

3.4 Biological Resources

This section identifies the biological resources that may be impacted by the proposed project. The following identifies the existing biological resources on the project site, analyzes potential impacts of the proposed project, and recommends mitigation measures to avoid or reduce potential impacts of the proposed project.

The existing biological resources information for this section is summarized from the following technical reports:

- *Biological Resources Technical Report* (BRTR) prepared by Stantec (Appendix E of this EIR)
- *Flat-Tailed Horned Lizard Survey* prepared by Barrett's Biological Surveys (Appendix F of this EIR)
- Preliminary Jurisdictional Waters/Wetlands Delineation Report prepared by Stantec (Appendix G of this EIR)

3.4.1 Existing Conditions

The 122.5-acre Project footprint includes the solar field, substation, control room, gen-tie line, proposed groundwater well, main access road, emergency access roads, drainage, security fencing, parking, retention basins, and temporary staging area. The project site is located within the Imperial Valley approximately 2 miles northeast of Niland, 5 miles east of the Salton Sea, and 1.5 miles west of the active Chocolate Mountain Aerial Gunnery Range (Figure 3.4-1). The biological study area (BSA) includes the Project footprint plus a 300-foot buffer (Figure 3.4-1).

The BSA is situated within the Sonoran Desert region of southern California, which has an average annual temperature ranging from 42 degrees Fahrenheit in December to 107 degrees Fahrenheit in July and an average annual precipitation of 2.87 inches (US Climate Data 2018). The BSA slopes gently from northeast to southwest, with elevations ranging from approximately 20 feet above mean sea level (MSL) to approximately 30 feet below MSL. It is bordered largely by undeveloped land to the north, east, and south, with existing orchard occurring to the west and northwest. The unpaved Gas Line Road is roughly parallel to the eastern boundary of the BSA. The East Highline Canal, an IID water delivery conveyance passes through the extreme southwestern corner of the BSA (Figure 2-2).

According to the BRTR, four soil types were mapped within the BSA including Niland gravelly sand; Niland-Imperial complex, wet; Vint and Indio very fine sandy loams, wet and NOTCOM (No Digital Data Available) (United States Department of Agriculture [USDA] Natural Resources Conservation Service [NRCS] 2020a). The project site falls within the portion of the BSA for which no digital data is available. However, a 1903 soil survey, identifies the project site as occurring on Imperial gravelly loam. Of the above soils, only "Niland gravelly sand" appears on the NRCS hydric soils list (USDA NRCS 2020b).

Methodology

General Surveys

Prior to conducting field surveys, a literature search was conducted to identify special-status plant and animal species with potential to occur within 10 miles of the BSA. Sources reviewed included:

- CDFW California Natural Diversity Database (CDFW 2019a)

- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2018a)
- Special Animals List (CDFW 2018b)
- State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW 2018c)
- Inventory of Rare and Endangered Vascular Plants of California (California Native Plant Society [CNPS] 2019)
- California Sensitive Natural Communities (CDFW 2018d)
- Consortium of California Herbaria (CCH; 2020)

On January 30, 2019, Stantec conducted a habitat assessment and reconnaissance-level survey by vehicle and on foot with the primary goal of identifying habitat that could be capable of supporting special-status species and to document the presence/absence of special-status biological resources. During that site visit, biologists recorded preliminary vegetation type boundaries over recent aerial photograph base maps using the ESRI® Collector for ArcGIS app on an Apple® iPad® coupled with a Bad Elf® GNSS Surveyor sub-meter external global positioning system unit. Mapping was further refined in the office using ArcGIS (version 10.4). Vegetation descriptions and names are based on Sawyer et al. (2009) and have been defined at least to the alliance level. Additional details regarding methodology are available in the BRTR for the Project (Appendix E of this EIR).

Habitat Assessments

SPECIAL-STATUS PLANTS

Each of the special-status plants species, subspecies, or variety identified from the literature search, including those listed as threatened or endangered under the Federal ESA or CESA, proposed for such listing, or with a California Rare Plant Rank (CRPR) of 1-4, was assessed for their potential to occur within the BSA based on the following criteria:

- **Present:** Species was observed within the BSA during recent botanical surveys or one or more populations have been acknowledged by CDFW, USFWS, or local experts.
- **High:** A documented recent record (within 10 years) exists of the species within the BSA or immediate vicinity (approximately 5 miles), the environmental conditions (including soil type) associated with presence of the species occur within the BSA, and the BSA is located within the known current distribution of the species.
- **Moderate:** A documented recent record (within 10 years) exists of the species within the BSA or immediate vicinity (approximately 5 miles), the environmental conditions associated with presence of the species are marginal and/or limited within the BSA, and the BSA is located within the known current distribution of the species.
- **Low:** A historical record (over 10 years) exists of the species within the BSA or general vicinity (approximately 10 miles) and the environmental conditions (including soil type) associated with presence of the species are marginal and/or limited within the BSA.
- **Not Likely to Occur:** The environmental conditions associated with presence of the species do not occur within the BSA.

