buried, capped, otherwise used or moved in any way. Likewise, all construction equipment with the potential to entrap SJKF (e.g., water buffalos, barrels, bins) will be covered or secured by turning over or tipping on their side to prevent trapping SJKF. All water tanks and containers will have tight fitting lids and will be checked to ensure the lids are closed and properly secured. Any SJKF found will be allowed to escape unimpeded. If a SJKF is trapped and does not leave on its own, a qualified biologist will move the animal according to agency authorizations, if there is no agency authorization, the fox shall not be moved (unless in imminent danger) until the USFWS and/or CDFW has been contacted and further guidance has been received.
BIO-RES-2	**Develop Invasive Plant Management Plan.** SCE shall prepare and implement an Invasive Plant Management Plan (IPMP). This plan shall include measures designed to avoid the introduction and spread of new nonnative invasive plant species (invasive plants) and minimize the spread of existing

APM number	Requirements
	invasive plants resulting from project activities. The IPMP shall be submitted to the CPUC and for review and approval prior to the start of construction. For the purpose of the IPMP, invasive plants shall include plants that (1) are invasive and rated high or moderate for negative ecological impact in the California Invasive Plant Inventory Database (Cal-IPC, 2006), or (2) aid and promote the spread of wildfires (such as Bromus tectorum (cheatgrass), Brassica tournefortii (Sahara mustard), and Bromus madritensis spp. Rubens (red brome)) or (3) identified by USFS as special concern. The IPMP will be implemented throughout project pre-construction, construction, and restoration phases. **Invasive Plant Management Plan** The IPMP will include the information defined in the following sections: **Assessment.** An assessment of the GKR Project's potential to cause spread or introduction of invasive plants into new areas, or to introduce new invasive plants into the ROW. This section will list known and potential invasive plants occurring on the ROW and in the project region and identify threat rankings and potential for project-related occurrence or spread for each species. This section will identify control goals (e.g., eradication, suppression, or containment) for invasive plants of concern with potential to occur on the ROW. **Pre-construction invasive plant inventory.** SCE shall inventory of all invasive plants of concern in areas (both within and outside the ROW) subject to project-related vegetation removal/disturbance, overland travel (drive and crush), and ground-disturbing activity. The invasive plants inventory area shall also include vehicle and equipment access routes within the ROW and all project staging and storage yards. Invasive plants of concern shall be mapped by area of occurrence and percent cover. The map will be updated with new occurrences at least once a year. **Pre-construction invasive plants treatment.** Invasive plant infestations identified in the pre-construction invasive plants inventory shall be evaluated to identify potential for project-related spread and potential benefits (if any) of pre-construction treatment. Pre-construction treatment will consider the specific invasive plants, potential seed banks, or other issues. The IPMP will identify any infestations to be controlled or eradicated prior to project construction. Control and follow-up monitoring of pre-construction invasive plants treatment sites will follow methods identified in appropriate sections of the IPMP. **Prevention.** The IPMP will specify methods to minimize potential transport of new invasive plant seeds onto the ROW, or from one section of the ROW to another. The ROW may be divided into "weed zones," based on invasive plants of concern in the ROW. The IPMP will specify inspection procedures for construction equipment entering the GKR Project area. Vehicles and equipment may be inspected and cleaned at entry points to specified sections of the ROW, and before leaving work sites where invasive plants of concern must be contained locally. Construction equipment shall be inspected to ensure it is free of any dirt or mud that could contain invasive plant seeds, roots, or rhizomes, and the tracks, outriggers, tires, and undercarriage will be carefully washed, with special attention being paid to axles, frame, cross members, motor mounts, underneath steps, running boards, and front bumper/brush guard assemblies. Other construction vehicles (e.g., pick-up trucks) that will be frequently entering and exiting the site will be inspected and washed on an as-needed basis. Tools such as chainsaws, hand clippers, pruners, etc., shall be cleaned of dirt and mud before entering project work areas. All vehicles will be washed off-site when possible. If off-site washing is infeasible, on-site cleaning stations (including air washing) will be set up at specified locations to clean equipment before it enters the work area. Wash stations will be located away from native habitat or special-status species occurrences. Wastewater from cleaning stations will not be allowed to run off the cleaning station site. When vehicles and equipment are washed, a daily log must be kept stating the location, date and time, types of equipment,

APM number	Requirements
	methods used, and personnel present. The log shall contain the signature of the responsible crewmember. Written or electronic logs shall be available to CPUC monitors on request. Erosion control materials (e.g., straw bales) must be certified free of invasive plant seed ("weed-free") before they are brought onto the site. The IPMP must prohibit on-site storage or disposal of mulch or green waste that may contain invasive plant material. Mulch or green waste will be removed from the site in a covered vehicle to prevent seed dispersal and transported to a licensed landfill or composting facility. The IPMP will specify guidelines for any soil, gravel, mulch, or fill material to be imported into the GKR Project area, transported from site to site within the GKR Project area, or transported from the GKR Project area to an off-site location, to prevent the introduction or spread of invasive plants to or from the GKR Project area. **Monitoring.** The IPMP shall specify methods to survey for invasive plants of concern during pre-construction, construction, and restoration phases; and shall specify qualifications of specialists responsible for invasive plant monitoring and identification. It must include a monitoring schedule to ensure timely detection and immediate control of new invasive plant infestations to prevent further spread. Surveying and monitoring for invasive plant infestations shall occur at least two times per year, to coincide with the early detection period for early season and late season invasive plants. The monitoring section shall also describe methods for post-eradication monitoring to evaluate success of control efforts and any need for follow-up control. **Control.** The IPMP must specify manual and chemical invasive plant control methods to be employed. The IPMP shall include only invasive plant control measures with a demonstrated record of success for target invasive plants, based on the best available information. The plan shall describe proposed methods for promptly scheduling and implementing control activity when any project-related invasive plant infestation is located (e.g., located on a project disturbance site), to ensure effective and timely invasive plant control. Invasive plant infestations must be controlled or eradicated as soon as possible upon discovery, and before they go to seed, or when appropriate with the goal to prevent further spread. All proposed invasive plant control methods must minimize disturbance to native vegetation, limit ingress and egress to defined routes, and avoid damage to any environmentally sensitive areas (ESAs) identified within or adjacent to the ROW. New infestations by invasive plants of concern will be treated at a minimum of once annually until eradication, suppression, or containment goals are met. Invasive plant occurrences can be considered eradicated when no new seedlings or resprouts are observed for three consecutive years, or a single season where new seedlings or resprouts are observed in reference populations but not at the control site. Invasive plant control efforts may cease when eradication is complete. Manual control shall specify well-timed removal of invasive plants or their seed heads with hand tools; seed heads and plants must be disposed of in accordance with guidelines from the relevant County Agricultural Commissioners, if such guidelines are available. The focus of weed abatement will be manual control. Chemical controls will be avoided. If chemical controls are indicated for specific invasive species, the following guidelines shall be followed. The chemical control section must include specific and detailed plans for any herbicide use. It must indicate where herbicides will be used, which herbicides will be used, and specify techniques to be used to avoid drift or residual toxicity to native vegetation or special-status plants, consistent with the National Invasive Species Management Plan (NISC, 2008). All herbicide applications will follow U.S. Environmental Protection Agency label instructions and will be in accordance with federal, state, and local laws and regulations. Only state-approved herbicides may be used. Herbicide treatment will be implemented by a Licensed Qualified Applicator. Herbicides shall be applied in accordance with product labels and applicator licenses. Herbicides shall not be applied during or within 24 hours of high confidence predicted

APM number	Requirements
	rain. Only water-safe herbicides shall be used in riparian areas or within channels (engineered or not) where they could run off into downstream areas. Herbicides shall not be applied in high wind conditions. 1. **Reporting schedule and contents.** The IPMP shall specify reporting schedule and contents of each report.
HAZ-1	**Prepare a Hazardous Materials Management Plan.** SCE will prepare and implement a Hazardous Materials Management Plan (HMMP)/Hazardous Materials Business Plan (HMBP) during project construction. The plan will outline proper hazardous materials handling, use, storage and disposal requirements, as well as hazardous waste management procedures. This plan will be developed to ensure that all hazardous materials and wastes will be handled and disposed of according to applicable rules and regulations. The HMMP will address the types of hazardous materials to be used during the project, hazardous materials storage, employee training requirements, hazard recognition, fire safety, first aid/emergency medical procedures, hazardous materials release containment/control procedures, hazard communication training, PPE training, and release reporting requirements. It will also include fueling and maintenance procedures for helicopters and construction equipment. If on site refueling is necessary, BMPs shall be implemented in accordance with the project SWPPP. Refueling stations and fuel tanks will be located, maintained, and operated during construction in accordance with applicable laws and regulations pertaining to hazardous materials. If more than 1,320 gallons of petroleum products in containers greater than 55-gallons, a SPCC plan must be created prior to products being brought on-site. All construction personnel, including environmental monitors, will be made aware of local, state and federal emergency response reporting guidelines for accidental spills.
HAZ-3	**Prepare and Implement a Project-Specific Fire Management Plan.** A Fire Prevention and Emergency Response Plan will be developed to ensure the health and safety of construction workers, SCE personnel, and the public during Project construction. The Plan shall cover: • The purpose and applicability of the plan • Responsibilities and duties • Project areas where the plan applies • Procedures for incorporating Red Flag Warnings, Fire Potential Index (FPI), Project Activity Level (PAL), and equivalent indicators in determining fire weather related work restrictions • Procedures for fire reporting, response, prevention, and evacuation routes • Coordination procedures with federal and local fire officials • Crew training, including fire safety practices and restrictions • Fire suppression and communication equipment required to be on hand during construction • Method for verification that Plan protocols and requirements are being followed • Post-construction fire prevention and response measures The Project-specific Fire Prevention and Emergency Response Plan for construction of the project will be prepared by SCE and submitted to CPUC, CALFIRE, Inyo, Kern and San Bernardino counties, and local municipal fire agencies for review at least 30 days prior to initiation of construction. SCE will address all comments received from reviewing agencies and provide the final Fire Prevention and Emergency Response Plan to reviewing agencies for approval prior to initiating construction activities.

3.4.6 Environmental Analysis

Summary of Impacts

Table 3.4-6 presents a summary of the CEQA significance criteria and impacts on biological resources that would occur during the construction and operation and maintenance phases of the Proposed Project.

Table 3.4-6 Summary of Proposed Project Impacts to Biological Resources

Would the proposed project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☐

Impact Discussion

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? (Less than significant with mitigation)

Construction

Direct Impacts

Special Status Plants
Special status plant species would be directly impacted by vegetation removal, grading, and rehabilitation and use of access roads. Vegetation removal and grading would occur at structure work areas. Vegetation in stringing sites would be impacted from the use of construction equipment and personnel accessing the areas. All existing access and spur roads are expected to require rehabilitation work, including re-grading and repairing the existing roadbeds to provide access to the construction work areas, which would remove vegetation from the roadway. Areas that support special status plant species would be impacted by construction-related habitat loss or modification of habitats. The impacts on special status species occurring in the Proposed Project area are discussed below.

Bakersfield cactus, Kern mallow, calico monkeyflower and Piute mountains navarretia: Grading and removal of vegetation from Proposed Project work areas and rehabilitation of access roads would directly impact the following:

- A population of 300 Bakersfield cactus that partially overlaps work areas
- 150 individuals of Kern mallow within work areas
- Six Calico monkeyflower within work areas
- 180 individuals of Piute mountain navarettia entirely within work areas and two populations (totaling 133 individuals) of Piute mountain navarettia that partially overlap work areas.

Given the federal and state endangered status of Bakersfield cactus, federal endangered status of Kern mallow, and rare and severely threatened rank of Calico monkeyflower and Piute mountain navarettia, the Proposed Project has the potential to have a significant direct impact on these species.

Mitigation Measures MM Biology-1 defines specific requirements for new surveys of rare plants and performance standards for salvage of special status plants that cannot be avoided. MM Biology-2 requires that certain performance standards and timeframes be met during restoration that would allow populations of special status plant species to remain viable in disturbed areas. Mitigation Measure Biology-3 requires worker training for avoidance of environmentally sensitive areas, including special status plant locations. Because MM Biology-1 requires avoidance measures where feasible and salvage and replanting for unavoidable impacts, MM Biology-2 requires temporarily disturbed areas to be restored to conditions

comparable to pre-construction conditions, and MM Biology-3 includes worker training, which would avoid significant impacts from loss of special status species habitat and population viability, the impacts on Bakersfield cactus, Kern mallow, calico monkeyflower, and Paiute mountain navarretia would be less than significant with mitigation.

Adobe Yampah and San Joaquin Bluecurls: Grading and removal of vegetation from structure work areas, pull sites, and access roads would impact 50 individuals of Adobe yampah and approximately 4,800 individuals of San Joaquin bluecurls (of 7,000 observed during surveys). Adobe yampah has a CRPR rank of 4.3, and San Joaquin bluecurls has a CRPR rank of 4.2. Plants with a CRPR rank of 4 are of limited distribution or infrequent throughout a broader area in California. The X.2 rank denotes that the plant is moderately threatened in California, and the X.3 means it is not very threatened. CRPR rank 4 plants are not protected by CDFW or USFWS and do not usually require avoidance unless an occurrence represents a locally unique resource. Impacts on CRPR rank 4 plants could be significant if the populations are at the periphery of the species' range, are located in areas where the taxon is especially uncommon or has sustained heavy losses, or are exhibiting unusual morphology or occurring on unusual substrates. The populations of Adobe yampah and San Joaquin bluecurls that would be impacted by the Proposed Project occur throughout the region of Proposed Project area, and neither population is unusual. Due to the larger regional populations of both species, the Proposed Project impacts would not have a substantial adverse impact on either species, and the Proposed Project's construction impacts would be less than significant.

Other special status plants: Several special status plants listed in Table 3.4-2 were not detected during surveys but have a high to moderate potential to occur in the Proposed Project area due to the presence of suitable habitat and known occurrences of these species nearby. While species with a moderate or high potential to occur were not detected in the work area during planning surveys, they could occur in Proposed Project work areas and access roads at the time of construction, and the special status plant species could be impacted by vehicle access, grading, and vegetation removal. Direct impacts on other individual federally or State-listed plant species and CRPR rank 1B and 2B species would be significant because these species are threatened and populations are limited across the state. Absent mitigation, direct impacts to special status plants with a moderate or high potential to occur in the area would be significant. MM Biology-1 requires specific criteria for pre-construction surveys during blooming season, avoidance measures, and a Salvage and Replanting Plan for special status plants that cannot be avoided. MM Biology-2 requires that performance standards and timeframes are met during restoration that would allow populations of these species to remain viable in disturbed areas. MM Biology-1 requires avoidance where feasible and salvage and replanting for unavoidable impacts and MM Biology-2 requires temporarily disturbed areas to be restored to conditions comparable to pre-construction conditions, which would avoid significant impacts from loss of special status plant species habitat and population viability. Because the mitigation would avoid and minimize impacts on individuals, offset any unavoidable impacts, and provide habitat restoration, the impacts on special status plants would be less than significant with mitigation.

