

2.3 Biological Resources

This section of the draft Environmental Impact Report (EIR) evaluates impacts to biological resources of the Project site and vicinity that could result from future development of the proposed JVR Energy Park Project (Proposed Project). The analysis focuses on possible resultant impacts to special status plant and wildlife species, riparian habitats and other sensitive natural communities, jurisdictional wetlands and waters, habitat connectivity and wildlife movement corridors, and consistency with applicable plans.

Information contained in this section is based on review of technical documentation, including the following:

- Biological Resources Technical Report for the JVR Energy Park Project (Appendix D)

Comments received in response to the Notice of Preparation (NOP) included concerns regarding the following: impacts to special status wildlife and plant species and their habitat; migratory birds; impacts to wetlands and riparian ecosystems; wildlife corridors/movement areas; and indirect impacts to biological resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated reserve lands. The NOP comments also requested that the EIR provide the following: jurisdictional delineation of creeks and their associated riparian habitats; a complete assessment of the flora and fauna within and adjacent to the Project site; a current inventory of biological resources associated with each habitat type on the Project site; and an inventory of rare, threatened, and other sensitive species on site. The NOP comments also state that the EIR should address the Planning Agreement for the North and East County Multiple Species Conservation Program (MSCP). These concerns and topics are addressed in the Biological Resources Report (Appendix D) and this section of the EIR. A copy of the NOP and comment letters received in response to the NOP is included in Appendix A of this EIR.

2.3.1 Existing Conditions

This section summarizes the existing biological resources within the Project site and identifies the resources that could be affected by the Proposed Project. Biological resources include living organisms and the physical environment where they occur. Biological resources are categorized in this section into habitat types/vegetation communities, flora and fauna, special status plant and wildlife species, jurisdictional wetlands and waters, and wildlife corridors within the Project site. This section considers information obtained through a review of pertinent literature and through field reconnaissance.

The Project site is generally an arid desert environment that supports a limited range of habitats and biological communities. These habitats and communities include mesquite bosque, desert scrub, and fallow agriculture. Additionally, these habitats and communities may vary depending

on the ecoregion, soils and substrate, and topography. The general topography of the site is relatively level to gently rolling, with steeper terrain within the western portion of the Project site. The entire Project site is within the draft East County MSCP planning area (see Figure 2.3-1, Regional Context).

Literature Review

A literature review was conducted to evaluate the environmental setting of the biological study area and identify potential special-status biological resources that may be found on the Project site. The review included the following:

- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) (CDFW 2019a) including U.S. Geological Survey (USGS) 7.5-minute Jacumba, Carrizo Mountain; Sweeney Pass; Sombrero Peak, In-Ko-Pah Gorge, Live Oak Springs, and Tierra del Sol quadrangles
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2019) for the Cucamonga Peak and surrounding 7.5-minute USGS quadrangles
- U.S. Fish and Wildlife Service (USFWS) database (USFWS 2018a) including USGS 7.5-minute Jacumba, Carrizo Mountain; Sweeney Pass; Sombrero Peak, In-Ko-Pah Gorge, Live Oak Springs, and Tierra del Sol quadrangles
- SanBIOS Database (SanGIS 2019) including USGS 7.5-minute Jacumba and In-Ko-Pah Gorge quadrangles
- U.S. Department of Agriculture Natural Resources Conservation Service Web Soil Survey (USDA 2018) for the potential to support rare vegetation communities, plants, and/or wildlife
- County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources (County of San Diego 2010)
- Google Earth (2018)
- USFWS National Wetlands Inventory (USFWS 2018b)
- San Diego County Bird Atlas (Unit 2004)
- San Diego Mammal Atlas (Tremor 2017)

Field Reconnaissance

Biological field surveys for the Proposed Project were conducted by Dudek biologists in 2018 and 2019. Surveys consisted of vegetation mapping, a formal jurisdictional delineation, habitat assessment and focused surveys for burrowing owl (*Athene cunicularia*; CDFW Species of Special

Concern [SSC]), Quino checkerspot butterfly (*Euphydryas editha quino*), rare plants, and early and late spring focused surveys for nesting raptors.

All field surveys were completed according to County of San Diego (County) requirements and included directed searches and habitat assessments for the County list of potential special-status faunal and floral species. The entire Project site was surveyed by personnel qualified to perform biological surveys. Special-status biological resources were mapped and analyzed together with Proposed Project plans.

2.3.1.1 Regional Overview

The 1,356-acre Project site is located in the unincorporated community of Jacumba in southeast San Diego County within private lands. The Project site is bordered by Interstate (I) 8 to the north and the U.S./Mexico border to the south. The community of Jacumba Hot Springs is located adjacent to the southwestern portion of the Project site. Currently undeveloped land in the Proposed Project vicinity includes State Park lands (Anza-Borrego Desert State Park), federal Bureau of Land Management lands, and private lands. The Proposed Project development footprint is located within the boundary of the 643-acre Major Use Permit (MUP) area.

2.3.1.2 Habitat Types/Vegetation Communities

Eleven vegetation communities and/or land covers occur within the Project site, including nine sensitive communities (County of San Diego 2010). A description of the vegetation communities and land covers in the study area is provided below. The acreages are listed in Table 2.3-1, Vegetation Communities and Land Covers, and their distribution on the Project site are shown on the biological resources map (Figure 2.3-2, Biological Resources).

Disturbed Habitat (11300)

Disturbed habitat is characterized by predominantly non-native species introduced and established through human action (Oberbauer et al. 2008). Oberbauer further describes disturbed habitat as “areas that have been physically disturbed (by previous legal human activity) and are no longer recognizable as a native or naturalized vegetation association, but continues to retain a soil substrate. Typically vegetation, if present, is nearly exclusively composed of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance, or shows signs of past or present animal usage that removes any capability of providing viable natural habitat for uses other than dispersal” (Oberbauer et al. 2008). A total of 55 acres of areas such as dirt roads and other areas lacking vegetation due to previous disturbance are mapped as disturbed habitat within the Project site.

Fallow Agriculture (No code)

Within the Project site, 508.46 acres are mapped as “fallow agriculture.” This acreage includes the previous agriculture field that has been fallow for over eight years and has since revegetated in varying degrees of cover with non-native (ruderal) forbs and grasses. Some portions of these areas are nearly entirely dominated by Russian thistle (*Salsola tragus*), while others are more sparsely dominated by a variety of non-native mustards (*Brassica tournefortii*, *Hirschfeldia incana*, and *Sysimbrium* spp.), redstem stork’s bill (*Erodium cicutarium*), mallows (*Malva* spp.), and puncturevine (*Tribulus terrestris*). The fallow agriculture areas also support a variety of non-native grasses (*Bromus* spp., smooth barley [*Hordeum murinum* ssp. *glaucum*], and common Mediterranean grass [*Schismus barbatus*]); however, they do not represent a dominant cover within these areas. Vegetation sampling done at representative locations throughout the fallow agriculture documented less than 1% cover of brome and smooth barley within these areas. The common Mediterranean grass occurs in various patches ranging from 0% cover in some areas to 25% cover in smaller areas where it was found with a variety of non-native mustards and other forbs described above. Common Mediterranean grass is a low-growing grass, typically 2 to 16 centimeters in height (Jepson Flora Project 2020) and by itself is not characteristic of non-native grassland, which is characterized by grasses 0.2 to 1 meter high in height (Oberbauer et al. 2008). Further, the County characterizes non-native grassland in its Report Format and Content Requirements: Biological Resources (County of San Diego 2010) with grasses typically comprising at least 30% of the vegetation with characteristic species consisting of “foxtail chess (*Bromus madritensis* ssp. *rubens*), ripgut grass (*Bromus diandrus*), wild oats (*Avena* spp.), fescues (*Vulpia* spp.), red-stem filaree (*Erodium cicutarium*), mustards (*Brassica* spp.), lupines (*Lupinus* spp.), and goldfields (*Lasthenia* spp.), among others.” While some of these species co-occur, the Project site still lacks the bromes (as a dominant or co-dominant), wild oats, and fescues that are characteristic of non-native grassland.

Additionally, because these areas are not comprised of active agriculture, they do not meet the definition of “agriculture” described by Oberbauer et al. (2008). Because the fallow agriculture field does not fit neatly into the agriculture, non-native grassland, or disturbed habitat categories, upon considering the species present within these areas (primarily mustards and Russian thistle) and the lack of overall function as a grassland community, these areas were classified as fallow agriculture, which is not specifically defined in Oberbauer et al. (2008) or Holland (1986).

Urban/Developed (12000)

Urban/developed land refers to areas that have been constructed upon or disturbed so severely that native vegetation is no longer supported. Developed land includes areas with permanent or semi-permanent structures, pavement or hardscape, landscaped areas, and areas with a large amount of

debris or other materials (Oberbauer et al. 2008). A total of 26 acres of urban/developed land currently exists within the Project site.

Sonoran Mixed Woody Scrub (33210)

Sonoran mixed woody scrub is characterized as being predominantly woody shrubs, 1.6 to 9.8 feet tall, and includes a mixture of three or more woody species (Oberbauer et al. 2008). Characteristic species include creosote bush (*Larrea tridentata*), white bursage (*Ambrosia dumosa*), and brittle bush (*Encelia farinosa*). In San Diego County, this vegetation community commonly occurs on lower alluvial fans, above the desert floor, and below the coarse mountain substrates (Oberbauer et al. 2008). A total of 139.34 acres of Sonoran mixed woody scrub occurs within the Project site.

Sonoran Mixed Woody and Succulent Scrub (33220)

Sonoran mixed woody and succulent scrub occurs in the Colorado Desert and is dominated by 1.6 to 9.8 feet shrubs and cacti and other stem succulents (Oberbauer et al. 2008). Common characteristic species include desert agave (*Agave deserti*), brittle bush, and Mojave yucca (*Yucca schidigera*). In San Diego County, this vegetation community is dominated by more than 50% cover of succulent species (Oberbauer et al. 2008). A total of 390.34 acres of Sonoran mixed woody scrub and succulent scrub occurs within the Project site.

Big Sagebrush Scrub (35210)

Big sagebrush scrub is characterized by mostly soft-woody shrubs approximately 1.6 to 6.5 feet tall. This vegetation community occurs on a variety of soils and terrain, including well-drained slopes to fine-textured valley soils. In San Diego County, big sagebrush scrub occurs in alluvial washes along dry margins of high desert and montane valleys (Oberbauer et al. 2008). Characteristic species include big sagebrush (*Artemisia tridentata*), fourwing saltbush (*Atriplex canescens*), black brush (*Coleogyne ramosissima*), and ashy ryegrass (*Elymus cinereus*). A total of 0.26 acres of big sagebrush scrub occurs within the Project site.

Desert Saltbush Scrub (36110)

Desert saltbush scrub is characterized by spaced low, microphyllous 1- to 3.2-foot-tall shrubs typically dominated by allscale (*Atriplex polycarpa*) and alkali goldenbush (*Isocoma acradenia* var. *eremophila*) (Oberbauer et al. 2008). This vegetation community commonly occurs on fine-textured, poorly drained soils with high alkalinity in drier areas. Characteristic species include quailbush (*Atriplex lentiformis*), fourwing saltbush (*Atriplex canescens*), and spiny hop sage (*Grayia spinosa*). A total of 77.39 acres of desert saltbrush scrub occurs within the Project site.

Desert Sink Scrub (36120)

Desert sink scrub is characterized by widely spaced low, microphyllous 1- to 3.2-foot-tall shrubs (Oberbauer et al. 2008). Desert sink scrub is dominated by succulent chenopods and occurs on fine-textured, poorly drained soils with high alkalinity or salt content. Characteristic species include iodine bush (*Allenrolfea occidentalis*), fourwing saltbush (*Atriplex canescens*), and salt heliotrope (*Heliotropium curassavicum*). A total of 12.43 acres of desert sink scrub occurs within the Project site.

Disturbed Freshwater Marsh (52400)

Freshwater marsh is a wetland habitat that develops at permanently flooded sites by freshwater lacking a significant current (Oberbauer et al. 2008). Because it often is permanently flooded by fresh water, there is an accumulation of deep, peaty soils. It typically is dominated by species such as cattails (*Typha* spp.), sedge (*Carex* spp.), yellow nutsedge (*Cyperus esculentus*), and bulrushes (*Scirpus* spp.). The freshwater marsh was classified as a “disturbed” form of the community based on the presence of tamarisk and other non-native species comprising approximately 50% of the relative cover of shrubs and herbs. A total of 0.08 acres of disturbed freshwater marsh occurs within the Project site.

Tamarisk Scrub (63810)

Tamarisk scrub is a weedy monoculture of any of the several *Tamarix* species (Oberbauer et al. 2008). This vegetation community occurs on sandy or gravelly braided washes or intermittent streams, and occurs in areas following major disturbance. A total of 2.11 acres of tamarisk scrub occurs within the Project site.

Mesquite Bosque (61820)

Mesquite Bosque is characterized by an open to fairly dense, drought-deciduous streamside thorn forest with open annual and perennial grass understory (Oberbauer et al. 2008). This vegetation community is dominated by mesquite (*Prosopis glandulosa*) and additional characteristic species include alkali goldenbush, white bursage, quailbush, and fourwing saltbush. Salt grass (*Distichlis spicata*) and mustards (*Sisymbrium* spp.) are present in some of the understory, but much is bareground. Iodine bush (*Allenrolfea occidentalis*) occurs sporadically within some of the mesquite, but is not present at a high percent absolute cover to be considered co-dominant. Mesquite Bosque occurs on higher alluvial terraces and near washes, streambanks, alkali sinks, or outwash plains with substantial groundwater. A total of 133.61 acres of mesquite bosque occurs within the Project site.

Unvegetated Streambed

Several ephemeral drainages area mapped as unvegetated streambed. These do not conform to classifications in Oberbauer et al. 2008. A total of 10.56 acres of non-vegetated floodplain or channel occurs within the Project site.

2.3.1.3 Flora

A total of 255 vascular plant species, consisting of 187 native species (83%), and 38 non-native species (17%), were recorded within the Project site during initial surveys (Appendix B of Appendix D, List of Plant Species Observed). The majority of the plants observed within the disturbed habitat areas are non-native, disturbance related species, such as Russian thistle, shortpod mustard, Asian mustard, rocketsalad (*Eruca vesicaria* ssp. *sativa*), mustards (e.g., *Sisymbrium* spp., *Brassica tournefortii*, *Descurainia* spp., *Hirschfeldia incana*), burclover, bromes (*Bromus* spp.), and stork's bills (*Erodium* spp.). Commonly observed plants in the native scrub vegetation types include creosote, California buckwheat, California joint fir, common Mediterranean grass, desert woollystar, common deerweed, and cholla (*Cylindropuntia* spp.). Western honey mesquite is the dominant species in the mesquite bosque vegetation type.

2.3.1.4 Fauna

The Project site supports habitat for common upland and riparian wash species. Desert and Sonoran scrubs, as well as mesquite bosque and fallow agriculture within the Project site provide foraging and nesting habitat for migratory and resident birds, and serve as habitat for other wildlife species, including reptiles, invertebrates, and mammals.

There were 153 wildlife species observed in the Project site during the 2018 and 2019 surveys. Species observed were recorded during focused surveys, habitat assessments, vegetation mapping, and special-status plant surveys. A cumulative list of wildlife species observed during these surveys is provided in Appendix C of the Biological Technical Resources Report (Appendix D to this EIR), List of Wildlife Species Observed. Species richness within the Project site is moderate due to the property size, amount of undeveloped land, and the number of native upland habitats. Species richness is generally increased with the presence of more habitat types and ecotones. The Project site is dominated by three habitat types: scrub communities comprise approximately 46%, riparian communities comprise 9%, fallow agriculture comprises approximately 37.5%, and disturbed and developed areas comprise approximately 6% of the Project site. The number of species and the wildlife population levels recorded (i.e., number of individuals) are typical for undeveloped areas in this region, particularly those areas that support multiple upland habitat types. The Project site supports special-status wildlife species.

Reptiles and Amphibians

Seven species of reptile were observed within the Project site during the various surveys conducted. Some of the species observed include gophersnake (*Pituophis catenifer*), desert spiny lizard (*Sceloporus magister*), and coachwhip (*Coluber* sp.).

One special-status reptile, San Diegan tiger whiptail (*Aspidoscelis tigris stejnegeri*), was observed during surveys conducted in 2019.

Birds

A total of 90 species of birds were observed within the Project site during the surveys conducted in 2018 and 2019. Some of the species observed include Pacific-slope flycatcher (*Empidonax difficilis*), California quail (*Callipepla californica*), California scrub-jay (*Aphelocoma californica*), Say's phoebe (*Sayornis saya*), California towhee (*Melospiza crissalis*), house finch (*Haemorhous mexicanus*), red-tailed hawk (*Buteo jamaicensis*), and northern mockingbird (*Mimus polyglottos*).

Sixteen special-status or County Group list birds were observed: Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), tricolored blackbird (*Agelaius tricolor*), golden eagle (*Aquila chrysaetos*), burrowing owl (*Athene cunicularia*), Costa's hummingbird (*Calypte costae*), turkey vulture (*Cathartes aura*), Vaux's swift (*Chaetura vauxi*), northern harrier (*Circus cyaneus*), California horned lark (*Eremophila alpestris actia*), merlin (*Falco columbarius*), loggerhead shrike (*Lanius ludovicianus*), black-tailed gnatcatcher (*Poliophtila melanura*), Lawrence's goldfinch (*Spinus lawrencei*), Brewer's sparrow (*Spizella breweri*), and yellow-headed blackbird (*Xanthocephalus xanthocephalus*).

Mammals

A total of 15 species of mammals were detected within the Project site by direct observation or sign. Mammals observed within the Project site include coyote (*Canis latrans*), desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus (Otospermophilus) beecheyi*). Mule deer (*Odocoileus hemionus*), and coyote are the only larger mammals known to use the site.

Two special-status or County Group list mammal was observed: San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) and San Diego desert woodrat (*Neotoma lepida intermedia*). Dudek recorded a potential American badger (*Taxidea taxus*) den on site as well.

Invertebrates

A total of 41 species of invertebrates, 39 of which were butterflies, were identified within the Project site by direct observation. Commonly observed species within the Project site include

western pygmy-blue (*Brephidium exile*), funereal duskywing (*Erynnis funeralis*), and desert pearly marble (*Euchloe hyantis lotta*).

One special-status butterfly was observed: Quino checkerspot butterfly.

2.3.1.5 Special-Status Plant Species

Endangered, rare, or threatened plant species, as defined in the California Environmental Quality Act (CEQA) Guidelines Section 15380(b) (14 CCR 15000 et seq.), are referred to as “special-status plant species” in this report and include (1) endangered or threatened plant species recognized in the context of California Endangered Species Act (CESA) and the federal Endangered Species Act (FESA) (CDFW 2019b), (2) plant species with a California Rare Plant Rank (CRPR) 1 through 4 (CNPS 2019), and (3) plant species considered “sensitive” by the County of San Diego (Table 2 in County of San Diego 2010).

In considering rarity, the CNPS inventory of rare and endangered vascular plants of California was the primary reference (CNPS 2019). Use of the CNPS inventory is helpful because it clearly defines levels of endangerment and rarity for all of the species addressed in the CNPS inventory. The CNPS inventory divides its subject taxa into four ranks: CRPR 1 (which is further divided into 1A and 1B), CRPR 2 (which is further divided into 2A and 2B), CRPR 3, and CRPR 4. Plants with a CRPR of 1A are presumed extirpated or extinct because they have not been seen or collected in the wild in California for many years. Plants with a CRPR of 1B are rare throughout their range, with the majority of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. Plants with a CRPR of 2A are presumed extirpated because they have not been observed or documented in California for many years. Except for being common beyond the boundaries of California, plants with a CRPR of 2B would have been ranked 1B. Plants with a CRPR of 3 have not had sufficient information collected to assign them to one of the other ranks or to reject them. Nearly all of the plants constituting CRPR 3 are taxonomically problematic. All of the plants constituting CRPR 1A, 1B, 2A, 2B, and 3 meet the definitions of CESA of the California Fish and Game Code and are eligible for state listing. Plants with a CRPR of 4 are of limited distribution or infrequent throughout a broader area in California, and their status should be monitored regularly. Should the degree of endangerment or rarity of a CRPR 4 plant change, they are transferred to a more appropriate rank.

CRPR 4 may be considered significant locally, and it is strongly recommended that CRPR 4 plants be evaluated for impact significance during preparation of environmental documents relating to CEQA based on CEQA Guidelines Section 15125(c) and/or 15380. This may be particularly appropriate for the following:

- The type locality of a CRPR 4 plant
- Populations at the periphery of a species’ range

- Areas where the taxon is especially uncommon
- Areas where the taxon has sustained heavy losses
- Populations exhibiting unusual morphology or occurring on unusual substrates

In addition to CRPR 1–4 species, plant species listed on County Lists A through D (County of San Diego 2010) also were included in the consideration of sensitive plant species for this analysis.

Focused special-status plant surveys were conducted in 2019 within the rare plant survey area (Figure 2.3-3, Survey Areas) to determine the presence or absence of special-status plant species that are considered endangered, rare, or threatened under CEQA Guidelines Section 15380 (14 CCR 15000 et seq.) and by the County. Special-status plant species directly observed during focused surveys or known to occur in the surrounding region are described in Appendix D1 of the Biological Resources Technical Report (Appendix D to the EIR), Special-Status Plant Species Detected Within the Project Area. Plants that are not expected to occur are included in Appendix D2 of Appendix D, Special-Status Plant Species Not Expected to Occur Within the Project Area. Appendices D1 and D2 include all County Lists A–D species (County of San Diego 2010), as well as species recorded in the Jacumba quadrangle and the surrounding six quadrangles (CDFW 2019a; CNPS 2019; SDNHM 2018; USFWS 2018a). The potential-to-occur determination is based on elevation, habitat, and soils present within the Project site, and Dudek biologists' knowledge of biological resources in the area and regional distribution of each species.

Five sensitive plant species were observed during focused rare plant surveys conducted in 2019: pygmy lotus (*Acmispon haydonii*; County List A), Higgins' barberry (*Berberis higginsiae*), Colorado Desert larkspur (*Delphinium parishii* ssp. *subglobosum*; County List D), sticky geraea (*Geraea viscida*; County List B) and Palmer's grapplinghook (*Harpagonella palmeri*; County List D).

County List A and B Species

Plants categorized as County List A species are plants that are rare, threatened, or endangered in California and elsewhere. Plants categorized as County List B are rare, threatened, or endangered in California, but more common elsewhere (County of San Diego 2010). County List A and B species that have high or moderate potential to occur are described in more detail in Appendix D1 of the Biological Resources Technical Report (Appendix D to this EIR).

Pygmy Lotus (*Acmispon haydonii*; List A)

Pygmy lotus is a CRPR List 1B.3 (CNPS 2019) and County List A species (County of San Diego 2010). This perennial herb in the pea or bean family (Fabaceae) blooms between January and June. It occurs in creosote bush scrub and pinyon-juniper woodland habitats at elevations of 1,705 to 3,935 feet above mean sea level (amsl). It has been recorded in San Diego County and Baja California, Mexico (CNPS 2019).

This species was observed in the Project site.

Sticky Geraea (*Geraea viscida*; List B)

Sticky geraea is a CRPR 2B.2 (CNPS 2019) and a County List B species (County of San Diego 2010). A member of the sunflower (Asteraceae) family, this species blooms May through June in chaparral. Sticky geraea is a perennial herb that occurs at elevations of 1,475 to 5,575 feet amsl. It has been recorded in San Diego County and Baja California, Mexico (CNPS 2019).

This species was observed within the Project site.

County List C and D Species

Plants categorized as County List C species are plants that may be rare but more information is needed to determine their true rarity status. Plants categorized as County List D are of limited distribution and are uncommon, but are not presently rare or endangered (County of San Diego 2010). County List C and County List D species that have high potential to occur in the Project site are described below and included in Appendix D1 of Appendix D.

Colorado Desert Larkspur (*Delphinium parishii* ssp. *subglobosum*; List D)

Colorado Desert larkspur is a CRPR List 4.3 (CNPS 2019) and a County List D species (County of San Diego 2010). This perennial herb in the buttercup (Ranunculaceae) family blooms between March and June. It occurs in creosote bush scrub, chaparral, and pinyon-juniper woodland habitat at elevations of 1,965 to 5,905 feet amsl. It has been recorded in San Diego County and Baja California, Mexico (CNPS 2019).

This species was observed in the Project site.

Palmer's Grapplinghook (*Harpagonella palmeri*; List D)

Palmer's grapplinghook is a CRPR 4.2 (CNPS 2019) and a County List D species (County of San Diego 2010). A member of the borage (Boraginaceae) family, this species blooms between March and May in chaparral, coastal scrub, and valley and foothill grasslands. This annual herb occurs at elevations of 65 to 3,135 feet amsl. It has been recorded in San Diego County and Baja California, Mexico (CNPS 2019).

This species was observed in the Project site.

Other Special-Status Plant Species

Plants that are not included on a County list, but have CRPRs and were observed or have the potential to occur within the Project site are described below.

Higgins' Barberry (*Berberis higginsiae*)

Higgins' barberry is a CRPR 3.2 (CNPS 2019). A member of the barberry (Berberidaceae) family, this species blooms between March and April. It occurs in chaparral and Sonoran desert scrub in rocky soils. This perennial shrub occurs at elevations of 2,620 to 3,495 feet amsl. It has been recorded in San Diego County (CNPS 2019).

This species was observed in the Project site.

Abram's Spurge (*Euphorbia abramsiana*)

Abram's spurge is a CRPR 2B.2 (CNPS 2019). A member of the spurge (Euphorbiaceae) family, this species blooms between August and November. It occurs in Mojavean desert scrub and Sonoran desert scrub in sandy soils. This annual herb occurs at elevations of -15 to 4,300 feet amsl. It has been recorded in San Diego County and in Baja California, Mexico (CNPS 2019).

This species has moderate potential to occur in the Project site.

2.3.1.6 Special-Status Animal Species

The County of San Diego divides sensitive wildlife species into County Group 1 and County Group 2 based on the species' rarity and known threats (County of San Diego 2010). County Group 1 species include those that have a high level of sensitivity, are listed as threatened or endangered, or have a natural history requirement that increases their sensitivity. County Group 2 species include those that are becoming less common, although not so rare that extinction is imminent without immediate action. CDFW assigns SSC status to species whose population levels are declining, have limited ranges, and/or are vulnerable to extinction due to continuing threats (CDFW 2019c). In addition, fully protected (FP) species are protected by CDFW, and Watch List (WL) species are candidates for higher sensitive status. USFWS provides the Birds of Conservation Concern (BCC) status to migratory and non-migratory bird species that adhere to the 1988 amendment to the Fish and Wildlife Conservation Act that mandates USFWS to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973" (USFWS 2008). County Group 1 and/or SSC species, as well as County Group 2 species that have been observed in the Project site, or those that have a high potential to occur, are discussed in this section and included in Appendix E1 of Biological Resources Technical Report

(Appendix D to the EIR), Special-Status Wildlife Species Detected or Potentially Occurring. Additional species that have moderate potential to occur are also described in more detail in Appendix E1 of Appendix D. Species that have low potential or are not expected to occur are described in Appendix E2 of Appendix D, Special-Status Wildlife Species With Low Potential or Not Expected to Occur, and not discussed further in this section of the EIR or the Appendix D to the EIR.

The following special-status animal species were observed within the Project site: San Diegan tiger whiptail (County Group 2, SSC), Cooper's hawk (County Group 1, WL), sharp-shinned hawk (County Group 1), tricolored blackbird (Group 1, SCE [state candidate for listing endangered], BCC, SSC), golden eagle (Group 1, BCC, FP, WL), burrowing owl (County Group 1, BCC, FP, WL), Costa's hummingbird (BCC), turkey vulture (County Group 1, BCC, SSC), Vaux's swift (SSC), northern harrier (County Group 1, SSC), California horned lark (County Group 2, WL), merlin (County Group 2, WL), loggerhead shrike (County Group 1, BCC, SSC), black-tailed gnatcatcher (WL), Brewer's sparrow (BCC), Lawrence's goldfinch (BCC), yellow-headed blackbird (SSC), San Diego black-tailed jackrabbit (County Group 2, SSC), San Diego desert woodrat (County Group 2, SSC), mule deer (sign only) (County Group 2), American badger (potential burrow) (*Taxidea taxus*; Group 2, SSC), and Quino checkerspot butterfly (County Group 1; FE [federally endangered]) (Figure 2.3-2).

The following are special-status animal species and County of San Diego Group List species with high potential to occur in the Project site: California glossy snake (*Arizona elegans occidentalis*; SSC), San Diego banded gecko (*Coleonyx variegatus abbotti*; County Group 1, SSC), red diamond rattlesnake (*Crotalus ruber*; County Group 2, SSC), rosy boa (*Lichanura trivirgata*; County Group 2), Blainville's horned lizard (*Phrynosoma blainvillii*; County Group 2, SSC), Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*; County Group 1, WL), pallid bat (*Antrozous pallidus*; County Group 2, SSC), northwestern San Diego pocket mouse (*Chaetodipus fallax*; County Group 2, SSC), pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*; County Group 2, SSC), western small-footed myotis (*Myotis ciliolabrum*; County Group 2), Yuma myotis (*Myotis yumanensis*; County Group 2), and Jacumba pocket mouse (*Perognathus longimembris internationalis*; County Group 2, SSC).

County Group 1 Species and/or SSC Species

County Group 1 and/or SSC species that have been observed in the Project site or have a high potential to occur are described below. Species that were detected or have a high or moderate potential to occur are included in Appendix E1 of the Biological Resources Technical Report (Appendix D to the EIR). Additional species that have a low potential to occur or are not expected to occur are described in detail in Appendix E2 of Appendix D.

Reptiles

California Glossy Snake (*Arizona elegans occidentalis*; SSC)

California glossy snake is an SSC species. This species is found throughout Southern California in desert regions (Zeiner et al. 1988–1990). California glossy snake occurs in chaparral, sagebrush, valley–foothill hardwood, pinyon–juniper, and annual grass at an elevation below 6,000 feet amsl. This species is primarily nocturnal and spends periods of inactivity during the day and during winter in mammal burrows and rock outcrops. California glossy snakes are most common in arid regions.

This species has high potential to occur in the Project site.

San Diegan Tiger Whiptail (*Aspidoscelis tigris stejnegeri*; SSC/County Group 2)

San Diegan tiger whiptail is an SSC and County Group 2 species. It is found in coastal Southern California, mostly west of the Peninsular Ranges and south of the Transverse Ranges, north into Ventura County, and south into Baja California, Mexico (Lowe et al. 1970; Stebbins 2003).

Tiger whiptail (*A. tigris*) is found in a variety of habitats, primarily in areas where plants are sparse and there are open areas for running. According to Stebbins (2003), the species ranges from deserts to montane pine forests, where it prefers warmer and drier areas. The species is also found in woodland and streamside growth, and it avoids dense grassland and thick shrub growth.

This species was observed in the Project site in 2019.

San Diego Banded Gecko (*Coleonyx variegatus abbotti*; SSC/County Group 1)

San Diego banded gecko is an SSC and County Group 1 species. San Diego banded gecko is only recorded in Riverside, San Diego, and San Bernardino Counties in California (CDFW 2019a). San Diego banded gecko is active at night and hides in burrows during daylight (Nafis 2016). The typical breeding season for San Diego banded gecko occurs during April and May, and hibernation is generally November through February (Nafis 2016). General habitat for this species includes coastal scrub and chaparral, and this species is typically found in granite or rocky outcrops.

This species has high potential to occur in the Project site.

Red Diamond Rattlesnake (*Crotalus ruber*; SSC/County Group 2)

Red diamond rattlesnake is an SSC and County Group 2 species. It is found in a variety of habitats from the coast to the deserts, from San Bernardino County into Baja California, Mexico (below 5,000 feet amsl). It commonly occurs in rocky areas within coastal sage scrub, chaparral, juniper woodlands, and desert habitats, but can also be found in areas devoid of rocks (Lemm 2006).

This species has high potential to occur in the Project site.

Blainville's Horned Lizard (*Phrynosoma blainvillii*; SSC/County Group 2)

Blainville's horned lizard (previously coast horned lizard) is an SSC and County Group 2 species. It is found from the Sierra Nevada foothills and central California to coastal Southern California. It is often associated with coastal sage scrub, especially areas of level to gently sloping ground with well-drained loose or sandy soil, but it can also be found in annual grasslands, chaparral, oak woodland, riparian woodland, and coniferous forest between 30 and 7,030 feet amsl (Jennings and Hayes 1994). This reptile typically avoids dense vegetation, preferring 20% to 40% bare ground in its habitat. Blainville's horned lizard can be locally abundant in areas where it occurs, with densities of near 20 adults per acre. Adults are active from late March through late August, and young are active from August through November or December.

This species has high potential to occur in the Project site.

Birds

Cooper's Hawk (*Accipiter cooperii*; WL/County Group 1)

Cooper's hawk is a WL and County Group 1 species. It is found throughout California in wooded areas. This species inhabits live oak, riparian, deciduous, or other forest habitats near water. Nesting and foraging usually occur near open water or riparian vegetation. Nests are built in dense stands with moderate crown depths, usually in second-growth conifer or deciduous riparian areas. Cooper's hawk uses patchy woodlands and edges with snags for perching while it hunts for prey such as small birds, small mammals, reptiles, and amphibians within broken woodland and habitat edges (Zeiner et al. 1990a).

A Cooper's hawk was observed foraging within the Project site during the early spring nesting raptor surveys in February 2019. There is moderate potential for Cooper's hawk to nest in the denser mesquite bosque habitat in the northern portion of the Project site.

Sharp-Shinned Hawk (*Accipiter striatus*; WL/County Group 1)

Sharp-shinned hawk is a WL and County Group 1 species. This species is a common migrant and winter resident throughout California, although an uncommon permanent resident and breeder in mid-elevation habitats (Zeiner et al. 1988–1990). Sharp-shinned hawk breeds in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats on north facing slopes with perches. This species prefers riparian habitats, and roost in intermediate to high-canopy forest often to forage in opening at edges of woodlands. Nests are found in dense, even-aged, single-layered forest canopy. The sharp-shinned hawk is the least common breeding *Accipiter* species in California (Zeiner et al. 1988–1990).

Sharp-shinned hawk was observed flying over the Project site during the April 4 and April 5, 2018, burrowing owl habitat assessment surveys. The sharp-shinned hawk does not nest in San Diego county (Unitt 2004) but may use the Project site for foraging.

Tricolored Blackbird (*Agelaius tricolor*; SSC/Group 1)

The tricolor blackbird is a SSC, and County Group 1 species. It occurs throughout Central Valley and in coastal districts from Sonoma County south (Zeiner et al. 1990a). This species breeds near freshwater, and in emergent wetland with tall, dense *Arundo* sp. and riparian thickets. Tricolor blackbird feeds in grassland, cropland, and alkali scrub habitats where aquatic insects are hatching (Beedy et al. 2018; Shuford and Gardali 2008). This species breeds in northeastern California and winters more widespread along the central coast and San Francisco Bay area (Garrett and Dunn 1981; Grinnell and Miller 1944; McCaskie et al. 1979).

Tricolored blackbird was observed in 2019 during focused Quino checkerspot butterfly surveys perched in trees adjacent to the U.S./Mexico border. There are no suitable freshwater bodies of water for nesting within the Project site. The disturbed freshwater marsh mapped in the southwest corner of the Project site is very small (0.08 acres) and composed of patchy cattails and Mexican juncus. It lacks the vegetative protection (e.g., nettles, thistles), size and structure needed for nesting (Beedy and Hamilton 1999). Tricolored blackbirds were observed nesting in the large pond west of Jacumba Street in 2019 (Amoaku 2019) and based on 2019 observations, they use the southwestern portion of the Project site for foraging.

Golden Eagle (*Aquila chrysaetos*; BCC/FP, WL/County Group 1)

Golden eagle is a BCC, WL, FP, and County Group 1 species. In addition, golden eagle is protected under the federal Bald and Golden Eagle Protection Act. As a state fully protected species, take may only occur pursuant to scientific research or in connection with an authorized NCCP.

Golden eagle is a year-round, diurnally active species that is a permanent resident and migrant throughout California. Golden eagle is more common in northeast California and the Coast Ranges than in Southern California and the deserts. In Southern California, the species tends to occupy mountain, foothill, and desert habitats. Foraging habitat for this species includes open habitats with scrub, grasslands, desert communities, and agricultural areas. This species nests on cliffs within canyons and escarpments and in large trees (generally occurring in open habitats), and occurs primarily in rugged, topographically complex landscapes (Garrett and Dunn 1981; Johnsgard 1990). Most nests are located on cliffs or trees near forest edges, in trees within woodland savannas, or in small stands near open habitats (Kochert et al. 2002). Nest locations tend to be more closely associated with topographic heterogeneity than with a particular vegetation type (Call 1978).

Nest building can occur almost any time during the year. This species nests on cliffs, rock outcrops, large trees, and artificial structures such as electrical transmission towers, generally near open habitats used for foraging (Garrett and Dunn 1981; Johnsgard 1990; Kochert et al. 2002; Scott 1985). Golden eagle commonly builds, maintains, and variably uses multiple alternative nest sites in its breeding territory, routinely refurbishing and reusing individual nests over many years. Generally, the nests are large platforms composed of sticks, twigs, and greenery that are often 10 feet across and 3 feet high (Zeiner et al. 1990a). Pairs may build more than one nest and tend multiple nests prior to laying eggs (Kochert et al. 2002). Each pair can have up to a dozen nests, especially in cliff-nesting habitat where nests persist for longer than they do in trees, but generally only two to three nests are used in rotation from one year to the next. Some pairs use the same nest each year, but others use alternative nests more regularly. Succeeding generations of eagles may even use the same nest (Terres 1980, as cited in CPUC and BLM 2011).

In California, golden eagle breeds January through August, with peak breeding activity occurring February through July. Breeding typically begins in January with courtship and nest building, and egg laying typically occurs in February and March (Brown 1976; CPUC and BLM 2011; WRI 2010). Golden eagles typically lay one to three eggs, which they incubate for 43 to 45 days (Beebe 1974). Hatching and then feeding of nestlings takes place March through June. After their young fledge, the adult eagles may continue to feed the young birds for several months (CPUC and BLM 2011; WRI 2010). In the prey-rich oak woodland and savanna habitats of the California Coast Ranges, established golden eagle breeding pairs typically nest in most years (Hunt et al. 1999; Hunt and Hunt 2006); however, the long breeding cycle may contribute to some pairs breeding only every other year, even when food is abundant (CPUC and BLM 2011; WRI 2010). In other situations, where overall ecosystem productivity is lower or more variable from year to year, pairs need to range farther in search of food and may not nest every year because of the energetic demands of securing dispersed prey (Kochert et al. 2002).

Lagomorphs (rabbits and hares) and ground squirrels are of primary importance in the diet of most golden eagles, including in San Diego County, but their diet may include a wide variety of other mammals, reptiles, and birds, and frequently includes carrion, especially during winter (Johnsgard 1990; Kochert et al. 2002; Olendorff 1976).

One juvenile golden eagle was observed flying over the Project site on March 24, 2019, and a golden eagle was observed kettling with a group of turkey vultures, ravens, and red-tailed hawks on April 14, 2019. There is a golden eagle nest recorded on Round Mountain (northwest of the Project site); however, the last information recorded by USFWS on the nest location was from 2012 documenting common ravens (*Corvus corax*) using the nest. The nest site was surveyed in April 2018 and February 2019, and no golden eagles or golden eagle nesting activity was observed at this location or elsewhere near the Project site. Although there is no formal definition of what constitutes an “inactive” or “abandoned” golden eagle nest/territory, seven or more years with no

nesting is a strong indicator that this territory has been abandoned. Based on only two observations over several months of surveys both in 2018 and 2019, golden eagles do not appear to use the Project site regularly.

Burrowing Owl (*Athene cunicularia*; BCC/SSC/County Group 1)

The burrowing owl is a BCC, SSC, and County Group 1 species. It occurs throughout North and Central America west of the eastern edge of the Great Plains south to Panama (County of Riverside 2008). The winter range is much the same as the nesting range, except that most burrowing owls apparently vacate the northern areas of the Great Plains and the Great Basin (County of Riverside 2008) in winter. The majority of burrowing owls that breed in Canada and the northern United States are believed to migrate south during September and October and north during March and April, and into the first week of May. These individuals winter within the nesting habitat of more southern populations. Thus, winter observations may include both the migratory individuals as well as the resident population (County of Riverside 2008). The burrowing owls in Northern California are believed to migrate (Coulombe 1971).

In California, burrowing owls are yearlong residents of flat, open, dry grassland and desert habitats at lower elevations (Bates 2006). They can inhabit annual and perennial grasslands and scrublands characterized by low-growing vegetation. They may be found in areas that include trees and shrubs if the cover is less than 30% (Bates 2006); however, they prefer treeless grasslands. Although burrowing owls prefer large, contiguous areas of treeless grasslands, they have also been known to occupy fallow agriculture fields, golf courses, cemeteries, road allowances, airports, vacant lots in residential areas and university campuses, and fairgrounds when nest burrows are present (Bates 2006; County of Riverside 2008). They typically require burrows made by fossorial mammals, such as California ground squirrels. This species also prefers sandy soils with higher bulk density and less silt, clay, and gravel (Lenihan 2007).

Focused surveys for burrowing owl were conducted within the Project site in 2018 following Staff Report on Burrowing Owl Mitigation (CDFG 2012) guidelines. On April 11, 2018, a possible burrowing owl burrow was observed based on pellets, white wash, as well as claw marks at the entrance and immediate surrounding area. During surveys the following day on April 12, 2018, a partial burrowing owl carcass was observed approximately 900 feet away from the potential burrow. It was likely that an owl used the burrow as a wintering burrow but was predated before it had the chance to begin the breeding season. Biologists did not detect any other fresh burrowing owl sign or activity at/near the burrow or around the site during subsequent surveys. A burrowing owl was observed on March 16, 2019 during Quino checkerspot butterfly surveys. The individual flew away from the slope of a berm constructed along the southern portion of the Project site and a burrowing owl burrow was observed in the same area on April 1, 2019, with signs of pellets and whitewash (Figure 2.3-2). The 2018 and 2019 observations are all in the southeast corner of the Project

site. These locations were revisited during the January 2, 2020 habitat assessment within the Jacumba Airport's runway and no burrowing owls or new sign were observed. There have been no further observations of burrowing owl within the Project site. Based on communication with Colleen Wisinski, Conservation Program Specialist with the San Diego Zoo Institute for Conservation Research (Wisinski pers comm. 2019), a delayed onset of breeding further into the spring of 2019 was observed compared to previous years. Given this information combined with the infrequent observations in 2018 and 2019, the burrowing owls may only be using the Project site during the winter. Additionally, there are no records of burrowing owls within, or near, the Project site in CNDDDB (CDFW 2019a), the San Diego Bird Atlas (Unitt 2004), or eBird (The Cornell Lab of Ornithology 2019).