SPECIAL-STATUS WILDLIFE

Each of the special-status wildlife species or subspecies identified from the literature search, including those listed as threatened or endangered under the Federal ESA or CESA, proposed for such listing, designated as Species of Special Concern or Fully Protected, and other species that have been identified by the USFWS, CDFW, or local jurisdictions as unique or rare, was assessed for their potential to occur within the BSA based on the following criteria:

- **Present:** Species (or sign) were observed in the BSA or in the same watershed (aquatic species only) during the most recent surveys, or a population has been acknowledged by CDFW, USFWS, or local experts.
- **High:** Suitable habitat (including soils) for the species occurs on site and a known occurrence has been reported within the BSA or adjacent areas (within 5 miles of the BSA) within the past 20 years; however, these species were not detected during the most recent surveys.
- **Moderate:** Suitable habitat (including soils) for the species occurs on site and a known regional record occurs within the database search, but not within 5 miles of the BSA or within the past 20 years; or a known occurrence occurs within 5 miles of the BSA and within the past 20 years and marginal or limited amounts of suitable habitat occur on site; or the species' range includes the BSA and suitable habitat exists within the BSA.
- **Low:** Limited suitable habitat for the species occurs on site, no known occurrences were produced from the database search, and the species' range includes the BSA.
- **Not Likely to Occur:** The environmental conditions associated with presence of the species do not occur within the BSA.

Focused Surveys for Flat-Tailed Horned Lizard

Per guidance provided by Magdalena Rodriguez, CDFW Senior Environmental Scientist (Specialist) from the Ontario, California field office, focused surveys for flat-tailed horned lizard were conducted for the entire 640-acre parcel on August 31, 2018. Surveys were conducted by Barrett's Biological Surveys in accordance with the survey protocol provided in the Flat-tailed Horned Lizard Rangeland Management Strategy (Flat-tailed Horned Lizard Interagency Coordinating Committee 2003). Additional details regarding methodology are available in the BRTR for the Project (Appendix E of this EIR).

Jurisdictional Delineation

Stantec conducted a formal jurisdictional delineation on April 12, 2018. During that survey, the BSA was evaluated for potential wetlands and/or waters subject to federal and/or state jurisdiction pursuant to Sections 404 and 401 of the Clean Water Act. The jurisdictional assessment also included an investigation of areas that could be jurisdictional pursuant to Section 1600 et seq. of the California FGC. Prior to conducting the jurisdictional delineation, Stantec reviewed current and historic aerial imagery, topographic maps, soil maps, local and state hydric soils lists, and the National Wetlands Inventory (USFWS 2006) to evaluate the potential active channels and wetland features that occur within the BSA. During the field assessment, hydrologic features were mapped using the same data collection equipment described above for vegetation mapping. Field data were further refined in the office using a Geographic Information System (GIS) and total jurisdictional area for each regulatory jurisdiction calculated. Additional details regarding methodology are available in the Preliminary Jurisdictional Waters/Wetlands Delineation Report for the Project (Appendix G of this EIR).

Vegetation Communities and Land Cover Types

The following vegetation communities and land cover types were mapped within the BSA during field surveys conducted for the Project: creosote bush – white bursage scrub, arrow weed thickets, blue palo verde – ironwood woodland, tamarisk thickets, agriculture, disturbed, and developed land. These vegetation communities and land cover types within the BSA are depicted on Figure 3.4-1 and summarized in Table 3.4-1. A brief description of each vegetation community and land cover type is provided below the table.

Table 3.4-1. Vegetation Communities or Land Cover Types within the Biological Study Area

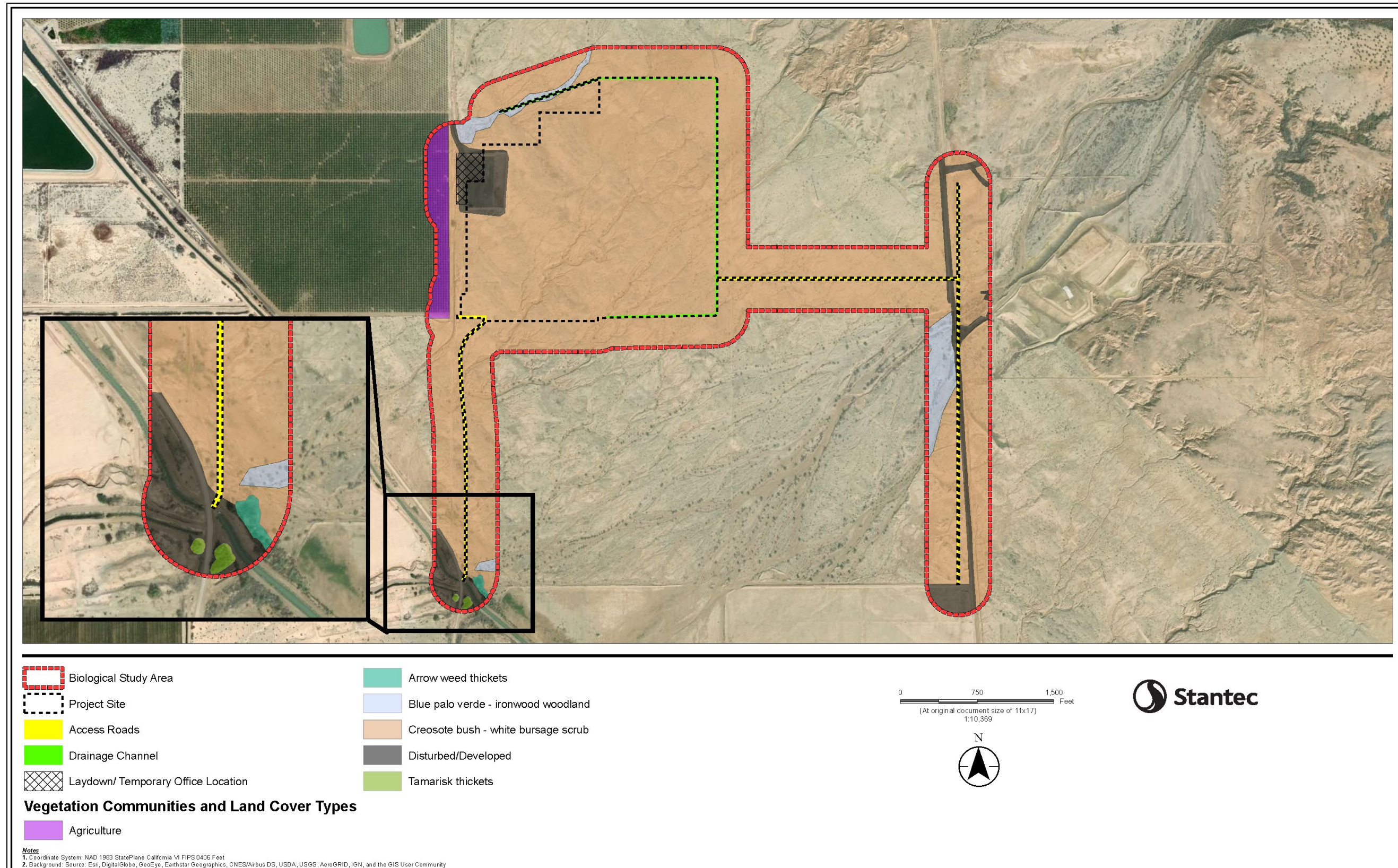
Vegetation Community or Land Cover Type	Acres within BSA
Creosote Bush – White Bursage Scrub	279.83
Arrow Weed Thickets	0.41
Blue Palo Verde – Ironwood Woodland	9.87
Tamarisk Thickets	0.29
Agriculture	7.92
Disturbed/Developed	21.80
Total	320.12

