

4.4 Biological Resources

This section describes the biological resources present in the area of the Proposed Project. Also discussed are the potential impacts of the Proposed Project and the Alternative Project. This section contains information from the Biological Resources Technical Report, West of Devers Upgrade Project, San Bernardino and Riverside Counties, California (LSA 2013), including focused survey reports appended to that report.

The Project Study Area for the assessment of biological resources is defined as the locations where work described in Chapter 3.0, Project Description, may be performed, plus the maximum survey buffer for any given area of the Proposed Project. In general, the maximum survey buffer extends out 500 feet from the edge of the existing WOD corridor. Survey buffers vary as appropriate for particular species or resources surveys as detailed in Section 4.4.3.1 Methodology, but were typically either 100' or 500'. Larger survey areas were used for raptors, and a minimum 4-mile buffer was used for golden eagle surveys. For biological resource surveys in 2013, surveys were initiated from the edge of the 500-foot buffer used in the 2012 surveys to cover additional disturbance areas associated with external project elements that extended beyond the existing WOD corridor (i.e., 66 kV subtransmission lines, 12 kV distribution lines, telecommunication, access roads, and staging yards, and the Alternative Project). Figure 4.4-1, Biological Project Study Area, depicts the composite Biological Project Study Area, which reflects the areas surveyed in 2012 and 2013.

4.4.1 Environmental Setting

The Project Study Area includes the cities of Banning, Beaumont, Calimesa, Colton, Grand Terrace, Loma Linda, Palm Springs, Rancho Cucamonga, Redlands, San Bernardino, and Yucaipa, and unincorporated areas of Riverside and San Bernardino counties. The Proposed Project component in the City of Rancho Cucamonga is limited to improvements within the Mechanical Electrical Equipment Room (MEER) at Etiwanda Substation. The extent of this work within an existing facility would not have the potential to affect biological resources in the City of Rancho Cucamonga; therefore, the City of Rancho Cucamonga is not included for further discussion.

This section defines the study area for biological resources (Project Study Area), and describes the regional context, natural environment, including elevation, topographic character, climate, vegetation/habitat types present, plants and wildlife, and wetlands and other drainages within the Project Study Area.

4.4.1.1 Regional Context

The Project Study Area is located in the Southwestern California region of the California Floristic Province, as described in *The Jepson Manual* (Baldwin et al. 2012) within the following subregions: the South Coast Ranges, the San Bernardino Mountains, and the Peninsular Ranges.

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- The South Coast Ranges subregion is characterized by valleys and small hills extending from the coast inland to the foothills of the San Gorgonio (north) and San Jacinto (south) Mountain Ranges.
- The San Bernardino Mountains subregion is characterized by a topographically well-defined range.
- The Peninsular Ranges subregion is characterized by topographically well-defined ranges surrounding lowlands and foothills.

The Project Study Area includes expanses of undeveloped vegetation communities, many of which are in rugged terrain or hill areas that are not easily developed, as well as areas developed for urban, suburban, and/or agricultural uses. Because of the broad variation of natural and developed land cover types, the plants and wildlife that occur in the Project Study Area represent a combination of species that include many species often associated with human activities as well as both rare and commonly occurring native species usually associated with more natural land cover types.

Extending for more than 45 miles from east to west, the Project Study Area incorporates a range of landscapes. The San Gorgonio Pass within the eastern half of the Project Study Area connects the deserts of the southwestern United States with the coastal, or cismontane, lowlands along the coast of California. The pass area also serves as an important connection between the San Bernardino Mountains and mountain ranges to the north and west, and the San Jacinto Mountains and the rest of the Transverse Ranges to the south.

The elevation ranges from approximately 1,000 to 3,000 feet above mean sea level (amsl), transecting multiple habitats and urban landscapes, from the bajadas of the desert floor to the riparian habitats in San Timoteo Canyon and the steep hillsides of Scott and Reche Canyons. The Project Study Area also crosses two rivers: the San Gorgonio River within the reservation trust land of the Morongo Band of Mission Indians (Reservation) and the Whitewater River, which is located 3.4 miles west of the Devers Substation.

Climatic conditions in the Project Study Area are characterized by mild, wet winters and dry summers. Average annual precipitation for the Project Study Area is 12.4 inches, with a high of 16.1 inches in San Bernardino and a low average precipitation of 5.5 inches in Palm Springs. The wet months are December through March, but can vary depending on summer thunderstorms (Western Regional Climate Center 2012).

The types of vegetation within the Project Study Area vary considerably. For purposes of this assessment, the observed types have been classified in the following categories: forbland/grassland, chaparral, desert scrub, coastal sage scrub (CSS), coast live oak woodland, riparian woodland, alluvial scrub, agricultural land, and disturbed areas. These plant communities have been further divided by botanists into various alliances (similar plant communities defined by the dominant and/or characteristic plant species in the upper layer of vegetation) as described in the Biological Resources Technical Report (BRTR, Appendix F) and supporting technical studies. For example, forbland/grassland is divided into two groups: forbland and grassland. Of these two groups, four alliances

and three stands (groups of individual plants in small numbers) were observed. Three common types of shrubland communities were also observed: chaparral, coastal sage scrub, and desert scrub. Of these three shrublands, there were 26 alliances identified among the three shrubland types. Two types of woodland communities were mapped (i.e., terrestrial and riparian), comprising a total of five alliances.

4.4.1.2 Land Management, Conservation, and Critical Habitat Areas

Land uses in the Project Study Area include built-up areas (commercial and residential development), agricultural areas, undeveloped areas that may be subject to future development, and open space/conservation lands. The Project Study Area crosses privately owned lands (e.g., ranches, nurseries, and orchards), lands under local jurisdictions (e.g., local streets), the Reservation, and Bureau of Land Management (BLM) lands. In Riverside County, portions of the Project Study Area are located within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (WR-MSHCP) and the Coachella Valley Multiple Species Habitat Conservation Plan (CV-MSHCP). Figure 4.4-2, Land Management and Critical Habitat Areas, depicts the locations of lands under Federal or tribal jurisdiction as well as areas within the boundaries of the WR-MSHCP and CV-MSHCP.

The Project Study Area passes through federally designated Critical Habitat¹ areas for both coastal California gnatcatcher (*Polioptila californica californica*) and Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*). Designated Critical Habitat for the coastal California gnatcatcher occurs just east of the Vista Substation where the existing WOD corridor passes through the cities of Grand Terrace and Loma Linda on either side of Reche Canyon Road. In Segment 6, the existing WOD corridor passes over the Whitewater River, where there is designated Critical Habitat for the Coachella Valley milk-vetch. See Figure 4.4-2, Land Management and Critical Habitat Areas, for the locations of designated Critical Habitats. Designated Critical Habitat areas for San Bernardino kangaroo rat (*Dipodomys merriami parvus*) and Santa Ana sucker (*Catostomus santaanae*) occur in the Santa Ana River to the west and north and outside of the Project Study Area in Segment 2. The southwestern willow flycatcher (*Empidonax traillii extimus*) occurs within 200 feet of the Proposed Project within San Timoteo Creek in Segment 3. As described in more detail in Section 4.4.2, Regulatory Setting, designated Critical Habitat has regulatory implications for Federal projects and some Federal approvals of projects. It is also an indication of the location of important habitat for the subject species.

4.4.1.3 Plants and Wildlife

The 2012 and 2013 plant surveys (BioResource Consultants, Inc. 2013) identified 393 species belonging to 73 genera, within a total of 84 families, including subspecies or

¹ Geographic areas designated by the United States Fish and Wildlife Service [USFWS] in Recovery Plans that contain features essential to conservation and recovery of threatened or endangered species.

varieties. Of the plant species found in the Project Study Area, 71 percent were native, while 29 percent were nonnative.

During the 2011 through 2013 surveys, 14 conspicuous invertebrate species, 1 fish species, 5 amphibian species, 20 reptile species, 123 bird species, and 38 mammal species were recorded during general and focused surveys within the Project Study Area. This count included both regionally abundant species and special-status species. Results pertaining to special-status species are described in Section 4.4.3.2 (Results), while most other species are not specifically discussed because of their relatively high regional abundance.

4.4.1.4 Wetlands and Other Drainages

During the 2012 through 2013 surveys, drainage features were identified throughout the entire Project Study Area. Many of these drainages were identified as either likely to connect to a Traditional Navigable Water and, therefore, potentially jurisdictional by both the California Department of Fish and Wildlife (CDFW) and the U.S. Army Corps of Engineers (USACE), or were identified as likely isolated from a Traditional Navigable Water, but still potentially jurisdictional by the CDFW. Associated with these drainages, approximately 63 vegetation areas were also identified, some of which were determined to have potential to satisfy the three criteria necessary to meet the USACE definition of a wetland (i.e., hydrophytic vegetation, hydric soils, and wetland hydrology). Lastly, surveys identified whether drainage features were subject to the jurisdiction of the Regional Water Quality Control Board (RWQCB) and/or any conservation areas. Section 4.4.2, Regulatory Setting, includes more specific information regarding jurisdictional wetlands and other drainage features.

4.4.2 Regulatory Setting

4.4.2.1 Federal Regulatory Setting

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) regulates actions that may result in the take of federally-listed as threatened or endangered species. The FESA defines “take” as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. (Federal Endangered Species Act, § 3[19]) The USFWS lists threatened or endangered species that are at risk of extinction and may also adopt recovery plans that identify specific areas that are essential to the conservation of a listed species.

Section 9 of the FESA prohibits the take of listed animal species without authorization, which may be obtained either through Section 7 consultations, or through a Section 10(a) permit in conjunction with an approved Habitat Conservation Plan (HCP). Under provisions of Section 7(a)(2) of the FESA, a Federal agency that permits, licenses, funds, or otherwise authorizes a project activity must consult with the USFWS to ensure that its actions would not jeopardize the continued existence of any listed species or destroy or

adversely modify designated Critical Habitat. The USFWS may also designate critical habitat areas to provide special management considerations or protections for listed species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 United States Code [U.S.C.] 703–712, as amended) governs take, possession, import, export, transport, selling, purchasing, or bartering of migratory birds, their eggs, parts and nests, except as authorized under a valid permit (50 Code of Federal Regulations [C.F.R.] 21.11). The take of all migratory birds is governed by the Act’s regulation of taking migratory birds for educational, scientific, and recreational purposes, and requiring harvests to be limited to levels that prevent over utilization. Section 704 of the MBTA authorizes the Secretary of the Interior to determine if, and by what means, the take of migratory birds should be allowed and to adopt suitable regulations permitting and governing take but ensuring that take is compatible with the protection of the species.

Federal Clean Water Act – Sections 404 and 401

The federal Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the “waters of the United States” (33 C.F.R. Part 328) and regulating water quality standards for surface waters, including lakes, rivers, and wetlands. The boundaries of waters not subject to the ebb and flow of the tide are defined by the Ordinary High Water Mark (OHWM). “Wetlands” are defined in 33 C.F.R. 328.3(b) as areas inundated or saturated by surface or ground water for a frequency and/or duration sufficient to support a prevalence of vegetation adapted to saturated soil conditions.

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

Pursuant to Section 404 of the CWA, the USACE regulates the discharge of dredged and/or fill material into “waters of the United States.” Project proponents must obtain a permit from the USACE for discharges of fill or dredged material before proceeding with a proposed activity.

The USACE may issue either an individual permit or a general permit. General permits are preauthorized at the regional or national level and are issued to cover activities expected to result in only minimal adverse environmental effects. Nationwide Permits (“NWP”) are a type of general permit issued to cover activities that the USACE has determined to have minimal adverse effects, such as routine maintenance (Nationwide Permit 3) or utility line activities (Nationwide Permit 12).

Each NWP specifies particular conditions that must be implemented by the permittee, including impact thresholds. NWPs are typically limited to projects of less than ½ acre of permanent impacts to waters of the U.S. for each “single and complete project,” as defined by the USACE. For linear projects, a “single and complete project” means the portion of the project that includes all crossings of a single waterbody at a specific location. Because each single and complete linear project need not have independent

utility within the overall utility line, there may be many “single and complete projects” along the length of a linear project from its point of origin to its terminal point, so long as each crossing is separate and distant. If an NWP does not apply to a project, a project is required to obtain an individual permit for authorization under Section 404.

Section 401 – Water Quality Certification

Section 401 of the CWA specifies that, for any activity that may result in a discharge into waters of the U.S., the SWRCB or applicable RWQCB must certify that the discharge would comply with state water quality standards, including beneficial uses (23 California Code of Regulations 3830, et seq.). Dredge and fill activities in wetlands and waterways that impact waters of the U.S. require a federal Section 404 permit from the USACE. Before a Section 404 permit can be issued, a Section 401 certification must first be obtained from the RWQCB.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act of 1940 (U.S.C. Title 16, Chapter 5A, Subchapter II, § 668 a–d), as subsequently amended, provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds.

On August 9, 2007, bald eagles were delisted and are therefore no longer protected under the FESA. In 2010, the USFWS published new guidance for the golden eagle (Interim Golden Eagle Inventory and Monitoring Protocols; and Other Recommendations) outlining minimum monitoring inventory, effort, and techniques.

Invasive Species, Executive Order 13112

On February 3, 1999, President Clinton signed Executive Order (EO) 13112, requiring Federal agencies to take steps towards combatting the introduction or spread of invasive species in the United States.

Executive Order 11990, Protection of Wetlands

On May 24, 1977, President Carter signed EO 11990, requiring Federal agencies to avoid adverse impacts (both long and short term) to wetlands whenever there is a practicable alternative available. The order defines wetlands as areas that are inundated by surface or ground water with a frequency sufficient to support a prevalence of vegetative or aquatic life that require saturation or at least seasonally saturated soil conditions for growth and reproduction.

Bureau of Land Management Lands

A small portion (approximately 1.2 miles in Segment 6) of the Project Study Area is located on land administered by the BLM. The BLM Special-Status Species Management Manual 6840 (BLM 2008) identifies BLM special-status species as species listed or

proposed for listing under the FESA and species recognized as requiring special management consideration to lessen the likelihood for future listing.

California Desert Conservation Area Plan

In 1976, Congress passed the Federal Land Policy Management Act. Under that law, the California Desert Conservation Area (CDCA) was established, with 12,000,000 acres of public lands administered by the BLM. The CDCA plan consists of five recovery units: Upper Virgin River, Eastern Mojave, Northwestern Mojave, Western Mojave, and Colorado Desert. The Colorado Desert recovery unit overlaps the eastern section of the Project Study Area. The CDCA gives preservation of endangered species the highest priority, and one of the goals is to provide a system of desert wildlife management areas within the recovery unit. In 1994, the CDCA plan established strategies for recovering the desert tortoise: maintain high survivorship of adult desert tortoises; protect existing populations and habitat; institute habitat restoration where necessary; and implement a formal adaptive management program. In addition, the CV-MSHCP is within the Colorado Desert Recovery Unit and establishes conservation areas and a reserve system for species and land cover types covered under the CV-MSHCP.

4.4.2.2 State Regulatory Setting

California Fish and Game Code

Pursuant to Division 2, Chapter 6, Sections 1600–1602 of the California Fish and Game Code, the CDFW regulates all substantial diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. Streams (and rivers) are defined by the presence of a defined channel with bed and banks and the potential to support biological resources.

California Fish and Game Code Sections 3500-3516, and 3800

FGC 3513 furthers the intent of the MBTA by prohibiting any take or possession of birds in California that are designated by the MBTA as migratory non-game birds, except as allowed by federal rules and regulations promulgated pursuant to the MBTA. In addition, FGC Sections 3503, 3503.5, 3511, and 3800 further protect nesting birds and their parts, including passerine birds, raptors, and state “fully protected” birds. These regulations protect almost all native nesting birds, not just special-status birds.

California Fish and Game Code Sections 3511, 4700, 5050, and 5515

FGC Sections 3511, 4700, 5050, and 5515 list the bird, mammal, reptile, amphibian, and fish species that are identified as “fully protected.” Fully protected wildlife may not be harmed, taken, or possessed. The classification of “fully protected” was California’s initial effort to identify and provide additional protection to those wildlife that were rare or faced possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under the California ESA and Federal ESA; white-tailed kite, golden eagle, trumpeter swan, northern elephant seal, and ringtail are the exceptions. The white-tailed kite and the

golden eagle are tracked in the California Natural Diversity Database (“CNDDDB”); the trumpeter swan, northern elephant seal, and ringtail are not.

State and Regional Water Quality Control Board

The SWRCB has jurisdiction throughout California and protects water quality by setting statewide policy and coordinating the nine RWQCBs in California that exercise regulatory activities by basins. Typically, the areas subject to RWQCB jurisdiction coincide with those of the USACE (i.e., waters of the U.S., including any wetlands) and the RWQCB is therefore responsible for the administration of Section 401 of the Federal CWA. The RWQCB also asserts authority over waters of the State under waste discharge requirements pursuant to the Porter-Cologne Water Quality Control Act. Waters found to be isolated and not subject to CWA regulation are often still regulated by the RWQCB under Porter-Cologne. If a CWA Section 404 permit is not required for an action, the RWQCB may still require a permit (i.e., Waste Discharge Requirement) under the Porter-Cologne Water Quality Control Act.

California Endangered Species Act

The CESA is administered by the CDFW and prohibits the take of plant and animal species identified as either threatened or endangered in the State of California by the Fish and Game Commission (California Fish and Game Code Sections 2050–2089). Under the CESA, “take” means to hunt, pursue, catch, capture, or kill or attempt to hunt, pursue, catch, capture or kill, and does not include the harm or harassment provisions in the FESA definition. However, Sections 2081 and 2080.1 of the CESA allow the CDFW to authorize exceptions to the prohibition of take of the State-listed threatened or endangered plant and animal species for purposes such as public and private development based on a determination that the project or action includes measures sufficient to “fully mitigate” impacts.

California Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code Sections 1900–1913) directs the CDFW to carry out the Legislature’s intent to “preserve, protect and enhance rare and endangered plants in this State.” The NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare and to protect endangered and rare plants from take.

4.4.2.3 Regional Regulatory Setting

Western Riverside County Multiple Species Habitat Conservation Plan

The WR-MSHCP serves as a comprehensive, multijurisdictional habitat conservation plan pursuant to both Section 10(a)(1)(B) of the FESA and the California Natural Communities Conservation Planning Act (NCCP Act) that focuses on the conservation of species and their associated habitats in western Riverside County. The MSHCP Plan Area encompasses approximately 1.26 million acres (1,966 square miles); it includes all unincorporated Riverside County lands west of the crest of the San Jacinto Mountains to

the Orange County line, as well as the jurisdictional areas of the cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, and San Jacinto (Figure 4.4-2, Land Management and Critical Habitat Areas).

Participants in the WR-MSHCP include all of the 19 cities in western Riverside County, Riverside County (proper), and a number of countywide and State agencies. Any regional public facility provider (e.g., a utility company or a public district or agency) that operates and/or owns land within the Plan Area can apply to participate in the WR-MSHCP as a Participating Special Entity (PSE) to rely upon the WR-MSHCP to comply with FESA and CESA. The WR-MSHCP allows signatories and PSEs to obtain authorization for take of both Federal and/or State-listed species under the federal ESA and CESA, respectively, for activities covered by the WR-MSHCP. The WR-MSHCP provides for the assembly of a Conservation Area consisting of Core Areas and Linkages for the conservation of Covered Species (County of Riverside 2003) comprising 146 species of plants and animals of various Federal and State listing statuses. Take authorization is extended to covered species in cases where they become listed as threatened or endangered in the future. Covered species also include several non-special-status species that are useful indicator species (such as predators and species with large home ranges). The Conservation Area is being assembled from Public/Quasi-Public (PQP) land and Additional Reserve Lands (ARLs), which area derived from portions of the WR-MSHCP Criteria Area. These consist of quarter-section (i.e., 160-acre) Criteria Cells, each with specific criteria for the species conservation within that cell.

The WR-MSHCP requires focused surveys for certain plant and animal species for projects within designated plant and animal survey areas when potentially suitable habitat is present. Designated survey areas have been defined for some species, such as burrowing owl and certain “Narrow Endemic Plant Species” where focused surveys must be conducted. For these species, surveys outside of designated survey areas are not required. For other species, focused surveys are necessary throughout the entire plan area, when suitable habitat is present. For example, focused surveys for listed riparian birds (e.g., least Bell’s vireo [*Vireo bellii pusillus*] and southwestern willow flycatcher) are required when suitable riparian habitat is present, surveys for listed fairy shrimp species are required when vernal pools or other suitable habitat is present, and surveys for Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) may be required in areas having Delhi sands soils.

The WR-MSHCP also includes provisions for the documentation of riverine, riparian, and vernal pool habitat. These areas are defined in the following manner:

- *Riparian/riverine* are lands dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens that occur close to, or which depend on, soil moisture from a nearby freshwater source, or areas with freshwater flow during all or a portion of the year (County of Riverside 2003). WR-MSHCP riparian/riverine and CDFW riparian resources are similar in definition. However, under the MSHCP Riparian and Riverine areas are characterized and assessed based on their habitat functions and values rather than their jurisdictional status. Riparian habitats generally consist of

vegetated areas that include willows, alders, or other vegetation typically associated with the banks of a stream or lake shoreline. Riparian habitat resources described by CDFW for the WR-MSHCP include wetlands and watercourses, whether intermittent or perennial, and should be retained and preserved. Riverine areas typically lack riparian vegetation but include wash areas that conduct flows that supply and sustain riparian areas downstream.

- *Vernal pools* are seasonal wetlands that occur in depression areas that have all three wetland indicators (i.e., soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack the wetland indicators of hydrology and/or vegetation during the drier portion of the growing season.

Southern California Edison (SCE) is not a signatory to the WR-MSHCP. According to Section 11.8 of the WR-MSHCP Implementing Agreement, any public facility provider, such as SCE, may request to participate in the WR-MSHCP as a PSE. PSE activities must comply with the terms and requirements of the WR-MSHCP permits, the WR-MSHCP and Implementing Agreement. The process for submitting an application review by the Regional Conservation Authority (RCA) and the wildlife agencies, and granting of take authorizations is described in Section 11.8 of the Implementing Agreement. For regional utility projects, PSEs shall pay a fee or take such other actions as may be agreed to by the RCA.

Coachella Valley Multiple Species Habitat Conservation Plan

Coachella Valley Association of Governments (CVAG) serves as lead agency for plan review and consideration of the CV-MSHCP (Figure 4.4-2, Land Management and Critical Habitat Areas). The CV-MSHCP pursuant to Section 10(a)(1)(B) of the FESA and the NCCP Act is a comprehensive, multi-jurisdictional habitat conservation plan that focuses on the conservation of species and their associated habitats in the Coachella Valley region of eastern Riverside County. The overall goal of the CV-MSHCP is to maintain and enhance biological diversity and ecosystem processes within the region, while allowing for future economic growth. The CV-MSHCP provides for the conservation of 27 special-status plant and animal species as well as 27 land cover types, including desert wetland communities. The overall provisions for the CV-MSHCP are subdivided according to specific resource conservation goals that are organized according to geographic areas defined as Conservation Areas. Each of these areas is categorized as Core, Essential, or Other Conserved Habitat (for special-status plant, invertebrate, amphibian, reptile, bird, and mammal species), Essential Ecological Process Areas, and Biological Corridors and Linkages. Each Conservation Area must satisfy specific Conservation Objectives.

The CV-MSHCP requires focused surveys for certain plant and animal species for project sites located within designated Conservation Areas. For projects located outside of these Conservation Areas, in general there are no specific survey requirements for covered species; however, there are exceptions within modeled habitat for such species as desert tortoise (*Gopherus agassizii*).

The CV-MSHCP also includes provisions for the documentation of wetland communities. These community descriptions are based on the *Preliminary Description of the Terrestrial Natural Communities of California* (CDFG 1986). The following wetland communities are included in the CV-MSHCP:

- Mesquite hummocks;
- Mesquite bosque;
- Desert saltbush scrub;
- Desert sink scrub;
- Southern arroyo willow riparian forests;
- Cottonwood willow riparian forest;
- Southern sycamore-alder riparian forest;
- Freshwater marsh;
- Cismontane alkali marsh;
- Desert fan palm oasis woodland; and
- Arrowweed scrub.

While this classification of communities does not correspond with more recent classification schemes, the listing of these communities is an indication that wetland and riparian resources in general are considered important in the CV-MSHCP, and by the USFWS and CDFW.

In addition, the existing WOD corridor passes through four CV-MSHCP conservation areas. As Table 4.4-1, CV-MSHCP Conservation Objectives by Conservation Area, shows, each area has unique conservation objectives, although some objectives have not yet been achieved.

Table 4.4-1: Coachella Valley MSHCP Conservation Objectives by Conservation Area

Conservation Area	Objective
Cabazon	Peninsular bighorn sheep, mesquite hummocks, southern sycamore riparian woodland, sand source, sand transport, Fomat wash corridor ¹
Stubbe and Cottonwood Canyons	Desert tortoise, Le Conte’s thrasher, desert dry wash woodland, Sonoran cottonwood-willow riparian forest, sand transport, Stubbe Canyon wash corridor ²
Whitewater Canyon	Desert tortoise-core habitat, sand source
Upper Creek Mission Creek/Big Morongo Canyon	Coachella Valley Jerusalem cricket, Le Conte’s thrasher, Palm Springs pocket mouse, Little San Bernardino Mountains linanthus, desert dry wash woodland, sand transport, sand source, Highway 62 corridor ³

¹ The Fomat wash corridor is between the San Bernardino Mountains and the San Jacinto Mountains. It is a culvert that passes under I-10 east of the Reservation.

² The Stubbe Canyon wash corridor utilizes two culverts under I-10 and connects the San Bernardino Mountains to the San Jacinto Mountains through the Snow Creek/Windy Point Conservation Area.

³ The Highway 62 corridor provides a movement corridor under the highway provided by two bridges that span Mission Creek.

SCE is not a signatory to the CV-MSHCP. According to CV-MSHCP Section 7.4, any public service provider, such as SCE, that operates facilities or owns land with the CV-MSHCP Area may request “take authorization” for its activities from the Coachella Valley Conservation Commission (CVCC) pursuant to the permits (USFWS Section 10(a) permit and CDFW Natural Communities Conservation Planning Act permit) as a PSE. Such activities must be consistent with the terms and requirements of the CV-MSHCP permits, the CV-MSHCP, and Implementing Agreement. The process for submitting an application review by CVCC and the wildlife agencies, and granting of take authorizations is described in Section 11.7 of the Implementing Agreement. Participating special entities shall contribute to CV-MSHCP implementation through the payment of a fee or other appropriate mechanism based on the type of proposed activity.

4.4.2.4 Local Regulatory Setting

The California Public Utilities Commission (CPUC) has jurisdiction over the siting and design of the Proposed Project because the CPUC regulates and authorizes the construction of investor-owned public utility (IOU) facilities. Although such projects are exempt from local land use and zoning regulations and permitting, General Order (GO) No. 131-D, Section III.C requires “the utility to communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any nondiscretionary local permits.” Table 4.4-2, Local Land Use Documents Applicable to Biological Resources, summarizes key policies in local land use plans applicable to biological resources. There are no relevant General Plan policies related to Biological Resources within the City of Colton General Plan.