Regardless, the County's guidelines state that habitat is considered occupied if there are observations of a burrowing owl burrow. Occupied habitat is delineated around the 2019 burrow, which showed signs of recent activity. There are approximately 14.2 acres of occupied burrowing owl habitat within the southeastern portion of the Project site, which was delineated based on the observation locations (Figure 2.3-2). Based on the lack of burrowing owl observations or burrows with sign anywhere else in the Project site, it appears this southeast portion of the Project site is at the outer edge of the suitable habitat in the area, and burrowing owl(s) are most likely using more suitable habitat to the east and south of the Project site. For example, there is non-native grassland and flat topographic areas east of the Project site around the Jacumba Airport airstrip, as well as flat open land just south of the Project site in Mexico. Both areas have better quality habitat compared to the burrowing owl observations in the Project site, which is primarily dominated by Russian thistle and other weeds. To provide additional information on these surrounding areas, Dudek conducted a habitat assessment along the southern boundary of the Jacumba Airport, which is included in Appendix F of the Biological Resources Technical Report (Appendix D to this EIR). This off-site study area consists of relatively flat land with occasional mounds and small hills, which generally constitutes suitable topography for burrowing owls to be able to perch and forage. Friable soils and rodent or lagomorph (hare or rabbit) burrows are present, although none of the burrows observed met the size criteria for a suitable or surrogate burrowing owl burrow (11 centimeters [4.3 inches] or greater in diameter and 150 centimeters [59 inches] in depth). One burrow mapped within the desert saltbush scrub habitat in the western portion of the off-site study area had an opening that met the diameter criteria, but did not quite meet the depth criteria for a suitable burrow. The depth of the burrow was approximately 107 centimeters (42 inches). The majority of this off-site area consists of suitable habitat with the potential to support burrowing owls.

Turkey Vulture (*Cathartes aura*; County Group 1)

Turkey vulture is not considered special status by any state or federal agencies; however, it is considered a County Group 1 species. In California, it is common during the nesting season and is a year-round resident west of the Sierra Nevada, especially in coastal areas. Summer and year-

round ranges also include the southeastern United States; portions of Texas, Mexico, Central America, and South America; and some islands in the Caribbean (Kirk and Mossman 1998).

Turkey vultures use a variety of habitats while foraging on wild and domestic carrion. They prefer open stages of most habitats. In the western United States, they tend to occur regularly in areas of hilly pastured rangeland, non-intensive agriculture, and areas with rock outcrops suitable for nesting, although they are not generally found in high-elevation mountain areas (Kirk and Mossman 1998; Zeiner et al. 1990a). Nest locations tend to be difficult to find and are usually located in a crevice among granite boulders (Unitt 2004). This species prefers hilly areas that provide deflective updrafts for flight, and generally avoids extensive areas of row-crop farmland (Kirk and Mossman 1998).

Turkey vulture was observed regularly foraging over the Project site; no nests were observed during the raptor surveys.

Vaux's Swift (*Chaetura vauxi*; SSC)

Vaux's swift is a SSC species. This species is a summer resident of northern California, breeds commonly in Coast Ranges, Sierra Nevada, and Cascade Range, is a common migrant throughout California in spring and summer, and winters irregularly in southern coastal lowlands (Garrett and Dunn 1981; Grinnell and Miller 1944; McCaskie et al. 1979). Vaux's swift nests in redwood and Douglas-fir habitats in large hollow trees and snags, and feeds over most terrains and habitats at lower levels of forest openings and above rivers (Grinnell and Miller 1944).

This species does not nest in San Diego County (Baltosser and Scott 1996; Unitt 2004), but migrates through in spring and fall, and winters in western and eastern parts of the County, with winter observations near the Project site (Unitt 2004). During migration, this species is much less common in the desert than along the coast (Unitt 2004) but could still use open portions of the Project site for foraging. Wintering and roosting on the site would be rare but possible in the several abandoned buildings and structures that exist within and adjacent to the Project site that could serve as potential roost sites.

One Vaux's swift was observed flying over the Project site during the Quino checkerspot butterfly surveys in 2019.

Northern Harrier (*Circus cyaneus*; SSC/County Group 1)

Northern harrier is an SSC and County Group 1 species. Northern harriers use a wide variety of open habitats in California, including deserts, coastal sand dunes, pasturelands, croplands, dry plains, grasslands, estuaries, flood plains, and marshes. This species can also forage over coastal sage scrub or other open scrub communities. Nesting areas are associated with marshes, pastures,

grasslands, prairies, croplands, desert shrub-steppe, and riparian woodland (Macwhirter and Bildstein 2011). Winter habitats similarly include a variety of open habitats dominated by herbaceous cover. Northern harrier populations are most concentrated in areas with low vegetation.

Northern harrier was observed foraging along the southern portion of the Project site during the early spring nesting raptor surveys in February 2019 and once during the Quino checkerspot butterfly surveys in March 2019. The open habitat within the Project site is marginal from past disturbance (agriculture) and a predominance of non-native species, particularly Russian thistle. While this species did not nest on site during the 2018 and 2019 surveys, nesting potential is considered moderate.

Loggerhead Shrike (*Lanius ludovicianus*; BCC/SSC/County Group 1)

Loggerhead shrike is a BCC, SSC, and County Group 1 species. It is found in lowlands and foothills throughout California, and it remains in the southern portion of the state year-round. Preferred habitats for the loggerhead shrike are open areas that include scattered shrubs, trees, posts, fences, utility lines, or other structures that provide hunting perches with views of open ground, as well as nearby spiny vegetation or built structures (such as the top of chain-link fences or barbed wire) that provide means to skewer prey items. The species occurs most frequently in riparian areas along the woodland edge, grasslands with sufficient perch and butcher sites, scrublands, and open-canopied woodlands, although they can be quite common in agricultural and grazing areas; and they can sometimes be found in mowed roadsides, cemeteries, and golf courses, although they occur rarely in heavily urbanized areas (Zeiner et al. 1990a). Loggerhead shrikes build nests in stable shrubs or trees requiring dense foliage for well-concealed nests and likely nests in the Project site.

Loggerhead shrike was observed throughout most of the summer in 2018 during focused burrowing owl surveys and likely nests within the Project site.

Southern California Rufous-Crowned Sparrow (*Aimophila ruficeps canescens*; WL/County Group 1)

Southern California rufous-crowned sparrow is a WL, and County Group 1 species. The current distribution of Southern California rufous-crowned sparrow is restricted to a narrow belt of semiarid coastal sage scrub and sparse chaparral from Santa Barbara south to the northwestern corner of Baja California (Bent 1968; Collins 1999; Grinnell 1926; Grinnell and Miller 1944; Todd 1922; Unitt 1984; Zeiner et al. 1990a). The subspecies has also been found on San Martin Island. Southern California rufous-crowned sparrow is considered a resident throughout its range. No true migratory movements have been recorded, although limited movements to lower elevations in some areas have been reported during especially severe winters (Collins 1999).

This species has high potential to occur within the Project site.

Yellow-Headed Blackbird (*Xanthocephalus xanthocephalus*; SSC)

Yellow-headed blackbird is a SSC species. This species breeds commonly east of Cascade Range and Sierra Nevada, in Imperial and Colorado River valleys, in the Central Valley, and selected locations in the coast ranges west of the Central Valley (Zeiner et al. 1990a). It occurs as a migrant and local breeder in deserts and along Orange County coast. Yellow-headed blackbird nests in fresh emergent wetland with dense vegetation and deep water, and forages in emergent wetland and moist, open areas, including cropland and shores of lacustrine habitat. This species nest and roost over water, and forage over water, near water, and moist ground.

One yellow-headed blackbird was observed within the Project site during focused Quino checkerspot butterfly surveys in 2019.

Mammals

Pallid bat (*Antrozous pallidus*; County Group 2, SSC)

Pallid bat is an SSC and County Group 2 species. It occurs throughout California (Zeiner et al. 1990b). Records from counties in Southern California include San Diego, San Bernardino, Los Angeles, Riverside, Imperial, and Orange Counties (CDFW 2019a). It roosts in rocky outcrops, human-built structures, and trees. Pallid bat is known to occur in a wide variety of habitats, including grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests (Zeiner et al. 1990b). It is commonly found in open, dry habitats with rocky areas for roosting (Zeiner et al. 1990b).

This species is fairly common and widespread in San Diego County and has potential to roost, including maternity roost, in the abandoned buildings on site and in the rocky outcrops on Round Mountain. The closest known CNDDDB occurrence overlaps the eastern boundary of the Project site (CDFW 2019a). There are records of pallid bats roosting in a bridge in Jacumba in 2014 (Tremor 2017).

This species has high potential to occur within the Project site.

Northwestern San Diego Pocket Mouse (*Chaetodipus fallax fallax*; SSC/County Group 2)

Northwestern San Diego pocket mouse is an SSC and County Group 2 species. Northwestern San Diego pocket mouse is a subspecies and inhabits sandy herbaceous areas in association with rocks and coarse gravel (Grinnell 1933; Miller and Stebbins 1964). This subspecies occurs in arid coastal and desert border areas in southwestern California (Zeiner et al. 1990a). Typical habitats for the northwestern San Diego pocket mouse include coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland.

This species has high potential to occur within the Project site.

Pallid San Diego Pocket Mouse (*Chaetodipus fallax pallidus*; SSC/County Group 2)

Pallid San Diego pocket mouse is an SSC and County Group 2 species. This subspecies is found in southwestern California at an elevation below 6,000 feet amsl (Zeiner et al. 1988–1990). This subspecies prefers coastal scrub, chamise–redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon–juniper, and annual grassland habitats in rocky or gravelly areas (Miller and Stebbins 1964). In San Diego County, pallid San Diego pocket mouse occurs in arid coastal and desert border areas (Zeiner et al. 1988–1990).

This subspecies has high potential to occur within the Project site.

San Diego Black-tailed Jackrabbit (*Lepus californicus bennettii*; SSC/County Group 2)

San Diego black-tailed jackrabbit is an SSC and County Group 2 species. It is confined to coastal Southern California, with marginal eastern records in Mount Piños, Arroyo Seco, Pasadena, San Felipe Valley, and Jacumba (Hall 1981). It is found in many diverse habitats, but primarily in arid regions supporting short-grass habitats. Jackrabbits typically are not found in high grass or dense brush where it is difficult for them to move quickly, and the openness of open scrub habitat likely is preferred over dense chaparral. Jackrabbits are common in grasslands that are overgrazed by cattle, and they are well adapted to using low-intensity agricultural habitats (Hall 1981). Although black-tailed jackrabbit was previously widespread throughout San Diego County, particularly in north county coastal areas from Del Mar to Oceanside, the species now persists in small, scattered habitat patches (Tremor 2017).

San Diego black-tailed jackrabbit was detected within the Project site during a focus survey. A specific location was not recorded.

San Diego Desert Woodrat (*Neotoma lepida intermedia*; SSC/County Group 2)

San Diego desert woodrat is an SSC and County Group 2 species. This species is found in coastal Southern California into Baja California, Mexico (Reid 2006). Marginal eastern records for San Diego desert woodrat in the United States include San Luis Obispo, San Fernando in Los Angeles County, the San Bernardino Mountains and Redlands in San Bernardino County, and Julian in San Diego County (Hall 1981). Desert woodrats are found in a variety of shrub and desert habitats, and are primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth.

This species has high potential to occur within the Project site. A woodrat midden was observed within the Project site, along the western boundary .

Jacumba Pocket Mouse (*Perognathus longimembris internationalis*; SSC/County Group 2)

Jacumba pocket mouse is an SSC and County Group 2 species. It is found in desert, grassland, herbaceous, shrubland, and chaparral habitats in Riverside and San Diego Counties (NatureServe 2019). This species prefers desert wash with sandy or gravelly alluvial substrate and disturbed grassland. Associated plant species include grasses, Catclaw acacia thorn (*Senegalia greggii*), mesquite (*Prosopis glandulosa*), and *Opuntia* sp.

This species has high potential to occur within the Project site.

American Badger (*Taxidea taxus*; SSC/County Group 2)

American badger is an SSC, and County Group 2 species. In California they are found throughout the state except in coastal Northern California (Zeiner et al. 1990b). American badger typically occurs in open, sparsely vegetated habitats, but also uses modified habitats such as agriculture. It is found in dry, open areas with friable soils, and can occur throughout the Project site. Its distribution in a landscape coincides with the availability of prey, burrowing sites, and mates, with distribution of males ranging wider than distribution of females during the breeding season and summer months (Minta 1993). In general, badger activity within a home range tends to concentrate in areas with suitable soils for burrowing or with colonies of ground squirrels.

This species has high potential to occur within the Project site. One potential badger den was observed within the Project site during focused Quino checkerspot butterfly protocol surveys.

Invertebrates

Quino Checkerspot Butterfly (*Euphydryas editha quino*; FE/County Group 1)

Quino checkerspot butterfly is a federally endangered and County Group 1 species. This species is found only in western Riverside County, southern San Diego County, and northern Baja California, Mexico (USFWS 2003). This species is found on sparsely vegetated hilltops, ridgelines, and occasionally on rocky outcrops in open chaparral and coastal sage scrub habitat (typically at less than 3,000 feet amsl). This species requires host plants within these vegetation communities for feeding and reproduction. The primary larval host plant is dotseed plantain; however, several other species have been documented as important larval host plants, including desert plantain, sometimes called woolly plantain (*Plantago patagonica*); thread-leaved bird's beak (*Cordylanthus rigidus*); white snapdragon (*Antirrhinum coulterianum*); owl's clover; and Chinese houses (*Collinsia* spp.) (USFWS 2003).

One Quino checkerspot butterfly was observed during the 2019 rare plant surveys in the southwestern portion of the Project site on a small hilltop nectaring on goldfields (*Lasthenia* spp.)

and redstem stork's bill (*Erodium cicutarium*). No Quino checkerspot butterflies were observed during the focused protocol Quino surveys. This individual was likely using the southwestern portion of the Project site for nectar while traveling between locations.

County Group 2 Species and Other Special-Status Species

County Group 2 species, CDFW WL species, or USFWS BCC species that have been observed or have high potential to occur in the Project site are described below and included in the Appendix E1 of the Biological Resources Technical Report (Appendix D to the EIR). Additional species that have moderate potential to occur are described in more detail in Appendix E1 of Appendix D.

Reptiles

Rosy Boa (*Lichanura trivirgata*; County Group 2)

Rosy boa is not considered special status by any state or federal agencies; however, it is a County Group 2 species. Rosy boa in California ranges from Los Angeles, eastern Kern, and southern Inyo Counties south through San Bernardino, Riverside, Orange, and San Diego Counties (Spiteri 1988; Stebbins 2003; Zeiner et al. 1990c). It occurs at elevations from sea level to 5,000 feet amsl in the Peninsular and Transverse Ranges. Within its range in Southern California, rosy boa is absent only from the southeastern corner of California around the Salton Sea and the western and southern portions of Imperial County (Zeiner et al. 1990c). Rosy boa inhabits rocky shrubland and desert habitats and is attracted to oases and streams, but does not require permanent water (Stebbins 2003).

This species has high potential to occur within the Project site.

Birds

Costa's hummingbird (*Calypte costae*; BCC)

Costa's hummingbird is a BCC species. Costa's hummingbird is common and widespread in southern California. This species is restricted to winter on the southern coast and southern deserts (Garrett and Dunn 1981). Costa's hummingbird moves upslope after breeding and during fall migration (Garrett and Dunn 1981). This species occurs in arid habitat, including desert wash, edges of desert riparian and valley foothill riparian, coastal scrub, desert scrub, desert succulent shrub, lower-elevation chaparral, and palm oasis. Costa's hummingbird nests in trees, shrubs, woody forbs, and sometimes vines (Bent 1940).

This species was observed multiple times within the Project site in 2018 and 2019.

California Horned Lark (*Eremophila alpestris actia*; WL/County Group 2)

California horned lark is a WL and County Group 2 species. California horned lark is a permanent resident found throughout much of the southern half of California. This species breeds and resides in the coastal region of California from Sonoma County southeast to the U.S./Mexico border, including most of the San Joaquin Valley, and eastward to the foothills of the Sierra Nevada (Beason 1995; Grinnell and Miller 1944). It is found from grasslands along the coast and deserts near sea level to alpine dwarf-shrub habitat above tree line. This species prefers open habitats, grassland, rangeland, shortgrass prairie, montane meadows, coastal plains, and fallow grain fields, and it nests on the ground in a hollow scrape.

California horned lark was observed foraging within the Project site in April and May 2018. Based on territorial and nesting behavior observed, this species is likely nesting within the fallow agricultural fields and possibly within the lower hillsides on the north side of the railroad tracks.

Merlin (*Falco columbarius*; WL/County Group 2)

Merlin is a WL and County Group 2 species. Merlin inhabits annual grassland, savannahs, woodlands, lakes, wetlands, and pine and conifer habitats (Zeiner et al. 1990a). This species is a winter migrant from September to May throughout the western California below 3,900 feet in elevation. Merlin does not breed in California, however this species does winter and forage in dense tree stands near bodies of water.

Merlin was observed within the Project site during focused Quino checkerspot butterfly surveys in 2019. Merlins only occur in California during the nonbreeding season (Warkentin et al. 2005).

Black-Tailed Gnatcatcher (*Poliophtila melanura*; WL)

Black-tailed gnatcatcher is a WL species. Black-tailed gnatcatcher inhabits desert wash from Palm Springs and Joshua Tree National Monument to eastern Mojave Desert and along the Colorado River at elevations below 1,000 feet amsl (Zeiner et al. 1988–1990). This species primarily nests in wooded desert wash habitat, and sparingly in desert scrub habitat in winter (Garrett and Dunn 1981; Grinnell and Miller 1944). Black-tailed gnatcatcher population has declined in numbers and may be victimized by cowbird parasitism (Friedmann 1963).

Black-tailed gnatcatcher was observed occasionally within the Project site in April 2019. This species could nest in the mesquite bosque within the Project site.

Lawrence's goldfinch (*Spinus lawrencei*; BCC)

Lawrence's goldfinch is a BCC species. Lawrence's goldfinch is common along the western edge of southern deserts and is fairly common but erratic in Santa Clara County (Kaiser 1976 as cited in Zeiner et al. 1988-1990), on coastal slope from Monterey County south, and in foothills surrounding Central Valley (Zeiner et al. 1988–1990). This species is present mostly from April through September; most individuals that breed in California will winter in other southwestern states and in northern Mexico. Lawrence's goldfinch winters erratically in southern coastal lowlands and Colorado River Valley and occurs in small numbers in northern California (Garrett and Dunn 1981; Grinnell and Miller 1944; McCaskie et al. 1979). This species occurs in valley foothill hardwood, valley foothill hardwood-conifer, desert riparian, palm oasis, pinyon-juniper, and lower montane habitats. Lawrence's goldfinch nests in dense foliage of a tree or shrub, and prefers oak, cypress, cedar, or riparian thicket (Grinnell and Miller 1944).

Lawrence's goldfinch was observed in 2019 during focused Quino checkerspot butterfly surveys and was likely migrating through the Project site or using it as a non-breeding location since it does not nest in the region (Baltosser and Scott 1996). The Project site may provide foraging habitat for this species as it migrates through the area.

Brewer's Sparrow (*Spizella breweri*; BCC)

Brewer's sparrow is a BSS species. Brewer's sparrow inhabits desert scrub, croplands, and treeless shrub habitats with moderate canopy and sagebrush (Zeiner et al. 1990a). This species breeds east of Cascade-Sierra Nevada crest, Mojave and Colorado deserts, and San Joaquin Valley. In recent years, the Brewer's sparrow rarely breeds in southwestern California (Garrett and Dunn 1981) and is considered a wintering or migrating species in San Diego County (Unitt 2004). This species finds cover in sagebrush and nests in the center of sagebrush or other shrub up to 3.9 feet above the ground.

Brewer's sparrow was observed within the Project site several times in April 2018 and was likely migrating through the site. The Project site may provide foraging habitat for this species as it migrates through the area.

Mammals

Western Small-Footed Myotis (*Myotis ciliolabrum*; County Group 2)

Western small-footed myotis is not considered special status by any state or federal agencies; however, it is a County Group 2 species. Western small-footed myotis inhabits arid wooded and brushy uplands near water in coastal and desert California (Zeiner et al. 1990b). This species occurs in elevation below 8,900 feet. This species seeks cover in caves and built structures, including buildings, mines, and bridges.

This species has high potential to occur within the Project site. This species has potential to roost, including maternity roost, in the abandoned buildings on the Project site.

Yuma Myotis (*Myotis yumanensis*; County Group 2)

Yuma myotis is not considered special status by any state or federal agencies; however, it is a County Group 2 species. It occurs throughout California except for the most arid areas of the Mojave and Colorado Deserts (Zeiner et al. 1990b). Records from counties in Southern California include San Diego, San Bernardino, Los Angeles, Riverside, Imperial, and Orange Counties (CDFW 2019a). Although Yuma myotis occurs in a wide variety of life zones, at elevations ranging from sea level to 10,820 feet amsl, its actual distribution is closely associated with access to water (Zeiner et al. 1990b). Forests and woodlands are primary habitats, and foraging usually occurs in open, uncluttered habitats and low over-water sources such as ponds, streams, and stock ponds (Brigham et al. 1992; Zeiner et al. 1990b).

This species has high potential to occur within the Project site. This species is fairly common and widespread in San Diego County and has potential to roost, including maternity roost, in the abandoned buildings on the Project site and in the rocky outcrops on Round Mountain, the eastern half of which is within the Project site.

Mule Deer (*Odocoileus hemionus*; County Group 2)

Mule deer is a County Group 2 species. It is a common species with a widespread distribution throughout the western United States and Canada, and south into mainland and Baja California, Mexico (Hall 1981). It occurs throughout most of California, except in deserts and intensively farmed areas without cover (Zeiner et al. 1990b). Throughout its range, mule deer uses coniferous and deciduous forests, riparian habitats, desert shrub, coastal scrub, chaparral, and grasslands with shrubs. It is often associated with successional vegetation, especially near agricultural lands (NatureServe 2019). It uses forested cover for protection from the elements and open areas for feeding (Wilson and Ruff 1999). Mule deer fawn in a variety of habitats that have available water and abundant forage, including moderately dense shrubs and forests, dense herbaceous stands, and higher-elevation riparian and mountain shrub vegetation.

Mule deer tracks were observed during biological surveys within the Project site. Mule deer favor habitats such as riparian and oak woodland, and early growth chaparral (Tremor 2017). Given the open landscape within the Project site and general absence of mule deer on the desert floor, it is likely that mule deer only occasionally occur on site and travel from the mountains north of the Project site. They are not expected to utilize the flat open areas due to the lack of vegetative cover.

2.3.1.7 Wetlands/Jurisdictional Waters

Potential jurisdictional aquatic resources within the Project site total 153.51 acres and include 22.48 acres of potential U.S. Army Corps of Engineers (ACOE)/Regional Water Quality Control Board (RWQCB)/CDFW-jurisdictional non-wetland waters, 130.95 acres of potential ACOE/RWQCB-jurisdictional non-wetland waters and CDFW-jurisdictional riparian habitat, and 0.08 acres of potential ACOE/RWQCB/CDFW-jurisdictional wetlands/riparian habitat and County RPO wetlands.

There are also two borrow pits on the Project site with scattered, sparse tamarisk shrubs. These borrow pits were wholly constructed in upland areas. The northern borrow pit is approximately 100 feet by 80 feet; the southern borrow pit is larger (approximately 1.5 acres), but lacks hydrophytic vegetation based on the sampling pit. Per the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, the northern borrow pit would be considered an artificial wetland that resulted from human activity, including excavation of the pit and discharging of water into the pit from agricultural activities (SWRCB 2019). Water is no longer being discharged to the borrow pit, and there is very minimal tamarisk in the pit. As such, the pit would not be considered a relatively permanent part of the natural landscape which is a requirement of the State procedures for an artificial wetland to be considered waters of the state. There is also an erosional feature formed solely from a culvert directing surface and road runoff beneath Carrizo Gorge Road which has eroded the landscape until the runoff dissipates into a dirt road approximately 1,000 feet from Carrizo Gorge Road. This feature does not support any wetland vegetation. The northern borrow pit and the erosional features formed from a culvert directing surface and road runoff were constructed or formed in uplands and have no current or historical connection to waters of the United States or State. Therefore, they are not considered features regulated by federal or state agencies.

Acreages for potential jurisdictional resources are summarized in Table 2.3-2, Jurisdictional Aquatic Resources within the Project site, and represented in Figure 2.3-2. The Aquatic Resources Delineation Report is included as Appendix G to the Biological Resources Technical Report (Appendix D to the EIR).

ACOE/RWQCB/CDFW Determination

There are 11 potential aquatic features within the Project site that are non-wetland waters. Features 1, 2, 5, 6, and 9–11 generally flow in a northerly direction into Carrizo Creek (Figure 2.3-2). Carrizo Creek flows through Carrizo Gorge and Carrizo Canyon where it turns into Carrizo Wash just north of the Coyote Mountains. Carrizo Wash outlets into San Felipe Creek near the Lower Borrego Valley and eventually drains into the Salton Sea to form a significant nexus to a traditional navigable water. Features 3 and 4 originate in Gray Mountain just northeast of the Project site;

however, this drainage terminates in the middle of the site. Features 7 and 8 also flow south from Gray Mountain and terminate at Carrizo Gorge Road. These waters do not connect to a traditional navigable water or tributary to a traditional navigable water, and will be evaluated during an approved preliminary jurisdictional determination which is currently being processed by the ACOE.

There is one wetland waters (Feature 12) mapped in the southwestern corner of the Project site that is likely fed from the higher water table in the area. This feature does not connect via the surface to a traditional navigable water or tributary to a traditional navigable water and will be evaluated during a preliminary jurisdictional determination which is currently being processed by the ACOE.

RPO Wetland Determination

The County's RPO identifies wetlands as "at least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places)," "substratum is predominantly undrained soil," or "an ephemeral or perennial stream is present whose substratum is predominately non-soil and such lands contribute substantially to biological functions or values of wetlands in the drainage system" (County of San Diego 2012). One feature supports RPO wetlands within the Project site: the small disturbed freshwater marsh is fed from subsurface water seasonally and lacks consistent water sources. Based on the County's guidelines (County of San Diego 2010), a 50-foot buffer would be appropriate for this feature (Figure 2.3-2).

Based on the lack of hydrophytes, hydric soils, or substratum that is predominantly non-soil in the ephemeral channels and the presence of well-drained soils, the ephemeral channels do not have the biological functions of a wetland nor do they have populations of wetland dependent species, and therefore are not considered an RPO wetland.

The mesquite bosque located within the floodplain along the western boundary is dominated by facultative species that occur equally in wetland and non-wetland areas. Other common species within the mesquite bosque include facultative, facultative upland, or upland species, such as tamarisk, white bursage, fourwing saltbush, quailbush, saltgrass, and mustards (*Sisymbrium* spp.). The dominant and co-dominant plant species would not be categorized as hydrophytes because they are not facultative wetland (usually occur in wetlands but occasionally found in non-wetlands) or obligate (occur almost always under natural conditions in wetlands) species that are consistent with the RPO's definition of a hydrophyte (County of San Diego 2012; Lichvar et al. 2012). Although iodine bush is present in some portions of the mesquite bosque at low percent cover, it is not dominant enough in the shrub cover to be considered a "predominance of hydrophytes" per the RPO definition. Areas mapped as mesquite bosque are located within a wide floodplain area with no evidence of surface flow. The soils are not hydric, the floodplain lacks a defined channel and a predominance of hydrophytes; and the slopes are less than 25%. Therefore, areas mapped as mesquite bosque would not be considered RPO wetlands.

Tamarisk often occupies jurisdictional wetlands but is also commonly associated with disturbed areas or toe of slopes that have higher groundwater tables in upland areas. On the Project site the tamarisk scrub is not associated with any jurisdictional features and is located along road sides or in soil piles and pits. Similar to mesquite bosque, tamarisk is a facultative species which occur equally in wetland and non-wetland areas and does not meet the County's definition of a hydrophyte (County of San Diego 2012; Lichvar et al. 2012). Data stations taken within the northern borrow pit showed signs of hydrology in the form of mudcracks, had sparse tamarisk, and assumed hydric soils (see Appendix F of Appendix D). The southern borrow pit had very minimal mudcracks, even sparser tamarisk, and no hydric soils. Due to its artificial nature, the presence of invasive species, the lack of hydrophytes, and the lack of observed hydric soils, these borrow pits created in upland areas would not be considered RPO wetlands.

2.3.1.8 *Habitat Connectivity and Wildlife Corridors*

Wildlife species generally inhabit suitable habitat patches distributed across a landscape. These habitat blocks, which may make up the species' home range or breeding territory, support most, if not all, of the species' life history needs (e.g., food resource, mates, refuge). Critical to the survival of most wide-ranging species is the ability to access or move between various habitat blocks to allow for juvenile dispersal, to access food and/or shelter during the winter months, to escape catastrophic events (e.g., flood, fire), and to ward against genetic in-breeding (Rosenberg et al. 1997). In undisturbed or unfragmented landscapes, such movements by some species may occur throughout the landscape without a defined movement route (e.g., between mosaics of suitable habitat patches). However, where landscapes have movement constraints related to either natural conditions, such as vegetation types or topography (e.g., steep slopes), or constructed obstacles (e.g., urban areas, roads), wildlife may have to move along defined landscape linkages or "wildlife corridors." The phrase "wildlife corridors," as used in the report, are generally linear landscape features that permit species to disperse between favorable habitats.

Habitat linkages are relatively large open space patches of natural habitat that function to join two larger adjacent open space patches of habitat (Bennett 2003). They serve as connections between habitat patches and help reduce the adverse effects of habitat fragmentation. The linkage represents a potential route for gene flow and long-term dispersal. Habitat linkages may serve as both habitat and avenues of gene flow for small animals such as reptiles and amphibians. Habitat linkages may be represented by continuous patches of habitat or by nearby habitat "islands" that function as "stepping stones" for dispersal. The Project site would be considered an east/west linkage for wildlife movement south of the I-8 and north of the U.S./Mexico border fence.

The Project site is included within a Core Wildlife Area as defined by the County based on its size and the surrounding undeveloped land (County of San Diego 1997). The Project site is currently undeveloped, except for dairy and ranch structures north of Old Highway 80, but the International

border fence limits the ability of the Project site to function as a linear north–south wildlife corridor for large mammals. The Proposed Project vicinity is generally surrounded by undeveloped landscapes to the north (of I-8), east, and northwest. Old Highway 80, a two-lane highway, traverses the Project site in an east/west direction within the southern portion of the Project site. Carrizo Gorge Road traverses the Project site in a generally north/south direction along the eastern portion of the Project site. There are no wildlife crossings along the Old Highway 80, but wildlife are generally able to make at-grade crossings over the highway. Based on observations from biological surveys, wildlife currently are able to traverse the Project site and surrounding undeveloped areas in an unencumbered manner until they arrive at the U.S./Mexico border fence along the southern boundary of the Project site. However, since openings in the border fence are located off site, approximately 1.2 miles to the east and 2 miles to the west, north/south wildlife movement is anticipated to be higher in these areas. These breaks are in steeper terrain, but provide for continued wildlife movement, as the topography does not pose difficulties for most wildlife use. Coyote, mountain lion, bobcat, and other species are readily able to scale steep slopes. The border fence openings occur along very steep portions of the fence and provide reduced movement options for most large wildlife. Additionally, the consistent presence of Border Patrol agents further reduces the attractiveness of the openings. Further, the Project site is situated adjacent to, or near, State Park and federal Bureau of Land Management (BLM) lands, which allows for unhindered movement. Figure 2.3-4, Habitat Connectivity and Wildlife Movement, shows the border fence openings, conserved lands, and adjacent land ownership, and Figure 2.3-5 shows the Habitat Evaluation Model.

The mesquite-dominated floodplain along the western portion of the Project site may serve as a wildlife movement area between the Project site and the north side of I-8 for a variety of wildlife species, including mammals, birds, reptiles, and invertebrates. The western portion of the floodplain (i.e., Boundary Creek) narrows, but larger wildlife may still move through the area at night if they are traveling to the west. The eastern portion of the Project site is flatter and more open with smaller drainages and dirt roads that could serve as movement areas for wildlife travel. Birds can move freely through the region; invertebrates and smaller mammals can also move relatively freely through the region. All terrestrial species' movement is hindered by I-8, constraining movement between north and south of I-8, and, to a lesser degree, movement is hindered by Old Highway 80 and surface streets. The exit to Carrizo Gorge Road and the San Diego and Eastern Railway/Carrizo Gorge Road underpasses are the only routes across I-8 in the vicinity. These constraints make the Project site a connection between blocks of habitat to the east and west.

There is critical habitat for Quino checkerspot butterfly located approximately 0.25 miles west of the Project site (Figure 2.3-3). The Jacumba Occurrence Complex appears to be the most southeastern occurrence of Quino checkerspot butterfly in its U.S. range (USFWS 2003, 2019). According to the Recovery Plan for Quino Checkerspot Butterfly (USFWS 2003), there is

occupied habitat south of El Condor, Baja California, Mexico, further southeast of Jacumba, although this location is not specifically mentioned in the 5-Year Recovery Plan (USFWS 2009). The Jacumba Occurrence Complex west of the Project site is likely connected to the vicinity of McCain Valley and Campo west of the Project site, potentially suitable habitat in the Table Mountain area northeast of the Project site, and occupied habitat in El Condor southeast of the Project site (USFWS 2003).

The In-Ko-Pah and Jacumba Mountains are north of the Project site; the Peninsular Ranges and Anza-Borrego Desert are to the east. The Project site is located approximately 3.4 miles southeast of designated critical habitat for Peninsular bighorn sheep, and 2.6 miles from the western slope of the Peninsular Ranges (Figure 2.3-2). The Project site is too removed from mountainous terrain to be provide habitat attractive to bighorn sheep, it does not provide inter-mountain connectivity habitat between occupied mountain ranges and they have not been identified in the area previously. Based on their known range, USFWS Critical Habitat, and unsuitable habitat between the Project site and known range, this species is not expected to occur on the Project site.

“Sensitive habitat lands” is a definition by the County (County of San Diego 2010) that includes wildlife corridors. As mentioned above, the mesquite-dominated floodplain may provide the best area for terrestrial mammals and some bird species found in tree or shrub habitat. The border fence that runs along the southern boundary of the Project site is currently impermeable to large mammals, such that wildlife movement between the United States and Mexico occurs only along breaks in the border fence east and west of the Project site. Birds, small mammals, reptiles and invertebrates are still able to travel between these areas. Given the undeveloped land to the north and east, the Project site does not currently serve as a local or regional wildlife corridor since wildlife is not constrained to travel through the area. However, because the Project site extends from I-8 to the border fence, it does serve as a linkage between open space to the east and west. Therefore, the Project site is considered a sensitive habitat land with regard to wildlife corridors.

The Pacific Flyway is a major north/south migration route for birds that travel between North and South America. This is a broad-front route that covers much landscape. In Southern California, birds typically use the coast and inland areas. The Pacific Coast route is used by gulls, ducks, and other water birds. The longest and most important route of the Pacific Flyway is that originating in northeastern Alaska. This route, which includes most waterfowl and shorebirds, passes through the interior of Alaska and then branches such that large flights continue southeast into the Central and Mississippi flyways, or they may turn in a southwesterly direction and pass through the interior valleys of California, ending or passing through the Salton Sea (BirdNature 2014). The southward route of long-distance migratory land birds of the Pacific Flyway that typically overwinter south of the United States extends through the interior of California to the mouth of the Colorado River and on to their winter quarters, which may be located in western Mexico (USGS 2006).

The Salton Sea, approximately 40 miles northeast, is an important stopover for many birds that travel inland (SDG&E 2009); the inland Pacific Flyway migration route, which is focused on a stopover at the Salton Sea, is east of the Project site. A study from 1985 to 1999 focused on shorebird migration and recorded avian use at the Salton Sea and adjacent Imperial Valley. Large numbers of shorebirds, including black-necked stilt (*Himantopus mexicanus*), American avocet (*Recurvirostra americana*), western sandpiper (*Calidris mauri*), and dowitchers (*Limnodromus* spp.) were recorded during migration periods (Shuford et al. 2002). In addition, the study showed that birds traveling to the Salton Sea use the sea not only as a migratory stopover, but the site is also a wintering area for many species, including the mountain plover (*Charadrius montanus*) (Shuford et al. 2002). Migration timing varies from species to species, and for some, there is little documentation of the timing; for others, the arrival and departure has been well documented species by species (Unitt 2004). In general, bird migration occurs during the months of March through April and August through November. However, the Project site does not support any bodies of water or wetlands that attract large migration stopovers or attractants for avian and bat species. The closest large bodies of water to the Project site are Tule Lake, located approximately 4 miles northwest, and Lake Domingo, located approximately 8 miles west. Therefore, although birds likely migrate over the Project site and certain birds may forage on site, the Project site is not considered a stopover for birds migrating to and from the Salton Sea, particularly with the agricultural fields and irrigation resources available in the El Centro and Brawley areas south of the Salton Sea. Additionally, many birds are known to migrate at night (Emlen 1975; Lowery 1951; USGS 2013), which reduces visibility and glare-related impacts to migrants.

Special Habitat Management Areas

Several regional habitat management programs are planned for the eastern San Diego County, including a future MSCP East County Plan. Conservation initiatives, including the Las Californias Binational Conservation Initiative and the Parque-to-Park Binational Corridor, include lands in the Project site (Figure 2.3-1, Regional Context) (Stallcup et al. 2015).

The Project site is located within the future East County MSCP Plan Area (Figure 2.3-1). As described in Section 2.3.1, Existing Conditions, a Preliminary Planning Map has been completed. The intent of preparing the East County MSCP Plan is to create a large, connected preserve system that addresses the regional habitat needs for multiple species. The majority of the Project site is mapped as “Agriculture or Natural Upland outside Focused Conservation Area.” Additional designations include: “Other Public/Semi-Public Lands” associated with roads, “Riparian/Wetland Habitat and Transition Zone within FCA” associated with on-site drainages, “Land Managed as Open Space” associated with the railroad, and “Land managed with Ecological Protection” associated with the land adjacent to conserved lands in the very northwest corner of the Project site. The development footprint of the Proposed Project would be located within the “Agriculture or Natural Upland outside Focused Conservation Area” and “Other Public/Semi-Public Lands.”

2.3.2 Regulatory Setting

2.3.2.1 Federal Regulations

Federal Endangered Species Act

FESA (16 USC 1531 et seq.) is implemented by USFWS through a program that identifies and provides for protection of various species of fish, wildlife, and plants deemed to be in danger of or threatened with extinction. As part of this regulatory act, FESA provides for designation of critical habitat, defined in FESA Section 3(5)(A) as specific areas within the geographical range occupied by a species where physical or biological features “essential to the conservation of the species” are found and that “may require special management considerations or protection.” Critical habitat may also include areas outside the current geographical area occupied by the species that are nonetheless “essential for the conservation of the species.” The Project site does not contain any critical habitat.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits the take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, “take” is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so (16 USC 703 et seq.). In December 2017, Department of Interior Principal Deputy Solicitor Jorjani issued a memorandum (M-37050) that interprets the MBTA to only prohibit intentional take. Unintentional or accidental take is not prohibited (DOI 2017). Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). The Executive Order requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species.

Clean Water Act

Pursuant to Section 404 of the Clean Water Act, ACOE regulates the discharge of dredged and/or fill material into “waters of the United States.” The term “wetlands” (a subset of waters of the United States) is defined in 33 Code of Federal Regulations (CFR) 328.3(b) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” In the absence of wetlands, the limits of ACOE jurisdiction in non-tidal waters, such as intermittent streams, extend to the “ordinary high water mark,” which is defined in 33 CFR 328.3(e).

2.3.2.2 State Regulations

California Endangered Species Act

CDFW administers the California Endangered Species Act (CESA) (California Fish and Game Code [CFGF] Section 2050 et seq.), which prohibits the “take” of plant and animal species designated by the California Fish and Game Commission as endangered or threatened in California. Under CESA Section 86, take is defined as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” CESA Section 2053 stipulates that state agencies may not approve projects that will “jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy.”

Sections 3511, 4700, and 5515 of the California Fish and Game Code designate certain birds, mammals, and fish as “fully protected” species. These species may not be taken or possessed without a permit from the Fish and Game Commission, and such take may only occur pursuant to scientific research or in connection with an authorized Natural Community Conservation Plan (NCCP). No “incidental take” of fully protected species is allowed.

CESA Sections 2080 through 2085 address the taking of threatened, endangered, or candidate species by stating, “No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the Commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided in this chapter, the Native Plant Protection Act (CFGF Sections 1900–1913), or the California Desert Native Plants Act (Food and Agricultural Code, Section 80001).”

Section 2081(b) and (c) of the Fish and Game Code authorizes take of endangered, threatened, or candidate species if take is incidental to otherwise lawful activity and if specific criteria are met. In such cases, CDFW issues the applicant an incidental take permit, which functions much like an incidental take statement in the federal context. Sections 2081(b) and (c) also require CDFW to coordinate consultations with USFWS for actions involving federally listed species that are also state-listed species. In certain circumstances, Section 2080.1 of CESA allows CDFW to adopt a federal incidental take statement or a 10(a) permit as its own, based on its findings that the federal permit adequately protects the species and is consistent with state law. As mentioned above, CDFW may not issue a Section 2081(b) incidental take permit for take of “fully protected” species. The Fish and Game Code lists the fully protected species in Section 3511 (birds), Section 4700 (mammals), Section 5050 (reptiles and amphibians), and Section 5515 (fish).

California Fish and Game Code

Streambed Alteration Agreement

Pursuant to CFGC Section 1602, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. A Streambed Alteration Agreement (CFGC Section 1602 et seq.) is required for impacts to jurisdictional resources, including streambeds and associated riparian habitat.

Birds and Mammals

According to CFGC Sections 3511 and 4700, which regulate birds and mammals, a fully protected species may not be taken or possessed. CDFW may not authorize the take of such species except (1) for necessary scientific research, (2) for the protection of livestock, and (3) when the take occurs for fully protected species within an approved NCCP.