Special Status Invertebrates

Crotch's bumblebee: Crotch's bumble bee foraging and nesting habitat is present throughout the majority of the Proposed Project area, and individuals have been observed habitat similar to that found in the to the Proposed Project area in Kern County. Crotch's bumblebee nest underground in burrows and can establish a new nest each year. If a nest of Crotch's bumble bee were to occur in the Proposed Project area at the time of construction, the impact from destruction of a nest would be significant. In addition, the impact on suitable habitat for Crotch's bumble bee would be significant. MM Biology-4 requires focused surveys for Crotch's bumble bee a season prior to construction, pre-construction surveys immediately prior to construction, monitoring of nest avoidance for any Crotch's bumblebee in proximity to a work area, and compensatory mitigation for impacts on Crotch's bumblebee habitat. With implementation of Mitigation Measure Biology-4, the impact on Crotch's bumble bee would be less than significant with mitigation.

Monarch butterfly. One individual monarch butterfly was observed in the southern portion of Segment 2 north of the mouth of Grapevine Canyon. No milkweed was present in this location. Suitable roost sites for the monarch butterfly are absent within the Proposed Project area, but monarchs may pass through the Proposed Project area during migrations. The monarch is not known to overwinter or breed in the Proposed Project area. Due to the absence of suitable larval host plants (i.e., milkweed) or roost habitat within the Proposed Project area, the Proposed Project would not have a substantial effect on monarch butterfly as limited numbers of monarch butterfly would be expected to pass through the Proposed Project area, and no habitat would be affected.

Special Status Amphibians

Tehachapi slender salamander, yellow-blotched salamander and Kern Canyon slender salamander. Tehachapi slender salamander, yellow-blotched salamander and Kern Canyon slender salamander have a high potential to occur in the Proposed Project area because of the presence of suitable habitat and recent occurrences within the Proposed Project area. Tehachapi slender salamander, yellow-blotched salamander, and Kern Canyon slender salamander generally have similar habitat requirements, including shaded (often north-facing) woodlands with down logs and debris near streams or other sources of water. Tehachapi slender salamander, yellow-blotched salamander, and Kern Canyon slender salamander could be injured or killed during construction activities as the Proposed Project includes access and work within suitable habitat and both species often hide under rocks, logs, or other surface debris. Construction would also result in direct permanent and temporary loss of suitable habitat for Tehachapi slender salamander, yellow-blotched salamander and Kern Canyon slender salamander. Approximately 63 acres of suitable habitat would be temporarily disturbed from construction work areas and staging/laydown yards, and less than 4 acres would be permanently impacted. Injury or mortality to either species and loss of suitable habitat would be a significant impact. SCE has proposed APM HERP-5 for protection of Tehachapi slender salamander, which requires pre-construction surveys and monitoring, limited operating periods (LOPs) in Tehachapi slender salamander habitat, avoidance of disturbing or displacing habitat

elements, and relocation (in compliance with any required permits). While the APM would reduce impacts on individual Tehachapi slender salamander, the APM would not address the yellow-blotched salamander or Kern Canyon slender salamander and would not address habitat loss, therefore, impacts on yellow-blotched salamander and Kern Canyon slender salamander would be potentially significant absent mitigation. MM Biology-2 requires that certain performance standards and timeframes be met during restoration that would ensure the restoration of temporal impact areas is comparable to pre-project conditions. MM Biology-5 requires pre-construction surveys to be performed by a qualified biologist no more than 30 days prior to construction and requires qualified biological monitors to be present and implement species avoidance practices at all times during construction in areas where yellow-blotched salamander and Kern Canyon slender salamander have been located and in areas of suitable habitat to minimize impacts on individuals. MM Biology-6 requires compensatory mitigation for permanent impacts to habitat for Tehachapi slender salamander and Kern Canyon slender salamander.

Western spadefoot: Two adult western spadefoots were observed at the edge of a stock pond within the Proposed Project area along Segment 4, and adults could be present within grassland habitats surrounding this pond, where potential breeding occurs. Western spadefoots could potentially be injured or killed from construction activities, including vehicle and equipment travel on access roads, burrow destruction from grading of work pads and stringing sites in upland aestivation habitat, or entrapment in excavations, and there is a potential significant impact from injury or mortality absent mitigation. MM Biology-5 requires pre-construction surveys be performed by a qualified biologist no more than 7 days prior to construction in each work area and requires qualified biological monitors to be present at all times during construction in areas where western spadefoot has been located and in areas of suitable habitat and allows the biologist to halt construction activities to ensure construction activities do not harm individuals. With implementation of MM Biology-5, direct impacts on western spadefoot would be less than significant with mitigation.

Construction would also result in direct permanent and temporary loss of suitable habitat for western spadefoot. Suitable habitat for the western spadefoot is present in grasslands and grassy openings in oak woodlands in the lower slopes and valleys of the Tehachapi Mountains in Segments 3 and 4 with a nearby source of ponded or slow-moving water (including ponds, vernal pools, and intermittent streams). Absent mitigation, temporary impacts on suitable habitat would be significant if the area of temporary impacts were not adequately restored. MM Biology-2 requires that certain performance standards and timeframes are met during restoration that would ensure the restoration of temporary impact areas is comparable to pre-Project conditions and would not result in permanent loss or degradation of habitat. Impacts on habitat for western spadefoot would, therefore, be less than significant with implementation of mitigation.

Special Status Reptiles

Blunt-nosed leopard lizard: Blunt-nosed leopard lizard has a high potential to occur the Proposed Project area due to the presence of suitable habitat in multiple locations along the

Proposed Project alignment. Because blunt-nosed leopard lizards live in underground burrows, individuals can go undetected during general biological clearance surveys. The species is fully protected in California, and take is prohibited by CDFW. Impacts on blunt-nosed leopard lizard, including mortality or capture of the species resulting from construction activities, would be a significant impact. SCE has proposed the "SCE Gorman Kern River Project Blunt-nosed Leopard Lizard Minimization and Avoidance Strategy," enclosed in Appendix D, which includes the following activities for blunt-nosed leopard lizard in suitable habitat:

- Pre-Project protocol surveys in all suitable habitat for blunt-nosed leopard season during seasons prior to construction (planning/permitting phase)
- Pre-construction surveys within 14 days of ground disturbing activities
- Clearance sweeps on the day of construction
- Excavation of inactive burrows within the work area one year prior to construction
- Implementation of burrow management procedures for active burrows within 15 meters of construction including burrow exclusion and excavation to avoid blunt-nosed leopard lizard

The proposed blunt-nosed leopard lizard minimization and avoidance strategy includes detailed procedures to ensure avoidance of mortality of any blunt-nosed leopard lizard. As a result, the impact on individual blunt-noised leopard lizard from construction activities would be less than significant.

The Proposed Project would temporarily disturb suitable habitat for blunt-nosed leopard lizard and would permanently impact up to 23 acres of suitable habitat. Absent mitigation, loss of suitable habitat for blunt-nosed leopard lizard would be a significant impact. Therefore, MM Biology-2 would be implemented and requires SCE to prepare and implement a Revegetation, Restoration, and Monitoring Plan, including specific procedures and performance standards to ensure temporarily disturbed habitats are adequately restored following construction. Where impacts cannot be fully offset by habitat restoration, MM Biology-6 would require compensatory mitigation to offset the permanent and temporary loss of suitable habitat for blunt-nosed leopard lizard. Mitigation for permanent impacts would be provided at a minimum ratio of 1:1 and temporary impacts at a ratio of 0.5:1 unless a higher ratio were required by authorizations issued under FESA for blunt-nosed leopard lizard. Because temporary impacts on suitable habitat for blunt-nosed leopard lizard would be restored and permanent and temporal impacts on blunt-nosed leopard lizard habitat would be compensated for, the impact on blunt-nosed leopard lizard would be less than significant with mitigation.

Bakersfield legless lizard, California legless lizard, Southern California legless lizard, coastal whiptail, coast horned lizard, San Joaquin coachwhip, and San Bernadino ringneck snake: Bakersfield legless lizard, California legless lizard, Southern California legless lizard, coastal whiptail, coast horned lizard, San Joaquin coachwhip, and San Bernadino ringneck snake have a high or moderate potential to occur within the Proposed Project area because of the presence of potentially suitable habitat and recent occurrences within the BSA, but these species were not observed during biological surveys. Construction of the Proposed Project could result in direct

impacts on special status reptile species with a moderate or high potential to occur in the Proposed Project area were the species to move into the area at the time of construction and were injured or killed during construction activities. Injury or mortality of Bakersfield legless lizard, California legless lizard, Southern California legless lizard, coastal whiptail, coast horned lizard, San Joaquin coachwhip, and San Bernadino ringneck snake would be a significant impact absent mitigation. Therefore, MM Biology-5 would be implemented to avoid impacts to these species. MM Biology-5 requires pre-construction surveys to be performed by a qualified biologist no more than 7 days prior to construction and requires qualified biological monitors with authority to halt construction to be present at all times during construction in areas where these species have been located and in areas of suitable habitat to ensure construction activities do not harm individuals. Implementation of MM Biology-5 would avoid direct impacts on Bakersfield legless lizard, California legless lizard, coastal whiptail, coast horned lizard, and San Joaquin coachwhip, and impacts would be less than significant with mitigation.

Construction would also result in direct permanent and temporary loss of suitable habitat for Bakersfield legless lizard, California legless lizard, coastal whiptail, coast horned lizard, and San Joaquin coachwhip. Temporary and permanent impacts on suitable habitat would not substantially impact Bakersfield legless lizard, California legless lizard, coastal whiptail, coast horned lizard, and San Joaquin coachwhip because the habitat impacts would be limited and dispersed along the Proposed Project alignment, and the habitat is common throughout the region. The temporary and permanent habitat impacts on Bakersfield legless lizard, California legless lizard, coastal whiptail, coast horned lizard, and San Joaquin coachwhip would therefore be less than significant.

Special Status Birds

There are numerous special status birds that have the potential to occur within the Proposed Project area that could be affected by construction, including 16 special status avian species observed during focused biological field surveys for the Proposed Project area. Most of the special status bird species with potential to occur in the Proposed Project area are protected under the MBTA or BGEPA, and many also have additional state and/or federal protection status (see Table 3.4-2). This impact analysis generally addresses special status avian species as a whole since the impacts from construction noise or vegetation removal would be similar across most species. However, some species are discussed in greater detail below due to impacts specific to these species.

Special status birds can be found in a wide variety of natural and developed environments, and their habitat and nesting characteristics vary greatly by species. Special status birds and their nests could be found at any location in the Proposed Project area; however, the potential for nesting activity is greater in grasslands, woodlands, riparian areas, and coniferous forests. The Proposed Project would involve vegetation removal and ground-disturbing activities in work areas and access routes located in grassland, woodland, and forests, where there is a high potential for encountering nesting birds during the nesting season (generally, February 1–September 15). Tree and vegetation removal or vegetation trimming could destroy nests of special status birds that nest in trees and bushes. Grading and other earth disturbing activities

could destroy nests of special status birds that nest on the ground (e.g., California horned lark, burrowing owl, northern harrier). Destruction of an active special status bird nest is considered a significant impact. Construction activities would also produce noise and vibration from the use of heavy construction equipment (e.g., trucks, drill rigs, excavators) and helicopters. Construction noise and vibration could disturb nesting behavior, depending on the type of construction activity, site-specific conditions, and species sensitivity to noise and vibration. Noise and vibration from construction equipment and helicopters could disturb nesting birds and result in the failure or abandonment of an active special status or migratory bird nest. Causing nest failure or abandonment could result in the mortality of egg embryos and the violation of State and federal laws governing the protection of birds and their nests, which would be a significant impact.

Mitigation Measure Biology-8 requires development and implementation of a Nesting Bird Management Plan (NBMP) that includes requirements for buffers that shall be established around any active nest that is found. The buffer specifications would be based on the specific nature of the bird species (or groups of species), conservation status, and tolerance to human activities and require smaller or larger buffer radii specified as appropriate, with 300 feet being the general standard and 500 feet being the standard for raptors. The Nesting Bird Management Plan would include restrictions for construction activities as well as nest monitoring and reporting to ensure that the measure is appropriately implemented and construction disturbances do not cause nest failure or abandonment. Because Mitigation Measure Biology-8 specifies protocols to avoid disturbance of an active nest, impacts would be less than significant. Construction of the Proposed Project would require ground disturbance, vegetation clearance zones, and tree removal, which would result in direct permanent and temporary loss of suitable habitat for special status birds. Temporary and permanent impacts on suitable habitat would not substantially impact special status birds because the impacts would be limited and dispersed along the Proposed Project alignment. Unaffected suitable foraging and nesting habitat surrounds the Proposed Project area, and birds would be able to avoid disturbance areas and travel to more suitable surrounding habitat. The impact on special status bird species from habitat loss because of the Proposed Project would therefore be less than significant.

Burrowing owl: Burrowing owls are particularly susceptible to harm from activities involving ground disturbance, such as grading and excavating. A single burrowing owl and two active burrows were observed within the Proposed Project alignment. Suitable burrowing owl habitat occurs within Segments 1 through 4 of the Proposed Project. Proposed Project ground-disturbing activities such as grading and vegetation removal could result in the destruction of burrows, disruption of breeding behavior, and injury to or mortality of owls, including the loss of eggs or chicks, resulting in a significant impact absent mitigation. MM Biology-9 would be implemented to avoid impacts on burrowing owls. MM Biology-9 requires buffers for burrowing owl to be determined by CDFW guidelines and would also require measures to reduce disturbance within buffer areas, such as installation of visual or sound barriers, prior to passive relocation as well as implementation of worker training per MM Biology-3. Burrowing owls can withstand some levels of disturbance, and MM Biology-9 requires that passive

relocation be considered only after other measures to reduce impacts from disturbance are implemented. Because MM Biology-9 would avoid potential for mortality or injury of a burrowing owl or eggs, the impact on burrowing owls from ground-disturbing activities would be less than significant with mitigation.

Construction of the Proposed Project would result in direct permanent and temporary loss of suitable habitat for burrowing owls. Over 462 acres of suitable habitat for burrowing owl would be temporarily disturbed by construction, and approximately 26 acres of permanent impacts would occur. Temporary impacts would be significant absent mitigation. MM Biology-2 requires that certain performance standards and timeframes are met during restoration that would ensure that habitat values are properly restored in all temporary impact areas. In addition, MM Biology-9 requires construction of replacement burrows within buffer areas determined by CDFW guidelines if relocation of burrowing owls is required and there are insufficient burrows within areas of suitable habitat. Permanent impact areas at new structure/pole locations in suitable habitat would be offset by the removal of the existing subtransmission poles/structures from suitable habitat areas. Because any impacted burrows would be replaced and temporary habitat impacts would be restored, construction impacts on burrowing owls from habitat loss resulting from the Proposed Project would be less than significant with mitigation.