Source: Appendix E of this EIR

Creosote Bush – White Bursage Scrub

Creosote bush (*Larrea tridentata*) - white bursage (*Ambrosia dumosa*) scrub is the primary vegetation community throughout the BSA. Other shrub species present within this community include a number of saltbush species (*Atriplex* spp.) and desert thorn (*Lycium brevipes*). The sparse understory consists of native herbaceous species, including desert dandelion (*Malacothrix glabrata*) and desert plantain (*Plantago ovata*), and non-native grasses, primarily bromes (*Bromus* spp.) and Mediterranean grass (*Schismus barbatus*).

Figure 3.4-1. Vegetation Communities and Land Cover Types in the Biological Study Area



Source: Appendix E of this EIR

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Arrow Weed Thickets

Arrow weed (*Pluchea sericea*) thickets are the dominant vegetation along the small section of the East Highline Canal in the southwestern corner of the BSA. Other species that are less common in this vegetation community include cattails (*Typha* spp.), common reed (*Phragmites australis*), and saltcedar (*Tamarix ramosissima*).

Blue Palo Verde – Ironwood Woodland

This vegetation community occurs along the margins of some of the larger drainage features within the BSA, particularly in the southeast portion of the BSA. This vegetation community is dominated by ironwood (*Olneya tesota*) trees, though a few blue palo verde (*Parkinsonia florida*) and honey mesquite (*Prosopis glandulosa* var. *torreyana*) trees are interspersed throughout the community. The understory consists of white bursage, creosote bush, and brome grasses.

Tamarisk Thickets

This vegetation community is comprised of a monoculture of mature tamarisk trees up to approximately 40 feet tall with no appreciable understory. It occurs along the small section of the East Highline Canal in the southwestern corner of the BSA.

Agriculture

This land cover type was used to map areas of active agriculture. Within the BSA, areas mapped as Agriculture were limited to citrus farms located within and adjacent to the northwest corner of the BSA.

Disturbed/Developed

This land cover type was used to map portions of the BSA that are developed, primarily unpaved roadways. Where vegetated, these areas are generally composed of scarce occurrences of native and non-native herbaceous species common to the vegetation communities through which they pass.

Sensitive Natural Communities

Sensitive natural communities are defined by CDFW as, "...communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects." All vegetation within the state is ranked with an "S" rank, however only those that are of special concern (S1-S3 rank) are generally evaluated under CEQA.

Arrow weed thickets are listed with a rank of S3 and approximately 0.41 acre of this habitat type occurs within the BSA (Table 3.4-1).

Designated Critical Habitat

Based on the literature review conducted prior to field surveys, federally designated critical habitat that is nearest to the BSA is for the federally and state threatened desert tortoise (*Gopherus agassizii*), which occurs approximately 4 miles northeast of the BSA. Marginally suitable habitat for this species was present within and adjacent to the BSA.

Plant Species

Plants observed during the January 2019 reconnaissance-level survey were recorded to the taxonomic level feasible at the time of the survey given the plant’s phenology; however, a focused, floristic-level survey was not conducted. The survey resulted in the documentation of 38 species of native and non-native plants within the BSA. A complete list of the plant species observed within the BSA is provided in the BRTR (Appendix E of this EIR).

Special-Status Plant Species

No special-status plant species were observed within the BSA during field surveys conducted in April and August 2018 and January 2019. A complete list of the special-status plant species with potential to occur in the vicinity of the project site is provided in the BRTR (Appendix E of this EIR). Table 3.4-2 identifies the special-status plant species that have a high to moderate potential to occur within the BSA.

Table 3.4-2. Known and Potential Occurrences of Special-Status Plant Species within the Biological Study Area

Species		Status	Habitat and Distribution	Blooming Period	Potential to Occur
Scientific Name	Common Name				
<i>Astragalus insularis</i> var. <i>harwoodii</i>	Harwood’s milkvetch	2B.2	Sandy or gravelly. Desert dunes, Mojavean desert scrub. <500 m.	January - May	High. Suitable habitat occurs within the BSA. The nearest recorded occurrence to the BSA is from 2005, approximately 3 miles to the northwest.
<i>Astragalus sabulonum</i>	gravel milk-vetch	2B.2	Usually sandy, sometimes gravelly. Flats, washes, and roadsides. Desert dunes, Mojavean desert scrub, Sonoran Desert scrub. 60 to 885 m.	February - June	Moderate. Suitable habitat occurs within the BSA and the nearest occurrence to the BSA is less than 1 mile to the southwest, although that occurrence is from 1906.
<i>Cylindropuntia munzii</i>	Munz’s cholla	1B.3	Sonoran Desert scrub, (sandy or gravelly). 150-600 m.	May	Moderate. Suitable habitat occurs within the BSA. The nearest occurrences to the BSA are approximately 6 miles to the east and 6 miles to the northeast.