Resident and Migratory Birds

The CFGC provides protection for wildlife species. It states that no mammals, birds, reptiles, amphibians, or fish species listed as fully protected can be “taken or possessed at any time.” In addition, CDFW affords protection over the destruction of nests or eggs of native bird species (CFGC Section 3503), and it states that no birds in the orders of Falconiformes or Strigiformes (birds of prey) can be taken, possessed, or destroyed (CFGC Section 3503.5). CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock (CFGC Section 3511). Separate from federal and state designations of species, CDFW designates certain vertebrate species as Species of Special Concern based on declining population levels, limited ranges, and/or continuing threats that have made them vulnerable to extinction.

California Native Plant Protection Act

The Native Plant Protection Act of 1977 (CFGC Sections 1900–1913) directed CDFW to carry out the legislature’s intent to “preserve, protect and enhance rare and endangered plants in this State.” The Native Plant Protection Act 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. When CESA was passed in 1984, it expanded on the original Native Plant Protection Act, enhanced legal protection for plants, and created the categories of “threatened” and “endangered” species to parallel FESA. CESA categorized all rare animals as threatened species under CESA, but did not do so for rare plants, which resulted in three listing categories for plants in California: rare, threatened, and endangered. The Native Plant Protection Act remains part of the California Fish and Game Code, and mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and project proponents.

Porter–Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act protects water quality and the beneficial uses of water. It applies to surface water and groundwater. Under this law, the State Water Resources Control Board develops statewide water quality plans, and the Regional Water Quality Control Boards (RWQCBs) develop regional basin plans that identify beneficial uses, water quality objectives, and implementation plans. The RWQCBs have the primary responsibility to implement the provisions of statewide plans and basin plans. Waters regulated under the Porter–Cologne Water Quality Control Act include isolated waters that are not regulated by ACOE. Developments with impacts to jurisdictional waters must demonstrate compliance with the goals of the act by developing stormwater pollution prevention plans (SWPPP), standard urban stormwater mitigation plans, and other measures to obtain a Clean Water Act Section 401 certification.

California Environmental Quality Act

CEQA requires identification of a project’s potentially significant impacts on biological resources and feasible mitigation measures and alternatives that could avoid or reduce significant impacts. CEQA Guideline 15380(b)(1) defines endangered animals or plants as species or subspecies whose “survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors” (14 CCR 15000 et seq.). A rare animal or plant is defined in CEQA Guideline 15380(b)(2) as a species that, although not presently threatened with extinction, exists “in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or ... [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered ‘threatened’ as that term is used in the federal Endangered Species Act.” Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guideline 15380(c). CEQA also requires identification of a project’s potentially significant impacts on riparian habitats (such as wetlands, bays, estuaries, and marshes) and other sensitive natural communities, including habitats occupied by endangered, rare, and threatened species.

2.3.2.3 Local Regulations

East County Multiple Species Conservation Program

The County has prepared a preliminary planning map for the future East County MSCP Plan. The intent of preparing the East County MSCP Plan is to create a large, connected preserve system that addresses the regional habitat needs for multiple species. The future East County MSCP Plan would cover approximately 1.6 million acres within the eastern unincorporated portion of the San Diego County. The Cleveland National Forest is located along the western boundary of the East

County MSCP Plan area. The East County MSCP Plan area is bounded by Riverside County to the north, Imperial County on the east, and Mexico to the south. Tribal lands will be excluded from the East County MSCP Plan. Preparation of a future East County MSCP Plan is a cooperative effort among the County of San Diego, USFWS, and CDFW. Authority for this process comes from the California Natural Community Conservation Planning Act and Section 10(a) of FESA that addresses habitat conservation plans.

The Project site is located within the East County MSCP Plan area (Figure 2.3-1, Regional Context). A preliminary planning map has been completed for the East County MSCP. According to this map, the Project site is primarily within Agriculture or Natural Upland outside of the Focused Conservation Area, which suggests that the area has regional conservation value (Figure 2.3-1).

Projects within the East County MSCP planning area were subject to a Planning Agreement (2014) between the County, the CDFW, and USFWS for the East County MSCP; however, the Planning Agreement has expired. The County anticipates a new Planning Agreement will be in place later in 2020. The Planning Agreement is intended to determine if Proposed Project approval would have an effect on the preparation and approval of the future East County MSCP. The Planning Agreement would outline preliminary conservation objectives for the future East County MSCP. In addition to the preliminary conservation objectives, the Planning Agreement would identify an interim Proposed Project review process.

County Resource Protection Ordinance

The RPO, administered by the County of San Diego, regulates biological and other natural resources within the County. These resources include wetlands, wetland buffers, floodways, floodplain fringe, steep slope lands, sensitive habitat lands, and significant prehistoric or historic sites. Generally, the ordinance stipulates that no impacts may occur to wetlands except for scientific research, removal of diseased or invasive exotic plant species, wetland creation and habitat restoration, revegetation and management projects, and crossings of wetlands for roads, driveways, or trails/pathways when certain conditions are met. The same exemptions apply to impacts to wetland buffer areas and improvements necessary to protect adjacent wetlands. Sensitive habitat lands support unique vegetation communities, habitat of sensitive species, lands essential to the healthy functioning of a balanced natural ecosystem, and/or wildlife corridors. Impacts to sensitive habitat lands are permitted when impacts have been reduced as much as possible and mitigation provides at least an equal benefit to the affected species (County of San Diego 2012).

RPO Wetlands

The RPO, Section 86.602(p), defines wetlands as (County of San Diego 2007):

Lands having one or more of the following attributes:

- At least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places);
- The substratum is predominantly undrained hydric soil; or
- An ephemeral or perennial stream is present, whose substratum is predominately non-soil, and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.

Wetlands are not lands which have the attributes specified above solely due to man-made structures (e.g., culverts, ditches, road crossings, or agricultural ponds), provided that the Director of Planning and Development Services determines that they:

- Have negligible biological function or value as wetlands even if restored to the extent feasible; and,
- Do not have substantial or locally important populations of wetland dependent sensitive species.

Lands are also not considered wetland if they have been degraded by past legal land disturbance activities, to the point that they meet the following criteria as determined by the Director of Planning and Development Services:

- Have negligible biological function or value as wetlands;
- Are small and geographically isolated from other wetland systems;
- Are not vernal pools; and,
- Do not have substantial or locally important populations of wetland dependent sensitive species.

According to Sec. 86.604, the RPO restricts specific development on wetlands to include aquaculture; scientific research and educational or recreational uses; wetland creation and habitat restoration. In addition, the ordinance requires that a wetland buffer be provided to further protect the wetland resources. Improvements necessary to protect the adjacent wetlands and those uses allowed within the actual wetland are the only allowed uses within the buffer. Section 86.604 goes on to specify, “There must be no net loss of wetlands and any impacts to wetlands shall be mitigated at a minimum ratio of 3:1” (County of San Diego 2007).

RPO Sensitive Habitat Lands

The RPO, Section 86.602(p), defines Sensitive Habitat Lands as (County of San Diego 2007):

Land which supports unique vegetation communities, or the habitats of rare or endangered species or sub-species of animals or plants as defined by Section 15380 of the State California Environmental Quality Act (CEQA) Guidelines (14 Cal. Admin. Code Section 15000 et seq.), including the area which is necessary to support a viable population of any of the above species in perpetuity, or which is critical to the proper functioning of a balanced natural ecosystem or which serves as a functioning wildlife corridor.

“Unique vegetation community” refers to associations of plant species which are rare or substantially depleted. These may contain rare or endangered species, but other species may be included because they are unusual or limited due to a number of factors, for example: (a) they are only found in the San Diego region; (b) they are a local representative of a species or association of species not generally found in San Diego County; or (c) they are outstanding examples of the community type as identified by the California Department of Fish and Game listing of community associations.

According to Section 86.604, development, grading, grubbing, clearing or any other activity or use damaging to sensitive habitat lands is prohibited. However, development may be allowed when all feasible measures necessary to protect and preserve the sensitive habitat lands are required as a condition of permit approval and where mitigation provides an equal or greater benefit to the affected species (County of San Diego 2007).

2.3.3 Analysis of Project Impacts and Determination as to Significance

2.3.3.1 Definition of Impacts

This section defines the types of impacts considered in this report to analyze the potential effects of the Proposed Project on biological resources. These impacts are discussed in more detail as follows.

Direct Impacts

Direct impacts include short term, construction-related impacts as well as permanent impacts, which refer to the 100% loss of a biological resource. Direct impacts were quantified by overlaying the MUP boundary over the mapped biological resources and quantifying impacts (Figure 2.3-6, Impacts to Vegetation Communities and Land Covers, and Jurisdictional Delineation, and Figure 2.3-7, Impacts to Biological Resources). The MUP boundary includes all areas of potential disturbance (including areas cleared and/or graded for construction and decommissioning of the Project site). Impacts related to on-site development of the Proposed Project would occur on approximately 643 acres.

Indirect Impacts

Indirect impacts result from adverse “edge effects,” either short-term indirect impacts related to construction, or long-term, chronic indirect impacts associated with the location of urban development in proximity to biological resources within natural areas. During construction of the Proposed Project, short-term indirect impacts may include dust and noise, which could temporarily disrupt habitat and species’ vitality; changes in hydrology; disruption of wildlife activity due to increased human activity; and construction-related chemical pollutants. However, all Proposed Project grading would be subject to restrictions and requirements that address erosion and runoff, including the federal Clean Water Act and the National Pollution Discharge Elimination System, and preparation of a SWPPP and Standard Urban Stormwater Management Plan. These programs are expected to minimize Proposed Project impacts with respect to erosion/runoff, and the potential impacts from chemical pollutants. Long-term indirect impacts to proposed preserve areas may include generation of fugitive dust, intrusions by humans and domestic pets, noise, lighting, invasion by exotic plant and wildlife species, effects of toxic chemicals (fertilizers, pesticides, herbicides, and other hazardous materials), urban runoff from developed areas, litter, fire, habitat fragmentation, and hydrologic changes.

Cumulative Impacts

Cumulative impacts refer to incremental individual environmental effects of two or more projects when considered together. These impacts taken individually may be minor but become collectively significant as they occur over time.

Project Effects

The Proposed Project is a solar energy generation and storage facility, which includes a switchyard that would be transferred to San Diego Gas & Electric (SDG&E) after construction. For the purposes of this analysis, the switchyard (as described in Chapter 1, Project Description, of this EIR) is a component of the Proposed Project and has been analyzed as part of the whole of the action. However, the EIR highlights the specific analysis of the switchyard under each threshold of significance in the event that responsible agencies have CEQA obligations related to the switchyard.

The County’s Guidelines for Determining Significance are generally intended to address the questions posed in Appendix G of the CEQA Guidelines. In 2018, the CEQA Guidelines were updated and several of the questions listed in Appendix G were revised, deleted or modified. The County’s Guidelines for Determining Significance have yet to be updated to address these amendments. Accordingly, this EIR analyzes the impacts from the Proposed Project using the County’s Guidelines for Determining Significance and the questions posed in Appendix G. Where the questions in Appendix G have not been revised, only the County’s Guidelines for Determining

Significance are identified and analyzed. Where the questions in Appendix G have been significantly altered or additional questions have been posed, the Proposed Project's impacts are analyzed as against the questions in Appendix G and, to the extent they remain consistent with Appendix G, the County's Guidelines for Determining Significance.

Impacts from Open Space Easement

The designation of the on-site open space easement would result in a significant unavoidable impact to minerals resources. Pursuant to CEQA Guidelines § 15126.4, "if a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed." As discussed in further detail in, **M-BI-3 (Habitat Preservation)**, will cause a potentially significant impact to any mineral resources underlying the open space easement areas. Please refer to Section 2.8, Mineral Resources, for a discussion of the mitigation measure's potential impact.

The designation of the on-site biological open space easements is in accordance with the County's Guidelines for Determining Significance, Section 5.2, which states that on-site open space should only be included if the "site hosts moderate value biological resources and site-specific factors dictate that on-site mitigation would be biologically-viable". The biological open space will preserve in perpetuity 435 acres of habitat, located immediately adjacent to existing preserve lands located west of the project site that play a vital role in reducing impacts to biological resources.

The on-site mitigation area has been designed to maximize its biological function as part of a wildlife corridor and to sustain habitat connectivity. According to the San Diego County Biological Mitigation Ordinance, the mitigation site is a Biological Resource Core area as it is located within the limits of the future East County MSCP Plan Area. The various habitats included in the biological open space easement will provide a similar biological function and value as the habitat being impacted. Without the onsite mitigation area, the project would not provide for the preservation of a local linkage. Instead, this area could be developed and could impact wildlife movement by fragmenting these habitat areas. Through the biological open space easement and the existing SDG&E easements, the proposed project would maintain movement along well-vegetated areas (i.e., the mesquite-dominated floodplain) as well as along the drainages that serve as natural wildlife movement areas between the Jacumba Peaks area to the west and the mountains to the north. Without providing for long-term protection of this corridor and opening, wildlife traveling east to west north of the project could be funneled toward I-8 and forced to cross the highway at grade. Preserving these areas also maintains continuity in habitat between state park lands to the west and BLM lands to the north and east, permitting wildlife movement amongst these larger habitat complexes. Without these open space easements, the Project site outside of the MUP boundary is subject to future development, which could prevent the preservation of these high value biological resources.

In addition, the open space location is within the future East County MSCP Plan Area, which has a stated intent to create a large, connected preserve system that addresses the regional habitat needs for multiple species. This mitigation area includes suitable foraging habitat for multiple wildlife species, such as tricolored blackbird; and supports desert saltbrush scrub, desert sink scrub, disturbed freshwater marsh, mesquite bosque, Sonoran mixed woody and succulent scrub, unvegetated channel, and fallow agriculture. The mitigation lands also support two special-status plant species: pygmy lotus and sticky geraea and will conserve all of the jurisdictional aquatic resources mapped on site.

2.3.3.2 Candidate, Sensitive, or Special-Status Species

Guidelines for the Determination of Significance

For the purpose of this section and because the Appendix G questions relating to Biological Resources were not substantially revised in 2018, the County's Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources (County of San Diego 2010) was used to evaluate direct, indirect, and cumulative impacts for the Proposed Project. Each general subject area is broken into more specific County guidelines, and lettered accordingly, to provide additional clarity on this complex resource topic.

A significant impact would result if:

The project would have a substantial adverse effect, either directly or through habitat modifications, on a candidate, sensitive, or special-status species listed in local or regional plans, policies, or regulations, or by the CDFW or U.S. Fish and Wildlife Service (USFWS).

- A. The project would impact one or more individuals of a species listed as federally or state endangered or threatened.
- B. The project would impact an on-site population of a County List A or B plant species, or a County Group 1 animal species, or a species listed as a state Species of Special Concern (SSC). Impacts to these species are considered significant; however, impacts of less than 5% of the individual plants or of the sensitive species' habitat on a project site may be considered less than significant if a biologically based determination can be made that the project would not have a substantial adverse effect on the local long-term survival of that plant or animal taxon.
- C. The project would impact the local long-term survival of a County List C or D plant species or a County Group 2 animal species.
- D. The project may impact arroyo toad aestivation, foraging, or breeding habitat. Any alteration of suitable habitat within 1 kilometer (3,280 feet) in any direction of occupied breeding habitat or suitable stream segments (unless very steep slopes or other barriers

constrain movement) could only be considered less than significant if a biologically based determination can be made that the project would not impact the aestivation or breeding behavior of arroyo toads.

- E. The project would impact golden eagle habitat. Any alteration of habitat within 4,000 feet of an active golden eagle nest could only be considered less than significant if a biologically based determination can be made that the project would not have a substantially adverse effect on the long-term survival of the identified pair of golden eagles.
- F. The project would result in the loss of functional foraging habitat for raptors. Impacts to raptor foraging habitat is considered significant; however, impacts of less than 5% of the raptor foraging habitat on a project site may be considered less than significant if a biologically based determination can be made that the project would not have a substantial adverse effect on the local long-term survival of any raptor species.
- G. The project would impact the viability of a core wildlife area, defined as a large block of habitat (typically 500 acres or more not limited to project boundaries, although smaller areas with particularly valuable resources may also be considered a core wildlife area) that supports a viable population of a sensitive wildlife species or supports multiple wildlife species. Alteration of any portion of a core habitat could only be considered less than significant if a biologically based determination can be made that the project would not have a substantially adverse effect on the core area and the species it supports.
- H. The project would cause indirect impacts, particularly at the edge of proposed development adjacent to proposed or existing undeveloped lands or other natural habitat areas, to levels that would likely harm sensitive species over the long term. The following issues should be addressed in determining the significance of indirect impacts: increasing human access; increasing predation or competition from domestic animals, pests, or exotic species; altering natural drainage; and increasing noise and/or nighttime lighting to a level above ambient that has been shown to adversely affect sensitive species.
- I. The project would impact occupied burrowing owl habitat.
- J. The project would impact occupied cactus wren habitat, or formerly occupied coastal cactus wren habitat that has been burned by wildfire.
- K. The project would impact occupied Hermes copper habitat.
- L. The project would impact nesting success of the following sensitive bird species through grading, clearing, fire-fuel modification, and/or other noise-generating activities such as construction.

Species	Breeding Season
Coastal cactus wren	February 15 through August 15
Least Bell's vireo	March 15 through September 15
Southwestern willow flycatcher	May 1 through September 1

Species	Breeding Season
Tree-nesting raptors	January 15 through July 15
Ground-nesting raptors	February 1 through July 15
Golden eagle	January 1 through July 31
Light-footed clapper rail	February 15 through September 30

Analysis

Special-status species are those species that have been given special recognition by federal, state, or local conservation agencies and organizations due to limited, declining, or threatened population sizes. Candidate species are eligible for listing as federal or state threatened or endangered species.

Project Effects Relevant to Guideline A

Quino Checkerspot Butterfly

One Quino checkerspot butterfly was observed within the Project site during a rare plant survey on April 10, 2019, by a biologist possessing a recovery permit for this species pursuant to Section 10(a)(1)(A) of the federal ESA. The observation was in the southwest portion of the Project site on a small hilltop nectaring on goldfields and redstem stork's bill as shown in Figure 2.3-2. No Quino checkerspot butterflies were observed during the focused protocol surveys in 2019. There is a known Quino checkerspot population approximately one mile west of the Project site near Jacumba Peak. This individual was likely using the Project site for nectar while traveling between locations and/or investigating the hilltop. With the absence of host plants in close proximity to the Quino checkerspot butterfly observation, females would not stay and males would not stake out a territory. Any future use of this hilltop by Quino checkerspot butterflies would likely have the same result (nectar, investigate, and continue to another location). Since the known populations are located west of the Project site, travel is assumed to be between the western side of the Project site and to the west to suitable habitat and known populations.

Two locations of Chinese houses (host plants for Quino checkerspot butterfly), each with approximately one to 19 individuals, were mapped in the northwest portion of the Project site (Figure 2.3-7).

The Proposed Project has been designed to avoid the hill where the Quino checkerspot butterfly was observed and the two locations of Chinese houses. The Proposed Project's MUP area is located approximately 1.5 kilometers from the host plant locations. Therefore, there are no permanent direct impacts to Quino checkerspot butterfly. Due to the lack of host plants near the Quino checkerspot butterfly sighting, and the distance of the proposed development footprint from the hill (approximately 150 feet), no indirect impacts to this species is anticipated, such as dust, construction noise, or lighting. No work would be conducted within this area, and the hill is situated at an elevation higher than the impact area, which provides an additional buffer.

There would be **no direct or indirect impacts** to Quino checkerspot butterfly.

Impact BI-W-2: Impacts to Tricolored Blackbird

Tricolored blackbirds were observed foraging, but not nesting, in the southern portion of the Project site in April 2019. No tricolored blackbirds were observed in 2018 despite surveys conducted along the southern portion of the Project site. Tricolored blackbirds nest occasionally at the pond in adjacent Jacumba Hot Springs. The pond is located approximately 0.5 miles west of the Project site. According to Beedy et al. (2018), tricolored blackbirds typically forage within 5 kilometers (3 miles) of a colony site. Therefore, Dudek reviewed the vegetation data (SANGIS 2019) within a 3-mile radius of the nesting site (the pond located west of the Project site) to determine the amount of suitable foraging habitat available in the 3-mile foraging range. Based on potential foraging habitat described in Beedy et al. (2018) suitable foraging habitat includes grasslands, irrigated pasture, grain fields, shallow wetlands, and alkali scrub habitats (Airola et al. 2015; Beedy 2008; Beedy and Hamilton 1997; Meese 2013). There are approximately 2,100 acres of suitable grassland, agricultural, and alkali scrub foraging habitat within the United States and up to an additional 4,400 acres of suitable habitat in Mexico within the 3-mile radius. Of the 2,100 acres of suitable available habitat, approximately 530 acres are within federal BLM, Nature Conservancy, and State Park owned and managed lands. An aerial review of land within the 3-mile radius buffer shows open flatter land suitable for tricolored blackbird foraging in Mexico. Additionally, biologists observed tricolored blackbirds flying back and forth between the United States and Mexico.

In addition, post-construction studies for solar projects have shown species that are known to forage in an area are likely to continue to forage in the area after construction (Sinha et al. 2018). Therefore, tricolored blackbirds may forage in areas within the proposed solar facility where seeding allows for herb growth and habitat for insects on which they forage.

The Proposed Project would impact 593.5 acres potential foraging habitat (refer to Table 2.3-3, Permanent Impacts to Special-Status Wildlife Species Present within the Project Site or with High Potential to Occur), approximately half of which is in the northern portion of the Project site where tricolored blackbirds were not observed. Of the total impacts to foraging habitat, 48.52 acres of suitable foraging habitat would be hardscape (i.e., access roads and substation). Given the amount of available foraging habitat within three miles of the nest location in the United States, and additional foraging habitat within Mexico, impacts to potential foraging habitat within the Project site would not preclude this species from successfully nesting in the region.

A total of 593.5 acres of suitable foraging habitat would be directly impacted as a result of the Proposed Project (refer to Table 2.3-3). Although potential direct impacts to tricolored blackbird are expected to be minimal, the County's guidelines state that any impact to a listed species is considered a significant

impact. Direct impacts to tricolored blackbird would be **potentially significant (Impact BI-W-2)**. A total of approximately 424.8 acres of suitable foraging habitat for tricolored blackbird occurs within the proposed biological open space easement within the Project site, including desert saltbush scrub, desert sink scrub, disturbed freshwater marsh, mesquite bosque, Sonoran mixed woody and succulent scrub, unvegetated channel, and fallow agriculture.

Project Effects Relevant to Guideline B

Special-Status Plant Species (County List A and B Species)

Impact BI-SP-1: Temporary Direct Impacts to Special-Status Plant Species

Short-term, construction-related, or temporary direct impacts to special-status plants at the edge of the development footprint and non-impacted areas interface could primarily result from construction activities. There are no planned temporary impacts associated with the Proposed Project. Clearing, trampling, or grading of special-status plants, if they occur, outside of designated construction zones could occur in the absence of avoidance and mitigation measures. Temporary direct impacts to special-status plant species would be potentially significant (**Impact BI-SP-1**).

Impact BI-SP-2: Permanent Direct Impacts to Special-Status Plant Species (County List A and B)

Long term, or permanent, direct impacts to special-status plant species were quantified by comparing the impact footprint with the occurrence data for each special-status plant species. There are direct impacts to two special-status species (see Table 5-2 of the Biological Resources Technical Report included as Appendix D): pygmy lotus (1 individual; 100%) and sticky gerardia (43 individuals with 21 plants being impacted; 48%). Direct impacts to pygmy lotus and sticky gerardia would be **potentially significant (Impact BI-SP-2)**.

Special-Status Wildlife Species (County Group 1 or State SSC)

Impact BI-W-1: Temporary Direct Impacts to Habitat for Special-Status Wildlife Species

Loss of County Group 1 or state SSC animals (i.e., California glossy snake, San Diego tiger whiptail, San Diego banded gecko, red diamond rattlesnake, Blainville's horned lizard, Cooper's hawk, sharp-shinned hawk (foraging habitat), southern California rufous-crowned sparrow, burrowing owl, golden eagle, Bell's sage sparrow, Swainson's hawk, turkey vulture, Vaux's swift, northern harrier, loggerhead shrike, pallid bat, northwestern San Diego pocket mouse, pallid San Diego pocket mouse, San Diego black-tailed jackrabbit, San Diego desert woodrat, Jacumba pocket mouse, and American badger) and/or suitable habitat from construction-related activities would result in short-term direct impacts. These temporary direct impacts would be **potentially significant (Impact BI-W-1)**.

Impact BI-W-2: Permanent Direct Impacts to Habitat for Special-Status Wildlife Species

Long-term or permanent direct impacts on special-status wildlife species (i.e., California glossy snake, San Diego tiger whiptail, San Diego banded gecko, red diamond rattlesnake, Blainville's horned lizard, Cooper's hawk, sharp-shinned hawk (foraging habitat), southern California rufous-crowned sparrow, burrowing owl, golden eagle, Bell's sage sparrow, Swainson's hawk, turkey vulture, Vaux's swift, northern harrier, loggerhead shrike, northwestern San Diego pocket mouse, pallid San Diego pocket mouse, San Diego black-tailed jackrabbit, San Diego desert woodrat, Jacumba pocket mouse, and American badger) were quantified by comparing the MUP boundary with suitable habitat for wildlife species (Table 2.3-3). Implementation of the Proposed Project would result in the direct loss of habitat, including foraging habitat, for some of the County Group 1, Group 2, and/or SSC species. Permanent direct impacts to habitat for special-status wildlife species would be **potentially significant (Impact BI-W-2)**.

Golden Eagle

Two golden eagles were observed flying over the Project site during the 2019 Quino checkerspot butterfly surveys. They did not circle, forage, or land on any part of the Project site. Golden eagles are known to nest in the region, including at Table Mountain, which is approximately 2 miles northeast of the Project site (USFWS 2019). The eastern portion of Round Mountain is located within the Project site. A golden eagle nest record on the northern side of Round Mountain. This nest was described as an intact cliff nest occupied by common ravens in 2012 (USFWS 2019). This nest location, along with other crags on Round Mountain, was surveyed in April 2018 and February 2019; ravens and red-tailed hawks were observed nesting in these areas. Seven or more years with no nesting is a strong indicator that this territory has been abandoned. Aside from Round Mountain, there is no suitable nesting habitat (i.e., large trees or cliffs) within the Project site. Accordingly, there would be no impacts to nesting habitat associated with the Proposed Project. However, the Proposed Project would impact 643.0 acres of suitable foraging habitat for the species (Table 2.3-3). Permanent direct impacts to golden eagle foraging habitat would be **potentially significant (Impact BI-W-2)**.

Burrowing Owl

Burrowing owls were not found occupying the Project site during the breeding season. As described in Section 2.3.1.6, Special-Status Animal Species, the two observations during 2018 and 2019 surveys indicate that the species may use a portion of the Project site in the winter. Both of the observations were located in the southeastern portion of the Project site. The County defines occupied burrowing owl habitat as "any land that is used by burrowing owls for any reason, including foraging, or that is known to have been used at any time during the past three years. If burrowing owls are using the habitat, it is considered Occupied Habitat for the calendar year of

the observation or survey and the following three years” (County of San Diego 2010). Therefore, the Proposed Project would result in impacts to 14.2 acres of occupied burrowing owl habitat (Figure 2.3-7). Impacts to burrowing owl would be **potentially significant (Impact BI-W-2)**.

Although the Proposed Project would impact existing suitable undeveloped foraging habitat, post-construction, burrowing owls potentially may still forage within the developed solar facility. The vegetation within the solar facility would be maintained at 6 inches for fire protection purposes which leaves potential habitat beneath the solar panels for foraging. For example, burrowing owls were observed perching on the ground and are likely to use some of the existing solar facility sites for foraging according to the Western Burrowing Owl Relocation Plan for the Maricopa Sun Solar Project in Kern County, California (Quad Knof 2014). Additionally, burrowing owls were detected during post-construction monitoring for the California Valley Solar Ranch (H.T. Harvey & Associates 2014) and Topaz Solar Farms (Althouse and Meade 2014) solar facilities.

Impact BI-W-3: Permanent Direct Impacts on Nesting Birds

If any active nests or the young of nesting County Group 1 and/or SSC bird species are impacted through direct grading, these impacts would be significant, based on the MBTA and Fish and Game Code. The Proposed Project could also result in direct impacts on birds during clearing and grubbing of vegetation in preparation for construction. Direct impacts on nesting birds would be **potentially significant (Impact BI-W-3)**.

Impact BI-W-4: Permanent Direct Impacts on Maternity Bat Roosts

Yuma myotis, pallid bat, and western small-footed myotis have a high potential to roost in the abandoned buildings on the Project site. These buildings are proposed to be demolished as part of the Proposed Project. If there were a maternity roost in a building, impacts on that roost site would be **potentially significant (Impact BI-W-4)**.

Project Effects Relevant to Guideline C

Special-Status Plant Species (County List C and D Species)

Impact BI-SP-1: Temporary Direct Impacts to Special-Status Plant Species

Short-term, construction-related, or temporary direct impacts to one special-status plant—Palmer’s grapplinghook (County List D)—could occur at the edge of the development footprint and the non-impacted areas interface could primarily result from construction activities such as dust. Palmer’s grapplinghook is the only special-status plant that occurs within 300 feet of the development footprint. Impacts on Palmer’s grapplinghook outside designated construction zones could occur from clearing, trampling, or grading. Potential temporary direct impacts to special-status plant species would be **potentially significant (Impact BI-SP-1)**.

Impact BI-SP-2: Permanent Direct Impacts to Special-Status Plant Species

No County List C plants were observed within the Project site. There would be no impacts to County List D plants from the Proposed Project (see Table 5-2 of the Biological Resources Technical Report included as Appendix D to the EIR).

Special-Status Wildlife Species (County Group 2)***Impact BI-W-1: Temporary Direct Impacts to Habitat for Special-Status Wildlife Species***

Loss of County Group 2 or other special-status species (i.e., rosy boa, Costa's hummingbird, California horned lark, merlin, black-tailed gnatcatcher, western small-footed myotis, Yuma myotis, and mule deer) and/or suitable habitat, from construction-related activities would result in short-term direct impacts that would be **potentially significant (Impact BI-W-1)**.

Impact BI-W-2: Permanent Direct Impacts to Habitat for Special-Status Wildlife Species

Long-term or permanent direct impacts on County Group 2 or other special-status wildlife species (i.e., rosy boa, Costa's hummingbird, California horned lark, merlin, black-tailed gnatcatcher, western small-footed myotis, Yuma myotis, and mule deer) were quantified by comparing the MUP boundary with suitable habitat for wildlife species (Table 2.3-3). Implementation of the Proposed Project would result in the direct loss of habitat, including foraging habitat, for some of the County of San Diego Group 2 or other special-status species, which would be a **potentially significant impact (Impact BI-W-2)**.

Impact BI-W-3: Permanent Direct Impacts on Nesting Birds

The MBTA prohibits the take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, "take" is defined as pursuing, hunting, shooting, capturing, collecting, killing, or attempting to commit any of these acts (16 USC 703 et seq.). Note that impacts on habitat do not constitute take under this definition unless such impacts result in death of a migratory bird. Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). The executive order requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species. Permanent direct impacts on nesting birds could result if active nests or the young of nesting County Group 1 and/or SSC bird species are impacts through direct grading or clearing and grubbing in preparation for construction. This impact would be **potentially significant (Impact BI-W-3)**.

Impact BI-W-4: Permanent Direct Impacts on Maternity Bat Roosts

Yuma myotis, pallid bat, and western small-footed myotis have a high potential to roost in the abandoned buildings on site, which would be demolished as part of the Proposed Project. If there were a maternity roost in a building, impacts on that roost site would be **potentially significant (Impact BI-W-4)**.

Project Effects Relevant to Guideline D

There are no known arroyo toad records within the Project site or vicinity; and there is not suitable habitat for the species as there are no third order stream channels present within the Project site. Therefore, the Proposed Project would have no impact on arroyo toad aestivation, foraging, or breeding habitat.

Project Effects Relevant to Guideline E

There is a golden eagle nest record on the northern side of Round Mountain. This nest was described as an intact cliff nest in 2012, but was occupied by common ravens (USFWS 2019). This nest location, along with other crags on Round Mountain, was surveyed in April 2018 and February 2019. No golden eagles were observed nesting on the Project site; ravens and red-tailed hawks were observed nesting in these areas. As described above, seven or more years with no nesting is a strong indicator that this territory has been abandoned. Golden eagles are known to nest at Table Mountain, which is approximately 2 miles northeast of the Project site (USFWS 2019). Due to lack of recent nesting by golden eagles in this area, there would be **no impacts** within 4,000 feet of an active golden eagle nest.

Project Effects Relevant to Guideline F***Impact BI-W-2: Permanent Direct Impacts to Habitat for Special-Status Wildlife Species***

Foraging habitat for raptors is present throughout the Project site. The Proposed Project would result in impacts to more than 5% of the raptor foraging habitat, as shown in Table 2.3-3. Therefore, impacts to raptor foraging habitat would be **potentially significant (Impact BI-W-2)**.

Project Effects Relevant to Guideline G***Impact BI-WLC-1: Temporary Direct Impacts on Habitat Connectivity and Wildlife Corridors***

Short-term, construction-related, or temporary direct impacts on potential foraging and breeding habitat for species that use the Project site (e.g., special-status birds) would primarily result from construction activities. Impacts on foraging and breeding habitat outside designated construction zones could occur from clearing, trampling, or grading. Potential temporary direct impacts on foraging and breeding habitat within the Project site would be **potentially significant (Impact BI-WLC-1)**.

Impact BI-WLC-2: Permanent Direct Impacts to Habitat Connectivity and Wildlife Corridors

The Project site is included within a Core Wildlife Area (a large block of habitat that supports multiple wildlife species), even though the 1,356-acre property is bordered by the U.S./Mexico border fence, which may exclude some larger wildlife from moving directly through the Project site. The Project site is also a linkage between two blocks of habitat located on either side of the Project site.

The Proposed Project would impact 643 acres of land within the 1,356-acre Project site. A list of special status wildlife species that were observed or have the potential to occur within the Project site are included in Appendix E1 of the Biological Resources Technical Report (Appendix D to the EIR). This impact on a core wildlife area for would be **potentially significant (Impact BI-WL-C)**.

Project Effects Relevant to Guideline H***Special-Status Plant Species******Impact BI-SP-3: Temporary Indirect Impacts to Special-Status Plant Species***

Most of the indirect impacts to vegetation communities described in Section 2.3.3.3, Riparian Habitat or Sensitive Natural Community, can also affect special-status plants. Potential short-term or temporary indirect impacts to special-status plant species in the Project site would primarily result from construction activities and include impacts related to or resulting from the generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; and the introduction of chemical pollutants (including herbicides). These impacts would be **potentially significant (Impact BI-SP-3)**.

Impact BI-SP-4: Permanent Indirect Impacts to Special-Status Plant Species

Permanent indirect impacts could result from the proximity of the Proposed Project to special-status plants after construction. Permanent indirect impacts that could affect special-status plant species include generation of chemical pollutants, altered hydrology, non-native invasive species, increased human activity, and alteration of the natural fire regime. These impacts would be potentially significant (Impact BI-SP-4). Each of these potential indirect impacts are discussed in Section 5.1.2.2 of the Biological Resources Technical Report (Appendix D to the EIR). Special-status plant species at the edge of the biological open space easement/development interface could be impacted by permanent indirect impacts such as those previously listed. These impacts would be potentially significant (Impact BI-SP-4).

Special-Status Wildlife Species

Impact BI-W-5: Temporary Indirect Impacts to Special-Status Wildlife Species

Short-term, construction-related, or temporary indirect impacts to avian foraging and wildlife access to foraging or nesting would primarily result from construction activities. Indirect impacts to sensitive bird species may occur if clearing of vegetation is conducted during the nesting season for MBTA protected species (generally January 15 through August 31). These indirect impacts would be **potentially significant (Impact BI-W-5)**.

Impact BI-W-6: Permanent Indirect Impacts to Special-Status Wildlife Species

Potential long-term or permanent indirect impacts to special-status wildlife species would include non-native, invasive plant and animal species introduction; habitat fragmentation; increased human activity; alteration of the natural fire regime; altered hydrology; and lighting. These impacts would be **potentially significant (Impact BI-W-8)**. Lighting for the Proposed Project would be limited to motion detector lighting at the substation and site entry ways and would be shielded and directed downward. Therefore, lighting would have a **less than significant** impact on wildlife. Only four proposed utility poles would provide perches from which avian species may forage, this is considered a minor risk for collision due to the small number of poles and **less than significant** impacts.

Project Effects Relevant to Guideline I

Impact BI-W-2: Permanent Direct Impacts to Occupied Burrowing Owl Habitat

As described in Section 2.3.1.6, Special-Status Animal Species, a burrowing owl habitat assessment and subsequent focused surveys were conducted in 2018 by Dudek biologists within the Project site. During these surveys, one dead burrowing owl was observed within the vicinity of a burrow showing burrowing owl activity (e.g., pellets, white wash, as well as claw marks at the entrance). The grassland areas do not contain suitable friable soils or suitable cover for the species. Therefore, there are no impacts to occupied burrowing owl habitat. Biologists did not detect any other fresh burrowing owl sign or activity at/near the burrow or around the site during subsequent focused surveys. One burrowing owl was observed once in April 2019 during the Quino checkerspot butterfly surveys. Therefore, the southeast portion of the Project site is considered occupied burrowing owl habitat. However it should be noted that subsequent visits to the occupied habitat in January 2020 did not detect any burrowing owls or burrowing owl sign. The Proposed Project would result in direct impacts to 14.2 acres of occupied burrowing owl habitat (see Table 2.3-3), which would be **potentially significant (Impact BI-W-2)**.

Project Effects Relevant to Guideline J

The Project site is outside of the range for coastal cactus wren. No cactus wrens have been detected in the Project site and the site does not support occupied coastal cactus wren habitat, or formerly occupied habitat that has been burned by wildfire. Therefore, no impacts relating to this guideline would occur.

Project Effects Relevant to Guideline K

No Hermes copper butterflies (*Lycaena hermes*) have been detected within the Project site. The larval host plant (i.e., true limiting factor), spiny redberry (*Rhamnus crocea*), has not been detected during biological surveys within the Project site. Based on the lack of suitable habitat for this species, the Project site is not considered occupied Hermes copper butterfly habitat. Therefore, **no impacts** related to this guideline would occur.

Project Effects Relevant to Guideline L

Impact BI-W-2: Permanent Direct Impacts on Habitat for Special-Status Wildlife Species

The Project site contains moderately suitable habitat for tree-nesting raptors (mesquite bosque), as well as some rocky outcrops and poles. Red-tailed hawks were observed nest building on one of the existing poles and have also been observed nesting in the rocky outcrops on Round Mountain (see Figure 2.3-7 for nest locations). Impacts on the nesting success of tree-nesting raptors (i.e., red-tailed hawk) as a result of habitat removal associated with the Proposed Project are anticipated. There is moderate potential nesting for ground-nesting raptors (i.e., northern harrier), but this species has only been observed foraging, not nesting, within the Project site and the habitat is marginal and composed primarily of Russian thistle and other weeds. Northern harriers typically nest in tall grasses and forbs in marsh/wetland type habitats (Unitt 2004; Zeiner et al. 1990a). Permanent direct impacts on vegetation communities are described in Table 5-1 of Appendix D. Potential impacts on the nesting success of tree- and/or ground-nesting raptors associated with the loss of suitable nesting habitat would be **potentially significant (Impact BI-W-2)**.

Impact BI-W-5: Temporary Indirect Impacts to Special-Status Wildlife Species

Temporary indirect impacts on avian foraging and wildlife access to foraging or nesting would primarily result from construction activities, such as noise producing activities. These impacts, as discussed above, are **potentially significant (Impact BI-W-5)**.

Due to lack of suitable habitat or range for coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), coastal California gnatcatcher (*Polioptila californica californica*), and light-footed clapper rail (*Rallus longirostris levipes*), these species are not expected to nest within the Project site; therefore, **no impact** on the nesting success of those species would result.

Switchyard

Project Effects Relevant to Guideline A

No federally or state-listed endangered or threatened plant species were observed within the switchyard development footprint; therefore, there are no permanent direct impacts to federally or state-listed plants.

No federally or state-listed endangered or threatened wildlife species were observed within the switchyard development footprint. Focused surveys for Quino checkerspot butterfly were negative. However, tricolored blackbirds were observed foraging within the Project site, though outside of the switchyard development footprint, in April 2019. Based on 2019 observations, tricolored blackbirds use the southwestern portion of the Project site for foraging. The switchyard site does not contain suitable nesting habitat for this species and therefore construction of the switchyard would only impact a minimal amount of potential foraging habitat (0.63 acres). Due to the suitable foraging habitat within the switchyard development footprint and the proximity of the occurrences, potential direct impacts to tricolored blackbird would be considered potentially significant (**Impact BI-W-2**).

Project Effects Relevant to Guideline B

Special-Status Plant Species (County List A and B Species)

There are no special-status plant populations located within 300 feet of the switchyard development footprint. Therefore, short-term, construction-related, or temporary direct impacts to special-status plants (County List A and B Species) at the edge of the switchyard development footprint and non-impacted areas interface will not occur.

No special-status plants (County List A and B Species) were observed within the switchyard development footprint; therefore, no permanent direct impacts to special-status plant species would occur.

Special-Status Wildlife Species (County Group 1 or State SSC)

Loss of County Group 1 or state SSC animals (i.e., California glossy snake, San Diego tiger whiptail, San Diego banded gecko, red diamond rattlesnake, Blainville's horned lizard, Cooper's hawk, sharp-shinned hawk [foraging habitat], southern California rufous-crowned sparrow, burrowing owl, golden eagle, Bell's sage sparrow, Swainson's hawk, turkey vulture, Vaux's swift, loggerhead shrike, northwestern San Diego pocket mouse, pallid San Diego pocket mouse, San Diego black-tailed jackrabbit, San Diego desert woodrat, and Jacumba pocket mouse) and/or suitable habitat from construction-related activities for the switchyard would result in short-term direct impacts that would be **potentially significant (Impact BI-W-1)**.

Long-term or permanent direct impacts on special-status wildlife species (i.e., California glossy snake, San Diego tiger whiptail, San Diego banded gecko, red diamond rattlesnake, Blainville's horned lizard, Cooper's hawk, sharp-shinned hawk [foraging habitat], southern California rufous-crowned sparrow, burrowing owl, golden eagle, Bell's sage sparrow, Swainson's hawk, turkey vulture, Vaux's swift, loggerhead shrike, northwestern San Diego pocket mouse, pallid San Diego pocket mouse, San Diego black-tailed jackrabbit, San Diego desert woodrat, and Jacumba pocket mouse) were determined by comparing the switchyard site with suitable habitat for wildlife species. Implementation of the switchyard would result in the direct loss of habitat, including foraging habitat, for some of the County Group 1, Group 2, and/or SSC species, resulting in a potentially significant impact, absent mitigation (**Impact BI-W-2**).