Golden eagle: Golden eagles have been observed foraging and nesting within the Proposed Project area. Golden eagles are particularly sensitive to noise and other anthropogenic disturbances and are prone to abandonment of nest sites, especially in newly established territories. Typical construction activities (e.g., most ground-based equipment) could impact nesting behavior of golden eagle for up to approximately 0.5 mile. High-disturbance construction activities such as helicopter operations could impact nesting behavior of golden eagle for up to 1 mile from the location of the activity. Mitigation Measure Biology-10 requires golden eagle nest surveys when construction activities are scheduled to occur in or near golden eagle nesting habitat from January 1 to August 31 to determine if any eagle nests are active within a 1-mile radius. If nesting eagles are observed, a buffer of 1 mile would be established around the nest if in line of sight of construction activity and 0.5 mile if not in line of sight, to be determined with USFWS concurrence. Because Mitigation Measure Biology-10 includes procedures to avoid disturbance of a golden eagle nest, including avoidance buffers, the impact on golden eagles from construction activities and associated disturbances would be less than significant.

Construction would also result in direct permanent and temporary loss of suitable foraging habitat for golden eagles. While golden eagles can nest in the existing transmission structures and trees along the alignment, the loss of habitat from removal of transmission structures and removal of trees from the wooded areas of the alignment would not significantly impact the species because there is surrounding natural nesting habitat that would not be affected by the Proposed Project. Temporary impacts on foraging habitat would not substantially impact this species because the impacts would be limited and dispersed along the Proposed Project alignment and unaffected foraging habitat surrounds the Proposed Project, which would

remain available to golden eagles. Permanent impacts from the new subtransmission poles in suitable foraging habitat for golden eagles would be offset by the removal of the existing subtransmission poles and towers/structures along the existing alignment. Impacts from habitat loss would, therefore, be less than significant.

Swainson's hawk: A Swainson's hawk was observed foraging within the Proposed Project area. Swainson's hawks are particularly sensitive to changes in disturbance levels (e.g., new activity in a formerly undisturbed location) and are prone to abandonment of nest sites. Construction activities could impact nesting behavior of Swainson's hawk for up to 0.5 mile and could cause nest abandonment, which would be a significant impact absent mitigation. MM Biology-8 requires that Swainson's hawk nest surveys be performed by a qualified biologist prior to construction and prohibits any new disturbances, habitat conversions, or other Project-related activities that may cause nest abandonment or forced fledging within 0.5 mile of an active nest between March 1 and September 15, which is the Swainson's hawk breeding season in the Project area. Because MM Biology-11 specifies requirements for pre-construction surveys and avoidance of Swainson's hawk nests, impacts to Swainson's hawks from construction activities and associated disturbances would be less than significant with mitigation.

Construction would also result in direct permanent and temporary loss of suitable foraging habitat for Swainson's hawks. Temporary impacts on foraging habitat would not substantially impact this species because the impacts would be limited and dispersed along the Proposed Project alignment and the unaffected foraging habitat surrounding the Proposed Project area would remain available to Swainson's hawks. Over 1,000 large trees would require removal for construction of the Project, which would result in loss of nesting habitat. However, the areas of tree removal for the Proposed Project occur in areas of forest where there is substantial surrounding habitat, and the removal of isolated patches of trees along the alignment would not substantially impact the species; therefore, the impact would be less than significant.

California condor: Portions of Segments 2 and 3 of the Proposed Project are located within critical habitat for California condor (approximately 62 acres), and suitable foraging habitat is present within undeveloped areas of the Proposed Project in the Tehachapi Mountains. It is unlikely that a condor would be nesting within the vicinity of the Proposed Project area as the nearest nesting habitat is over 2.5 miles away from the Proposed Project. However, this species may be present foraging in and around the Proposed Project area. Construction would result in direct permanent and temporary loss of suitable foraging habitat for California condors. No nesting habitat would be affected. Temporary impacts on foraging habitat would not substantially impact this species because the impacts would be limited and dispersed and would only last a few days in each work area, and unaffected foraging habitat surrounding the Proposed Project area would remain available to California condors. Permanent impacts to suitable foraging habitat for California condors from installation of new subtransmission poles/structures would be offset by the removal of the existing subtransmission poles and structures. Impacts to California condor from construction within suitable foraging habitat would be less than significant.

Special Status Mammals

American badger: American badger has a moderate potential to occur in and adjacent Proposed Project work areas and access routes located in woodland, forest, and grassland habitats. Construction activities could result in disturbing or collapsing an active den or otherwise harming individual badgers. Injuring or killing an American badger, or destroying an active American badger den, would be a significant impact absent mitigation. MM Biology-121 requires pre-construction surveys for active American badger dens within 7 days prior to grading or vegetation clearing in work areas or use of overland access routes. Should active dens be located, MM Biology-12 would require work exclusion buffers of 250 feet for maternal dens and 50 feet for non-maternal dens to avoid impacts from noise on breeding or behavior or, if badger dens could not be avoided, passive relocation. MM Biology-12 would avoid substantial direct impacts on American badger, and the impact would therefore be less than significant with mitigation.

Construction of the Proposed Project would require ground disturbance, which could result in direct permanent and temporary loss of suitable habitat for American badgers, including denning sites. Temporary impacts on foraging habitat would not substantially impact this species because the impacts would be limited and dispersed along the Proposed Project alignment, and unaffected foraging habitat surrounding the Proposed Project would remain available. Disturbance to habitat for badgers would be significant if it resulted in the permanent loss of habitat available for dens and foraging near den sites. MM Biology-2 requires that certain performance standards and timeframes are met during restoration that would ensure the restoration of temporary impact areas is comparable to pre-Project conditions and would not result in a permanent loss of habitat. Permanent impacts on habitat from the new subtransmission poles/structures would be offset by the removal of the existing subtransmission poles/structures. Impacts from habitat loss would be less than significant.

San Joaquin kit fox: San Joaquin kit fox has been observed in and adjacent the Proposed Project work areas and access routes located in grassland habitats. Construction activities could result in disturbing or collapsing an active den or otherwise harming individual foxes. Injuring or killing a San Joaquin kit fox, or destroying an active den, would be a significant impact. SCE has proposed APM-MAM-2 for protection of San Joaquin kit fox, which includes exclusion zones and destruction of unoccupied dens to prevent them from becoming occupied dens. Because the APM defines protocols for avoidance and minimization of impacts on San Joaquin kit fox, the impact on San Joaquin kit fox would be less than significant.

Construction of the Proposed Project would require ground disturbance and vegetation removal, which would result in direct permanent and temporary loss of suitable habitat for San Joaquin kit foxes. Approximately 235 acres of suitable habitat for San Joaquin kit foxes would be temporarily disturbed by construction, and approximately 12 acres of permanent impacts would occur. Temporary impacts could become permanent loss of habitat if these areas were not restored, and the permanent loss of this amount of suitable habitat for San Joaquin kit fox would be significant. MM Biology-2 requires that certain performance standards and timeframes are met during restoration that would ensure the restoration of temporary impact

areas is comparable to pre-Project conditions and would not result in a permanent loss of habitat. MM Biology-13 requires compensatory mitigation for permanent impacts on San Joaquin kit fox habitat at a minimum 1:1 ratio. Because MM Biology-2 would ensure proper restoration of temporary impacts and MM Biology-13 requires compensatory habitat mitigation for permanent impacts, the impact on San Joaquin kit fox from habitat loss would be less than significant with mitigation.

Tipton kangaroo rat: Tipton kangaroo rat has moderate potential to occur in the Proposed Project work areas and access routes located in grassland or scrubland habitats with soft friable soils. Construction activities could result in disturbing or collapsing an active burrow or otherwise harming individual kangaroo rats. Injuring or killing a Tipton kangaroo rat, or destroying an active burrow, would be a significant impact. Mitigation Measure Biology-14 requires pre-construction surveys for Tipton kangaroo rat, flagging and 30-foot buffers for avoidance, limited operating periods, and measures to avoid vehicle collisions or entrapment by equipment or trenching. The Proposed Project's construction impacts on Tipton kangaroo rat would be less than significant with implementation of Mitigation Measure Biology-14.

Construction of the Proposed Project would require ground disturbance and vegetation removal, which would result in direct permanent and temporary loss of suitable habitat for Tipton kangaroo rats. Approximately 18 acres of suitable habitat for Tipton kangaroo rats would be temporarily disturbed by construction, and less than 1 acre of permanent impacts would occur. Temporary impacts could become permanent loss of habitat if these areas were not restored, and the permanent loss of this amount of suitable habitat for Tipton kangaroo rats would be significant. MM Biology-2 requires that certain performance standards and timeframes are met during restoration that would ensure the restoration of temporary impact areas is comparable to pre-Project conditions and would not result in a permanent loss of habitat. Permanent impacts from the new subtransmission poles/structures would also be offset by the removal of the existing subtransmission poles/structures. The impact on Tipton kangaroo rats from habitat loss would be less than significant with mitigation.

Special status bats: Trees within and adjacent the Proposed Project work areas and access routes provide potentially suitable roosting habitat for special status bats, including pallid bats that have been observed within the Proposed Project BSA. Structures and outbuildings adjacent work areas may also provide suitable roosting habitat for bats. The Proposed Project would involve vegetation clearing and tree removal that could destroy or disturb bat roosts and result in injury to or mortality of a special status bat, which would be a significant impact. Mitigation Measure Biology-15 requires a qualified bat biologist to conduct surveys before the start of construction to identify active bat roosting or maternity colonies within or adjacent Proposed Project impact areas for features with roosting potential, including trees, rock outcrops, caves, and mines. If an active roost or bats are present, measures would be implemented to get bats to vacate the tree. Tree removal would also be avoided between April 15 and August 15 (the maternity period) to avoid impacts to active maternity roosts. Implementation of Mitigation Measure Biology-15 would avoid direct impacts on special status bats, and the impact would be less than significant.

Construction of the Proposed Project would require vegetation clearance zones and tree removal, which would result in direct permanent and temporary loss of potentially suitable roosting and foraging habitat for special status bats. Temporary and permanent impacts on suitable habitat would not substantially impact special status bats because the impacts would be limited and dispersed along the Proposed Project alignment. Unaffected suitable foraging and roosting habitat surrounds the Proposed Project area, and bats would be able to avoid disturbance areas and travel to more suitable surrounding habitat. The impact on special status bats from habitat loss because of the Proposed Project would therefore be less than significant.

Indirect Construction Impacts

Construction disturbance could indirectly impact special status plants and wildlife through increased erosion and sedimentation, fugitive dust, release of toxic substances, and the introduction and/or spread of invasive plant species, resulting in a significant impact. Increased erosion can adversely affect plant growth and success by removing valuable topsoil and exposing roots, and increased sedimentation can bury small plants or seedlings. Construction activities such as grading and driving heavy equipment on unpaved roadways can result in increased levels of fugitive dust that may settle on surrounding plants, which can adversely affect photosynthesis. Spills from hazardous materials may harm or kill affected plants. The State of California NPDES program would require SCE to obtain coverage under the SWRCB Construction General Permit and prepare a SWPPP prior to construction because the Project would disturb more than 1 acre of land. The SWPPP developed for the Proposed Project would address risk factors and BMPs to reduce the potential for erosion and sedimentation. SCE would also implement APM HAZ-1, which includes a Hazardous Materials Management Plan (HMMP)/Hazardous Materials Business Plan (HMBP), during Project construction that would outline proper hazardous materials handling, use, storage and disposal requirements as well as hazardous waste management procedures. Impacts from erosion and sedimentation and the release of toxic substances would be less than significant after implementation of the SWPPP and APMs.

Invasive, non-native plants can spread when seeds are brought in on the soles of shoes or on the tires and undercarriages of vehicles or equipment. They can also be brought in if soil containing the seeds is imported. Furthermore, ground disturbance from construction activities generally favors the establishment of non-native species because they are more adapted to disturbance than native species. Once established, invasive species are often able to out-compete native plants and sometimes displace them, especially if there is further disturbance. Loss of suitable habitat for special-status plant and animal species from introduction of invasive plants is a potentially significant indirect construction impact. SCE proposes APM BIO-RES-2, which would require development and implementation of an Invasive Species Management Plan, which would address pre-construction inventories and treatment, prevention methods to implement during construction, monitoring, and post-construction control and eradication to avoid loss of suitable habitat. Indirect impacts to habitat for special status plants and animals would be less than significant with implementation of APM BIO-RES-2.

Wildfires caused by construction are rare but may occur, such as if a construction vehicle were to spark and ignite nearby vegetation or as a result of worker smoking. If a wildfire were to occur, the associated land disturbance would result in a significant impact to special status species in the area. SCE proposes APM HAZ-3 as part of the Proposed Project, which requires implementation of a Fire Prevention and Emergency Response Plan to include specific precautions to minimize the risk of wildfire ignition and procedures for containing any ignitions caused by construction such as carrying fire suppression equipment during construction to suppress any fires that are started by construction activity. Through implementation of the proposed fire risk minimization measures, the potential impacts of wildfire on habitat for special status plants and animals resulting from Project construction would be less than significant.

Operation and Maintenance

Special Status Plants

Special status plant species could also be impacted through crushing by vehicles, vegetation removal, and herbicide use during facility operation and maintenance. Inspections with the use of vehicles may crush plants. Vegetation management including herbicide application could cause plant mortality, and equipment maintenance could result in crushed plants or the release of toxic substances that could harm plants or cause mortality. Inspections would occur at the same frequency as inspections for the existing power lines in the utility corridor. There would be additional vegetation management activities around the structure operation work pads and spur roads, including the use of herbicides or trimming to manage vegetation.

Operation and maintenance activities for the Proposed Project would be approximately the same as the operation and maintenance activities for the existing lines and substation. SCE would continue to regularly inspect, maintain, and repair conductor, power line structures, and substation facilities, as well as maintain vegetation clearances from all facilities in the Proposed Project alignment, in approximately the same manner. SCE would use the same types of herbicides that are currently used for maintenance of clearance zones around the existing poles. Thus, the risk to special status plants from the application of herbicides and inspection activities would not change from existing conditions. Operation and maintenance would not create any new impacts on special status plants. The impact would be less than significant.

Special Status Wildlife

Special status wildlife species could be impacted by operation and maintenance activities including inspections, substation lighting, vegetation management, herbicide application, equipment maintenance, and accidental spills of hazardous materials and from trash generated during operation and maintenance activities. These activities could also result in loss of or damage to suitable breeding or foraging habitat or destruction of nests or burrows and could cause mortality or injury to species located in the Proposed Project work areas or access routes. Inspections would occur at the same frequency as inspections for the existing power lines in the utility corridor. There would be vegetation management activities around the new structure operation work pads and spur roads, including the use of herbicides to manage vegetation.

Annual inspections would be performed for the transmission and power lines and other related infrastructure in accordance with regulatory requirements. Maintenance would occur on an as-needed basis and could directly or indirectly impact wildlife species located near the work areas through equipment noise and human presence, exhaust or dust, vegetation removal, and herbicide use. Because the Proposed Project would replace an existing adjacent line and inspection and maintenance activities would be the same as existing activities, the risk to special status species from the application of herbicides and inspection activities would not change from existing conditions. Inspection and maintenance activities would not create any new impacts on special status species. The impact would be less than significant.