Source: Appendix E of this EIR

Status Codes – California Rare Plant Rank designation: 1B = Plants rare, threatened, or endangered in California and elsewhere; 2B = Plants rare, threatened, or endangered in California but more common elsewhere; .2 = Fairly threatened in California (20-80% occurrences threatened / moderate degree/immediacy of threat); .3 = Not very threatened in California (less than 20% of occurrences threatened / low degree/immediacy of threats or no current threats known)

Wildlife Species

Conditions in the BSA provide microhabitats suitable for a variety of terrestrial insects and other invertebrates. As in all ecological systems, invertebrates in the BSA play a crucial role in a number of biological processes, including serving as primary or secondary food sources for bird, reptilian, and mammalian predators and pollination vectors, and providing pest control, waste removal, and nutrient cycling. The hand raked and visually inspected areas of the BSA included a wide variety of common native and non-native invertebrates further detailed in the BRTR (Appendix E of this EIR).

Although the ephemeral washes within the BSA do not support fish, the East Highline Canal, which traverses the extreme southwestern corner of the BSA, is known to support fish species including channel catfish (*Ictalurus punctatus*), bass (*Micropterus* sp.), and sunfish (*Lepomis* sp.).

Amphibians all require aquatic habitat for all or part of their life cycle, which may only be present within the BSA (except for the East Highline Canal) for a short period time during and immediately after substantial rain events. Therefore, amphibians are not expected to occur throughout the vast majority of the BSA. Common species known to occur in the region associated with more permanent sources of water provided by irrigation infrastructure include the Rio Grande leopard frog (*Lithobates berlandieri*), American bullfrog (*L. catesbeianus*), and Great Plains toad (*Anaxyrus cognatus*).

No reptile species were observed in the BSA at the time of the reconnaissance survey. Although these species were not detected, suitable habitat for a number of common reptiles was observed within the BSA, including sidewinder (*Crotalus cerastes*), Sonoran gopher snake (*Pituophis catenifer affinis*), western whiptail (*Aspidoscelis tigris*), desert iguana (*Dipsosaurus dorsalis*), and zebra-tailed lizard (*Callisaurus draconoides*).

The most common bird species observed was sagebrush sparrow (*Artemisospiza nevadensis*), although mourning dove (*Zenaida macroura*) and flyovers by turkey vulture (*Cathartes aura*) and American kestrel (*Falco sparverius*) were also noted. Suitable habitat for a number of common birds known to occur in the region were observed at the time of the survey, including greater roadrunner (*Geococcyx californianus*), ladder-backed woodpecker (*Dryobates scalaris*), Gambel's quail (*Callipepla gambelii*), and phainopepla (*Phainopepla nitens*), although these species were not detected in the BSA.

Signs of mammal species (tracks, scat, etc.) were detected, but no individuals were observed during the January 2019 reconnaissance survey. A number of common mammals are expected to occur within the BSA given the habitat conditions and species that are known to occur in the region. These include round-tailed ground squirrel (*Xerospermophilus tereticaudus*), desert cottontail (*Sylvilagus audubonii*), kangaroo rats (*Dipodomys* spp.), coyote (*Canis latrans*), kit fox (*Vulpes macrotis*), and raccoon (*Procyon lotor*).

Special-Status Wildlife Species

No special-status wildlife species or their diagnostic sign (i.e., scat, tracks, whitewash, pellets or burrows) were observed within or immediately adjacent to the BSA during field surveys conducted in April and August 2018 or January 2019. A complete list of the special-status wildlife species with potential to occur in the vicinity of the project site is provided in the BRTR (Appendix E of this EIR). Table 3.4-3 identifies the special-status wildlife species that have a high to moderate potential to occur within the BSA.

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Table 3.4-3. Known and Potential Occurrences of Special-Status Wildlife Species within the Biological Study Area

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
Amphibians					
<i>Incilius alvarius</i>	Sonoran Desert toad	SSC	Inhabits grasslands, arid desert lowlands, mountain canyons with oaks and sycamores, and pinyon-oak-juniper mountain forests. Found near washes, river bottoms, springs, reservoirs, canals, irrigation ditches, stock ponds, streams, temporary pools, and sometimes away from water sources.	Suitable habitat occurs within the East Highline Canal in the extreme southwest corner of the BSA. The nearest recorded occurrence to the BSA is less than 1 mile to the southwest; however, this record is from 1916.	Moderate (in IID canal only)
<i>Lithobates yavapaiensis</i>	lowland leopard frog	SSC	Found in streams, river side channels, springs, ponds, stock ponds in desert scrub, grassland, woodland, and pinyon juniper habitats. Has been observed in canals, roadside ditches, and ponds in the Imperial Valley during the first quarter of this century, but the context of its occurrence in those areas is not well understood because that era was a period of extensive habitat alteration. Lowland leopard frogs may have simply been transitory in those areas.	Suitable habitat occurs within the East Highline Canal in the extreme southwest corner of the BSA. The nearest recorded occurrence to the BSA is approximately 1.5 miles to the southwest; however, this record is from 1940.	Moderate (in IID canal only)
<i>Scaphiopus couchii</i>	Couch's spadefoot	SSC	Desert and arid regions of grassland, prairie, mesquite, creosote bush, thorn forest, and sandy washes. Temporary desert rain pools that last at least 7 days, with water temps >15°C and with subterranean refuge sites close by. An insect food base, especially termites, must be available.	Moderately suitable dispersal habitat occurs within the BSA, but formation of temporary desert pools for breeding and gestation would occur infrequently. The nearest recorded occurrence to the BSA is approximately 3 miles to the west.	Moderate
Reptiles					
<i>Gopherus agassizii</i>	desert tortoise	FT, ST	A desert species that needs firm ground in order to dig burrows, or rocks to shelter among. In California, it is found in arid sandy or gravelly locations along riverbanks, washes, sandy dunes, alluvial fans, canyon bottoms, desert oases, rocky hillsides, creosote flats, and hillsides.	Marginally suitable habitat occurs within the BSA. The nearest recorded occurrence to the BSA is approximately 4.3 miles to the northeast.	Moderate