If any active nests or the young of nesting County Group 1 and/or SSC bird species are impacted through direct grading, these impacts would be significant, absent mitigation, based on the MBTA and Fish and Game Code. Therefore, this impact is potentially significant (**Impact BI-W-3**).

Project Effects Relevant to Guideline C

Special-Status Plant Species (County List C and D Species)

No special-status plant species occur within 300 feet of the switchyard development footprint; therefore, there are no temporary direct impacts to special-status plants.

No County List C plants were observed within the switchyard development footprint. There are no impacts to County List D plants.

Special-Status Wildlife Species (County Group 2)

Loss of County Group 2 or other special-status species (i.e., rosy boa, Costa's hummingbird, California horned lark, black-tailed gnatcatcher, Yuma myotis, and mule deer) and/or suitable habitat, from construction-related activities for the switchyard would result in short-term direct impacts that would be **potentially significant (Impact BI-W-1)**.

Long-term or permanent direct impacts on County Group 2 or other special-status wildlife species (i.e., rosy boa, Costa's hummingbird, California horned lark, black-tailed gnatcatcher, Yuma myotis, and mule deer) were determined by comparing the switchyard site with suitable habitat for wildlife species. Implementation of the switchyard would result in the direct loss of habitat, including foraging habitat, for some of the County of San Diego Group 2 or other special-status species, which would be a potentially significant impact (**Impact BI-W-2**).

If any active nests or the young of nesting County Group 2 or other special-status bird species are impacted through direct grading, these impacts would be **potentially significant**, based on the MBTA mitigation (**Impact BI-W-3**).

Project Effects Relevant to Guideline D

There are no known arroyo toad records within the switchyard development footprint or vicinity; and there are no third order stream channels present within the switchyard footprint. Therefore, the switchyard would have no impact on arroyo toad aestivation, foraging, or breeding habitat.

Project Effects Relevant to Guideline E

As described above, due to lack of recent nesting by golden eagles in this area, there would be no impacts within 4,000 feet of an active golden eagle nest.

Project Effects Relevant to Guideline F

Foraging habitat for raptors is present throughout the Project site, including the switchyard development footprint. Overall, the Proposed Project would result in impacts to more than 5% of the raptor foraging habitat, as shown in Table 2.3-3. Therefore, impacts to raptor foraging habitat would be potentially significant (**Impact BI-W-2**).

Project Effects Relevant to Guideline G

Short-term, construction-related, or temporary direct impacts on potential foraging and breeding habitat for species that use the switchyard development footprint (e.g., special-status birds) would primarily result from construction activities. Impacts on foraging and breeding habitat outside designated construction zones could occur from clearing, trampling, or grading. Potential temporary direct impacts on foraging and breeding habitat would be **potentially significant** (**Impact BI-WLC-1**).

The switchyard would impact up to 0.63 acres of land. This impact to populations of wildlife species would not be significant; therefore, there are no permanent direct impacts to habitat connectivity and wildlife corridors.

Project Effects Relevant to Guideline H

Special-Status Plant Species

There are no special-status plant species located within the 300 feet of the switchyard development footprint. Therefore, there will be no temporary or permanent indirect impacts to special-status plants resulting from construction of the switchyard.

Special-Status Wildlife Species

Short-term, construction-related, or temporary indirect impacts to avian foraging and wildlife access to foraging or nesting would primarily result from construction activities for the switchyard. Indirect impacts to sensitive bird species may occur if clearing of vegetation is conducted during the nesting season for MBTA protected species (generally January 15 through August 31). These impacts would be **potentially significant (Impact BI-W-5)**.

Potential long-term or permanent indirect impacts to special-status wildlife species would include non-native, invasive plant and animal species introduction; habitat fragmentation; increased human activity; alteration of the natural fire regime; altered hydrology; and lighting (**Impact BI-W-8**). Lighting for the switchyard would be limited to motion detector lighting and would be shielded and directed downward. Therefore, lighting would have a **less than significant** impact on wildlife. Only four proposed utility poles would provide perches from which avian species may forage, this is considered a minor risk for collision due to the small number of poles and **less than significant** impacts.

Project Effects Relevant to Guideline I

No burrowing owls have been detected in the switchyard development footprint. Therefore, no impacts relating to this guideline would occur.

Project Effects Relevant to Guideline J

The Project site, including the switchyard site, is outside of this range for coastal cactus wren. Therefore, no impacts relating to this guideline would occur.

Project Effects Relevant to Guideline K

No Hermes copper butterflies (*Lycaena hermes*) have been detected in the Project site, including the switchyard development footprint. The larval host plant (i.e., true limiting factor), spiny redberry (*Rhamnus crocea*), has not been detected during biological surveys. Based on the lack of suitable habitat for this species, the switchyard site is not considered occupied Hermes copper butterfly habitat. Therefore, no impacts related to this guideline would occur.

Project Effects Relevant to Guideline L

The switchyard development footprint contains moderately suitable habitat for ground-nesting raptors. Potential impacts on the nesting success of tree- and/or ground-nesting raptors associated with the loss of suitable nesting habitat would be **potentially significant (Impact BI-W-2)**.

Temporary indirect impacts on avian foraging and wildlife access to foraging or nesting would primarily result from construction activities for the switchyard. These impacts would be **potentially significant (Impact BI-W-5)**.

Due to lack of suitable habitat or range for coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), coastal California gnatcatcher (*Polioptila californica californica*), and light-footed clapper rail (*Rallus longirostris levipes*), these species are not expected to nest in the Project site, including the switchyard development footprint; therefore, **no impact** on the nesting success of those species would result.

2.3.3.3 *Riparian Habitat or Sensitive Natural Community*

Guidelines for the Determination of Significance

For the purpose of this section, the County's Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources (County of San Diego 2010) was used to evaluate the direct, indirect, cumulative impact analysis. Each general subject area is broken into more specific County guidelines, and lettered accordingly, to provide additional clarity on this complex resource topic.

A significant impact would result if:

The project would have a substantial adverse effect on riparian habitat or another sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.

- A. Project-related grading, clearing, construction, or other activities would temporarily or permanently remove sensitive native or naturalized habitat (as listed in Table 5 [County of San Diego 2010] excluding those without a mitigation ratio) on or off the project site. This Guideline would not apply to small remnant pockets of habitat that have a demonstrated limited biological value. No de minimus standard is specified under which an impact would not be significant; however, minor impacts to native or naturalized habitat that is providing essentially no biological habitat or wildlife value can be evaluated on a case-by-case basis to determine whether the projected impact may be less than significant. For example, an impact to native or naturalized upland habitat under 0.1 acres in an existing urban setting may be considered less than significant (depending on a number of factors). An evaluation of this type should consider factors including, but not limited to, type of habitat, relative presence or potential for sensitive species, relative connectivity with other native habitat, wildlife species and activity in the project vicinity, and current degree of urbanization and edge effects in project vicinity, etc. Just because a particular habitat area is isolated, for example, does not necessarily mean that impacts to the area would not be significant (e.g.,

vernal pools). An area that is disturbed or partially developed may provide a habitat “island” that would serve as a functional refuge area “stepping stone” or “archipelago” for migratory species.

- B. Any of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by U.S. Army Corps of Engineers (ACOE), California Department of Fish and Game (CDFG [now CDFW]), and the County of San Diego: removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity, and abundance.
- C. The project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of 3 feet or more from historically low groundwater levels.
- D. The project would cause indirect impacts, particularly at the edge of proposed development adjacent to proposed or existing undeveloped lands or other natural habitat areas, to levels that would likely harm sensitive habitats over the long term. The following issues should be addressed in determining the significance of indirect impacts: increasing human access; increasing predation or competition from domestic animals, pests, or exotic species; altering natural drainage; and increasing noise and/or nighttime lighting to a level above ambient that has been shown by the best available science to adversely affect the functioning of sensitive habitats.
- E. The project does not include a wetland buffer adequate to protect the functions and values of existing wetlands. If the project is subject to the Resource Protection Ordinance (RPO), buffers of a minimum of 50 feet and a maximum of 200 feet to protect wetlands are required based on the best available science available to the County at the time of adoption of the ordinance. The following examples provide guidance on determining appropriate buffer widths:
 - A 50-foot wetland buffer would be appropriate for lower quality RPO-wetlands where the wetland has been assessed to have low physical and chemical functions, vegetation is not dominated by hydrophytes, soils are not highly erosive, and slopes do not exceed 25%.
 - A wetland buffer of 50 to 100 feet is appropriate for moderate- to high-quality RPO-wetlands that support a predominance of hydrophytic vegetation or wetlands within steep slope areas (greater than 25%) with highly erosive soils. Within the 50- to 100-foot range, wider buffers are appropriate where wetlands connect upstream and downstream, where the wetlands serve as a local wildlife corridor, or where the adjacent land use(s) would result in substantial edge effects that could not be mitigated.

- Wetland buffers of 100 to 200 feet are appropriate for RPO-wetlands within regional wildlife corridors or wetlands that support significant populations of wetland-associated sensitive species, or where stream meander, erosion, or other physical factors indicate a wider buffer is necessary to preserve wildlife habitat.
- Buffering of greater than 200 feet may be necessary when an RPO-wetland is within a regional corridor or supports significant populations of wetland-associated sensitive species and lies adjacent to land use(s) that could result in a high degree of edge effects within the buffer. Although the RPO stipulates a maximum of 200 feet for RPO-wetland buffers, actions may be subject to other laws and regulations (such as the Endangered Species Act) that require greater wetland buffer widths.

Analysis

Riparian vegetation occurs along rivers, streams, and other drainages in the County. Riparian areas connect terrestrial and aquatic habitats and provide linkages between water bodies and upstream vegetation communities.

Project Effects Relevant to Guideline A

Impact BI-V-1: Temporary Direct Impacts to Riparian Habitat or Sensitive Vegetation Communities

Short-term, construction-related, or temporary direct impacts to special-status upland vegetation communities would primarily result from construction activities. Clearing, trampling, or grading of special-status vegetation communities outside designated construction zones could occur. Temporary direct impacts to special-status vegetation communities within the Project site would be **potentially significant (Impact BI-V-1)**.

Impact BI-V-2: Permanent Direct Impacts to Riparian Habitat or Sensitive Vegetation Communities

The Proposed Project would result in permanent direct impacts to 126.99 acres of riparian habitat or sensitive vegetation communities and 467.63 acres of fallow agriculture (Table 2.3-4, Proposed On-Site Mitigation for Impacts to Vegetation Communities and Land Covers). Although fallow agriculture is typically not considered a sensitive vegetation community, the areas mapped as fallow agriculture do provide foraging habitat for wildlife and therefore would be considered a sensitive vegetation community (Table 2.3-4). These impacts would be potentially significant **(Impact V-2)**.

Project Effects Relevant to Guideline B

Any adverse change to jurisdictional aquatic resources (i.e., wetlands and riparian habitat under the jurisdiction of ACOE, RWQCB, CDFW, and/or County RPO wetlands) resulting from construction activities would be considered significant, as analyzed below. For the Proposed Project, RPO wetlands are a subset of the ACOE, RWQCB, and CDFW jurisdiction.

Impact BI-JAR-1: Temporary Direct Impacts to Jurisdictional Aquatic Resources

Short-term, construction-related, or temporary direct impacts to jurisdictional aquatic resources would primarily result from construction activities. Clearing, trampling, or grading of jurisdictional aquatic resources could result outside of designated construction zones. These potential impacts could damage individual plants and alter their ecosystem, creating gaps in vegetation that allow non-native plant species to become established, thus increasing soil compaction and leading to soil erosion. Potential temporary direct impacts to jurisdictional aquatic resources within the Project site would be **potentially significant (Impact BI-JAR-1)**.

The Proposed Project would result in **no impacts** to potential ACOE and RWQCB non-wetland waters or CDFW streambeds.

Impact BI-JAR-2: Temporary Indirect Impacts to Jurisdictional Aquatic Resources

Potential short-term or temporary indirect impacts to jurisdictional aquatic resources in the Project site would primarily result from construction activities and include impacts related to or resulting from the generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; and the introduction of chemical pollutants, including herbicides. Therefore, this impact would be **potentially significant (Impact BI-JAR-2)**.

Impact BI-JAR-3: Permanent Indirect Impacts to Jurisdictional Aquatic Resources

Long-term or permanent indirect impacts could result from the proximity of the Proposed Project to jurisdictional aquatic resources after construction (e.g., maintenance of roads). Permanent indirect impacts that could affect jurisdictional aquatic resources include generation of fugitive dust, chemical pollutants, altered hydrology, non-native invasive species, increased human activity, and alteration of the natural fire regime. Potential long-term indirect impacts to jurisdictional aquatic resources that occur outside of the impact area would be **potentially significant (Impact BI-JAR-3)**.

Project Effects Relevant to Guideline C

Estimated drawdown at the nearest groundwater-dependent habitat from pumping Well No. 2 and Well No. 3 would be less than three feet. Further, current groundwater levels in Well No. 3 are at least 12 feet higher than the historical low groundwater level recorded in the Jacumba Valley alluvial aquifer (Appendix J, Groundwater Investigation Report). Therefore, drawdown as a result of Proposed Project groundwater use would be unlikely to exceed the historical low groundwater level, and impacts on the groundwater table would be **less than significant**.

Project Effects Relevant to Guideline D

Impact BI-V-3: Temporary Indirect Impacts to Riparian Habitat or Sensitive Vegetation Communities

Potential short-term or temporary indirect impacts to sensitive vegetation communities within the Project site would primarily result from construction activities and include impacts related to or resulting from the generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; and the introduction of chemical pollutants, including herbicides. These temporary indirect impacts would be **potentially significant (Impact BI-V-3)**.

Impact BI-V-4: Permanent Indirect Impacts to Riparian Habitat or Sensitive Vegetation Communities

Long-term or permanent indirect impacts could result from the proximity of the Proposed Project to sensitive vegetation communities after construction (e.g., maintenance of roads, fencing, and landscaping). Permanent indirect impacts that could affect sensitive vegetation communities include generation of fugitive dust, chemical pollutants, altered hydrology, non-native invasive species, increased human activity, and alteration of the natural fire regime. Potential long-term indirect impacts to sensitive vegetation communities that occur outside of the impact area would be **potentially significant (Impact BI-V-4)**.

Project Effects Relevant to Guideline E

The Proposed Project includes wetland buffers adequate to protect the functions and values of the existing RPO wetlands as shown in Figure 2.3-6. A 50-foot wetland buffer is deemed appropriate because the vegetation lacks hydrophytes in the understory and hydric soils, is dominated by mesquite which is a facultative upland plant (plants that usually occur in non-wetlands, but may occur in wetlands), and are within slopes that are less than 25%. The small disturbed freshwater marsh is fed from subsurface water seasonally and lacks consistent water sources; therefore, a 50-foot buffer is appropriate for these RPO wetlands.

The Proposed Project is designed to avoid RPO wetlands and the 50-foot RPO wetland buffer. Therefore, **no impacts** relating to Guideline 4.2.E would occur.

Switchyard

Project Effects Relevant to Guideline A

Short-term, construction-related, or temporary direct impacts to sensitive upland vegetation communities would primarily result from construction activities. Clearing, trampling, or grading of sensitive vegetation communities outside designated construction zones could occur. Temporary direct impacts to sensitive vegetation communities on the switchyard site would be **potentially significant (Impact BI-V-1)**.

The construction of the switchyard would result in permanent direct impacts 0.63 acres of sensitive vegetation communities (0.53 acres of Sonoran mixed woody and succulent scrub and 0.10 acres of disturbed habitat – vegetated) (refer to Table 2.3-4). These direct impacts would be **potentially significant (Impact BI-V-2)**.

Project Effects Relevant to Guideline B

No jurisdictional aquatic resources_(i.e., wetlands and riparian habitat under the jurisdiction of ACOE, RWQCB, CDFW, and/or RPO wetlands) occur within the switchyard development footprint. Therefore, there are **no direct impacts** to jurisdictional aquatic resources.

Potential short-term or temporary indirect impacts to jurisdictional aquatic resources would primarily result from construction activities for the switchyard and include impacts related to or resulting from the generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; and the introduction of chemical pollutants, including herbicides. These potential short-term indirect impacts to jurisdictional aquatic resources would be **potentially significant (Impact BI-JAR-2)**.

Long-term or permanent indirect impacts could result from the proximity of the switchyard to jurisdictional aquatic resources after construction (e.g., maintenance of roads). Permanent indirect impacts that could affect jurisdictional aquatic resources include generation of fugitive dust, chemical pollutants, altered hydrology, non-native invasive species, increased human activity, and alteration of the natural fire regime. Potential long-term indirect impacts to jurisdictional aquatic resources that occur outside of the impact area would be **potentially significant (Impact BI-JAR-3)**.

Project Effects Relevant to Guideline C

As discussed above, drawdown as a result of the switchyard's groundwater use would be unlikely to exceed the historical low groundwater level and impacts on the groundwater table would be **less than significant**.

Project Effects Relevant to Guideline D

Potential short-term or temporary indirect impacts to sensitive vegetation communities within the switchyard development footprint would primarily result from construction activities and include impacts related to or resulting from the generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; and the introduction of chemical pollutants, including herbicides. These potential short-term indirect impacts to sensitive vegetation communities outside of the switchyard impact area would be **potentially significant (Impact BI-V-3)**.

Long-term or permanent indirect impacts could result from the proximity of the switchyard to sensitive vegetation communities after construction (e.g., maintenance of roads, fencing, and landscaping). Permanent indirect impacts that could affect special-status vegetation communities include generation of fugitive dust, chemical pollutants, altered hydrology, non-native invasive species, increased human activity, and alteration of the natural fire regime. Potential long-term indirect impacts to sensitive vegetation communities that occur outside of the switchyard impact area would be **potentially significant (Impact BI-V-4)**.

Project Effects Relevant to Guideline E

The switchyard would impacts to the avoid RPO wetlands and the 50-foot RPO wetland buffer. Therefore, **no impacts** relating to Guideline 4.2.E would occur.

2.3.3.4 Jurisdictional Wetlands and Waterways

Guidelines for the Determination of Significance

For the purpose of this section, the County's Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources (County of San Diego 2010) was used to evaluate the direct, indirect, and cumulative impact analysis.

A significant impact would result if:

The project would 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.

Analysis

Project Effects Relevant to Guideline 4.3

As described in Section 2.3.3.3, there are no wetlands or “waters of the United States” under the jurisdiction of the ACOE, RWQCB, CDFW, or County within the MUP area for the Proposed Project. However, the Proposed Project would have potential temporary direct impacts, and potential temporary and permanent indirect impacts, on jurisdictional aquatic resources as defined by Section 404 of the Clean Water Act if grading occurred outside the approved limits of disturbance—e.g., outside the MUP. These impacts would be **potentially significant (Impacts BI-JAR-1, BI-JAR-2, and BI-JAR-3)**. There are no direct impacts to federally regulated waters.

Switchyard

Project Effects Relevant to Guideline 4.3

The switchyard could have potential temporary and permanent indirect impacts to jurisdictional aquatic resources as defined by Section 404 of the Clean Water Act. These impacts would be **potentially significant (Impacts JAR-2 and JAR-3)**. There are no direct impacts to federally regulated waters. There are no potential temporary direct impacts on jurisdictional aquatic resources within the switchyard footprint.

2.3.3.5 Wildlife Movement and Nursery Sites

Guidelines for the Determination of Significance

For the purpose of this section, the County’s Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources (County of San Diego 2010) was used to evaluate the direct, indirect, and cumulative impact analysis. Each general subject area is broken into more specific County guidelines, and lettered accordingly, to provide additional clarity on this complex resource topic.

A significant impact would result if:

The project would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

- A. The project would impede wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction.
- B. The project would substantially interfere with connectivity between blocks of habitat, or would potentially block or substantially interfere with a local or regional wildlife corridor

or linkage. For example, if the project proposes roads that cross corridors, fencing that channels wildlife to underpasses located away from interchanges will be required to provide connectivity. Wildlife underpasses shall have dimensions (length, width, height) suitable for passage by the affected species based on a site-specific analysis of wildlife movement. Another example is increased traffic on an existing road that would result in significant road-kill or interference with an existing wildlife corridor/linkage.

- C. The project would create artificial wildlife corridors that do not follow natural movement patterns; for example, constraining a corridor for mule deer or mountain lion to an area that is not well-vegetated or that runs along the face of a steep slope instead of through the valley or along the ridgeline.
- D. The project would increase noise and/or nighttime lighting in a wildlife corridor or linkage to levels likely to affect the behavior of the animals identified in a site-specific analysis of wildlife movement.
- E. The project does not maintain an adequate width for an existing wildlife corridor or linkage and/or would further constrain an already narrow corridor through activities such as (but not limited to) reduction of corridor width, removal of available vegetative cover, placement of incompatible uses adjacent to it, and placement of barriers in the movement path. The adequacy of the width shall be based on the biological information for the target species, the quality of the habitat within and adjacent to the corridor, topography, and adjacent land uses. Where there is limited topographic relief, the corridor should be well-vegetated and adequately buffered from adjacent development. Corridors for bobcats, deer, and other large animals should reach rim-to-rim along drainages.
- F. The project does not maintain adequate visual continuity (i.e., long lines of site) within wildlife corridors or linkage. For example, development (such as homes or structures) sited along the rim of a corridor could present a visual barrier to wildlife movement. For stepping-stone/archipelago corridors, a project does not maintain visual continuity between habitat patches.

Analysis

Project Effects Relevant to Guideline A

Impact BI-WLC-1: Temporary Direct Impacts to Habitat Connectivity and Wildlife Corridors

Short-term, construction-related, or temporary direct impacts to potential foraging and breeding habitat for species that use the Project site (e.g., special-status birds) would primarily result from construction activities. Clearing, trampling, or grading of foraging and breeding habitat outside

designated construction zones could occur. Potential temporary direct impacts to foraging and breeding habitat within the Project site would be **potentially significant (Impact BI-WLC-1)**.

Impact BI-WLC-2: Permanent Direct Impacts to Habitat Connectivity and Wildlife Corridors

Permanent direct impacts to 643 acres of potential foraging and breeding habitat for species that use the Project site would occur as a result of the Proposed Project. Permanent direct impacts to foraging and breeding habitat would be **potentially significant (Impact BI-WLC-2)**.

Impact BI-WLC-3: Temporary Indirect Impacts to Habitat Connectivity and Wildlife Corridors

Short-term, construction-related, or temporary indirect impacts to avian foraging, and wildlife access to foraging, or nesting would primarily result from construction activities. Indirect impacts to sensitive bird species may occur if clearing of vegetation is conducted during the nesting season for MBTA protected species (generally January 15 through August 31). These impacts would be **potentially significant (Impact BI-WLC-3)**.

Project Effects Relevant to Guideline B

As shown in Figure 2.3-6, the Project site is located between high to very high habitat value areas. The proposed development footprint (643 acres) for the Proposed Project is mapped as “agriculture” or “developed” in the Habitat Evaluation Model layer (Figure 2.3-4). This portion of the Project site was historically used for dairy and agricultural operations but has been fallow since 2014. As discussed in Section 2.3.1.8, Habitat Connectivity and Wildlife Corridors, the Project site currently functions as a large block of habitat which, after Proposed Project development, would be altered as described below.

The Proposed Project would require permanent fencing around five separate areas within the MUP boundary. The areas of the solar facility would be fenced separately to accommodate existing easements on site for Carrizo Gorge Road, Old Highway 80, and an SDG&E easement. The fencing would be 7 feet in height total, with a 6-foot-high chain-link perimeter fence and 1 foot of three strands of barbed wire along the top. Fencing would still allow small reptiles, amphibians, and mammals to pass through, but would not provide movement for larger species. Although the fencing would limit the ability of particularly large wildlife to access and traverse the solar facility, the undeveloped SDG&E easement between the fence lines is approximately 700 to 1,100 feet wide and more than 4,000 feet long and would allow uninterrupted wildlife movement from Boundary Creek to currently undeveloped land to the east (Figure 2.3-4). The habitat to the west of the easement corridor not part of the project development expands upon existing conserved lands located west of the Project site, and protects the only north/south movement corridor across I-8. Additionally, the Project is designed to include a 50- to 100-foot opening in the fence north of the easement to allow for wildlife moving within the SDG&E easement corridor or north of the

easement to move in and out of the easement (Figure 2.3-4 and Figure 2.3-8, Potential Mitigation Areas). Without this opening wildlife traveling west to east north of the Project site could be funneled toward the I-8 and forced to cross the highway at grade. The opening in the fence would allow wildlife traveling along the fence line to find a break in the fencing leading them into the larger wildlife corridor.

Wildlife currently are able to traverse the Project site and surrounding undeveloped areas in an unencumbered manner until they arrive at the U.S./Mexico border fence along the southern boundary of the Project site. Since openings in the border fence are located off site, approximately 1.2 miles to the east and 2 miles to the west, north/south wildlife movement is anticipated to be higher near these openings. These breaks in the border fence are located in areas of steep terrain; however, this topography does not pose difficulties for most wildlife use. Coyote, mountain lion, bobcat, and other species are readily able to scale steep slopes. Further, the Project site is situated adjacent to State Park lands and federal BLM lands, which allows for unhindered movement. Figure 2.3-4 shows the border fence openings, Habitat Evaluation Model, existing Conserved Lands, and adjacent land ownership.

Small wildlife species (e.g., lizards and small mammals) would be able to access the solar facility through openings in the fence. Even though vegetation within solar site may grow to 6 inches above ground, this may still cause a permanent significant wildlife movement impact due to loss of habitat for smaller wildlife that cannot easily move around or through the site.

Larger wildlife (e.g., coyotes, bobcats, mountain lions) could still move along the mesquite-dominated floodplain and unvegetated portion of Boundary Creek to access undeveloped lands to the west as well as cross into Mexico at the open border to the west. Wildlife movement is more restricted along the eastern side since there are less topographic features for cover; however, there is the undeveloped SDG&E easement between the fence line that is approximately 700 to 1,100 feet wide and more than 4,000 feet long, which would allow uninterrupted movement from Boundary Creek to currently undeveloped land to the east, and the border crossing to the east. There is also land between Carrizo Gorge Road and I-8 that allows movement for some wildlife species, particularly nocturnal wildlife. Additionally, the Proposed Project design is consistent with the recommendations by the Las California Binational Conservation Initiative 2015, which recommends that renewable energy companies “site facilities on lands of lower ecological value, design road networks that minimize fragmentation, designate off-site conservation of land as mitigation for direct and indirect impacts of development, and establish conservation easements on the lands where facilities are sited” (Stallcup et al. 2015). The Proposed Project is primarily sited on the previously disturbed agricultural areas to reduce impacts to native vegetation and avoids unnecessary fragmentation of the landscape.

The Proposed Project would impact wildlife movement through the open, flatter areas of the Project site; however, the more suitable movement areas, such as creeks and drainages, the mesquite-dominated floodplain and even dirt roads, would not be impacted. These non-impacted areas would allow movement between larger blocks of habitat to the east, Jacumba Peaks area to the west, and the mountains to the north (via the floodplain).

However, the Proposed Project may substantially interfere with a local linkage and connectivity between blocks of habitat and would impact wildlife movement between the east and west core habitat areas. This impact would be **potentially significant (Impact BI-WLC-2)**.

Project Effects Relevant to Guideline C

Impact WLC-2: Permanent Direct Impacts on Habitat Connectivity and Wildlife Corridors

The Proposed Project would maintain movement along well-vegetated areas (i.e., the mesquite-dominated floodplain) as well as creeks and drainages that serve as natural movement areas for wildlife. Although the Proposed Project fencing would limit the ability of particularly large wildlife to access and traverse the solar facility, the undeveloped SDG&E easement between the fence lines, which is approximately 700 to 1,100 feet wide and more than 4,000 feet long, would allow uninterrupted wildlife movement from Boundary Creek to currently undeveloped land to the east (Figure 2.3-4). The location of the Proposed Project has the potential to create a “dead-end” for wildlife traveling west to east along the northern portion of the Project site. This could funnel wildlife toward I-8 and result in increased mortality of wildlife forced to cross at grade. However, to ensure that wildlife traversing that area are directed toward the SDG&E easement, the Proposed Project has been designed to provide a 50- to 100-foot opening in the fence north of the easement. This opening will allow for wildlife that may be moving along the northern portion of the Project site to enter into the easement corridor and move through the site to habitat located on either side of the Project site (Figure 2.3-4 and Figure 1-2 in Chapter 1). Therefore, the Proposed Project does not create unnatural movement corridors. The impacts would **less than significant**.

Project Effects Relevant to Guideline D

Impact BI-WLC-3: Temporary Indirect Impacts to Habitat Connectivity and Wildlife Corridors

There would be short-term, construction-related noise. These temporary indirect impacts would be **potentially significant (Impact BI-WLC-3)**.

Permanent Indirect Impacts to Habitat Connectivity and Wildlife Corridors

Permanent indirect impacts to habitat connectivity and wildlife corridor may occur as a result of noise and lighting. Noise associated with the Proposed Project would include pad-mounted

inverters, transformers, and HVAC units cooling energy storage equipment—all of which would be distributed across 26 locations throughout the solar facility. The electrical transformer located within the collector substation, and to a much lesser degree the smaller transformers within the switchyard, would also generate relatively steady-state sources of continuous noise. These noise receptors would be dispersed throughout the solar facility.

Permanent lighting associated with the Proposed Project would be motion detector security lighting. Nighttime lighting would comply with the County of San Diego Light Pollution Code (LPC), also known as the Dark Sky Ordinance, Section 59.101 et seq. Additionally, lighting for the Proposed Project would be designed in accordance with the San Diego County Zoning Ordinance, Performance Standards Sections 6320, 6322, and 6324 which guide performance standards for glare, and controls excessive or unnecessary outdoor light emissions.

Therefore, long-term (permanent) indirect impacts from noise and lighting would be **less than significant**.

Project Effects Relevant to Guideline E

As described above, after development of the Proposed Project larger wildlife (e.g., coyotes, bobcats, mountain lions) could still move along the mesquite-dominated floodplain and unvegetated portion of Boundary Creek to access undeveloped lands to the west as well as cross into Mexico at the opening in the border fence to the west. Wildlife movement is more restricted along the eastern side since there are less topographic features for cover; however, there is the undeveloped SDG&E easement between the Proposed Project fence lines. The SDG&E easement is approximately 700 to 1,100 feet wide and 4,000 feet long, which would allow uninterrupted movement from Boundary Creek to currently undeveloped land to the east. There is also land between Carrizo Gorge Road and I-8 that allows movement for some wildlife species, particularly nocturnal wildlife. A 50- to 100-foot break in the fence would be provided to facilitate movement from this open space to the SDG&E easement (see Figure 2.3-4). Without this opening wildlife traveling west to east north of the Project site could be funneled toward the I-8 and forced to cross the highway at grade. The opening in the fence would allow wildlife traveling along the fence line to find a break in the fencing leading them into the larger wildlife corridor. The Project site is situated adjacent to State Park lands and federal lands managed by the Bureau of Land Management, which allows for unhindered wildlife movement. Further, the fence would be raised off the ground, due to terrain, in multiple areas allowing for small wildlife species to move through the solar facility areas. Vegetation within the solar facility would be maintained at a height of 6 inches within the fuel modification areas, which would allow for some cover and habitat for wildlife species.

There is a potential for birds to collide with the gen-tie line during migration, but that risk was assessed to be low due to the minimal overhead line. Certain types of solar panels may create a “pseudo-lake effect,” and birds may collide with solar panels that appear like a body of water due to the sky’s reflection. However, there is little scientific information available regarding the pseudo-lake effect, and a detailed discussion of the impacts would be speculative. Further, the following factors would minimize the risk of collision due to sky reflection: (1) the Project site is not located near bodies of water that would attract wetland-associated birds; (2) the locale is not considered to be a major contributor to the Pacific Flyway; and (3) the solar units would be uniformly dark in color, coated to be non-reflective, and designed to be highly absorptive of all light that strikes their glass surfaces, and may not appear like water from above, as water displays different properties by both reflecting and absorbing light waves. Therefore, glare and pseudo-lake effect are deemed to be a low risk due to a number of factors, including the Proposed Project solar facility design and the Project site location.

The fenced solar panels and facilities would be unstaffed and therefore would be compatible with adjacent wildlife movement, since human activity would be limited. Although fencing is proposed around the solar facility, wildlife movement could still occur within the SDG&E easement that transects the Project site and drainage corridor along the western portion of the proposed solar facility. Therefore, the Proposed Project would result in a **less than significant** impact on corridor widths.

Project Effects Relevant to Guideline F

Although focused wildlife corridor studies have not been completed within the vicinity, based on knowledge of the area, probable key wildlife species, and typical wildlife movement patterns the following discussion applies. Large mammals, such as deer, are not likely to use the fallow agricultural areas as movement corridors due to lack of cover; however, it is likely that they use the open space on the western side of the railroad tracks which is dominated by mesquite. Avian species use the area during migrations, but those movements typically are oriented in a north/south direction, are broad-fronted, and are not focused on this Project site. Broader regional wildlife corridors likely connect between the Laguna Mountains to the west and north, and to the east, the Anza-Borrego Desert and the eastern slope of the Peninsular Range. However, connections to the east likely occur north of the site and possibly along I-8 corridor, which provides the most direct and obvious potential corridor route between the Proposed Project and habitats east of the Peninsular Range. Much of this area is large, core blocks of habitat through which wildlife are free to move with minimal constraint. The Project site is not located between lakes/ponds, loafing spots, foraging areas, or nesting sites that might entice local movement of birds or larger wildlife. However, as previously described, the Project site does function as a movement corridor between large blocks of habitat located east and west of the Project site. The placement of fencing and the solar arrays within the Project site could disrupt the visual continuity of wildlife using the Project site as a movement corridor.

The existing U.S./Mexico border fence along the southern boundary of the Project site already creates a visual and structural barrier to north and south wildlife movement in the Project site. The Proposed Project would be situated adjacent to the border fencing (there would be an approximate 100- to 330-foot buffer from the existing border fence to the Proposed Project fencing). Although visual continuity within the Project site could be exacerbated by the addition of the solar facility and fencing, wildlife can likely use a variety of local wildlife corridors outside of the Project site to move east, west, and north of the Project site. The Proposed Project would disrupt visual continuity if larger terrestrial wildlife was attempting to move from the northern portion of the Project site to the southeast. However, the existing SDG&E easement which transects the Project site would provide an east/west corridor to facilitate wildlife movement through the Project site. The easement corridor is largely composed of native habitat and a large channel which provides better coverage for wildlife moving through the Project site as well as visual continuity between patches of habitat west of the easement and contiguous habitat located east of the easement. The drainages and mesquite-lined floodplain along the western boundary of the Proposed Project are located outside of the fenced areas within the proposed biological open space, and would maintain visual continuity for wildlife moving between the areas north, south and west of the Project site.

In summary, the placement of fencing and the solar facility within the Project site could disrupt the visual continuity of the Project site as a wildlife movement corridor. This impact is **potentially significant (Impact BI-WLC-2)**.

Switchyard

Project Effects Relevant to Guideline A

Short-term, construction-related, or temporary direct impacts to potential foraging and breeding habitat for species that use the switchyard footprint (e.g., special-status birds) would primarily result from construction activities. Clearing, trampling, or grading of foraging and breeding habitat outside designated construction zones could occur in the absence of avoidance and mitigation measures. Potential temporary direct impacts to foraging and breeding habitat on the switchyard site would be **potentially significant (Impact BI-WLC-1)**.

Permanent direct impacts to 0.63 acres of potential foraging and breeding habitat for species that use the switchyard site would occur. Permanent direct impacts to foraging and breeding habitat would be **potentially significant, (Impact BI-WLC-2)**.

Short-term, construction-related, or temporary indirect impacts to avian foraging and wildlife access to foraging or nesting would primarily result from construction activities. Indirect impacts to sensitive bird species may occur if clearing of vegetation is conducted during the nesting season for MBTA protected species (generally January 15 through August 31). These impacts would be potentially

significant (**Impact BI-WLC-3**). Lighting and noise are the long-term indirect impacts identified for habitat connectivity and wildlife corridors, which are discussed in detail in Guidelines 4.4.D below.

Project Effects Relevant to Guideline B

The switchyard component of the Proposed Project would not significantly impact wildlife movement due to its small size. This impact would be **less than significant**.

Project Effects Relevant to Guideline C

The Proposed Project does not create unnatural movement corridors. **No impact** would occur.

Project Effects Relevant to Guideline D

There would be short-term, construction-related noise. This impact would be **potentially significant (Impact BI-WLC-3)**.

Noise associated with the switchyard would include smaller transformers, which would generate relatively steady-state sources of continuous noise. Permanent lighting associated with the switchyard would include motion detector security lighting. Nighttime lighting would comply with the County of San Diego Light Pollution Code (LPC), also known as the Dark Sky Ordinance, Section 59.101 et seq. Additionally, lighting for the Proposed Project would be designed in accordance with the San Diego County Zoning Ordinance, Performance Standards Section 6320, 6322, and 6324 which guide performance standards for glare, and controls excessive or unnecessary outdoor light emissions. Therefore, long-term (permanent) indirect impacts from noise and lighting would be **less than significant**.

Project Effects Relevant to Guideline E

As described above, the switchyard component of the Proposed Project would not impact wildlife movement due to its small size. Therefore, **no impact** would occur.

Project Effects Relevant to Guideline F

Due to its relatively small size, the switchyard would not significantly impact wildlife movement. Therefore, the impact to visual continuity would be **less than significant**.

2.3.3.6 Local Policies, Ordinances, and Adopted Plans

Guidelines for the Determination of Significance

For the purpose of this EIR, the County's Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources (County of San Diego 2010) was used to evaluate the direct, indirect, and cumulative impact analysis. Each general subject area is broken into more specific County guidelines, and lettered accordingly, to provide additional clarity on this complex resource topic.

A significant impact would result if:

The project would conflict with one or more local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and/or would conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP.

- A. For lands outside of the Multiple Species Conservation Plan (MSCP), the project would impact coastal sage scrub vegetation in excess of the County's 5% habitat loss threshold as defined by the Southern California Coastal Sage Scrub Natural Communities Conservation Planning (NCCP) Process Guidelines.
- B. The project would preclude or prevent the preparation of the subregional NCCP Process. For example, the project proposes development within areas that have been identified by the County or resource agencies as critical to future habitat preserves.
- C. The project will impact any amount of wetlands or sensitive habitat lands as outlined in the Resource Protection Ordinance (RPO).
- D. The project would not minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the NCCP Process Guidelines.
- E. The project does not conform to the goals and requirements as outlined in any applicable Habitat Conservation Plan (HCP), Habitat Management Plan (HMP), Special Area Management Plan (SAMP), Watershed Plan, or similar regional planning effort.
- F. For lands within the MSCP, the project would not minimize impacts to Biological Resource Core Areas (BRCAs), as defined in the Biological Mitigation Ordinance (BMO).
- G. The project would preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub NCCP Process Guidelines.
- H. The project does not maintain existing movement corridors and/or habitat linkages as defined by the BMO.
- I. The project does not avoid impacts to MSCP narrow endemic species and would impact core populations of narrow endemics.
- J. The project would reduce the likelihood of survival and recovery of listed species in the wild.
- K. The project would result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (MBTA).
- L. The project would result in the take of eagles, eagle eggs, or any part of an eagle (Bald and Golden Eagle Protection Act).

Analysis

Project Effect as Relevant to Guideline A

The Project site does not support coastal sage scrub; therefore, there are no significant impacts under this threshold.

Project Effect as Relevant to Guideline B

The Proposed Project would not preclude or prevent the preparation of an NCCP because the Proposed Project has been planned in accordance with the planning principles of the MSCP and in consideration of preparation of a future MSCP East County Plan. As described in Section 2.3.1.8, the proposed development footprint would be located areas identified as “Agriculture or Natural Upland outside Focused Conservation Area” and “Other Public/Semi-Public Lands.” The proposed development footprint avoids the major mapped drainages, as well as the following Preliminary MSCP map designations: “Land Managed as Open Space” and “Land managed with Ecological Protection.”

Although a preliminary draft map of the focused conservation areas has been prepared, the future MSCP East County Plan currently has no schedule for completion. The Proposed Project would not conflict with the draft MSCP East County planning effort. Therefore, **no impacts** would occur.

Project Effect as Relevant to Guideline C

Although RPO wetlands are located within the Project site, the Proposed Project would avoid RPO wetlands and the wetland buffer. Therefore, no impacts would occur to RPO wetlands or wetland buffers. The County also regulates sensitive habitat lands, which include lands that support unique vegetation communities or the habitats of rare or endangered species or subspecies of animals or plants as defined by CEQA Section 15380. Per County guidelines, the occupied burrowing owl habitat is considered sensitive habitat lands. Thus, the impacts to occupied burrowing owl habitat would be **potentially significant (Impact BI-W-2)**.

Project Effect as Relevant to Guideline D

The Project site does not support coastal sage scrub; therefore, there are **no impacts** under this threshold.

Project Effect as Relevant to Guideline E

The Proposed Project conforms to the goals and requirements as outlined in all applicable regional planning efforts; therefore, **no impacts** would occur.

Project Effect as Relevant to Guideline F

Since there is no approved MSCP East County Plan and no associated BMO, this guideline does not apply to the Proposed Project and therefore **no impacts** would occur.

Project Effect as Relevant to Guideline G

As shown in Figure 2.3-5, the Project site is located between high to very high habitat value areas. The proposed development footprint is located within lands mapped as “agriculture” or “developed” in the Habitat Evaluation Model layer. As discussed in Section 2.3.3.5, Wildlife Movement and Nursery Sites, development of the Proposed Project would convert the Project site from a large open space available for unimpeded wildlife movement. This impact would be **potentially significant (Impact BI-WLC-2)**.

Project Effect as Relevant to Guideline H

Since there is no approved MSCP East County Plan and no associated BMO, this guideline does not apply to the Proposed Project; therefore, **no impacts** would occur.

Project Effect as Relevant to Guideline I

This guideline only applies to areas with an adopted MSCP Plan. Since there is no approved MSCP East County Plan, this guideline does not apply to the Proposed Project; therefore, **no impacts** would occur.