All power lines and associated structures pose a risk to special-status birds. Birds can be injured or killed through electrocution while perching on transmission line structures or by striking suspended lines during flight. Birds with large wing spans, such California condors, are particularly susceptible to collisions and electrocution. The Proposed Project could result in a significant impact on special status birds from electrocution or collision if the design of the new power line increased the potential for electrocution or collision compared to the existing line. SCE would construct the Proposed Project following the recommendations published by the Avian Power Line Interaction Committee (APLIC) in *Reducing Avian Collisions with Power Lines: The State of the Art in 2012* (APLIC 2012). In addition, SCE's Avian Protection Program (Appendix D) contains specific measures for the protection of California condors. With implementation of APLIC guidelines, the new structures would not pose a greater risk to birds than the existing power line and structures and may pose less risk than the existing power line because the new structures and lines would be designed according to modern standards and practices for avoiding avian interactions. The impact would, therefore, be less than significant.

Required APMs and MMs: APM BIO RES-2, APM BIO HERP-5, APM HAZ-1, APM HAZ-3, APM BIO-MAM 6, Mitigation Measure Biology-1, Mitigation Measure Biology 2, Mitigation Measure Biology 3, Mitigation Measure Biology-4, Mitigation Measure Biology-5, Mitigation Measure Biology-6, Mitigation Measure Biology-7, Mitigation Measure Biology-8, Mitigation Measure Biology-9, Mitigation Measure Biology-10, Mitigation Measure Biology-11, Mitigation Measure Biology-12, Mitigation Measure Biology-13, Mitigation Measure Biology-14, and Mitigation Measure Biology-15

Mitigation Measures

Mitigation Measure Biology-1: Avoidance and Minimization of Impacts on Special-Status Plants
SCE shall avoid, minimize or mitigate impacts on any State or federally listed or California Rare Plant Rank (CRPR) 1 or 2 plants that may be located on the project disturbance areas or surrounding buffer areas. This shall include known occurrences of Bakersfield cactus, Kern mallow, calico monkeyflower and Piute mountains navarretia, as well as new species or populations discovered during pre-construction surveys.
Pre-construction surveys: SCE shall obtain CPUC approval of a qualified botanist to perform pre-construction surveys for state or federally listed plant species and those with a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, or 2B that have the potential to occur in the area. These surveys shall be performed utilizing CNPS or other accepted botanical survey protocol. Special-status plant surveys shall be conducted during the appropriate blooming period for each species and prior to construction activities for all work areas occurring off existing

Mitigation Measure Biology-1: Avoidance and Minimization of Impacts on Special-Status Plants

access roads in natural areas, including overland travel routes, and areas of existing roads that require modifications. The surveys shall include a floristic inventory and focused search for special-status plants with potential to occur in Project areas where suitable habitat is present. Special-status plant survey(s) shall be conducted within 1 year of construction mobilization.

The survey results shall be summarized in a report and provided to the CPUC no less than 30 days prior to commencement of construction. The survey report shall identify the botanists' names and qualifications, and a description of the survey dates, methods, and a description of the survey efforts, including a list of the species that were searched for, results of the plant inventory evaluation, and suitable habitat that was encountered. The report shall include maps (1: 3,000 scale) that identify final Project work areas and access routes and the extent of focused plant surveys that cover Project areas located in occupied habitat. Maps in the report shall identify point locations for individual plants and boundaries for plant populations. The report shall include specific recommendations for avoiding the plants.

Avoidance measures: SCE shall mark all populations of special-status plants within the BSA as environmentally sensitive areas on maps that are provided to construction contractors working near environmentally sensitive areas (ESAs). All populations within 25 feet of a project work area and 20 feet of an access road shall be staked and flagged or fenced for avoidance by a qualified biologist or botanist prior to construction and shall be monitored by a qualified biologist or botanist during construction to ensure proper avoidance of the species. The project work areas shall be adjusted as needed to avoid any populations of special status plants that occur within the work area to the extent feasible. All stakes and flagging shall be removed no later than 30 days after construction is complete in the area. Information about special-status plants and avoidance requirements shall be included in the Workers Environmental Awareness Training Program (MM Biology-3). In the event of a discovery of previously undocumented species, the boundary of the occurrence will be flagged, avoided, and monitored as discussed above and the CPUC, CDFW, and/or USFWS will be notified if the species is state or federally listed.

If the special-status plant species cannot be avoided, SCE shall notify CPUC in writing, and SCE shall submit a Salvage and Replanting Plan to CPUC and CDFW for approval as described below. No state or federally listed plant species shall be salvaged or relocated without obtaining permit authorization from CDFW and/or USFWS, as required. SCE shall provide the CPUC with any permits and authorizations obtained from USFWS and CDFW. SCE shall relocate the species to areas within the easement that are outside of the long-term maintenance areas. If the species occurs in an area that is subject to temporary impacts, the species shall be included in the restoration of the site (see MM Biology-2).

Salvage and replanting plan: For impacts on state or federally listed or CRPR 1 or 2 plants that cannot be avoided, the qualified botanist shall prepare and implement a Salvage and Replanting Plan. The Salvage and Replanting plan would specify, at a minimum, the following:

- Location of the mitigation site(s) (extent of the plants within and adjacent to project areas).
- Procedures for procuring plants, such as transplanting or collecting seed from plants to be impacted, including storage locations and methods to preserve the plants.
- Procedures for propagating collected seed, including storage methods.
- Quantity and species of plants to be planted or transplanted.
- Planting procedures, including the use of soil preparation and irrigation.
- Schedule and action plan to maintain and monitor the mitigation site for a minimum 3-year period.
- Reporting procedures, including the contents of annual progress reports.
- List of criteria (e.g., growth, plant cover, survivorship) by which to measure success of the plantings.
- Contingency measures to implement if the plantings are not successful (i.e., weed removal, supplemental plantings, etc.).

SCE shall submit the plan to the CPUC for review and approval no less than 30 days prior to impacting or collecting special-status plants. At a minimum, the transplanted/created population(s) shall have approximately the same characteristics as the impacted population (within 10-percent density, total population number, and non-

Mitigation Measure Biology-1: Avoidance and Minimization of Impacts on Special-Status Plants

native/invasive). Seasonal population changes may be taken into account by identifying and documenting the characteristics of an appropriate representative reference site prior to impacting a population. Reference sites that will be used must be identified and described in the Salvage and Replanting Plan.

If CPUC or CDFW determines that the Salvage and Replanting Plan is not likely to be successful (due to the species' life form, habitat requirements, or other factors), then SCE shall provide compensation lands consisting of habitat occupied by the impacted CRPR 1 or 2 ranked plant occurrences at a 1:1 ratio of acreage for any occupied habitat affected by the project. Occupied habitat will be calculated on the project site and on the compensation lands as including each special-status plant occurrence. If compensation is required as a means of mitigating special-status plant impacts, it may be accomplished by purchasing credit in an established mitigation bank, acquiring conservation easements, or direct purchase and preservation of compensation lands. Compensation for these impacts may be "nested" or "layered" with compensation for habitat loss.

Annual reporting: Annual salvage and replanting monitoring reports shall be submitted to CPUC for a period of 3 years after transplanting to ensure success of the transplanted populations. Where transplantation has not been successful under the criteria set forth in the performance standards below, compensation shall be provided to offset the loss of transplanted special-status plants. Annual reports shall include, details of plants or propagules salvaged, stored, and transplanted (salvage and transplanting locations, species, number, size, condition, etc.); adaptive management efforts implemented (date, location, type of treatment, results, etc.); and evaluation of success of transplantation. Salvage status and success will be described in the annual report.

Applicable locations: All special-status plant populations within 50 feet of a work area and 20 feet of an access road, and anywhere activities will occur off existing access roads in natural areas for other special-status plants.

Performance Standards and Timing:

Before construction: (1) Special-status plant surveys are conducted during the appropriate blooming period for each species, (2) A survey report is submitted to the CPUC no less than 30 days before construction, including maps, (3) if an impact to a special-status plant cannot be avoided, a Salvage and Replanting Plan that would be part of the Habitat Restoration Plan is submitted to the CPUC for approval and appropriate permit authorization from CDFW and/or USWFS is obtained, (4) Plant salvage and/or seed collection procedures are implemented, and (5) Special-status plant populations are flagged for avoidance. Compensation is documented for any special-status species where habitat compensation is the appropriate form of mitigation.

During construction: (1) Special-status plants are avoided and monitored appropriately, and (2) Salvaged plants and seed are stored and monitored appropriately.

After construction: The transplanted/created population(s) shall have approximately the same characteristics as the impacted population (within 10-percent density, total population number, and non-native/invasive). Replanting procedures and monitoring are implemented for 3 years or until the success criteria are met, or a financial contribution is made to an organization that restores/protects special-status populations in the project region. All stakes and flagging are removed no later than 30 days after construction is complete. Habitat compensation is provided for any transplanted populations that do not meet success criteria.

Mitigation Measure Biology-2: Habitat Restoration

SCE shall prepare and implement a Revegetation, Restoration, and Monitoring Plan that addresses procedures for quantifying habitat impacts from construction activities and revegetation and/or restoration requirements for applicable vegetation and soils resources. The plan shall also address the requirements for restoration in the following measures:

- Special-status plant populations (MM Biology-1).
- Blunt-nosed leopard lizard habitat (MM Biology-6)

Mitigation Measure Biology-2: Habitat Restoration

- Burrowing owl (MM Biology-7)
- Sensitive natural plant communities including riparian woodland and shrubland habitat, blue oak and valley oak woodlands, California buckeye groves, wetlands (MM Biology 11)

The plan shall be developed upon completion of final design and submitted to the CPUC for review and approval no less than 60 days before commencement of construction.

All temporarily disturbed areas shall be restored to near pre-construction conditions to ensure permanent impacts do not occur in areas of temporary impacts as a result of the project. Pre-construction conditions, including vegetation cover estimates and percentage of Cal-IPC list invasive weeds (plants rated as "High" and "Moderate"), shall be documented for each project work area as described below in the Pre-Construction Report. The goal of the restoration shall be that habitat functions and values and species composition of the restored vegetation are comparable to those of nearby comparable vegetation within 3 years.

The plan shall identify corrective actions to implement (e.g., removal of invasive weeds, supplemental planting, etc.) if the performance standards defined in this measure are not achieved. Work sites that have been proven to meet the performance standard defined in this measure shall not require further monitoring and reporting.

Monitoring procedures: A qualified biologist or botanist shall monitor vegetation resources that are impacted annually until performance standards have been met. Monitoring shall be conducted once a year during the blooming period to verify species composition and cover within all areas of temporary disturbance.

Pre-construction report(s): Prior to construction, a qualified biologist or botanist shall survey all final work areas and overland access routes to identify the vegetation resources that may be impacted, including their location, composition, condition, and extent of planned project disturbance. Survey efforts may be conducted in conjunction with focused surveys required for special-status species, as described in applicable APMs and mitigation measures. Anticipated impacts on vegetation resources shall be quantified and documented in the report, such as special-status plant individuals or the characteristics of populations (i.e., estimated size and cover estimates), the types and numbers of tree and shrub individuals, and restoration acreages for sensitive natural communities and riparian areas. The baseline conditions for adjacent and comparable vegetation resources shall also be documented in the report. Such areas may be used as a control for post-construction monitoring to determine relative restoration performance and account for seasonal fluctuations in invasive species composition, general growth rates, and overall coverage.

The report shall include maps (1: 3,000 scale) that identify the types and locations of the vegetation resources that may be impacted, the limits of the planned work areas, and project access routes. An initial report shall be submitted to the CPUC no less than 30 days before construction. Separate reports may be submitted for each project segment, if necessary. If new impacts or restoration procedures are identified, the plan shall be updated and submitted in track changes to the CPUC.

Post-construction reports: SCE shall prepare and submit Post-Construction Reports to the CPUC on an annual basis until construction is complete. Post-Construction Reports shall include table summaries of actual project impacts, and maps of the areas that identify the limits of actual impacts. The summary table shall include the location name/ID for each impact area, anticipated impact acreage from the Pre-Construction Report, and actual impact acreage during construction. The report shall include a brief statement about revegetation, restoration, and monitoring procedures that would be implemented where impacts occurred, as defined in the approved plan.

Annual monitoring reports: Once revegetation and restoration begins, SCE shall conduct surveys during the growing season and submit Annual Monitoring Reports to the CPUC. The reports shall summarize revegetation and restoration efforts for each applicable impact area, provide data on how the restoration is performing relative to the performance standards, and detail any corrective actions necessary to meet performance standards. Once the performance standards have been achieved for each location, monitoring and reporting would no longer be required for the location.

SCE shall provide written updates to CPUC upon request regarding seasonally dependent restoration and corrective actions prior to submission of the annual monitoring reports.

Mitigation Measure Biology-2: Habitat Restoration

Applicable locations: Areas of temporary impact.

Performance standard: No greater than 1% of noxious, invasive weeds. Habitat restoration needs to based on the vegetation type being impacted and the success criteria need to be based on surrounding vegetation. Areas dominated my non-native plants should require reseeding only. Greater than 70% of pre-project total vegetation cover within 5 years

Timing: Restoration of temporary impact areas shall occur within one year following completion of temporary disturbance. Monitoring to occur during blooming periods and reporting to occur annually and submitted to CPUC within 30 days of monitoring.

Mitigation Measure Biology-3: Worker Environmental Awareness Program

All workers on the project site shall be required to attend a Worker's Environmental Awareness Training Program (WEAP). Training shall inform all construction personnel of the resource protection and avoidance measures as well as procedures to be followed upon the discovery of environmental resources. WEAP training materials will include avoidance and minimization measures being implemented to protect biological resources, cultural resources, and paleontological resources, and the management of hazardous materials. WEAP training will also discuss terms and conditions of any permits or agreements, information on federal and state environmental laws, and consequences and penalties for violation or noncompliance with these laws, regulations, and project permits. Workers will be informed about the presence, identification, life history, and habitat requirements of the special-status species that have a potential to occur in the project area. The WEAP training program will be provided to the CPUC at least 30 days prior to construction for CPUC verification that all mitigation measures and topics are addressed. SCE will be responsible for maintaining WEAP training logs. At a minimum, the logs will contain the name, company, and date of training. These logs will be made available to the CPUC within a month after training is completed. The WEAP training will include, at a minimum, the following topics so crews will understand their obligations:

- ESA and other delineated boundaries (e.g., work areas) and how to recognize/avoid exclusion areas and sensitive habitat and specific avoidance or minimization measures for sensitive species and habitats
- Housekeeping (e.g., trash management and equipment cleaning)
- Safety, hazardous materials, and fire management, including hazardous substance spill prevention and containment measures
- Work stoppage
- Communication protocol
- Consequences of non-compliance
- Stormwater Pollution Prevention Plan (SWPPP) procedures
- How to identify cultural resources; avoidance requirements and procedures to be followed if unanticipated cultural resources are discovered during construction; disciplinary actions that may occur when historic preservation laws and project proponent policies are violated
- How to identify paleontological resources, including types of fossils that could occur in the project area and types of lithologies in which the fossils could be preserved; avoidance requirements and procedures to be followed if a fossil is discovered during construction; penalties for disturbing paleontological resources
- Review of mitigation and avoidance measures

Applicable Locations: All work areas

Mitigation Measure Biology-3: Worker Environmental Awareness Program

Performance Standard:

- All workers receive environmental awareness training prior to performing work on the site

Timing:

- WEAP training program developed prior to construction and provided to CPUC for review and approval at least 30 days prior to construction.
- Workers are trained prior to conducting work on the project site.