Table 3.4-3. Known and Potential Occurrences of Special-Status Wildlife Species within the Biological Study Area

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
Birds					
<i>Athene cunicularia</i>	burrowing owl	SSC	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Suitable habitat occurs within the BSA. The nearest recorded occurrence to the BSA is less than 1 mile to the west.	High
<i>Charadrius montanus</i>	mountain plover (wintering)	SSC	Short grasslands, freshly plowed fields, newly sprouting grain fields, and sometimes sod farms. Short vegetation, bare ground, and flat topography. Prefers grazed areas and areas with burrowing rodents.	No suitable habitat occurs within the BSA. The nearest recorded occurrence to the BSA is approximately 1.4 miles to the south.	Moderate (as a transient)
<i>Falco columbarius</i>	merlin (wintering)	WL	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands and deserts, farms and ranches. Clumps of trees or windbreaks are required for roosting in open country.	Suitable foraging habitat occurs within the BSA, but no roosting habitat is present. The nearest recorded occurrence to the BSA is approximately 2 miles to the south.	Moderate (foraging only)
<i>Lanius ludovicianus</i>	loggerhead shrike (nesting)	SSC	Loggerhead shrikes inhabit open country with short vegetation and well-spaced shrubs or low trees, particularly those with spines or thorns. They frequent agricultural fields, pastures, old orchards, riparian areas, desert scrublands, savannas, prairies, golf courses, and cemeteries. Often seen along mowed roadsides with access to fence lines and utility poles.	Suitable habitat occurs within the BSA. The nearest recorded occurrence to the BSA is approximately 7 miles to the southeast.	Moderate
<i>Poliophtila melanura</i>	black-tailed gnatcatcher	WL	Live year-round in semiarid and desert thorn scrub at elevations up to 7,000 feet, often among creosote bush, salt bush, mesquite, palo verde, ocotillo, and spiny hackberry, as well as cacti such as saguaro, prickly pear, cholla, and barrel cactus. Along the lower Colorado River they may use willows as well as the invasive species tamarisk (salt cedar). They are well adapted to dry habitats and tend to be most common in areas with less than 8 inches of annual rainfall. They often live far away from streams and other bodies of water.	Marginally suitable habitat occurs within the BSA. The nearest recorded occurrence to the BSA is approximately 6 miles to the southwest.	Moderate



Table 3.4-3. Known and Potential Occurrences of Special-Status Wildlife Species within the Biological Study Area

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Setophaga petechia</i>	yellow warbler (nesting)	SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in the Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets and in other riparian plants, including cottonwoods, sycamores, ash, and alders.	No suitable habitat occurs within the BSA. The nearest recorded occurrence to the BSA is approximately 3 miles to the southwest.	Moderate (as a transient)
<i>Toxostoma crissale</i>	Crissal thrasher	SSC	Found in dense, low scrubby vegetation, such as desert and foothill scrub and riparian brush.	Suitable habitat occurs within the BSA. The nearest recorded occurrence to the BSA is approximately 6 miles to the southwest.	Moderate
<i>Toxostoma lecontei</i>	Le Conte's thrasher	SSC	Desert scrub, mesquite, tall riparian brush and, locally, chaparral.	Suitable habitat occurs within the BSA. The nearest recorded occurrence to the BSA is approximately 9 miles to the southwest.	Moderate
Mammals					
<i>Eumops perotis californicus</i>	western mastiff bat	SSC	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Suitable foraging habitat occurs within the BSA, but no roosting habitat is present. The nearest recorded occurrence to the BSA is less than 1 mile to the northeast.	High (foraging only)
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	SSC	Variety of arid areas in southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, and rocky areas with high cliffs.	Marginally suitable foraging habitat occurs within the BSA, but no roosting habitat is present. The nearest recorded occurrence to the BSA is less than 1 mile to the northeast.	High (foraging only)

Table 3.4-3. Known and Potential Occurrences of Special-Status Wildlife Species within the Biological Study Area

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Taxidea taxus</i>	American badger	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats. Needs sufficient food, friable soils, and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Suitable habitat occurs within the BSA. The nearest recorded occurrence to the BSA is approximately 6 miles to the southwest.	Moderate

Source: Appendix E of this EIR

Federal Rankings: FE = Federally Endangered; FT = Federally Threatened

State Rankings: FP = Fully Protected; SE = State Endangered; ST = State Threatened; SSC = Species of Special Concern; WL = CDFW Watch List

Jurisdictional Waters

Two types of jurisdictional features were documented within the BSA: potential USACE non-wetland waters of the United States (19.15 acres) and CDFW state waters (25.83 acres). The BSA is bisected from northeast to southwest by numerous braided ephemeral drainage channels that contain surface water only during heavy storm events, draining the mountains to the northeast. These drainages ultimately flow into the Salton Sea, which is considered a Traditionally Navigable Water. As such, these drainage features would likely be considered federally and state jurisdictional. The extent of potential jurisdictional features within the BSA is depicted on Figure 3.4-2.