Table 4.4-2: Local Land Use Documents Applicable to Biological Resources

Document	Plans, Policies, Program
City of Banning General Plan, Biological Resources Element	<p>Goal: A pattern of community development that supports a functional, productive, harmonious and balanced relationship between the built and natural environment.</p> <p>Policy 1: The City shall take continue to participate in the preservation of habitat for endangered, threatened and sensitive species.</p>
City of Beaumont General Plan, Resource Management Element	<p>Goal 4: The City of Beaumont will assist in the protection of biological resources.</p> <p>Policy 11: The City of Beaumont will work with landowners and government agencies in promoting development concepts that are sensitive to the environment and give maximum consideration to the preservation of natural habitats.</p>
City of Calimesa General Plan, Land Use Element, Preservation of Natural Resources and Environmentally Sensitive Areas	<p>Goal 5: Preserve the natural beauty, minimize degradation of the Calimesa area, and provide protection for the environmentally sensitive resources.</p> <p>Policy 5.1: To ensure that hillside areas are preserved and protected, all developments in areas having a slope of 25 percent or greater shall comply with the Calimesa Hillside Development Guidelines.</p> <p>Policy 5.3: Graded areas shall be revegetated with native plants compatible to the area to prevent erosion.</p> <p>Policy 5.4: Development shall be prohibited in areas containing sensitive</p>

Table 4.4-2: Local Land Use Documents Applicable to Biological Resources

Document	Plans, Policies, Program
	biological resources and habitats, cultural resources, groundwater recharge areas, prominent ridgelines, unless adequate protection and/or preservation is provided.
City of Calimesa General Plan, Resource Management Element, Biological Resources	<p>Goal 3: Conserve and protect significant stands of mature trees, native vegetation, and wildlife habitat within the planning area.</p> <p>Policy 3.1: Conserve and protect important plant communities and wildlife habitats, such as riparian areas, wetlands, oak woodlands, and other significant tree stands, and rare or endangered plant/animal species by using buffers, creative site planning, revegetation and open space easement/dedications.</p> <p>Policy 3.3: In areas that may contain important plant and animal communities, require developments to prepare biological assessments identifying species types and locations and develop measure to preserve sensitive species to the maximum extent possible.</p> <p>Policy 3.4: Allow new development to remove only the minimum natural vegetation and require revegetation of graded areas with native plant species.</p>
City of Calimesa, Chapter 18.80 Oak Tree Preservation, Oak Tree Preservation Ordinance	<p>Municipal Code 18.80.060: An oak tree pruning permit issued by the director of community development must be obtained before oak tree pruning is undertaken.</p> <p>Municipal Code 18.80.070: An oak tree removal permit issued by the director of community development must be obtained before oak tree removal is undertaken.</p> <p>Municipal Code 18.80.080: For any parcel or lot with a heritage oak tree or with more than three protected oak trees or protected stand of oak trees, an oak tree preservation and replacement plan shall be prepared by an arborist that is retained by the community development department and submitted in conjunction with an application for a tree preservation and replacement permit. The plan will include adequate mitigation, including the planting of replacement trees or acorns or the payment of replacement costs to the city for each tree removed.</p>
City of Grand Terrace General Plan, Land Use Element	<p>Goal 2.5: Provide for the preservation of natural resources and open space.</p> <p>Policy 2.5.2: Areas designated as Open Space shall be preserved to provide long term recreation opportunities as well as the preservation of scenic and environmental resources and the protection of public health and safety.</p>
City of Loma Linda General Plan, Conservation and Open Space Element	<p>Guiding Policy 9.2.10.3: Avoidance of Environmentally Sensitive Areas- New development shall be sited so as to maximize the permanent preservation of large blocks of unbroken open space and to minimize the loss of habitat, wildlife, and watershed resources.</p> <p>Guiding Policy 9.2.10.4: Development to Respect Wildlife Habitats- Development projects are to be designed to protect habitat values and to preserve significant habitat areas and habitat connections in their natural condition.</p>
City of Loma Linda General Plan, Conservation and Open Space Element, Biological Resources	<p>Guiding Policy 9.4.4: Preserve habitats supporting rare and endangered species of plants and animals including wildlife corridors.</p>

Table 4.4-2: Local Land Use Documents Applicable to Biological Resources

Document	Plans, Policies, Program
<p>City of Palm Springs General Plan, Open Space & Conservation Element</p>	<p>Goal RC7: Support the preservation and protection of biological resources, especially sensitive, rare, threatened, or endangered species, wildlife, or habitats.</p> <p>Policy RC7.1: Support local and regional efforts to evaluate, acquire, and protect natural habitats for sensitive, threatened, and endangered species occurring in the City and vicinity.</p> <p>Policy RC7.5: Protect and enhance known wildlife and migratory corridors, including corridors leading into the Santa Rosa Mountains, the San Jacinto Mountains, and along the Whitewater River.</p> <p>Policy RC7.7: Actively encourage and promote the understanding and appreciation of the natural environment and sensitive biological resources in and around Palm Springs.</p>
<p>City of Redlands General Plan, Open Space and Conservation Element, Biotic Resources</p>	<p>Guiding Policy 7.21a: Minimize disruption of wildlife and valued habitat throughout the Planning Area.</p> <p>Guiding Policy 7.21b: Preserve, protect, and enhance natural communities of special status.</p> <p>Guiding Policy 7.21c: Preserve, protect and enhance wildlife corridors connecting the San Bernardino National Forest, Santa Ana River Wash, Crafton Hills, San Timoteo/Live Oak Canyons, the Badlands, and other open space areas.</p> <p>Guiding Policy 7.21e: Preserve, restore, protect and enhance riparian corridors throughout the Planning Area.</p> <p>Guiding Policy 7.21h: Require a biological assessment of any proposed project site where species or the habitat of species defined as sensitive or special-status by the Department of Fish and Game or the U.S. Fish and Wildlife Service might be present.</p> <p>Guiding Policy 7.21i: Require that proposed projects adjacent to, surrounding or containing wetlands, riparian corridors, or wildlife corridors be subject to site-specific analysis which will determine the appropriate size and configuration of a buffer zone.</p>
<p>City of San Bernardino General Plan, Natural Resources and Conservation Element</p>	<p>Goal 12.1: Conserve and enhance San Bernardino’s biological resources.</p> <p>Policy 12.1.2: Site and develop land uses in a manner that is sensitive to the unique characteristics of and that minimizes the impacts upon sensitive biological resources.</p> <p>Goal 12.2: Protect riparian corridors to provide habitat for fish and wildlife.</p> <p>Policy 12.2.1: Prohibit development and grading within fifty (50) feet of riparian corridors, as identified by a qualified biologist, unless no feasible alternative exists.</p> <p>Policy 12.2.4: Development adjacent to riparian corridors shall:</p> <ul style="list-style-type: none"> a. Minimize removal of vegetation; b. Minimize erosion, sedimentation, and runoff by appropriate protection or vegetation and landscape;

Table 4.4-2: Local Land Use Documents Applicable to Biological Resources

Document	Plans, Policies, Program
City of Yucaipa General Plan, Citywide Goals	Goal CW-5: Encourage development which is environmentally sensitive and preserves major landforms, sensitive habitat and biological resources, as well as other important natural resources.
County of Riverside General Plan Multipurpose Open Space Element	<p>OS 17.2 Enforce the provisions of applicable MSHCPs, if adopted when developing transportation or other infrastructure projects that have been designated as covered activities in the applicable MSHCP.</p> <p>OS 17.4 Require the preparation of biological reports in compliance with Riverside County Planning Department Biological Report Guidelines for development related uses that require discretionary approval to assess the impacts of such development and provide mitigation for impacts to biological resources until such time as the CVAG MSHCP and/or Western Riverside County MSHCP are adopted or should one or both MSHCPs not be adopted.</p> <p>OS 18.1 Preserve multi-species habitat resources in the County of Riverside through the enforcement of the provisions of applicable MSHCPs, if adopted.</p> <p>Reche Canyon/Badlands Area Plan 13.1 Protect visual and biological resources in the Reche Canyon/Badlands area through adherence to General Plan policies found in the Multipurpose Open Space Element.</p>
County of San Bernardino General Plan Conservation Element	<p>Goal CO 2. The County will maintain and enhance biological diversity and healthy ecosystems throughout the County.</p> <p>Policy CO 2.4 All discretionary approvals requiring mitigation measures for impacts to biological resources will include the condition that the mitigation measures be monitored and modified, if necessary, unless a finding is made that such monitoring is not feasible.</p>

Morongo Reservation

The Proposed Project will traverse approximately 8 miles of the tribal trust lands of the Morongo Indian Reservation east of Banning, California. Except for approximately two miles of new corridor between Malki Road and the western boundary of the Reservation, the Proposed Project will utilize the transmission corridor that has been used by existing SCE 220kV transmission lines starting in 1945, and as subsequently expanded. Matters concerning the use of the Reservation's trust lands are subject to approval by the Morongo Band's General Membership, which consists of all enrolled adult voting members. With limited exceptions, the Morongo Band does not release its internal ordinances and other laws to the public.

The Morongo Band's General Membership has voted to approve the Bureau of Indian Affairs' grants to SCE of the rights of way and easements necessary for SCE to continue operating its existing 220 kV facilities on the Morongo Reservation and to replace and upgrade those facilities with the WOD Project. The Morongo Band's approval of these grants of rights of way and easements includes relocating approximately two miles of the corridor west of Malki Road into a new corridor depicted on Figure 2-3, Proposed and Alternative Transmission Line Routes, as either the Proposed Project (Alternative 1) or the Alternative Project (1X). The existing corridor, plus either Alternative 1 or 1X, thus

would be consistent with all applicable tribal laws, and are the only corridors approved by the Morongo Band for the continued operation and eventual replacement of SCE's 220 kV facilities on and across the trust lands of the Morongo Indian Reservation.

4.4.3 Biological Analysis

4.4.3.1 Methodology Used for the Biological Analysis

Project Study Area

The Project Study Area is defined as the locations where work described in Chapter 3.0, Project Description, would be performed, plus the maximum survey buffer for any given area of the Proposed Project. The survey buffers are described below.

The Project Study Area in 2012 included the existing WOD corridor and various buffers extending out from the edge on either side of the existing WOD corridor as follows:

- The vegetation mapping buffer was 100 feet.
- The plant survey buffer was 100 feet.
- The fairy shrimp survey buffer was 100 feet.
- The desert tortoise survey buffer was 1,970 feet (600 meters).
- The burrowing owl survey buffer was 500 feet.
- The coastal California gnatcatcher survey buffer was 500 feet.
- The least Bell's vireo survey buffer was 500 feet.
- The southwestern willow flycatcher survey buffer was 500 feet.
- The Swainson's hawk (*Buteo swainsoni*) survey buffer was 0.5 mile.
- The general raptor survey buffer was 500 feet.
- The bat assessment buffer was 500 feet.
- The small mammal trapping buffer ranged from 100 to 500 feet.
- The drainage assessment buffer was 200 feet for non-riparian vegetated drainage features and 500 feet for riparian vegetated drainage features.

The specific Project Study Areas in 2013 included additional identified disturbance areas (i.e., 66kV subtransmission lines, 12 kV distribution lines, telecommunication, access roads, and staging yards, and Alternative Project) beyond the 500-foot buffer from the existing WOD corridor, except for coastal California gnatcatcher, and various buffers extending out from the edge of the additional identified disturbance areas. For coastal California gnatcatcher and fairy shrimp, the survey areas were limited to the areas surveyed in 2012 (i.e., 500 feet and 100 feet from the existing WOD corridor, respectively). The various buffers extending out from the edge of the additional identified disturbance areas are as follows:

- The vegetation mapping buffer was 100 feet.
- The plant survey buffer was 100 feet.
- The fairy shrimp survey buffer was 100 feet from the ROW only.
- The desert tortoise survey area included the Proposed Project and Alternative Project corridors on the Reservation; no buffer was surveyed in this area.
- The burrowing owl survey buffer was 500 feet.
- As described above, the coastal California gnatcatcher survey included the areas surveyed in 2012, which included most of the suitable habitat within the additional identified disturbance areas.
- The bat assessment buffer was 500 feet.
- The small mammal trapping buffer was 100 feet.
- The drainage assessment buffer was 200 feet for non-riparian vegetated drainage features and 500 feet for riparian vegetated drainage features.

These buffer areas were surveyed based primarily on protocol survey methodology approved by the CDFW and/or USFWS.

Literature Search

LSA conducted a literature search of database records and published reports, using Federal and State resources as well as local and regional knowledge to: (a) identify the previous existence or potential occurrence of special-status species and sensitive land cover types on or in the vicinity of the Project Study Area; (b) assist in evaluating the suitability of habitat in the Project Study Area for those species that have potential to occur; and (c) determine the current taxonomic nomenclature and legal and rarity status of each species.

Focused Survey Methods

Botanical Resources Surveys

Focused rare plant surveys, mapping of vegetation communities, and invasive species mapping were conducted during spring and summer of 2012 within the existing WOD corridor and a 100-foot buffer; then, in the spring of 2013, the telecommunications lines, access roads, and staging yards were surveyed. Refer to the map of the vegetation survey area on Figure 4.4-3, Land Cover. Plant surveys focused on identification and location of special-status plant species. Field surveys also included mapping invasive species concentration areas and updating a vegetation community map prepared by Garcia and Associates (GANDA 2011). Field transect surveys were conducted on foot, and two survey passes were conducted in 2012: one during March and April and the other in May and June, with surveys in 2013 conducted in April and May. Each was conducted so as to provide for 100 percent visual coverage of the ground, access permitting. The botanical Project Study Area in 2012 included a 100-foot buffer on either side of the edge of the existing WOD corridor. In 2013, the botanical Project Study Area included a 100-foot

buffer from the edge of the additional identified disturbance areas (e.g., access roads, telecommunications lines, and staging areas) that are outside of the 500-foot existing WOD corridor buffer. Vegetation mapping followed the California Native Plant Society (CNPS) *Manual of California Vegetation* (Sawyer et al. 2009).

Fairy Shrimp Surveys

Given that the target fairy shrimp species are not known to be present from desert areas in California, a fairy shrimp habitat assessment was conducted only for the portion of the Proposed Project west of Hargrave Avenue in Banning. This eastern limit for the assessment was selected with the concurrence of Karin Cleary-Rose of the USFWS (Personal communication, November 28, 2011). All potentially suitable habitat in or within 100 feet of the existing WOD corridor was assessed. Protocol surveys were conducted in accordance with the April 19, 1996, *Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods*. A complete fairy shrimp survey consists of two wet season surveys within a 5-year period, or a wet season survey immediately preceded or followed by a dry season survey. The Project Study Area was covered in two wet season surveys; the first from November 30, 2011, to May 22, 2012 (west of El Casco Substation), and the second from November 15, 2012, to March 27, 2013 (east of El Casco Substation). A dry season survey was conducted on October 1, 2012, with laboratory soil analysis on October 15, 16, and 23, and November 6, 2012. A wet season survey consists of site visits to sample potential fairy shrimp habitat every 2 weeks while pools are inundated. Sampling is conducted by drawing a handheld net through the water column, occasionally bumping the bottom to stir up any benthic organisms. The net is periodically removed from the water to check for aquatic species. A dry season survey consists of the careful collection of dry soil from pool basins followed by sieving and examination of soil samples to isolate and identify fairy shrimp cysts.

Coachella Valley Jerusalem Cricket and Coachella Giant Sand Treader Cricket

Coachella Valley Jerusalem cricket and Coachella giant sand treader cricket surveys were conducted concurrently by AMEC in 2012 within the known range of these species (potentially suitable habitat in Segment 6). Focused surveys were initiated in December 2011 following measurable precipitation from winter storms and continued through April 2012. All potential habitats within the Project Study Area were assessed on foot for components of potential suitability for each species. Surveyed areas included habitats within the east portion of the Whitewater River floodplain and continued east 0.62 mile past SR-62 within the Project Study Area (AMEC 2012c).

All areas within this segment that contained fine sandy loose aeolian and alluvial substrates (active and stabilized dunes, sand fields, hummocks, washes, and areas of sand transport) and were determined suitable for these two species were mapped (AMEC 2012c). Surveys were conducted in accordance with established methods, and recommended timing, temperature, and rainfall events.

Desert Tortoise Surveys

Desert tortoise surveys were conducted within the known range of the species (suitable habitat in Segments 5 and 6) by AMEC in 2011, Karl 2012, and LSA 2013. The 2011 survey covered the eastern portion of the Reservation (Segment 5) and all suitable habitat areas east of the Reservation (Segment 6). The 2012 survey covered east of the Reservation (Segment 6) and the 2013 survey covered all potentially suitable habitat areas on the Reservation. All three surveys were conducted in accordance with the methods, timing, and temperature requirements in the currently prescribed survey protocol (USFWS 2010a). In order to survey 100 percent of the ground surface, biologists walked adjacent transects spaced approximately 33 feet (10 meters) apart within the existing WOD corridor and any necessary survey protocol buffers. Transects were programmed into Global Positioning Systems (GPS) units to ensure accurate and complete ROW coverage and buffer transect locations. All potential desert tortoise habitats were surveyed in 2011 and 2012 where there were no access restrictions; however, in 2013, there was one fenced, private property on the Reservation which was not surveyed. Where habitat was not suitable for desert tortoise (i.e., areas that are poorly vegetated or too steep) biologists did not conduct pedestrian transect surveys. Instead, these areas were sampled (i.e., visited a representative location to verify that conditions were unsuitable). The 2011 surveys were conducted from October 11 through 21 within the existing WOD corridor. The 2012 surveys were conducted from April 9 through 14. In addition, per protocol, single buffer transects were walked at 656, 1,312, and 1,968 feet (200, 400, and 600 meters) from the edge of the existing WOD corridor comprising an approximately 1,970-foot (600-meter) total survey buffer. For 2013 surveys, conducted from May 8 through 29, on the Reservation, the survey areas covered 100 percent of the existing WOD corridor and the Alternative Project (i.e., action area). Additional buffer transects were not required because desert tortoise sign was found in the Project Study Area (i.e., action area). The protocol does not require three additional belt transects if live desert tortoise or its sign (burrows, scat, carcasses) are found within the action area.

Burrowing Owl Habitat Assessment and Surveys

Burrowing owl (*Athene cunicularia*) surveys were conducted throughout the Project Study Area within suitable habitat, access permitting, including the existing WOD corridor, transmission lines and additional identified disturbance areas outside of the existing WOD corridor, and the Alternative Project on the Reservation. Surveys generally followed the field methods described in the Staff Report on Burrowing Owl Mitigation (CDFG 2012a) for the habitat assessment, but included a modified breeding season survey due to the extensive nature of the Project Study Area and, in 2013, the available survey schedule. The Staff Report on Burrowing Owl Mitigation calls for several biologists walking straight-line transects spaced up to 65 feet (20 meters, per protocol) apart to search for burrows, sign, and owls followed by four breeding season survey visits (one survey each in April, May, June, and after June) to each burrowing owl location and/or potential burrow location.

The 2012 surveys consisted of a habitat assessment, comprehensive burrow surveys, and focused burrowing owl surveys of the existing WOD corridor and a 500-foot buffer from the existing WOD corridor. Due the Project Study Area's large size and expected pre-construction owl surveys of the Project Study Area, the methods were modified slightly so that focused breeding season surveys in a given area ceased when positive identification of breeding individuals were made, as opposed to continuing surveys for four visits.

In 2012, the following methods were implemented for a modified survey approach, which focused the survey effort on determining the owl use areas and population distribution and evaluated all burrows (approximately 500). Methods included revisiting each area supporting large groupings of potential burrows to reevaluate and take detailed notes on the condition of the burrows. Evaluations included consideration of vegetation height and type, topography, actual burrow size, distance to avian predator nest, and distance to nearest known owl(s). In most cases, a combination of various factors enabled determination of which burrows/locations can be reasonably eliminated from further surveys. Therefore, based on the results of the burrow survey in March 2012, each occupied site and each site supporting sign was visited one or two times between the end of May and late June to distinguish where nesting birds were located from sites that might have been occupied by migrants during the burrow survey in March. In this way, nest site locations were mapped and burrowing owl pairs were documented.

The 2013 surveys consisted of a habitat assessment and a comprehensive burrow survey of additional identified disturbance areas (e.g., access roads, telecommunication lines, staging yards, and Alternative Project) and the 500-foot buffer from the edge of the additional identified disturbance areas, access permitting. Potential burrowing owl burrows, sign, and owl locations were mapped as part of the survey. However, follow-up breeding season surveys were not conducted per the recommendations in the 2012 CDFG staff report due to schedule constraints that precluded conducting surveys in accordance with the 2012 CDFG staff report within the April to July survey schedule. Breeding burrowing owl surveys were conducted per the methods in the 1993 CDFG Staff Report on Burrowing Owl Mitigation (CDFG 1993) in suitable habitat areas for the underground trenching at the telecommunications routes (i.e., south of I-10 and the cities of Beaumont and Banning). The 1993 CDFG Staff Report on Burrowing Owl Mitigation calls for four breeding season survey visits on four separate days between April 15 and July 15.

Coastal California Gnatcatcher Assessment and Surveys

On March 21 and 22, 2012, a coastal California gnatcatcher habitat assessment was conducted by permitted biologists from a vehicle and on foot to assess potentially suitable California gnatcatcher habitat. Potentially suitable habitat was mapped within the existing WOD corridor and mapping was extended to cover a 500-foot buffer from the edge of the existing WOD corridor. Pedestrian surveys of these habitat areas were then surveyed over a two-day period by two permitted biologists to cover the entire study area within Segments 1, 2, and 3, which included Critical Habitat for this species. Focused surveys were conducted from March 27 through May 23, 2012 and again from March 18 through April 26, 2013. All surveys were conducted in accordance with the 1997 survey

protocol (USFWS 1997), which requires pedestrian surveys with playback of taped vocalizations during specified hours (6:00 a.m. to noon).

Riparian Bird Habitat Assessment and Surveys

A riparian bird habitat assessment was conducted on foot on April 17 and 18, 2012, to identify potentially suitable habitat for least Bell's vireo and southwestern willow flycatcher within the existing WOD corridor and a 500-foot buffer. Pedestrian focused riparian bird surveys then were conducted by permitted biologists walking through and along the edges of all suitable habitat following the least Bell's vireo protocol (USFWS 2001) and southwestern willow flycatcher protocol (USFWS 2010b) with eight least Bell's vireo surveys conducted at least 10 days apart from April 17 through July 24, 2012, and five concurrent southwestern willow flycatcher surveys within the specified survey periods from May 15 through July 13, 2012.

Swainson's Hawk and Golden Eagle Focused Surveys and General Raptor Surveys

Swainson's hawk focused surveys and general raptor surveys were conducted by Kidd Biological, Inc., in 2012. Aerial surveys via helicopter were conducted on March 14 and April 6, 2012, while ground surveys were conducted between March 23 and July 27, 2012. Aerial and ground surveys for nesting raptors were completed throughout the Project Study Area and within a half-mile buffer from the edge of each side of the existing WOD corridor in accordance with the Swainson's Hawk Technical Advisory Committee (SHTAC 2000) survey recommendations and the Swainson's Hawk survey protocols, impact avoidance, and minimization measures for renewable energy projects in the Antelope Valley of Los Angeles and Kern Counties, California (California Energy Commission [CEC] and CDFG 2010). Field methods included surveying during the approved survey windows (i.e., dates, times, and weather conditions) via on the ground vehicle surveys conducted per "windshield surveys" protocol to minimize disturbance.

Golden eagle focused surveys were conducted by Wildlife Research Institute, Inc. (WRI), in 2013. Aerial surveys via helicopter were conducted March 27 through March 29, and May 10, 2013. Golden eagle surveys were conducted throughout the Project Study Area and within an approximately 4 mile buffer from the edge of the existing WOD corridor. Due to the large territory size of golden eagles, and because the study also included inspection of known nest areas in the vicinity, the survey area extended substantially beyond the 4 mile spatial buffer to include suitable golden eagle habitat in parts of the Soboba Hills, San Jacinto Mountains, San Bernardino Mountains, and the Badlands of Moreno Valley. Surveys were conducted in accordance with the current USFWS *Interim Golden Eagle Inventory and Monitoring Protocols* (USFWS 2010c) and the subsequent *Draft Eagle Conservation Plan Guidance* (USFWS 2011). March surveys were scheduled to coincide with late courtship and/or egg-laying and focused on identifying any areas with suitable golden eagle nesting habitat (e.g., cliffs with flat ledges or shallow cavities) with possible nesting substrate (e.g., nest decorations or leafy green branches). The May survey focused on golden eagle nests found during the March surveys to record any reproductive efforts made by the eagles and count any possible chicks. Other significant wildlife observed was also noted.

Nest site and other location-specific data were documented using handheld GPS units. All active golden eagle nests were photographed using optically-stabilized zoom lenses. Some other raptor nests were also documented with GPS and photographs.

Small Mammal Habitat Assessment and Surveys

Habitat assessments were conducted in 2012 and 2013 prior to conducting small mammal trapping within the Project Study Area. Examination of aerial images to locate suitable habitat was followed up by ground visits to many areas to identify the most promising trapping sites for the target species. Protocol surveys consisted of five consecutive nights of trapping at each location. USFWS protocol states that trapping may be terminated if the target species is captured. Traps were usually arranged in one to several lines placed in the most appropriate microhabitats for the target species. Each trap was opened and baited at dusk, checked near mid-night, and checked and closed at dawn. All animals were identified and released unharmed where they were captured.

The 2012 effort involved 110 nights of trapping from March 4 through September 13 at 25 locations, for a total of 18,145 trap nights. A total of 60 nights and 9,785 trap nights were focused on Stephens' kangaroo rat (*Dipodomys stephensi*), 52 nights and 8,660 trap nights targeted the Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), and 18 nights and 3,175 trap nights were focused on the Palm Springs pocket mouse (*Perognathus longimembris bangsi*). Note that more than one species was targeted at some locations. In 2013, protocol trapping was conducted for 35 nights from April 15 through May 31 at 7 locations, for a total of 4,350 trap nights. All 35 nights and 4,350 trap nights were focused on Stephens' kangaroo rat, with 20 nights and 2,100 trap nights also targeting the Los Angeles pocket mouse.

Bat Habitat Suitability Assessment

A bat habitat suitability assessment was conducted in 2012 along the existing WOD corridor plus a 500-foot buffer. Potential bat roosting sites were initially identified by examining aerial imagery (e.g., Google and Bing online maps) for the presence of any mature trees, rock cliffs, boulders, and anthropogenic structures such as bridges, culverts, and buildings. In addition, LSA biologists noted the locations of any potential roosting and foraging habitat observed while conducting various wildlife and botanical surveys within the Project Study Area. On December 10, 2012, a site visit was conducted by a bat specialist to confirm the suitability of the locations identified on aerial maps or by biologists during previous surveys as containing roosting habitat, to more closely examine these potential roosting areas for presence of bat sign (e.g., guano or staining), and to determine if any other suitable sites are present within the 2012 Project Study Area. Due to access restrictions (e.g., private property or fencing), many of the observed structures could not be approached and examined for bats or sign of bats. Therefore, some potential roost sites in commercial and residential areas within the 500-foot buffer were not visited due to restrictions associated with private property.

Potential foraging habitat was assessed on the basis of vegetation composition, existence of adjacent foraging or roosting habitat, and the presence of a water source, while

potential day- and night-roosting sites were identified through the examination of mature or dead trees and anthropogenic structures such as culverts for suitable crevices and/or cavities that may be suitable for roosting, as well as any presence of bat sign (e.g., guano, urine staining, or vocalizations). Large trees within the study area that are suitable for foliage-roosting species were noted, but roosting activity at these locations could not be confirmed during the assessment due to the nature of this roosting behavior (these species tend to roost singly, beneath leaves, and may roost in a different location each night).

In 2013, a bat habitat suitability assessment was conducted in the additional identified disturbance areas added to the Project Study Area subsequent to the 2012 assessment. These additional areas included access roads, subtransmission lines, telecommunication lines, and staging areas, and were assessed using the methods described above. Site visits were conducted on April 3 and 4, 2013, by a bat specialist to more closely examine these potential roosting areas identified during review of aerial imagery or documented as potential roost sites by other biologists.

Drainage Assessment

The drainage assessment in the Project Study Area for 2012 surveys included the existing WOD corridor with a 200-foot buffer for assessing drainage features and a 500-foot buffer for mapping riparian vegetation. The Project Study Area for 2013 included areas previously not assessed during 2012 surveys, such as: telecommunication lines, subtransmission lines, staging areas, relocated portions of transmission line, as well as along all currently identified access roads intended for use within the Proposed Project. Survey areas included a 100-foot buffer around telecommunication lines, subtransmission lines, and staging areas; and a 200-foot or 250-foot buffer along access roads for both assessing drainage features and for mapping riparian vegetation. However, a drainage assessment was not conducted for the V-shaped subtransmission line in Segment 1 or for the two telecommunication lines within the developed (residential) area in the City of Banning within Segments 4 and 5 (Figure 4.4-1, Biological Project Study Area).

For the drainage assessment, the term drainage features was used to identify all land features signaling water flow patterns and includes both potentially jurisdictional defined drainage courses and non-jurisdictional features such as swales or erosional rills. Preliminary assessment of whether features were potentially jurisdictional or non-jurisdictional was conducted, as described below. Potentially jurisdictional defined drainage courses are henceforth referred to simply as drainages.

The drainage assessments along the proposed WOD corridor were conducted as pedestrian surveys between April 16 and September 20, 2012. A subsequent drainage assessment for the additional Project Study Area for 2013 was conducted between March 4 and May 20, 2013. Drainage assessment surveys for the western portion of the Reservation and the Alternative Project were conducted on May 16, 2013.

The drainage assessment consisted of a preliminary determination of the location of potentially jurisdictional waters and should not be considered a formal routine jurisdictional delineation. In the field, the drainage features were typically recorded with

average widths and depths for the entire drainage. A single line was drawn on an aerial photograph and then digitized to show the general centerline for each drainage feature, including very wide drainages. Thus, the exact drainage extent or area (polygon mapping) was not determined for all linear features as would be done for a routine jurisdictional delineation (Note, polygons were collected for ponded features, potential wetlands, significant areas of riparian vegetation, and other non-linear features).

Drainage features were typically assessed for characteristics such as width and vegetation observed in the field during pedestrian surveys and potential jurisdictional/non-jurisdictional status. All drainage characteristics were recorded on data sheets, locations marked on aerial field maps, and representative photographs taken. Aerial imagery was used to facilitate or augment the assessment of drainages that were extensive and/or difficult to access in the field due to access constraints, steep terrain, or for very wide features (e.g., for the San Gorgonio River areas in Segment 5). Aerial imagery was also used to assess potential connections to a Traditional Navigable Water by following the path of water flow for the drainage features that continued outside the Project Study Area; in this way, jurisdictional status was evaluated (i.e., drainages that appeared to connect to a Traditional Navigable Water were considered to be potentially subject to USACE jurisdiction).

Western Riverside County MSHCP Survey Areas

All suitable habitats within the WR-MSHCP portion of the Project Study Area were surveyed or species habitat noted per the WR-MSHCP guidelines, which include the Narrow Endemic Plant Species Survey Area (NEPSSA) and Criteria Area Species Survey Area (CASSA) plant species, burrowing owls, mammals, and riparian birds.

Coachella Valley MSHCP Survey Areas

All suitable habitats within the portions of the Project Study Area that fall within the boundaries of the CV-MSHCP were surveyed for specific species per the CV-MSHCP guidelines. These species include burrowing owl, desert tortoise, Coachella Valley milk-vetch, Palm Springs pocket mouse, flat-tailed horned lizard, giant sand-treader cricket, and Coachella Valley Jerusalem cricket. The overall provisions for the plan are subdivided according to specific resource conservation goals that have been organized according to geographic areas defined as Conservation Areas. These areas are identified as Core, Essential, or Other Conserved Habitat for special-status plant, invertebrate, amphibian, reptile, bird, and mammal species, Essential Ecological Process Areas, and Biological Corridors and Linkages. For each Conservation Area, Conservation Objectives and required measures are articulated for conserving Core Habitat for covered species, Essential Ecological Processes necessary to maintain habitat viability, Biological Corridors and Linkages as needed, and the less common Conserved Natural Communities.

4.4.3.2 Results

The results of the focused surveys and mapping efforts to inventory the biological resources in the Project Study Area, described above in Section 4.4.3.1, Methodology Used for the Biological Assessment, are summarized below and represented in part in Figure 4.4-3, Land Cover, and Figure 4.4-4, Special-Status Species Observations. A full description of results can be found in the BRTR (Appendix F).

Land Cover

Vegetation within the Project Study Area consists of several vegetation communities as classified for this report. Each community may comprise up to several alliances or stands with similar species, but with different compositions. Vegetation identified during the 2012 and 2013 plant surveys was mapped at the alliance/stand and association level (refer to the Appendix F, BRTR, for mapping at the alliance/stand and association level). The alliances and stands that make up each vegetation community and the acreage of each vegetation community located within the Project Study Area are listed below in Table 4.4-3, Land Cover Types in the Project Study Area.

Forbland/Grassland

The Forbland/Grassland habitat group consists of herbaceous, non-woody plant communities and is dominated by nonnative annual forbs and grasses. Although forbland is dominated by nonnative species, it provides suitable habitat for native special-status plant and animal species. Therefore, it is included in this discussion as a “natural” community.

Forbland and grassland are scattered throughout the Project Study Area and are often encountered in transitional areas associated with some type of disturbance, such as development, wildfire, or livestock grazing. Dominant plant species found within the Forbland/Grassland habitat include fiddleneck (*Amsinckia* spp.), common sandaster (*Corethrogyne filaginifolia*), California croton (*Croton californicus*), short-pod mustard (*Hirschfeldia incana*), chess grasses (*Bromus* spp.), and Mexican rush (*Juncus mexicanus*).