Project Effect as Relevant to Guideline J

Quino Checkerspot Butterfly

One federally listed wildlife species was observed in the southwestern portion of the Project site (Quino checkerspot butterfly). The Proposed Project is designed to avoid the location where the Quino checkerspot butterfly was observed as well as the two locations of Chinese houses (i.e., host plants). Therefore, there are no permanent direct impacts to Quino checkerspot butterfly. Due to the lack of host plants near the Quino checkerspot butterfly sighting, and the distance of the proposed solar facility from the hill (approximately 150 feet), no significant indirect impacts (such as dust, construction noise, lighting) to this species is anticipated. No work will be conducted within this area, and the hill is situated at an elevation higher than the impact area, which provides an additional buffer. Based on this analysis, the Proposed Project would not reduce the likelihood of survival or recovery of Quino checkerspot butterfly in the wild. Therefore, the Proposed Project would not have any impacts (direct or indirect) on Quino checkerspot butterfly, including host plants. No impact would occur.

Tricolored Blackbird

One state-listed species, tricolored blackbird, was observed within the Project site. Tricolored blackbirds were observed foraging, but not nesting, in the southern portion of the Project site in April 2019. No tricolored blackbirds were observed in 2018 despite surveys conducted along the southern portion of the Project site. Tricolored blackbirds nest occasionally at a pond in Jacumba, approximately 0.5 miles west of the Project site. According to Beedy et al. (2018), tricolored blackbirds typically forage within 5 kilometers (3 miles) of a colony site.

Dudek reviewed the vegetation data (SANGIS 2019) available within a 3-mile radius of the nesting site (located west of the Project site). Based on potential foraging habitat described in Beedy et al. (2018) (e.g., grasslands, irrigated pasture, grain fields, shallow wetlands, and alkali scrub habitats), there are approximately 2,100 acres of suitable foraging habitat within the United States in the vicinity of the Project site. In addition, up to an additional 4,400 acres of suitable habitat is located in Mexico within the 3-mile radius from the tricolored blackbird colony site. Aerial review of land within the 3-mile radius buffer shows open, flatter land suitable for tricolored blackbird foraging in Mexico. Additionally, biologists observed tricolored blackbirds flying back and forth between the United States and Mexico side of the border.

The Proposed Project would impact 593.5 acres of potential tricolored blackbird foraging habitat within the Project site. Approximately half of the impacted habitat is located in the northern portion of the Project site where tricolored blackbirds were not observed. Of the total impacts, there are 48.52 acres of suitable foraging habitat that would be hardscape (i.e., access roads and substation).. It may be possible that tricolored blackbirds would forage in and around the solar panels since there would be herb growth underneath the panels and could provide habitat for insects on which they forage. Given the amount of available foraging habitat within three miles of the nest location, impacts to potential foraging habitat on the Project site would not preclude this species from successfully nesting in the region. Because the tricolored blackbird is a listed species, based on the County's guidelines, the impacts to tricolored blackbird would be **potentially significant (Impact BI-W-2)**.

Project Effect as Relevant to Guideline K

Impacts to migratory birds (**Impact BI-W-3**) are discussed in Section 2.3.3.2, Candidate, Sensitive, or Special-Status Species.

Project Effect as Relevant to Guideline L

Golden eagles are known to nest in the region, including at Table Mountain, which is approximately two miles northeast of the Project site (USFWS 2019). The eastern portion of Round Mountain is located within the Project site and there is a golden eagle nest record on the northern side of Round Mountain. This nest was described as an intact cliff nest in 2012, but was

occupied by common ravens (USFWS 2019). This nest location, along with other crags on Round Mountain, was surveyed in April 2018 and February 2019. No golden eagles were observed in the nest; ravens and red-tailed hawks were observed nesting in these areas. As described in Section 2.3.1.6, Special-Status Animal Species, seven or more years with no nesting is a strong indicator that this territory has been abandoned by golden eagles. Aside from Round Mountain, there is no suitable nesting habitat (i.e., large trees or cliffs) within the Project site. Based on the limited use of the site by golden eagles, the Proposed Project would not result in the take of eagles, eagle eggs, or any part of an eagle. Due to lack of recent nesting by golden eagles in this area, permanent direct impacts to golden eagle would be **less than significant**.

Switchyard

Project Effect as Relevant to Guideline A

The switchyard development footprint does not support coastal sage scrub; therefore, there are **no impacts** under this threshold.

Project Effect as Relevant to Guideline B

The Proposed Project, including the switchyard, would not preclude or prevent the preparation of an NCCP because the Proposed Project has been planned in accordance with the planning principles of the MSCP and in consideration of preparation of a future MSCP East County Plan. Therefore, **no impacts** would occur.

Project Effect as Relevant to Guideline C

The proposed switchyard would avoid impacts to the RPO wetlands and the wetland buffer. The County also regulates sensitive habitat lands, which include lands that support unique vegetation communities or the habitats of rare or endangered species or subspecies of animals or plants as defined by CEQA Section 15380. The switchyard site is not located within the occupied burrowing owl habitat. Therefore, **no impacts** would occur.

Project Effect as Relevant to Guideline D

The switchyard footprint does not support coastal sage scrub; therefore, there **no impacts** would occur.

Project Effect as Relevant to Guideline E

The switchyard would conform to the goals and requirements as outlined in all applicable regional planning efforts; therefore, **no impacts** would occur.

Project Effect as Relevant to Guideline F

Since there is no approved MSCP East County Plan and no associated BMO, this guideline does not apply to the Proposed Project, including the switchyard, and therefore **no impacts** would occur.

Project Effect as Relevant to Guideline G

The switchyard is not expected to preclude habitat connectivity; therefore, **no impacts** would occur.

Project Effect as Relevant to Guideline H

Since there is no approved MSCP East County Plan and no associated BMO, this guideline does not apply to the switchyard; therefore, **no impacts** would occur.

Project Effect as Relevant to Guideline I

This guideline only applies to areas with an adopted MSCP Plan. Since there is no approved MSCP East County Plan, this guideline does not apply to the switchyard; therefore, **no impacts** would occur.

Project Effect as Relevant to Guideline J

No federally or state-listed endangered or threatened wildlife species were observed within the switchyard development footprint. The only Quino checkerspot butterfly observation and host plants are located in the southwestern portion of the Project site. Tricolored blackbirds were observed foraging within the Project site, outside of the switchyard development footprint, in April 2019. Based on 2019 observations, Tricolored blackbirds use the southwestern portion of the site for foraging. The switchyard does not contain suitable nesting habitat for this species and therefore construction of the switchyard would only impact a minimal amount of potential foraging habitat (0.63 acres). Due to the suitable foraging habitat within the switchyard footprint and the proximity of the occurrences, potential direct impacts to tricolored blackbird would be a **potentially significant** impact (**Impact BI-W-2**).

Project Effect as Relevant to Guideline K

Impacts to migratory birds (**Impact BI-W-3**) are discussed in Section 2.3.3.2.

Project Effect as Relevant to Guideline L

There is no suitable nesting habitat (i.e., large trees or cliffs) in the switchyard development footprint. Due to lack of recent nesting by golden eagles in this area, permanent direct impacts on golden eagle would be **less than significant**.

2.3.4 Cumulative Impact Analysis

Geographic Extent

The geographic extent for the analysis of cumulative impacts associated with biological resources includes the vicinity of all reasonably foreseeable cumulative projects and extends throughout southeastern San Diego County. Within the extent of the cumulative projects, the Peninsular Ranges of the California Floristic Province, as defined in the Jepson Flora Project, was initially chosen to define the biological resources cumulative study area. However, since the Proposed Project is located approximately 1 mile east of the Peninsular Range boundary the southeastern portion of the Carrizo Creek Watershed (Hydrologic Unit Code 18100202) was also included to define the southeastern extent of the cumulative study area (Figure 2.3-9, Cumulative Impact Analysis).

The Peninsular Ranges eco-geographic extent was chosen because the geographic system developed by the Jepson Flora Project “combines features of natural landscapes and biota to delimit the units, as opposed to using the often arbitrary and unnatural boundaries of counties for that purpose. The Jepson geographic system most importantly reflects broad patterns of natural vegetation (and, at a finer scale, more specific plant assemblages), geology, topography, and climate” (Jepson Flora Project 2020). In addition, habitat within the Peninsular Ranges would be biologically representative of that present within the Project site. The southeastern portion of Carrizo Creek Watershed is used to define the southeastern extents of the cumulative study area. The approximately 653-square-mile Carrizo Creek Watershed boundaries are defined by “hydrographic and topographic criteria that delineate an area of land upstream from a specific point on a river, stream or similar surface waters” (USDA 2019). Similar to the Jepson Flora Project, the boundaries of this watershed also reflect natural patterns of the landscape. The additional use of the Carrizo Creek Watershed boundaries provide a southeastern biologically relevant connection between the Proposed Project and Peninsular Ranges. Based on this system, the Peninsular Ranges and southeastern portion of the Carrizo Creek Watershed would define an appropriate study area for biological resources assessed in this EIR. The biological cumulative analysis study area is explained in the “Existing Cumulative Conditions” section that follows. The cumulative projects analyzed for biological resources are a subset of those projects summarized in Table 1-7, Cumulative Scenario – Reasonably Foreseeable Approved and Pending Projects (see Chapter 1, Project Description, of this EIR).

Existing Cumulative Conditions

The southeastern San Diego County area is considered a transition zone between biogeographic regions. The California Floristic Province occurs in the biological cumulative analysis study area, which encompasses a majority of California west of the extreme dry regions. The Desert Province occurs east of the cumulative analysis area, which encompasses the dry desert regions, and is not

included in the biological cumulative analysis study area. Within the California Floristic Province, the Peninsular Ranges subregion (i.e., an area of similar climatic and plant community associations) stretches from southern Los Angeles County along the valley, foothills, and mountains south to Baja California, Mexico. Although the Project site is located within the Desert Province boundaries, habitat within the Project site is more characteristic of that within the Peninsular Ranges subregion. Therefore, the southeastern portion of the Carrizo Creek Watershed is included to define the southeastern boundaries of the biological cumulative analysis study area.

Cumulative Methodology

The cumulative analysis conducted for biological resources is based on the list method and considers relevant projects from Table 1-4 in Chapter 1. Figure 2.3-9 shows the extent of the cumulative study area. Of the cumulative projects listed in Table 1-7 in Chapter 1, the following completed projects would potentially affect biological resources within the cumulative study area. Completed cumulative projects include the following: Energia Sierra Juarez wind project (located in Mexico), Tule Wind project (Phase I), Ocotillo Express wind project, Kumeyaay Wind, Energia Sierra Juarez transmission line, ECO Substation, Jacumba Solar, Golden Acorn Casino and Travel Center, Freedom Ranch, Boulevard Fire Station. Cumulative projects which are either under review, approved, or under construction (but not completed) include the following: Tule Wind project (Phase 2), Campo Wind with Boulder Brush Facilities project, Torrey Wind project, Rugged Solar, Boulevard Solar, Cameron Solar, Boulevard Energy Storage, Rough Acres Foundation Campground Facility, Jacumba Community Services District new well, Meteorological Testing Facilities, Level 2 Communications, Site Master water tank, Pacific Telephone, White Star Communications Site, Pactel White Star, Mazanita T-Mobile, and VZW I-8 Boulevard. The locations of these cumulative projects can be found in Figure 2.3-9. Reasonably foreseeable cumulative projects located east of the overall cumulative analysis area are not included because they would affect more arid vegetation communities than those present on site; therefore, the Proposed Project would not cumulatively contribute to impacts to natural vegetation communities in this region or to impacts to species that are associated with these habitat types. Reasonably foreseeable cumulative projects located in the western, central, and southeastern portion of the cumulative analysis area (within San Diego County) within the cumulative study area, as described above, have the potential to affect similar vegetation communities as the Proposed Project, and therefore, could cumulatively contribute to impacts to natural vegetation communities in this region, or to impacts to species that are associated with these habitat types.

The cumulative analysis for wildlife movement and local and regional planning is similarly limited to the western, central, and southeastern portions of the cumulative study area. As described in Section 2.3.4.3, Wildlife Movement, since the analysis area is largely undeveloped; wildlife movement through and around the reasonably foreseeable cumulative project areas would still be possible. Despite the development of the reasonably foreseeable cumulative projects, the area

would remain predominantly rural with significant undeveloped areas and wildlife movement opportunity. Local and regional planning efforts are defined by the jurisdiction of local planning authorities, which in the case of the Proposed Project is San Diego County.

2.3.4.1 Candidate, Sensitive, or Special-Status Species

Special-Status Plant Species

Direct

The Project site is characterized by a diverse assemblage of vegetation communities (see Table 2.3-1 for vegetation communities and associated acreage in the Project site) that supports or has the potential to support special-status plant species. Focused surveys for special-status plants within the Project site were conducted in spring and summer 2019 resulting in the detection of six special-status plant species (see Section 2.3.1.5). Short-term, construction-related, or temporary direct impacts on special-status plants, if they occur, at the edge of the development footprint and non-impacted areas interface could primarily result from construction activities. One population of sticky geraea, a County List B species, occurs along the edge of development and non-impacted areas and could be subject to these temporary impacts. The Proposed Project will result in direct impacts to 22 individuals of two plant species: pygmy lotus (List A; 1 individual) and sticky geraea (List B; 21 individuals). These proposed direct impacts would be potentially significant.

For a cumulative impact to special-status plant species to occur, the cumulative projects would have to result in the loss of the same special-status plant species or their habitat as the Proposed Project such that those species become more limited in their distribution, population size, or available suitable habitat within the cumulative analysis area.

The Proposed Project would result in direct impacts to small populations of two plant species (22 individuals total) and could temporarily impact one small population of sticky geraea during construction. These impacts, when added to the potential impacts to suitable habitat from other projects, would not result in a reduced distribution of these two species in the region. Therefore, loss of special-status plant species from the Proposed Project combined with the reasonably foreseeable cumulative projects would **not contribute to a cumulatively considerable impact**.

Indirect

Invasive Plant Species

Ground-disturbing activities and increased vehicle and human uses associated with construction of the Proposed Project have the potential to introduce and spread invasive, non-native, and noxious plant species in the area, which is generally characterized by undisturbed native vegetation

communities with low levels of invasive and noxious plant species. The introduction of invasive, non-native, or noxious plant species resulting from the Proposed Project would result in potentially significant indirect impacts.

For a cumulative impact related to the introduction and spread of invasive, non-native, or noxious plant species to occur, reasonably foreseeable cumulative projects would have to result in the introduction and spread of these species across the biological cumulative analysis study area. The biological cumulative analysis study area is a largely undeveloped area characterized by large expanses of undisturbed native vegetation communities. The listed cumulative projects have the potential to result in the introduction and spread of invasive, non-native, or noxious plant species due to the cumulative increase in ground disturbance in undeveloped native vegetation communities (as discussed above, the total estimate of disturbance in the biological cumulative analysis study area to vegetation as a result of reasonably foreseeable cumulative projects was determined to be approximately 3,886 acres). However, the development of the Proposed Project is largely located within fallow agriculture, disturbed habitat, and developed lands (586.47 of the 643.13 acres of impact or approximately 80% of the impact footprint). The Proposed Project would remove 508.46 acres of non-native plant species associated with the fallow agriculture from the Project site, thus reducing the potential for these species to invade nearby native habitat. Conversely, the Proposed Project would remove 126.99 acres of sensitive vegetation and could spread invasive plants into adjacent native habitat.

Fugitive Dust

For a cumulative impact related to construction dust generation resulting in vegetation degradation to occur, the reasonably foreseeable cumulative projects would have to be constructed at the same time and in proximity to each other. The listed cumulative projects within the biological cumulative analysis study area involve a variety of project types. Additionally, most of the biological cumulative analysis study area is characterized by undisturbed native vegetation communities. Construction of some cumulative projects may partially overlap or would be completed prior to commencement of Proposed Project construction activities, and impacts would be less severe than if they were constructed simultaneously. If all of the reasonably foreseeable cumulative projects in proximity to the Proposed Project were to be constructed simultaneously, which is highly unlikely, substantial dust generation could degrade nearby vegetation.

Indirect impacts stemming from the Proposed Project could affect one population of sticky gerea located at the development edge. The remaining populations of special-status plants would be located away from Proposed Project development. Given the potential impact to only one small population of one plant species, the Proposed Project would **not contribute to a cumulatively considerable significant impact** from indirect impacts on special-status plant species.

Special-Status Wildlife Species

Direct

For a cumulative impact to special-status wildlife species to occur, the cumulative projects would have to result in the loss of the same special-status wildlife species or their habitat as the Proposed Project such that those species become more limited in their distribution, population size, or available suitable habitat within the biological cumulative analysis study area. The listed cumulative projects that occur in the biological cumulative analysis study area would have the potential to impact the same special-status wildlife species as the Proposed Project due to a similar climate and similar distribution of vegetation communities. As stated previously, the total estimated area of disturbance to similar native vegetation communities as the Proposed Project for reasonably foreseeable cumulative projects in the biological cumulative analysis study area was determined to be approximately 3,886 acres.

As described above, the biological cumulative analysis study area includes the Peninsular Ranges eco-geographic extent as defined by the Jepson Flora Project (Jepson Flora Project 2020). To analyze potential cumulative impacts to wildlife species, a habitat-based approach was used, which provides an overall view of suitable habitats within the biological study area. Similar to plants, the habitat model included suitable vegetation communities that are being impacted within the biological cumulative analysis study area, and known elevation ranges for the wildlife species. The habitat model is provided in Table 2.3-3, which includes the vegetation communities, elevation ranges, total suitable acreage in the biological cumulative analysis study area, total impacted acreage, and a discussion of the results. The Proposed Project, combined with the reasonably foreseeable cumulative projects, despite species avoidance, minimization, and mitigation measures that would likely be implemented by each project, would have the potential to reduce the distribution and/or the overall population size of one or more special-status wildlife species such that they are vulnerable to environmental variability and are at a higher risk of becoming imperiled.

However, the suite of wildlife species that occur or have potential to occur within the biological study area are wide-ranging and occur in a wide variety of habitat types that occur throughout the biological cumulative analysis study area. The Proposed Project would **not contribute to a cumulatively considerable significant impact**.

Indirect

Given the nature, location, and timing of the reasonably foreseeable cumulative projects, the potential for cumulatively significant indirect construction-related impacts is low. Reasonably foreseeable cumulative projects within the biological cumulative analysis study area involve a variety of project types. Projects within a few miles of the Project site are generally not anticipated to be constructed simultaneously.

However, construction of some listed cumulative projects in proximity to the Proposed Project may overlap, in which case increased human presence, vehicle traffic, and construction noise could cause wildlife behavior modifications and avoidance of the area. These disruptions could result in changes in habitat usage and potentially affect species fitness and productivity. The potential mortality resulting from increased vehicle use in the area and construction area hazards (e.g., trenches) across the Project site and listed cumulative Project site areas could lead to decreased population numbers and reduced productivity. The Proposed Project and other reasonably foreseeable cumulative projects are located in a rural area and adjacent properties provide undeveloped areas for wildlife to evacuate. Additionally, there is suitable habitat available for wildlife species on portions of the Project site and throughout the biological cumulative analysis study area. Therefore, the potential for construction-related wildlife disturbance and mortality impacts from the Proposed Project combined with the reasonably foreseeable cumulative projects would **not contribute to a cumulatively considerable impact**.

2.3.4.2 *Riparian Habitat or Sensitive Natural Community*

The reasonably foreseeable cumulative projects have the potential to result in adverse impacts to vegetation communities. Reasonably foreseeable cumulative projects have the potential to affect more than 3,886 acres of vegetation communities and land covers within the biological cumulative analysis study area. For cumulative effects to occur, cumulative projects would have to result in the loss of the same vegetation communities as the Proposed Project such that those vegetation communities become limited in acreage or extent within the cumulative analysis area. Additionally, a cumulative impact to native vegetation communities could occur if the cumulative projects use all available land for mitigation such that the loss of native vegetation communities cannot be adequately compensated within the cumulative analysis study area.

The Proposed Project would impact up to 643.13 acres of vegetation communities and land covers. Many of the vegetation communities impacted by the Proposed Project are similar to those impacted by the other cumulative projects in the region. Impacts to fallow agriculture account for more than 50% of the total cumulative project impacts. Impacts to other vegetation communities vary, but are generally similar between the Proposed Project and the other cumulative projects.

The Proposed Project's impacts to vegetation communities total approximately 0.13% of the cumulative analysis study area. The Proposed Project combined with the reasonably foreseeable cumulative projects would impact approximately 0.91% of the cumulative analysis study area. Therefore, the Proposed Project, combined with the reasonably foreseeable cumulative projects in the biological cumulative analysis study area, would contribute incrementally to adverse impacts on vegetation communities. However, the cumulative scenario would impact less than 1% of the total cumulative analysis study area; therefore, vegetation communities would not become limited in acreage or extent within the cumulative analysis area. Therefore, the Proposed Project would **have a less than significant cumulative impact**.

2.3.4.3 *Wildlife Movement*

A cumulative impact to linkages or wildlife movement corridors, the movement of fish, and/or native wildlife nursery sites would occur if the listed cumulative projects, combined with the Proposed Project, result in constraining or blocking known habitat linkages or result in a cumulative barrier to wildlife movement through the cumulative analysis area. The cumulative analysis study area encompasses a largely undeveloped landscape with few barriers to movement, except for I-8, the U.S./Mexico border fence, and, to a lesser extent, scattered rural development and property fencing.

Reasonably foreseeable projects that occur in the cumulative analysis area could potentially inhibit wildlife movement. Several of the larger reasonably foreseeable projects, including wind energy projects could block wildlife movement (particularly for avian species) due to their size and location (e.g., along an avian flyway or migration route).

The Proposed Project combined with the cumulative projects would result in energy-related and other development throughout the cumulative analysis area. These projects have the potential to disrupt wildlife movement patterns for wildlife species moving east/west and traversing the I-8 freeway (in particular, typical wide-ranging terrestrial species including mule deer, mountain lion, bobcat, and coyote). To reduce impacts to wildlife movement, the Proposed Project has been designed to maintain movement corridors throughout the Project site and concentrate development in the least sensitive portions of the Project site. In addition, the cumulative analysis area is largely undeveloped, and wildlife movement through and around the reasonably foreseeable cumulative project areas would still be possible. Despite the development of these projects, the area would remain predominantly rural with significant undeveloped areas and wildlife movement opportunity. Additionally, the total acreage of vegetation communities analyzed in the biological cumulative analysis study area is approximately 499,048 acres and the Proposed Project combined with reasonably foreseeable cumulative projects would only impact approximately 0.91% of the total acreage. Therefore, impacts from the Proposed Project combined with the reasonably foreseeable cumulative projects would be **less than significant** for habitat linkages and wildlife movement corridors.

2.3.4.4 *Local Policies, Ordinances, and Adopted Plans*

A cumulative impact to regional planning would occur if the reasonably foreseeable cumulative projects, combined with the Proposed Project, conflict with one or more local policies or ordinances protecting biological resources. Those projects within the biological cumulative analysis study area would, similar to the Proposed Project, be within the future MSCP East County Plan area. The cumulative projects under the land use planning jurisdiction of the County of San Diego would be reviewed for consistency with the draft MSCP East County Plan currently in progress (no schedule for completion currently). Therefore, reasonably foreseeable projects, in combination with the Proposed Project, would not cumulatively contribute to a potential conflict with local plans.

2.3.5 Significance of Impacts Prior to Mitigation

Candidate, Sensitive or Special-Status Species

Project Effects Relevant to Guideline A

There are no direct or indirect impacts to Quino checkerspot butterfly.

A total of 593.5 acres of suitable foraging habitat for the tricolored blackbird would be directly impacted as a result of the Proposed Project; therefore, direct impacts to tricolored blackbird would be **potentially significant (Impact BI-W-2)**.

Project Effects Relevant to Guideline B

Special-Status Plant Species (County List A and B Species)

The Proposed Project would result in short-term, construction-related, or temporary direct impacts to one special-status plant (Palmer's grapplehook) that could occur at the edge of the development footprint. Potential temporary direct impacts on special-status plant species would be **potentially significant (Impact BI-SP-1)**.

In addition, there are direct impacts to two special-status species (see Table 5-2 of the Biological Resources Technical Report included as Appendix D): pygmy lotus (1 individual) and sticky geraea (21 individuals). Direct impacts to pygmy lotus and sticky geraea would be **potentially significant (Impact BI-SP-2)**.

Special-Status Wildlife Species (County Group 1 or State SSC)

Loss of County Group 1 or state SSC animals and/or suitable habitat from construction-related activities would result in short-term direct impacts. These temporary direct impacts would be **potentially significant (Impact BI-W-1)**.

Implementation of the Proposed Project would result in the direct loss of habitat, including foraging habitat, for some of the County Group 1, Group 2, and/or SSC species. Permanent direct impacts to habitat for special-status wildlife species would be **potentially significant (Impact BI-W-2)**.

The Proposed Project would impact 643.0 acres of suitable foraging habitat for the golden eagle; therefore, permanent direct impacts to golden eagle foraging habitat would be **potentially significant (Impact BI-W-2)**.

The Proposed Project would result in impacts to 14.2 acres of occupied burrowing owl habitat; therefore, impacts to burrowing owl would be **potentially significant (Impact BI-W-2)**.

The Proposed Project would result in direct impacts on special-status wildlife species, if any active nests or the young of nesting County Group 1 and/or SSC bird species are impacted through direct grading, these impacts would be **potentially significant**, based on the MBTA and Fish and Game Code (**Impact BI-W-3**).

Yuma myotis, pallid bat, and western small-footed myotis have a high potential to roost in the abandoned buildings on site, which would be demolished as part of the Proposed Project. If there were a maternity roost in a building, impacts on that roost site would be potentially significant, absent mitigation (**Impact BI-W-4**).

Project Effects Relevant to Guideline C

Special-Status Plant Species (County List C and D Species)

Impacts on Palmer's grapplehook outside designated construction zones could occur from clearing, trampling, or grading. Potential temporary direct impacts to special-status plant species would be **potentially significant** (**Impact BI-SP-1**).

No County List C plants were observed within the Project site. There are **no impacts** to County List D plants.

Special-Status Wildlife Species (County Group 2)

Loss of County Group 2 or other special-status species and/or suitable habitat, from construction-related activities would result in short-term direct impacts that would be **potentially significant** (**Impact BI-W-1**).

Implementation of the Proposed Project would result in the direct loss of habitat, including foraging habitat, for some of the County of San Diego Group 2 or other special-status species, which would be a **potentially significant** impact (**Impact BI-W-2**).

Permanent direct impacts on nesting birds could result if active nests or the young of nesting County Group 1 and/or SSC bird species are impacted through direct grading or clearing and grubbing in preparation for construction. This impact would be **potentially significant** (**Impact BI-W-3**).

Yuma myotis, pallid bat, and western small-footed myotis have a high potential to roost in the abandoned buildings on site, which would be demolished as part of the Proposed Project. If there were a maternity roost in a building, impacts on that roost site would be **potentially significant** (**Impact BI-W-4**).

Project Effects Relevant to Guideline D

There are no known arroyo toad records within the Project site or vicinity; and there are no third order stream channels present within the Project site. Therefore, the Proposed Project would have **no impact** on arroyo toad aestivation, foraging, or breeding habitat.

Project Effects Relevant to Guideline E

Due to lack of recent nesting by golden eagles in this area, there would be **no impacts** within 4,000 feet of an active golden eagle nest.

Project Effects Relevant to Guideline F

The Proposed Project would result in impacts to more than 5% of the raptor foraging habitat; therefore, impacts to raptor foraging habitat would be **potentially significant (Impact BI-W-2)**.

Project Effects Relevant to Guideline G

Short-term, construction-related, or temporary direct impacts on potential foraging and breeding habitat for species that use the Project site (e.g., special-status birds) would primarily result from construction activities. Potential temporary direct impacts on foraging and breeding habitat within the Project site would be **potentially significant (Impact BI-WLC-1)**.

The Project site is included within a Core Wildlife Area (a large block of habitat that supports multiple wildlife species), even though the 1,356-acre property is bordered by the U.S./Mexico border fence, which may exclude some larger wildlife from moving directly through the Project site. The Project site is also a linkage between two blocks of habitat located on either side of the Project site. The Proposed Project would impact 643 acres of land within the 1,356-acre Project site. A list of special status wildlife species that were observed or have the potential to occur within the Project site are included in Appendix E1 of the Biological Resources Technical Report (Appendix D to the EIR). This impact on a core wildlife area for would be **potentially significant (Impact BI-WL-C)**.

Project Effects Relevant to Guideline H

Special-Status Plant Species

Potential short-term or temporary indirect impacts to special-status plant species in the Project site would primarily result from construction activities and include impacts related to or resulting from the generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; and the introduction of chemical pollutants (including herbicides). These impacts would be **potentially significant (Impact BI-SP-3)**.

Permanent indirect impacts could result from the proximity of the Proposed Project to special-status plants after construction. Permanent indirect impacts that could affect special-status plant species include generation of chemical pollutants, altered hydrology, non-native invasive species, increased human activity, and alteration of the natural fire regime. These impacts would be potentially significant (Impact BI-SP-4).

Special-status plant species at the edge of the biological open space easement/development interface could be impacted by permanent indirect impacts such as those previously listed. These impacts would be potentially significant (Impact BI-SP-4).

Special-Status Wildlife Species

Indirect impacts to sensitive bird species may occur if clearing of vegetation is conducted during the nesting season for MBTA protected species (generally January 15 through August 31). These indirect impacts would be **potentially significant (Impact BI-W-5)**.

Potential long-term or permanent indirect impacts to special-status wildlife species would include non-native, invasive plant and animal species introduction; habitat fragmentation; increased human activity; alteration of the natural fire regime; altered hydrology; and lighting. These impacts would be **potentially significant (Impact BI-W-8)**.

Lighting for the Proposed Project would be limited to motion detector lighting at the substation and site entry ways and would be shielded and directed downward. Therefore, lighting would have a **less than significant** impact on wildlife.

Only five proposed utility poles would provide perches from which avian species may forage, this is considered a minor risk for collision due to the small number of poles and **less than significant** impacts.

Project Effects Relevant to Guideline I

The Proposed Project would result in direct impacts to 14.2 acres of occupied burrowing owl habitat (see Table 2.3-3), which would be **potentially significant (Impact BI-W-2)**.

Project Effects Relevant to Guideline J

The Project site is outside of the range for coastal cactus wren. Therefore, **no impacts** relating to this guideline would occur.

Project Effects Relevant to Guideline K

No Hermes copper butterflies (*Lycaena hermes*) have been detected within the Project site. The larval host plant (i.e., true limiting factor), spiny redberry (*Rhamnus crocea*), has not been detected

during biological surveys within the Project site. Based on the lack of suitable habitat for this species, the Project site is not considered occupied Hermes copper butterfly habitat. Therefore, **no impacts** related to this guideline would occur.

Project Effects Relevant to Guideline L

Potential impacts on the nesting success of tree and/or ground-nesting raptors associated with the loss of suitable nesting habitat would be **potentially significant (Impact BI-W-2)**.

Temporary indirect impacts on avian foraging and wildlife access to foraging or nesting would primarily result from construction activities. These impacts, as discussed above, are **potentially significant (Impact BI-W-5)**.

Due to lack of suitable habitat or range for coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), coastal California gnatcatcher (*Poliophtila californica californica*), and light-footed clapper rail (*Rallus longirostris levipes*), these species are not expected to nest within the Project site; therefore, **no impact** on the nesting success of those species would result.

Riparian Habitat or Sensitive Upland Natural Community

Project Effects Relevant to Guideline A

Short-term, construction-related, or temporary direct impacts to special-status upland vegetation communities would primarily result from construction activities. Temporary direct impacts to special-status vegetation communities within the Project site would be **potentially significant (Impact BI-V-1)**.

The Proposed Project would result in permanent direct impacts to 126.99 acres of riparian habitat or sensitive vegetation communities and 467.63 acres of fallow agriculture. Although fallow agriculture is typically not considered a sensitive vegetation community, the areas mapped as fallow agriculture do provide foraging habitat for wildlife and therefore would be considered a sensitive vegetation community. These impacts would be potentially significant (**Impact BI-V-2**).

Project Effects Relevant to Guideline B

Short-term, construction-related, or temporary direct impacts to jurisdictional aquatic resources would primarily result from construction activities. Potential temporary direct impacts to jurisdictional aquatic resources within the Project site would be **potentially significant (BI-JAR-1)**.

The Proposed Project would result in **no impacts** to potential ACOE and RWQCB non-wetland waters or CDFW streambed.

Potential short-term or temporary indirect impacts to jurisdictional aquatic resources in the Project site would primarily result from construction activities and include impacts related to or resulting from the generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; and the introduction of chemical pollutants, including herbicides. Therefore, this impact would be **potentially significant (Impact BI-JAR-2)**.

Long-term or permanent indirect impacts could result from the proximity of the Proposed Project to jurisdictional aquatic resources after construction (e.g., maintenance of roads). Potential long-term indirect impacts to jurisdictional aquatic resources that occur outside of the impact area would be **potentially significant (Impact BI-JAR-3)**.

Project Effects Relevant to Guideline C

Estimated drawdown at the nearest groundwater-dependent habitat from pumping Well No. 2 and Well No. 3 would be less than three feet. Further, current groundwater levels in Well No. 3 are at least 12 feet higher than the historical low groundwater level recorded in the Jacumba Valley alluvial aquifer (Appendix J, Groundwater Investigation Report). Therefore, drawdown as a result of Proposed Project groundwater use would be unlikely to exceed the historical low groundwater level, and impacts on the groundwater table would be **less than significant**.

Project Effects Relevant to Guideline D

Potential short-term or temporary indirect impacts to sensitive vegetation communities within the Project site would primarily result from construction activities and include impacts related to or resulting from the generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; and the introduction of chemical pollutants, including herbicides. These temporary indirect impacts would be **potentially significant (Impact BI-V-3)**.

Long-term or permanent indirect impacts could result from the proximity of the Proposed Project to sensitive vegetation communities after construction (e.g., maintenance of roads, fencing, and landscaping). Potential long-term indirect impacts to sensitive vegetation communities that occur outside of the impact area would be **potentially significant (Impact BI-V-4)**.

Project Effects Relevant to Guideline E

The Proposed Project is designed to avoid RPO wetlands and the 50-foot RPO wetland buffer. Therefore, **no impacts** relating to Guideline 4.2.E would occur.

Jurisdictional Wetlands and Waterways

Project Effects Relevant to Guideline 4.3

The Proposed Project would have potential temporary direct impacts, and potential temporary and permanent indirect impacts, on jurisdictional aquatic resources as defined by Section 404 of the Clean Water Act if grading occurred outside the approved limits of disturbance. These impacts would be **potentially significant (Impacts BI-JAR-1, BI-JAR-2, and BI-JAR-3)**.

There would be **no direct impacts** to federally regulated waters.

Wildlife Movement and Nursery Sites

Project Effects Relevant to Guideline A

Short-term, construction-related, or temporary direct impacts to potential foraging and breeding habitat for species that use the Project site (e.g., special-status birds) would primarily result from construction activities. Potential temporary direct impacts to foraging and breeding habitat within the Project site would be **potentially significant (Impact BI-WLC-1)**.

Permanent direct impacts to 643 acres of potential foraging and breeding habitat for species that use the Project site would occur as a result of the Proposed Project. Permanent direct impacts to foraging and breeding habitat would be **potentially significant (Impact BI-WLC-2)**.

Indirect impacts to sensitive bird species may occur if clearing of vegetation is conducted during the nesting season for MBTA protected species (generally January 15 through August 31). These impacts would be **potentially significant (Impact BI-WLC-3)**.

Project Effects Relevant to Guideline B

The Proposed Project would substantially interfere with a local linkage and connectivity between blocks of habitat and would impact wildlife movement between the east and west core habitat areas. This impact would be **potentially significant (Impact BI-WLC-2)**.

Project Effects Relevant to Guideline C

The Proposed Project does not create unnatural movement corridors. The impacts would **less than significant**.

Project Effects Relevant to Guideline D

There would be short-term, construction-related noise. These temporary indirect impacts would be **potentially significant (Impact BI-WLC-3)**.

Permanent Indirect Impacts to Habitat Connectivity and Wildlife Corridors

Long-term (permanent) indirect impacts from noise and lighting would be **less than significant**.

Project Effects Relevant to Guideline E

The fenced solar panels and facilities would be unstaffed and therefore would be compatible with adjacent wildlife movement, since human activity would be limited. Although fencing is proposed around the solar facility, wildlife movement could still occur within the SDG&E easement that transects the Project site and drainage corridor along the western portion of the proposed solar facility. Therefore, with the incorporation of mitigation, the Proposed Project would result in a **less than significant** impact on corridor widths.

Project Effects Relevant to Guideline F

The placement of fencing and the solar facility within the Project site could disrupt the visual continuity of the Project site as a wildlife movement corridor. This impact is **potentially significant (Impact BI-WLC-2)**.

Local Policies, Ordinances and Adopted Plans**Project Effect as Relevant to Guideline A**

The Project site does not support coastal sage scrub; therefore, there are **no significant impacts** under this threshold.

Project Effect as Relevant to Guideline B

The Proposed Project would not conflict with the draft MSCP East County planning effort. Therefore, **no impacts** would occur.

Project Effect as Relevant to Guideline C

Although RPO wetlands occur within the Project site, the Proposed Project would avoid RPO wetlands and the wetland buffer. Therefore, **no impacts** would occur to RPO wetlands or wetland buffers.

Per County guidelines, the occupied burrowing owl habitat is considered sensitive habitat lands. Thus the impacts to occupied burrowing owl habitat would be **potentially significant (Impact BI-W-2)**.

Project Effect as Relevant to Guideline D

The Project site does not support coastal sage scrub; therefore, there are **no impacts** under this threshold.

Project Effect as Relevant to Guideline E

The Proposed Project conforms to the goals and requirements as outlined in all applicable regional planning efforts; therefore, **no impacts** would occur.

Project Effect as Relevant to Guideline F

Since there is no approved MSCP East County Plan and no associated BMO, this guideline does not apply to the Proposed Project and therefore **no impacts** would occur.

Project Effect as Relevant to Guideline G

In regard to wildlife Movement and Nursery Sites, development of the Proposed Project would convert the Project site from a large open space available for unimpeded wildlife movement. This impact would be **potentially significant (Impact BI-WLC-2)**.

Project Effect as Relevant to Guideline H

Since there is no approved MSCP East County Plan and no associated BMO, this guideline does not apply to the Proposed Project; therefore, **no impacts** would occur.

Project Effect as Relevant to Guideline I

This guideline only applies to areas with an adopted MSCP Plan. Since there is no approved MSCP East County Plan, this guideline does not apply to the Proposed Project; therefore, **no impacts** would occur.

Project Effect as Relevant to Guideline J

Quino Checkerspot Butterfly

The Proposed Project would not reduce the likelihood of survival or recovery of Quino checkerspot butterfly in the wild. Therefore, the Proposed Project would have **no impacts** (direct or indirect) on Quino checkerspot butterfly, including host plants.

Tricolored Blackbird

The Proposed Project would impact 593.5 acres of potential tricolored blackbird foraging habitat within the Project site. Because the tricolored blackbird is a listed species, based on the County's guidelines, the impacts to tricolored blackbird would be **potentially significant (Impact BI-W-2)**.

Project Effect as Relevant to Guideline K

The Proposed Project would have potential impacts to migratory birds (**Impact BI-W-3**).

Project Effect as Relevant to Guideline L

Based on the limited use on site by golden eagles, the Proposed Project would not result in the take of eagles, eagle eggs, or any part of an eagle. Due to lack of recent nesting by golden eagles in this area, permanent direct impacts to golden eagle would be **less than significant**.

Cumulative Impacts

Candidate, Sensitive, or Special-Status Species

Special-Status Plant Species

The Proposed Project would result in direct impacts to small populations of two plant species (22 individuals total) and could temporarily impact one small population of sticky geraea during construction. These impacts, when added to the potential impacts to suitable habitat from other projects, would not result in a reduced distribution of these two species in the region. Therefore, loss of special-status plant species from the Proposed Project combined with the reasonably foreseeable cumulative projects would **not contribute to a cumulatively considerable impact**.

Indirect impacts stemming from the Proposed Project could affect one population of sticky geraea located at the development edge. The remaining populations of special-status plants would be located away from the Proposed Project development. Given the potential impact to only one small population of one plant species, the Proposed Project would **not contribute to a cumulatively considerable significant impact** on special-status plant species.

Special-Status Wildlife Species

The suite of wildlife species that occur or have potential to occur within the biological study area are wide-ranging and occur in a wide variety of habitat types that occur throughout the biological cumulative analysis study area. The Proposed Project would **not contribute to a cumulatively considerable significant impact**.

The Proposed Project and other reasonably foreseeable cumulative projects are located in a rural area and adjacent properties provide undeveloped areas for wildlife to evacuate. Additionally, there is suitable habitat available for wildlife species on portions of the Project site and throughout the biological cumulative analysis study area. Therefore, the potential for construction-related wildlife disturbance and mortality impacts from the Proposed Project combined with the reasonably foreseeable cumulative projects would **not contribute to a cumulatively considerable impact**.

Riparian Habitat or Sensitive Natural Community

The cumulative scenario would impact less than 1% of the total cumulative analysis study area; therefore, vegetation communities would not become limited in acreage or extent within the cumulative analysis area. Therefore, the Proposed Project would **not contribute to a cumulatively significant impact**.

Wildlife Movement

The Proposed Project has been designed to maintain movement corridors throughout the Project site and concentrate development in the least sensitive portions of the Project site. Therefore, when combined with other projects in the cumulative area, the Proposed Project would not **contribute to a cumulatively significant impact** on wildlife movement.

In addition, the cumulative analysis area is largely undeveloped, and wildlife movement through and around the reasonably foreseeable cumulative project areas would still be possible. Despite the development of these projects, the area would remain predominantly rural with significant undeveloped areas and wildlife movement opportunity. Additionally, the total acreage of vegetation communities analyzed in the biological cumulative analysis study area is approximately 499,048 acres and the Proposed Project combined with reasonably foreseeable cumulative projects would only impact approximately 0.91% of the total acreage. Therefore, impacts from the Proposed Project combined with the reasonably foreseeable cumulative projects would be **less than significant** for habitat linkages and wildlife movement corridors.

Local Policies, Ordinances, and Adopted Plans

A cumulative impact to regional planning would occur if the reasonably foreseeable cumulative projects, combined with the Proposed Project, conflict with one or more local policies or ordinances protecting biological resources. Those projects within the biological cumulative analysis study area would, similar to the Proposed Project, be within the future MSCP East County Plan area. The cumulative projects under the land use planning jurisdiction of the County of San Diego would be reviewed for consistency with the draft MSCP East County Plan currently in progress (no schedule for completion currently). Therefore, reasonably foreseeable projects, in combination with the Proposed Project, would not cumulatively contribute to a potential conflict with local plans, and the Proposed Project would **not contribute to a cumulatively significant impact**.