Mitigation Measure Biology-4: Crotch's Bumble Bee Avoidance Procedure

Focused survey: Focused surveys shall be conducted in accordance with CDFW's Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023) the season immediately prior to ground disturbing activities are scheduled to occur. A minimum of three Crotch bumble bee focused surveys shall be conducted at 2-to-4-week intervals during the colony active period (April through August) when Crotch's bumble bees are most likely to be detected. Non-lethal, photo voucher surveys shall be completed by a biologist who holds a Memorandum of Understanding to capture and handle Crotch's bumble bee (if nesting and chilling protocol is to be utilized) or by a CDFW approved biologist experienced in identifying native bumble bee species (if surveys are restricted to visual surveys that will provide high-resolution photo documentation for species verification). The surveyor shall walk through all areas of suitable habitat focusing on areas with floral resources. Surveys shall be completed at a minimum of one person-hour of searching per three acres of suitable habitat during suitable weather conditions (sustained winds less than 8 mph, mostly sunny to full sun, temperatures between 65 and 90 degrees Fahrenheit) at an appropriate time of day for detection (at least an hour after sunrise and at least two hours before sunset, though ideally between 9:00 AM and 1:00 PM).

Pre-construction survey: Nesting surveys shall be conducted with focus on detecting active nesting colonies within one week and 24-hours immediately prior to ground disturbing activities. If an active Crotch bumble bee nest is detected, an appropriate no disturbance buffer zone (including foraging resources and flight corridors essential for supporting the colony) shall be established by a qualified biologist in consultation with CDFW around the nest to reduce the risk of disturbance or accidental take. Nest avoidance buffers may be removed at the completion of the flight season and/or once the qualified biologist deems the nesting colony is no longer active and CDFW has provided concurrence of that determination. If no nests are found but the species is present, a full-time qualified biological monitor shall be present during vegetation removal or ground disturbing activities that are scheduled to occur during the queen flight period (February through March), colony active period (March through September), and/or gyne flight period (September through October). Because bumble bees move nest sites each year, three preconstruction nesting surveys shall be required during each subsequent year of construction, regardless of the previous year's findings, whenever vegetation removal and ground disturbing activities are scheduled to occur during the flight season (February through October). SCE may relocate Crotch's bumble bees out of the work area only if a CESA incidental take permit has been obtained and any relocation follows the terms of the incidental take permit.

Compensatory mitigation: Compensatory mitigation for permanent direct impacts to suitable Crotch's bumble bee habitat shall be offset through compensatory mitigation, which may include, but is not necessarily limited to, on-site or off-site habitat preservation, enhancement, restoration, and/or creation at a ratio of no less than 1:1.

Applicable locations: Suitable habitat for Crotch's bumble bee

Mitigation Measure Biology-4: Crotch's Bumble Bee Avoidance Procedure

Performance standard:

- Complete focused surveys for Crotch's bumble bee a season prior to construction.
- Complete two nesting surveys one week prior and 24 hours prior to ground disturbing activities
- Nest avoidance buffers are implemented and monitoring is conducted per the measure if any active bee colonies occur.
- Habitat mitigation at a 1:1 ratio.

Timing:

- Focused surveys season prior to ground disturbing activities
- Pre-construction survey one week and two days prior to activities
- Monitoring during construction, where needed.
- Mitigation prior to ground disturbing activities

Mitigation Measure Biology-5: Pre-Construction Surveys for Special-Status Wildlife and Construction Monitoring and Avoidance Procedures

Biologist approval and qualifications: A qualified biologist(s) will be pre-approved by the CPUC prior to conducting biological surveys and monitoring for the project. Qualified biologists are defined as individuals with a bachelor's degree or above in a biological science field and demonstrated field experience. Approved and qualified biologists shall conduct required surveys and monitoring for special-status species and active nests. Qualified avian biologists are defined as individuals with demonstrated field expertise in ornithology, in particular, nesting behavior and nest detection. Monitoring biologists conducting avian nest checks shall have demonstrated experience surveying or monitoring nesting birds. Qualified botanists are defined as individuals with demonstrated field expertise in botany. Qualified herpetologists are defined as individuals with demonstrated experience with California reptile and amphibian species. Biologists qualified for construction monitoring shall hold at minimum 1 to 2 years of construction-related biological monitoring experience. Biologists qualified as a lead biological monitor shall have 5 or more years of related experience.

Pre-construction surveys: A CPUC-approved qualified biologist (i.e., a biologist with the requisite education and experience to address special-status species and biological resources with potential to occur in the project area) shall conduct a pre-construction survey for special-status wildlife species known to occur or with the potential to occur in all work areas located within suitable habitat for special-status species. In those situations where the qualified biologist cannot make a definitive species identification, the qualified biologist shall make a determination based on the available evidence and professional expertise. The pre-construction survey shall be conducted no earlier than 7 days prior to surface disturbance in each work area. The results of the pre-construction survey will be documented by the qualified biologist in a pre-construction survey report(s). The pre-construction survey report(s) shall be submitted to the CPUC for review and approval and the results shall be submitted to CDFW and USFWS as required by any other regulatory permits or approvals. The pre-construction survey report(s) will include the following:

- Special status species encountered, including potential breeding sites such as dens, burrows, nests, or aquatic habitat
- Type, location, and size of Project impact areas
- Date, time, and weather conditions during survey, and surrounding land uses
- Evaluation of type and quality of habitat
- Map or GIS of survey area and of work area

Monitoring: Where pre-construction surveys indicate the presence of sensitive species within 200 feet of a work area or sensitive habitats within 50 feet of a work area, a CPUC approved biologist(s) shall conduct biological

Mitigation Measure Biology-5: Pre-Construction Surveys for Special-Status Wildlife and Construction

monitoring during construction activities in proximity to the sensitive species or habitats. Extended monitoring buffers for sensitive species may be applied per the conditions of other APMs or mitigation measures. Where special-status species (e.g., amphibians, reptiles, birds, mammals, and bat roosts), sensitive natural communities, riparian areas, or wetlands may occur, unless otherwise determined absent through pre-construction surveys, a qualified biological monitor shall monitor construction activities to ensure that any unplanned or unpermitted impacts to special-status species, sensitive natural communities, riparian habitat, and wetlands are avoided.

Resource avoidance: Prior to construction or access in any area containing or potentially containing special-status species habitats, sensitive natural communities, riparian areas, or wetlands, the biological monitor shall mark or otherwise delineate the limits of special-status species habitat, sensitive natural communities, riparian areas, and wetlands for avoidance, and where necessary, post signs at access route entrances to inform workers of special access considerations (i.e., seasonal restrictions, biological monitor escort, etc.). Resource markings and signs shall be maintained and repaired as needed and as directed by the biological monitor. All stakes and flagging are removed no later than 30 days after construction is complete.

The biological monitor shall have full authority to halt construction, once safe to do so, if a sensitive resource/species has or may be impacted. The biological monitor may relocate wildlife out of harm's way, if appropriate to protect the species (additional protections or permits would be required prior to relocation of any state or federally listed threatened or endangered species). The biological monitor shall revisit each active work site at least once a week to inspect the work area for the presence of biological resources and verify that all avoidance measures (e.g., flagging or fencing) are in place.

Applicable locations: All work areas and access roads within 200 feet of suitable habitat for special-status species

Performance standards and timing:

- **Before construction:** (1) SCE submits qualifications for qualified biologists to the CPUC for review and approval, (2) A qualified biologist performs pre-construction surveys for special-status wildlife no earlier than 30 days prior to activity in all work areas within suitable habitat, (3) survey reports are submitted to CPUC for review and the results are submitted to CDFW and USFWS as required by any other regulatory permits or approvals.
- **During construction:** (1) Biological monitoring is conducted when working in proximity to sensitive habitats and at least once a week, (2) Signs and marking and flagging material are maintained and repaired (3) the biological monitor halts construction if it will impact a sensitive resource/species, (4) species are relocated out of harm's way, if appropriate.
- **After Construction:** All stakes and flagging for sensitive resources are removed no later than 30 days after construction is complete.

Mitigation Measure Biology-6: Blunt-nosed leopard lizard Compensatory Mitigation

SCE shall submit a report to USFWS, CDFW, and CPUC documenting (i) the total area of temporary and permanent impacts in blunt-nosed leopard lizard suitable habitat, (ii) the total area of habitat restoration that would offset the temporary and permanent impact, and (iii) the total area of temporary and permanent impact that is not offset by habitat restoration, which would require compensatory mitigation. The report shall be submitted to USFWS, CDFW, and CPUC at least 60 days prior to construction in suitable habitat.

Where impacts cannot be fully offset by habitat restoration, compensatory mitigation shall be provided to offset the permanent and temporary loss of suitable habitat for blunt-nosed leopard lizard. Mitigation for permanent impacts will be provided at a minimum ratio of 1:1 and temporary impacts at a ratio of 0.5:1, unless a higher ratio is required by authorizations issued under FESA for blunt-nosed leopard lizard. Compensatory mitigation shall include either:

- Purchase of mitigation credits from an agency-approved mitigation bank.
- Protection of habitat through acquisition of fee-title or conservation easement and funding for long-term management of the habitat. Title to lands acquired in fee will be transferred to CDFW and conservation easements will be held by an entity approved in writing by the applicable regulatory agency. In circumstances where SCE protects habitat through a conservation easement, the terms of the conservation easement will be subject to approval of the applicable regulatory agencies, and the conservation easement will identify applicable regulatory agencies as third-party beneficiaries with a right of access to the easement areas.

Compensatory mitigation shall be acquired and approved by USFWS and appropriate agency (as needed) prior to activities within blunt-nosed leopard lizard suitable habitat.

Applicable locations: Permanent impacts in suitable blunt-nosed leopard lizard habitat**.**

Performance standards and timing:

- **Before construction:** (1) SCE submits a report to USFWS, CDFW, and CPUC documenting habitat that would require compensatory mitigation at least 60 days prior to construction and (2) Compensatory mitigation is acquired and approved by USFWS (as needed) prior to activities within blunt-nosed leopard lizard suitable habitat. A compensatory mitigation plan using the minimum compensatory ratios and mitigation pathways described in this measure shall be drafted and approved by appropriate agency prior to activities within TSS and KCSS suitable habitat. If mitigation cannot be acquired prior to activities in habitat, SCE will provide a letter of credit to USFWS and CDFW will a mutually approved entity/lender.
- **During construction:** N/A
- **After construction:** N/A

Mitigation Measure Biology-7: Tehachapi Slender Salamander and Kern Canyon Slender Salamander Compensatory Mitigation

SCE shall submit a report to USFWS, CDFW, and CPUC documenting (i) the total area of temporary and permanent impacts in Tehachapi slender salamander and Kern Canyon slender salamander habitat, (ii) the total area of habitat restoration that would offset the temporary and permanent impact, and (iii) the total area of temporary and permanent impact that is not offset by habitat restoration, which would require compensatory mitigation. The report shall be submitted to USFWS, CDFW, and CPUC at least 60 days prior to construction in Tehachapi slender salamander and Kern Canyon slender salamander habitat.

Where impacts cannot be fully offset by habitat restoration, compensatory mitigation shall be provided to offset the permanent loss of habitat. Mitigation for permanent impacts will be provided at a minimum ratio of 1:1. Compensatory mitigation shall involve protection of habitat through acquisition of fee-title or conservation easement and funding for long-term management of the habitat. Conservation easements will be held by an entity approved by CDFW.

Mitigation Measure Biology-7: Tehachapi Slender Salamander and Kern Canyon Slender Salamander Compensatory Mitigation

Applicable locations: Permanent impacts in suitable Tehachapi slender salamander and Kern Canyon slender salamander habitat**.**

Performance standards and timing:

Before construction: (1) SCE submits a report to USFWS, CDFW, and CPUC documenting habitat that would require compensatory mitigation at least 60 days prior to construction within suitable habitat and (2) Compensatory mitigation is acquired and approved by CDFW prior to activities within suitable habitat**:** A compensatory mitigation plan using the minimum compensatory ratios and mitigation pathways described in this measure shall be drafted and approved by appropriate agency prior to activities within TSS and KCSS suitable habitat. If mitigation cannot be acquired prior to activities in habitat, SCE will provide a letter of credit to USFWS and CDFW will a mutually approved entity/lender.

- **During construction:** N/A
- **After construction:** N/A

Mitigation Measure Biology -8: Nesting Bird Management

Nesting Bird Management Plan. SCE shall prepare a Nesting Bird Management Plan (NBMP) in coordination with CPUC. The NBMP shall describe methods to minimize potential project effects to nesting birds and avoid any potential for unauthorized take. Project-related disturbance including construction and pre-construction activities shall not proceed within 300 feet of active nests of common bird species or 500 feet of active nests of raptors and 500 feet of active nests of tricolored blackbirds until approval of the NBMP by CPUC in consultation with CDFW and USFWS.

NBMP Content. The NBMP shall include: (1) definitions of default nest avoidance buffers for each species or group of species, depending on characteristics and conservation status for each species; (2) a notification procedure for buffer distance reductions should they become necessary; (3) a rigorous monitoring protocol, including qualifications of monitors, monitoring schedule, and field methods, to ensure that any project-related effects to nesting birds will be minimized; and (4) a protocol for documenting and reporting any inadvertent contact or effects to birds or nests.

The paragraphs below describe the NBMP requirements in further detail.

Background. The NBMP shall include the following:

- A summary of applicable state and federal laws and regulations, including definition of what constitutes a nest or active nest under federal law.
- A procedure for amendment of the NBMP, should there be changes in applicable state or federal regulations, and requirement for CDFW review of any NBMP amendment.
- A list of bird species potentially nesting on or near the ROW or other work areas, indicating approximate nesting seasons, nesting habitat, typical nest locations (e.g., ground, vegetation, structures, etc.), tolerance to disturbance (if known) and any conservation status for each species.
- A list of the types of project activities (construction, operations, and maintenance) that may occur during nesting season, with a short description of the noise and physical disturbance resulting from each activity.

Clearing of any vegetation, site preparation in open or barren areas, or other project related activities that may adversely affect breeding birds shall be scheduled outside the nesting season, as feasible.

Pre-construction nest surveys. Pre-construction nest surveys will be conducted prior to any construction activities scheduled during the breeding period. For this project, the breeding period will be defined as January 1 through September 15. The NBMP shall describe the proposed field methods, survey timing, and qualifications of field biologists. The avian biologists conducting the surveys shall be experienced bird surveyors and familiar with

Mitigation Measure Biology -8: Nesting Bird Management

standard nest-locating techniques such as those described in Martin and Guepel (1993). Nest surveys will focus on visual searches for nest locations and observations of bird activities and movement to detect nesting activity (e.g., carrying nest materials or food, territorial displays, courtship behavior). Surveys shall be conducted in accordance with the following guidelines:

Surveys shall cover all potential nesting habitat within the ROW or other work areas within 500 feet of these areas for raptors and 300 feet for non-raptors.