Table 4.4-3: Land Cover Types in the Project Study Area

Vegetation Community Land Cover Type	Alliances	Acreage within the Project Study Area
Grassland/Forbland	<i>Bromus</i> Semi-Natural Herbaceous Stands (6 stand types) <i>Juncus mexicanus</i> Herbaceous Alliance <i>Amsinckia</i> Herbaceous Alliance (2 associations) California Herblands (3 associations) <i>Corethrogyne filaginifolia</i> Herbaceous Alliance <i>Croton californicus</i> Herbaceous Alliance <i>Brassica</i> and Other Mustards Semi-Natural Herbaceous Stands (2 stand types)	2,490.1

Table 4.4-3: Land Cover Types in the Project Study Area

Vegetation Community Land Cover Type	Alliances	Acreage within the Project Study Area
Chaparral	<i>Adenostoma fasciculatum</i> Shrubland Alliance (2 associations) <i>Adenostoma fasciculatum/Artemisia californica</i> Shrubland Alliance (8 associations) <i>Adenostoma fasciculatum/Ceanothus perplexans</i> Shrubland Alliance (3 associations) <i>Adenostoma fasciculatum/Eriogonum fasciculatum</i> Shrubland Alliance <i>Adenostoma fasciculatum/Salvia mellifera</i> Shrubland Alliance	576.8
Desert Scrub	<i>Ambrosia dumosa</i> Shrubland Alliance (2 associations) <i>Encelia farinosa</i> Shrubland Alliance (16 associations), in part <i>Encelia farinosa-Ephedra</i> Shrubland Alliance (3 associations) <i>Larrea tridentata</i> Shrubland Alliance (7 associations) <i>Senegalia greggii</i> Shrubland Alliance (3 associations) <i>Stillingia linearis</i> Shrubland Alliance <i>Thamnosma montana</i> Shrubland Alliance <i>Yucca schidigera</i> Shrubland Alliance	3,345.2
Coastal Sage Scrub	<i>Artemisia californica</i> Shrubland Alliance (2 associations) <i>Artemisia californica-Salvia mellifera</i> Shrubland Alliance <i>Ceanothus perplexans</i> Shrubland Alliance <i>Encelia farinosa</i> Shrubland Alliance (16 associations), in part <i>Encelia farinosa-Eriogonum fasciculatum</i> Shrubland Alliance (2 associations) <i>Ericameria palmeri</i> Shrubland Alliance <i>Eriogonum fasciculatum</i> Shrubland Alliance (5 associations) <i>Keckiella antirrhinoides</i> Shrubland Alliance (3 associations) <i>Rhamnuc crocea</i> Shrubland Alliance (2 associations) <i>Rhus ovata</i> Shrubland Alliance (3 associations) <i>Rhus trilobata</i> Shrubland Alliance <i>Toxicodendron diversilobum</i> Shrubland Alliance	1,373.9
Coast Live Oak Woodland	<i>Quercus agrifolia</i> Woodland Alliance	49.0
Riparian Woodland	<i>Chilopsis linearis</i> Riparian Woodland Alliance <i>Populus fremontii</i> Forest Alliance <i>Salix laevigata</i> Woodland Alliance	145.1
Alluvial Scrub	<i>Ericameria paniculata</i> Shrubland Alliance (2 associations) <i>Lepidospartum squamatum</i> Shrubland Alliance (3 associations)	386.0
Agriculture	Active horticulture/agriculture Fallow agricultural field	441.2

Table 4.4-3: Land Cover Types in the Project Study Area

Vegetation Community Land Cover Type	Alliances	Acreage within the Project Study Area
Developed/Disturbed	Developed Developed – Parkland Developed – Rural Residence Developed – Urban Residential Developed/disturbed/Disturbed	3,432.4
Open Water		10.3

Sparrow and raptor species were common wildlife species found in the Forbland/Grassland habitat type, which includes habitat in much of the San Timoteo Badlands (Segments 2 and 3) and land west of the City of Beaumont (Segments 1 through 4). Frequently detected species during 2011–2013 surveys in this low-growing habitat included foraging red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), western meadowlark (*Sturnella neglecta*), lark sparrow (*Chondestes grammacus*), California ground squirrel (*Spermophilus beecheyi*), Audubon’s cottontail (*Sylvilagus audubonii*), deer mouse (*Peromyscus maniculatus*), and coyote (*Canis latrans*).

Chaparral

The Chaparral habitat group within the Project Study Area is dominated by dense evergreen shrubs with sclerophyllous (small and leathery) leaves that can form impassable thickets measuring 4 to 8 feet in height (Rundel and Gustafson 2005). It is most common in Segments 2, 3, and 4 and occurs mainly on north-facing slopes and hilltops. Fire and invasive species affect portions of this community. Dominant plant species found within the Chaparral habitat include chamise (*Adenostoma fasciculatum*), California sagebrush (*Artemisia californica*), cupped leaf ceanothus (*Ceanothus greggiivar.perplexans*), California buckwheat (*Eriogonum fasciculatum*), and black sage (*Salvia mellifera*).

Avian species were common in the Chaparral habitat types, which include portions of the San Timoteo Badlands (Segments 2 and 3) and the hills north of the cities of Beaumont and Banning (Segments 1 through 5). Frequently detected species during 2011–2013 surveys in chaparral included western toad (*Anaxyrus boreas*), California quail (*Callipepla californica*), Anna’s hummingbird (*Calypte anna*), wrentit (*Chamaea fasciata*), spotted towhee (*Pipilo maculatus*), big-eared woodrat (*Neotoma macrotis*), striped skunk (*Mephitis mephitis*), and mule deer (*Odocoileus hemionus*).

Desert Scrub

The Desert Scrub habitat group consists of a mosaic of several habitat types, characterized by openly spaced, low-growing shrubs adapted to very arid conditions. Specifically, the habitat types identified in the Project Study Area are Catclaw Scrub, Creosote Bush Scrub, Desert Brittlebush Scrub, Mojave Yucca Scrub, and White Bursage

Scrub habitats. These habitats have similar species composition within them, but are differentiated from each other based on the dominant plant species found within each.

Some of the dominant plant species found within the Desert Scrub habitat group in the Project Study Area include white bursage (*Ambrosia dumosa*), brittlebush (*Encelia farinosa*), catclaw (*Acacia greggii*), Mormon tea (*Ephedraspp.*), Mojave rabbitbrush (*Ericameria paniculata*), creosote bush (*Larrea tridentata*), narrow-leaved stillingia (*Stillingia linearifolia*), turpentine broom (*Thamnosma montana*), and Mohave yucca (*Yucca schidigera*).

Wildlife species were numerous in the Desert Scrub, which includes most of the vegetation east of the City of Banning (Segment 5) including the San Gorgonio River area (Segment 5) and Whitewater River area (Segment 6). Frequently detected species during 2011–2013 surveys in desert scrub included common side-blotched lizard (*Uta stansburiana*), common raven (*Corvus corax*), cactus wren (*Campylorynchus brunneicapillus*), long-tailed pocket mouse (*Chaetodipus formosus*), and desert woodrat (*Neotoma lepida*).

Coastal Sage Scrub

Coastal Sage Scrub is generally a patchy vegetation community found in diverse habitat mosaics and is dominated by a suite of shrub species with low moisture content. Shrub cover is dense and often continuous, while other areas are sparse due to rocky outcrops, preventing dense growth. Steep, xeric slopes and quickly draining soils characterize the Coastal Sage Scrub community. Annual herbs, including weedy grasses and forbs and native wildflowers, are common in openings and disturbed areas. Coastal sage scrub communities are generally of conservation concern, and one alliance (*Keckiella antirrhinoides* Shrubland Alliance) of the scrub community in the Project Study Area is of conservation concern and is rated G3/S3 by the CDFW, denoting that it is considered vulnerable and at moderate risk of extinction.

Coastal Sage Scrub is a broad category that refers to several different kinds of scrub communities that are dominated by drought-deciduous shrubs. Many of these communities share similar plant species with slight variations due to climatic influences (e.g., the direction the slope is facing). Dominant plant species found within Coastal Sage Scrub include California sagebrush, black sage, ceanothus (*Ceanothus* sp.), brittlebush, California buckwheat, Palmer's goldenbush (*Ericameria palmeri*), snapdragon penstemon (*Keckiella breviflora*), scalebroom (*Lepidospartum squamatum*), redberry (*Rhamnus crocea*), sugar bush (*Rhus ovata*), fragrant sumac (*Rhus aromatica*), and poison oak (*Toxicodendron diversilobum*).

Wildlife species were common in the Coastal Sage Scrub habitat types, which include portions of the San Timoteo Badlands, especially in the westernmost section (Segments 2 and 3) and the hills west of the City of Beaumont (Segments 2 through 4). Frequently detected species during 2011 through 2013 surveys in Coastal Sage Scrub included western fence lizard (*Sceloporus occidentalis*), common side-blotched lizard, Anna's hummingbird, western scrub-jay (*Aphelocoma californica*), California towhee (*Melospiza*

crissalis), white-crowned sparrow (*Zonotrichia leucophrys*), big-eared woodrat, Audubon's cottontail, coyote, and mule deer.

Coast Live Oak Woodland

The Coast Live Oak Woodland vegetation community is dominated by coast live oaks (*Quercus agrifolia*). It is rare in the Project Study Area, occurring predominantly in or adjacent to drainages and slopes. The understory consists predominantly of grasses and forbs similar to those vegetation communities.

Wildlife species overall were most numerous and concentrated in the Riparian Woodland dominated by willows or Oak Woodland habitat types. San Timoteo Creek and tributaries (Segment 4), the unnamed canyon north of Theodore Street in the City of Banning (Segment 4), and the San Gorgonio River (Segment 5) are vegetated with one or both of these habitat types. Frequently detected species during 2011 through 2013 surveys in woodland areas included Cooper's hawk (*Accipiter cooperii*), acorn woodpecker (*Melanerpes formicivorus*), oak titmouse (*Baeolophus inornatus*), black phoebe (*Sayornis nigricans*), common yellowthroat (*Geothlypis trichas*), song sparrow (*Melospiza melodia*), and big-eared woodrat.

Riparian Woodland

Riparian woodlands present within the Project Study Area include woodlands dominated by desert willow (*Chilopsis linearis*), Fremont cottonwood (*Populus fremontii*), or red willow (*Salix laevigata*). Riparian woodland communities are generally of conservation concern, and one (*Salix laevigata* Woodland Alliance) alliance of the riparian woodland community in the Project Study Area is of notable conservation concern and is rated G3/S3 by the CDFW, denoting that it is considered vulnerable and at moderate risk of extinction. Riparian woodlands can be found along drainage channels where surface or subsurface water remains throughout the year.

Common wildlife species found in the Riparian Woodland vegetation community were similar to those found in the Oak Woodland community. Frequently detected species during 2011 through 2013 surveys in woodland areas included Cooper's hawk, black phoebe, common yellowthroat, song sparrow, and big-eared woodrat.

Alluvial Scrub

The Alluvial Scrub vegetation community consists of a mosaic of several habitat types, characterized by openly spaced, low-growing shrubs adapted to intermittent or rarely flooded areas along washes, streams, and fans. In the Project Study Area, the dominant plant species found include mule fat (*Baccharis salicifolia*), scalebroom, cheesebush (*Ambrosia salsola*), and non-native grasses and forbs. Alluvial scrub communities are generally of conservation concern and two alliances (*Ericameria paniculata* Shrubland Alliance and *Lepidospartum squamatum* Shrubland Alliance) of the alluvial scrub community in the Project Study Area are of notable conservation concern and are rated G3/S3 by the CDFW, denoting that they are considered vulnerable and at moderate risk of extinction.

Common wildlife species found in the Alluvial Scrub vegetation community were the same as those found in the Desert Scrub and Coastal Sage Scrub communities.

Agricultural Land

Agricultural Land is primarily composed of active or recently active crop fields and groves/orchards. These areas contain both purposely planted species and undesired “volunteer” species, both of which are almost always nonnative species. Commonly present are nonnative annual plants known to be promoted by mechanical disturbances to the soil; however, special-status plant and animal species that are tolerant of nonnative habitats may also occur. Although Agricultural Land is dominated by nonnative species, it provides suitable habitat for some native special-status plant and animal species. Therefore, it is included in this discussion as a “natural” community.

Sparrow and raptor species were the most evident wildlife species found in the agricultural vegetation community, which includes habitat in San Bernardino County (Segment 1) and land west of the City of Beaumont (Segment 4). Frequently detected species during 2011 through 2013 surveys associated with orchard and other cultivated areas (oranges and feed crops) and ornamental vegetation included red-tailed hawk, American kestrel, house finch (*Haemorhous mexicanus*), California ground squirrel, deer mouse, and coyote.

Developed/Disturbed

This land cover consists of developed areas such as paved roads, ornamental vegetation, and commercial and residential properties. It has limited value, but some areas provide habitat for urban-adapted species, such as house finch, black phoebe, Cooper’s hawk, and Audubon’s cottontail.

Recent Fires

Several recent fires occurred after the biological resource surveys and the vegetation mapping were conducted; thereby modifying the Project Study Area and immediate vicinity. According to the California Department of Forestry and Fire (CALFIRE) and Google maps (Google 2013), there have been three recent fires within 1 mile of or within the Project Study Area (CALFIRE 2012).

One fire burned within Segment 4 of the Project Study Area. The Summit Fire began north of the City of Banning on the afternoon of May 1, 2013, and was contained on the evening of May 4, 2013. The fire burned 3,166 acres in the vicinity of Mias Canyon and Bluff Road and the fire’s southwest edge crossed into the Project Study Area (Banning-Beaumont Patch, May 8, 2013).

Two fires burned land cover within 1 mile of the Project Study Area. The Viper Fire started near Viper Road along the southern edge of San Timoteo Canyon Road just west of Redlands Boulevard and north of the City of Moreno Valley. The 42-acre fire began on June 8, 2013, and was contained the same day. The small fire was centrally located in Segment 3 within 500 feet of the existing WOD corridor. The Redlands Fire started just

west of Redlands Boulevard south of San Timoteo Canyon Road and north of the City of Moreno Valley. The 150-acre fire began on July 16, 2013, and was contained the next day. The small fire was centrally located in Segment 3 within 0.25 mile of the existing WOD corridor. For purposes of this assessment, it is assumed that the burned areas would recover to approximately the pre-fire condition as represented by the vegetation mapping shown in Figure 4.4-3, Land Cover.

Invasive Plant Species

Approximately 71 percent of the plant species found in the Project Study Area are native while 29 percent are nonnative (BRC 2013). Forty of the nonnative species found in the Project Study Area are considered invasive (BRC 2013), meaning that they are nonnative species that can spread into wildlands and displace native species, hybridize with native species, alter biological communities, or alter ecosystem processes (Cal-IPC 2013).

The invasive species found within the Project Study Area are most notably within Segments 2, 3, and 4 where overgrazing and other disturbance have reduced the ability of native species to compete with the invasive species. The vegetation communities in these segments are generally dominated by nonnative annuals, predominantly species from the grass family (*Bromus*) and the mustard family (*Brassica*). Although natural vegetation in other portions of the Project Study Area is generally less disturbed and has a greater proportion of native vegetative cover, invasive species are common throughout the Project Study Area. The Project Study Area does not have any wildland areas that are largely free from invasive species.

The California Invasive Plant Council (Cal-IPC) Invasive Plant Inventory identifies nonnative plants that are serious problems in wildlands, and categorizes them as High, Moderate, or Limited based on the species' negative ecological impact in California. Plants categorized as High have severe ecological impacts. Plants categorized as Moderate have substantial and apparent, but not severe, ecological impacts. Plants categorized as Limited are invasive, but their ecological impacts are minor on a statewide level. Of the 40 invasive plant species observed within the Project Study Area, 8 species are categorized as High, 18 are categorized as Moderate, and 14 are categorized as Limited. Species observed within the Project Study Area that are categorized as High are giant reed (*Arundo donax*), Sahara mustard (*Brassica tournefortii*), red brome (*Bromus madritensis* ssp. *rubens*), cheat grass (*Bromus tectorum*), sweet fennel (*Foeniculum vulgare*), Himalayan blackberry (*Rubus armeniacus*), Spanish broom (*Spartium junceum*), and Mediterranean tamarisk (*Tamarix ramosissima*). Of these, red brome, cheat grass, and Sahara mustard were observed in grassland and scrub areas throughout the Project Study Area. The remaining species were observed in isolated patches.

These species have long been present in the vicinity and are found throughout the region; therefore, new invasive plants are unlikely to be introduced as a result of the Proposed Project activities. Invasive species may spread locally, however, in response to Proposed Project-related disturbance. Where predominantly native vegetation is disturbed, native species should be used for restoration. Of note, the CV-MSHCP and the WR-MSHCP both list invasive plants that should be avoided in plantings near conserved habitat.

Descriptions and location information for invasive species in the Project Study Area are provided in the BRTR (Appendix F) and its appendices.

Special-Status Plants

The 2012 and 2013 plant surveys identified 393 species, subspecies, or varieties of plants. Of the plants found in the Project Study Area, 71 percent were native, while 29 percent were nonnative. Table 4.4-4, Special-Status Plant Species Potentially Occurring or Known to Occur, includes the status and habitat descriptions of special-status plant species known from or potentially occurring in the Proposed Project vicinity. For species not observed during surveys, the potential for their occurrence was determined by biologists knowledgeable about each species based on the species' habitat requirements, range (including elevation), and previously recorded observations. The following list describes the expected occurrence of special-status plant species:

- **Observed:** Species documented during biological surveys either conducted previously for SCE within the immediate vicinity of the Project Study Area or from surveys conducted for the Proposed Project in late 2011 through mid-2013. Observations from previous studies (i.e., prior to 2011) are not included in Figure 4.4-4, Special-Status Species Observations.
- **High Potential:** Species identified in the literature search or known to occur in the region and suitable habitat is present within the Project Study Area. These species are generally common and/or widespread in the Project Study Area and vicinity.
- **Moderate Potential:** Species identified in the literature search or known to occur in the region, suitable habitat is present within the Project Study Area. These species are generally less common and/or widespread than those considered with a High Potential in the Project Study Area and vicinity.
- **Low Potential:** Species identified in the literature search or known to occur in the region, but the Project Study Area is outside of the species known range or elevation or habitat is generally unsuitable.
- **Not Expected:** Species identified in the literature search or known to occur in the region, but which are absent from the Project Study Area because the Project Study Area is outside of their known range or elevation, suitable habitat is lacking in the Project Study Area, or the species was not observed during focused surveys and would have been conspicuous (e.g., perennial plant species).

The following special-status plant species are not expected to occur within the Project Study Area. These are discussed in more detail in the BRTR (Appendix F).

- Pygmy lotus (*Acemison (Lotus) haydonii*)
- Munz's onion (*Allium munzii*)
- Singlewhorl burrobush (*Ambrosia monogyra*)
- San Diego ambrosia (*Ambrosia pumila*)
- Marsh sandwort (*Arenaria paludicola*)

- Horn's milk-vetch (*Astragalus hornii*)
- Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*)
- Jaeger's milk-vetch (*Astragalus pachypus* var. *jaegeri*)
- Triple-ribbed milk-vetch (*Astragalus tricarinatus*)
- San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*)
- California ayenia (*Ayenia compacta*)
- Nevin's barberry (*Berberis nevinii*)
- Thread-leaved brodiaea (*Brodiaea filifolia*)
- Round-leaved filaree (*California macrophylla* (*Erodium macrophyllum*))
- Bristly sedge (*Carex comosa*)
- Payson's jewelflower (*Caulanthus simulans*)
- Arizona spurge (*Chamaesyce arizonica*)
- Flat-seeded spurge (*Chamaesyce platysperma*)
- Long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*)
- Peruvian dodder (*Cuscuta obtusifolia* var. *glandulosa*)
- Mojave tarplant (*Deinandra mohavensis*)
- Slender-horned spineflower (*Dodecahema leptoceras*)
- Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*)
- Harwood's eriastrum (*Eriastrum harwoodii*)
- Vanishing wild buckwheat (*Eriogonum evanidum*)
- Cliff spurge (*Euphorbia misera*)
- California bedstraw (*Galium californicum* ssp. *primum*)
- Los Angeles sunflower (*Helianthus nuttallii* ssp. *parishii*)
- Mesa horkelia (*Horkelia cuneata* ssp. *puberula*)
- California satintail (*Imperata brevifolia*)
- Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*)
- Orcutt's linanthus (*Linanthus orcuttii*)
- Parish's desert-thorn (*Lycium parishii*)
- Hall's monardella (*Monardella macrantha* ssp. *hallii*)
- Pringle's monardella (*Monardella pringlei*)
- Mud nama (*Nama stenocarpum*)
- Gambel's water cress (*Nasturtium gambelii*)
- Slender woolly-heads (*Nemacaulis denudata* var. *gracilis*)

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- Desert beardtongue (*Penstemon pseudospectabilis* ssp. *pseudospectabilis*)
- Parish's gooseberry (*Ribes divericatum* var. *parishii*)
- Latimer's woodland gilia (*Saltugilia latimeri*)
- Parish's checkerbloom (*Sidalcea hickmanii* ssp. *parishii*)
- Salt spring checkerbloom (*Sidalcea neomexicana*)
- Prairie wedge grass (*Sphenopholis obtusata*)
- Purple stemodia (*Stemodia durantifolia*)
- Laguna Mountains jewel-flower (*Streptanthus bernardinus*)
- Southern jewel-flower (*Streptanthus campestris*)
- Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*)
- Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*)
- Mecca aster (*Xylorhiza cognata*)

Figure 4.4-4, Special-Status Species Observations, shows the locations where special-status plant species were observed during surveys conducted in 2012 and 2013. A copy of the Botanical Resources of the West of Devers Project report is appended to the BRTR (Appendix F).

Table 4.4-4: Special-Status Plant Species Potentially Occurring or Known to Occur

Species	Status	Habitat and Distribution	Blooms	Occurrence Probability
<i>Abronia villosa</i> var. <i>aurita</i> Chaparral sand-verbena	US: – CA: 1B BLM: S MSHCP: –	Sandy areas in chaparral and coastal sage scrub and improbably in desert dunes or other sandy areas, below 5,300 feet elevation. In California, reported from Riverside, San Diego, Imperial, Los Angeles, and Ventura Counties. Believed extirpated from Orange County. Also reported from Arizona and Mexico (Baja California). Plants reported from desert communities are likely misidentified.	Blooms mostly March through August (annual or perennial herb)	Observed. Observed during surveys in 2012 and 2013 (BRC 2013).
<i>Allium marvinii</i> Yucaipa onion	US: – CA: 1B BLM: S MSHCP: WRS	Openings in clay soils in chaparral. Known only from the Yucaipa and Beaumont areas of the San Bernardino Mountains; 2,500 to 3,500 feet elevation.	Blooms April through May (perennial herb)	Observed. Observed during surveys in 2012 and 2013 (BRC 2013).
<i>Calochortus plummerae</i> Plummer's mariposa-lily	US: – CA: 4 BLM: S MSHCP: WRP	Sandy or rocky sites of (usually) granitic or alluvial material in valley and foothill grassland, coastal scrub, chaparral, cismontane woodland, and lower montane coniferous forest at 300 to 5,600 feet elevation. Known from the Santa Monica Mountains to San Jacinto Mountains in Riverside, San Bernardino, Orange, Los Angeles, and Ventura Counties, California. In the western Riverside County area, this species is known from the foothills of the San Bernardino Mountains, northeastern Santa Ana Mountains, Box Springs Mountains, and from the Lake Skinner area (<i>The Vascular Plants of Western Riverside County</i> , California. F.M. Roberts et al., 2004).	Blooms May through July (perennial herb)	Observed. Found in clay deposits near El Casco (SCE 2007). <i>Calochortus</i> observed during surveys may have been this species (BRC 2013).
<i>Centromadia pungens</i> ssp. <i>laevis</i> Smooth tarplant	US: – CA: 1B BLM: S MSHCP: WRS	Alkaline areas in chenopod scrub, meadows, playas, riparian woodland, valley and foothill grassland below 1,600 feet elevation. Known from Riverside and San Bernardino Counties, extirpated from San Diego County.	Blooms April through November (annual herb)	Observed. Found along San Timoteo Creek near El Casco Substation within the Project Study Area (Aspen 2007).
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	US: – CA: 1B BLM: S MSHCP: WRP	Sandy or rocky soils in chaparral, coastal scrub, or woodlands at 100 to 5,600 feet elevation. Known only from Los Angeles, Riverside, and San Bernardino Counties.	April through June (annual herb)	Observed. Found within the Reservation (BRC 2003; LSA 2010) and other desert portions of the Project Study Area (GANDA 2011).

Table 4.4-4: Special-Status Plant Species Potentially Occurring or Known to Occur

Species	Status	Habitat and Distribution	Blooms	Occurrence Probability
<i>Chorizanthe xanti</i> var. <i>leucotheca</i> White-bracted spineflower	US: – CA: 1B BLM: S MSHCP: –	Sandy to gravelly places, generally in Mojave desert scrub and pinyon and juniper woodland at 900 to 4,000 feet elevation. Reported from Los Angeles, Riverside, and San Bernardino Counties (<i>The Vascular Plants of Western Riverside County, California</i> . F.M. Roberts et al., 2004). Mostly localized in the eastern San Bernardino Mountains of San Bernardino County and on the eastern slopes of the San Jacinto Mountains in Riverside County.	April through June (annual herb)	Observed. Near Cabazon and Whitewater River (BRC 2003), within the Reservation (LSA 2010), between Banning and Whitewater (GANDA 2011), and (BRC 2013).
<i>Juglans californica</i> var. <i>californica</i> Southern California black walnut	US: – CA: 4 BLM: – MSHCP: WRC	Found in alluvial soils, in chaparral, cismontane woodland, and coastal scrub from 160 to 3,000 feet elevation. Threatened by urbanization and grazing, non-native plants, and possibly by lack of natural reproduction.	Blooms March through August (perennial deciduous tree)	Moderate. Species is fairly common in project vicinity though no individuals were identified during focused surveys.
<i>Linanthus maculatus</i> (<i>Gilia maculata</i>) Little San Bernardino Mountains linanthus	US: – CA: 1B BLM: S MSHCP: CVC	Loose, well-aerated sand on wash-margin benches with few or no competing species and void of large shrubs or trees, in areas of desert dune, desert scrub, and Joshua tree woodland at 600 to 6,800 feet elevation. Loosely associated shrubs include creosote bush (<i>Larrea tridentata</i>), brittle bush (<i>Encelia farinosa</i>), white bursage (<i>Ambrosia dumosa</i>), cheesebush (<i>Hymenoclea salsola</i>) and desert catalpa (<i>Chilopsis linearis</i>). Not found in loose sands away from washes, or in dense stands of weedy annuals. Known only from Riverside and San Bernardino Counties. Known only from edges of washes associated with the San Bernardino Mountains (north and east sides), the Little San Bernardino Mountains, and the northern part of the Coachella Valley.	Blooms March through May (annual herb)	Moderate. Although not observed during focused surveys, about 200 individuals of this small plant were observed in 1998 (CNDDDB #3) at the east edge of the Whitewater River just north of I-10, which may be within the Project Study Area. Even if individuals are not present, a seed bank likely persists in or near the Project Study Area.
<i>Mentzelia tricuspis</i> Spiny-hair blazing star	US: – CA: 2 BLM: – MSHCP: –	Inhabits sandy, gravelly slopes and washes, and around Mojavean desert scrub, from 500 to 4,200 feet. Known from fewer than twenty extant occurrences. Occurrences from Riverside County need quads and verification. Possibly threatened by renewable energy development.	Blooms March through May (annual herb)	Observed. This species was observed in the Project Study Area during surveys conducted in 2013 (BRC 2013).
<i>Quercus engelmannii</i> Engelmann oak	US: – CA: 4 BLM: – MSHCP: WRC	Chaparral, woodland, and grassland, from 400 to 4,300 feet elevation. Known from Los Angeles, Orange, Riverside, and San Diego Counties and from northern Baja California.	Year-round	Observed. Observed during survey in 2012 (BRC 2013).
<i>Selaginella eremophila</i> Desert spike-moss	US: – CA: 2 BLM: – MSHCP: –	Shaded sites in gravelly soils and among rocks or in crevices from 700 to 3,000 (8,000?) feet elevation in Sonoran desert scrub.	Reproductive mostly in June (perennial herb)	Observed. Observed during survey in 2012 (BRC 2013)

Table 4.4-4: Special-Status Plant Species Potentially Occurring or Known to Occur

Species	Status	Habitat and Distribution	Blooms	Occurrence Probability
<i>Symphytotrichum defoliatum</i> (<i>Aster defoliatum</i>) San Bernardino aster	US: – CA: 1B BLM: S MSHCP: –	Vernally wet sites (such as ditches, streams, and springs) in many plant communities below 6,700 feet elevation. In California, known from Ventura, Kern, San Bernardino, Los Angeles, Orange, Riverside, and San Diego Counties. May also occur in San Luis Obispo County. In the western Riverside County area, this species is scarce, and documented only from Temescal and San Timoteo Canyons (<i>The Vascular Plants of Western Riverside County, California</i> . F.M. Roberts et al., 2004).	Blooms July through November (perennial herb)	Low. Not observed during focused surveys, but documented from “El Casco, San Timoteo Canyon” in 1951 (CNDDDB #24).

* Probability determined by BioResource Consultants, Inc. (2012)

US: Federal Classifications

FE: Listed as Endangered.

FT: Listed as Threatened.

CA: State Classifications

SE: State-listed as Endangered.

ST: State-listed as Threatened.

SR: State-listed as Rare.

1A: California Rare Plant Rank** 1A – presumed extinct in California.

1B: California Rare Plant Rank** 1B – rare, threatened or endangered in California and elsewhere.

2: California Rare Plant Rank** 2 – rare, threatened or endangered in California, but more common elsewhere.

3: California Rare Plant Rank** 3 – a review list of plants about which more information is needed.

4: California Rare Plant Rank** 4 – a watch list of plants of limited distribution.

**California Rare Plant Ranks are assigned by a committee of government and non-governmental experts and are not official State designations of rarity status.

BLM: BLM Classification for California

S: BLM Sensitive Species

MSHCP: Multiple Species Habitat Conservation Plan

WRC: Western Riverside County MSHCP Species: covered under the MSHCP

WRS: Western Riverside County MSHCP Species: surveys are required within indicated habitats and/or survey areas; covered under the MSHCP

WRP: Western Riverside County MSHCP Species: will be adequately conserved when specified requirements are met; covered under the MSHCP

CVC: Coachella Valley MSHCP Species: covered under the MSHCP

Federally Listed Plant Species

None of the special-status plant species described in Table 4.4-4, Special-Status Plant Species Potentially Occurring or Known to Occur, is federally listed as endangered, threatened, or a candidate species under FESA. However, a portion of the Project Study Area is within federally designated Critical Habitat for Coachella Valley milk-vetch.

Coachella Valley Milk-vetch. Coachella Valley milk-vetch is a federally listed endangered species, a BLM Sensitive Species, and is a covered species under the CV-MSHCP. This milk-vetch is an 8 to 12-inch tall winter annual or short-lived perennial. It occurs in windblown or alluvial sand dunes at an elevation range of 196 to 2,148 feet amsl. It is known only from the Coachella Valley between Cabazon and Indio in Riverside County.

Coachella Valley milk-vetch was not observed during surveys conducted in 2012 and 2013. The nearest documented occurrences were in 1904 (CNDDDB No. 54) at “Banning” and in recent years (CNDDDB occurrence Nos. 15, 49, and 50) along Highway 111 and the adjacent foothills about 1 mile south of the Project Study Area. It is not known from portions of the Whitewater River or other washes within or upstream of the Project Study Area. Although the Project Study Area intersects designated critical habitat for this species, the portion within the Project Study Area does not contain wind-blown sands or dunes, and therefore does not contain suitable habitat; thus, Coachella Valley milk-vetch is not expected to occur although it is impossible to completely rule out the possibility that this species could appear in the area in the future. See Figure 4.4-2, Land Management and Critical Habitat Areas, for the locations of designated Critical Habitats.