2.3.6 Mitigation Measures

M-BI-1 Biological Monitoring.

- (a) In order to prevent inadvertent disturbance to sensitive resource areas outside the approved area of impact, a County of San Diego (County)-approved biologist

(Project Biologist) shall be contracted to perform biological monitoring during all grading, clearing, grubbing, trenching, and construction activities.

1. The Project Biologist shall perform the monitoring duties before, during, and after construction pursuant to the most current version of the County *Biological Report Format and Requirement Guidelines*. The contract provided to the County shall include an agreement that this will be completed, and a memorandum of understanding between the biological consulting company and the County shall be executed. The contract shall include a cost estimate for the monitoring work and reporting. In addition to performing monitoring duties pursuant to the most current version of the County *Biological Report Format and Requirement Guidelines*, the Project Biologist shall also perform the following duties:
 - a. Attend the pre-construction meeting with the contractor and other key construction personnel prior to clearing, grubbing, or grading to reduce conflict between the timing and location of construction activities with other mitigation requirements (e.g., seasonal surveys for nesting birds).
 - b. Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas prior to clearing, grubbing, or grading and clarifying that the Project Biologist has the authority to halt work that could harm or harass a protected species.
 - c. Review and/or designate the construction area in the field with the contractor in accordance with the final grading plan prior to clearing, grubbing, or grading.
 - d. Discuss procedures/training for minimizing harm to or harassment of wildlife encountered during construction with the contractor and other key construction personnel prior to clearing, grubbing, or grading.
 - e. Conduct a field review of the staking to be set by the surveyor, designating the limits of all construction activity prior to clearing, grubbing, or grading.
 - f. Supervise and monitor vegetation clearing, grubbing, and grading to ensure against direct and indirect impacts on biological resources that are intended to be protected and preserved.
 - g. Flush special-status species (i.e., avian or other mobile species) from occupied habitat areas immediately prior to brush-clearing and

earthmoving activities. If brush-clearing and earth-moving activities take place within the bird breeding season, flushing shall not occur in an area identified as having an active nest and thus resulting in a potential take of a species.

- h. Verify that grading plans include a stormwater pollution prevention plan (SWPPP) (if required pursuant to provisions of the State Water Resources Control Board 2009-0009-DWQ Construction General Permit, or equivalent applying the standards set forth in the County of San Diego Stormwater Standards Manual) to address hydrology impacts; see **M-BI-7**.
 - i. Periodically monitor the construction site to see that dust is minimized according to the fugitive dust control plan and that temporarily impacted areas are revegetated as soon as possible.
 - j. Periodically monitor the construction site to verify that artificial security light fixtures are directed away from open space and are shielded.
 - k. Oversee the construction site so that cover and/or escape routes for wildlife from excavated areas are provided on a daily basis during vegetation clearing, grubbing and grading. All steep trenches, holes, and excavations during construction shall be covered at night with backfill, plywood, metal plates, or other means, and the edges covered with soils and plastic sheeting such that small wildlife cannot access them. Soil piles shall be covered at night to prevent wildlife from burrowing in. The edges of the sheeting shall be weighted down with sandbags. These areas may also be fenced to prevent wildlife from gaining access. Exposed trenches, holes, and excavations shall be inspected twice daily (i.e., each morning and prior to sealing the exposed area at the end of the day) by a qualified biologist to monitor for wildlife entrapment. Excavations shall provide an earthen ramp to allow for a wildlife escape route.
 - l. Except as stated otherwise herein, biological monitoring is daily during vegetation clearing, grubbing and grading. Once the PV field construction commences, the monitoring shall be weekly.
2. The cost of the monitoring shall be added to the grading bonds or bonded separately with the County Planning & Development Services (PDS).

Documentation: The Applicant shall provide a copy of the biological monitoring contract, cost estimate, and MOU to the PDS. Additionally, the cost amount of the monitoring work shall be added to the grading bond cost estimate.

Timing: Prior to approval of any grading and or improvement plans and issuance of any grading or construction permits.

Monitoring: The PDS shall review the contract, MOU, and cost estimate or separate bonds for compliance with this condition. The cost estimate should be forwarded to the Project manager, for inclusion in the grading bond cost estimate, and grading bonds. The DPW/PDS shall add the cost of the monitoring to the grading bond costs.

(b) In order to ensure that the biological monitoring occurred during the grading phase of the Project, a final biological monitoring report shall be prepared. The Project Biologist shall prepare the final biological monitoring report. The report shall substantiate the supervision of the grading activities, and confirm that grading or construction activities did not impact any additional areas or any other sensitive biological resources. The report shall conform to the County *Report Format Guidelines for Biological Resources*, and include the following items:

- a. Photos of the fencing or temporary flagging that was installed during the trenching, grading, or clearing activities
- b. Monitoring logs showing the date and time that the monitor was on site
- c. Photos of the site after the grading and clearing activities.

Documentation: The Project Biologist shall prepare the final report and submit it to the PDS for review and approval.

Timing: Prior to any occupancy, final grading release, or use of the premises in reliance of this permit, the final report shall be approved.

Monitoring: The PDS shall review the final report for compliance with this condition and the report format guidelines. Upon approval of the report, PDS shall inform DPW that the requirement is complete and the bond amount can be relinquished. If the monitoring was bonded separately, then PDS shall inform the applicant to release the bond back to the Applicant.

(c) Compliance with this measure shall be required during decommissioning activities.

M-BI-2

Temporary Construction Fencing. Prior to issuance of permits, including clearing, grubbing, grading, and/or construction permits, the project applicant or its designee shall install fencing wherever the limits of grading are adjacent to sensitive vegetation communities or other biological resources, as identified by the Project Biologist. Fencing shall remain in place during all construction activities. All temporary fencing shall be shown on plans. Prior to release of grading and/or

improvement bonds, a qualified biologist shall provide evidence to the satisfaction of the Director of the San Diego County Department of Planning and Development Services (or his/her designee) that work was conducted as authorized under the approved permits and associated plans.

M-BI-3 Habitat Preservation. In order to mitigate for impacts to loss of sensitive vegetation communities, plant and wildlife species habitat, special status plant species, burrowing owl occupied habitat, and wildlife movement, the applicant shall provide an on-site biological open space easement.

- (a) In order to protect sensitive biological resources, pursuant to the Resource Protection Ordinance (RPO) and California Environmental Quality Act, a biological open space easement will be granted over up to 435.00 acres of sensitive vegetation communities, special-status plant species, and habitat for special-status species. The project is estimated to impact sensitive vegetation communities that require mitigation as summarized in the following table.

Vegetation Community/Land Cover	Ratio	Permanent Direct Impacts (Acres)	Required Mitigation (Acres)	Biological Open Space Easement (Acres)
*Desert saltbush scrub	2:1	50.39	100.78	4.69
*Desert sink scrub	3:1	—	—	12.43
*Disturbed freshwater marsh	3:1	—	—	0.08
*Mesquite bosque	3:1	2.64	7.92	126.12
*Sonoran mixed woody scrub	1:1	—	—	139.33
*Sonoran mixed woody and succulent scrub	1:1	72.85	72.85	132.05
*Tamarisk scrub	3:1	1.11	3.33	—
*Non-wetland waters of the United States/state	1:1	—	—	0.78
Fallow agriculture ¹	0.5:1	467.63	233.82	9.35
Disturbed habitat	N/A	27.27	—	10.17
Urban/developed	N/A	21.24	—	<0.01
Total	—	643.13	418.70	435.00

Note: An asterisk (*) marks land cover types for which the County of San Diego (2010a) requires mitigation.

¹ The fallow agriculture is considered raptor foraging habitat mitigated at a 0.5:1 mitigation ratio.

This biological open space easement shall mitigate for project impacts to sensitive vegetation communities and habitat for wildlife species, thereby preserving compensatory habitat that provides equal or greater benefit to plant and wildlife species. This biological open space easement will be granted to the County of San Diego (County). Granting of this open space authorizes the County and its agents to periodically access the land to perform management

and monitoring activities for the purposes of species and habitat conservation. This easement is for the protection of biological resources and prohibits all of the following on any portion of the land subject to said easement: grading; excavation; placement of soil, sand, rock, gravel, or other material; clearing of vegetation; construction, erection, or placement of any building or structure; vehicular activities; trash dumping; or use for any purpose other than as open space. Granting of this open space authorizes the County and its agents to periodically access the land to perform management and monitoring activities for the purposes of species and habitat conservation. The only exceptions to this prohibition are (1) vegetation clearing by hand, by written order of the fire authority for reduction of an identified fire hazard; (2) activities conducted pursuant to an approved revegetation or resource management plan; (3) vector control by written order of the County; and (4) construction, use, and maintenance of approved multi-use, non-motorized trails. No trails have been approved as part of this Project and would require subsequent environmental review and approval by PDS. Permanent signage indicating the area is a biological open space will be required and will be installed by the developer.

Documentation: The applicant shall prepare the draft plats and legal descriptions of the easements, then submit them for preparation and recordation with the DGS, and concurrence with PDS, and pay all applicable fees associated with preparation of the documents.

Timing: Prior to approval of any plan or issuance of any permit, and prior to use of the premises in reliance of this permit the easements shall be recorded.

Monitoring: The DGS shall prepare and approve the easement documents and send them to PDS for pre-approval. The PDS shall pre-approve the language and estimated location of the easements before they are released to the applicant for signature and subsequent recordation. Upon Recordation of the easements, DGS shall forward a copy of the recorded documents to PDS for satisfaction of the condition.

(b) **Special-Status Plants.** Mitigation shall be provided for one pygmy lotus (County List A) and 21 sticky gerardia individuals (County List B). County List A plant species will be mitigated at a 3:1 ratio, and County List B species will be mitigated at a 1:1 mitigation ratio. Mitigation for these plants shall be achieved through a combination of (1) salvaging the plants located in proposed impact areas and replanting in suitable mitigation lands, and (2) establishment of additional plants to meet the mitigation requirements. The Resource Management Plan (RMP) for the biological open space easement shall include the required measures to ensure viability of the transplanted and established

individuals. The RMP (see M-BI-4) will include the locations of the plant restoration. The RMP will be the basis for monitoring and mitigation activities for the entire biological open space, including locations of plant mitigation.

Documentation: The applicant shall prepare an RMP and submit it to PDS and pay all applicable review fees.

Timing: Prior to approval of any plan or issuance of any permit, and prior to use of the premises in reliance of this permit the easements shall be recorded.

Monitoring: A RMP Annual Report will be submitted to the County along with the submittal fee to cover County staff review time.

(c) **Burrowing owl occupied habitat.** Based on mitigation ratios provided in Table 1 of the Strategy for Mitigating Impacts to Burrowing Owls in the Unincorporated County (Attachment A, County of San Diego 2010b), the project is required to provide 1:1 mitigation ratio for impacts to occupied burrowing owl habitat. Impacts to burrowing owl habitat will be mitigated by dedicating 22 acres of suitable burrowing owl habitat as an on-site biological open space easement. This acreage is included in the overall up to 435-acre biological open space easement. This area is comprised of open, relatively flat habitat which contains similar vegetation communities as the impacted habitat. This biological open space easement shall mitigate for project impacts to occupied burrowing owl habitat. Refer to M-BI-3(a) which describes the biological open space easement requirements.

(d) **Wildlife Corridor Access.** The project shall provide a 50 to 100 foot opening in the perimeter fence north of the SDG&E easement to allow for wildlife moving within the easement corridor or north of the easement to move in and out of the easement. The opening in the fence will allow wildlife traveling along the fence line to find a break in the fencing leading them into the larger wildlife corridor. This opening in the fence shall be provided and maintained for the life of the project.

Documentation: The fencing on the construction plans shall show an opening in the perimeter fencing as described above. The applicant shall install the project fencing or walls as indicated above and provide site photos and a statement from a California Registered Engineer, or licensed surveyor that the fencing has been installed to provide the required opening.

Timing: Prior to approval of any plan or issuance of any permit, and prior to use of the premises in reliance of this permit the easements shall be recorded.

Monitoring: The [PDS, PCC] shall review the photos and statement for compliance with this condition.

M-BI-4 Resource Management Plan (RMP). In order to provide for the long-term management of the proposed on-site biological open space, an RMP will be prepared and implemented. The final RMP cannot be approved until the following has been completed to the satisfaction of the Director of Planning & Development Services as follows:

1. The plan will be prepared and approved pursuant to the most current version of the County of San Diego (County) Biological Report Format and Content Requirements.
2. The habitat land to be managed will be owned by a land conservancy or equivalent.
3. Open space easements will be dedicated to the County in perpetuity, unless conveyed to another public agency subject to approval by the Director of PDS.
4. A resource manager will be selected and approved, with evidence provided demonstrating acceptance of this responsibility.
5. The RMP funding mechanism to fund annual costs for basic stewardship shall be identified and approved by the County. The RMP funding mechanism will be identified and adequate to fund annual costs for implementation; typically determined by a Property Analysis Record as a non-wasting endowment.
6. A contract between the applicant and County will be executed for the implementation of the RMP.

Documentation: The applicant shall prepare an RMP and submit it to PDS and pay all applicable review fees.

Timing: Prior to approval of any plan or issuance of any permit, and prior to use of the premises in reliance on this permit, the RMP shall be approved.

Monitoring: The PDS shall review the RMP for compliance with the content guidelines, the conceptual RMP, and this condition.

M-BI-5 This mitigation measure serves to avoid take of birds protected under the Migratory Bird Treaty Act and California Fish and Game Code during the nesting season (M-BI-5(a)) and take avoidance for burrowing owls during the breeding and non-breeding season (M-BI-5(b)).

(a) Nesting Bird Survey. To avoid any direct impacts on raptors and/or any migratory birds protected under the Migratory Bird Treaty Act and California Fish and Game Code, removal of habitat that supports active nests on the

proposed area of disturbance shall occur outside the nesting season for these species (which is January 15 through August 31, annually). If construction work must occur during the avian breeding season (January 15 to August 31, annually), the applicant shall:

1. Work with the County, CDFW and the USFWS to prepare a Nesting Bird Management, Monitoring, and Reporting Plan (NBMMRP) to address avoidance of impacts to nesting birds.
 - a. The applicant(s) will submit to the agencies the NBMMRP (see following for details) for review and approval prior to commencement of the project during the breeding season. The NBMMRP should include the following:
 - b. Nest survey protocols describing the nest survey methodologies
 - c. A management plan describing the methods to be used to avoid nesting birds and their nests, eggs, and chicks
 - d. A monitoring and reporting plan detailing the information to be collected for incorporation into a regular Nest Monitoring Log (NML) with sufficient details to enable USFSW and CDFW to monitor the applicant's compliance with Fish and Game Code Sections 3503, 3503.5, 3511, and 3513
 - e. A schedule for the submittal (usually weekly) of the NML
 - f. Standard buffer widths deemed adequate to avoid or minimize significant project-related edge effects (disturbance) on nesting birds and their nests, eggs, and chicks
 - g. A detailed explanation of how the buffer widths were determined.
 - h. All measures the applicant will implement to preclude birds from utilizing project-related structures (i.e., construction equipment, facilities, or materials) for nesting.
2. Conduct preconstruction nesting bird surveys within 72 hours of construction-related activities; conduct preconstruction survey sweeps immediately prior to ground-disturbing activities; and implement appropriate avoidance measures for identified nesting birds in the NBMMRP. Resurvey, if construction activities are halted for ten consecutive days.
3. To determine presence of nesting birds that the project activities may affect, surveys shall be conducted beyond the project area—300 feet for passerine

birds and 500 feet for raptors. The survey protocols shall include a detailed description of methodologies utilized by CDFW-approved avian biologists to search for nests and describe avian behaviors that indicate active nests. The protocols shall include but are not limited to the size of the project area being surveyed, method of search, and behavior that indicates active nests.

4. Each nest identified in the project area shall be included in the NML. The NMLs should be updated daily and submitted to the CDFW weekly. Since the purpose of the NMLs is to allow the CDFW to track compliance, the NMLs shall include information necessary to allow comparison between nests protected by standard buffer widths recommended for the project (300 feet for passerine birds, 500 feet for raptors) and nests whose standard buffer width was reduced by encroachment of project-related activities. The NMLs shall provide a summary of each nest identified, including the species, status of the nest, buffer information, and fledge or failure data. The NMLs shall allow for tracking the success and failure of the buffers and would provide data on the adequacy of the buffers for certain species.
5. The applicant(s) will rely on its avian biologists to determine the appropriate standard buffer widths for nests within the project corridor/footprint to employ based on the sensitivity levels of specific species or guilds of avian species. The determination of the standard buffer widths shall be site- and species-/guild-specific and data-driven and not based on generalized assumptions regarding all nesting birds. The determination of the buffer widths shall consider the following factors:
 - a. Nesting chronologies
 - b. Geographic location
 - c. Existing ambient conditions (human activity within line of sight—cars, bikes, pedestrians, dogs, noise)
 - d. Type and extent of disturbance (e.g., noise levels and quality—punctuated, continual, ground vibrations—blasting-related vibrations proximate to tern colonies are known to make the ground-nesting birds flush the nests)
 - e. Visibility of disturbance
 - f. Duration and timing of disturbance
 - g. Influence of other environmental factors
 - h. Species' site-specific level of habituation to the disturbance.

6. Application of the standard buffer widths shall avoid the potential for project-related nest abandonment and failure of fledging and minimize any disturbance to the nesting behavior. If project activities cause or contribute to a bird being flushed from a nest, the buffer must be widened. This measure does not apply to nests that are started on construction equipment or panels or supporting structures.

Documentation: The Project Biologist shall prepare the final report and submit it to the PDS for review and approval.

Timing: Prior to any occupancy, final grading release, or use of the premises in reliance of this permit, the final report shall be approved.

Monitoring: The PDS shall review the final report for compliance with this condition and the report format guidelines. Upon approval of the report, PDS shall inform the applicant that the requirement is complete and the bond amount can be relinquished. If the monitoring was bonded separately, then the PDS shall inform DPW to release the bond back to the applicant.

(b) Burrowing Owl Take Avoidance Surveys. Take avoidance surveys are intended to detect the presence of burrowing owls on a project site at a fixed period in time and inform necessary take avoidance actions. Take avoidance surveys may detect changes in owl presence such as colonizing owls that have recently moved onto the site, migrating owls, resident burrowing owls changing burrow use, or young of the year that are still present and have not dispersed (CDFG 2012). Surveys must be completed no less than 14 days prior to the initiating ground disturbance activities.

1. If burrowing owls are detected during the breeding season (February 1 through August 1) surveys, a Burrowing Owl Management Plan will need to be written and approved by the County and the California Department of Fish and Wildlife before construction continues. The Plan shall include, at a minimum: 1) measures to protect burrowing owls during grading; 2) description of passive or active burrowing relocation during the non-breeding season; and 3) description of BMPs to implement during construction (e.g., ensure that the ends of all pipes and culverts are covered when they are not being worked on, and covering rubble piles, dirt piles, ditches, and berms). Table 6-2, Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls, provides the CDFW-recommended restricted activity dates and setback distances around occupied burrowing owl nests for varying levels of disturbance (CDFG 2012).

2. If construction activities occur during the non-breeding season for burrowing owl (1 September – 31 January), a biologist shall conduct a take avoidance survey, following the methods described in the Burrowing Owl Staff Report (CDFG 2012). The take avoidance survey(s) can be conducted between 14 days and 24 hours prior to initiating ground disturbance activities; however, time lapses between project activities may require subsequent surveys within 24 hours prior to ground disturbance. If any burrowing owls are found during these surveys, avoidance and minimization measures must be implemented.

The following avoidance and minimization measures shall be implemented:

- a. Avoid working within 50 meters (160 feet) from the occupied burrow during the non-breeding season;
- b. Avoid direct destruction of occupied burrows during the non-breeding season until the burrowing owl has vacated the burrow (determined through monitoring of the burrow);

If these measures cannot be implemented, the applicant shall obtain written approval of an accepted plan (written or verbal) from the County and the California Department of Fish and Wildlife before construction continues. The plan shall include 1) identification of artificial burrow sites, 2) passive relocation methods, 3) monitoring and management of the artificial burrow site, and 4) reporting.

Documentation: The Project Biologist shall prepare the final survey report and/or Burrowing Owl Management Plan and submit it to the PDS for review and approval.

Timing: Prior to final grading release, or use of the premises in reliance of this permit, the final survey report and/or Burrowing Owl Management Plan shall be approved.

Monitoring: The PDS shall review the final survey report and/or Burrowing Owl Management Plan for compliance with this condition and the report format guidelines. Upon approval of the report, PDS shall inform the applicant that the requirement is complete and the bond amount can be relinquished.

- (c) In order to avoid impacts to nesting birds and burrowing owls during decommissioning the Project operator shall be required to implement the measures outlined in subsections (a) and (b) prior to undertaking decommissioning activities.

M-BI-6 Bat Surveys and Roost Avoidance or Exclusion. To determine whether there is an active maternity roost within the buildings and other structures to be demolished, a bat biologist shall conduct surveys prior to demolition of the buildings or any other areas that provide suitable roosting habitat for bats. If a potential maternity roost is present, the following measures shall be implemented to reduce the potential impact on special-status bat species to a less than significant level:

- a. **Maternity Roosting Season Avoidance.** All demolition activities, or bat roost exclusion, shall occur outside the general bat maternity roosting season of March through August to reduce any potentially significant impact to maternity roosting bats. If the maternity roosting season cannot be avoided, then roost exclusion can occur outside the maternity roosting season (September through February) to exclude bats from the demolition area prior to the start of demolition during the maternity roosting season. Items b and c below will be required to ensure no impacts occur to roosting bats during the exclusion process.
- b. **Replacement Roost Installation.** If there is a potential or known maternity roost within a structure to be demolished, a replacement roost installation shall occur outside of the maternity roosting season within the biological open space easement. At least one month prior to the exclusion of bats from the roost(s), the project applicant will procure and install two bat boxes from a reputable vendor, such as Bat Conservation and Management, to allow bats sufficient time to acclimate to a new potential roost location. The bat boxes shall be installed in an area that is close to suitable foraging habitat as determined by a biologist who specializes in bats in consultation with County staff. Additionally, the bat boxes will be oriented to the south or southwest, and the area chosen for the bat boxes must receive sufficient sunlight (at least 6 hours daily) to allow the bat boxes to reach an optimum internal temperature (approximately 90°F) to mimic the existing bat roost. The bat boxes will be suitable to house crevice-roosting bat species, and large enough to contain a minimum of 50 bats (e.g., Four Chamber Premium Bat House or Bat Bunker Plus). The bat boxes shall be installed on a 20-foot-tall steel pole. Should the bat boxes be required, maintenance of the boxes will be included in the RMP to ensure long-term use/functionality.
- c. **Roost Exclusion.** Roost exclusion must only occur September through February to increase the potential to exclude all bats from roosts and minimize the potential for a significant impact to occur by avoiding the maternity roosting season. Approximately one month after bat boxes have been installed, exclusion of the existing roost within the buildings will occur. The primary exit points for roosting bats will be identified, and all secondary ingress/egress locations on the buildings

will be covered with a tarp or wood planks to prevent bats from leaving from other locations. The primary exit point will remain uncovered to allow exclusion devices to be installed. Exclusion devices will consist of a screen (e.g., poly netting, window screen, or fiberglass screening) with mesh 1/6 of an inch or smaller, installed at the top of the roost location and sealed and passing 2 feet below the bottom of the primary exit point. The exclusion devices will be installed at night to increase the potential that bats will have already left the roost and are less likely to return. Exclusion devices will be left in place for one week to ensure that any remaining bats in the roost(s) are excluded. A passive acoustic monitoring detector will also be deployed during the exclusion period in order to verify excluded species and monitor whether bat activity has decreased during the exclusion period. Periodic monitoring should also be conducted during the exclusion period to observe whether any bats are still emerging from additional areas within the impact footprint, and an active monitoring survey should be conducted on the final night of exclusion to ensure that no bats are emerging from the buildings and determine whether exclusion has been successful. Any continued presence of roosting bats will require an adjustment to the exclusion devices and schedule. The exclusion devices may remain in place until the start of demolition activities. If any bats are found roosting in any proposed demolition areas prior to demolition, additional exclusion will be required and follow the same methodology described in this mitigation measure. This will occur until all bats are excluded.

- d. **Survey Report.** Following completion of the survey the bat biologist will complete a survey report which records the findings. If active roosts are observed, and the maternity roosting season cannot be avoided, and bats must be removed, the report will also document the replacement roost installation and roost exclusion.

Documentation: The Project Biologist shall prepare the final report and submit it to the PDS for review and approval.

Timing: Prior to final grading release, or use of the premises in reliance of this permit, the final report shall be approved.

Monitoring: The PDS shall review the final report for compliance with this condition and the report format guidelines. Upon approval of the report, PDS shall inform the applicant that the requirement is complete and the bond amount can be relinquished.

M-BI-7 Biological Monitoring of Stormwater Pollution Prevention Plan (SWPPP) Implementation. During construction monitoring, the Project Biologist shall verify the following are implemented:

- a. No planting or seeding of invasive plant species on the most recent version of the California Invasive Plant Council's California Invasive Plant Inventory for the project region.
- b. Dust-control fencing is in place and intact if fencing is required.
- c. Construction activity is located outside of jurisdictional waters of the United States/state except as authorized by applicable law and permit(s), including permits and authorizations approved by the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and Regional Water Quality Control Board.
- d. Silt-settling basins installed during the construction process are located away from areas of ponded or flowing water to prevent discolored, silt-bearing water from reaching areas of ponded or flowing water during normal flow regimes. Design of drainage facilities shall incorporate long-term control of pollutants and stormwater flow to minimize pollution and hydrologic changes.
- e. Temporary structures, staging, and storage areas for construction equipment and/or materials are located outside of jurisdictional waters, including wetlands and riparian areas.
- f. No material stockpiles, debris, bark, slash sawdust, rubbish, cement, concrete or washing thereof, oil, or petroleum products are stored where they may be washed by rainfall or runoff into jurisdictional waters of the United States/state.
- g. When construction operations are completed, excess materials or debris have been removed from the work area.
- h. No equipment maintenance is performed within or near jurisdictional waters of the United States/state where petroleum products or other pollutants from the equipment may enter these areas.
- i. Fully covered trash receptacles that are animal-proof and weather-proof are installed and used by the operator to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Littering is prohibited and removal of trash from construction areas daily is required. All food-related trash and garbage are removed from construction sites on a daily basis.
- j. There are no pets on or adjacent to construction sites.
- k. Speed limits in and around all construction areas are enforced so that vehicles do not exceed 15 miles per hour on unpaved roads and the right-of-way accessing the construction site, or 10 miles per hour during the night.

M-BI-8 Prevention of Chemical Pollutants. Weed control treatments shall include all legally permitted chemical, manual, and mechanical methods applied with the authorization of the County of San Diego (County) agriculture commissioner. The application of herbicides shall be in compliance with all federal and state laws and regulations under the prescription of a licensed Pest Control Adviser with at least 2-years' experience and implemented by a licensed applicator. Where manual and/or mechanical methods are used, disposal of the plant debris shall follow the regulations set by the County agriculture commissioner. The timing of the weed control treatment shall be determined for each plant species in consultation with the Pest Control Adviser, the County agriculture commissioner, and the California Invasive Plant Council, with the goal of controlling populations before they start producing seeds.

During project operation, all areas that use chemicals that are potentially toxic or impactive to sensitive habitats or plants shall incorporate best management practices (e.g., avoid applications during or before rain events and avoid placing materials close to sensitive habitats) on site to reduce impacts caused by the application and/or drainage of such materials within the development footprint. In addition, use of rodenticides shall not be allowed. Weed treatment shall occur at least once per year throughout the life of the project.

M-BI-19 Prevention of Invasive Plant Species. A County of San Diego-approved plant list shall be used for areas immediately adjacent to open space. A hydroseed mix that incorporates native species, is appropriate to the area, and is free from invasive species shall be used for landscaped areas adjacent to the biological open space. The San Diego County Planning & Development Services landscape architect shall require that all final landscape plans comply with the following: no invasive plant species, as included on the most recent version of the California Invasive Plant Council's California Invasive Plant Inventory for the project region shall be included, and the plant palette shall be composed of native species that do not require high irrigation rates. The Project Biologist shall periodically check landscape products for compliance with these requirements.

M-BI-10 Operations and Maintenance Signage. Signage shall be posted at all entrances to the facility stating that operations and maintenance personnel shall be prohibited from the following:

- Harming, harassing, or feeding wildlife and/or collecting special-status plant or wildlife species

- Smoking
- Traveling (either on foot or in a vehicle) outside of the solar facility undisturbed portions of the Project site
- No pets
- No Littering
- No persons not conducting operations and maintenance activities shall remain at the facility after daylight hours or exceed normal nighttime operational noise or lighting

M-BI-11 Noise Reduction. Construction-related activities that are excessively noisy (e.g., clearing, grading, or grubbing) adjacent to breeding/nesting areas shall incorporate noise-reduction measures (described below) or be curtailed during the breeding/nesting season of sensitive bird species.

1. Trucks and other engine-powered equipment shall be equipped with noise reduction features, such as mufflers and engine shrouds, which are no less effective than those originally installed by the manufacturer.
2. Trucks and other engine-powered equipment shall be operated in accordance with posted speed limits and limited engine idling requirements.
3. Usage of truck engine exhaust compression braking systems shall be limited to emergencies.
4. Back-up beepers for all construction equipment and vehicles shall be adjusted to the lowest noise levels possible, provided that Occupational Safety and Health Administration (OSHA) and Cal OSHA's safety requirements are not violated. These settings shall be retained for the duration of construction activities.
5. Vehicle horns shall be used only when absolutely necessary, as specified in the contractor's specifications.
6. Radios and other noise-generating "personal equipment" shall be prohibited

If construction-related activities that are excessively noisy (e.g., clearing, grading, grubbing, or blasting) occur during the period of January 15 through August 31, a County of San Diego-approved biologist shall conduct preconstruction surveys in suitable nesting habitat adjacent to the construction area to determine the location of any active nests in the area (see **M-BI-5**).

- M-AQ-2** **Fugitive Dust Control Plan.** Refer to **M-AQ-2**, Fugitive Dust Control Plan.
- M-WF-1** **Fire Protection Plan (FPP).** Refer to **M-WF-1**, Fire Protection Plan.
- M-WF-2** **Construction Fire Protection Plan (CFPP).** Refer to **M-WF-2**, Construction Fire Protection Plan.

2.3.7 Conclusion

This section provides a synopsis of the conclusion reached in each of the impact analyses, and the level of impact that would occur after mitigation measures are implemented. A summary is also provided in Table 2.3-7, Summary of Significant Impacts and Mitigation.

Candidate, Sensitive or Special-Status Species

Focused surveys for special-status plants were conducted in spring and summer 2019. The significant short-term direct impacts to suitable habitat for special-status plants (**Impact BI-SP-1**), if they occur, will be reduced to a level that is **less than significant** through implementation of mitigation measures **M-BI-1** (biological monitoring), which prevents inadvertent disturbance to areas outside of the limits of grading, including areas where special-status species may occur, and **M-BI-2** (temporary construction fencing) which prevents inadvertent impacts to special-status plants. The significant long-term direct impacts to suitable habitat for special-status plants (**Impact BI-SP-2**) will be reduced to a level that is **less than significant** through implementation of mitigation measures **M-BI-3** (habitat preservation) and **M-BI-4** (Resource Management Plan (RMP)).

The significant short-term indirect impacts to suitable habitat for special-status plants (**Impact BI-SP-3**), if they occur, will be reduced to a level that is **less than significant** through implementation of mitigation measures **M-BI-1** (biological monitoring), **M-BI-2** (temporary construction fencing), **M-BI-7** (biological monitoring of SWPPP), **M-BI-8** (prevention of chemical pollutants), and **M-AQ-2** (fugitive dust control plan). The significant long-term indirect impacts to suitable habitat for special-status plants (**Impact BI-SP-4**), if they occur, will be reduced to a level that is **less than significant** through implementation of mitigation measures **M-BI-3** (habitat preservation), **M-BI-4** (RMP), **M-BI-8** (prevention of chemical pollutants), **M-BI-09** (prevention of invasive plant species), **M-BI-10** (Operations and Maintenance (O&M) signage), and **M-WF-1** (fire protection plan (FPP)).

Potential significant short-term direct impacts from loss of County Group 1 wildlife species (**Impact BI-W-1**) will be reduced to **less than significant** through implementation of mitigation measures **M-BI-1** (biological monitoring), which prevents inadvertent disturbance to areas outside of the limits of grading, including areas where special-status wildlife species may occur, and **M-BI-2** (temporary construction fencing). The significant long-term direct loss of habitat, including

foraging habitat, for some of the County of San Diego Group 1, Group 2, and/or SSC wildlife species will be reduced to **less than significant** through implementation of mitigation measure **M-BI-3** (habitat preservation), **M-BI-4** (RMP), and **M-BI-5** (nesting bird surveys).

The significant long-term direct impacts to any active nests or the young of nesting special-status bird species (**Impact BI-W-3**) will be reduced to **less than significant** through implementation of mitigation measure **M-BI-1** (biological monitoring) and **M-BI-5** (nesting bird surveys).

The significant long-term direct impacts to maternity bat roost sites (**Impact BI-W-4**) will be reduced to **less than significant** through implementation of mitigation measure **M-BI-6** (Bat Surveys and Roost Avoidance or Exclusion).

The significant short-term indirect impacts to avian foraging and wildlife access to foraging, nesting, or water resources (**Impact BI-W-5**) will be reduced to **less than significant** through implementation of mitigation measure **M-BI-1** (biological monitoring), **M-BI-2** (temporary construction fencing), **M-BI-5** (nesting bird surveys), **M-BI-7** (biological monitoring of SWPPP), **M-BI-10** (O&M signage), **M-BI-11** (noise reduction), and **M-AQ-2** (fugitive dust control plan).

The significant long-term indirect impacts on special-status wildlife species (**Impact BI-W-6**), if they occur, will be reduced to a level that is **less than significant** through implementation of mitigation measures **M-BI-3** (habitat preservation), **M-BI-4** (RMP), **M-BI-8** (prevention of chemical pollutants), **M-BI-9** (prevention of invasive plant species), **M-BI-10** (O&M signage), and **M-WF-1** (FPP).

Habitat Connectivity and Wildlife Corridors

The significant short-term direct impacts to habitat connectivity and wildlife movement (**Impact BI-WLC-1**) will be reduced to a level that is **less than significant** through implementation of mitigation measures **M-BI-1** (biological monitoring) and **M-BI-2** (temporary construction fencing). The significant long-term direct impacts to habitat connectivity between and wildlife movement (**Impact BI-WLC-2**) will be reduced to a level that is **less than significant** through implementation of mitigation measures **M-BI-3** (habitat preservation) and **M-BI-4** (RMP).

The significant temporary indirect impacts to habitat connectivity and wildlife corridors (**Impact BI-WLC-3**) will be reduced to a level that is **less than significant** through implementation of mitigation measures **M-BI-1** (biological monitoring), **M-BI-2** (temporary construction fencing), **M-BI-5** (nesting bird survey), **M-BI-7** (biological monitoring of SWPPP), and **M-BI-11** (noise reduction).

Riparian Habitat or Sensitive Upland Natural Community

Mitigation for some of the vegetation communities being impacted will be out-of-kind, as shown in Table 2.3-4. The Project site has an excess of desert sink scrub, disturbed freshwater marsh, mesquite bosque, Sonoran mixed woody scrub, Sonoran mixed woody and succulent scrub and unvegetated stream channel. These vegetation communities will be conserved as mitigation for impacts to desert saltbush scrub, tamarisk scrub and fallow agriculture. The 100.78 acres of mitigation required for impacts to 50.39 acres of desert saltbush scrub will be met through the preservation of 4.69 acres of like habitat, desert sink scrub (12.43 acres), mesquite bosque (24.46 acres), and Sonoran mixed woody and succulent scrub (59.20 acres). Both desert sink scrub and desert saltbush scrub vegetation communities have similar species composition and are both classified as Chenopod Scrub (36000) and therefore desert sink scrub is a suitable replacement vegetation for desert saltbush scrub. Sonoran mixed woody and succulent scrub has the same habitat structure as desert saltbush scrub and all of the special-status wildlife species present or with a high potential to occur, which would utilize desert saltbush scrub would also utilize Sonoran mixed woody and succulent scrub (see Table 2.3-3). The mesquite bosque provides habitat for several wildlife species which may also utilize desert saltbush scrub such as San Diegan tiger whiptail, Blainville's horned lizard, Cooper's hawk and mule deer (see Table 2.3-3). Mitigation for tamarisk scrub will be provided by the preservation of mesquite bosque (3.33 acres) which provides the same habitat structure as tamarisk scrub. The fallow agriculture is foraging habitat for raptors and other sensitive species observed and with potential to occur on-site; therefore will be mitigated at a 0.5:1 mitigation ratio. Impacts to 467.63 acres of fallow agriculture will be mitigated through the preservation of 233.82 acres of the following vegetation communities: fallow agriculture (9.35 acres), mesquite bosque (90.41 acres), Sonoran mixed woody scrub (133.27 acres), and unvegetated streambed (0.78 acres). Each of these communities is expected to provide foraging habitat for various wildlife species, such as California glossy snake, San Diegan tiger whiptail, tri-colored blackbird, Vaux's swift and Jacumba pocket mouse, including any raptors which may currently utilize the site (see Table 2.3-3). Therefore, the various habitats included in the biological open space easement will provide a similar biological function and value as the habitat being impacted.

The significant short-term direct impacts to sensitive vegetation communities (**Impact BI-V-1**) will be reduced to a level that is **less than significant** through implementation of mitigation measures **M-BI-1** (biological monitoring) and **M-BI-2** (temporary construction fencing). The significant long-term direct impacts to sensitive vegetation communities (**Impact BI-V-2**) will be reduced to a level that is **less than significant** through implementation of mitigation measures **M-BI-3** (habitat preservation) and **M-BI-4** (RMP)

The significant short-term indirect impacts to sensitive vegetation communities (**Impact BI-V-3**) will be reduced to a level that is **less than significant** through implementation of mitigation measures **M-**

BI-1 (biological monitoring), **M-BI-2** (temporary construction fencing), **M-BI-7** (biological monitoring of SWPPP), **M-BI-8** (prevention of chemical pollutants), and **M-AQ-2** (fugitive dust control plan). The significant long-term indirect impacts to sensitive vegetation communities (**Impact BI-V-4**) will be reduced to a level that is **less than significant** through implementation of mitigation measures **M-BI-3** (habitat preservation), **M-BI-4** (RMP), **M-BI-8** (prevention of chemical pollutants), **M-BI-9** (prevention of invasive plant species), and **M-WF-1** (FPP).

Jurisdictional Resources

The Proposed Project would result in **no impacts** to potential ACOE and RWQCB non-wetland waters or CDFW streambeds.

The significant short-term direct impacts to jurisdictional aquatic resources (**Impact BI-JAR-1**) will be reduced to a level that is **less than significant** through implementation of mitigation measures **M-BI-1** (biological monitoring), **M-BI-2** (temporary construction fencing), **M-BI-7** (biological monitoring of SWPPP), **M-BI-8** (prevention of chemical pollutants), **M-BI-9** (prevention of invasive plant species), **M-AQ-2** (fugitive dust control plan), and **M-WF-2** (CFPP).

The significant short-term indirect impacts to jurisdictional aquatic resources (**Impact BI-JAR-2**) will be reduced to a level that is **less than significant** through implementation of mitigation measures **M-BI-1** (biological monitoring), **M-BI-2** (temporary construction fencing), **M-BI-7** (biological monitoring of SWPPP), **M-BI-8** (prevention of chemical pollutants), **M-BI-9** (prevention of invasive plant species), **M-AQ-2** (fugitive dust control plan), and **M-WF-2** (CFPP).

The significant long-term indirect impacts to jurisdictional aquatic resources (**Impact BI-JAR-3**) will be reduced to a level that is **less than significant** through implementation of mitigation measures **M-BI-3** (habitat preservation), **M-BI-4** (RMP), **M-BI-8** (prevention of chemical pollutants), **M-BI-9** (prevention of invasive plant species), and **M-WF-1** (FPP).

Cumulative Impacts

The Proposed Project would not result in cumulatively considerable impacts to sensitive biological resources including special-status plant and wildlife species, sensitive habitat and wildlife movement corridors due to the small amount of impact in the larger landscape, type of habitat impacted and project design.

Table 2.3-1
Vegetation Communities and Land Covers

Vegetation Community or Land Cover	Code ¹	Acres	Typical County Mitigation Requirement
<i>Sensitive Vegetation Communities and Land Covers</i>			
Big Sagebrush Scrub	35210	0.26	2:1
Desert Saltbush Scrub	36110	77.39	2:1
Desert Sink Scrub	36120	12.43	3:1
Disturbed freshwater marsh	52400	0.08	3:1
Mesquite Bosque	61820	133.61	3:1
Sonoran Mixed Woody Scrub	33210	139.34	1:1
Sonoran Mixed Woody and Succulent Scrub	33220	390.34	1:1
Tamarisk scrub	63810	2.11	3:1
<i>Sensitive Vegetation Communities and Land Covers Subtotal</i>		755.55	—
<i>Non-Sensitive Land Covers</i>			
Disturbed Habitat	11300	55.00	N/A
Fallow agriculture	N/A	508.46	N/A
Urban/Developed	12000	26.00	N/A
<i>Non-Sensitive Land Covers</i>		589.47	—
Non-wetland waters of the U.S.		10.56	1:1
Total		1,355.58	—

N/A = not applicable.

¹ Oberbauer et al. 2008.

Table 2.3-2
Jurisdictional Aquatic Resources within the Biological Study Area

Jurisdictional Aquatic Resources	Acreage
<i>ACOE/RWQCB Non-Wetlands and CDFW Streambed</i>	
Non-Wetland Waters – Desert Sink Scrub	12.43
Non-Vegetated Channel	9.96
Non-Vegetated Channel (isolated)	0.60
<i>ACOE/RWQCB Wetlands and CDFW Riparian Areas Subtotal*</i>	22.99
<i>ACOE/RWQCB Non-Wetland Waters; CDFW Riparian Areas; and County RPO Wetlands</i>	
Mesquite Bosque	130.96
<i>ACOE/RWQCB Wetland Waters, CDFW Riparian Areas, and County RPO Wetlands</i>	
Disturbed Freshwater Marsh	0.08
Total Jurisdictional Area*	154.02

* Totals may not sum due to rounding.