Wildlife Corridors and Habitat Connectivity

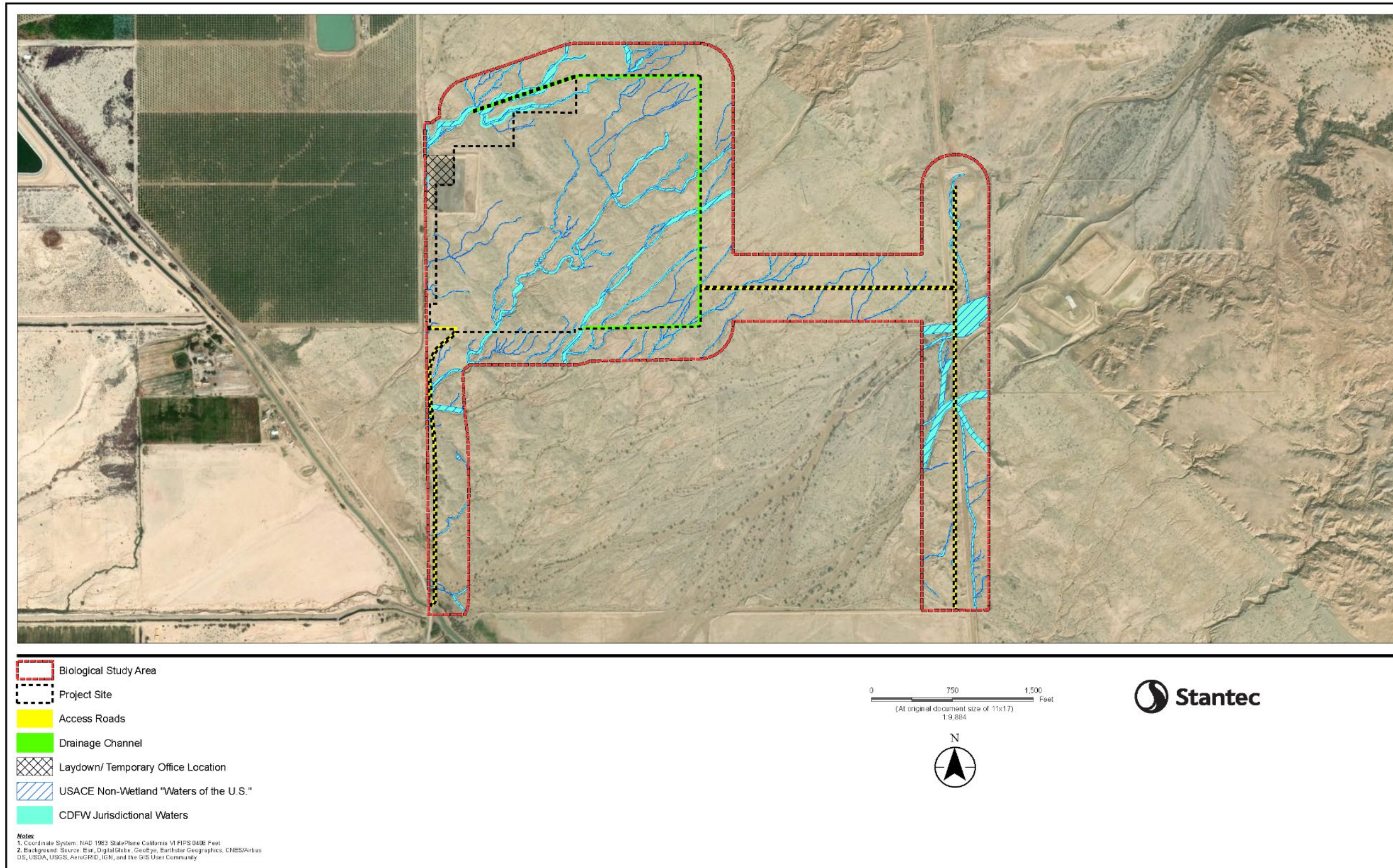
Linkages and corridors facilitate regional animal movement and are generally centered in or around waterways, riparian corridors, flood control channels, contiguous habitat, and upland habitat. Drainages generally serve as movement corridors because they provide fresh water and wildlife can move easily through these areas. Corridors also offer wildlife unobstructed terrain for foraging and for dispersal of young individuals.

The BSA is located at the edge of a vast area of generally undeveloped open space that facilitates unimpeded wildlife movement and provides “live-in habitat” for a variety of species. Due to the lack of significant development to the north, northeast, and southeast of the BSA, wildlife movement is generally unconstrained in these directions. Lands to the west, southwest, and south are more developed, generally with agriculture to the west and southwest separating the BSA from the Salton Sea and a solar power generating facility to the south. In addition, SR 111 runs to the southwest of the BSA and likely serves as some level of barrier to wildlife movement. These areas contain few structures that would significantly impact wildlife movement.

Within the BSA, the lack of structures or other significant development and the presence of relatively intact habitat and features such as desert washes and unpaved roads all facilitate wildlife passage. However, the BSA does not occur within any known wildlife movement corridor or habitat linkage (Penrod et al. 2001).

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Figure 3.4-2. Potentially Jurisdictional Waters



Source: Appendix E of this EIR

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3.4.2 Regulatory Setting

This section identifies and summarizes federal, state, and local laws, policies, and regulations that are applicable to the project.