Table 4.4-5, Coachella Valley Milk-Vetch Critical Habitat in the Project Study Area by Vegetation Community, shows the amount of designated critical habitat in the Project Study Area by vegetation community.

Table 4.4-5: Coachella Valley Milk-Vetch Critical Habitat in the Project Study Area by Vegetation Community

Vegetation Community	Acreage within the Project Study Area
Desert Scrub	32.4
Alluvial Scrub	47.2
Developed/Disturbed	23.9
Total Critical Habitat	103.5

State Listed Plant Species

None of the special-status plant species described in Table 4.4-4, Special-Status Plant Species Potentially Occurring or Known to Occur, is State-listed as endangered.

Non-Listed Plant Species of Interest

Focused surveys for special-status plant species were conducted in 2012 and 2013. As indicated in Table 4.4-4, Special-Status Plant Species Potentially Occurring or Known to

Occur, the following special-status plant species were observed during biological surveys either conducted previously for SCE within the immediate vicinity of the Project Study Area or from focused surveys conducted for the Proposed Project, most recently in 2012 and 2013:

- Chaparral sand-verbena (*Abronia villosa* var. *aurita*);
- Desert spike-moss (*Selaginella eremophila*);
- Engelmann oak (*Quercus engelmannii*);
- Parry's spineflower (*Chorizanthe parryi* var. *parryi*);
- Plummer's mariposa lily (*Calochortus plummerae*);
- Smooth tarplant (*Centromadia pungens* ssp. *laevis*);
- Spiny-hair blazing star (*Mentzelia tricuspis*);
- White-bracted (Riverside) spineflower (*Chorizanthe xanti* var. *leucotheca*); and
- Yucaipa onion (*Allium marvinii*).

Some of these special-status species occurrences appeared to be within the burn area boundary of the recent Summit Fire in Banning (Segment 4) including the Yucaipa onion and Engelmann oak.

Figure 4.4-4, Special-Status Species Observations, shows the locations of special-status plant species observed in the Project Study Area. The Botanical Resources of the West of Devers Project report is appended to the BRTR (Appendix F).

Special-Status Wildlife

Moderately to highly disturbed habitats characterize most of the Project Study Area, although there are some relatively undisturbed expanses of native vegetation as shown in Figure 4.4-3, Land Cover. Therefore, most wildlife species occurring within the Project Study Area are common and consistent with those expected within the various habitat types. The following list describes the expected occurrence of special-status wildlife species.

- **Observed:** Species documented during biological surveys either conducted previously for SCE within the immediate vicinity of the Project Study Area or from surveys conducted for the Proposed Project in late 2011 through mid-2013. Observations from previous studies (i.e., prior to 2011) are not included in Figure 4.4-4, Special-Status Species Observations.
- **High Potential:** Species identified in the literature search or known to occur in the region, suitable habitat is present within the Project Study Area. These species are generally common and/or widespread in the Project Study Area and vicinity.
- **Moderate Potential:** Species identified in the literature search or known to occur in the region, suitable habitat is present within the Project Study Area. These species are

generally less common and/or widespread than those considered with a High Potential in the Project Study Area and vicinity.

- **Low:** Species identified in the literature search or known to occur in the region, but the Project Study Area is outside of the species' known range or elevation, or habitat is generally unsuitable.
- **Not Expected:** Species identified in the literature search or are known to occur in the region, but are absent from the Project Study Area because the Project Study Area is outside of their known range and/or suitable habitat is lacking in the Project Study Area.

During the 2011 through 2013 surveys, 14 conspicuous invertebrate species, 1 fish species, 5 amphibian species, 20 reptile species, 124 bird species, and 38 mammal species were recorded during general and focused surveys within the Project Study Area. Some species have special-status, but most have no formal status primarily because of their regional abundance. Table 4.4-6, Special-Status Wildlife Species Potentially Occurring or Known to Occur, includes the status, characteristics, habitat descriptions, and probability of occurrence of special-status animal species for the Project Study Area and immediate vicinity. For species not observed during surveys, the potential for their occurrence was determined by biologists knowledgeable about each species based on the species' specific habitat requirements, known ranges, and previously recorded occurrences. Figure 4.4-4, Special-Status Species Observations, shows the locations where special-status animal species were observed during general and focused surveys.

The following special-status species are not expected to occur within the Project Study Area, and are discussed further in the BRTR (Appendix F). For several avian species, the special-status designation applies only to certain activities (i.e., nesting, wintering), which is indicated in the list below. Therefore, although individuals may have been observed, the Project Study Area does not support suitable habitat for the protected activities. For some species, such as fairy shrimp species and San Bernardino kangaroo rat, the species was not observed during focused surveys. Results of focused surveys are discussed in greater detail below.

- Vernal pool fairy shrimp (*Branchinecta lynchi*)
- Riverside fairy shrimp (*Streptocephalus wootoni*)
- Arroyo toad (*Anaxyrus californicus*)
- Great egret (*Ardea alba*) (nesting colony)
- Great blue heron (*Ardea herodias*) (nesting colony)
- Swainson's hawk (*Buteo swainsoni*) (nesting)
- Olive-sided flycatcher (*Contopus cooperi*) (nesting)
- Black swift (*Cypseloides niger*) (nesting)
- Snowy egret (*Egretta thula*) (nesting colony)
- Little willow flycatcher (*Empidonax traillii brewsteri*) (nesting)

- Prairie falcon (*Falco mexicanus*) (nesting)
- American peregrine falcon (*Falco peregrinus anatum*) (nesting)
- Black-crowned night-heron (*Nycticorax nycticorax*) (nesting colony)
- Osprey (*Pandion haliaetus*) (nesting)
- Double-crested cormorant (*Phalacrocorax auritus*) (nesting colony)
- White-faced ibis (*Plegadis chihi*) (nesting colony)
- Allen's hummingbird (*Selasphorus sasin*) (nesting)
- Bendire's thrasher (*Toxostoma bendirei*)
- San Bernardino kangaroo rat (*Dipodomys merriami parvus*)

Several species occur that have no designated special-status but are nonetheless covered under the WR-MSHCP or CV-MSHCP. The following MSHCP-covered species have the potential to occur within the Project Study Area:

- Granite spiny lizard (*Sceloporus orcutti*)
- Granite night lizard (*Xantusia henshawi*)
- Wilson's warbler (*Cardellina pusilla*)
- Turkey vulture (*Cathartes aura*) (breeding)
- Nashville warbler (*Oreothlypis ruficapilla*)
- Downy woodpecker (*Picoides pubescens*)
- Tree swallow (*Tachycineta bicolor*)
- Coyote (*Canis latrans*)
- Dulzura kangaroo rat (*Dipodomys simulans*)
- Bobcat (*Lynx rufus*)
- Long-tailed weasel (*Mustela frenata*)
- Mountain lion (*Puma concolor*)
- Brush rabbit (*Sylvilagus bachmani*)

Table 4.4-6: Special-Status Wildlife Species Potentially Occurring or Known to Occur

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability*
Invertebrates				
<i>Halictus harmonius</i> Haromonius halictid bee	US: – CA: SA BLM: – MSHCP: –	Habitat is not well understood. Known only from the foothills of the San Bernardino and (with less certainty) the San Jacinto Mountains in Southern California.	Diurnal. Spring and Summer.	Low. Species is little known and sparsely distributed.
<i>Macrobaenetes valgum</i> Coachella giant sand treader cricket	US: – CA: SA BLM: – MSHCP: – CVC	Wind-swept sand dune ridges, spring-dampened sandy areas. Restricted to Coachella Valley.	Nocturnal. Juveniles active late fall through early winter. Adults active early to mid-spring.	Low. Habitat poor. Outside known range. Focused searches for the species distinctive delta-shaped burrow tailings failed to detect the species within the floodplain, on the east side of the Whitewater River (AMEC 2012c).
<i>Stenopelmatus cahuilensis</i> Coachella Valley Jerusalem cricket	US: – CA: SA BLM: – MSHCP: –	According to AMEC (2012c), this species is associated with wind-deposited sand dunes, drift sands, and water-deposited gravelly/sandy soils in the western Coachella Valley and eastern San Geronio Pass area. This species is vulnerable to desiccation, despite occurring in one of the nation's most arid regions. To prevent drying out, Jerusalem crickets migrate up and down with the moisture regime in local soils. Jerusalem crickets can be found foraging, courting and taking cover beneath surface objects such as decomposing wood, rocks, duff and other debris.	Winter and early spring.	Moderate. Not detected along during focused surveys, but potentially suitable habitat occurs at two primary locations: (1) within the floodplain, on the east side of the Whitewater River, and (2) within the Whitewater Hills between Whitewater Canyon and State Route 62 (AMEC 2012c).
Amphibians				
<i>Spea hammondi</i> Western spadefoot	US: – CA: SSC BLM: S MSHCP: – WRC	Grasslands and occasionally hardwood woodlands; largely terrestrial but requires rain pools or other ponded water persisting at least three weeks for breeding; burrows in loose soils during dry season. Occurs in the Central Valley and adjacent foothills, the non-desert areas of southern California, and Baja California.	Primarily nocturnal. October through April (following onset of winter rains).	Observed. Tadpoles found within the vernal pool in the spillway near Palomares Road in the City of Redlands (LSA 2012).
Reptiles				
<i>Coleonyx variegatus abbotti</i> San Diego banded gecko	US: – CA: SA BLM: – MSHCP: – WRC	Often associated with rocks. Coastal sage scrub and chaparral, most often on granite or rocky outcrops in these habitats. Interior Ventura County south to northern Baja California Sur.	Nocturnal. April through October.	High. Habitat appears to be suitable.
<i>Sauromalus ater</i> Chuckwalla	US: – CA: SA BLM: – MSHCP: –	Sandy areas with rock outcrops or boulders in a variety of desert plant communities. Occurs in the Mojave and Sonoran Deserts of the southwestern United States and northwestern Mexico. Sea level to around 6,000 feet.	Diurnal. May through September.	Low. Habitat unsuitable. Not seen during 2012 surveys (LSA 2012).

Table 4.4-6: Special-Status Wildlife Species Potentially Occurring or Known to Occur

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability*
<i>Phrynosoma blainvillii</i> Coast horned lizard	US: – CA: SSC BLM: S MSHCP: WRC	Primarily in sandy soil in open areas, especially washes and floodplains, in many plant communities. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants or other insects. Occurs from Baja California west of the deserts north to Shasta County below 8,000 feet elevation.	Diurnal. April through July with reduced activity August through October.	Observed. Near El Casco Substation (Aspen 2007).
<i>Aspidoscelis tigris stejnegeri</i> Coastal western whiptail	US: – CA: SA BLM: – MSHCP: WRC	Wide variety of habitats including coastal sage scrub, sparse grassland, and riparian woodland; coastal and inland valleys and foothills; Ventura County to Baja California.	Diurnal. April through August.	Observed. Throughout the Project Study Area, especially along Cottonwood Canyon near the City of Whitewater (LSA 2012, 2013).
<i>Aspidoscelis hyperythra</i> Orange-throated whiptail	US: – CA: SSC BLM: – MSHCP: WRC	Prefers washes and other sandy areas with patches of brush and rocks, in chaparral, coastal sage scrub, juniper woodland, and oak woodland from sea level to 3,000 feet elevation. Perennial plants required. Occurs in Riverside, Orange, San Diego Counties west of the crest of the Peninsular Ranges, in extreme southern San Bernardino County near Colton, and in Baja California.	Diurnal. March through July with reduced activity August through October.	Low. Apparently outside the species' current range.
<i>Anniella pulchra pulchra</i> Silvery legless lizard	US: – CA: SSC BLM: – MSHCP: –	Inhabits sandy or loose loamy soils with high moisture content under sparse vegetation from central California to northern Baja California.	Diurnal and nocturnal. Nearly year round, at least in southern areas.	Moderate. Conditions may be suitable for the species.
<i>Charina trivirgata</i> Rosy boa	US: – CA: SA BLM: – MSHCP: –	In rocky areas in chaparral or scrub habitats or adjacent oak woodland; also in rocky riparian areas. Found in Los Angeles County, southwestern San Bernardino County, south through western Riverside County, and San Diego County into Baja California.	Nocturnal. Rarely diurnal. Active between April and September.	Observed. Two individuals found along Stubble Canyon near the City of Whitewater (LSA 2012).
<i>Diadophis punctatus modestus</i> San Bernardino ringneck snake	US: – CA: SA BLM: – MSHCP: –	Under surface objects along drainage courses, preferring mesic chaparral and oak and walnut woodland communities. Moist habitats of southwestern California from about Ventura to Orange Counties.	Diurnal. Crepuscular and nocturnal during warmer periods.	High. Conditions appear to be suitable for the species.
<i>Salvadora hexalepis virgulata</i> Coast patch-nosed snake	US: – CA: SSC BLM: – MSHCP: –	Coastal chaparral, washes, sandy flats, and rocky areas from San Luis Obispo County to northwestern Baja California.	Diurnal. Mostly year-round.	High. Suitable habitat occurs on site.

Table 4.4-6: Special-Status Wildlife Species Potentially Occurring or Known to Occur

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability*
<i>Thamnophis hammondi</i> Two-striped garter snake	US: – CA: SSC BLM: S MSHCP: –	Highly aquatic. Only in or near permanent sources of water. Streams with rocky beds supporting willows or other riparian vegetation. From Monterey County to northwest Baja California.	Diurnal. Year-round.	Moderate. Observed within Whitewater River 4 miles north of the Project Study Area (AMEC 2012b). No known observations in the San Timoteo Canyon area.
<i>Crotalus ruber</i> Red-diamond rattlesnake	US: – CA: SSC BLM: – MSHCP: WRC	Desert scrub, thornscrub, open chaparral and woodland; occasional in grassland and cultivated areas. Prefers rocky areas and dense vegetation. Morongo Valley in San Bernardino and Riverside Counties to the west and south into Mexico.	Primarily nocturnal. Mid-spring through mid-fall.	Observed. Between Devers Substation and Beaumont (AMEC 2012b). Several in the San Timoteo Badlands just south of the City of Loma Linda (LSA 2012).
<i>Gopherus agassizii</i> Desert tortoise	US: FT CA: ST BLM: – MSHCP: CVC	Historically found throughout most of the Mojave and Sonoran Deserts into Arizona, Nevada, and Utah. Believed to have been extirpated from the western and southern portions of the Antelope Valley. Found in creosote bush scrub, saltbush scrub, thornscrub (in Mexico), and Joshua tree woodland. Found in the open desert as well as in oases, riverbanks, washes, dunes, and occasionally rocky slopes.	Diurnal. Spring, and early fall in areas of summer rains, with brief periods of activity at other times.	Observed. Near Lion Canyon (LSA 2010). Near Deep Creek Road on the Reservation (GANDA 2010). Scat and burrows detected between Devers Substation and the Reservation (AMEC 2012a). Two live individuals incidentally found within the eastern edge of the Reservation (LSA 2012).
Birds				
<i>Elanus leucurus</i> (nesting) White-tailed kite	US: – CA: CFP BLM: S MSHCP: WRC	Typically nests in riparian trees such as oaks, willows, and cottonwoods at low elevations. Forages in open country. Found in South America and in southern areas and along the western coast of North America.	Diurnal. Year-round.	Observed. Foraging near El Casco (Aspen 2007) and in riparian habitat within the Project Study Area (LSA 2012). Suitable nesting habitat is present within the Project Study Area.
<i>Haliaeetus leucocephalus</i> (nesting & wintering) Bald eagle	US: – CA: SE/CFP BLM: S MSHCP: WRC	Winters locally at deep lakes and reservoirs feeding on fish and waterfowl. Locally rare throughout North America.	Diurnal. Primarily November through February, but nests locally.	Low. Occasional winter visitors have been observed in the area.
<i>Circus cyaneus</i> (nesting) Northern harrier	US: – CA: SSC BLM: – MSHCP: WRC	Marshy habitats, grassland and other open country; uncommon in open desert and brushlands. Nests on the ground in open (treeless) wetland and upland areas, including cultivated cropland and dry grassland. Nests usually constructed in tall, dense clumps of vegetation. Found in the Temperate Zone worldwide.	Diurnal. Year-round, but more widespread in winter.	Low. Suitable nesting habitat probably absent. Foraging birds observed in open grassland near El Casco (Aspen 2007), within the Reservation (LSA 2010), in various loci in Project Study Area (LSA 2012, 2013).

Table 4.4-6: Special-Status Wildlife Species Potentially Occurring or Known to Occur

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability*
<i>Accipiter cooperii</i> (nesting) Cooper's hawk	US: – CA: SA BLM: – MSHCP: WRC	Forages in a wide range of habitats, but primarily in forests and woodlands. Usually nests in tall trees (20 to 60 feet). Found throughout North America.	Diurnal. Year-round.	Observed. Found foraging over El Casco Substation (Aspen 2007). Throughout the Project Study Area (LSA 2012, 2013).
<i>Buteo swainsoni</i> (nesting) Swainson's hawk	US: – CA: ST BLM: S MSHCP: WRC	Open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pastures. Breeds and nests in western North America; winters in South America. In Southern California, now mostly occurs as a spring and fall transient.	Diurnal. Spring and fall (in migration).	Not Expected. Nesting not expected. Nesting individuals not observed and Project Study Area is outside the species known breeding range. Some suitable nesting habitat is present and migrants observed, especially in 2013 when over 200 migrants were observed on hills just east of the San Timoteo Landfill near Palomares Road and San Timoteo Creek Road (LSA 2012, 2013).
<i>Buteo regalis</i> (wintering) Ferruginous hawk	US: – CA: SA BLM: – MSHCP: WRC	Open country in western North America; north to Canada in summer and south to Mexico in winter.	Diurnal. Mid-September through mid-April.	Observed. Within Project Study Area in northeast corner of the City of Beaumont (LSA 2012).
<i>Aquila chrysaetos</i> (nesting & wintering) Golden eagle	US: – CA: CFP BLM: S MSHCP: WRC	Generally open country of the Temperate Zone worldwide. Nesting primarily in rugged mountainous country. Uncommon resident in Southern California.	Diurnal. Year-round.	Observed. Foraging near El Casco Substation (Aspen 2007). Within the Reservation (LSA 2010). Two individuals flying over transmission towers located in the Whitewater River area and on the Reservation (LSA 2012). Nest detected 1.5 miles from the WOD Corridor during 2013 focus surveys (WRI 2013).
<i>Coccyzus americanus</i> <i>occidentalis</i> (nesting) Western yellow-billed cuckoo	US: FC CA: SE BLM: S MSHCP: WRS	Breeds and nests in extensive stands of dense cottonwood/willow riparian forest along broad, lower flood bottoms of larger river systems at scattered locales in western North America; winters in South America.	Diurnal. May through September.	Low. Habitat may be unsuitable for nesting but individuals have been observed in riparian habitat associated with San Timoteo Creek south of El Casco Substation (outside of the Study Area) (Aspen 2007).
<i>Athene cucularia</i> (burrow sites) Burrowing owl	US: – CA: SSC BLM: S MSHCP: WRS/CVC	Open country in much of North and South America. Usually occupies ground squirrel burrows in open, dry grasslands, agricultural and range lands, railroad rights-of-way, and margins of highways, golf courses, and airports. Often utilizes man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock, or wood debris piles. Avoids thick, tall vegetation, brush, and trees, but may occur in areas where brush or tree cover is less than 30 percent.	Crepuscular. Year-round.	Observed. On the Reservation (LSA 2010; GANDA 2010). Between Devers Substation and Whitewater River (GANDA 2011). On Whitewater Hill (AMEC 2012a). Within the eastern portion of the Project Study Area (LSA 2012, 2013).

Table 4.4-6: Special-Status Wildlife Species Potentially Occurring or Known to Occur

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability*
<i>Asio otus</i> (nesting) Long-eared owl	US: – CA: SSC BLM: – MSHCP: –	Scarce and local in forests and woodlands throughout much of the Northern Hemisphere. Rare resident in coastal southern California. Nests and roosts in dense willow-riparian woodland and oak woodland, but forages over wider areas. Breeds from valley foothill hardwood up to ponderosa pine habitat.	Nocturnal. Year-round.	Low. Suitable nesting habitat may be absent.
<i>Calypte costae</i> (nesting) Costa's hummingbird	US: – CA: SA BLM: – MSHCP: –	Primarily deserts, arid brushy foothills, and chaparral in the southwestern United States and northwestern Mexico.	Diurnal. February through September, rare in winter.	Observed. Found within the Reservation (LSA 2010) and just east of the San Bernardino Junction (LSA 2012).
<i>Picoides nuttallii</i> (nesting) Nuttall's woodpecker	US: – CA: SA BLM: – MSHCP: –	Oak, pine-oak, and riparian woodland in California and northwestern Baja California.	Diurnal. Year-round.	Observed. Nesting presumed. Pairs observed in the breeding season near San Timoteo Creek and in the canyon just north of Theodore Street in the City of Banning (LSA 2012).
<i>Falco columbarius</i> (wintering) Merlin	US: – CA: SA BLM: – MSHCP: WRC	Open country; breeds in the Holarctic Region and winters south to the tropics. Rare fall migrant and winter visitor to southwestern California.	Diurnal. September through April.	Observed. Near El Casco (Aspen 2007). Near Refuse Road, south of San Timoteo Creek Road (LSA 2013)
<i>Empidonax traillii extimus</i> Southwestern willow flycatcher	US: FE CA: SE BLM: – MSHCP: WRS/CVC	Rare and local breeder in riparian areas, willows, usually with standing water, in the southwestern U.S. and formerly northwestern Mexico. Winters in Middle and South America.	Diurnal. May through September.	Low. Some riparian areas on site may be marginally suitable for nesting. Migrant willow flycatcher observed in 2007 probably represents <i>E. t. brewsteri</i> (Aspen 2007).
<i>Pyrocephalus rubinus</i> (nesting) Vermilion flycatcher	US: – CA: SSC BLM: – MSHCP: –	Occurs in a wide range of open country habitats, often near water. Ranges from the southwestern United States to central South America. Rare and local in southwestern California.	Diurnal. Fall or winter visitor or rare and local breeder.	Low. Probably no suitable nesting habitat.
<i>Lanius ludovicianus</i> (nesting) Loggerhead shrike	US: – CA: SSC BLM: – MSHCP: WRC	Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Inhabits open country with short vegetation, pastures, old orchards, cemeteries, golf courses, riparian areas, and open woodlands. Occurs only rarely in heavily urbanized areas, but often found in open cropland. Found in open country in much of North America.	Diurnal. Year-round.	Observed. Near El Casco Substation (Aspen 2007), within the Reservation (LSA 2010), and near San Gorgonio River and Whitewater Canyon (LSA 2012, 2013). Suitable nesting habitat is present.

Table 4.4-6: Special-Status Wildlife Species Potentially Occurring or Known to Occur

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability*
<i>Vireo bellii pusillus</i> Least Bell's vireo	US: FE CA: SE BLM: – MSHCP: WRS/CVC	Formerly occurred in well-developed riparian areas from north-central California to Baja California. Now absent from northern portions of its range, but populations in southern California are growing in response to intense management efforts. Winters primarily in western Mexico.	Diurnal. April through September.	Observed. Territories in riparian habitat associated with San Timoteo Creek near El Casco Substation (Aspen 2007), in riparian habitat associated with San Timoteo Creek (LSA 2012), in riparian habitat along Highland Spring Road just south Beaumont (LSA 2013).
<i>Eremophila alpestris actia</i> California horned lark	US: – CA: SA BLM: – MSHCP: WRC	Open grasslands and fields, agricultural area, open montane grasslands. This subspecies is resident from northern Baja California northward throughout non-desert areas to Humboldt County. During the breeding season, this is the only subspecies of horned lark in non-desert southern California; however, from September through April or early May, other subspecies visit the area.	Diurnal. Year-round.	Observed. Near El Casco Substation and in agricultural fields (Aspen 2007). Within the Reservation (LSA 2010). Within the Project Study Area (LSA 2012).
<i>Progne subis</i> (nesting) Purple martin	US: – CA: SSC BLM: – MSHCP: WRC	Open agricultural areas, towns, and marsh edges. Nesting habitat consists of old sycamores and pines, often within oak woodland or open coniferous forest. Breeds throughout much of North America, but rare and local in southern California. Winters in South America.	Diurnal. April through September.	Low. Probably no suitable nesting habitat.
<i>Baeolophus inornatus</i> (nesting) Oak titmouse	US: – CA: SA BLM: – MSHCP: –	Primarily oak woodland from southern Oregon to southern Baja California Sur. Common resident in much of Southern California.	Diurnal. Year-round.	Observed. Near San Timoteo Creek (LSA 2012).
<i>Polioptila californica californica</i> Coastal California gnatcatcher	US: FT CA: SSC BLM: – MSHCP: WRC	Inhabits coastal sage scrub in low-lying foothills and valleys up to about 1,640 feet elevation in cismontane southwestern California and Baja California.	Diurnal. Year-round.	Moderate. Recorded 2 miles south of Segment 2 near Reche Canyon in 1997 (3 pair) and 2000 (male) (CNDDDB Occurrence Number 542), but not found during protocol surveys in 2012 and 2013 (LSA 2012, 2013).
<i>Polioptila melanura</i> Black-tailed gnatcatcher	US: – CA: SA BLM: – MSHCP: –	Nests in wooded desert wash habitat containing mesquite, palo verde, ironwood, and acacia. May also occur in areas with salt cedar, especially when adjacent to native wooded desert wash habitat. Also occurs in desert scrub habitat in winter.	Diurnal. Year-round.	Observed. East of the San Gorgonio River (LSA 2012).

Table 4.4-6: Special-Status Wildlife Species Potentially Occurring or Known to Occur

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability*
<i>Toxostoma lecontei</i> Le Conte's thrasher	US: – CA: SA BLM: – MSHCP: –	Inhabits sparsely vegetated desert flats, dunes, alluvial fans, or gently rolling hills having a high proportion of saltbush (<i>Atriplex</i> spp.) or cholla (<i>Cylindropuntia</i> spp.), often occurring along small washes or sand dunes. Prefers dense thorny shrubs (most often saltbush or cholla) for nesting. Uncommon and local resident in low desert scrub throughout most of the Mojave Desert, extending up into the southwestern corner of the San Joaquin Valley. Breeding range in California extends from these areas into eastern Mojave, north into the Owens Valley and south into the lower Colorado Desert and eastern Mojave. Only the San Joaquin Valley population of this species is considered a BLM Sensitive species or California Species of Concern. Also ranges into southern Nevada, western Arizona, and northwestern Mexico.	Diurnal. Year-round.	Observed. Within the Reservation (LSA 2010, 2012).
<i>Setophaga petechia</i> (nesting) Yellow warbler	US: – CA: SSC BLM: – MSHCP: WRC/CVC	Riparian woodland while nesting in the western U.S. and northwestern Baja California; more widespread in brushy areas and woodlands during migration. Occurs from western Mexico to northern South America in winter. Migrants are widespread and common.	Diurnal. April through September in nesting areas. More widespread during migration, rare in winter.	Observed. Nesting presumed. Pairs observed during the breeding season in riparian habitat associated with San Timoteo Creek near El Casco Substation (Aspen 2007; LSA 2012).
<i>Icteria virens</i> (nesting) Yellow-breasted chat	US: – CA: SSC BLM: – MSHCP: WRC/CVC	Riparian thickets of willow, brushy tangles near watercourses. Nests in riparian woodland throughout much of western North America. Winters in Central America.	Diurnal. April through September.	Observed. In riparian habitat associated with San Timoteo Creek near El Casco Substation (Aspen 2007). Just east of San Timoteo Creek (LSA 2012).
<i>Aimophila ruficeps canescens</i> Southern California rufous-crowned sparrow	US: – CA: SA BLM: – MSHCP: WRC	Steep, rocky coastal sage scrub and open chaparral habitats, particularly scrubby areas mixed with grasslands. From Santa Barbara County to northwestern Baja California.	Diurnal. Year-round.	Observed. In Riversidean sage scrub/chaparral habitat within the Reservation (LSA 2010). In chaparral just south of the City of Redlands, and in scrubland west of the Reservation; common throughout western coastal sage scrub habitat within the Project Study Area (LSA 2012, 2013).
<i>Spizella breweri</i> (nesting) Brewer's sparrow	US: – CA: SSC BLM: – MSHCP: –	Inhabits brushland, primarily sagebrush flats. Breeds in the western United States and Canada and winters in the southwestern United States and western Mexico.	Diurnal. Primarily September through April in our area.	Low. Regular during migration and winter, but nesting is not expected.

Table 4.4-6: Special-Status Wildlife Species Potentially Occurring or Known to Occur

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability*
<i>Pooecetes gramineus affinis</i> Oregon vesper sparrow	US: – CA: SSC BLM: – MSHCP: –	A grassland obligate, breeding in western Washington, Oregon, and extreme northwestern California and wintering primarily in southwestern California.	Diurnal. September to April.	Moderate. Vesper sparrows were observed during 2012 surveys but subspecies identification is difficult and the subspecies <i>P. g. confinis</i> is believed to be the more numerous subspecies here (LSA 2012).
<i>Chondestes grammacus</i> (nesting) Lark sparrow	US: – CA: SA BLM: – MSHCP: –	Open situations with scattered bushes or trees. Breeds throughout much of western North America and winters from the southern United States to southern Mexico.	Diurnal. Year-round.	Observed. In the canyon just north of Theodore Street in the City of Banning, and just east of the San Timoteo Landfill within the study area in the San Bernardino County (LSA 2012).
<i>Artemisiospiza belli</i> Bell's sage sparrow	US: – CA: SA BLM: – MSHCP: WRC	Occupies chaparral and coastal sage scrub from west central California to northwestern Baja California.	Diurnal. Year-round.	Observed. On the Reservation (LSA 2010).
<i>Ammodramus savannarum</i> (nesting) Grasshopper sparrow	US: – CA: SSC BLM: – MSHCP: WRP	Grasslands of North America and northern South America.	Diurnal. Primarily March through August.	Observed. Within the Study Area just west of the Reservation (LSA 2012).
<i>Agelaius tricolor</i> (nesting colony) Tricolored blackbird	US: – CA: SSC BLM: S MSHCP: WRC	Open country in western Oregon, California, and northwestern Baja California. Breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, tall herbs and forages in grassland and cropland habitats. Seeks cover for roosting in emergent wetland vegetation, especially cattails and tules, and also in trees and shrubs.	Diurnal. Year-round.	Low. No suitable nesting habitat present but foraging birds were observed (LSA 2012).
<i>Spinus lawrencei</i> (nesting) Lawrence's goldfinch	US: – CA: SA BLM: – MSHCP: –	Oak woodland chaparral, riparian woodland and other habitats in arid regions, but usually near water; from northern California to northern Baja California, but periodically wandering throughout much of western North America.	Diurnal. Fairly common April through August; otherwise uncommon.	Observed. Observed in the canyon just north of Theodore Street in the City of Banning, as well as at the end of Pilgrim Road south of Redlands. (LSA 2012).
Mammals				
<i>Xerospermophilus tereticaudus chlorus</i> Palm Springs round-tailed ground squirrel	US: – CA: SSC BLM: S MSHCP: –	Desert succulent scrub, desert wash, desert scrub, alkali scrub; will burrow in man-made levees; prefers open, flat, grassy areas in fine textured, sandy soil. Restricted to Coachella Valley.	Diurnal. February through August (hibernates September through January).	Low. May be outside species' current known range. Not observed during 2012 and 2013 surveys (LSA 2012, 2013).