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
<i>Reptiles</i>						
California glossy snake (<i>Arizona elegans occidentalis</i>)	USFWS: None CDFW: SSC County: None	<ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub • disturbed habitat • fallow agriculture • Sonoran mixed woody and succulent scrub 	<ul style="list-style-type: none"> • montane buckwheat scrub • big sagebrush scrub • granitic chamise chaparral • granitic northern mixed chaparral • red shank chaparral • semi-desert chaparral • southern mixed chaparral • chamise chaparral • non-native grassland • disturbed habitat • wildflower field • mulefat scrub • alluvial fan scrub • desert woodland • pine forest 	There is 435,099 acres of modeled habitat within the biological cumulative study area.	High potential to occur. There is 1,183.2 acres of modeled habitat within the Project site, of which 618.1 acres would be directly impacted. Of the 618.1 acres of impact 0.63 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.
San Diegan tiger whiptail (<i>Aspidoscelis tigris stejnegeri</i>)	USFWS: None CDFW: SSC County: Group 2	<ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub • disturbed habitat • fallow agriculture • mesquite bosque • Sonoran mixed woody and succulent scrub • tamarisk scrub 	<ul style="list-style-type: none"> • montane buckwheat scrub • big sagebrush scrub • granitic chamise chaparral • granitic northern mixed chaparral • red shank chaparral • semi-desert chaparral • southern mixed chaparral • chamise chaparral • non-native 	There is 435,099 acres of modeled habitat within the biological cumulative study area.	High potential to occur. There is 1,318.9 acres of modeled habitat within the Project site, of which 621.9 acres would be directly impacted. Of the 621.9 acres of impact 0.63 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
			grassland • disturbed habitat • wildflower field • mulefat scrub • alluvial fan scrub • desert woodland • pine forest • sea level to 7,000 feet (2,130 meters)			
San Diego banded gecko (<i>Coleonyx variegatus abbotti</i>)	USFWS: None CDFW: SSC County: Group 1	• big sagebrush scrub • desert saltbush scrub and sink scrub • Sonoran mixed woody and succulent scrub	• montane buckwheat scrub • big sagebrush scrub • granitic chamise chaparral • granitic northern mixed chaparral • red shank chaparral • semi-desert chaparral • chamise chaparral • southern mixed chaparral • mulefat scrub • alluvial fan scrub	There is 399,880 acres of modeled habitat within the biological cumulative study area.	High potential to occur. There is 619.7 acres of modeled habitat within the Project site, of which 123.2 acres would be directly impacted. Of the 123.2 acres of impact 0.53 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.
red diamond rattlesnake (<i>Crotalus ruber</i>)	USFWS: None CDFW: SSC County: Group 2	• big sagebrush scrub • desert saltbush scrub and sink scrub • Sonoran mixed woody and succulent scrub	• montane buckwheat scrub • big sagebrush scrub • granitic chamise chaparral • granitic northern mixed chaparral • red shank chaparral • semi-desert chaparral • chamise chaparral • southern mixed chaparral	There is 399,880 acres of modeled habitat within the biological cumulative study area.	High potential to occur. There is 619.7 acres of modeled habitat within Project site, of which 123.2 acres would be directly impacted. Of the 123.2 acres of impact 0.53 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
			<ul style="list-style-type: none"> • mulefat scrub • alluvial fan scrub 			
rosy boa (<i>Lichanura</i> <i>trivirgata</i>)	USFWS: None CDFW: None County: Group 2	<ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub • mesquite bosque • Sonoran mixed woody and succulent scrub 	<ul style="list-style-type: none"> • montane buckwheat scrub • big sagebrush scrub • granitic chamise chaparral • granitic northern mixed chaparral • red shank chaparral • semi-desert chaparral • chamise chaparral • southern mixed chaparral • mulefat scrub • alluvial fan scrub 	There is 399,880 acres of modeled habitat within the biological cumulative study area.	High potential to occur. There is 753.4 acres of modeled habitat within the Project site, of which 125.9 acres would be directly impacted. Of the 125.9 acres of impact 0.53 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.
Blainville's horned lizard (<i>Phrynosoma</i> <i>blainvillii</i>)	USFWS: None CDFW: SSC County: Group 2	<ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub • mesquite bosque • Sonoran mixed woody and succulent scrub • Tamarisk scrub 	<ul style="list-style-type: none"> • montane buckwheat scrub • big sagebrush scrub • granitic chamise chaparral • granitic northern mixed chaparral • southern mixed chaparral • red shank chaparral • semi-desert chaparral • chamise chaparral • non-native grassland • southern arroyo willow riparian forest • coast live oak woodland 	There is 472,398 acres of modeled habitat within the biological cumulative study area.	High potential to occur. There is 755.5 acres of modeled habitat within the Project site, of which 127.0 acres would be directly impacted. Of the 127.0 acres of impact 0.53 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
			<ul style="list-style-type: none"> • desert woodland • pine forest • oak riparian forest • riparian forest • riparian scrub • alluvial fan scrub • sea level to 8,000 feet (2,438 meters) 			
<i>Birds</i>						
Cooper's Hawk (<i>Accipiter cooperii</i>)	USFWS: None CDFW: WL County: Group 1	Foraging <ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub • developed • disturbed habitat • fallow agriculture • disturbed freshwater marsh • mesquite bosque • Sonoran mixed woody and succulent scrub • unvegetated channel 	Nesting <ul style="list-style-type: none"> • coast live oak woodland • southern arroyo willow riparian forest • eucalyptus woodland • oak riparian forest • riparian forest • pine forest • riparian scrub • mulefat scrub Foraging <ul style="list-style-type: none"> • montane buckwheat scrub • big sagebrush scrub • granitic chamise chaparral • granitic northern mixed chaparral • red shank chaparral • semi-desert chaparral • chamise chaparral • southern mixed chaparral • non-native 	There is 59,756 acres of modeled nesting habitat and 448,719 acres of modeled foraging habitat within the biological cumulative study area.	Observed. There is 1,353.5 acres of modeled habitat within the Project site, of which 643.0 acres would be directly impacted. No potential suitable nesting habitat (the mesquite in the northern portion of the Project site) will be impacted. Of the 643.0 acres of impact 0.63 acres are associated with the switchyard.	Given the large amount of foraging habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
			grassland • southern arroyo willow riparian forest • coast live oak woodland • eucalyptus woodland • oak riparian forest • riparian forest • riparian scrub • mulefat scrub • cismontane alkali marsh			
Sharp-Shinned Hawk (<i>Accipiter striatus</i>)	USFWS: None CDFW: WL County: Group 1	Foraging • big sagebrush scrub • desert saltbush scrub and sink scrub • developed • disturbed habitat • fallow agriculture • disturbed freshwater marsh • mesquite bosque • Sonoran mixed woody and succulent scrub • unvegetated channel	Foraging • montane buckwheat scrub • big sagebrush scrub • granitic chamise chaparral • granitic northern mixed chaparral • red shank chaparral • semi-desert chaparral • chamise chaparral • southern mixed chaparral • non-native grassland • southern arroyo willow riparian forest • coast live oak woodland • eucalyptus woodland • oak riparian forest	There is 448,719 acres of modeled foraging habitat within the biological cumulative study area.	Observed. There is 1,353.5 acres of modeled habitat within the Project site, of which 643.0 acres would be directly impacted. Of the 643.0 acres of impact 0.63 acres are associated with the switchyard.	Given the large amount of foraging habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
			<ul style="list-style-type: none"> • riparian forest • riparian scrub • mulefat scrub • cismontane alkali marsh 			
Tricolored blackbird <i>Agelaius tricolor</i> (nesting colony)	USFWS: BCC CDFW: ST, SSC County: Group 1	Foraging <ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub • fallow agriculture • disturbed freshwater marsh • mesquite bosque • sonoran mixed woody and succulent scrub • unvegetated channel 	Foraging habitat limited to areas within 3 miles of nesting sites. Suitable vegetation communities within the cumulative study area could include the following: <ul style="list-style-type: none"> • big sagebrush scrub • desert scrub • disturbed habitat • mulefat scrub • alluvial fan scrub 	Because foraging habitat is typically modeled within a distance of nesting colonies, it is not quantified.	Observed. There are 1,272.5 acres of modeled habitat in the Project site, of which 593.5 acres would be directly impacted (excluding access roads and substation). Of the 593.5 acres of impact 0.63 acres are associated with the switchyard.	Given the large amount of foraging habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.
Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)	USFWS: None CDFW: WL County: Group 1	<ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub • Sonoran mixed woody and succulent scrub 	<ul style="list-style-type: none"> • montane buckwheat scrub • big sagebrush scrub • granitic chamise chaparral • granitic northern mixed chaparral • red shank chaparral • semi-desert chaparral • chamise chaparral • southern mixed chaparral • mulefat scrub • alluvial fan scrub 	There is 399,880 acres of modeled habitat within the biological cumulative study area.	High potential to occur. There is 619.7 acres of modeled habitat within the Project site, of which 123.2 acres would be directly impacted. Of the 123.2 acres of impact 0.53 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
Golden eagle (<i>Aquila chrysaetos</i>)	USFWS: BCC CDFW: FP, WL County: Group 1	Foraging <ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub • developed • disturbed habitat • fallow agriculture • disturbed freshwater marsh • mesquite bosque • Sonoran mixed woody and succulent scrub • unvegetated channel • tamarisk scrub 	Foraging <ul style="list-style-type: none"> • montane buckwheat scrub • big sagebrush scrub • granitic chamise chaparral • granitic northern mixed chaparral • red shank chaparral • semi-desert chaparral • chamise chaparral • southern mixed chaparral • non-native grassland • southern arroyo willow riparian forest • coast live oak woodland • eucalyptus woodland • oak riparian forest • riparian forest • riparian scrub • mulefat scrub • cismontane alkali marsh 	There is 448,719 acres of modeled foraging habitat within the biological cumulative study area.	Observed. There are 1,355.6 acres of modeled habitat in the Project site, of which 643.1 acres would be directly impacted. Of the 643.1 acres of impact 0.63 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.
burrowing owl (<i>Athene cunicularia</i>)	USFWS: BCC CDFW: SSC County: Group 1	• Model (area surrounding burrows, excluding developed land)	• non-native grassland	There is 5,481.2 acres of modeled habitat within the biological cumulative study area.	Observed. There is 14.3 acres of modeled occupied habitat within the Project site, of which 14.2 acres would be directly impacted. The switchyard	Burrowing owls were not found occupying the site during the breeding season; therefore, the potential habitat is not considered occupied. Given the large amount

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
					would not impact any occupied burrowing owl habitat.	of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.
Costa's hummingbird (<i>Calypte costae</i>)	USFWS: BCC CDFW: None County: None	<ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub • Sonoran mixed woody and succulent scrub 	<ul style="list-style-type: none"> • montane buckwheat scrub • big sagebrush scrub • semi-desert chaparral • southern arroyo willow riparian forest • coast live oak woodland • desert woodland • pine forest • oak riparian forest • riparian forest • riparian scrub • alluvial fan scrub 	There is 35,579.8 acres of modeled habitat within the biological cumulative study area.	Observed. There is 619.7 acres of modeled habitat in the Project site, of which 123.2 acres would be directly impacted. Of the 123.2 acres of impact 0.53 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.
turkey vulture (<i>Cathartes aura</i>)	USFWS: None CDFW: None County: Group 1	<ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub • disturbed habitat • fallow agriculture • Sonoran mixed woody and succulent scrub 	<ul style="list-style-type: none"> • montane buckwheat scrub • big sagebrush scrub • granitic chamise chaparral • granitic northern mixed chaparral • red shank chaparral • semi-desert chaparral • southern mixed chaparral 	There is 435,099 acres of modeled habitat within the biological cumulative study area.	Observed. There is 1,183.2 acres of modeled habitat in the Project site, of which 618.1 acres would be directly impacted. Of the 618.1 acres of impact 0.63 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
			<ul style="list-style-type: none"> • chamise chaparral • non-native grassland • disturbed habitat • wildflower field • mulefat scrub • alluvial fan scrub • desert woodland • pine forest 			
Vaux's swift (<i>Chaetura vauxi</i>)	USFWS: None CDFW: SSC County: None	Foraging <ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub • developed • disturbed habitat • fallow agriculture • disturbed freshwater marsh • Sonoran mixed woody and succulent scrub • unvegetated channel • tamarisk scrub 	Foraging <ul style="list-style-type: none"> • montane buckwheat scrub • big sagebrush scrub • non-native grassland • mulefat scrub • riparian scrub • disturbed habitat • wildflower • eucalyptus woodland • desert woodland • alluvial fan scrub • semi-desert chaparral • southern mixed chaparral 	There is 57,950 acres of modeled habitat within the biological cumulative study area.	Observed. There are 1,222.0 acres of modeled habitat in the Project site, of which 640.5 acres would be directly impacted. Of the 640.5 acres of impact 0.63 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.
Northern Harrier (<i>Circus cyaneus</i>)	USFWS: None CDFW: SSC County: Group 1	<ul style="list-style-type: none"> • disturbed habitat • fallow agriculture 	<ul style="list-style-type: none"> • disturbed habitat • non-native grassland 	There is 10,086.6 acres of modeled habitat within the biological cumulative study area.	Observed. There is 563.5 acres of modeled habitat within the Project site, of which 494.9 acres would be directly impacted. Of the 494.9 acres of	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
					impact 0.10 acres are associated with the switchyard.	be less than significant.
California horned lark (<i>Eremophila alpestris actia</i>)	USFWS: None CDFW: WL County: Group 2	<ul style="list-style-type: none"> big sagebrush scrub desert saltbush scrub and sink scrub fallow agriculture Sonoran mixed woody and succulent scrub 	<ul style="list-style-type: none"> montane buckwheat scrub big sagebrush scrub granitic chamise chaparral granitic northern mixed chaparral red shank chaparral semi-desert chaparral southern mixed chaparral chamise chaparral non-native grassland disturbed habitat wildflower field mulefat scrub alluvial fan scrub desert woodland pine forest 	There is 435,099 acres of modeled habitat within the biological cumulative study area.	Observed. There is 1,128.2 acres of modeled habitat within the Project site, of which 590.9 acres would be directly impacted. Of the 590.9 acres of impact 0.63 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.
merlin (<i>Falco columbarius</i>) (wintering)	USFWS: None CDFW: WL County: Group 2	<ul style="list-style-type: none"> fallow agriculture disturbed freshwater marsh unvegetated channel 	<ul style="list-style-type: none"> cismontane alkali eucalyptus woodland mulefat scrub non-native grassland oak riparian forest riparian forest riparian scrub southern arroyo willow riparian forest wildflower field 	There is 8,115.1 acres of modeled habitat within the biological cumulative study area.	Observed. There is 519.1 acres of modeled habitat in the Project site, of which 467.6 acres would be directly impacted. Of the 467.6 acres of impact 0.10 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
loggerhead shrike (<i>Lanius ludovicianus</i>)	USFWS: BCC CDFW: SSC County: Group 1	<ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub • fallow agriculture • Sonoran mixed woody and succulent scrub 	<ul style="list-style-type: none"> • montane buckwheat scrub • big sagebrush scrub • non-native grassland • mulefat scrub • riparian scrub • disturbed habitat • wildflower • eucalyptus woodland • desert woodland • alluvial fan scrub • semi-desert chaparral • southern mixed chaparral 	There is 57,950 acres of modeled habitat within the biological cumulative study area.	Observed. There is 1,128.2 acres of modeled habitat within the Project site, of which 590.9 acres would be directly impacted. Of the 590.9 acres of impact 0.63 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.
black-tailed gnatcatcher (<i>Polioptila melanura</i>)	USFWS: None CDFW: WL County: None	<ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub • mesquite bosque • Sonoran mixed woody and succulent scrub 	<ul style="list-style-type: none"> • montane buckwheat scrub • big sagebrush scrub • non-native grassland • mulefat scrub • riparian scrub • wildflower • eucalyptus woodland • desert woodland • alluvial fan scrub • semi-desert chaparral • southern mixed chaparral 	There is 57,360 acres of modeled habitat within the biological cumulative study area.	Observed. There is 753.4 acres of modeled habitat within the Project site, of which 125.9 acres would be directly impacted. Of the 125.9 acres of impact 0.53 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.
Lawrence's goldfinch (<i>Spinus lawrencei</i>)	USFWS: BCC CDFW: None County: None	Foraging <ul style="list-style-type: none"> • big sagebrush scrub 	Foraging <ul style="list-style-type: none"> • montane buckwheat scrub 	There is 57,950 acres of modeled habitat within the	Observed. There are 1,130.3 acres of modeled habitat	Given the large amount of habitat within the region, impacts to

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
		<ul style="list-style-type: none"> desert saltbush scrub and sink scrub fallow agriculture Sonoran mixed woody and succulent scrub tamarisk scrub 	<ul style="list-style-type: none"> big sagebrush scrub non-native grassland mulefat scrub riparian scrub disturbed habitat wildflower eucalyptus woodland desert woodland alluvial fan scrub semi-desert chaparral southern mixed chaparral 	biological cumulative study area.	in the Project site, of which 590.9 acres would be directly impacted. Of the 590.9 acres of impact 0.63 acres are associated with the switchyard.	suitable habitat associated with the Proposed Project would be less than significant.
Brewer's sparrow (<i>Spizella breweri</i>)	USFWS: BCC CDFW: None County: None	Foraging <ul style="list-style-type: none"> big sagebrush scrub desert saltbush scrub and sink scrub fallow agriculture Sonoran mixed woody and succulent scrub tamarisk scrub 	Foraging <ul style="list-style-type: none"> montane buckwheat scrub big sagebrush scrub non-native grassland mulefat scrub riparian scrub disturbed habitat wildflower eucalyptus woodland desert woodland alluvial fan scrub semi-desert chaparral southern mixed chaparral 	There is 57,950 acres of modeled habitat within the biological cumulative study area.	Observed. There are 1,130.3 acres of modeled habitat in the Project site, of which 590.9 acres would be directly impacted. Of the 590.9 acres of impact 0.63 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.
yellow-headed blackbird (<i>Xanthocephalus xanthocephalus</i>)	USFWS: None CDFW: SSC	Foraging <ul style="list-style-type: none"> big sagebrush scrub 	Foraging habitat limited to areas within 3 miles of nesting sites. Suitable	Because foraging habitat is typically modeled within a	Observed. There is 1,138.9 acres of modeled habitat in the	Given the large amount of foraging habitat within the region,

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
(nesting)	County: None	<ul style="list-style-type: none"> desert saltbush scrub and sink scrub fallow agriculture disturbed freshwater marsh Sonoran mixed woody and succulent scrub unvegetated channel 	vegetation communities within the cumulative study area could include the following: <ul style="list-style-type: none"> big sagebrush scrub desert scrub disturbed habitat mulefat scrub alluvial fan scrub 	distance of nesting colonies, it is not quantified.	Project site, of which 590.9 acres would be directly impacted (excluding roads and substation). Of the 590.9 acres of impact 0.53 acres are associated with the switchyard.	impacts to suitable habitat associated with the Proposed Project would be less than significant.
<i>Mammals</i>						
Pallid bat (<i>Antrozous pallidus</i>)	USFWS: None CDFW: SSC County: Group 2	<ul style="list-style-type: none"> disturbed habitat fallow agriculture developed 	<ul style="list-style-type: none"> disturbed habitat non-native grassland 	There is 10,086.6 acres of modeled habitat within the biological cumulative study area.	High potential to occur. There is 589.5 acres of modeled habitat in the Project site, of which 516.1 acres would be directly impacted. Of the 516.1 acres of impact 0.10 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.
northwestern San Diego pocket mouse (<i>Chaetodipus fallax fallax</i>)	USFWS: None CDFW: SSC County: Group 2	<ul style="list-style-type: none"> big sagebrush scrub desert saltbush scrub and sink scrub disturbed habitat fallow agriculture Sonoran mixed woody 	<ul style="list-style-type: none"> montane buckwheat scrub big sagebrush scrub non-native grassland mulefat scrub riparian scrub disturbed habitat wildflower eucalyptus 	There is 69,468 acres of modeled habitat within the biological cumulative study area.	High potential to occur. There is 1,209.2 acres of modeled habitat within the Project site, of which 639.4 acres would be directly impacted. Of the 639.4 acres of impact 0.63	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
		and succulent scrub • developed	woodland • desert woodland • alluvial fan scrub • semi-desert chaparral • southern mixed chaparral • developed		acres are associated with the switchyard.	
pallid San Diego pocket mouse (<i>Chaetodipus fallax pallidus</i>)	USFWS: None CDFW: SSC County: Group 2	• big sagebrush scrub • desert saltbush scrub and sink scrub • disturbed habitat • fallow agriculture • developed • Sonoran mixed woody and succulent scrub	• montane buckwheat scrub • big sagebrush scrub • non-native grassland • mulefat scrub • riparian scrub • disturbed habitat • wildflower • eucalyptus woodland • desert woodland • alluvial fan scrub • semi-desert chaparral • southern mixed chaparral • developed	There is 69,468 acres of modeled habitat within the biological cumulative study area.	High potential to occur. There is 1,209.2 acres of modeled habitat within the Project site, of which 639.4 acres would be directly impacted. Of the 639.4 acres of impact 0.63 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	USFWS: None CDFW: SSC County: Group 2	• big sagebrush scrub • desert saltbush scrub and sink scrub • Sonoran mixed woody and succulent scrub	• montane buckwheat scrub • big sagebrush scrub • granitic chamise chaparral • granitic northern mixed chaparral • red shank chaparral • semi-desert chaparral	There is 413,938 acres of modeled habitat within the biological cumulative study area.	Observed. There is 619.7 acres of modeled habitat within the Project site, of which 123.2 acres would be directly impacted. Of the 123.2 acres of impact 0.53 acres are	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
			<ul style="list-style-type: none"> • chamise chaparral • southern mixed chaparral • non-native grassland • mulefat scrub • riparian scrub • alluvial fan scrub • desert woodland 		associated with the switchyard.	
Western small-footed myotis (<i>Myotis ciliolabrum</i>)	USFWS: None CDFW: None County: Group 2	Foraging <ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub • developed • disturbed habitat • fallow agriculture • disturbed freshwater marsh • sonoran mixed woody and succulent scrub • unvegetated channel Roosting (abandoned building; not quantified)	<ul style="list-style-type: none"> • big sagebrush scrub • semi-desert chaparral • non-native grassland • wildflower field • mulefat scrub • alluvial fan scrub • desert woodland • pine forest • cismontane alkali • oak riparian forest • riparian forest • riparian scrub • southern arroyo willow riparian forest 	There is 37,282.8 acres of modeled habitat within the biological cumulative study area.	High potential. There are 1,219.9 acres of modeled habitat in the Project site, of which 639.4 acres would be directly impacted. Of the 639.4 acres of impact 0.63 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.
Yuma myotis (<i>Myotis yumanensis</i>)	USFWS: None CDFW: None County: Group 2	Foraging <ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub 	<ul style="list-style-type: none"> • big sagebrush scrub • semi-desert chaparral • non-native grassland 	There is 37,282.8 acres of modeled habitat within the biological cumulative study area.	High potential. There is approximately 1,353.5 acres of modeled habitat in the Project site, of which	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
		<ul style="list-style-type: none"> • developed • disturbed habitat • fallow agriculture • disturbed freshwater marsh • mesquite bosque • Sonoran mixed woody and succulent scrub • unvegetated channel Roosting (abandoned building and/or rocky outcrops on Round Mountain; not quantified)	<ul style="list-style-type: none"> • wildflower field • mulefat scrub • alluvial fan scrub • desert woodland • pine forest • cismontane alkali • oak riparian forest • riparian forest • riparian scrub • southern arroyo willow riparian forest 		643.0 acres would be directly impacted. Of the 643.0 acres of impact 0.63 acres are associated with the switchyard.	Project would be less than significant.
San Diego desert woodrat (<i>Neotoma lepida intermedia</i>)	USFWS: None CDFW: SSC County: Group 2	<ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub • disturbed habitat • fallow agriculture • Sonoran mixed woody and succulent scrub 	<ul style="list-style-type: none"> • montane buckwheat scrub • big sagebrush scrub • granitic chamise chaparral • chamise chaparral • non-native grassland • mulefat scrub • riparian scrub • disturbed habitat • wildflower • alluvial fan scrub • desert woodland • southern mixed 	There is 415,819 acres of modeled habitat within the biological cumulative study area.	High potential to occur. There is 1,183.2 acres of modeled habitat within the Project site, of which 618.1 acres would be directly impacted. Of the 618.1 acres of impact 0.63 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
			chaparral • semi-desert chaparral			
Mule deer (<i>Odocoileus hemionus</i>)	USFWS: None CDFW: None County: Group 2	<ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub • developed • disturbed habitat • fallow agriculture • mesquite bosque • Sonoran mixed woody and succulent scrub 	<ul style="list-style-type: none"> • montane buckwheat scrub • big sagebrush scrub • non-native grassland • mulefat scrub • riparian scrub • disturbed habitat • wildflower • eucalyptus woodland • desert woodland • alluvial fan scrub • semi-desert chaparral • southern mixed chaparral 	There is 57,950 acres of modeled habitat within the biological cumulative study area.	Observed. There is 1,342.8 acres of modeled habitat in the Project site, of which 643.0 acres would be directly impacted. Of the 643.0 acres of impact 0.10 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.
Jacumba pocket mouse (<i>Perognathus longimembris internationalis</i>)	USFWS: None CDFW: SSC County: Group 2	<ul style="list-style-type: none"> • big sagebrush scrub • desert saltbush scrub and sink scrub • disturbed habitat • fallow agriculture • developed • Sonoran mixed woody and succulent scrub 	<ul style="list-style-type: none"> • montane buckwheat scrub • big sagebrush scrub • non-native grassland • mulefat scrub • riparian scrub • disturbed habitat • wildflower • eucalyptus woodland • desert woodland • alluvial fan scrub • semi-desert chaparral 	There is 69,468 acres of modeled habitat within the biological cumulative study area.	High potential to occur. There is 1,209.2 acres of modeled habitat within the Project site, of which 639.4 acres would be directly impacted. Of the 639.4 acres of impact 0.63 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.

Table 2.3-3
Permanent Impacts to Special-Status Wildlife Species Present within the
Project Site or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal State County of San Diego	Modeled Habitat within the Project Site	Modeled Habitat within the Biological Cumulative Study Area	Biological Cumulative Study Area Habitat Total	Impacts to Modeled Habitat within Project Site and Occurrence	Significance Determination
			<ul style="list-style-type: none"> southern mixed chaparral developed 			
American badger (<i>Taxidea taxus</i>)	USFWS: None CDFW: SSC County: Group 2	<ul style="list-style-type: none"> Disturbed habitat Fallow agriculture 	<ul style="list-style-type: none"> disturbed habitat non-native grassland 	10,086.6 acres of modeled habitat within the biological cumulative study area.	High potential to occur. There is 563.5 acres of modeled habitat in the Project site, of which 494.9 acres would be directly impacted. Of the 494.9 acres of impact 0.10 acres are associated with the switchyard.	Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.
<i>Invertebrates</i>						
Quino checkerspot butterfly (<i>Euphydryas editha quino</i>)	USFWS: FE CDFW: None County: Group 1	No model; this species was observed once on a hilltop in the southwest corner with host plants absent from the hilltop and surrounding area.	No model; this species was observed once on a hilltop in the southwest corner with host plants absent from the hilltop and surrounding area.	N/A. This species is being avoided.	N/A. Hilltop and southwest corner is being avoided.	Quino checkerspot butterfly was observed once on a hilltop, however the hilltop is being avoided. Given the large amount of habitat within the region, impacts to suitable habitat associated with the Proposed Project would be less than significant.

¹ Desert scrub modeled habitat includes desert saltbush scrub, desert sink scrub, Sonoran mixed woody and succulent scrub, and Sonoran mixed woody scrub vegetation communities.

Table 2.3-4
Proposed On-Site Mitigation for Impacts to Vegetation Communities and Land Covers (Acres)

Habitat Types/ Vegetation Communities	Existing	Total Impacts	Mitigation Ratio	Mitigation Required	Conservation Easement	Mitigation Excess or (Deficit)
<i>Sensitive Vegetation Communities and Land Covers</i>						
Big sagebrush scrub	0.26	—	2:1	0	0	N/A
Desert saltbush scrub	77.39	50.39	2:1	100.78	4.69	(96.09 acres) ¹
Desert sink scrub	12.43	—	3:1	0	12.43	12.43 acres. Applied excess 12.43 acres to desert saltbush scrub deficit
Disturbed freshwater marsh	0.08	—	3:1	0	0.08	0.08 acres
Mesquite bosque	133.61	2.64	3:1	7.92	126.12	118.20 acres. Applied excess 24.46 acres to desert saltbush scrub deficit, 3.33 acres to tamarisk scrub deficit, and 90.41 acres to fallow agriculture (raptor foraging habitat) deficit
Sonoran mixed woody scrub	139.34	—	1:1	0	139.34	139.33 acres. Applied 133.27 acres to fallow agriculture (raptor foraging habitat) deficit
Sonoran mixed woody and succulent scrub	390.34	72.85	1:1	72.85	132.05	59.20 acres. Applied excess 59.20 acres to desert saltbush scrub deficit
Tamarisk scrub	2.11	1.11	3:1	3.33	0	(3.33 acres) ²
Unvegetated streambed (non-wetland water of the U.S./state)	10.56	—	1:1	0	0.78	0.78 acres. Applied 0.78 acres to fallow agriculture (raptor foraging habitat) deficit
<i>Subtotal³</i>	<i>766.11</i>	<i>126.99</i>	<i>—</i>	<i>184.88</i>	<i>415.47</i>	<i>6.86</i>
<i>Non-Sensitive Land Covers</i>						
Fallow agriculture (raptor foraging habitat)	508.46	467.63	0.5:1 ⁴	233.82	9.35	(224.46 acres) ⁵
Disturbed habitat	55.00	27.27	0	0	10.17	N/A

Table 2.3-4
Proposed On-Site Mitigation for Impacts to Vegetation Communities and Land Covers (Acres)

Habitat Types/ Vegetation Communities	Existing	Total Impacts	Mitigation Ratio	Mitigation Required	Conservation Easement	Mitigation Excess or (Deficit)
Urban/developed	26.00	21.24	0	0	<0.01	N/A
<i>Subtotal</i> ³	598.47	516.14	N/A	233.82	19.52	0
Total ³	1,355.58	643.13	N/A	418.70	435.00	6.86

¹ This deficit is mitigated through the preservation of desert sink scrub (12.43 acres), mesquite bosque (24.46 acres), and Sonoran mixed woody and succulent scrub (59.20 acres).

² This deficit is mitigated through the preservation of mesquite bosque (3.33 acres).

³ May not total due to rounding.

⁴ While fallow agriculture is not defined by Oberbauer or the County, fallow agriculture is considered raptor foraging habitat mitigated at a 0.5:1 mitigation ratio, which is the mitigation ratio for non-native grassland and extensive agriculture – field/pasture.

⁵ This deficit is mitigated through the preservation of mesquite bosque (90.41 acres), Sonoran mixed woody scrub (133.27 acres), and unvegetated streambed (0.78 acres).

Table 2.3-5
Cumulative Impacts – Vegetation Communities

Vegetation Community ^{1,2}	Inventory of Vegetation Communities in the Cumulative Analysis Study Area (acres)	Propose d Project Impacts (acres)	Cumulative Project Impacts (acres)		Cumulative Analysis Study Area	
			Total Impacts to Vegetation Communities in the Biological Cumulative Analysis Study Area	Total Cumulative Impacts	Proposed Project Impacts as Percentage of Cumulative Analysis Study Area	Total Cumulative Impacts as Percentage of Cumulative Analysis Study Area
Alkali Marsh	87.6	—	—	—	—	—
Broadleaved Upland Forest	2,884.1	—	—	—	—	—
Chaparral	358,001.7	—	2,904	2,904	<0.00%	0.81%
Chenopod Scrub	1,801.0	50.39	3	52	2.79%	2.89%
Cismontane Woodland	25,085.0	—	98	98	<0.00%	0.39%
Closed-cone Coniferous Forest	113.5	—	—	—	<0.00%	<0.00%
Coastal Sage- Chaparral Transition	7,828.1	—	—	—	<0.00%	<0.00%
Coastal Scrub	18,887.9	—	9	9	<0.00%	0.05%
Disturbed Habitat ³	590.2	27.27	105	132.27	4.62%	22.41%
Freshwater Marsh	278.6	—	2	2	<0.00%	0.72%
General Agriculture ²	6,696.3	467.63	2	469.63	6.98%	7.01%
Great Basin Scrub	2,147.2	—	185	185	<0.00%	8.61%
Lower Montane Coniferous Forest	9,644.1	—	—	—	<0.00%	<0.00%

**Table 2.3-5
Cumulative Impacts – Vegetation Communities**

Vegetation Community ^{1,2}	Inventory of Vegetation Communities in the Cumulative Analysis Study Area (acres)	Proposed Project Impacts (acres)	Cumulative Project Impacts (acres)		Cumulative Analysis Study Area	
			Total Impacts to Vegetation Communities in the Biological Cumulative Analysis Study Area	Total Cumulative Impacts	Proposed Project Impacts as Percentage of Cumulative Analysis Study Area	Total Cumulative Impacts as Percentage of Cumulative Analysis Study Area
Meadows and Seeps	5,379.5	—	0	0	<0.00%	<0.00%
Mojavean Desert Scrub	180.9	—	—	—	<0.00%	<0.00%
Non-Native Vegetation	30.5	—	—	—	<0.00%	<0.00%
Non-Native Woodland	48.4	—	—	—	<0.00%	<0.00%
Pinon and Juniper Woodlands	3,014.3	—	119	119	<0.00%	3.95%
Riparian Forests	7,070.9	—	0.11	0.11	<0.00%	<0.00%
Riparian Scrub	1,415.0	3.75	5	8.75	<0.00%	0.61%
Riparian Woodlands	143.3	—	0	0	<0.00%	<0.00%
Sonoran Desert Scrub	6,023.5	72.85	56	128.85	<0.00%	2.14%
Undifferentiated Open Woodland	194.0	—	—	—	<0.00%	<0.00%
Unvegetated Habitat	1,728.1	—	4	4	<0.00%	0.23%
Upper Montane Coniferous Forest	13,585.2	—	—	—	<0.00%	<0.00%
Upper Sonoran Subshrub Scrub	3,815.0	—	29	29	<0.00%	0.77%
Urban/Developed	11,518.2	21.24	219	240	<0.00%	2.08%
Valley and Foothill Grassland, meadows, herb communities	10,786.8	—	144	144	0.05%	0.05%
Total	499,048.7	643.13	3,886	4,525.61	0.13%	0.91%

¹ The vegetation communities are described within the higher level of their classification category (e.g., semi-desert chaparral is described under chaparral).

² Vegetation community categories are based on Oberbauer et al. 2008 classifications.

³ Disturbed Habitat vegetation mapping was acquired from SanGIS (2018). Impacts to Disturbed Habitat are more than the Inventory of Vegetation Communities in the Cumulative Analysis Study Area because more detailed mapping data is available for the cumulative projects; therefore the acreages are not equal. Fallow agriculture is included in this category.

Table 2.3-6
Recommended Restricted Activity Dates and Setback Distances
by Level of Disturbance for Burrowing Owls

Location	Time of Year	Level of Disturbance (meters)		
		Low	Medium	High
Nesting Sites	April 1–August 15	200	500	500
Nesting sites	August 16–October 15	200	200	500
Nesting Sites	October 16–March 31	50	100	500

Source: CDFG 2012

Table 2.3-7
Summary of Significant Impacts and Mitigation

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation
<i>Guideline 4.1: The project would have a substantial adverse effect, either directly or through habitat modifications, on a candidate, sensitive, or special status species listed in local or regional plans, policies, or regulations, or by California Department of Fish and Game or U.S. Fish and Wildlife Service.</i>					
<i>4.1.A. The project would impact one or more individuals of a species listed as federally or state endangered or threatened.</i>					
2.3.3.2	Impact BI-W-2	State-listed wildlife species (Tricolored blackbird)	Direct and indirect	M-BI-3 (habitat preservation) M-BI-4 (RMP)	Less than significant
<i>4.1.B. The project would impact an on-site population of a County List A or B plant species, or a County Group I animal species, or a species listed as a state Species of Special Concern [SSC]. Impacts to these species are considered significant; however, impacts of less than 5 percent of the individual plants or of the sensitive species' habitat on a project site may be considered less than significant if a biologically-based determination can be made that the project would not have a substantial adverse effect on the local long-term survival of that plant or animal taxon.</i>					
2.3.3.2	Impact BI-SP-1	Special-status plants	Temporary direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing)	Less than significant
2.3.3.2	Impact BI-SP-2	Special-status plants	Permanent direct	M-BI-3 (habitat preservation) M-BI-4 (RMP)	Less than significant
2.3.3.2	Impact BI-W-1	Special-status wildlife	Temporary direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing)	Less than significant
2.3.3.2	Impact BI-W-2	Special-status wildlife	Permanent direct	M-BI-3 (habitat preservation) M-BI-4 (RMP) M-BI-5 (nesting bird survey)	Less than significant
2.3.3.2	Impact BI-W-3	Nesting birds	Permanent direct	M-BI-1 (biological monitoring) M-BI-5 (nesting bird survey)	Less than significant
2.3.3.2	Impact BI-W-4	Special-status wildlife (bats)	Permanent direct	M-BI-6 (bat surveys and roost avoidance or exclusion)	Less than significant

Table 2.3-7
Summary of Significant Impacts and Mitigation

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation
<i>4.1.C. The project would impact the local long-term survival of a County List C or D plant species or a County Group II animal species.</i>					
2.3.3.2	Impact BI-SP-1	Special-status plants	Temporary direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing)	Less than significant
2.3.3.2	Impact BI-W-1	Special-status wildlife	Temporary direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing)	Less than significant
2.3.3.2	Impact BI-W-2	Special-status wildlife	Permanent direct	M-BI-3 (habitat preservation) M-BI-4 (RMP)	Less than significant
2.3.3.2	Impact BI-W-3	Nesting birds	Permanent direct	M-BI-1 (biological monitoring) M-BI-5 (nesting bird survey)	Less than significant
2.3.3.2	Impact BI-W-4	Special-status wildlife (bats)	Permanent direct	M-BI-6 (bat surveys and roost avoidance or exclusion)	Less than significant
<i>4.1.F. The project would result in the loss of functional foraging habitat for raptors. Impacts to raptor foraging habitat is considered significant; however, impacts of less than 5 percent of the raptor foraging habitat on a project site may be considered less than significant if a biologically-based determination can be made that the project would not have a substantial adverse effect on the local long-term survival of any raptor species</i>					
2.3.3.2	Impact BI-W-2	Special-status wildlife (raptor foraging habitat)	Permanent direct	M-BI-3 (habitat preservation) M-BI-4 (RMP)	Less than significant
<i>4.1.G. The project would impact the viability of a core wildlife area, defined as a large block of habitat (typically 500 acres or more not limited to project boundaries, though smaller areas with particularly valuable resources may also be considered a core wildlife area) that supports a viable population of a sensitive wildlife species or supports multiple wildlife species. Alteration of any portion of a core habitat could only be considered less than significant if a biologically-based determination can be made that the project would not have a substantially adverse effect on the core area and the species it supports.</i>					
2.3.3.2	Impact BI-WLC-1	Wildlife movement	Temporary direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing)	Less than significant
2.3.3.2	Impact BI-WLC-2	Core wildlife area	Permanent direct	M-BI-3 (habitat preservation) M-BI-4 (RMP)	Less than significant
<i>4.1.H. The project would cause indirect impacts, particularly at the edge of proposed development adjacent to proposed or existing open space or other natural habitat areas, to levels that would likely harm sensitive species over the long term. The following issues should be addressed in determining the significance of indirect impacts: increasing human access; increasing predation or competition from domestic animals, pests or exotic species; altering natural drainage; and increasing noise and/or nighttime lighting to a level above ambient that has been shown to adversely affect sensitive species.</i>					
2.3.3.2	Impact BI-SP-3	Special-status plants	Temporary indirect	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-7 (biological monitoring of SWPPP)	Less than significant

**Table 2.3-7
Summary of Significant Impacts and Mitigation**

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation
				M-BI-8 (prevention of chemical pollutants) M-AQ2 (fugitive dust control plan)	
2.3.3.2	Impact BI-SP-4	Special-status plants	Permanent indirect	M-BI-3 (habitat preservation) M-BI-4 (RMP) M-BI-8 (prevention of chemical pollutants) M-BI-9 (prevention of invasive plant species) M-BI-10 (O&M signage) M-WF-1 (FPP)	Less than significant
2.3.3.2	Impact BI-W-5	Special-status wildlife	Temporary indirect	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-5 (nesting bird survey) M-BI-7 (biological monitoring of SWPPP) M-BI-11 (noise reduction) M-AQ-2 (fugitive dust control plan)	Less than significant
2.3.3.2	Impact BI-W-6	Special-status wildlife	Permanent indirect	M-BI-3 (habitat preservation) M-BI-4 (RMP) M-BI-8 (prevention of chemical pollutants) M-BI-9 (prevention of invasive plant species) M-BI-10 (O&M signage) M-WF-1 (FPP)	Less than significant
<i>4.1.1. The project would impact occupied burrowing owl habitat.</i>					
2.3.3.2	Impact BI-W-2	Special-status wildlife (burrowing owl)	Permanent direct	M-BI-3 (habitat preservation) M-BI-5 (nesting bird survey)	Less than significant
<i>4.1.L. The project would impact nesting success of the following sensitive bird species through grading, clearing, fire fuel modification, and/or other noise generating activities such as construction: coastal cactus wren, coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, tree-nesting raptors, ground-nesting raptors, golden eagle, and light-footed clapper rail.</i>					
2.3.3.2	Impact BI-W-2	Special-status wildlife (sensitive bird nesting)	Permanent direct	M-BI-3 (habitat preservation) M-BI-4 (RMP)	Less than significant
2.3.3.2	Impact BI-	Special-status	Temporary	M-BI-1 (biological monitoring)	Less than significant