Pre-construction surveys shall be conducted for each work area, no longer than 10 days prior to the start of construction activity. On the first day of construction at any given site, a qualified Avian Biologist will perform a pre-construction "sweep" to identify any bird nests or other resources that may have appeared since the 10-day survey.

SCE shall provide the CPUC a report describing the findings of the pre-construction nest surveys, including the time, date, and duration of the survey; identity of the surveyor(s); a list of species observed; and electronic data identifying nest locations and the boundaries of buffer zones. The electronic data set will be updated following each preconstruction nest survey throughout the nesting season. The format and contents of this report will be described in the draft NBMP and will be subject to review and approval by CPUC.

Nest Buffers and Acceptable Activities

Nest buffers shall be delineated on the work site, to consist of clearly visible marking and signage. Buffer locations shall be communicated to the construction contractor and shall remain in effect until formally discontinued (when each nest is no longer active). Measures to ensure nesting buffers are observed shall include direct communication and decision protocol to stop work within buffer areas. In some cases, active nests may be found while work is underway. Therefore, a protocol shall be implemented for stopping ongoing work within the buffer area, securing the work site, and removing personnel and equipment from the buffer.

Buffer distances from active nests shall be implemented to avoid take or adverse effects to nests. Buffers shall be based on the specific nature of the bird species and conservation status, and other pertinent factors. Buffer distances shall be defined specific to each species relative level of tolerance of human activity. If no information is available to specify a buffer distance for a species, then a 300 foot buffer shall apply as a standard buffer distance for migratory birds, and 500 feet of active nests of raptors and 1,000 feet of active nests of tricolored blackbirds. All applicable avoidance measures, including buffer distances, must be continued until nest monitoring (below) confirms that the nestlings have fledged and dispersed, or the nest is no longer active. For each special-status species potentially nesting within or near project work areas, the NBMP shall specify applicable buffers and any additional nest protection measures, specialty monitoring, or restrictions on work activities, if needed.

The NBMP shall identify acceptable work activities within nest buffers (e.g., pedestrian access for inspection or BMP repair) including conditions and restrictions, and any monitoring required. The NBMP shall include pictorial representation showing buffer distances for ground buffers, vertical helicopter buffers, and horizontal helicopter buffers for nests near the ground and nests in towers.

Nest Buffer Modification or Reduction

At times, SCE or its contractor may propose buffer distances different from those approved in the NBMP. Buffer adjustments shall be reviewed and recommended by a qualified avian biologist, who has been approved by CPUC in consultation with the CDFW and USFWS. The NBMP shall provide a procedure and timing requirements for notifying CPUC, CDFW, and USFWS of any planned adjustments to nest buffers. Separate and distinct procedures will be provided for special-status birds. The NBMP will list the information to be included in buffer reduction notifications in a standardized format.

Nest deterrents

The NBMP shall describe any proposed measures or deterrents to prevent or reduce bird nesting activity on project equipment or facilities, such as buoys, visual or auditory hazing devices, bird repellents, securing of materials, vehicles, and equipment. It shall also include timing for installation of nest deterrents and field

Mitigation Measure Biology -8: Nesting Bird Management

confirmation to prevent effects to any active nest; guidance for the contractor to install, maintain, and remove nest deterrents according to product specifications; and periodic monitoring of nest deterrents to ensure proper installation and functioning and prevent injury or entrapment of birds or other animals. In the event that an active nest is located on project facilities, materials or equipment, SCE will avoid disturbance or use of the facilities, materials, or equipment (e.g., by red-tag) until the nest is no longer active.

Communication

The NBMP shall specify the responsibilities of construction monitors in regard to nests and nest issues and specify a direct communication protocol to ensure that nest information and potential adverse impacts to nesting birds can be promptly communicated from nest monitors to construction monitors, so that any needed actions can be taken immediately.

The NBMP shall specify a procedure to be implemented following accidental disturbance of nests, including wildlife rehabilitation options. It also shall describe any proposed measures, and applicable circumstances, to prevent take of precocial young of ground-nesting birds such as killdeer or quail. Finally, the NBMP will specify a procedure for removal of inactive nests, including verification that the nest is inactive and a notification/approval and approval process prior to removal.

Monitoring

SCE shall be responsible for monitoring the implementation, conformance, and efficacy of the avoidance measures (above). The NBMP shall include specific monitoring measures to track any active bird nest within or adjacent to project work areas, bird nesting activity, project-related disturbance, and outcome of each nest. For nests with reduced buffers, SCE shall monitor each nest until nestlings have fledged and dispersed or until the nest becomes inactive. Nests with default buffers do not require further monitoring once construction work is completed in the area. New nests discovered after work completion in an area will not require monitoring. In addition, monitoring shall include pre-construction surveys, daily sweeps of work areas and equipment, and any special monitoring requirements for particular activities (tree trimming, vegetation removal, etc.) or particular species (noise monitoring, etc.). Nest monitoring shall continue throughout the breeding season during each year of the project's construction activities.

Reporting

- Throughout the construction phase of the project, nest locations, project activities in the vicinity of nests (including helicopter routes), and any adjustments to buffer areas shall be updated and available to CPUC monitors on a daily basis in the Field Reporting Environmental Database (FRED). All buffer reduction notifications and prompt notifications of nest-related non-compliance and corrective actions will be made via email to CPUC monitors. In addition, the NBMP shall specify the format and content of nest data to be provided in regular monitoring and compliance reports. At the end of each year's nest season, SCE will submit an annual NBMP report to the CPUC, CDFW, and USFWS.

Applicable locations: All work areas.

Performance standards and timing:

- **Before construction:** Prepare NBMP for CDFW and CPUC review and approval.
- **During construction:** (1) Implement pre-construction surveys per the NBMP. 2) Avoid active nests and implement nest buffers, deterrents, and communication per the measure and NBMP, 3) update FRED throughout construction, 4) submit annual reports to CPUC, CDFW, and USFWS.

Mitigation Measure Biology 9: Burrowing Owl

Surveys and avoidance for burrowing owl. Burrowing owl surveys shall be conducted by a qualified biologist in accordance with the most current CDFW guidelines (CDFG 2012; or updated guidelines should they become available). SCE shall implement buffers for active burrowing owl burrow within or adjacent to a work area. The buffer for active burrowing owl nesting sites shall be in accordance with CDFW guidelines (CDFG 2012) and shall be as follows:

- From April 1-August 15, buffers shall be 300 feet for low levels of disturbance (i.e., vehicles, worker presence), and 500 feet for moderate to high levels of disturbance (i.e., demolition, grading, tree felling, helicopter use)
- From August 16-October 15, buffers shall be 600 feet for low and moderate levels of disturbance (i.e., vehicles, worker presence, tree felling, grading), and 1,500 feet for high levels of disturbance (i.e., helicopter use)
- From October 16-March 31, buffers shall be 150 feet for low levels of disturbance (i.e., vehicles, worker presence), 300 feet for moderate levels of disturbance (i.e., grading, tree felling), and 1,500 feet for high levels of disturbance (i.e., helicopter use)

Binocular surveys may be substituted for protocol field surveys on private lands adjacent to the project site only when SCE has made reasonable attempts to obtain permission to enter the property for survey work but was unable to obtain such permission.

If active burrowing owl burrows are located within project work areas, they shall be avoided to the greatest extent possible through work exclusion buffers as described above. Monitoring of active burrowing owl nests shall occur in all buffer areas as defined above, and other methods to reduce disturbance (such as visual or sound barriers) shall be employed depending on the type and level of work being conducted to prevent the need for relocation. Other measures shall include eliminating actions that reduce burrowing surrogates (e.g., ground squirrels), and the WEAP (MM Biology-3) shall include measures to reduce the potential for the introduction or attraction of predator species, such as litter control.

In any cases where active burrows could not be adequately avoided, as determined by a qualified biologist, through exclusion buffers and project activities could result in substantial indirect disturbance, direct physical disturbance, or destruction of burrows that are located within certain project work areas (i.e., facility footprints, areas that require grading, etc.), SCE may passively relocate the owls, as described below and per the conditions of any required CESA incidental take permit. Passive relocation shall only be considered if work cannot take place due to active nest, such as grading over burrows. No passive relocation of burrowing owls shall be permitted during breeding season, unless a qualified biologist verifies through noninvasive methods that an occupied burrow is not occupied by a mated pair, and only upon authorization by CDFW. Any passive burrowing owl relocation shall address:

- **Replacement burrows:** For each burrowing owl that will be passively relocated, if fewer than two suitable unoccupied burrows are available within 600 feet of the affected project work site, then SCE shall construct at least two replacement burrows within 600 feet of the affected project work site, or in suitable locations within 0.25 mile when suitable locations within 600 feet are not available. Burrow replacement sites shall be in areas of suitable habitat for burrowing owl nesting, and subject to minimal human disturbance and access. The Burrowing Owl Exclusion Plan shall be prepared that would describe measures to ensure that burrow installation or improvements will not affect sensitive species habitat or any burrowing owls already present in the relocation area. The Burrowing Owl Exclusion Plan shall provide guidelines for creation or enhancement of at least two natural or artificial burrows for each active burrow within the project disturbance area, including a discussion of timing of burrow improvements, specific location of burrow installation, and burrow design. Design of the artificial burrows shall be consistent with CDFW guidelines (CDFG, 2012; or more current guidance as it becomes available) and the Burrowing Owl Exclusion Plan shall be approved by the CPUC and CDFW.
- **Methods:** An occupied burrow may not be disturbed during the nesting season (generally, but not limited to, February 1 to August 31), unless a qualified biologist determines, by non-invasive methods, that it is not occupied by a mated pair. Passive relocation will include installation of one-way doors on burrow entrances that will let owls out of the burrow but will not let them back in. Once owls have been passively relocated,

Mitigation Measure Biology 9: Burrowing Owl

burrows will be carefully excavated by hand and collapsed by, or under the direct supervision, of a qualified biologist.

- **Monitoring and reporting**: SCE shall monitor the replacement burrow site(s) and provide monitoring reports consistent with CDFW guidance (CDFG 2012). The objective shall be to manage the relocation area for the benefit of burrowing owls, with the specific goal of maintaining the functionality of the burrows for a minimum of two years. Monitoring will be conducted after the burrowing owl passive relocation process is complete, up until the onset of ground disturbance due to construction to ensure that owls do not re-establish themselves. The artificial burrows or enhanced replacement burrows will be monitored for a period that will be defined in the site-specific relocation plan to determine if they are being used by owls. Monitoring reports shall be available to the CPUC.

Applicable locations: Where active burrowing owl nesting sites are present within 1,500 feet of work areas**.**

Performance standards and timing:

- **Before construction:** Burrowing owl surveys shall be conducted by a qualified biologist in accordance with the most current CDFW guidelines.
- **During construction:** (1) Appropriate buffers are employed as defined by current CDFW guidelines and in this measure based on timing and activity disturbance level, (2) Active burrows are avoided to the highest extent possible, (3) Passive relocation is considered only if all possible avoidance measures are not feasible and will be implemented in accordance with the procedures in the measure and CDFW requirements, and (4) Replacement burrows are constructed as defined in the measure and any CDFW incidental take permit, if applicable.
- **After construction:** Monitoring and reporting for replacement burrows and relocation sites is provided to CPUC.

Mitigation Measure Biology 10: Golden Eagle Avoidance and Minimization

Avoid and minimize impacts. All project activities located within areas identified as habitat (as described in the TLRR Habitat and Sensitive Species Report for the GKR Project) shall implement the following avoidance and minimization measures.

- Golden eagle nest surveys will be performed when construction activities are scheduled to occur in or near golden eagle nesting habitat from January 1-August 31 to determine if any eagle nests are active within a 1-mile radius. Ground-based or helicopter-based survey methods will be developed in coordination with USFWS and will be consistent with current USFWS survey guidelines, or as recommended by USFWS.
- For construction activity, should an active golden eagle nests be present, the nest shall receive a 1-mile buffer if in line of sight, 0.5-mile buffer if no line of sight—with USFWS concurrence.
- Buffers and buffer modifications for golden eagles will be addressed in the Project Nesting Bird Management Plan (Mitigation Measure Biology-8).

Applicable locations: Activities within 1 mile of a golden eagle nest.

Performance standards and timing:

- **Before construction:** N/A.
- **During construction:** SCE conducts a nesting survey for all activities within 1 mile of suitable habitat in the period January 1 to August 31. Nest buffers shall be implemented per the measure and USFWS requirements.
- **After construction:** N/A.

Mitigation Measure Biology-11: Swainson's Hawk

Swainson's hawk nest surveys shall be performed by a CPUC-approved qualified biologist in areas of suitable habitat prior to construction activities scheduled to occur during the Swainson's hawk nesting season (from March 1-July 31). Surveys shall be conducted within 0.5 miles of suitable nesting habitat for Swainson's hawk to determine if any Swainson's hawk nests are active within a 0.5-mile radius of the construction area. Suitable habitat for Swainson's hawk is defined as the following:

- Nesting habitat includes trees within mature riparian forest or corridors, lone oak trees and oak groves, and mature trees near fields.

If any active nests are located, the following shall apply:

- An active nest shall receive a 0.5-mile buffer between March 1 and July 31. Buffer zones may be adjusted in consultation with CDFW and approved by CPUC, and must be protective of the species nesting behavior with continued monitoring of the nest by a qualified biologist.
- Do not remove Swainson's hawk nest trees unless tree avoidance is infeasible. Removal of any trees that are used by Swainson's hawk for nesting shall only occur only outside of the Swainson's hawk nesting season during the timeframe of August 1 (after a qualified biologist has confirmed the nest to be inactive) and the last day in February.

For hawks found injured during project-related activities on the project site, SCE shall consult with CPUC and CDFW for immediate relocation to an agency-approved raptor recovery center.

Applicable locations: Suitable habitat for Swainson's hawk

Performance standards and timing:

- **Before construction:** Pre-construction surveys are performed by a qualified biologist for active Swainson's hawk nests prior to construction that would take place between March 1 and July 31.
- **During construction:** Appropriate buffers for construction activities are applied for active Swainson's hawk nests (0.5-mile radius between March 1 and July 31). No trees containing Swainson's hawk nests are removed during the nesting season.
- **After construction:** N/A

Mitigation Measure Biology-12: American Badger

A qualified biologist shall conduct a pre-construction survey for active American badger dens within 7 days prior to grading or vegetation clearing in work areas, or use of overland access routes. The pre-construction survey area shall be required for potentially suitable habitat for American badger (e.g., grasslands and woodlands) located within 250 feet of work areas where grading or land vegetation clearing may occur and within or immediately adjacent to overland access routes. SCE shall submit the survey results to CPUC prior to construction.

SCE may use cameras to determine if dens are active. If active dens are identified at any time during construction, the dens shall be flagged and avoided to the greatest extent possible through work exclusion buffers. A 250-foot work restriction buffer shall be established around active maternal dens. For non-maternal dens, a 50-foot work restriction buffer shall be established around active dens. Smaller buffers may be established through consultation with CDFW. If any cases where an active den cannot be adequately avoided (i.e., the den is located within the facility footprints or active work area), SCE will implement passive exclusion techniques by sealing the den after animals have vacated (e.g., one way doors). SCE shall obtain any required permits prior to implementing any den exclusions.