Table 4.4-6: Special-Status Wildlife Species Potentially Occurring or Known to Occur

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability*
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	US: FE CA: ST BLM: – MSHCP: WRC	Found in plant communities transitional between grassland and coastal sage scrub, with perennial vegetation cover of less than 50%. Most commonly associated with <i>Artemisia tridentata</i> , <i>Eriogonum fasciculatum</i> , and <i>Erodium</i> . Requires well-drained soils with compaction characteristics suitable for burrow construction. Not found in soils that are highly rocky, less than 20 inches deep, or heavily alkaline or clay, or in areas exceeding 25% slope. Occurs only in western Riverside County, northern San Diego County, and extreme southern San Bernardino County, below 3,000 feet elevation. In northwestern Riverside County, known only from east of Interstate 15. Reaches its northwest limit in south Norco, southeast Riverside, and in the Reche Canyon area of Riverside and extreme southern San Bernardino Counties.	Nocturnal. Year-round.	Observed. One specimen found outside of the 100-foot study buffer area at the end of Pilgrim Road south of Redlands. (LSA 2012).
<i>Perognathus longimembris bangsii</i> Palm Springs pocket mouse	US: – CA: SSC BLM: MSHCP: CVC	Primary habitat in the Coachella Valley is dunes and mesquite hummocks associated with honey mesquite (<i>Prosopis glandulosa</i> var. <i>torreyana</i>) and, to a lesser extent, dunes and hummocks associated with creosote (<i>Larrea tridentata</i>) or other vegetation. Its range in the Coachella Valley extends from Joshua Tree National Park southward, west to San Geronio Pass, and south to Borrego Springs and the east side of San Felipe Narrows, in Riverside, San Diego, and Imperial Counties.	Nocturnal. Primarily active spring through fall.	Observed. Between Whitewater Canyon and the eastern terminus of the Project Study Area (LSA 2012).
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	US: – CA: SSC BLM: – MSHCP: WRS	Prefers sandy soil for burrowing, but has been found on gravel washes and stony soils. Found in coastal sage scrub in Los Angeles (formerly), western Riverside, and southwestern San Bernardino Counties.	Nocturnal. Primarily active spring through fall.	Observed. Near Smith Creek and Montgomery Creek near El Casco Substation (Aspen 2007). Between Beaumont and Cherry Valley, north of Banning and north and northeast of Cabazon (LSA 2012, 2013).
<i>Chaetodipus fallax fallax</i> Northwestern San Diego pocket mouse	US: – CA: SSC BLM: – MSHCP: WRC	Found in sandy herbaceous areas, usually associated with rocks or coarse gravel in coastal scrub, chaparral, grasslands, and sagebrush, from Los Angeles County through southwestern San Bernardino, western Riverside, and San Diego Counties to northern Baja California.	Nocturnal. Year-round.	Observed. Along Smith Creek near El Casco Substation (Aspen 2007). Also observed in the Badlands generally southeast of Loma Linda and south of Redlands, between Beaumont and Cherry Valley, and north of Banning (LSA 2012, 2013).

Table 4.4-6: Special-Status Wildlife Species Potentially Occurring or Known to Occur

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability*
<i>Chaetodipus fallax pallidus</i> Pallid San Diego pocket mouse	US: – CA: SSC BLM: – MSHCP: –	Found in sandy herbaceous areas, usually associated with rocks or coarse gravel in desert wash, desert scrub, desert succulent scrub, and pinyon-juniper woodland. Restricted to southwestern California from southwestern San Bernardino County to eastern San Diego and western Imperial Counties.	Nocturnal. Year-round.	Observed. From Cabazon eastward within the Project Study Area (LSA 2012).
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	US: – CA: SSC BLM: – MSHCP: WRC	Frequents poorly vegetated arid lands and is especially associated with cactus patches. Occurs along the Pacific slope from about San Luis Obispo County to northwest Baja California. Three subspecies of desert woodrat have traditionally been recognized in the area, and the boundary of the coastal subspecies' range is unclear (probably at about Banning). However, the most recent taxonomic work on these animals suggested a species level split within the Project Study Area, with <i>N. lepida</i> to the east (desert) and <i>N. bryanti</i> to the west (coastal) (Patton et al. 2008).	Nocturnal, occasionally crepuscular and diurnal. Year-round.	Observed. In the Badlands, generally located southeast of Loma Linda and south of Redlands, and north of Banning in the central portion of the Project Study Area (LSA 2012). Desert woodrats east of Banning are not likely to be this subspecies.
<i>Onychomys torridus ramona</i> Southern grasshopper mouse	US: – CA: SSC BLM: – MSHCP: –	Believed to inhabit sandy or gravelly valley floor habitats with friable soils in open and semi-open scrub, including coastal sage scrub, mixed chaparral, low sagebrush, riparian scrub, and annual grassland with scattered shrubs, preferring low to moderate shrub cover. More susceptible to small- and large-scale habitat loss and fragmentation than most other rodents, due to its low fecundity, low population density, and large home range size. Arid portions of cismontane southwestern California and northwestern Baja California.	Nocturnal. Year-round.	Low. Not captured during 2012 and 2013 surveys. Grasshopper mice captured at the eastern end of the Project Study Area are belong to the subspecies <i>O. t. pulcher</i> (LSA 2012).
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	US: – CA: SSC BLM: – MSHCP: WRC	Variety of habitats including herbaceous and desert scrub areas, early stages of open forest and chaparral. Most common in relatively open habitats. Restricted to the cismontane areas of Southern California, extending from the coast to the Santa Monica, San Gabriel, San Bernardino, and Santa Rosa Mountain Ranges.	Primarily nocturnal. Year-round.	Observed. In several locations near El Casco (Aspen 2007). (Specimens from Cabazon and Whitewater have been identified as <i>deserticola</i> , not <i>bennettii</i>).

Table 4.4-6: Special-Status Wildlife Species Potentially Occurring or Known to Occur

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability*
<i>Macrotus californicus</i> California leaf-nosed bat	US: – CA: SSC BLM: S MSHCP: –	Occurs from northern Nevada, Southern California, and western Arizona south to southern Baja California and Sonora. In California, these bats primarily occupy low-lying desert areas, where they roost in caves, mines, and old buildings. Historic records extend west to near Chatsworth, Los Angeles County, but most populations from the California coastal basins are believed to be extirpated (Williams 1986).	Nocturnal. Year-round.	Not Expected. Specific roosting and foraging habitat not present and Study Area outside of likely range
<i>Eumops perotis</i> Western mastiff bat	US: – CA: SSC BLM: S MSHCP: –	Ranged historically throughout much of the southwestern United States and northwestern Mexico. In California, most records are from rocky areas at low elevations. Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.; roosts in crevices in vertical cliff faces, high buildings, trees, and tunnels throughout southwestern California. May roost in tall bridges.	Nocturnal. Year-round.	Observed. No suitable cliffs or rock outcrops for day roosting present but forages in the Study Area. Audibly detected near the City of Grand Terrace and southwest of El Casco Lakes within the Project Study Area (LSA 2012).
<i>Nyctinomops femorosaccus</i> Pocketed free-tailed bat	US: – CA: SSC BLM: – MSHCP: –	Varied habitats, but usually associated with high cliffs or rocky areas. Spotty distribution, ranging from southern California and southwestern Arizona through central Mexico. Roosts primarily in cliffs/rock crevices; may use buildings for roosting. Rarely roosts in bridges.	Nocturnal. Year-round.	Low. Suitable cliffs and rock outcrops not present for day roosting. May forage in Project Study Area.
<i>Nyctinomops macrotis</i> Big free-tailed bat	US: – CA: SSC BLM: – MSHCP: –	Mainly inhabits rugged, rocky habitats in arid southwestern North America. Feeds principally on large moths. Roosts primarily in cliffs/rock crevices, and rarely in buildings, caves, and tree cavities. Not known to use bridges for roosting.	Nocturnal. Year-round.	Low. Suitable cliffs and rock outcrops not present for day roosting. May forage in Project Study Area.
<i>Lasiurus blossevillii</i> Western red bat	US: FSS CA: SSC BLM: – MSHCP: –	Ranges from southwestern Canada through the western United States and Middle America to South America. Forages over a wide range of habitats, but often associated with intact riparian habitat, and particularly with willows, cottonwoods, and sycamores. Typically solitary, roosting in the foliage of trees or shrubs. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas.	Nocturnal. Year-round.	High. Suitable large trees present for day roosting in riparian areas and citrus groves. Likely forages in Project Study Area.
<i>Lasiurus cinereus</i> Hoary bat	US: CA: SA BLM: – MSHCP: –	Forages over a wide range of habitats, but prefers open habitats with access to trees, for roosting, and water. Ranges throughout much of North and South America.	Nocturnal. Most common in winter and during migratory periods in our area.	High. Suitable large oak trees present for day roosting. Likely forages in Project Study Area.

Table 4.4-6: Special-Status Wildlife Species Potentially Occurring or Known to Occur

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability*
<i>Lasiurus xanthinus</i> Western yellow bat	US: – CA: SSC BLM: – MSHCP: –	Varied habitats from the southwestern United States to southern Mexico; often associated with palms and desert riparian habitats. In southern California occurs in palm oases and in residential areas with untrimmed palm trees. Roosts primarily in trees, especially the dead fronds of palm trees, though they have also been documented to roost under the leaves of deciduous trees such as cottonwoods.	Nocturnal. Year-round.	High. Suitable palm trees for day roosting present in project vicinity; may also roost in large-leaved deciduous trees within or adjacent to Project Study Area. Likely forages in Project Study Area.
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	US: FSS CA: SC BLM: S MSHCP: –	Ranges from southwestern Canada through the western United States to southern Mexico. Requires caves, mines, tunnels, buildings or other similar structures for roosting. Occasionally roosts in hollow spaces of bridges or buildings. Will occasionally roost in hollow trees. Highly sensitive to disturbance.	Nocturnal. Year-round.	Low. No suitable day roosting habitat in or adjacent to Project Study Area. May forage in Project Study Area.
<i>Euderma maculatum</i> Spotted bat	US: – CA: SSC BLM: S MSHCP: –	Found in various communities including desert-scrub, pinyon-juniper woodland, ponderosa pine, mixed conifer forest, canyons, cliffs, riparian areas, fields, and open pasture at scattered localities in western North America from southern British Columbia to north-central Mexico. Roosts in cracks, crevices, and caves, usually on exposed cliff faces. Poorly known. Wanders widely and through varied habitats when foraging.	Nocturnal. Year-round.	Low. No suitable day roosting habitat in or adjacent to Project Study Area. May forage in Project Study Area.
<i>Antrozous pallidus</i> Pallid bat	US: FSS CA: SSC BLM: S MSHCP: –	Varied habitats in western North America, including grasslands, shrublands, woodlands, deserts, and forest. Primarily day roosts in bridges, hollows or crevices of trees, or buildings. Occasionally roosts in mines, caves, and cliff/rock crevices. Night roosts may be more open sites, such as porches, open buildings, and bridges.	Nocturnal. Year-round.	High. Suitable trees and structures for day roosting present. Likely forages in Study Area.
<i>Lasionycteris noctivagans</i> Silver-haired bat	US: – CA: SA BLM: – MSHCP: –	Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes and rarely under rocks. Needs drinking water. Primarily a coastal and montane forest dweller feeding over streams, ponds and open brushy areas. Much of North America north of Mexico.	Nocturnal. Year-round.	Moderate. Occurs widely during migration.
<i>Myotis ciliolabrum</i> Western small-footed myotis	US: – CA: SA BLM: S MSHCP: –	Found across much of North America, primarily in relatively arid wooded and brushy uplands near water. Individuals are known to roost singly or in small groups in cliff and rock crevices, buildings, concrete overpasses, caves, and mines.	Nocturnal. Primarily the warmer months.	Moderate. Marginally suitable habitat present for day roosting. May forage in Project Study Area.

4.4 BIOLOGICAL RESOURCES

Table 4.4-6: Special-Status Wildlife Species Potentially Occurring or Known to Occur

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability*
<i>Myotis evotis</i> Long-eared myotis	US: – CA: SA BLM: S MSHCP: –	Found throughout much of North America, in semiarid shrublands, chaparral, and agricultural areas, but is usually associated with coniferous forests. Roosts under exfoliating tree bark and in hollow trees, caves, mines, and crevices in cliffs/rocks. Sometimes roosts in buildings and bridges.	Nocturnal. Primarily the warmer months.	Moderate. Marginally suitable trees present for day roosting; may forage in Project Study Area.
<i>Myotis thysanodes</i> Fringed myotis	US: – CA: SA BLM: S MSHCP: –	Range is patchy in western North America from sea-level to 9,350 feet; most common at middle elevations. Appears to be most common in drier woodlands but is found in a wide variety of habitats including desert scrub, mesic coniferous forest, grassland, and sage-grass steppe. Roosts primarily in large trees and snags, as well as in caves and mines. Also roosts in buildings, rock crevices, cliff faces, and bridges.	Nocturnal. Primarily the warmer months.	Low. Generally rare and local in the area. Suitable roosting habitat not found within the Study Area; however, foraging individuals may occur.
<i>Myotis volans</i> Long-legged myotis	US: – CA: SA BLM: – MSHCP: –	Widespread in western North America, primarily in coniferous forests, but also occurs seasonally in riparian and desert habitats. Utilizes abandoned buildings, cracks in the ground, cliff crevices, exfoliating tree bark, and hollows within snags as summer day roosts; caves and mine tunnels are used as hibernacula. Commonly forages in and around the forest canopy.	Nocturnal. Primarily the warmer months.	Low. Marginally suitable trees present for day roosting; may forage in Project Study Area.
<i>Myotis yumanensis</i> Yuma myotis	US: – CA: SA BLM: S MSHCP: –	Occurs in a variety of habitats in western North America, including riparian, arid scrublands and deserts, and forests. Optimal habitats are open forests and woodlands with sources of water over which to feed. Roosts in buildings, mines, caves or crevices; and under bridges. May occasionally roost in swallow nests.	Nocturnal. Primarily the warmer months.	High. Suitable day-roosting habitat present in trees and structures. Likely forages in Project Study Area.
<i>Taxidea taxus</i> American badger	US: – CA: SSC BLM: – MSHCP: –	Primary habitat requirements seem to be sufficient food and friable soils in relatively open uncultivated ground in grasslands, woodlands, and desert. Widely distributed in North America.	Primarily nocturnal. Year-round.	Moderate. Widely distributed and known to occur in the area.
<i>Bassariscus astutus</i> Ringtail	US: – CA: CFP BLM: – MSHCP: –	Woody and rocky areas of the southwestern United States and most of Mexico.	Nocturnal. Year-round.	Moderate. Most likely in rocky areas.

Table 4.4-6: Special-Status Wildlife Species Potentially Occurring or Known to Occur

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability*
<i>Ovis canadensis nelsoni</i> Nelson's bighorn sheep (non-peninsular population)	US: – CA: SA BLM: S MSHCP: –	Occurs in open, rocky, steep areas with available water and herbaceous forage. Non-peninsular population ranges from San Geronio Pass north to central California, central Nevada, and northwestern Arizona.	Diurnal. Year-round.	Low. Not observed during surveys conducted from 2011 through 2013. May be just outside of the species' current range.

* LSA 2012 and LSA 2013 species observations were made by either LSA staff or their subconsultants during 2012 and 2013 general and/or focused surveys conducted for the Proposed Project.

US: Federal Classifications

FE: Listed as Endangered.

FT: Listed as Threatened.

FC: Candidate for listing as Threatened or Endangered.

FSS: Forest Service Sensitive Species. Not listed under the Federal Endangered Species Act, but receive special management within the National Forest.

CA: State Classifications

SE: State-listed as Endangered.

ST: State-listed as Threatened.

SC: Candidate for listing as Threatened or Endangered.

SSC: Species of Special Concern. Refers to animals with vulnerable or seriously declining populations.

CFP: California Fully Protected. Refers to animals protected from take under Fish and Game Code sections 3511, 4700, 5050, and 5515.

SA: Special Animal. Refers to any other animal monitored by the Natural Diversity Data Base, regardless of its legal or rarity status.

BLM: BLM Classification for California

S: BLM Sensitive Species

MSHCP: Multiple Species Habitat Conservation Plan

WRC: Western Riverside County MSHCP Species: covered under the MSHCP

WRS: Western Riverside County MSHCP Species: surveys are required within indicated habitats and/or survey areas; covered under the MSHCP

WRP: Western Riverside County MSHCP Species: will be adequately conserved when specified requirements are met; covered under the MSHCP

CVC: Coachella Valley MSHCP Species: covered under the MSHCP

Federally Listed Wildlife Species

Seven of the special-status wildlife species described in Table 4.4-6, Special-Status Wildlife Species Potentially Occurring or Known to Occur, are federally listed as endangered, threatened, or are candidate species under FESA. In addition, focused surveys were conducted for other federally listed as threatened or endangered species. The results of surveys for federally listed species are discussed below.

Vernal Pool Fairy Shrimp. The vernal pool fairy shrimp is federally listed as threatened and is covered under the WR-MSHCP. Vernal pool fairy shrimp is a small freshwater crustacean (0.5 to 1.5 inches long) belonging to the *Anostraca* order of branchiopods that inhabit seasonal wetlands and pools.

The 2012 dry season focused survey for vernal pool fairy shrimp and Riverside fairy shrimp was conducted in 22 dry ephemeral pools consisting of 21 depressions in dirt roads and one detention basin. Dry season surveys found no eggs in the soil samples. Three of these pools were surveyed during the 2011–2012 and 2012–2013 wet seasons. Neither the vernal pool fairy shrimp nor the Riverside fairy shrimp were detected during the wet season surveys. No other special-status fairy shrimp species were found; however, one relatively common species, versatile fairy shrimp (*Branchinecta lindahli*), was observed during the surveys. Because the Project Study Area is outside of its known range and none was observed during focused surveys, the vernal pool fairy shrimp is considered absent from the Project Study Area. The Fairy Shrimp Focused Survey reports are appended to the BRTR (Appendix F).

Riverside Fairy Shrimp. Riverside fairy shrimp is federally listed as endangered and is also covered under the WR-MSHCP. Similar to the vernal pool fairy shrimp described above, the Riverside fairy shrimp is a small freshwater crustacean (0.5 to 1.5 inches long) belonging to the *Anostraca* order of branchiopods that inhabit seasonal wetlands and pools. As described above for the vernal pool fairy shrimp, no Riverside fairy shrimp were detected during focused surveys conducted in 2011 through 2013. Because the Project Study Area is outside of its known range and none was observed during focused surveys, this species is considered absent from the Project Study Area. The Fairy Shrimp Focused Survey reports are appended to the BRTR (Appendix F).

Desert Tortoise. Desert tortoise is federally and State-listed as threatened and is also a covered species under the CV-MSHCP. In general, desert tortoise is found in a variety of desert habitats, including those scrub communities found on and around the eastern part of the Project Study Area (Segments 5 and 6).

In 2012, protocol desert tortoise surveys were conducted east of the Reservation in Segment 6. No definite tortoises or tortoise sign were observed in the existing WOD corridor or in the buffer transects during the 2012 surveys but sign was noted during the fall surveys in 2011 (AMEC 2012). However, an SCE employee showed the survey team a recently dead desert tortoise near the existing WOD corridor, just west of the Devers Substation. In addition, there have been previous sightings of desert tortoises and/or their sign within and east of the Reservation. Survey results indicate multiple observations of

desert tortoise sign (i.e., scat, burrows). Figure 4.4-4, Special-Status Species Observations, shows the locations where desert tortoise and/or their sign were observed. A copy of the 2012 Desert Tortoise Survey Report is appended to the BRTR (Appendix F).

In 2013, protocol desert tortoise surveys were conducted within the boundary of the Reservation in Segment 5 in the Proposed Project and Alternative Project corridors. Tortoise sign and burrows were found in the Proposed Project during the transect surveys. Survey results indicate multiple observations of desert tortoise sign (i.e., scat, burrows) in the eastern half of Segment 5, but no further west than Deep Creek Road. Figure 4.4-4, Special-Status Species Observations, shows the locations where desert tortoise sign and/or burrows were observed. A copy of the 2013 Desert Tortoise Survey Report is appended to the BRTR (Appendix F).

In addition to the surveys conducted for the Proposed Project, there have been additional sightings of desert tortoise within and around the Project Study Area. In 2009, one adult desert tortoise was incidentally observed on the Reservation near Lion Canyon. In the fall 2011, desert tortoise sign (burrows and scat) was documented during focused surveys along the existing WOD corridor in the eastern portion of the Reservation and continuing just east of the Reservation boundary.

Western Yellow-Billed Cuckoo. The western yellow-billed cuckoo is a Federal candidate for listing under the FESA and is State-listed as endangered. It is also a covered species under the WR-MSHCP. The western yellow-billed cuckoo is a slender, medium-sized bird that feeds on large insects, frogs, and even other insectivorous birds. The western yellow-billed cuckoo breeds and nests primarily in extensive stands of riparian forest along large river systems. Although scattered cuckoos continue to be seen in southwestern California each summer, nesting birds have become extremely rare. They no longer nest in their last local stronghold in the vast riparian forests of the Prado Basin.

A specific survey protocol for western yellow-billed cuckoo has not been adopted by the CDFW or USFWS, although several have been proposed. The proposed protocols generally call for 3 or 4 visits between June 15 and August 15 and the broadcasting of recorded cuckoo calls. Because the cuckoo's habitat requirements are similar to those of the southwestern willow flycatcher and least Bell's vireo, focused surveys for those species provide ample opportunity for the detection of cuckoos. No western yellow-billed cuckoos were observed during surveys conducted in 2012. This species has a low potential to occur occasionally since it was observed in 2007 in San Timoteo Creek southeast of El Casco Substation; however breeding is not expected in this area. A copy of the Protocol Least Bell's Vireo and Southwestern Willow Flycatcher Survey Results letter report is appended to the BRTR (Appendix F).

Southwestern Willow Flycatcher. The southwestern willow flycatcher is a Federal and State-listed endangered species and is covered under both the WR-MSHCP and the CV-MSHCP. Southwestern willow flycatcher and least Bell's vireo habitat requirements are similar; however, southwestern willow flycatchers generally require standing water.

Because of this similarity of habitat, protocol surveys for both species were done concurrently.

The southwestern willow flycatcher is a rare and local breeder in extensive riparian areas containing dense willows or (rarely) tamarisk or riparian oak woodland, usually with standing or flowing water. It is found breeding below 6,000 feet amsl in the southwestern United States, formerly northwestern Mexico, and overwintering in Central and South America. This species is most affected by loss of riparian habitat and brood parasitism by the brown-headed cowbird (*Molothrus ater*). The southwestern willow flycatcher can be detected in Southern California between May and September (USGS 2010).

Focused protocol surveys for the southwestern willow flycatcher were conducted in 2012. A copy of the Protocol Least Bell's Vireo and Southwestern Willow Flycatcher Survey Results letter report is appended to the BRTR (Appendix F). In 2012, five survey locations of moderate- to high-quality willow riparian scrub and woodland vegetation communities were surveyed for breeding least Bell's vireo and/or southwestern willow flycatcher. The habitat in the surveyed areas varied from linear and extensive (San Timoteo Creek, an unnamed canyon north of Theodore Street in the City of Banning, and the San Gorgonio River) to isolated and pond-like (San Timoteo Landfill). Southwestern willow flycatcher was not detected during these focused surveys. While southwestern willow flycatchers were not observed in the Project Study Area during protocol surveys, and habitat within the Project Study Area is of marginal nesting quality, some higher quality nesting habitat is available nearby. Therefore, there is potential for southwestern willow flycatchers to occur in the Project Study Area in the future, although the probability is low due to the rarity of the subspecies in the vicinity.

In addition to focused surveys conducted for the Proposed Project, there have been previous reports of southwestern willow flycatchers. In May and June of 2006, a willow flycatcher individual was detected in riparian habitat associated with San Timoteo Creek south El Casco Substation (outside of the Study Area), this individual was not confirmed to be a southwestern willow flycatcher and was more likely a transient member of a different subspecies (*E.t. brewsteri*) as it was not detected during subsequent surveys. In 2010, it was determined that suitable habitat was lacking from the San Gorgonio River to Cottonwood Canyon within the then-proposed Morongo Relocation Study Area (identified in the BRTR, Appendix F).

Least Bell's Vireo. Least Bell's vireo is a Federal and State-listed endangered species and is a covered species under both the WR-MSHCP and the CV-MSHCP. The least Bell's vireo typically breeds in riparian woodland and scrub. A critical structural component of its habitat is a dense shrub layer 2 to 10 feet above ground that is used for nesting. The breeding range spans from central California to northern Baja California Sur, while overwintering occurs primarily in Baja California Sur. The likelihood of detection within the Project Study Area is highest from April through early September. Loss of habitat and brood parasitism by the brown-headed cowbird were the main causes of population decline (Kus, B. 2002). However, the least Bell's vireo population has experienced a substantial increase since its Federal listing, due to habitat conservation

and management efforts (USFWS 2006). The most successful management effort involves brown-headed cowbird control programs.

Focused protocol surveys for least Bell's vireos were conducted in 2012. A copy of the Protocol Least Bell's Vireo and Southwestern Willow Flycatcher Survey Results letter report is included as an appendix to the BRTR (Appendix F). In 2012 five survey locations of moderate- to high-quality willow riparian scrub and woodland vegetation communities were surveyed for breeding least Bell's vireo and/or southwestern willow flycatcher. Habitat in the surveyed areas varied from linear and extensive (San Timoteo Creek, an unnamed canyon north of Theodore Street in the City of Banning, and San Gorgonio River) to isolated and pond-like (San Timoteo Landfill).

In 2012, least Bell's vireo males were detected during focused surveys at nine locations from San Timoteo Creek and adjacent riparian habitat. In addition, three fledgling least Bell's vireos were detected on the east side of San Timoteo Canyon Road (two from adjacent territories on May 15 and one on July 2012). More recently, a singing male least Bell's vireo was detected May 26–31, 2013 in quality riparian habitat just east of Highland Springs Avenue, south of Breckenridge Avenue and I-10 in Beaumont (incidental observation by LSA). Figure 4.4-4, Special-Status Species Observations, shows the locations where least Bell's vireos were observed. These observations are discussed further in the Least Bell's Vireo and Southwestern Willow Flycatcher Survey Results letter report appended to the BRTR (Appendix F).

In addition to the surveys conducted for the Proposed Project, there have been additional sightings of least Bell's vireo within and around the Project Study Area. In 2007, at least four presumed territories were detected within riparian habitat associated with San Timoteo Creek about 1 mile south of Palmer Avenue, and an even greater number of individuals were detected 2 miles north of Palmer Avenue.

Coastal California Gnatcatcher. The coastal California gnatcatcher is a federally listed threatened species and a State Species of Special Concern. The coastal California gnatcatcher occurs in coastal Southern California and is typically found in coastal sage scrub in low-lying foothills and valleys at elevations below 2,000 feet amsl (Atwood and Bolsinger 1992). It is primarily a scrub-foraging insectivore, whose non-migratory behavior permits individuals to be detected year-round.

Table 4.4-7, Coastal California Gnatcatcher Critical Habitat in the Project Study Area by Vegetation Community, shows the amount of coastal California gnatcatcher designated Critical Habitat by vegetation community in the Project Study Area. See Figure 4.4-2, Land Management and Critical Habitat Areas for the locations of designated Critical Habitat.

The 2012 habitat assessment found several areas of low to moderate-quality scrub that may be potentially suitable for coastal California gnatcatcher, described in further detail in the BRTR (Appendix F). Most scrub areas were fragmented and isolated. No coastal California gnatcatchers were detected during protocol surveys conducted in 2012 and

2013. The Protocol Coastal California Gnatcatcher Survey Results letter report is appended to the BRTR (Appendix F).

Table 4.4-7: Coastal California Gnatcatcher Critical Habitat in the Project Study Area by Vegetation Community

Vegetation Community	Acreage within the Project Study Area
Coastal Sage Scrub	220.4
Grassland/Forbland	312.1
Riparian Woodland/Scrub	9.6
Developed/Disturbed	81.1
Total Critical Habitat	623.2

In addition to focused surveys conducted for the Proposed Project, there have been previous sightings of a coastal California gnatcatcher in the Project Study Area. There was a 2002 record of one gnatcatcher reported within the Project Study Area in designated critical habitat, just west of Reche Canyon Road (CDFG 2012b).

Stephens’ Kangaroo Rat. Stephens’ kangaroo rat is a federally listed endangered species and a State listed threatened species. Stephens’ kangaroo rat is primarily associated with grasslands, but can be found in some transitional coastal sage scrub communities as well. Stephens’ kangaroo rat requires well-drained soils with compaction characteristics suitable for burrow construction and is not found in soils that are highly rocky, less than 20 inches deep, heavily alkaline or clay, or in areas exceeding 25 percent slope. Kangaroo rats are nocturnal and active year-round. They eat seeds primarily (particularly those of filaree), but also some green vegetation.

The species is known to occur only below 3,000 feet elevation amsl in western Riverside County, northwestern San Diego County, and extreme southwestern San Bernardino County. In the Project Study Area, it is known only from east of Interstate 15 (I-15), reaching its northwest limits in south Norco, southeast Riverside, and in southernmost San Bernardino County.

During the 2012 focused trapping surveys, one Stephens’ kangaroo rat was captured at the western end of Segment 3, near a historic location for this species (O’Farrell and Uptain 1989). Figure 4.4-4, Special-Status Species Observations, shows the location where the Stephens’ kangaroo rat was observed. A copy of the Summary Report for Special-Status Rodent Trapping: Southern California Edison West of Devers Upgrade Project letter report is appended to the BRTR (Appendix F).

Nelson’s Bighorn Sheep. There are multiple populations for this species. The peninsular population is a distinct population segment of Nelson’s bighorn sheep that occupies the Peninsular Ranges of Southern California and it is this distinct population segment that is federally listed as endangered and State listed as threatened. The range of this population segment does not extend north of I-10 and is approximately 0.8 mile (4,200 feet) south of the Project Study Area and vicinity.

The non-listed population segment is a State Special Animal. The Project Study Area is generally located outside of the listed population segment's current range, but the non-listed population is known from the Whitewater Canyon/River area about 3.5 miles upstream from Segment 6. Therefore, there is a low potential for Nelson's bighorn sheep (non-listed population) to occur in lowland habitat in or near the Project Study Area during foraging and dispersal activities; therefore, this species cannot be definitively considered absent from the Project Study Area. No bighorn sheep were observed during surveys conducted from 2011 to 2013.