Federal

National Environmental Policy Act

The National Environmental Policy Act of 1969 (NEPA) requires all Federal agencies to examine the environmental impacts of their actions, incorporate environmental information, and utilize public participation in the planning and implementation of all actions. Federal agencies must integrate NEPA with other planning requirements and prepare appropriate NEPA documents to facilitate better environmental decision making. NEPA requires Federal agencies to review and comment on Federal agency environmental plans/documents when the agency has jurisdiction by law or special expertise with respect to any environmental impacts involved (42 USC 4321- 4327) (40 CFR 1500-1508).

Bald and Golden Eagle Protection Act of 1940

The Bald Eagle Protection Act of 1940 protects bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*) by prohibiting the taking, possession, and commerce of such birds and establishes civil penalties for violation of this Act. ‘Take’ is defined as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.” ‘Disturb’ is defined as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available: (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior” (72 *Federal Register* [FR] 31132; 50 CFR 22.3). All activities that may disturb or incidentally take an eagle or its nest as a result of an otherwise legal activity must be permitted by the USFWS under this Act.

Federal Endangered Species Act

The Federal ESA protects federally listed threatened and endangered species and their habitats from unlawful take and ensures that federal actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Under the ESA, “take” is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. USFWS regulations define harm to mean “an act which actually kills or injures wildlife” (50 CFR 17.3).

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits the kill or transport of native migratory birds, or any part, nest, or egg of any such bird unless allowed by another regulation adopted in accordance with the MBTA. The prohibition applies to birds included in the respective international conventions between the U.S. and Great Britain, the U.S. and Mexico, the U.S. and Japan, and the U.S. and Russia. Disturbances that cause nest abandonment and/or loss of reproductive effort or the loss of habitats upon which these birds depend may be a violation of the MBTA.

Section 404 Permit (Clean Water Act)

The Clean Water Act establishes a program to regulate the discharge of dredge and fill material into waters of the U.S., including wetlands. Activities regulated under this program include fills for development, water resource projects (e.g., dams and levees), infrastructure development (e.g., highways and airports), and conversion of wetlands to uplands for farming and forestry. Either an individual 404b permit or authorization to use an existing USACE Nationwide Permit will need to be obtained if any portion of the construction requires fill into a river, stream, or stream bed that has been determined to be a jurisdictional waterway.

Farmland Protection Policy Act

The Farmland Protection Policy Act is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It also stipulates that federal programs be compatible with state, local, and private efforts to protect farmland. The USDA NRCS is charged with oversight of the Farmland Protection Policy Act.

State

California Endangered Species Act

Provisions of CESA protect state-listed threatened and endangered species. CDFW regulates activities that may result in “take” of individuals (“take” means “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”). Habitat degradation or modification is not expressly included in the definition of “take” under California FGC. Additionally, California FGC contains lists of vertebrate species designated as “fully protected” (California FGC §§ 3511 [birds], 4700 [mammals], 5050 [reptiles and amphibians], 5515 [fish]). Such species may not be taken or possessed.

In addition to state-listed species, CDFW has also produced a list of Species of Special Concern to serve as a “watch list.” Species on this list are of limited distribution or the extent of their habitats has been reduced substantially such that threats to their populations may be imminent. Species of Special Concern may receive special attention during environmental review, but they do not have statutory protection.

Birds of prey are protected in California under California FGC. Section 3503.5 states it is “unlawful to take, possess, or destroy any birds of prey (in the order Falconiformes or Strigiformes) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this Code or any regulation adopted pursuant thereto.” Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment.

California Fish and Game Code Section 1600 (as amended)

California Fish and Wildlife Code Section 1600 regulates activities that substantially divert or obstruct the natural flow of any river, stream, or lake or use materials from a streambed. This can include riparian habitat associated with watercourses.

California Fish and Game Codes 3503, 3503.5, and 3513

Under Sections 3503, 3503.5, and 3513 of the California FGC, activities that would result in the taking, possessing, or destroying of any birds-of-prey, taking or possessing of any migratory nongame bird as designated by the MBTA, or the taking, possessing, or needlessly destroying of the nest or eggs of any raptors or non-game birds protected by the MBTA, or the taking of any non-game bird pursuant

to FGC Section 3800 are prohibited. Additionally, the state further protects certain species of fish, mammals, amphibians and reptiles, birds, and mammals through CDFW's Fully Protected Animals which prohibits any take or possession of classified species.

Native Plant Protection Act (California Fish and Game Code Sections 1900-1913)

California's Native Plant Protection Act prohibits the taking, possessing, or sale within the state of any plant listed by CDFW as rare, threatened, or endangered. This allows CDFW to salvage listed plant species that would otherwise be destroyed.

Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, all projects proposing to discharge waste that could affect waters of the State must file a waste discharge report with the appropriate regional board. The project falls under the jurisdiction of the Colorado River RWQCB.

California Environmental Quality Act

Title 14 CCR 15380 requires the identification of endangered, rare, or threatened species or subspecies of animals or plants that may be impacted by a project. If any such species are found, appropriate measures should be identified to avoid, minimize, or mitigate the potential effects of projects.

California Land Conservation Act

The Williamson Act (California Land Conservation Act, California Government Code, Section 51200 et seq.) is a statewide mechanism for the preservation of agricultural land and open space land. The Act provides a comprehensive method for local governments to protect farmland and open space by allowing lands in agricultural use to be placed under contract (agricultural preserve) between a local government and a land owner.