**Table 2.3-7
Summary of Significant Impacts and Mitigation**

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation
	W-5	wildlife (sensitive bird nesting)	indirect	M-BI-2 (temporary construction fencing) M-BI-5 (nesting bird survey), M-BI-7 (biological monitoring of SWPPP) M-BI-10 (O&M signage) M-BI-11 (noise reduction) M-AQ-2 (fugitive dust control plan)	
<i>Guideline 4.2: The project would have a substantial adverse effect on riparian habitat or another sensitive natural community identified in local or regional plans, policies, regulations or by California Department of Fish and Game or U.S. Fish and Wildlife Service.</i>					
<i>4.2.A. Project-related grading, clearing, construction, or other activities would temporarily or permanently remove sensitive native or naturalized habitat (as listed in Table 5 [County of San Diego 2010] excluding those without a mitigation ratio) on or off the project site. This Guideline would not apply to small remnant pockets of habitat that have a demonstrated limited biological value. No de minimus standard is specified under which an impact would not be significant; however, minor impacts to native or naturalized habitat that is providing essentially no biological habitat or wildlife value can be evaluated on a case-by-case basis to determine whether the projected impact may be less than significant. For example, an impact to native or naturalized upland habitat under 0.1 acres in an existing urban setting may be considered less than significant (depending on a number of factors). An evaluation of this type should consider factors including, but not limited to, type of habitat, relative presence or potential for sensitive species, relative connectivity with other native habitat, wildlife species and activity in the project vicinity, and current degree of urbanization and edge effects in project vicinity, etc. Just because a particular habitat area is isolated, for example, does not necessarily mean that impacts to the area would not be significant (e.g., vernal pools). An area that is disturbed or partially developed may provide a habitat "island" that would serve as a functional refuge area "stepping stone" or "archipelago" for migratory species.</i>					
2.3.3.3	Impact BI-V-1	Riparian habitat or sensitive vegetation communities	Temporary direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing)	Less than significant
2.3.3.3	Impact BI-V-2	Riparian habitat or sensitive vegetation communities	Permanent direct	M-BI-3 (habitat preservation) M-BI-4 (RMP)	Less than significant
<i>4.2.B. Any of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by U.S. Army Corps of Engineers (ACOE), CDFG [now CDFW] and the County of San Diego: removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity, and abundance.</i>					
2.3.3.3	Impact BI-JAR-1	Jurisdictional resources	Temporary direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing)	Less than significant
2.3.3.3	Impact BI-JAR-2	Jurisdictional resources	Temporary indirect	M-BI-1 (biological monitoring)	Less than significant

**Table 2.3-7
Summary of Significant Impacts and Mitigation**

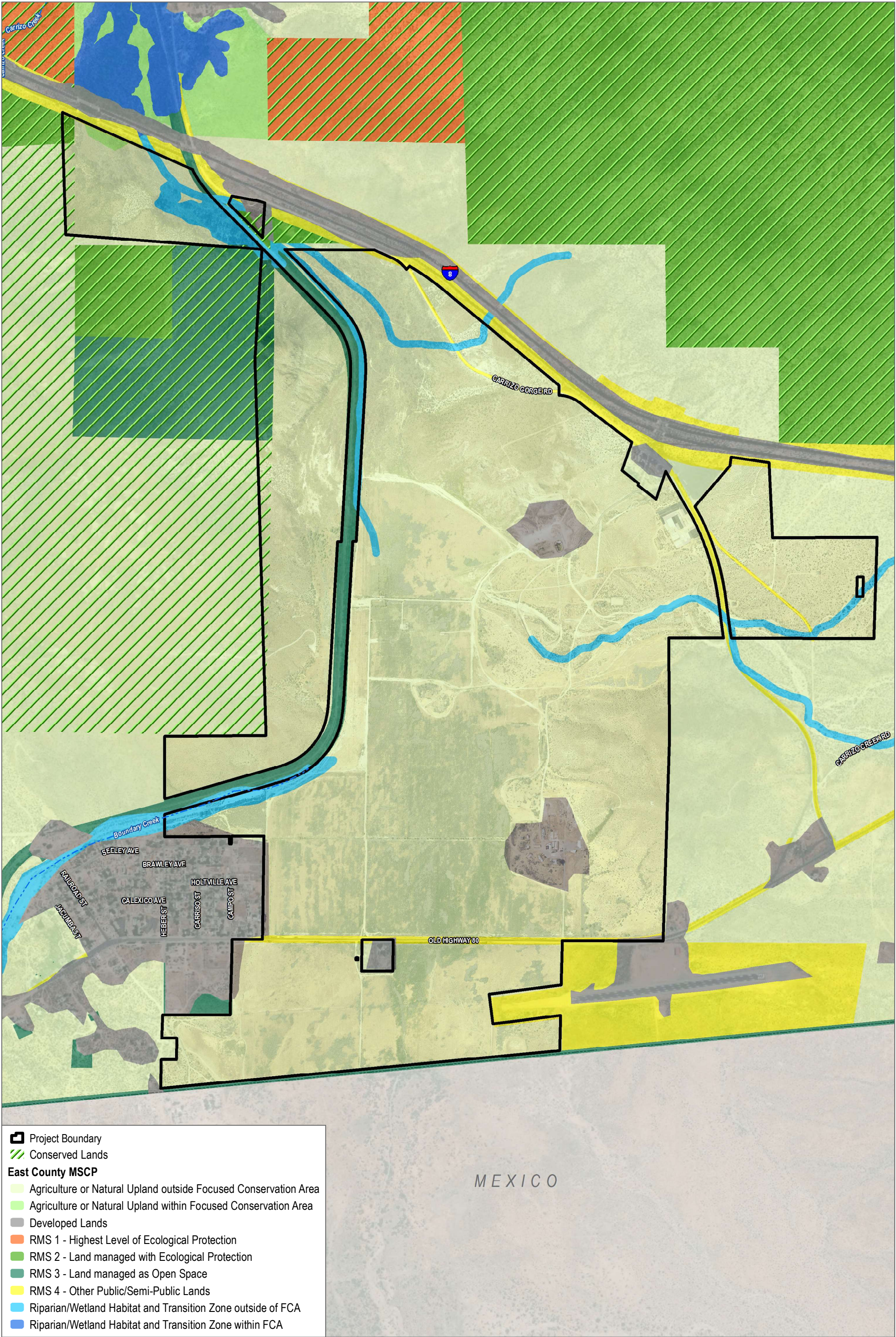
Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation
				M-BI-2 (temporary construction fencing) M-BI-7 (biological monitoring of SWPPP) M-BI-8 (prevention of chemical pollutants) M-AQ-2 (fugitive dust control plan)	
2.3.3.3	Impact BI-JAR-3	Jurisdictional resources	Permanent indirect	M-BI-3 (habitat preservation) M-BI-4 (RMP) M-BI-7 (biological monitoring of SWPPP) M-BI-8 (prevention of chemical pollutants) M-BI-9 (prevention of invasive plant species) M-WF-1 (FPP)	Less than significant
<i>4.2.D. The project would cause indirect impacts, particularly at the edge of proposed development adjacent to proposed or existing undeveloped lands or other natural habitat areas, to levels that would likely harm sensitive habitats over the long term. The following issues should be addressed in determining the significance of indirect impacts: increasing human access; increasing predation or competition from domestic animals, pests, or exotic species; altering natural drainage; and increasing noise and/or nighttime lighting to a level above ambient that has been shown by the best available science to adversely affect the functioning of sensitive habitats.</i>					
2.3.3.3	Impact BI-V-3	Riparian habitat or sensitive vegetation communities	Temporary indirect	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-7 (biological monitoring of SWPPP) M-BI-8 (prevention of chemical pollutants) M-AQ-2 (fugitive dust control plan)	Less than significant
2.3.3.3	Impact BI-V-4	Riparian habitat or sensitive vegetation communities	Permanent indirect	M-BI-3 (habitat preservation) M-BI-4 (RMP) M-BI-7 (biological monitoring of SWPPP) M-BI-8 (prevention of chemical pollutants) M-BI-9 (prevention of invasive plant species) M-WF-1 (FPP)	Less than significant

Table 2.3-7
Summary of Significant Impacts and Mitigation

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation
<i>Guideline 4.3: The project would have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means.</i>					
2.3.3.4	Impact BI-JAR-1, Impact JAR-2, and Impact BI-JAR-3	Jurisdictional resources	Temporary direct, and temporary and permanent indirect	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-3 (habitat preservation) M-BI-4 (RMP) M-BI-7 (biological monitoring of SWPPP) M-BI-8 (prevention of chemical pollutants) M-BI-9 (prevention of invasive plant species) M-AQ-2 (fugitive dust control plan) M-WF-2 (CFPP)	Less than significant
<i>Guideline 4.4: The project would interfere substantially with the movement of a native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.</i>					
<i>4.4.A. The project would impede wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction.</i>					
2.3.3.5	Impact BI-WLC-1	Wildlife movement	Temporary direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing)	Less than significant
2.3.3.5	Impact BI-WLC-2	Wildlife movement	Permanent direct	M-BI-3 (habitat preservation) M-BI-4 (RMP)	Less than significant
2.3.3.5	Impact BI-WLC-3	Wildlife movement	Temporary indirect	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-5 (nesting bird survey) M-BI-7 (biological monitoring of SWPPP) M-BI-11 (noise reduction)	Less than significant
<i>4.4.B. The project would substantially interfere with connectivity between blocks of habitat, or would potentially block or substantially interfere with a local or regional wildlife corridor or linkage.</i>					
2.3.3.5	Impact WLC-2	Wildlife movement	Permanent direct	M-BI-3 (habitat preservation) M-BI-4 (RMP)	Less than significant
<i>4.4.C. The project would create artificial wildlife corridors that do not follow natural movement patterns.</i>					
2.3.3.5	Impact WLC-2	Wildlife movement	Permanent direct	M-BI-3 (habitat preservation) M-BI-4 (RMP)	Less than significant

Table 2.3-7
Summary of Significant Impacts and Mitigation

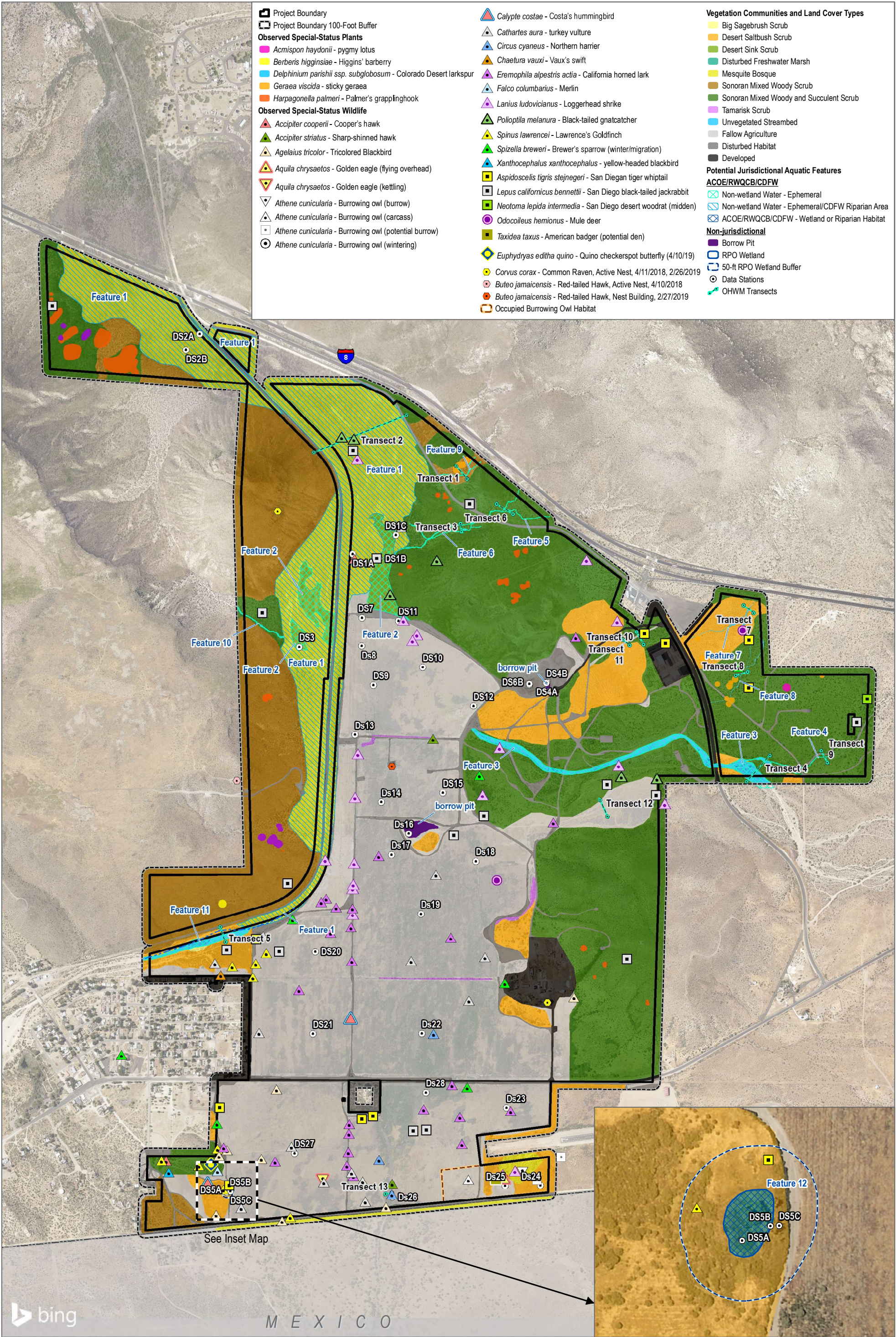
Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation
<i>4.4.D. The project would increase noise and/or nighttime lighting in a wildlife corridor or linkage to levels likely to affect the behavior of the animals identified in a site-specific analysis of wildlife movement.</i>					
2.3.3.5	Impact BI-WLC-3	Wildlife movement	Temporary indirect	M-BI-11 (noise reduction)	Less than significant
<i>4.4.E. The project does not maintain an adequate width for an existing wildlife corridor or linkage and/or would further constrain an already narrow corridor.</i>					
2.3.3.5	Impact WLC-2	Wildlife movement	Permanent direct	M-BI-3 (habitat preservation) M-BI-4 (RMP)	Less than significant
<i>4.4.F. The project would create artificial wildlife corridors that do not follow natural movement patterns.</i>					
2.3.3.5	Impact WLC-2	Wildlife movement	Permanent direct	M-BI-3 (habitat preservation) M-BI-4 (RMP)	Less than significant
<i>Guideline 4.5: The project would conflict with one or more local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and/or would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan.</i>					
<i>4.5.C. The project will impact any amount of wetlands or sensitive habitat lands as outlined in the Resource Protection Ordinance (RPO).</i>					
2.3.3.6	Impact BI-W-2	Sensitive habitat lands (occupied burrowing owl habitat)	Permanent direct	M-BI-3 (habitat preservation) M-BI-5 (nesting bird survey and take avoidance surveys)	Less than significant
<i>4.5.G. The project would preclude connectivity between areas of high habitat values.</i>					
10.2.7	Impact W-2	Sensitive habitat lands (occupied burrowing owl habitat)	Permanent direct	M-BI-3 (habitat preservation) M-BI-5 (nesting bird survey and take avoidance surveys)	Less than significant
<i>4.5.J. The project would reduce the likelihood of survival and recovery of listed species in the wild.</i>					
2.3.3.6	Impact BI-W-2	State-listed wildlife species (Tricolored blackbird)	Direct and indirect	M-BI-3 (habitat preservation) M-BI-4 (RMP)	Less than significant
<i>4.5.K. The project would result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (Migratory Bird Treaty Act).</i>					
2.3.3.6	Impact BI-W-3	Nesting birds	Permanent direct	M-BI-1 (biological monitoring) M-BI-5 (nesting bird survey)	Less than significant



SOURCE: SANGIS 2017, 2020

FIGURE 2.3-1
Regional Context
JVR Energy Park Project EIR

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SOURCE: SANGIS 2017, 2020

DUDEK



FIGURE 2.3-2
Biological Resources
JVR Energy Park Project EIR

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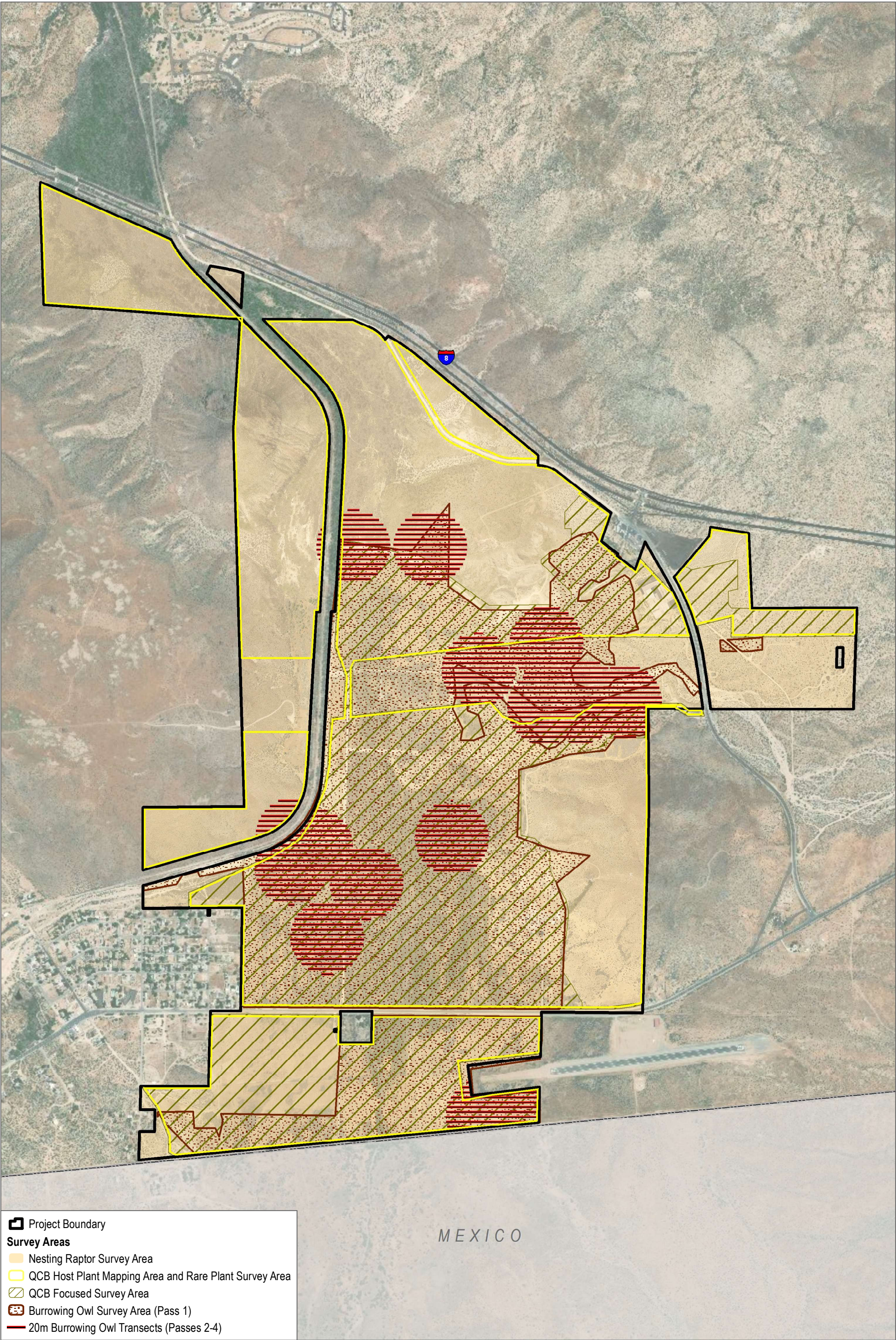
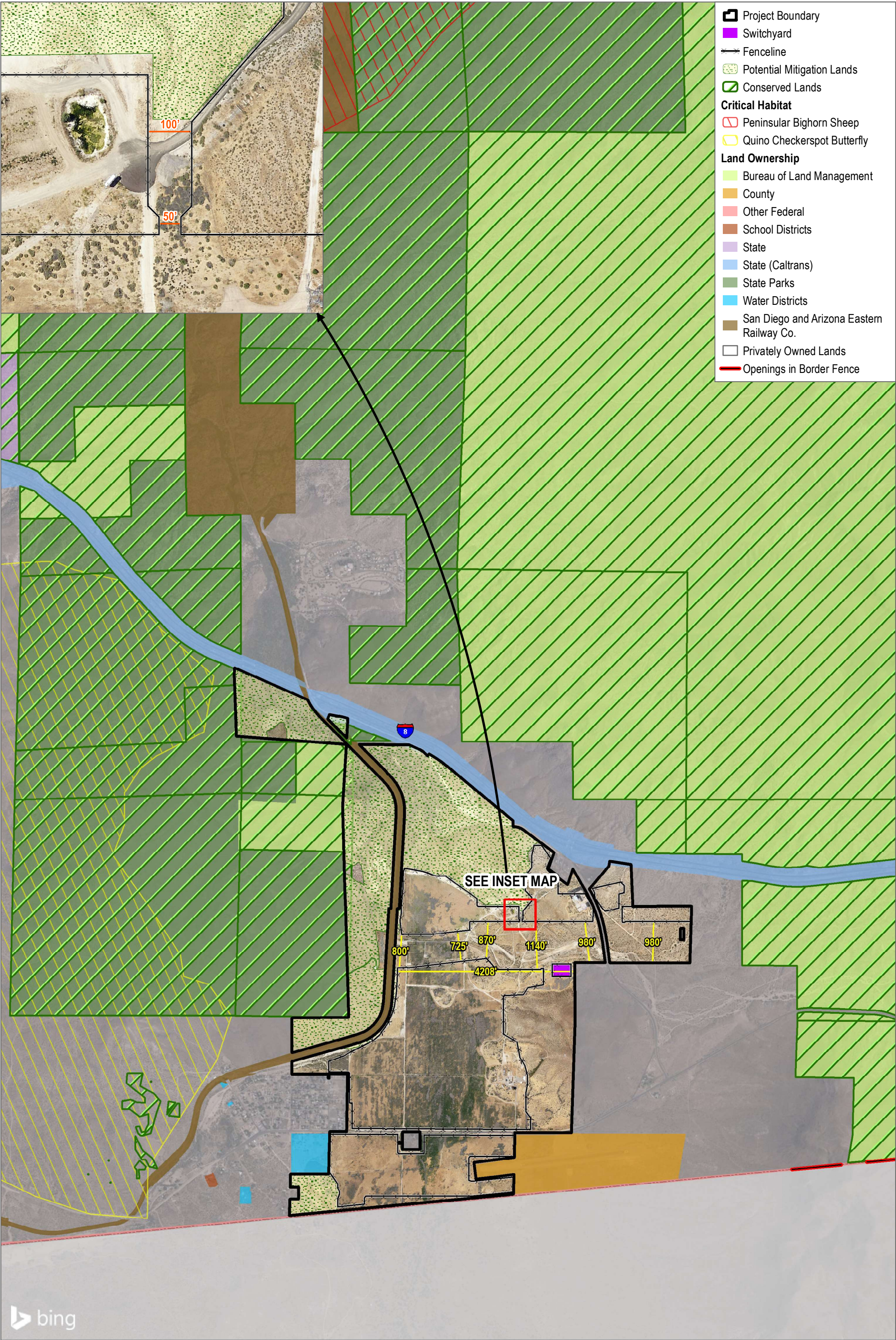


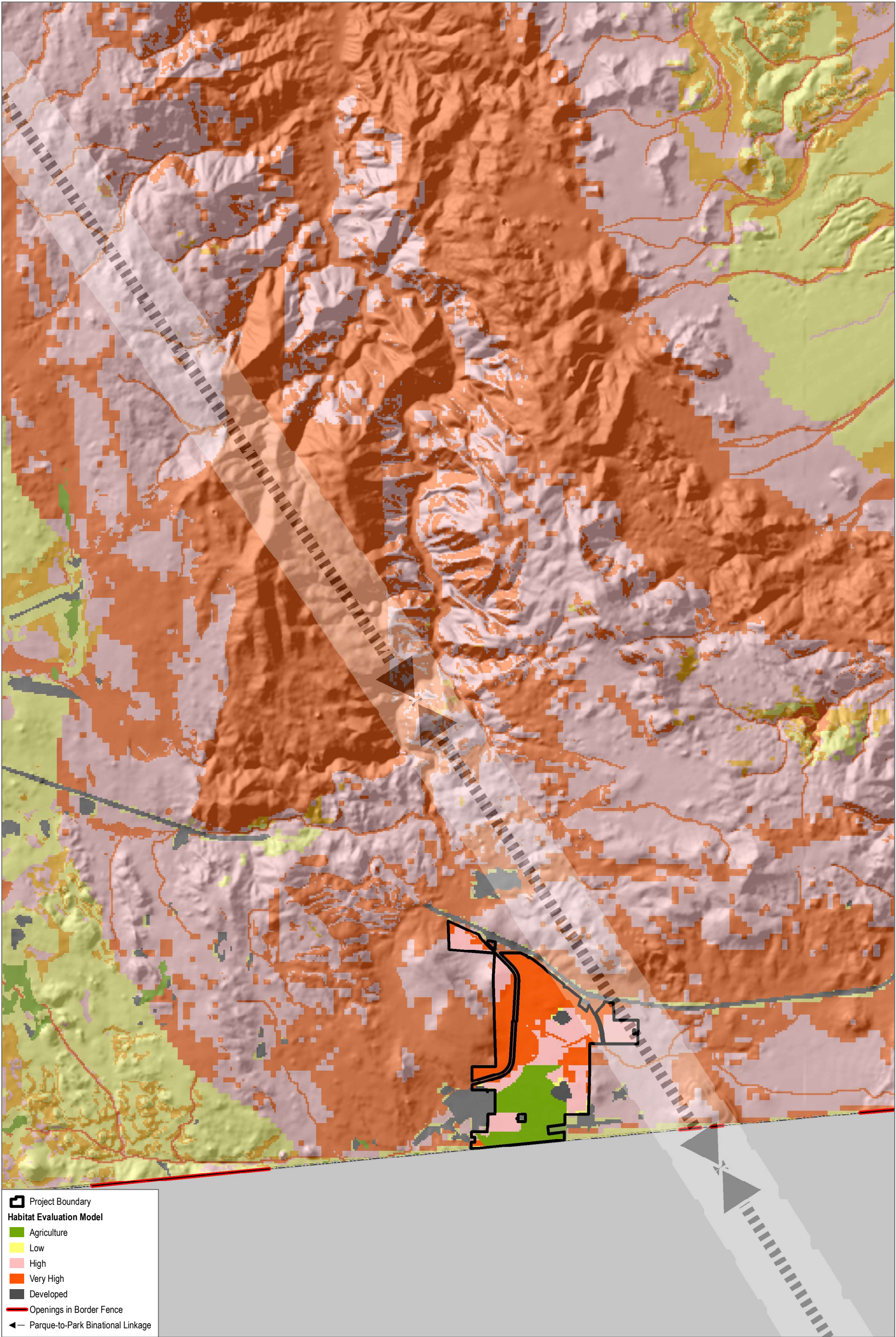
FIGURE 2.3-3
Survey Areas
JVR Energy Park Project EIR

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SOURCE: Kimley-Horn 2020; SANGIS 2017, 2020

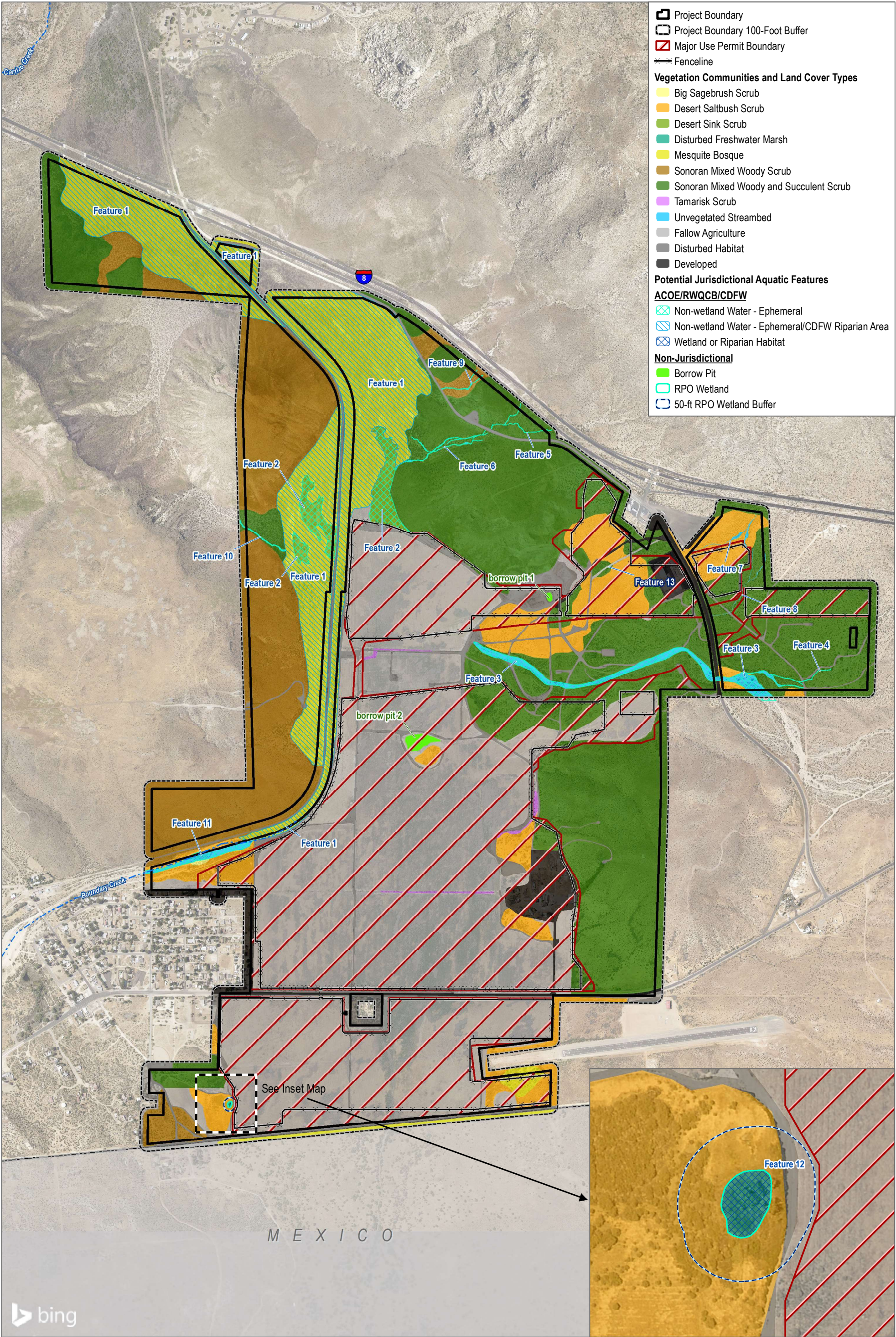
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SOURCE: Stallcup et. al. 2015; SANGIS 2020

FIGURE 2.3-5
Habitat Evaluation Model
JVR Energy Park Project EIR

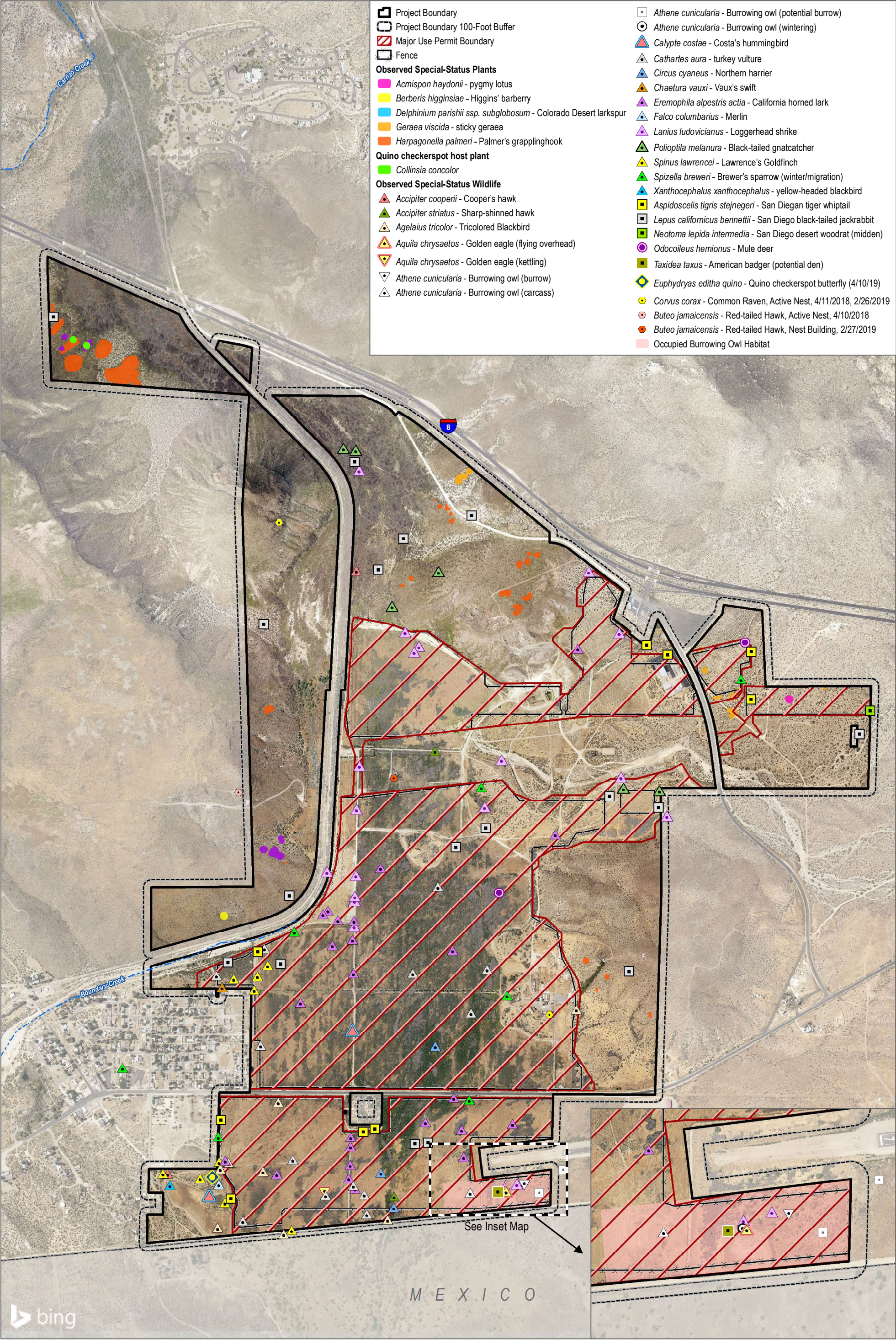
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SOURCE: Kimley-Horn 2020; SANGIS 2017, 2020

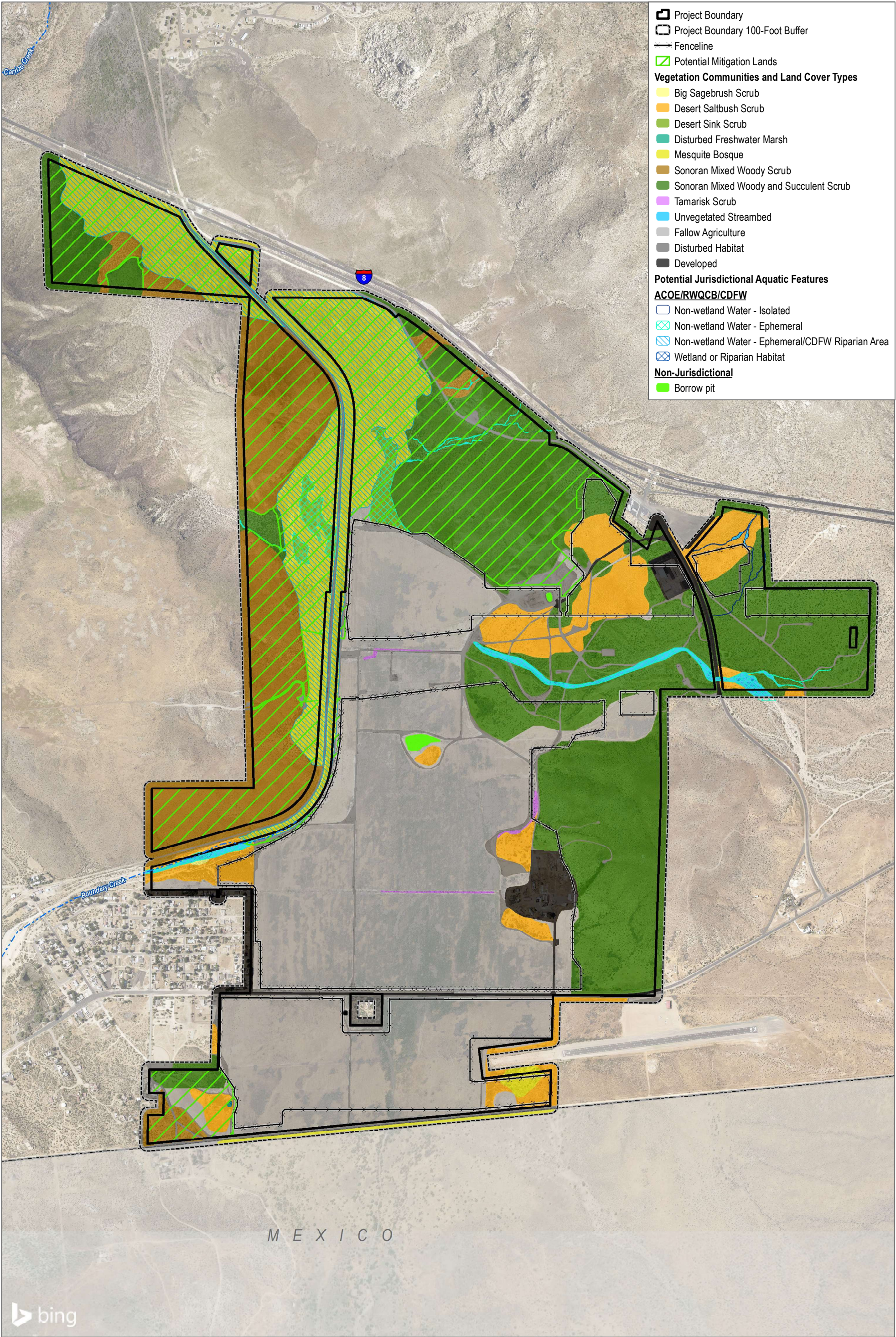
FIGURE 2.3-6
Impacts to Vegetation Communities and Land Covers and Jurisdictional Delineation
JVR Energy Park Project EIR

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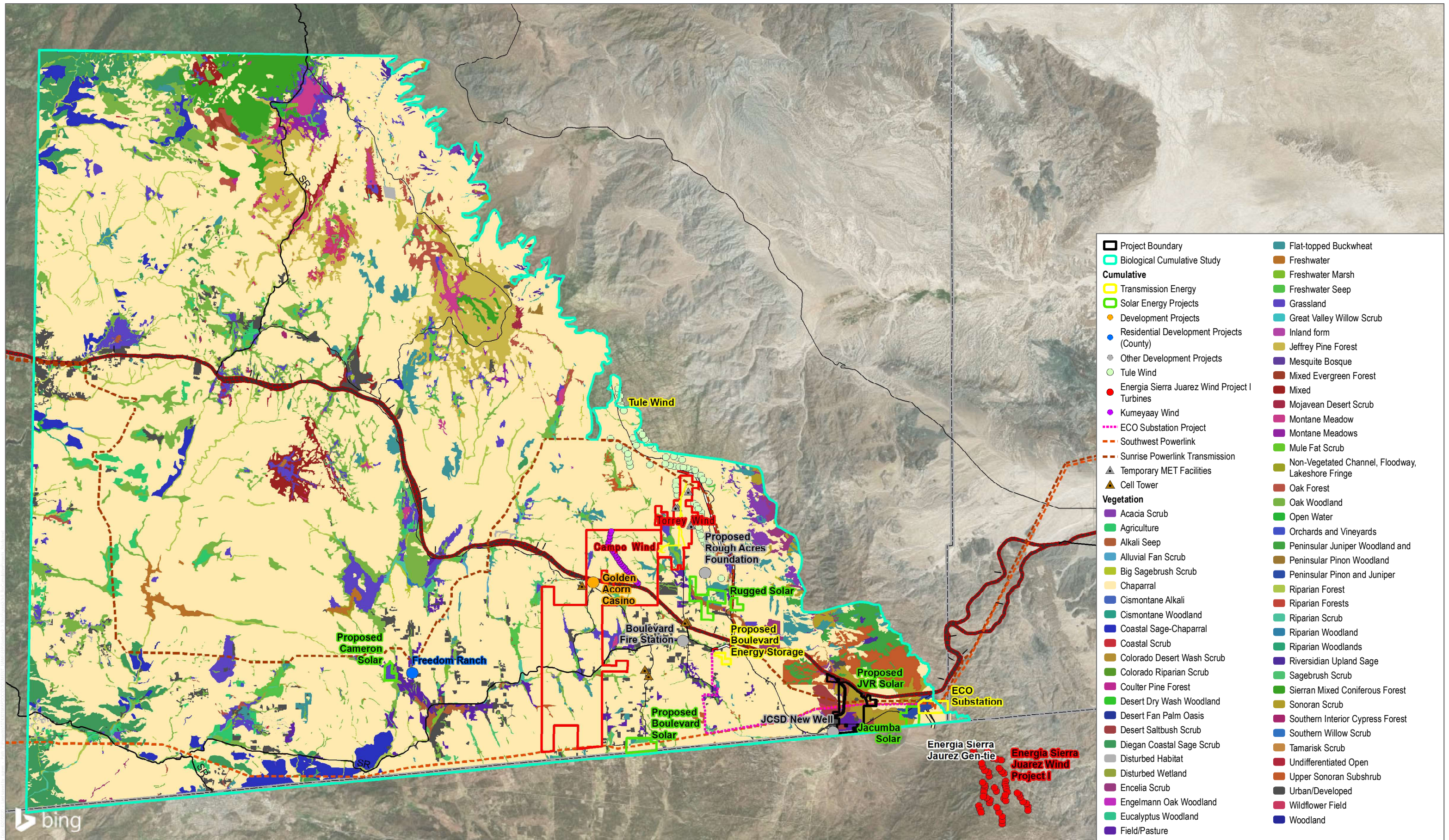
SOURCE: Kimley-Horn 2020; SANGIS 2017, 2020

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SOURCE: Kimley-Horn 2020; SANGIS 2017, 2020

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SOURCE: County of San Diego; Bing Maps

FIGURE 2.3-9

Cumulative Impact Analysis

JVR Energy Park Project EIR

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