State Listed and State Fully Protected Wildlife Species

There are species described in Table 4.4-6, Special-Status Wildlife Species Potentially Occurring or Known to Occur, that are State listed as endangered, threatened, or are candidate species under CESA but are not listed under FESA. In addition, focused surveys were conducted for other State listed species. Species classified as fully protected species by the State of California are also discussed below. The State designation for "fully protected" species was introduced in an initial effort to identify and protect wildlife that were rare or faced possible extinction in California. While most fully protected species were later listed by the State under CESA, there are some exceptions. The results of surveys for these species are discussed below.

Golden Eagle. The golden eagle is a fully protected species by the State of California (nesting and wintering sites only) and a covered species under the WR-MSHCP. Golden eagles inhabit or forage over open and semi-open habitats such as grasslands, scrublands, oak savannas, riparian woodlands, and deserts within mountainous and canyon terrain. The species generally does not migrate, although individuals may make seasonal elevation movements in order to exploit available resources (Kochert et al. 2002; Wheeler and Clark 2003).

Focused golden eagle surveys documented one active nest (2 chicks) within the 4-mile survey buffer. This nest was within 1.5 miles south of the eastern telecommunication line that is proposed to be installed south of the cities of Beaumont and Banning and I-10. Overall, the study documented a total of 12 golden eagles (including adults, eggs and chicks) and 14 golden eagle nests were documented in seven territories. Of the six territories with nests outside the 4-mile buffer, 5 were within 3.5 miles from the buffer and one was 17.5 miles away. Five territories were determined to be active and two were inactive.

In addition, a focused survey for general raptor species was conducted during the breeding season in 2012. During this survey, golden eagles were detected within the Project Study Area in the Whitewater River area and within and just west of the Reservation; however, no nests were located in the Project Study Area in 2012 and 2013. Figure 4.4-4, Special-Status Species Observations, shows the 2012 locations where golden eagles were observed. These individuals were recorded flying over and perched on transmission structures in the existing WOD corridor. A copy of the West of Devers Swainson's Hawk & General Raptor Nesting Report for the 2012 Breeding Season is appended to the BRTR (Appendix F).

In addition to the surveys conducted for the Proposed Project, there have been previous sightings of golden eagles. Golden eagles were reported in 2007 foraging above San Timoteo Canyon Road near El Casco Substation (Aspen 2007) and in January 2010 within a then-proposed Morongo Relocation study area between the San Gorgonio River and Cottonwood Canyon (LSA 2010).

Swainson's Hawk. Swainson's hawk is State listed as threatened. Swainson's hawk is a large, wide-ranging raptor that breeds in lowland open habitats, including sparsely vegetated expanses of valleys, plateaus, floodplains, and desert. Its preferred foraging habitat includes dry land, pastures, fallow or low-growing agricultural fields, open shrublands, desert scrub communities, and grasslands. Preferred nesting trees are typically in remnant riparian forests, planted windbreaks, residential shade trees, and solitary upland oaks. Swainson's hawks can be found in the nesting season throughout much of western North America extending from southern Canada to northern Mexico and from California to the Great Plains, with small numbers in Alaska and northwestern Canada.

During spring studies conducted in 2012 and 2013, Swainson's hawk were observed migrating north over the Project Study Area. On March 26, 2013, LSA biologists observed approximately 200 individuals perched in and adjacent to the Project Study Area, just east of the San Timoteo Landfill. However, no Swainson's hawks were observed engaging in any breeding behaviors such as copulation, nest construction, or courtship displays during surveys conducted for the Proposed Project or conducted previously for SCE within the immediate vicinity of the Project Study Area. In addition, the Mojave Desert is the southernmost portion of the currently known breeding range in California. Therefore, because Swainson's hawks were not detected nesting or exhibiting breeding behavior in potentially suitable habitat, and the Project Study Area is not within the currently known breeding range in California, nesting Swainson's hawks are not expected to occur within the Project Study Area. A copy of the West of Devers Swainson's Hawk & General Raptor Nesting Report for the 2012 Breeding Season is appended to the BRTR (Appendix F).

White-Tailed Kite. The white-tailed kite is a fully protected species by the State of California (nesting sites only) and a covered species under the WR-MSHCP. The white-tailed kite is a medium-sized raptor that prefers open grasslands and savannahs, where it hovers while hunting small mammals. White-tailed kites typically nest in trees near marshes or riparian areas.

Focused surveys for raptor species were conducted during the breeding season in 2012. White-tailed kites were observed during surveys conducted in 2012 for the Proposed Project, but no nesting sites were detected. In addition to the surveys conducted for the Proposed Project, there have been previous sightings of white-tailed kites in the Project Study Area. Figure 4.4-4, Special-Status Species Observations, shows the locations where white-tailed kites were observed. A copy of the West of Devers Swainson's Hawk & General Raptor Nesting Report for the 2012 Breeding Season is appended to the BRTR (Appendix F).

Bald Eagle. The bald eagle is listed as endangered by the State. It was federally delisted on July 9, 2007. The bald eagle nests in large trees and on platforms. Nests are typically located within 1 mile of water. This species roosts communally in winter.

Focused surveys for raptor species were conducted during the breeding season in 2012 and 2013. Suitable nesting habitat is absent from the Project Study Area. However, foraging and wintering visitors have been previously observed. While suitably sized breeding habitat is absent from the Project Study Area, there is a low probability that bald eagles may occur during winter (e.g., at El Casco Lakes and vicinity) within the Project Study Area. The probability is expected to decrease, however, as water supply to El Casco Lakes is to be discontinued. Without El Casco Lakes, the closest location of open water would be at Fisherman's Retreat, outside of the Project Study Area. Therefore, it is likely wintering bald eagles would be absent from the Project Study Area in the near future, and probably before Project implementation. A copy of the West of Devers Swainson's Hawk & General Raptor Nesting Report for the 2012 Breeding Season and the 2013 Golden Eagle Report is appended to the BRTR (Appendix F).

Townsend's Big-Eared Bat. Townsend's big-eared bat is a State candidate (endangered) for listing under the CESA, and a BLM Sensitive Species. Townsend's big-eared bat was not documented during any survey conducted for the Proposed Project.

Since the CDFW is currently working on protocols for Townsend's big-eared bat focused surveys, no protocol surveys for this species were conducted for the Proposed Project. General bat habitat assessment surveys were conducted and included an assessment of suitable habitat for Townsend's big-eared bat.

Townsend's big-eared bat is known to use mines, caves, and cave-like areas for roosting. There are some reports of this species utilizing buildings, bridges, rock crevices, and hollow trees as roost sites though these are not their preferred habitat (Piaggio 2005). No suitable day roosting habitat in or adjacent to the Project Study Area was identified during habitat assessments.

Potential foraging habitat is present within the Project Study Area; therefore, foraging individuals could be present. However, due to the lack of nearby known suitable roosting habitat, there is only a low probability that Townsend's big-eared bat may occur.

Ringtail. The ringtail is a fully protected species by the State of California. Ringtails are small, nocturnal members of the raccoon family that reside in woody and rocky areas of the southwestern United States and most of Mexico.

While this species was not observed during general and focused wildlife surveys conducted for the Proposed Project, suitable habitat for this species does occur within the Project Study Area. There is a moderate potential that ringtails are present in rocky areas in the Project Study Area and immediate vicinity.

Non-Listed Wildlife Species of Interest

Coachella Valley Jerusalem Cricket and Coachella Giant Sand Treader Cricket.

Coachella Valley Jerusalem cricket is a California Special Animal. Habitat assessment and focused surveys for this species were conducted concurrently with surveys for the Coachella giant sand treader cricket. During these surveys, potentially suitable habitat for the Coachella Valley Jerusalem cricket was identified; however, no individuals were observed (AMEC 2012b).

Habitat within the Project Study Area identified as suitable for the Coachella Valley Jerusalem cricket occurred within the floodplain along the east side of Whitewater River, and within the Whitewater Hills between Whitewater Canyon and SR-62.

There are six previously documented records of the Coachella Valley Jerusalem cricket in CNDDDB that are from the vicinity of the Proposed Project, though none has been documented within the Project Study Area. All six of these past records were from a very small area east of Whitewater Canyon on Whitewater Hill, approximately 0.42 mile south of the Project Study Area.

Coachella giant sand-treader cricket is a California Special Animal and covered under the CV-MSHCP. During surveys conducted for both this species and the Coachella Valley Jerusalem cricket, potentially suitable habitat for the Coachella giant sand-treader cricket was identified; however, no individuals were observed.

Habitat within the Project Study Area identified as suitable for the Coachella giant sand treader cricket also occurred within 2 acres on the floodplain along the east side of Whitewater River.

There is only one previously documented record of the Coachella giant sand treader cricket in the CNDDDB that is from the vicinity of the Project Study Area. This occurrence was from the “Palm Springs Depot,” approximately 1.5 miles south of the Project Study Area and was recorded in 1950.

Amphibian and Reptile Species. The following non-listed special-status amphibian and reptile species were incidentally observed during biological surveys conducted previously for SCE within the immediate vicinity of the Project Study Area, or during focused surveys conducted for the Proposed Project (AMEC 2012b).²

- Western spadefoot (CA: SSC; BLM: S; MSHCP: WRC) (LSA 2012);
- Coast horned lizard (CA: SA; BLM: S; MSHCP: WRC) (Aspen 2007);
- Coastal western whiptail (CA: SA; MSHCP: WRC) (LSA 2012, 2013);
- Red-diamond rattlesnake (CA: SSC; MSHCP: WRC) (AMEC 2012b; LSA 2012);
- and

² LSA 2012 and LSA 2013 species observations were made by either LSA staff or their subconsultants during 2012 and 2013 general and/or focused surveys conducted for the Proposed Project

- Rosy boa (CA: SA) (AMEC 2012b; LSA 2012).

Burrowing Owl. Burrowing owl is federally protected under the MBTA and by California Fish and Game Code Sections 3503, 3503.5, and 3800. In addition, the burrowing owl is a State Species of Special Concern and is covered under both the WR-MSHCP and CV-MSHCP. The California Fish and Game Commission rejected a proposal for State listing because of relatively high population levels in some parts of the State. However, because the species has declined in other parts of California, and it is particularly vulnerable to incidental take due to its unique utilization of burrows, the burrowing owl has been the focus of specific CDFW management recommendations since the 1990s.

Burrowing owls inhabit open country in North and South America. These owls are known to occupy and modify former ground squirrel burrows in grasslands, agricultural fields, rangelands, and other open habitat types including those in railroad rights-of-ways, margins of highways, golf courses, and airports. They often utilize structures such as earthen berms, concrete culverts, pipes, and concrete, asphalt, rock, or wood debris piles. Burrowing owls are active year-round and forage both diurnally and nocturnally for insects, scorpions, amphibians, reptiles, birds, and small mammals (Poulin et al. 2011).

Focused surveys for burrowing owls were conducted during the breeding season in 2012 and burrow surveys were conducted in 2013. A copy of the West of Devers Burrowing Owl Nesting Report is appended to the BRTR (Appendix F). Figure 4.4-4, Special-Status Species Observations, shows the locations where this species and sign (burrows with pellets, feathers, tracks) was detected.

During the 2012 surveys, sign was found at 89 burrow locations and 17 nesting pairs of burrowing owls were recorded within the Project Study Area. Although no large nesting colonies were found, hundreds of suitable burrows were identified throughout the Project Study Area. All of the confirmed occupied burrows and nesting pairs were limited to the eastern portion of the Project Study Area, within a 22-mile section extending from the City of Beaumont east to the Devers Substation. Only one presumably migrant burrowing owl was found west of State Route 79 (SR-79) and I-10. This individual was detected only once east of El Casco Substation.

During the 2013 burrow surveys, an additional 21 potentially suitable or suitable burrows were identified within the Project Study Area. Results included 10 potential burrows without sign and 9 potential burrows with sign; in addition, one occupied burrow with at least one adult burrowing owl was observed on March 8 east of the Reservation and the community of Cabazon near Rushmore Avenue and Tamarack Road, and another owl was observed in proximity to several burrows with owl sign about 0.7 mile west of Whitewater River.

During the 2013, focused breeding season surveys conducted along the proposed telecommunication routes where lines would be placed underground, suitable burrow habitat was determined to be lacking and no active burrows or owls were detected. Focused surveys were conducted for the two telecommunication lines south of I-10 and

the cities of Beaumont and Banning, but suitable burrow habitat was determined to be lacking at other underground telecommunication line areas.

In addition to the surveys conducted for the Proposed Project, there have been previous sightings of burrowing owls and/or their sign in the Project Study Area and vicinity. In 2010, owls were detected east of Millard Canyon, and found to be especially common along the concrete channel near Bonita Avenue on the Reservation and along the San Gorgonio River near the wind farms. In 2011, an inactive burrow was reported near the Junction of SR-243 and Old Idyllwild Road, and burrowing owls were reported between the Devers Substation and Whitewater River and along the west bank of Super Creek on Whitewater Hill.

Other Raptor Species. Focused surveys for raptor species were conducted during the breeding season in 2012. In addition to the species discussed above, the following special-status raptor species were observed during biological surveys either conducted previously for SCE within the immediate vicinity of the Project Study Area or from focused surveys conducted for the Proposed Project:

- Cooper's hawk (*Accipiter cooperii*);
- Ferruginous hawk (*Buteo regalis*);
- Loggerhead shrike (*Lanius ludovicianus*);
- Merlin (*Falco columbarius*);
- Northern harrier (*Circus cyaneus*); and
- Prairie falcon (*Falco mexicanus*).

Figure 4.4-4, Special-Status Species Observations, shows the locations where raptors were observed. A copy of the West of Devers Swainson's Hawk & General Raptor Nesting Report for the 2012 Breeding Season is appended to the BRTR (Appendix F). See Table 4.4-6, Special-Status Wildlife Species Potentially Occurring or Known to Occur, for other special-status raptor species that have the potential to occur in the Project Study Area.

Other Riparian Birds. Focused surveys for least Bell's vireo and southwestern willow flycatcher were conducted during the breeding season in 2012. During these focused surveys, all bird species observed were noted. Because of the similarity of habitat, other riparian bird species would likely have been observed or otherwise detected, if present. The following special-status riparian bird species were observed during biological surveys either conducted previously for SCE within the immediate vicinity of the Project Study Area or from focused surveys conducted for the Proposed Project:

- Black-crowned night-heron (*Nycticorax nycticorax*);
- Allen's hummingbird (*Selasphorus sasin*);
- Great blue heron (*Ardea herodias*);
- Great egret (*Ardea alba*);

- Osprey (*Pandion haliaetus*);
- Snowy egret (*Egretta thula*);
- Yellow warbler (*Setophaga petechia*); and
- Yellow-breasted chat (*Icteria virens*).

Figure 4.4-4, Special-Status Species Observations, shows the locations where other special-status riparian birds were observed. A copy of the Protocol Least Bell's Vireo and Southwestern Willow Flycatcher Survey Results letter report is appended to the BRTR (Appendix F). See Table 4.4-6, Special-Status Wildlife Species Potentially Occurring or Known to Occur, for other special-status riparian bird species that were not observed during surveys and their potential for occurring in the Project Study Area.

Other Rodent Species. Focused surveys for special-status rodent species were conducted in 2012 and 2013. In addition to the species discussed above, the following special-status rodent species were observed during biological surveys either conducted previously for SCE within the immediate vicinity of the Project Study Area or from focused surveys conducted for the Proposed Project:

- Dulzura kangaroo rat (*Dipodomys simulans*);
- Los Angeles pocket mouse (*Perognathus longimembris brevinasus*);
- Palm Springs pocket mouse (*Perognathus longimembris bangsii*);
- Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*);
- Pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*); and
- San Diego desert woodrat (*Neotomalepida intermedia*).

See Table 4.4-6, Special-Status Wildlife Species Potentially Occurring or Known to Occur, for other special-status rodent species that were not detected during surveys and their potential for occurring in the Project Study Area. A copy of the 2012 and 2013 Summary Report for Special-Status Rodent Trapping letter reports is appended to the BRTR (Appendix F).

Bat Species. A reconnaissance-level bat habitat suitability assessment for the Project Study Area was conducted in 2012. A copy of the Bat Habitat Suitability Assessment for the West of Devers Upgrade Project letter report is appended to the BRTR (Appendix F). Suitable bat roosting habitat was observed in the Project Study Area. These included anthropogenic structures such as culverts, bridges, and abandoned houses or buildings, as well as various mature oak and cottonwood trees containing loose bark, cavities, and crevices suitable for bats. Foliage-roosting species may also roost in the leaves of the citrus trees, palm trees, and cottonwood trees found throughout the Project Study Area. Although no bats were observed during the bat habitat assessment, bat guano indicating some degree of bat roosting activity was observed at three of the visited potential roosting locations. In addition, the varied topography and relative diversity of plant communities within the Project Study Area and their associated insect fauna may provide foraging habitat for a variety of bat species. All special-status bat species considered to have some

potential to occur within the Project Study Area or in its immediate vicinity are identified in Table 4.4-6, Special-Status Wildlife Species Potentially Occurring or Known to Occur, along with descriptions of each species' specific roosting habitat requirements.

In 2012, foraging western mastiff bat (*Eumops perotis*) individuals were incidentally and audibly detected by LSA biologists conducting surveys within the Project Study Area in early June (City of Grand Terrace) and on September 8 and 12 (southwest of El Casco Lakes).

In 2013, additional areas containing potential roosting habitat were observed, but no bats were detected.

Other Special-Status or MSHCP Covered Species Incidentally Detected During Other Biological Surveys

Other Special-Status Species. In addition to the species described above, the following are lists of special-status or MSHCP-covered animal species documented during biological surveys either conducted previously for SCE within the immediate vicinity of the Project Study Area or from non-focused surveys conducted in late 2011 to early 2013 for the Proposed Project. Conservation status classifications are defined below the following lists.

- Western spadefoot (*Spea hammondi*) (SSC; S; WRC);
- Coast horned lizard (*Phrynosoma blainvillii (coronatum)*) (SSC; S; WRC);
- Coastal western whiptail (*Aspidoscelis tigris stejnegeri*) (SA; WRC);
- Red-diamond rattlesnake (*Crotalus ruber*) (SSC; WRC);
- Rosy boa (*Charina trivirgata*) (SA);
- Two-striped garter snake (*Thamnophis hammondi*) (SSC; S);
- Bell's sage sparrow (*Artemisospiza belli belli*) (SA; WRC);
- Black-tailed gnatcatcher (*Polioptila melanura*) (SA);
- California horned lark (*Eremophila alpestris actia*) (SA; WRC);
- Costa's hummingbird (*Calypte costae*) (SA);
- Grasshopper sparrow (*Ammodramus savannarum*) (SSC; WRP);
- Lark sparrow (*Chondestes grammacus*) (SA);
- Lawrence's goldfinch (*Spinus lawrencei*) (SA);
- Le Conte's thrasher (*Toxostoma lecontei*) (SA);
- Nuttall's woodpecker (*Picoides nuttallii*) (SA);
- Oak titmouse (*Baeolophus inornatus*) (SA);
- Olive-sided flycatcher (*Contopus cooperi*) (SSC);

- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) (SA; WRC); and
- San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) (SSC; WRC).

MSHCP-Only Species. Some species covered under the WR-MSHCP have no special-status, but are simply included under the MSHCP as “covered.” These species were identified for coverage because of regional consideration, association with limited habitats within the MSHCP area, or because they are key species in maintaining species richness in smaller habitat fragments. There are no species that occur or have the potential to occur within the Project Study Area that are covered by the CV-MSHCP and are not also State or Federal special-status species. Therefore, any species covered by the CV-MSHCP relevant to the Project Study Area is addressed in the above sections.

- Downy woodpecker (*Picoides pubescens*) (WRC);
- Lincoln’s sparrow (*Melospiza lincolnii*) (WRP);
- Tree swallow (*Tachycineta bicolor*) (WRC);
- Bobcat (*Lynx rufus*) (WRC);
- Coyote (*Canis latrans*) (WRC);
- Long-tailed weasel (*Mustela frenata*) (WRC); and
- Mountain lion (*Puma concolor*) (WRC).

State Classifications:

- SSC: State Species of Special Concern.
- SA: Special Animal.

BLM Classification for California:

- S: BLM Sensitive Species.

Species Habitat Conservation Plan Classifications:

- WRC: Western Riverside County MSHCP Species: covered under the MSHCP
- WRP: Western Riverside County MSHCP Species: will be adequately conserved when specified requirements are met; covered under the MSHCP

For a complete list of potentially occurring special-status animal species and their probabilities of occurrence within the Project Study Area, refer to Table 4.4-6, Special-Status Wildlife Species Potentially Occurring or Known to Occur.

Wildlife Species Considered Absent

The following species were identified in the literature search but the Project Study Area occurs outside the known range or elevation or lacks suitable habitat. Therefore, the following species do not warrant further consideration in this document, as they are not expected to occur:

- Casey’s June beetle (*Dinacoma caseyi*);
- Santa Ana sucker (*Catostomus santaanae*);

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- Arroyo toad (*Anaxyrus [Bufo] californicus*);
- California tiger salamander (*Ambystoma californiense*);
- Large-blotched salamander (*Ensatina klauberi*);
- Sierra Madre yellow-legged frog (*Rana muscosa*);
- California mountain kingsnake (San Bernardino population) (*Lampropeltis zonata [parvirubra]*);
- Coachella Valley fringe-toed lizard (*Uma inornata*);
- Flat-tailed horned lizard (*Phrynosoma mcalli*);
- Southern rubber boa (*Charina umbratica*);
- American bittern (*Botaurus lentiginosus*);
- Black-chinned sparrow (*Spizella atrogularis*);
- California gull (nesting colony) (*Larus californicus*);
- Chipping sparrow (*Spizella passerina*);
- Clark's marsh wren (*Cistothorus palustris clarkae*);
- Large-billed Savannah sparrow (*Passerculus sandwichensis rostratus*);
- Least bittern (nesting) (*Ixobrychus exilis*);
- Macgillivray's warbler (nesting) (*Oporornis tolmiei*);
- San Diego cactus wren (*Campylorhynchus brunneicapillus sandiegensis*);
- Sharp-shinned hawk (nesting) (*Accipiter striatus*);
- Short-eared owl (nesting) (*Asio flammeus*);
- Yellow-headed blackbird (nesting) (*Xanthocephalus xanthocephalus*);
- Dulzura pocket mouse (*Chaetodipus californicus femoralis*);
- Lesser long-nosed bat (*Leptonycteris yerbabuena*);
- Lodgepole chipmunk (*Neotamias speciosus speciosus*);
- San Bernardino flying squirrel (*Glaucomys sabrinus californicus*);
- San Bernardino kangaroo rat (*Dipodomys merriami parvus*); and
- Sierra Nevada bighorn sheep (*Ovis canadensis sierrae* (formerly *californiana*)).

Wetlands and Other Waters

A delineation of jurisdictional wetlands and other waters was not conducted in accordance with routine wetland delineation procedures described in the *Corps of Engineers Wetlands Delineation Manual*. However, a less rigorous drainage assessment was conducted for the Proposed Project to identify the locations and general configurations of potential drainage features and the extent to which these features may potentially be subject to Federal and State jurisdiction under Sections 404 and 401 of the

CWA and for Streambed Alteration Agreement processing under Section 1600 et seq. of the California Fish and Game Code, respectively. The drainage assessment was conducted to assist with Proposed Project design by identifying constraints and to assess whether permit authorizations from the USACE, CDFW, and RWQCB may be required.

United States Army Corps of Engineers Jurisdiction

Non-Wetland Waters. There are up to 275 nonwetland drainages that meet the USACE nexus criteria were identified within the Project Study Area (the BRTR [Appendix N]). Drainages within the western half of the Project Study Area (Segments 1 through 4) generally flow north or southwest into Reche Canyon, Mission Channel, San Timoteo Canyon, or San Timoteo Creek and eventually reach the Santa Ana River, which is tributary to the Pacific Ocean (a Traditional Navigable Water). The remaining drainages, found in the eastern part of the Proposed Project Study Area (Segments 4 through 6) and located in the City of Banning, on the Reservation, or situated farther east up to the Devers Substation generally flow south or southeast into either the San Gorgonio River, the Whitewater River, Super Creek, or Garnet Wash, each of which then flows into the Salton Sea (a Traditional Navigable Water). Because the Pacific Ocean and the Salton Sea are Traditional Navigable Waters, several of the drainages in the Project Study Area, or tributaries thereof, are potentially subject to USACE jurisdiction pursuant to Section 404 of the CWA. Preparation of a jurisdictional delineation, with a Preliminary or Approved Jurisdictional Determination by the USACE would determine jurisdictional status.

Wetland Waters. There are up to 26 drainages within the Project Study Area that were identified with the potential to satisfy the three criteria necessary to meet the USACE definition of a wetland (i.e., presence of dominant hydrophytic vegetation, hydric soils, and wetland hydrology) (BRTR [Appendix N]).

For most areas inspected, soil pits were not dug to definitively characterize hydric soils and thus confirm wetland status; therefore, mapped potential wetland areas should be considered areas that may or may not meet the three wetland criteria, and represent an estimation of the maximum extent of potential wetland areas until a routine jurisdictional delineation of these drainages is conducted.

California Department of Fish and Wildlife Jurisdiction

All of the potential USACE jurisdictional drainages would also be considered CDFW jurisdictional. In addition, 196 drainages that did not meet the USACE nexus criteria but showed evidence of a bed and bank (e.g., not categorized as swales) were also identified and are potentially subject to CDFW jurisdiction (BRTR [Appendix N]). In addition, riparian vegetation associated with these drainages was also mapped as potentially under CDFW jurisdiction.

Regional Water Quality Control Board Jurisdiction

Areas of potential RWQCB jurisdiction coincide with the identified limits of potential USACE jurisdiction, per the September 2004 Workplan (SWRCB 2004). These areas

may be subject to RWQCB jurisdiction through provisions in the CWA. In addition, areas that are potentially subject to CDFW jurisdiction, but do not qualify as USACE jurisdiction (i.e., isolated areas with a bed and bank that do not connect to a TNW and isolated wetlands), may also be subject to RWQCB jurisdiction through Porter-Cologne. The drainages in the western half of the Project Study Area (Segments 1–4), which flow into the Santa Ana River, will be subject to jurisdiction by Region 8 (Santa Ana RWQCB) of the SWRCB. The drainages in the eastern part of the Project Study Area (Segments 4–6), which flow into the Salton Sea, are regulated by Region 7 (Colorado River RWQCB) of the SWRCB. This includes the depressional feature (Drainage 182B from 2012) on the Reservation (Segment 5). The regional boundary within the Project Study Area is approximately the border (generally Highland Springs Avenue) between the cities of Beaumont and Banning in Riverside County.

Western Riverside County MSHCP Riparian/Riverine/Pool Areas

No specific assessment of riparian/riverine areas subject to the provisions of the WR-MSHCP portion of the Project Study Area was made, because SCE is not currently a PSE. All of the existing riparian communities within the WR-MSHCP that occur within the Project Study Area likely fall under the regulatory jurisdiction of the USACE pursuant to Section 404 of the CWA and/or the CDFW pursuant to Section 1600 of the California Fish and Game Code. Therefore, all drainage features subject to conditions of the WR-MSHCP Riparian/Riverine guidelines were identified as potentially jurisdictional by the USACE and the CDFW. There are a total of 59 riverine or riparian areas identified within the boundaries of the WR-MSHCP planning area, which is in Segments 2, 3, and 4 (Figure 4.4-2, Land Management and Critical Habitat Areas).

None of the seasonally ponded depressions found during the vernal pool assessment survey conducted between November 2011 through March (May for water level site checks) 2013 met the WR-MSHCP criteria for vernal pools (see Section 2.5.15, Regional Conservation Plans, for a description of vernal pool criteria). Locations and a full description of surveyed ponded depressions can be found in the BRTR (Appendix N).

Coachella Valley MSHCP Desert Wetland Communities

The CV-MSHCP only protects jurisdictional drainages as they relate to the Natural Communities Conservation Goals within the Conservation Areas. No communities identified as wetland communities in the CV-MSHCP are present within the Project Study Area. However, Desert Willow and Alluvial Scrub communities may still be regulated under other agency authorities. See the BRTR, Appendix N, for all major drainage features identified by the CV-MSHCP planning area.

4.4.4 Significance Criteria

4.4.4.1 CEQA Significance Criteria

The significance criteria for assessing the impacts to biological resources come from the CEQA Environmental Checklist (Appendix G of the CEQA Guidelines). According to the checklist, a project causes a potentially significant impact if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridor, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

4.4.4.2 NEPA Analysis

Unlike CEQA, NEPA does not have specific significance criteria. However, NEPA regulations contain guidance regarding significance analysis. Specifically, consideration of “significance” involves an analysis of both context and intensity (Title 40 Code of Federal Regulations 1508.27).

4.4.5 Impact Analysis

Due to the long geographic span of the Proposed Project and the multiple components, the subsequent subsections of this Impact Analysis are divided into discussions of the impacts of each major component (i.e., substation modifications, 220 kV transmission lines, 66 kV subtransmission lines, 12 kV distribution lines, telecommunications, and staging yards). The discussions of all components are further divided into individual locations or segments. Following this description of the impacts relative to each component, there is a specific assessment of identified overall Proposed Project effects relative to the CEQA thresholds listed above. The significance of each impact is determined based on the significance criteria set forth in Section 4.4.4.1, CEQA Significance Criteria, and Section 4.4.4.2, NEPA Significance Criteria.

Prior to the more detailed discussion of impacts by component and location, this overview generally describes the overall impacts of the Proposed Project, discusses the context of the impact analysis, and highlights the impact issues. Additionally, as it relates to each of the project components, the Project Description utilizes conservative ground disturbance assumptions based on preliminary engineering to estimate surface area disturbance. This expanded surface area disturbance is provided for the purpose of ensuring the environmental analysis included in Chapters 4.0 through 6.0 of this PEA sufficiently analyzes the potential environmental impacts of conservative ground disturbance assumptions. The actual surface area disturbance is expected to be reduced following completion of final engineering.

Impacts from the Proposed Project may be direct or indirect, and include both temporary and permanent effects. Direct impacts are those that damage, degrade, or remove a resource or disturb activity patterns, occur as a direct result of project activities, and occur at the same time and place of the activities. These impacts may include habitat loss or modification (e.g., during grading), displacement of wildlife, and direct mortality of wildlife during construction. Indirect impacts are defined as those caused by project activities that occur at a different time or place from direct impacts. Indirect impacts include changes such as long-term alterations to land use patterns, plant or animal population dynamics, and nutrient and water flow, as well as impacts caused by proximity to project elements, such as changes to noise levels, disturbance from increased or ongoing human activities, and changes to air and water quality.

Impacts that are reversible through mitigation or are short-term are considered to be temporary. Temporary impacts can include direct impacts such as habitat loss where the habitat would be restored following construction; they also can include indirect effects such as increased noise during construction that would cease when construction is complete. Short-term impacts associated with periodic maintenance, such as reestablishing access roads, may also be considered temporary; although the initial construction of new access roads would be considered permanent.