A qualified biologist shall inspect construction activities near active American badger dens on a weekly basis to ensure the work restriction buffers are implemented appropriately and active dens are avoided.

Mitigation Measure Biology-12: American Badger

Applicable locations: Suitable habitat for American badger (e.g., grasslands and woodlands) within 250 feet of work areas where grading or land vegetation clearing may occur and within or immediately adjacent to overland access routes.

Performance standards and timing:

- **Before construction:** Pre-construction surveys are conducted for American badger dens and survey results are submitted to the CPUC.
- **During construction:** (1) Work restriction buffers are implemented, and (2) Construction activities near active dens are monitored.
- **After construction:** N/A

Mitigation Measure Biology-13: San Joaquin Kit Fox Habitat

Prior to construction within San Joaquin kit fox habitat, compensatory habitat mitigation shall be provided to offset the loss of suitable habitat for San Joaquin kit fox. Mitigation for permanent impacts will be provided at a minimum ratio of 1:1. Compensatory mitigation shall include either:

- Purchase of mitigation credits from an agency-approved mitigation bank.
- Protection of habitat through acquisition of fee-title or conservation easement and funding for long-term management of the habitat. Title to lands acquired in fee will be transferred to CDFW and conservation easements will be held by an entity approved in writing by the applicable regulatory agency. In circumstances where SCE protects habitat through a conservation easement, the terms of the conservation easement will be subject to approval of the applicable regulatory agencies, and the conservation easement will identify applicable regulatory agencies as third-party beneficiaries with a right of access to the easement areas.
- Compensatory mitigation shall be acquired and approved by USFWS (as needed) prior to activities within San Joaquin kit fox suitable habitat.

Applicable locations: Suitable habitat for San Joaquin kit fox.

Performance standards and timing:

- **Before construction:** Determine permanent impacts within San Joaquin kit fox habitat and submit proof of mitigation credits for habitat acquisition in compliance with the measure. A compensatory mitigation plan using the minimum compensatory ratios and mitigation pathways described in this measure shall be drafted and approved by appropriate regulatory agency prior to activities within SJKF suitable habitat. If mitigation cannot be acquired prior to activities in habitat, SCE will provide a letter of credit to USFWS and CDFW will a mutually approved entity/lender
- **During construction:** N/A
- **After construction:** N/A

Mitigation Measure Biology-14: Tipton Kangaroo Rat Avoidance and Minimization

Pre-construction Survey/Construction Monitoring. Prior to initial ground-disturbing activities, a qualified (permitted Tipton kangaroo rat) biologist will conduct habitat assessment surveys within areas identified as potentially suitable habitat for Tipton kangaroo rat to determine suitability Prior to project activities SCE will provide a map of potentially suitable habitat for Tipton kangaroo rat along the project alignment.

Mitigation Measure Biology-14: Tipton Kangaroo Rat Avoidance and Minimization

Conduct surveys and avoidance for Tipton kangaroo rat. Prior to the start of construction, within potentially suitable habitat for Tipton kangaroo rat (TKR), SCE shall conduct focused surveys to determine if there are any active burrows with possible TKR sign (burrows, scat, etc.) within 100 feet of proposed ground disturbing activities. All surveys shall be conducted by a qualified biologist who holds the appropriate USFWS and CDFW permits to conduct trapping surveys for TKR. Trapping Plans shall approved by CDFW and USFWS prior to any trapping activities. If TKR sign is present, and SCE cannot avoid potentially suitable burrows then SCE shall conduct focused protocol trapping surveys according to accepted protocols to determine presence or absence of TKR.

If TKR are present, then SCE shall take additional measures to prevent or minimize take, such as flagging for avoidance and establishment of 30' avoidance buffers. Under the direction of a qualified biologist, cover boards to prevent burrow collapse may also be used to allow for work area access. Other avoidance measures may be required, subject to authorization by USFWS and CDFW. If TKR are absent, no measures shall be required.

Construction activities shall avoid suitable TKR habitat to the extent feasible. All requirements will be followed for any take authorizations granted by USFWS and/or CDFW. A qualified biologist will monitor construction activities within occupied habitat.

Avoid and Minimize Impacts. All project activities located within areas identified as occupied TKR habitat shall implement the following avoidance and minimization measures:

- **Limited Operating Period.** SCE shall restrict work to daylight hours, except during an emergency or critical construction activity, in order to avoid nighttime activities when TKR may be present on access roads. No night lighting will be used within TKR habitat except during an emergency or critical construction activities.
- **Trash disposal.** Trash and food items will be contained in closed containers and removed daily to reduce attracting predators.
- **Pets Prohibited.** Employees will not bring pets or other animals to the GKR Project area, unless the animal is ADA compliant.
- **Vehicle Travel.** During construction-related activities, motor vehicles will be limited to maintained roads, designated routes, and areas identified as being permanently or temporarily affected by construction within the Project footprint. Motor vehicle speeds along Project routes and access roads within habitat for TKR will not exceed 15 miles per hour.

Trapped Animal Prevention. All auger holes, trenches, pits, or other steep-sided excavations that may pose a hazard to TKR will be either constructed with escape ramps (earthen or wooden) or securely covered when unattended to prevent entrapping animals. At the start and end of each workday, and just before backfilling, all excavations will be inspected for trapped animals. Any TKR found will be allowed to escape unimpeded. If a TKR is trapped and does not leave on its own, a qualified biologist will move the animal according to agency authorizations, if there is no agency authorization, the TKR shall not be moved (unless in imminent danger) until the relevant agency has been contacted and further guidance has been received.

Cover and Inspect Construction Materials. All construction pipes, culverts, or similar structures with a diameter of approximately 1 inch or greater that are stored for one or more overnight periods will be thoroughly inspected for TKR before the pipe is subsequently buried, capped, otherwise used or moved in any way. If a TKR is discovered inside construction material and does not leave on its own, the materials shall not be moved until the relevant agency has been contacted and further guidance has been received. Any kangaroo rat found will be allowed to escape unimpeded.

Applicable locations: Suitable habitat for Tipton kangaroo rat

Performance standards and timing:

- **Before construction:** Pre-construction surveys are conducted for Tipton kangaroo rat and results submitted to CPUC and CDFW

Mitigation Measure Biology-14: Tipton Kangaroo Rat Avoidance and Minimization

- **During construction:** (1) Work restriction buffers are implemented, (2) Construction activities near active dens are monitored, and (3) construction materials are covered and inspected.
- **After construction:** N/A

Mitigation Measure Biology-15: Bat Avoidance and Minimization

Pre-construction Surveys. A qualified bat biologist will conduct surveys before the start of construction to identify active bat roosting or maternity colonies within or adjacent to project impact areas in trees, rock outcrops, caves, and mines with bat roost potential. A one-night visual emergence survey during acceptable weather conditions (e.g., no rain or high winds, night temperatures >45F) may be employed to determine presence. Alternatively, the roost can be physically examined if conditions permit (e.g., remote cameras or lift equipment).

High-value habitat features (large tree cavities, crevices, bark fissures, basal hollows, loose or peeling bark, larger snags, palm trees with intact thatch, mines, rock outcrops, buildings, etc.) will be identified and the area around these features searched for bats and bat sign (guano, culled insect parts, staining, etc.). Riparian woodland, orchards, and stands of mature broadleaf trees shall be considered potential habitat for solitary foliage roosting bat species, such as the solitary western red bat and western yellow bat.

If no roosts (maternity, wintering, or otherwise) are present, tree trimming/removal may continue as planned. If an active roost has been identified or lasiurine bats are present, removal of trees around the roost would be conducted between September 15 - October 30, and February 15 - April 15, which corresponds to time periods when bats are active, not in torpor, and not caring for non-mobile young.

Removal of trees requires the following two-step process prior to trimming/removal:

- On Day 1 under the supervision of a qualified bat biologist, Step 1 would include branches and limbs with no cavities removed by hand (e.g., using chainsaws). This would create a disturbance (noise and vibration) and physically alter the tree. Bats roosting in the tree would either abandon the roost immediately (rarely) or, after emergence, would avoid returning to the roost.
- On Day 2, Step 2 of the tree removal may occur, which would be removal of the remainder of the tree. Trees that are only to be trimmed and not removed would be processed in the same manner; if a branch with a potential roost must be removed, all surrounding branches would be trimmed on Day 1 under supervision of a qualified bat biologist and then the limb with the potential roost would be removed on Day 2.

Construction Monitoring. If a colonial or solitary maternity roost was located, tree/structure removal will be avoided between April 15 and August 15 (the maternity period) to avoid impacts to active maternity roosts (reproductively active females and dependent young). If bats are present, but no dependent young bats are present within the structure for removal, an eviction plan shall be prepared by a qualified biologist and submitted to CPUC and CDFW for review. A qualified biologist will determine the appropriate no disturbance buffer area around active nest(s) and provisions for buffer exclusion areas. Unless restricted by the qualified biologist, construction vehicles will be allowed to move through a buffer area with no stopping or idling. The qualified biologist will determine, evaluate, and modify buffers as appropriate based on species tolerance and behavior, the potential disruptiveness of construction activities, and existing conditions. Furthermore, the roost will be monitored to determine activity. Roost monitoring will be conducted by qualified biological monitors with knowledge of bat behavior under the direction of a CDFW qualified bat biologist. The qualified biological monitor will observe and document implementation of appropriate buffer areas around active roosts(s) during project activities.

Applicable locations: Suitable habitat for bats

Performance standards and timing:

- **Before construction:** Pre-construction surveys are conducted by a qualified biologist within suitable bat habitat

Mitigation Measure Biology-15: Bat Avoidance and Minimization
• **During construction:** (1) Tree removal is timed per the measure or bat eviction is implemented per the measure prior to tree removal, and (2) no disturbance buffers for maternity bat roosts are defined and monitored by a qualified biologist. • **After construction:** N/A

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

Construction

Direct Impacts

Construction for the Proposed Project would temporarily and permanently disturb sensitive vegetation communities and riparian habitat. Temporary impacts on riparian habitat and other sensitive natural communities would occur from construction access, site preparation (including surface grading, leveling, and/or compacting), removal of existing structures and conductor, installation of new structures, stringing, temporary guard structures, and temporary vehicle and equipment parking. No sensitive vegetation communities or riparian areas are located within staging yards or helicopter landing zones. Permanent impacts on sensitive vegetation communities and riparian habitat would occur from new structure foundations. The areas of temporary and permanent impacts within riparian areas and sensitive natural communities are listed in Table 3.4-7.

The temporary loss of riparian and sensitive vegetation communities during construction would be a significant impact if these areas were not adequately restored to pre-Project conditions to avoid permanent loss of the habitat and if vegetation characteristic of these communities that were removed or substantially impacted were not replaced. MM Biology-2 requires SCE to prepare and implement a Revegetation, Restoration, and Monitoring Plan, including specific procedures and performance standards to ensure temporarily impacted sensitive natural communities and riparian areas are adequately restored following construction.

Permanent impacts on sensitive natural communities and riparian habitat would occur over the life of the Proposed Project due to the presence of new structures and permanent foundations. The permanent loss of sensitive vegetation communities and riparian habitat would have a potentially significant impact. MM Biology-16 requires that permanent construction impacts to sensitive natural communities and riparian areas be compensated for. Because MM Biology-2 requires temporarily disturbed areas to be restored to conditions comparable to pre-construction conditions, which would avoid the loss of sensitive natural communities and riparian areas, and MM Biology-16 requires avoidance where feasible and compensation for permanent impacts, the impact on sensitive natural communities and riparian areas would be less than significant with mitigation.

Table 3.4-7 Temporary and Permanent Construction Impacts on Sensitive Natural Communities and Riparian Areas

Vegetation community	Community type	Temporary impact area (acres)	Permanent impact area (acres)
Woodland and forests			
Blue oak woodland and forest	Sensitive natural community	38.74	13.6
California buckeye groves	Sensitive natural community	2.16	0.34
California sycamore – coast live oak riparian woodland	Sensitive natural community/riparian habitat	1.22	0.005
California live oak chapparal	Sensitive natural community	0.0	0.19
California live oak forest	Sensitive natural community	1.85	0.06
Fremont cottonwood forest and woodland	Sensitive natural community/riparian habitat	2.42	0.07
Goodding's willow – red willow riparian woodland and forest	Sensitive natural community/riparian habitat	1.87	0.18
Shining willow groves	Sensitive natural community/riparian habitat	2.25	0.04
Valley oak riparian forest and woodland	Sensitive natural community/riparian habitat	0.16	0.21
Valley oak woodland and forest	Sensitive natural community	8.48	2.19
Shrubland			
Acton's and Virgin River brittle brush – net-veined goldeneye scrub	Sensitive natural community	7.01	0.32
Arroyo willow thickets	Sensitive natural community/riparian habitat	1.05	0.003
California joint-fir – longleaf joint-fir scrub	Sensitive natural community	2.52	0.57
Mulefat thickets	Riparian/wetland	0.40	0.06
Narrowleaf goldenbush – bladderpod scrub	Sensitive natural community	10.91	5.11
Scalebroom scrub	Sensitive natural community/riparian habitat	14.32	1.91

Vegetation community	Community type	Temporary impact area (acres)	Permanent impact area (acres)
Herbaceous			
Ashy ryegrass – creeping ryegrass turfs	Sensitive natural community/wetlands	1.02	0.09
Baltic and Mexican rush marshes	Riparian/wetland	8.53	1.02
Common monkey flower seeps	Sensitive natural community/wetlands	0.01	nil
Needle grass – melic grass grassland	Riparian/wetland	0.16	nil
Salt grass flats	Riparian/wetland	0.90	0.13
Yerba mansa – Nuttall's sunflower – Nevada goldenrod alkaline wet meadows	Sensitive natural community/wetlands	0.05	0.01
TOTAL		**59.64**	**11.84**

Indirect Impacts

Proposed Project construction could result in the introduction and proliferation of invasive weeds if invasive weeds were carried into the Project work areas via construction equipment or vehicles. Uncontrolled invasive weeds could degrade the quality of sensitive vegetation communities, especially riparian areas, as seeds are often transported in water and the spread along waterways can be rapid. The degradation of sensitive vegetation communities and riparian habitat would be a significant impact. APM BIO-RES-2 would require development and implementation of an Invasive Species Management Plan, which would address pre-construction inventories and treatment as well as prevention methods to avoid introduction of invasive weeds to sensitive vegetation communities. The impact on sensitive natural vegetation communities from invasive weeds would be less than significant.

Grading and earthwork at Project work areas could result in loosened soils, erosion, and sedimentation off site. Erosion and sedimentation in off-site areas could result in loss or degradation of downstream riparian habitats and other sensitive vegetation communities. SCE would be required to prepare a SWPPP and comply with the requirements of the State of California Construction General Permit. Because implementation of the SWPPP and compliance with the Construction General Permit would avoid substantial sedimentation, the impact on sensitive vegetation communities and riparian habitat from dust, erosion and sedimentation would be less than significant.