Permanent impacts are those direct and indirect impacts that cannot be reversed or that are associated with project elements that are anticipated to remain in place for a long period of time (e.g., many years). Permanent direct impacts include loss or modification of habitat to accommodate project elements (e.g., structures and access roads); permanent indirect impacts include alterations to land use patterns as a result of permanent project elements, noise associated with project facilities, and adjacency effects associated with other project elements (e.g., changes to species abundance through the addition or removal of suitable nesting locations).

Direct and indirect impacts of the Proposed Project, both temporary and permanent, have been quantified by correlating the results from the biological assessment to the footprint of the identified disturbance areas. The analysis of project impacts is based on these calculations. The overall Proposed Project impacts to land cover types and drainage features, which occur throughout the Proposed Project Study area are summarized in Table 4.4-8, Maximum Potential Permanent Impacts to Land Cover, Table 4.4-9, Maximum Potential Temporary Impacts to Land Cover, Table 4.4-10, Maximum

Potential Permanent Impacts to Jurisdictional Drainage Features, and Table 4.4-11, Maximum Potential Temporary Impacts to Jurisdictional Drainage Features, and discussed in more detail in Section 4.4.5.1, Impact Assessment by Project Component.

In evaluating impacts, the following points relative to the Proposed Project and its context are considered:

- For the most part, the Proposed Project consists of upgrade and/or replacement of existing facilities, i.e., the existing condition is a substantial utility corridor.
- The impact assessment is based on preliminary engineering, which does not yet include all potential avoidance of mapped resources (e.g., drainages). The identified permanent impact polygons for individual facilities such as roads and lattice steel towers (LSTs) are generally larger than the area that may actually be affected.
- As with the permanent impacts, the temporary impact “envelope” encompasses much more land than would actually be affected, but a more precise delineation of temporary impact areas cannot be made until final engineering plans for the Proposed Project are completed.
- While the amount of calculated effects might be considered substantial in some settings, such as a concentrated residential or commercial development where all effects occur in the same time and space, the effects of the Proposed Project would be distributed in both time and space over a very large area, lessening the importance of quantity alone in determining the significance of effects. To illustrate this concept, the total permanent effects to native or naturalized land cover is estimated as occurring to up to approximately 303.4 acres, which is 3.6 percent of the over 8,376.4 total acres of natural land cover types that currently exist throughout the Project Study Area (Table 4.4-8, Maximum Potential Permanent Impacts to Land Cover). Similarly calculated, the total temporary effects of the Proposed Project on natural land cover are estimated to occur to up to 2,240.70 acres, which is 28.7 percent of currently existing natural land cover (Table 4.4-9, Maximum Potential Temporary Impacts to Land Cover). These values show that temporary effects are expected to be considerably larger than permanent effects. Temporary effects, however, are generally of a low intensity and relatively short term, and will be incurred over substantial spans of time and distance. Specifically, the effects at any particular point, such as the LSTs along the 220 kV transmission lines, are expected to be relatively small.
- Operational impacts, which might otherwise be considered as part of the long-term indirect impacts, are essentially the same as the existing facility. Therefore, operational impacts are not considered except in cases of new facilities or alignments where there may be operational impacts that affect biological resources.

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Table 4.4-8: Maximum Potential Permanent Impacts to Land Cover

Segment	Permanent Impacts (Acres)										
	Agriculture	Alluvial Scrub	Chaparral	Coast Live Oak Woodland	Coastal Sage Scrub	Desert Scrub	Developed/ Disturbed	Grassland/ Forbland	Riparian Woodland	Open Water	Total
1	4.9	—	0.3	—	1.2	—	21.1	4.8	—	—	32.3
2	0.2	0.1	—	—	12.3	—	5.9	18.2	—	—	36.7
3	1.7	0.8	13.0	—	59.1	—	6.4	50.6	0.0	—	131.7
4	2.7	—	21.5	1.6	2.5	—	12.4	22.9	2.5	—	66.1
5	—	5.2	—	—	4.1	26.4	9.3	2.6	—	—	47.7
6	—	2.0	—	—	—	61.7	4.2	—	—	—	67.9
Total	9.6	8.1	34.8	1.6	79.3	78.1	59.3	99.0	2.5	—	372.5

Table 4.4-9: Maximum Potential Temporary Impacts to Land Cover

Segment	Temporary Impacts (Acres)										
	Agriculture	Alluvial Scrub	Chaparral	Coast Live Oak Woodland	Coastal Sage Scrub	Desert Scrub	Developed/ Disturbed	Grassland/ Forbland	Riparian Woodland	Open Water	Total
1	32.7	—	1.1	—	5.1	—	168.4	26.8	0.6	—	234.6
2	4.2	2.3	—	—	92.7	—	52.2	130.3	0.8	—	282.4
3	8.4	1.3	49.4	—	291.9	—	78.2	259.0	2.6	0.2	688.0
4	30.0	1.9	158.9	13.1	27.3	6.6	222.4	265.2	16.6	—	741.9
5	—	62.3	—	—	36.6	401.1	85.7	34.0	1.7	—	621.5
6	—	17.2	—	—	—	498.2	59.4	—	—	—	574.9
Total	108.7	85.0	209.5	13.1	453.5	905.9	666.9	715.3	22.2	0.2	3,180.2

Table 4.4-10: Maximum Potential Permanent Impacts to Jurisdictional Drainage Features

Segment	Potentially Jurisdictional Drainage Features (Linear Feet)				Potentially Jurisdictional Riparian Vegetation (Acres)			
	CDFW/USACE/RWQCB		CDFW/RWQCB Nonwetland Drainages	Total Impacts (Linear Feet)	CDFW/USACE/RWQCB		CDFW/RWQCB Riparian Vegetation	Total Impacts (Acres)
	Wetland Drainages	Nonwetland Drainages			Wetland Vegetation	Riparian Vegetation		
1	0	960	0	960	0	0	0	0
2	114	1,054	2,000	3,168	0	0.03	0	0.03
3	0	1,354	1,636	2,990	0	0	0	0
4	0	1,762	122	1,884	0	1.04	0.2	1.24
5	0	1,400	0	1,400	0	2.28	0.04	2.32
6	0	1,115	408	1,523	0	0.16	0	0.16
Total	114	7,645	4,166	11,925	0	3.51	0.24	3.75

¹ Totals do not include the area (i.e., acres) of the drainage features because only one dimensional (i.e., linear feet) data was collected. Therefore, totals do not fully quantify the extent of the effects of the Proposed Project to potentially jurisdictional drainages mapped within the Project Study Area. Additionally, many drainage features will be avoided in final engineering plans.

Table 4.4-11: Maximum Potential Temporary Impacts to Jurisdictional Drainage Features

Segment	Potentially Jurisdictional Drainage Features (Linear Feet)				Potentially Jurisdictional Riparian Vegetation (Acres)			
	CDFW/USACE/RWQCB		CDFW/RWQCB Nonwetland Drainages ¹	Total Impacts (Linear Feet)	CDFW/USACE/RWQCB		CDFW/RWQCB Riparian Vegetation	Total Impacts (Acres)
	Wetland Drainages	Nonwetland Drainages			Wetland Vegetation	Riparian Vegetation		
1	77	5,910	2,895	8,882	0	0.1	0.09	0.19
2	640	9,638	11,068	21,346	0	0.45	0.35	0.8
3	29	18,168	18,337	36,534	0	1.82	0	1.82
4	1,601	15,578	2,851	20,030	1.27	7.46	0.53	9.26
5	0	24,562	4,265	28,827	0.34	34.78	0.82	35.94
6	49	13,941	5,306	19,296	0	0.53	0	0.53
Total²	2,396	87,797	44,722	134,915	1.6	45.1	1.8	48.5

¹ This total does not include the 0.09 acres measured for catchment basins in developed areas of Segment 1. These basins were determined to be potentially jurisdictional for the CDFW and the RWQCB.

² Totals do not include the area (i.e., acres) of the drainage features because only one dimensional (i.e., linear feet) data was collected. Therefore, totals do not fully quantify the extent of the effects of the Proposed Project to potentially jurisdictional drainages mapped within the Project Study Area. Additionally, many drainage features will be avoided in final engineering plans.

The key issues that are evaluated in more detail in Section 4.4.5.1, Impact Assessment by Project Component, and the subsequent analyses of the CEQA thresholds are as follows:

- Disturbance and loss of native vegetation;
- General wildlife resources, including birds and bird nesting;
- Special-status species animal species, or specifically protected by legislation, as well as other species for which protect protocols have been established;
- Special-status plant species, especially those listed as threatened, endangered, species, and plant species classified as California Rare Plant Rank 1B;
- Potentially jurisdictional waters, including associated wetland and riparian habitats;
- Designated Critical Habitat, established habitat conservation plans and associated habitat conservation areas, and sensitive natural communities;
- Wildlife movement; and
- Locally protected resources, e.g., through tree ordinances.

Detailed descriptions of these issues for individual components are intended to be both qualitative and quantitative; however, assessment of significance is based on the whole project under the CEQA threshold discussions rather than considering individual components separately.

4.4.5.1 Impact Assessment by Project Component

The following discussion addresses all Proposed Project components, including substation modifications, 220 kV transmission lines, 66 kV subtransmission lines, 12 kV distribution lines, telecommunication facilities, and the establishment of staging yards. The overall Proposed Project impacts to land cover types and drainage features, which occur throughout the Project Study Area are summarized in Table 4.4-8, Maximum Potential Permanent Impacts to Land Cover, Table 4.4-9, Maximum Potential Temporary Impacts to Land Cover, Table 4.4-10, Maximum Potential Permanent Impacts to Jurisdictional Drainage Features, and Table 4.4-11, Maximum Potential Temporary Impacts to Jurisdictional Drainage Features.

Acreages and linear feet are derived by overlaying planned facilities/structures and construction zones with the land cover types and mapped drainages, because impacts may occur within any portion of the intersected impact areas. However, this is generally an overstatement of impacts because actual impacts would occur within only a portion of the facilities/structures layers that were used in the mapping analysis. For example, permanent impacts for LST tower construction pads were calculated using the assumption that each pad would cover 2,500 square feet (50-foot by 50-foot pads), but the actual permanent impact of an LST would likely be limited to the tower footings and permanent removal of vegetation around a substantially smaller area around the LST base, to allow access for maintenance. Similarly, while any portion of the area identified for temporary construction access may be utilized at some point in time, the amount of land that is actually affected in any given area would usually be much smaller.

Temporary and permanent impacts may occur at the same location. In these cases, impacts are quantified as permanent.

Substation Modifications

There are no new substations proposed as part of the Proposed Project. Modifications to existing substation equipment would be performed to accommodate continuous and emergency power on the existing 220 kV transmission lines between the Vista, San Bernardino, El Casco, Etiwanda, and Devers Substations. Additionally, modifications to Timoteo and Tennessee Substations would also be performed to accommodate the 66 kV subtransmission line relocations. See Figure 4.4-1, Biological Project Study Area, for the substation locations.

The Proposed Project would not result in changes to access roads, parking areas, drainage patterns, or modifications to perimeter walls or fencing at the existing substations. All substation construction activities would be entirely contained within the perimeter fences, which surround these developed and highly disturbed areas. The following substations have proposed grading and surface improvements:

- San Bernardino Substation;
- Timoteo Substation;
- Vista Substation;
- Tennessee Substation;
- El Casco Substation; and
- Devers Substation.

Except for potential anthropogenic nesting structures for native bird species protected under the MBTA, the substations do not support potential habitat for any special-status plant or wildlife species. Therefore, minimal impacts to special-species may occur at the substations if active nests are disturbed during construction activities or operations and maintenance. As discussed below, impacts due to substation modification activities would be limited to the areas surrounding the substations.

No permanent or temporary impacts to habitat are anticipated to occur as a result of substation modifications. Similarly, wildlife and plants immediately surrounding the substations are not likely to be adversely affected due to work at the substation locations since vehicular and human activity to and from the work locations is not anticipated to increase substantially (typically fewer than 100 days of work at each substation) and would elevate the potential for direct and indirect effects to plant and animal species surrounding the substations.

There is potential for impacts to nesting birds during upgrades to substation infrastructure. However, impacts associated with substation modifications would not affect a large number of plants or animals, as these areas are already heavily developed. The areas within the perimeter fence of each substation may provide nesting

opportunities for relatively small members of birds representing common species that are adapted to anthropogenic structures, and are not expected to support substantial local plant or wildlife populations.

220 kV Transmission Lines

The Proposed Project would include the removal and upgrade of approximately 181 circuit miles of existing 220 kV transmission line facilities (approximately 48 corridor miles), primarily within the existing WOD corridor. The Proposed Project would primarily be constructed on a combination of new 220 kV double-circuit LSTs, double-circuit tubular steel poles (TSPs), and single-phase TSPs. Each of the proposed 220 kV transmission lines would consist of overhead wires (conductors). Helicopters would be used to facilitate construction and support activities.

Access and spur roads would be used to access the planned removal and construction areas. SCE's existing access roads are located within WOD corridor/easements. New and/or expanded property rights may be required to construct new access/spur roads.

Temporary wood and/or steel structures would be used to facilitate construction of the new 220 kV transmission lines and would function as guard structures and/or shoo-fly structures. These temporary structures would be direct-buried and/or guyed and removed following completion of construction for the particular location.

Relocation of existing distribution facilities would be required to accommodate relocation of 220 kV transmission infrastructure. Distribution work resulting from the 220 kV transmission portion of the Proposed Project would include overhead and underground construction. Distribution work resulting from 220 kV transmission line work would be conducted in franchise³ or newly acquired utility ROW. The Dental 12 kV circuit would be relocated to a new underground system (approximately 1.5 miles). The Intern 12 kV circuit would be relocated into the same new underground system as the Dental 12 kV circuit, and a portion would be underbuilt on an existing 66 kV subtransmission line. Additionally, the relocations of both the San Bernardino-Redlands-Timoteo 66 kV and the San Bernardino-Redlands-Tennessee 66 kV Subtransmission Lines would require the additional relocation of existing distribution circuits and associated equipment from existing poles to new subtransmission poles exclusively in Segment 1.

See Figure 4.4-1, Biological Project Study Area, for the transmission line location. Impacts that are anticipated during the work associated with the 220 kV transmission lines include:

- Removal or destruction of habitat, primarily in focused areas along the alignment for relocated structures and access roads; this could have minor effects on wildlife populations or localized plant colonies, but not likely a reduction in overall distribution of any plant or wildlife species, due to the areas of existing habitat that would persist between the periodic Proposed Project facilities.

³ The term "franchise" refers to utility infrastructure ROW agreements that SCE holds with local jurisdictions.

- Impacts to potentially jurisdictional drainage features and habitat, to the extent they are not avoided, which could adversely affect water quality and habitat value.
- Disturbance associated with construction activities, which could temporarily hinder wildlife movement, foraging, and breeding in the immediate work area during construction.
- Helicopters would be used to facilitate construction and support activities. Project-related helicopter activities could include transportation of construction workers, delivery of equipment and materials to structure sites, structure placement, hardware installation, and conductor and/or OPGW stringing operations. SCE utilizes helicopters for operations and maintenance (O&M) including inspecting overhead facilities in a manner consistent with CPUC GO 165, a minimum of once per year via aerial observation.
- Impacts to plants and wildlife due to collision or crushing by vehicles, machinery, or foot traffic.
- Noise, lighting, and dust from construction activities, which may discourage foraging or use of an area by wildlife species.
- Loss of topsoil, erosion, downstream sedimentation, and changes to hydrology, which could degrade downstream water quality and habitat value.
- Introduction of nonnative plant species as a result of seed-contaminated vehicles, clothes, or equipment.

Most of the impact quantities summarized in Table 4.4-8, Maximum Potential Permanent Impacts to Land Cover, Table 4.4-9, Maximum Potential Temporary Impacts to Land Cover, Table 4.4-10, Maximum Potential Permanent Impacts to Jurisdictional Drainage Features, and Table 4.4-11, Maximum Potential Temporary Impacts to Jurisdictional Drainage Features, are associated with the 220 kV transmission lines. The impacts are described in more detail by segment below.

Segment 1

Segment 1 is approximately 3.5 miles long, located primarily within developed and disturbed areas. Land cover types primarily consist of agricultural lands and open space areas interspersed with development; however, the southern end of Segment 1 near San Bernardino Junction lies within the undeveloped San Timoteo Badlands south of the City of Loma Linda. Impacts in this segment are summarized in Table 4.4-12, Segment 1 Maximum Potential Impacts – 220 kV Transmission Lines.

Table 4.4-12: Segment 1 Maximum Potential Impacts – 220 kV Transmission Lines

Land Cover (acres)	Permanent Impacts	Temporary Impacts
Agricultural Lands	4.9	2.7
Chaparral	0.3	1.1
Coastal Sage Scrub*	1.2	5.1
Grassland/Forbland	4.8	26.8
Riparian Woodland	-	0.6

Table 4.4-12: Segment 1 Maximum Potential Impacts – 220 kV Transmission Lines

Land Cover (acres)	Permanent Impacts	Temporary Impacts
Developed/Disturbed	21.1	168.4

*Sensitive vegetation community

Permanent impacts would occur due to grading, footings, and placement of LSTs and TSPs, while temporary impacts would occur as a result of wood and steel structures used to facilitate construction, vehicles and equipment driving overland to the construction site, clearing of brush to conduct construction, and day-to-day construction activities.

Within this segment, most impacts would occur within developed/disturbed areas. The majority of Segment 1 is within developed areas that are unlikely to be used for substantial wildlife movement. Impacts to land cover types, particularly at the southern end of the segment, would be located in the San Timoteo Badlands south of the City of Loma Linda, an extensive expanse of open space that provides habitat for wildlife. Construction activities and the placement of new or replaced structures would be limited to the periphery of the San Timoteo Badlands, and the isolated construction activities would not obstruct wildlife movement over a substantial area or for a long duration. Therefore, the Proposed Project is not anticipated to substantially impede wildlife movement.

The majority of the impacts to land cover types would occur to agriculture and grassland/forbland. Impacts to sensitive vegetation communities are limited to coastal sage scrub (up to 1.2 acres permanent and up to 5.1 acres temporary).

Based on the results of the biological studies, one special-status plant species has the potential to occur: Little San Bernardino Mountains linanthus. Furthermore, detected special-status animal species include burrowing owl and/or sign, and northwestern San Diego pocket mouse. Additionally, the following special-status animals have the potential to occur: golden eagle (foraging) and white-tailed kite.

The disturbance areas along the alignment for relocated structures and access roads would result in the permanent loss of up to 32.3 acres of land cover types (the majority of which is developed/disturbed lands); however, the impacts are localized and distributed throughout the 3.5-mile segment, and are not expected to have substantial impacts on local or regional plant and wildlife populations given the context of the impacts within the highly disturbed San Timoteo Badlands, which are characterized by lower habitat values. For the same reasons, temporary impacts are also not expected to have a substantial impact on local or regional species populations.

Construction activities could result in impacts to drainage features that occur in Segment 1, as shown in Table 4.4-10, Maximum Potential Permanent Impacts to Jurisdictional Drainage Features, and Table 4.4-11, Maximum Potential Temporary Impacts to Jurisdictional Drainage Features. Consideration for the avoidance and minimization of disturbances to jurisdictional drainages would occur during final engineering. Any impacts to jurisdictional drainages that cannot be avoided would be minimized through compliance with the conditions set forth in the Federal or State permits and coordination with regulatory agencies. Construction activities in or adjacent to these nonwetland

drainages could result in indirect impacts such as erosion and degraded water quality, as well as changes to hydrology.

Segment 2

This segment is approximately 5 miles long, and is located within primarily undeveloped areas (Reche Canyon and San Timoteo Badlands). Land cover within the segment consists primarily of coastal sage scrub, developed areas, and grassland/forbland. Portions of the segment are within designated Critical Habitat for coastal California gnatcatcher; however, the species was not detected during surveys. Impacts in this segment are summarized in Table 4.4-13, Segment 2 Maximum Potential Impacts – 220 kV Transmission Lines.

Table 4.4-13: Segment 2 Maximum Potential Impacts – 220 kV Transmission Lines

Land Cover (acres)	Permanent Impacts	Temporary Impacts
Agricultural Lands	0.2	4.2
Alluvial Scrub*	0.1	2.3
Coastal Sage Scrub*	12.3	92.7
Grassland/Forbland	18.2	130.3
Riparian Woodland*	--	0.8
Developed/Disturbed	5.9	52.2

*Sensitive vegetation community

Permanent impacts would occur due to grading, footings, and placement of LSTs and TSPs, while temporary impacts would occur as a result of wood and steel structures used to facilitate construction, vehicles and equipment driving overland to the construction site, clearing of brush to conduct construction, and day-to-day construction activities.

Within this segment, most impacts would occur within undeveloped areas. Much of Segment 2 is within an extensive area with contiguous natural land cover types extending several miles from the Proposed Project. Impacts to natural vegetation communities within this area are generally in undeveloped areas. Developed areas including commercial uses occur in the western portion of the segment near I-215; residential areas and local roads are located adjacent to the Project Study Area along much of this segment. Construction activities and the placement of new or replaced structures would primarily occur within the existing WOD corridor. The construction activities are not expected to obstruct wildlife movement due to the substantial open area nor are activities planned for a long duration (entire Proposed Project is 48 months). Therefore, the Proposed Project is not anticipated to substantially impede wildlife movement.

The majority of the impacts to land cover types would occur to grassland/forbland and coastal sage scrub. Impacts to sensitive vegetation communities are limited to coastal sage scrub (up to 12.3 acres permanent and up to 92.7 acres temporary) and alluvial scrub (up to 0.1 acre permanent and up to 2.3 acres temporary). Limited impacts would occur to agricultural lands as well.

4.4 BIOLOGICAL RESOURCES

Based on the results of the biological studies, one special-status plant species has the potential to occur: Little San Bernardino Mountains linanthus. Furthermore, detected special-status animal species include red-diamond rattlesnake, burrowing owl and/or sign, and western mastiff bat. Additionally, the following special-status animals have the potential to occur: white tailed kite, golden eagle (foraging) and coastal California gnatcatcher.

Impacts to land cover types have the potential to affect habitat potentially suitable to support Stephens' kangaroo rat and coastal California gnatcatcher; however, neither species was detected within this segment during focused surveys.

The Proposed Project would result in permanent impacts within up to 28.3 acres of designated Critical Habitat for coastal California gnatcatcher, of which not more than 11.1 acres consists of potentially suitable coastal sage scrub habitat for this species while approximately 17 acres is either developed/disturbed or grassland/forbland and therefore less likely or unlikely to support the species. Temporary impacts would occur within up to 187.1 acres designated as coastal California gnatcatcher Critical Habitat, of which not more than approximately 72.8 acres is potentially suitable coastal sage scrub or alluvial scrub and approximately 111.3 acres is either developed/disturbed or grassland/forbland which is not considered suitable. Coastal California gnatcatcher was not detected in the Project Study Area during focused surveys conducted within the Project Study Area in 2012 and 2013. Refer to Table 4.4-20, Coastal California Critical Habitat Maximum Potential Impacts, in Section 4.4.5.2, CEQA Thresholds Discussion.

The permanent loss of up to 36.7 acres of land cover types would be localized and distributed throughout the 5-mile segment, and is not expected to have substantial impacts on local or regional plant and wildlife populations given the location of the impacts within the highly disturbed San Timoteo Badlands, which are characterized by lower habitat values. For the same reasons, temporary impacts are also not expected to have a substantial impact on local or regional species populations.

Construction activities could result in impacts to drainage features that occur in Segment 2, as shown in Table 4.4-10, Maximum Potential Permanent Impacts to Jurisdictional Drainage Features, and Table 4.4-11, Maximum Potential Temporary Impacts to Jurisdictional Drainage Features. Consideration for the avoidance and minimization of disturbances to jurisdictional drainages would occur during final engineering. Any impacts to jurisdictional drainages that cannot be avoided would be minimized through compliance with the conditions set forth in the Federal or State permits and coordination with regulatory agencies.

Construction activities in or adjacent to these nonwetland drainages could result in indirect impacts such as erosion and degraded water quality, as well as changes to hydrology.

Segment 3

This segment is approximately 10 miles in length and is located partially within the San Timoteo Badlands. This segment begins in San Bernardino County and extends into Riverside County. Land cover within the segment consists primarily of coastal sage scrub, grassland/forbland, and agricultural lands. The central portion of the segment is within 200 feet of designated Critical Habitat for southwestern willow flycatcher. Impacts in this segment are summarized in Table 4.4-14, Segment 3 Maximum Potential Impacts – 220 kV Transmission Lines.

Table 4.4-14: Segment 3 Maximum Potential Impacts – 220 kV Transmission Lines

Land Cover (acres)	Permanent Impacts	Temporary Impacts
Agricultural Lands	1.7	41.8
Alluvial Scrub*	0.8	1.3
Chaparral	13.0	49.4
Coastal Sage Scrub*	59.1	291.9
Grassland/Forbland	50.6	259.0
Open Water	—	0.2
Riparian Woodland*	—	2.6
Developed/Disturbed	6.4	78.7

*Sensitive vegetation community

Permanent impacts would occur due to grading, footings and placement of LSTs and TSPs, while temporary impacts would occur as a result of wood and steel structures used to facilitate construction, vehicles and equipment driving overland to the construction site, clearing of brush to conduct construction, and day-to-day construction activities.

Within this segment, most impacts may occur within undeveloped areas. Segment 3 is within an extensive area with contiguous natural land cover types extending several miles from the Proposed Project. Developed areas in this segment are minimal. Construction activities and the placement of new or replaced structures would primarily occur within the existing WOD corridor. The construction activities would not obstruct wildlife movement over a substantial area or for a long duration. Therefore, the Proposed Project is not anticipated to impede wildlife movement.

The majority of the impacts to land cover types would likely occur to coastal sage scrub, grassland/forbland, and agricultural lands. Impacts to sensitive vegetation communities include coastal sage scrub (up to 59.1 acres permanent and up to 291.9 acres temporary), alluvial scrub (up to 0.8 acre permanent and up to 1.3 acres temporary), and riparian woodland (less than 0.1 acre permanent, 2.6 acres temporary). Limited impacts may occur to chaparral as well.

Based on the results of the biological studies, two special-status plant species were observed or have the potential to occur: smooth tarplant (observed), and Little San Bernardino Mountains linanthus (potential to occur). Furthermore, detected special-status animal species include western spadefoot, red-diamond rattlesnake, least Bell's vireo,

yellow warbler, burrowing owl and/or sign, yellow-breasted chat, Stephens' kangaroo rat, northwestern San Diego pocket mouse, San Diego desert woodrat, and San Diego black-tailed jackrabbit. Additionally, the following special-status animals have the potential to occur: golden eagle (foraging), western yellow-billed cuckoo, white-tailed kite, southwestern willow flycatcher, and coastal California gnatcatcher.

Based on an estimate of 528.2 acres of suitable Stephens' kangaroo rat habitat in the Project Study Area, the maximum potential impacts may include up to 29.7 acres of permanent impacts and up to 187.9 acres of temporary impacts. Suitable habitat was identified along an approximately 5.1-mile stretch of the alignment in San Bernardino County extending from the southern end of Segment 1 (i.e., the San Bernardino Junction) to the Riverside County line, including the single SKR capture location (depicted on Figure 4.4-4) northwest from the San Timoteo Landfill. Topography, habitat, and land use changes at either end of this stretch were judged to form natural barriers for the species. Within this stretch of the alignment, the detailed vegetation mapping included in the BRTR was used to further identify potentially suitable SKR habitat. Acreages for eight vegetation alliances were combined to identify the amount of potential permanent and temporary impacts. The eight alliances were Annual Brome Grassland, California Buckwheat Shrubland, California Sagebrush Scrub, Fiddleneck Herbaceous Alliance, Mixed Forbland/-Grassland, Ripgut Brome Semi-Natural Herbaceous Stands, Upland Mustards, and Wild Oats Grassland.

The permanent loss of up to 129.1 acres of land cover types is distributed in localized areas throughout the 10-mile segment. Most of the impacts are within the highly disturbed San Timoteo Badlands, which are characterized by lower habitat values without rich populations of plants and wildlife. Similarly, temporary impacts are also not expected to have a substantial impact on local or regional species populations. As noted below, there is a relatively small amount of potential impact to riparian habitat that could support southwestern willow flycatcher, least Bell's vireo, and yellow-billed cuckoo.

Construction activities could result in impacts to drainage features that occur in Segment 3, as shown in Table 4.4-10, Maximum Potential Permanent Impacts to Jurisdictional Drainage Features, and Table 4.4-11, Maximum Potential Temporary Impacts to Jurisdictional Drainage Features. Consideration for the avoidance and minimization of disturbances to jurisdictional drainages would occur during final engineering. Any impacts to jurisdictional drainages that cannot be avoided would be minimized through compliance with the conditions set forth in the Federal or State permits and coordination with regulatory agencies.

Construction activities in or adjacent to these nonwetland drainages could result in indirect impacts such as erosion and degraded water quality, as well as changes to hydrology.

The segment is located within the planning area for the WR-MSHCP. Permanent impacts may affect up to 127.4 acres of Criteria Cell Area, up to 19.6 acres of PQP Lands, and 10.9 acres of ARLs; temporary impacts may also occur within Criteria Cell Area as well

as within up to 84.9 acres of PQP lands and up to 68.5 acres of ARLs. Consistency with MSHCPs is discussed in more detail in Section 4.4.5.2, CEQA Thresholds Discussion.

Segment 4

This segment is approximately 12 miles long, and is partially located within undeveloped areas (San Timoteo Canyon), but also is within residential communities in the cities of Calimesa and Beaumont and lies within the WR-MSHCP plan area. Land covers within the segment consist primarily of developed areas, grassland/forbland, and chaparral. The western portion of the segment includes riparian woodland vegetative cover associated with San Timoteo Creek, which provides habitat for several endangered least Bell's vireo territories. Impacts in this segment are summarized in Table 4.4-15, Segment 4 Maximum Potential Impacts – 220 kV Transmission Lines.

Table 4.4-15: Segment 4 Maximum Potential Impacts – 220 kV Transmission Lines

	Permanent Impacts	Temporary Impacts
Agricultural Lands	2.7	30.0
Alluvial Scrub	—	1.9
Chaparral	21.5	158.9
Coast Live Oak Woodland	1.6	13.1
Coastal Sage Scrub*	2.5	27.3
Desert Scrub	—	6.6
Grassland/Forbland	22.9	265.2
Riparian Woodland*	2.5	16.6
Developed/Disturbed	12.4	222.4

*Sensitive vegetation community

Permanent impacts would occur due to grading, footings and placement of LSTs and TSPs, while temporary impacts would occur as a result of wood and steel structures used to facilitate construction, vehicles and equipment driving overland to the construction site, clearing of brush to conduct construction, and day-to-day construction activities.

Within this segment, impacts would occur within undeveloped and developed areas. Much of Segment 4 is within an extensive area with contiguous natural land cover types extending several miles from the Proposed Project. Impacts to natural vegetation communities within this segment are generally in undeveloped areas, as the residential development is fairly dense and compact. Construction activities and the placement of new or replaced structures would primarily occur within the existing WOD corridor. Although the existing WOD corridor crosses San Timoteo Creek at El Casco Substation, the construction activities would likely not obstruct wildlife movement over a substantial area or for a long duration. Therefore, the Proposed Project is not anticipated to substantially impede wildlife movement.

The majority of the impacts to land covers would occur to grassland/forbland, chaparral, and developed/disturbed areas. Impacts to sensitive vegetation communities include coastal sage scrub (up to 2.5 acres permanent and up to 27.3 acres temporary), alluvial scrub (up to 1.9 acre temporary), and riparian woodland (up to 2.5 acres permanent and

up to 16.6 acres temporary). Limited impacts may occur to agricultural lands, coast live oak woodland, and desert scrub as well.

Based on the results of the biological studies, four special-status plant species were observed or have the potential to occur: Yucaipa onion (observed), Plummer's mariposa lily (observed), Engelmann oak (observed), and Little San Bernardino Mountains linanthus (potential to occur). Furthermore, detected special-status animal species include golden eagle (foraging), red-diamond rattlesnake, white-tailed kite, burrowing owl and/or sign, least Bell's vireo, yellow warbler, yellow-breasted chat, grasshopper sparrow, Los Angeles pocket mouse, northwestern San Diego pocket mouse, San Diego desert woodrat, and San Diego black-tailed jackrabbit. Additionally, the following special-status animals have the potential to occur: western yellow-billed cuckoo, white tailed kite, southwestern willow flycatcher, and coastal California gnatcatcher.

Foraging habitat for golden eagle occurs within this segment and this large home-range species has been observed nesting outside the Project Study Area with the closest recently documented location 3.5 miles south of the existing WOD corridor.

The permanent loss of up to 66.1 acres of land cover types is would be localized and distributed throughout the 12-mile segment, and is not expected to have substantial impacts on local or regional plant and wildlife populations given the context of the impacts within extensive undeveloped areas. The remaining undeveloped areas can sustain a very high percentage of the existing habitat values, which are relatively low. For the same reasons, temporary impacts are also not expected to have a substantial impact on local or regional species populations.

Construction activities could result in impacts to drainage features that occur in Segment 4, as shown in Table 4.4-10, Maximum Potential Permanent Impacts to Jurisdictional Drainage Features, and Table 4.4-11, Maximum Potential Temporary Impacts to Jurisdictional Drainage Features. Consideration for the avoidance and minimization of disturbances to jurisdictional drainages would occur during final engineering. Any impacts to jurisdictional drainages that cannot be avoided would be minimized through compliance with the conditions set forth in the Federal or State permits and coordination with regulatory agencies.

Construction activities in or adjacent to these nonwetland drainages could result in indirect impacts such as erosion and degraded water quality, as well as changes to hydrology.

The segment is located within the planning area for the WR-MSHCP. Permanent impacts may affect up to 22.2 acres of Criteria Cell Area, up to 13.2 acres of PQP Conserved Lands, and 11 acres of ARLs; temporary impacts may also occur within Criteria Cell Areas and may affect up to 79.4 acres of PQP lands and up to 105 acres of ARLs. Consistency with MSHCPs is discussed in more detail in Section 4.4.5.2, CEQA Thresholds Discussion. Additionally, as it relates to each of the project components and the potential impacts to surface lands, the Project Description utilizes very conservative ground disturbance assumptions based on preliminary engineering to estimate surface

area disturbance. This expanded surface area disturbance is provided for the purpose of ensuring the environmental analysis included in Chapters 4.0 through 6.0 sufficiently analyzes the potential environmental impacts of very conservative ground disturbance assumptions. The actual surface area disturbance is expected to be reduced following completion of final engineering.

Segment 5

This segment is approximately 9 miles long, and spans the Reservation, which includes patches of private, non-Reservation lands. This segment is located within primarily undeveloped areas with small areas of residential development (northern City of Banning, low-density residential within the Reservation). Land covers within the segment consist primarily of desert scrub, developed areas, and alluvial scrub. Impacts in this segment are summarized in Table 4.4-16, Segment 5 Maximum Potential Impacts – 220 kV Transmission Lines.

Table 4.4-16: Segment 5 Maximum Potential Impacts – 220 kV Transmission Lines

Land Cover (acres)	Permanent Impacts	Temporary Impacts
Alluvial Scrub*	5.2	62.3
Coastal Sage Scrub*	4.1	36.6
Desert scrub	26.4	401.1
Grassland/Forbland	2.6	34.0
Riparian Woodland*	—	1.7
Developed/Disturbed	9.3	85.7

*Sensitive vegetation community

Permanent impacts would occur due to grading, footings and placement of LSTs and TSPs, while temporary impacts would occur as a result of wood and steel structures used to facilitate construction, vehicles and equipment driving overland to the construction site, clearing of brush to conduct construction, and day-to-day construction activities.

Within this segment, most impacts would occur within undeveloped areas. Much of Segment 5 is within an extensive area with contiguous natural land cover types extending several miles from the Proposed Project, which includes a portion of the San Gorgonio River. Impacts to natural vegetation communities within this area occur in undeveloped areas as well as in areas near low-density residential development (Reservation) and higher density development (northern City of Banning). Construction activities and the placement of new or replaced structures would occur within the existing WOD corridor and in a proposed new ROW. The Alternative Project alignment occurs within this segment. The construction activities would likely not obstruct wildlife movement over a substantial area or for a long duration due to the continuity of surrounding land cover types with similar vegetation in the vicinity. Therefore, the Proposed Project is not anticipated to substantially impede wildlife movement.

The majority of the impacts to land cover types may occur to desert scrub (up to 26.4 acres permanent and up to 401.1 acres temporary). Impacts to sensitive vegetation

communities are limited to coastal sage scrub (up to 4.1 acres permanent and up to 36.6 acres temporary) and alluvial scrub (up to 5.2 acres permanent and up to 62.3 acres temporary). Limited impacts may occur to grassland/forbland as shown in Table 4.4-16, Segment 5 Maximum Potential Impacts – 220 kV Transmission Lines.

Based on the results of the biological studies, four special-status plant species were observed or have the potential to occur: white-bracted spineflower (observed) Parry's spineflower (observed), and Little San Bernardino Mountains linanthus (potential to occur). Furthermore, observed special-status animal species include rosy boa, golden eagle (foraging), desert tortoise (2012) and sign (2012 and 2013), burrowing owl and/or sign, loggerhead shrike, Los Angeles pocket mouse, northwestern San Diego pocket mouse, and pallid San Diego pocket mouse.

The permanent loss of up to 47.6 acres of land cover types is distributed in localized areas throughout the 9-mile segment. Most of the impacts are not expected to have substantial impacts on local or regional plant and wildlife populations, given that the impacts are surrounded by extensive undeveloped area. For the same reasons, temporary impacts are also not expected to have a substantial impact on local or regional species populations.

Construction activities could result in impacts to drainage features that occur in Segment 5, as shown in Table 4.4-10, Maximum Potential Permanent Impacts to Jurisdictional Drainage Features, and Table 4.4-11, Maximum Potential Temporary Impacts to Jurisdictional Drainage Features. Consideration for the avoidance and minimization of disturbances to jurisdictional drainages would occur during final engineering. Any impacts to jurisdictional drainages that cannot be avoided would be minimized through compliance with the conditions set forth in the Federal or State permits and coordination with regulatory agencies.

Construction activities in or adjacent to these nonwetland drainages could result in indirect impacts such as erosion and degraded water quality, as well as changes to hydrology.

Permanent and temporary impacts of up to 2.6 acres and 11.5 acres, respectively, may occur to PQP lands in the WR-MSHCP. Permanent and temporary impacts may also occur within the CV-MSHCP, including up to 2.2 acres of permanent impacts and up to 55.6 acres of temporary impacts within the Cabazon Conservation Area. The objectives of this conservation area are listed in Table 4.4-1, Coachella Valley MSHCP Conservation Objectives by Conservation Area. These objectives would not be affected by the Proposed Project. In particular, one of the key ecological functions and conservation objectives is maintaining sand transport, which would essentially be uninterrupted by the Proposed Project. Within the CDCA, temporary impacts may occur to up to 0.1 acre of Unclassified Lands.⁴ Uses in unclassified land are evaluated by the

⁴ Scattered and isolated parcels of public land in the CDCA which have not been placed within multiple-use classes are unclassified land. These parcels would be managed on a case-by-case basis, as explained in the Land Tenure Adjustment Element.

BLM on a project-by-project basis. The utilization of existing utility corridors is specifically addressed in the California Desert Plan.

Segment 6

This segment is approximately 8 miles in length and extends east from the eastern limit of the Reservation to Devers Substation within primarily undeveloped areas, but passes near the community of Whitewater. Land covers within the segment consist primarily of desert scrub and alluvial scrub. Portions of the segment are within designated Critical Habitat for Coachella Valley milk-vetch and temporary impacts to the habitat are expected due to guard structure placement; however, the species was not detected during surveys and is not expected to occur.

Impacts in this segment are summarized in Table 4.4-17, Segment 6 Maximum Potential Impacts – 220 kV Transmission Lines.

Table 4.4-17: Segment 6 Maximum Potential Impacts – 220 kV Transmission Lines

Land Cover (acres)	Permanent Impacts	Temporary Impacts
Alluvial Scrub*	2.0	17.2
Desert Scrub	51.7	498.2
Developed/Disturbed	4.2	59.4

*Sensitive vegetation community

Permanent impacts would occur due to grading, footings and placement of LSTs and TSPs, while temporary impacts would occur as a result of wood and steel structures used to facilitate construction, vehicles and equipment driving overland to the construction site, clearing of brush to conduct construction, and day-to-day construction activities.

Within this segment, impacts would predominantly occur in undeveloped areas due to construction activities from the placement of new or replaced structures within the existing WOD corridor. In addition to proposed land cover impacts, the Whitewater Canyon/River area is expected to incur temporary impacts due to placement of a guard structure. The Whitewater Canyon area provide an sparsely vegetated and rocky north-south wildlife movement corridor, but construction activities would likely not obstruct wildlife movement over a substantial area or for a long duration and the Proposed Project is expected to have no permanent impacts to Whitewater Canyon. Therefore, the Proposed Project is not anticipated to impede wildlife movement.

The majority of the impacts to land covers would occur in desert scrub. Impacts to sensitive vegetation communities include alluvial scrub (up to 2.0 acres permanent and up to 17.2 acres temporary).

Based on the results of the biological studies, four special-status plant species were observed or have the potential to occur: chaparral sand-verbena (observed), white-bracted spineflower (observed), desert spike-moss (observed), and spiny-hair blazing star (observed). Special-status animal species observed include desert tortoise, burrowing owl and/or sign, loggerhead shrike, Palm Springs pocket mouse, and pallid San Diego pocket

mouse. The following special-status animal has the potential to occur: golden eagle (foraging).

The Proposed Project may result in temporary impacts within up to 3.3 acres of designated Critical Habitat for Coachella Valley milk-vetch as the result of placing temporary guard structures and providing construction access. As indicated in Table 4.4-18, in Section 4.4.5.2, below, 1.8 acres of the potential impacts would occur within developed or highly disturbed areas that are less likely or unlikely to support this species. Moreover, Coachella Valley milk-vetch was not detected during focused species conducted within the Project Study Area. Furthermore, as the overhead transmission lines would be spanning Whitewater Canyon, permanent impacts to Coachella Valley Milk-vetch Critical Habitat impacts would be avoided.

The permanent loss of up to 57.9 acres of land cover types would be localized and distributed throughout the 8-mile segment, and is not expected to have substantial impacts on local or regional plant and wildlife populations, given that the impacts are surrounded by extensive undeveloped areas that would sustain a very high percentage of existing resources. For the same reasons, temporary impacts are also not expected to have a substantial impact on local or regional species populations.

Construction activities could result in impacts to drainage features that occur in Segment 6, as shown in Table 4.4-10, Maximum Potential Permanent Impacts to Jurisdictional Drainage Features, and Table 4.4-11, Maximum Potential Temporary Impacts to Jurisdictional Drainage Features. Consideration for the avoidance and minimization of disturbances to jurisdictional drainages would occur during final engineering. Any impacts to jurisdictional drainages that cannot be avoided would be minimized through compliance with the conditions set forth in the Federal or State permits and coordination with regulatory agencies.

Construction activities in or adjacent to these nonwetland drainages could result in indirect impacts such as erosion and degraded water quality, as well as changes to hydrology.

Permanent impacts may occur within the CV-MSHCP, including up to 1.2 acres within the Cabazon Conservation Area, 23.2 acres within the Stubbe and Cottonwood Canyons Conservation Area, 1.8 acres within Whitewater Canyon Conservation Area, and 8.8 acres within the Upper Mission Creek/Big Morongo Canyon Conservation Area. Temporary impacts may also occur within these areas. In particular, one of the key ecological functions is sand transport, which would essentially be uninterrupted by the Proposed Project components, but also includes the objective to conserve various wash areas, vegetation types, and plant and animal species. See Table 4.4-1, Coachella Valley MSHCP Conservation Objectives by Conservation Area, for the conservation objectives for each conservation area. In Segment 5, temporary effects may occur to up to 0.1 acre of Unclassified Lands with no expected permanent effects, while in Segment 6, permanent effects may occur to up to 57.9 acres of Unclassified Lands; temporary effects may occur to up to 575.0 acres of Unclassified Lands. Uses in unclassified land are

evaluated by the BLM on a project-by-project basis. The utilization of existing utility corridors is specifically addressed in the California Desert Plan.

66 kV Subtransmission Lines

The Proposed Project may require relocation of portions of the existing San Bernardino-Redlands-Timoteo (approximately 2 miles) and the San Bernardino-Redlands-Tennessee 66 kV (approximately 3.5 miles) subtransmission lines located within Segment 1 to new routes within the existing WOD corridor, newly acquired ROW, or franchise. The construction methods for the 66 kV subtransmission line and ancillary structures (including the 12 kV distribution line, access and spur roads, and temporary construction-related structures) and associated impacts would be similar to the 220 kV transmission line construction. Refer to Section 3.2.3, Transmission and Subtransmission Line Installation, for a description of construction activities associated with subtransmission line installation. See Figure 3.1-5, Relocated Subtransmission and Distribution Lines Routes Description, for the subtransmission line locations.

Construction of the 66 kV subtransmission lines may result in temporary impacts to up to 0.6 acre of riparian woodland, 18.3 acres of agricultural lands, and 42.3 acres of developed/disturbed areas.

No impacts to special-status plant species are expected since none are expected to occur within the identified disturbance areas. No Federal or State listed threatened or endangered animal species are expected to occur in this segment.

No permanent loss of habitat for special-status species is anticipated. Although habitat present may be potentially suitable for burrowing owl, and potentially suitable for foraging golden eagle, white-tailed kite, and Swainson's hawk, disruption to habitat would likely be short-term and minimal.

Drainage features occur within the subtransmission line areas. Construction activities are not anticipated to result in permanent impacts to drainages, but may result in temporary impacts. Consideration for the avoidance and minimization of disturbances to jurisdictional drainages would occur during final engineering. Any impacts to jurisdictional drainages that cannot be avoided would be minimized through compliance with the conditions set forth in the Federal or State permits and coordination with regulatory agencies

Impacts to these wetland and nonwetland drainages and riparian vegetation could result in indirect impacts such as erosion and degraded water quality, as well as changes to hydrology.

Telecommunications

The new telecommunications infrastructure would include additions and modifications to the existing telecommunications system in order to maintain telecommunications operations during and after construction of the Proposed Project. The telecommunications infrastructure would be constructed in new and existing underground conduit and cable

trenches, and on existing riser, distribution, and subtransmission poles. Additionally, removal of the fiber optic portions from the 220 kV existing structures to connections in the field and/or at existing substations would be required. Telecommunications equipment and cables would be installed along the same route as the 220 kV transmission lines, as well as other locations outside of the proposed WOD corridor as shown in Figure 3.1-7, Telecommunications Route Description, and Figure 4.4-1, Biological Project Study Area. The telecommunication routes outside of the existing WOD corridor are associated with existing substations and would be constructed primarily in existing public streets. Construction methods are described in Section 3.2.8, Telecommunications Construction, and this section addresses the telecommunication impacts that are not associated with the impacts for the 220 kV transmission lines section above.

Impacts to biological resources from construction of telecommunications infrastructure would be temporary. Impacts would likely be minimal, but could include:

- Temporary habitat loss or modification in localized areas near existing disturbed areas; this could have minor effects on wildlife populations or localized plant colonies, but not likely result in a reduction in overall distribution of any plant or wildlife species.
- Impacts to potentially jurisdictional drainage features, which could adversely affect water quality and habitat value. Construction activities are not anticipated to result in permanent impacts to drainages. Consideration for the avoidance and minimization of disturbances to jurisdictional drainages would occur during final engineering. Any impacts to jurisdictional drainages that cannot be avoided would be minimized through compliance with the conditions set forth in the Federal or State permits and coordination with regulatory agencies.
- Disturbance associated with construction activities, which could temporarily disrupt wildlife movement, and which could adversely affect nesting or breeding behavior during construction.
- Impacts to plants and wildlife due to collision or crushing by vehicles, machinery, or foot traffic.
- Noise, lighting, and dust from construction activities, which may discourage foraging or use of an area by wildlife species.
- Loss of topsoil, erosion, downstream sedimentation, and changes to hydrology, which could degrade downstream water quality and habitat value.
- Introduction of nonnative plant species as a result of seed-contaminated vehicles, clothes, or equipment.

Segment 1

Telecommunications construction activities would occur within up to 1.2 acres of developed/disturbed areas. Except for potential habitat for nesting urban-adapted bird species, the developed/disturbed areas do not support potential habitat for any special-status plant or wildlife species; therefore, no impacts to any such species due to

telecommunication line construction are anticipated. Refer to Sheet 1 of 5 on Figure 3.1-7, Telecommunication Route Description, for location of the line.

There is potential for impacts to nesting birds during telecommunication line installation.

Species immediately surrounding the telecommunication line construction area may be indirectly affected. The increased vehicular and human activity to and from the work location would elevate the potential for direct and indirect effects to plant and animal species surrounding the telecommunication line construction area. Impacts may include direct collision or crushing by vehicles of wildlife species and introduction of nonnative plant species to the area from seed-contaminated vehicles, machinery, or clothing.

No special-status plant species are expected to be impacted since any such species are not expected to occur within the identified disturbance areas. No listed Federal and State threatened or endangered species are expected to occur within the construction areas. No impacts to sensitive vegetation communities are expected as impacts are limited to developed/disturbed areas.

Drainage features occur within Segment 1, but would likely not be affected by telecommunications construction activities.

Segment 2

All of the telecommunication line construction activities would be entirely within the perimeter fence of Vista Substation. Within the substation, the area is developed and highly disturbed, but there is the potential for minor effects due to increased human activity as described for Segment 1. Refer to Sheet 2 of 5 on Figure 3.1-7, Telecommunication Route Description, for location of the line.

Segment 3

El Casco Substation telecommunications construction activities would occur within the perimeter fence, but continue overhead beyond the substation to existing poles along San Timoteo Canyon Road. Within the substation the area is developed and highly disturbed. West of the substation, the telecommunication line construction activity would occur within the southwest corner of the Poultry Staging Yard within a small amount of the coastal sage scrub *Keckiella antirrhinoides* Shrubland Alliance, which is of conservation concern and is rated G3/S3 by the CDFW, denoting that it is considered vulnerable and at moderate risk of extinction. Impacts to staging yards are discussed below under the Staging Yards heading. Refer to Sheet 3 of 5 on Figure 3.1-7, Telecommunication Route Description, for location of the line.

Except for potential habitat for nesting bird species, the substation does not support potential habitat for any special-status plant or wildlife species; therefore, no special-status impacts are anticipated due to telecommunication line construction at the substation. There is the potential for minor effects due to increased human activity as described for Segment 1.

4.4 BIOLOGICAL RESOURCES

Least Bell's vireo habitat and/or a breeding territory are documented within the proposed telecommunication route. Habitat for this species may be affected and the migratory species, if present, may be temporarily and indirectly affected by noise or other temporary effects during the limited telecommunication line installation period.

No permanent or temporary impacts are expected to occur to Southwestern Willow Flycatcher Critical Habitat, although the Critical Habitat boundary is approximately 150 feet from the roadside work area along San Timoteo Canyon Road. Refer to Figure 4.4-2, Land Management and Critical Habitat Areas, for the Critical Habitat location along San Timoteo Creek in Segment 3.

Telecommunications construction activities may result in temporary impacts to jurisdictional drainages. Impacts to drainages may result in indirect impacts such as erosion and degraded water quality, as well as changes to hydrology.

Segment 4

The telecommunications line construction activities would occur primarily within developed/disturbed areas, but also within grassland/forbland, and coastal sage scrub. Impacts to sensitive vegetation communities may include up to 0.4 acre of coastal sage scrub, and up to 0.02 acre of riparian woodland. Refer to Sheet 4 of 5 on Figure 3.1-7, Telecommunication Route Description, for location of the lines.

Long stretches of the construction area are within or adjacent to existing development; however, equally long sections are within grassland/forbland, chaparral, and coast live oak and riparian woodlands. The affected area provides potential habitat for nesting bird species, and the vegetated land cover types may provide habitat for burrowing owl, golden eagle (foraging), white-tailed kite, and ringtail. These species were not detected in the immediate area, although golden eagle is known to nest nearby. No listed Federal and State threatened or endangered species are expected to occur.

There is the potential for minor effects due to increased human activity as described for Segment 1.

Telecommunications construction activities may result in temporary impacts to jurisdictional drainages in the proposed overhead and underground sections of the telecommunication lines south of I-10 in the cities of Beaumont and Banning. See Figure 3.1-7, Telecommunication Route Description. Impacts to drainages may result in indirect impacts such as erosion and degraded water quality, as well as changes to hydrology.

Segment 5

No telecommunication work is planned for Segment 5.

Segment 6

The majority of telecommunications line construction activities would be within and adjacent (extend less than 200 feet from the substation boundary to an existing tower) to

the Devers Substation. Overall, the area is developed and highly disturbed. Refer to Sheet 5 of 5 on Figure 3.1-7, Telecommunication Route Description, for location of the line.

Except for potential habitat for nesting bird species, the substation does not support potential habitat for any special-status plant or wildlife species. Burrowing owl and desert tortoise may occur outside of the Devers Substation, but the proposed work is within 200 feet of the Devers Substation perimeter wall and the proximity of this work area to existing development and human activity may tend to increase the potential presence of avian predators (e.g., common raven). Both of these conditions decrease the potential for burrowing owl and desert tortoise use of the work area; therefore, impacts to these species during telecommunication line construction at the substation would be unexpected. There is the potential for minor effects due to increased human activity as described for Segment 1.

Drainage features occur within Segment 6, but would likely not be affected by telecommunications construction activities.

Staging Yards

SCE anticipates using one or more of the possible temporary staging yards listed in Table 3.2-A, Potential Staging Yard Locations, and seen in Figure 3.2-1, Potential Staging Yard Locations. These staging yards would be used as a reporting location for workers, vehicle and equipment parking, and material storage. Typically, each yard would be 3 to 20 acres in size, depending on land availability and intended use. Preparation of the staging yard would include temporary perimeter fencing and, depending on existing ground conditions at the site, include the application of gravel or crushed rock. Any land that may be disturbed at the staging yard would be restored to pre-construction conditions or to conditions agreed upon between SCE and the landowner⁵ following the completion of construction for the Proposed Project. Construction plans for the Proposed Project limit construction workspace, such as staging yards, to specific designated areas. (See Chapter 3.0, Section 3.2.1.1, and Table 3.2-A, Potential Staging Yard Locations, for a list and dimensions of proposed staging yards.) However, for purposes of the environmental analysis, and as stated in Chapter 3.0, Table 3.2-G, Potential Staging Yard Approximate Land Disturbance, all staging yard impacts are considered temporary. See Figure 4.4-2, Land Management and Critical Habitat Areas, for the staging yard locations.

Impacts associated with the use of staging yards may include the following:

- Removal or destruction of habitat within the staging yard (all impacts to habitat are considered permanent); this could have minor effects on wildlife populations or localized plant colonies, but not likely a reduction in overall distribution of any plant or wildlife species.

⁵ Fencing and other improvements at the staging yard locations may stay in place post-construction per the landowner's request. The potential staging yard locations identified as previously disturbed may be returned to preexisting condition.

4.4 BIOLOGICAL RESOURCES

- Impacts to potentially jurisdictional drainage features and habitat, which could adversely affect water quality and habitat value. Consideration for the avoidance and minimization of disturbances to jurisdictional drainages would occur during final engineering. Any impacts to jurisdictional drainages that cannot be avoided would be minimized through compliance with the conditions set forth in the Federal or State permits and coordination with regulatory agencies.
- Disturbance associated with construction activities, which could temporarily disrupt wildlife movement, and which could adversely affect nesting or breeding behavior during construction.
- Impacts to plants and wildlife due to collision or crushing by vehicles, machinery, or foot traffic; during preparation of the staging yard and while the yard is in use.
- Noise, lighting, and dust from construction activities, which may discourage foraging or use of an area by wildlife species.
- Loss of topsoil, erosion, downstream sedimentation, and changes to hydrology, which could degrade downstream water quality and habitat value.
- Introduction of nonnative plant species as a result of seed-contaminated vehicles, clothes, or equipment.

Segment 1: Mountain View 1 Staging Yard (San Bernardino County)

No special-status plant or animal species are expected to occur within the disturbed habitat (e.g., forbland/grassland, disturbed/developed) within the staging yard; therefore, special-status species are not expected to be affected during staging yard operation. Similarly, no sensitive vegetation communities are expected to be affected since none are present within the expected disturbance areas. No potentially jurisdictional drainage features or vegetation are expected to be affected.

Segment 1 – Lugonia Staging Yard (San Bernardino County)

No special-status plant or animal species are expected to occur within the disturbed habitat (e.g., forbland/grassland, disturbed/developed) within the staging yard; therefore, special-status species are not expected to be affected. Similarly, no sensitive vegetation communities are expected to be affected since none are present within the expected disturbance areas. No potentially jurisdictional drainage features or riparian vegetation are expected to be affected.

Segment 2 – Grand Terrace Staging Yard (San Bernardino County)

No special-status plant or animal species are expected to occur within the disturbed habitat (e.g., forbland/grassland, disturbed/developed) within the staging yard; therefore, special-status species are not expected to be affected. Similarly, no sensitive vegetation communities are expected to be affected since none are present within the expected disturbance areas. No potentially jurisdictional drainage features or riparian vegetation are expected to be affected.

Segment 3 – Poultry Staging Yard (Riverside County; WR-MSHCP)

Special-status plant or animal species may occur within the Poultry staging yard. Use of the area may result in impacts up to approximately 20.7 acres, of which 2.9 acres are coastal sage scrub and the remainder is agricultural lands. This area may provide foraging habitat for special-status animal species, including golden eagle, white-tailed kite, and burrowing owl, and provide potential habitat for coastal California gnatcatcher and Stephens' kangaroo rat habitat. However, habitat for these species is extensive and contiguous in the vicinity and region; therefore, this roadside yard is not expected to provide a high quality use area. The coastal sage scrub present is on a slope in the southwest corner of the staging yard and is unlikely to be affected. A subset of the coastal sage scrub vegetation community, it is rated G3/S3 by the CDFW denoting that it is considered vulnerable and at moderate risk of extinction.

Drainage features occur within the staging yard area. Construction activities may impact potentially jurisdictional drainages due to construction and use of the staging yard, but the roadside drainage is expected to be avoided.

Segment 3 – San Timoteo Staging Yard (Riverside County; WR-MSHCP)

No special-status/special-interest plant or animal species are expected to be impacted as such species are not expected to occur within the identified disturbance areas. Impacts to land cover due to construction and use of the staging yard would occur to up to 15.5 acres of agricultural land, 0.6 acre of developed/disturbed areas, as well as 0.6 acre of coastal sage scrub, a sensitive vegetation community. These habitats provide potential foraging habitat for golden eagle, white-tailed kite, and burrowing owl, and potential habitat for Stephens' kangaroo rat and coastal California gnatcatcher (just the 0.6 acre of sage scrub). No potentially jurisdictional drainage features or riparian vegetation are expected to be affected.

Segment 4 – Beaumont 1 Staging Yard (Riverside County; WR-MSHCP)

No special-status plant or animal species are expected to occur within the disturbed habitat (e.g., forbland/grassland, disturbed/developed) within the staging yard; therefore, special-status species are not expected to be affected. Similarly, no sensitive vegetation communities are expected to be affected since none are present within the expected disturbance areas. No potentially jurisdictional drainage features or vegetation are expected to be affected.

Segment 4 – Beaumont 2 Staging Yard (Riverside County; WR-MSHCP)

No special-status plant or animal species are expected to occur within the disturbed habitat (e.g., forbland/grassland, disturbed/developed) within the staging yard; therefore, special-status species are not expected to be affected. Similarly, no sensitive vegetation communities are expected to be affected since none are present within the expected disturbance areas. No potentially jurisdictional drainage features or vegetation are expected to be affected.

Segment 5 – Hathaway 1 Staging Yard (Riverside County; WR-MSHCP)

Special-status plant or animal species may occur within the forbland/grassland (up to 6.9 acres) and disturbed/developed areas (up to 22.6 acres) within the staging yard; therefore, special-status species may be affected. Impacts to natural land cover types may affect potential foraging habitat for golden eagle and potential habitat for burrowing owl due to construction and use of the staging yard. However, habitat for these species is extensive and contiguous in the vicinity and region; therefore, this roadside yard is not expected to provide an important or high quality use area.

No sensitive vegetation communities are expected to be affected since none are present within the expected disturbance areas. No potentially jurisdictional drainage features or vegetation are expected to be affected.

Segment 5 – Hathaway 2 Staging Yard (Riverside County; WR-MSHCP)

Special-status plant or animal species may occur within the Hathaway 2 Staging Yard. Use of the area may result in impacts to habitable forbland/grassland (up to 14.3 acres) within the staging yard; therefore, special-status species may be affected. Impacts to natural land cover types may affect potential foraging habitat for golden eagle and potential habitat for burrowing owl due to construction and use of the staging yard. However, habitat for these species is extensive and contiguous in the vicinity and region; therefore, this roadside yard is not expected to provide an important or high quality use area.

No sensitive vegetation communities are expected to be affected since none are present within the expected disturbance areas. No potentially jurisdictional drainage features or vegetation are expected to be affected.

Segment 6 – Devers Staging Yard (Riverside County; CV-MSHCP)

Special-status plant or animal species may occur within the Devers Staging Yard. Use of the area may result in impacts to habitable disturbed desert scrub (up to 10.0 acres) within the staging yard; therefore, special-status species may be affected. Impacts to natural land cover types may affect potential foraging habitat for golden eagle and potential habitat for burrowing owl and desert tortoise during any additional minor expansion and use of the staging yard; however, as the existing condition of the staging yard is already mostly developed, no considerable impacts would be expected.

No sensitive vegetation communities are expected to be affected since none are present within the expected disturbance areas.

Drainage features occur within the staging yard area. Construction activities are expected to permanently impact jurisdictional drainages due to construction and use of the staging yard.