Construction of the Proposed Project could result in an increased risk of wildfire, which could result in the loss or degradation of riparian habitat and sensitive vegetation communities. SCE would adhere to the measures contained in the Project-specific Fire Prevention and Emergency

Response Plan during construction activities, which would effectively reduce the risk of wildfire and associated impacts on habitat loss. Impacts from potentially increased wildfire risk would thus be less than significant.

Operation and Maintenance

Operation and maintenance activities for the Proposed Project would be approximately the same as those for the operation and maintenance activities for the existing subtransmission lines and substations. SCE would continue to regularly inspect, maintain, and repair conductor, poles, and substation facilities as well as maintain vegetation clearances at approximately the same frequency and duration as the existing facilities. No sensitive vegetation would be removed during operation and maintenance because maintenance work would be conducted at structure locations within previously disturbed areas and within the existing subtransmission line alignment. SCE would continue to implement vegetation clearance zones in accordance with its wildfire mitigation plan. The vegetation clearance zones would be maintained within areas that are identified as permanent impact areas. Because the vegetation clearance zones would be within areas that are impacted during construction, the operational impact would be less than significant.

Required APMs and MMs: APM BIO-RES-2, MM Biology-2, and MM Biology-16

Mitigation Measure Biology-16: Compensatory Mitigation for Sensitive Natural Communities, Riparian, and Wetlands

The project shall avoid and/or minimize impacts on waters, wetlands, sensitive habitats, and riparian habitats including ephemeral waters that occur within the Project area to the maximum extent feasible. All grading, fill, staging of equipment, infrastructure construction or removal, and all other construction activities shall be designed, sited, and conducted outside of state and federally jurisdictional waters, wetlands, and riparian habitat to the maximum extent feasible.

The implementation of appropriate Best Management Practices (BMPs) (e.g., silt fencing, straw wattles, secondary containment, avoiding fueling in close proximity to waters, etc.) shall be utilized to ensure that indirect impacts to waters, wetlands and riparian areas are avoided or minimized to the maximum extent feasible. BMPs are also necessary to reduce the risk of an unintended release of sediments or other materials into jurisdictional waters. New and upgraded roadways will use at-grade type stream crossings where possible. Stockpiled and bermed sediment will be redistributed or removed from the site so as not to cause water impoundment or induce hydromodification. New poles will be sited outside stream channels to the extent possible.

Permanent impacts on sensitive natural communities, riparian habitat, and wetlands shall be compensated through on-site or off-site enhancement or establishment of equivalent or higher value sensitive natural community, riparian areas, or wetlands. Permanent impacts on sensitive natural communities, riparian areas, or wetlands habitat shall be compensated through enhancement of comparable vegetation communities, riparian habitat, or wetlands at a minimum 2:1 ratio (enhancement: impact) or creation of comparable habitat at a minimum 1:1 ratio. Mitigation credits may be purchased from a USACE, CDFW, and/or RWQCB-approved mitigation bank if on-site mitigation is not feasible.

If SCE conducts mitigation through habitat enhancement or creation, a sensitive natural community, riparian and wetland mitigation plan shall be prepared at least 30 days prior to permanent impacts that address the following parameters:

- Baseline conditions within the mitigation site
- Proposed mitigation site conditions

Mitigation Measure Biology-16: Compensatory Mitigation for Sensitive Natural Communities, Riparian, and Wetlands

- Mitigation methods (e.g., habitat creation or enhancement)
- Planting plan
- Methods for invasive weed control
- Methods to establish the desired mitigation site conditions
- Maintenance, including trash removal, invasive weed removal, and repair of any damage to the mitigation site
- Adaptive management procedures
- Monitoring methods

The enhanced or created sensitive natural community, riparian, and wetland habitats shall meet the following performance criteria:

- Minimum of 70 percent vegetated cover with the target vegetation community that is being mitigated for (sensitive natural community, riparian, or wetlands)
- Less than 3 percent invasive weed cover
- Wetland hydrology and soil conditions in the compensatory wetland mitigation areas

Annual monitoring shall be conducted for the mitigation of habitats and shall include surveys for native vegetation cover, photo documentation at defined photo-monitoring locations, and monitoring for invasive species and any other habitat stressors. Monitoring will be conducted for the first 5 years or until performance criteria are met. If performance criteria are not met after 5 years, additional mitigation shall be provided so that all permanent impacts are fully mitigated.

An annual report shall be submitted by January 31st following the reporting year. The annual report shall provide the results of annual habitat monitoring, recommendations for any corrective actions needed to meet success criteria, and a description of any corrective actions taken in the previous reporting year. The annual monitoring report shall be submitted to CPUC and CDFW, RWQCB, and USACE as appropriate.

Applicable locations: Areas of permanent impacts to sensitive natural communities, riparian areas, and wetlands

Performance standards and timing:

- **Before construction**: (1) SCE prepares mitigation plan for unavoidable impacts to sensitive natural communities, riparian areas, and wetlands including proposed methods of mitigation and location of mitigation in addition to the specifics identified in the measure.
- **During construction:** Habitat enhancement or creation mitigation is implemented.
- **After construction**: (1) Mitigation habitats replace the functions and values of the impacted habitats as evidenced by annual monitoring reports submitted to the CPUC and appropriate regulatory agencies.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (*Less than significant with mitigation*)

Construction

Multiple wetlands were identified in the Proposed Project BSA, as shown in Appendix D, "Jurisdictional Waters Mapbook". Construction of work pads and grading of access roads would result in discharge of material to wetlands located within the Proposed Project disturbance footprint. The area of wetlands located within temporary construction areas is summarized, including structure work pads, guard sites, pull sites, access roads, and overland travel routes are summarized in Appendix D, "Jurisdictional Waters Mapbook".

Vegetation clearing and grading within wetlands could result in filling, hydrological interruption, and/or direct removal of the wetland by converting it to uplands and result in the permanent loss of wetland habitats, which would be a significant impact. MM Biology-16 defines procedures to avoid impacts where feasible and requirements for compensatory mitigation of wetlands to ensure the enhanced or created wetlands offset the permanent impacts on wetlands. Thus, construction impacts to state or federally protected wetlands would be less than significant with mitigation incorporated.

The Proposed Project would involve grading and excavation that would expose soil and could result in increased erosion and sedimentation to adjacent wetland areas. The discharge of sediment to wetlands could impact the quality of the wetland or result in loss of wetland habitat. Because the Proposed Project would disturb more than 1 acre, SCE would be required to prepare a SWPPP and comply with requirements of the State of California Construction General Permit. Implementation of all sediment and erosion control measures contained in the Project-specific SWPPP would reduce the potential for significant erosion and sedimentation, and construction impacts on wetlands from sediment and erosion would be less than significant.

Operation and Maintenance

Operation and maintenance activities for the Proposed Project would be similar to operation and maintenance activities for the existing subtransmission line. The new conductor and subtransmission structures would not result in any new impacts or risk of impacts on jurisdictional wetlands or other waters. SCE would continue to conduct access road maintenance consistent with the maintenance procedures for SCE's existing access roads. Because the maintenance activities would not extend into undisturbed areas and would be comparable to the existing maintenance activities, the impact on wetlands from operation and maintenance activities would be less than significant.

Required APMs and MMs: MM Biology-16

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? (*Less than significant with mitigation*)

Construction

Movement of Native Resident or Migratory Fish and Wildlife Species

Construction of the Proposed Project would not substantially impact the movement of any native or migratory fish or wildlife species. The proposed structure locations would be separated by several hundred feet, and terrestrial and semi-aquatic species could move freely between them during construction. No work areas or structures would be located within creeks or streams, and the Proposed Project construction would not interfere with movement of aquatic species. Construction vehicles would not cross through creeks when water is flowing;

therefore, construction activities would not block fish passage. Impacts on resident and migratory wildlife species movement would be less than significant.

Migratory Corridors

Significant impacts on migratory corridors would occur should a wildlife movement corridor be interrupted by a feature that physically blocks wildlife movement (e.g., a roadway) or if substantial amounts of contiguous habitat to support wildlife movement and migration is directly removed during construction. Portions of the Project area located within a Significant Ecological Area in Los Angeles County, cross Kern River at the northern end of Segment 1, and traverse Crane Canyon to the Tehachapi Mountains at the southern end of Segment 2, each of which are used as migration corridors for wildlife. Construction would occur within an existing transmission corridor adjacent to the existing subtransmission line and would not create physical barriers to movement through any migration corridors. Construction activities would produce dust and noise and result in increased human presence. However, these impacts would be temporary and isolated to the work areas and would not persist following construction. The construction work areas would also be interspersed by several hundred feet, and vegetation disturbance or removal would not be contiguous such that it would affect wildlife migration. Because the project would not create a barrier to migration and would not have contiguous habitat impacts, the impact on migratory corridors during construction would be less than significant.

Native Wildlife Nursery Sites

No designated wildlife nursery sites occur in the Proposed Project area. The aquatic habitat and forest habitat within the Proposed Project alignment provide breeding opportunities for aquatic and upland wildlife species, and other habitats such as grasslands and shrublands provide breeding areas for burrowing wildlife. The Proposed Project would not involve the construction of any structures within aquatic habitat and would not impede the use of an aquatic wildlife nursery site because all work within aquatic habitats (e.g., stream crossings, culvert replacements) would be conducted when the streams are dry and, therefore, wildlife that breeds in aquatic habitats would not be using the area. The impact to aquatic nursery sites would be less than significant.

Some upland and riparian breeding habitat would be disturbed during construction—in particular, trees that would be removed and disturbance would occur in areas that could contain underground burrows or dens. If ground disturbance were to disturb areas with existing burrows and cause them to collapse, it could disturb a breeding den or burrow, and tree removal could impact a nest of native wildlife, which would result in a potentially significant impact. Mitigation Measures Biology-4, Biology-5, Biology-8, Biology-10, Biology-11, Biology-12, Biology-14, and Biology-15 define protocols for monitoring and avoidance of active burrows, nests, or dens of native wildlife. Because the mitigation measures define protocols to avoid native wildlife nursery sites, the impacts would be less than significant with mitigation.

Operation and Maintenance

Replacing poles and conductor would not create a new barrier to species movement because the new facilities would be located adjacent and parallel to the existing subtransmission line, which would be removed. The new subtransmission facilities would not have a greater effect on species movement than existing facilities. The subtransmission lines would span all waterways where aquatic species could be present and would not block movement. The Proposed Project would also be constructed in accordance with avian-safe guidance provided by the Avian Powerline Interaction Committee (APLIC) in *Reducing Avian Collisions with Power Lines: The State of the Art in 2012* (APLIC 2012) to reduce impacts on migratory birds. Because the Proposed Project would replace the existing facility and would not create a new barrier to species migration and would not create any permanent disturbance of native wildlife nursery sites, the impact would be less than significant.

Required APMs and MMs: Mitigation Measures Biology-4, Mitigation Measure Biology-5, Mitigation Measure Biology-8, Mitigation Measure Biology-10, Mitigation Measure Biology-11, Mitigation Measure Biology-12, Mitigation Measure Biology-14, and Mitigation Measure Biology-15

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (*Less than significant with mitigation*).

Construction

Construction of the Proposed Project would require temporary and permanent disturbance of sensitive ecological resources within the San Andreas SEA. The City of Los Angeles has adopted a policy that protects trees within the San Andreas SEA. The Proposed Project would require removal of 48 trees that meet the criteria of protected trees under the SEA ordinance. The Proposed Project would also require removal of 716 oak trees that exceed 8 inches dbh (20 inches circumference) and could conflict with the Los Angeles County oak tree permit requirements or Kern County General Plan oak tree conservation policies that require protection of oak trees because the Proposed Project does not include replacement of impacted protected trees or oak trees. MM Biology-17 requires planting of trees to replace the removed protected trees as defined under the SEA and oak trees greater than 8 inches dbh. Because MM Biology-17 would replace the impacted protected trees, the impact from conflict with the SEA, Kern County General Plan oak tree conservation policies, and Los Angeles County oak tree permit requirements would be less than significant with mitigation.

Operation and Maintenance

The Proposed Project would be located entirely within existing transmission corridors. Maintenance activities for the reconductored power lines would be the same as for the existing power lines and could include tree pruning or removal for safety and fire prevention in the transmission corridors. Maintenance or emergency repairs of the reconductored subtransmission lines would not conflict with Los Angeles County ordinances for the San Andreas SEA and oak tree preservation because they do not apply to emergency or routine

maintenance by a public utility necessary to protect or maintain an electric power or communication line or other property of a public utility. The impact would be less than significant.

Required APMs and MMs: MM Biology-17

Mitigation Measure Biology-17: Protected Tree Removal Mitigation
Removal of oak trees and protected trees within the San Andreas SEA will be minimized to what is required to implement the Project. For removal of any protected trees within the San Andreas SEA, oak trees greater than 6 inches dbh, or oak trees with multiple trunks with a cumulative dbh greater than 12 inches, SCE will provide replacement plantings for the protected trees or oak trees at a 3:1 ratio with three trees planted for each tree removed. Prior to tree planting, a restoration consultant shall evaluate the planting area(s) to ensure the location has adequate soil and hydrologic conditions to support successful planting of the tree species. Monitoring of replacement trees including tree health and height shall be conducted annually for a period of three years after mitigation planting with annual monitoring reports submitted to the CPUC by January 31 of each year. Maintenance shall be conducted at the tree planting sites for three years to ensure effectiveness of the tree replacement efforts. If replacement trees are not successful, additional trees shall be planted to replace the trees that have died or are not growing. Alternatively, SCE may mitigate through off-site compensation of oak woodland habitats and off-site compensation of SEA protected trees, as applicable or nest mitigation with other species mitigation. Off-site compensation may include the permanent protection of an off-site population of oak trees or protected trees with preservation of four oak trees or otherwise protected trees for every oak tree or protected tree removed.
Applicable locations: All Project areas where qualifying oak tree or protected tree removal occurs.
Performance standards and timing: • **Before construction**: SCE identifies all qualifying oak trees and protected trees that may be impacted with work areas and access routes. • **During construction**: (1) SCE documents all qualifying oak trees and protected trees that are removed, (2) SCE defines locations for replacement of trees or purchases mitigation credits as applicable and (3) Protected trees are replaced at a 3:1 ratio for replanting or 4:1 ratio for preservation. • **After construction**: Conduct annual monitoring and maintenance and submit annual monitoring reports.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (*Less than significant with mitigation*)

A portion of Segments 2 and 3 are within areas covered by the TUMSHCP. The Proposed Project is not a covered activity under the TUMSHCP. Because the Proposed Project is located in an area covered by the TUMSHCP, conflicts with the HCP could occur should the Proposed Project involve development in areas that are defined for conservation/open space and/or mitigation lands under the TUMSHCP. The Proposed Project is located within the existing SCE transmission line easement through the TUMSHCP-covered lands and would not result in an increase of structures within these areas or reduce open space lands since existing structures would be removed and replaced. Because construction and operation of the Proposed Project would occur within the existing SCE easement, it would not require an additional easement through mitigation lands. Therefore, the Proposed Project would not conflict with the

TUMSHCP management of open space or mitigation lands, and the impact would be less than significant.

Required APMs and MMs: None required.

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