Local

Imperial County General Plan

The Conservation and Open Space Element of the Imperial County General Plan provides detailed plans and measures for the preservation and management of biological and cultural resources, soils, minerals, energy, regional aesthetics, air quality, and open space. The purpose of this element is to recognize that natural resources must be maintained for their ecological value for the direct benefit to the public and to protect open space for the preservation of natural resources, the managed production of resources, outdoor recreation, and for public health and safety. In addition, the purpose of this element is to promote the protection, maintenance, and use of the County's natural resources with particular emphasis on scarce resources, and to prevent wasteful exploitation, destruction, and neglect of the state's natural resources. Table 3.4-4 analyzes the consistency of the project with specific policies contained in the Imperial County General Plan associated with biological resources.

Table 3.4-4. Project Consistency with General Plan Goals and Policies

General Plan Policies	Consistency with General Plan	Analysis
<p>Conservation and Open Space Element - Open Space and Recreation Conservation</p> <p>Policy No. 2 - The County shall participate in conducting detailed investigations into the significance, location, extent, and condition of natural resources in the County.</p> <p>Program: Notify any agency responsible for protecting plant and wildlife before approving a project which would impact a rare, sensitive, or unique plant or wildlife habitat.</p>	Consistent	<p>A biological assessment has been conducted at the project site to evaluate the proposed project's potential impacts on biological resources. No sensitive resources, including burrowing owl (California species of special concern) and flat-tailed horned lizard (BLM sensitive species) were identified within the BSA.</p> <p>Applicable agencies responsible for protecting plants and wildlife will be notified of the proposed project and provided an opportunity to comment on this EIR prior to the County's consideration of any approvals for the project.</p> <p>As described in Chapter 2, Project Description, implementation of the project would require the approval of CUPs, General Plan Amendment, Zone Change, and Variance by the County to allow for the construction and operation of the project.</p>
<p><i>Conservation of Environmental Resources for Future Generations</i></p> <p>Goal 1 - Environmental resources shall be conserved for future generations by minimizing environmental impacts in all land use decisions and educating the public on their value.</p> <p>Objective 1.6 - Promote the conservation of ecological sites and preservation of cultural resource sites through scientific investigation and public education.</p>	Consistent	<p>A biological assessment has been conducted at the project site to evaluate the project's potential impacts on biological resources. No sensitive resources, including burrowing owl (California species of special concern) and flat-tailed horned lizard (BLM sensitive species), were identified within the BSA.</p> <p>With implementation of Mitigation Measures BIO-1 through BIO-5, the project would not result in residual significant and unmitigable impacts on biological resources.</p>

Source: County of Imperial 1993
 BLM=Bureau of Land Management; CDFW – California Department of Fish and Wildlife; EIR – environmental impact report;
 USFWS – U.S. Fish and Wildlife Service

The Agricultural Element of the County's General Plan serves as the primary policy statement for implementing development policies for agricultural land use in Imperial County. The goals, objectives, implementation programs, and policies found in the Agricultural Element provide direction for new development as well as government actions and programs. Imperial County's Goals and Objectives are intended to serve as long-term principles and policy statements to guide agricultural use decision-making and uphold the community's ideals.

Agriculture has been the single most important economic activity in the County throughout its history. The County recognizes the area as one of the finest agricultural areas in the world because of several environmental and cultural factors, including good soils, a year-round growing season, the availability of adequate water transported from the Colorado River, extensive areas committed to agricultural production, a gently sloping topography, and a climate that is well-suited for growing crops and raising livestock. The Agricultural Element in the County General Plan demonstrates the long-term commitment by the County to the full promotion, management, use, and development and protection

of agricultural production, while allowing logical, organized growth of urban areas (County of Imperial 2015).

Other Applicable Regulations, Plans and Standards

California Native Plant Society Rare Plant Program

As part of the CNPS Rare Plant Program, if a species has been identified as being of potential conservation concern, it is put through an extensive review process. Once a species has gone through the review process, information on all aspects of the species (e.g., listing status, habitat, distribution, threats, etc.) are entered into the online CNPS Inventory and given a CRPR. The CNPS Rare Plant Program currently recognizes more than 1,600 plant taxa (species, subspecies, and varieties) as rare or endangered in California.

3.4.3 Impacts and Mitigation Measures

This section presents the significance criteria used for considering project impacts on biological resources, the methodology employed for the evaluation, an impact evaluation, and mitigation requirements, if necessary.

Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to biological resources are considered significant if any of the following occur:

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

Methodology

This analysis evaluates the potential for the project, as described in Chapter 2, Project Description, to result in significant impacts on biological resources based on the criteria established in Appendix G of the CEQA Guidelines.

Impact Analysis – Solar Energy Facility and Gen-Tie Line

As indicated in Table 3.4-5 and depicted on Figure 3.4-1, construction of the proposed project would result in the direct, long-term (20-25 year) loss of 115.4 acres of native Creosote Bush – White Bursage Scrub and 0.2 acre of Blue Palo Verde – Ironwood Woodland. In addition to habitat removal, grading may also result in the direct, albeit incidental, mortality of ground-dwelling insects, reptiles, amphibians, and mammals, and nesting birds. Construction of the project may fill or modify washes that are regulated by USACE, CDFW, and/or RWQCB. Construction activities may also result in indirect impacts on adjacent biological resources by introducing water quality or air pollutants (e.g., sediment and dust), altering drainage patterns, introducing non-native species that may compete or prey upon native species, introducing night lighting, or causing edge effects that can disorient wildlife, make them more susceptible to predation, or increase the threat of wildfire.

Table 3.4-5. Vegetation Communities and Other Land Cover Types Impacted by the Project

Vegetation Community or Land Cover Type	Project Impacts (acres)
Creosote Bush – White Bursage Scrub	115.4
Arrow Weed Thickets	0.0
Blue Palo Verde – Ironwood Woodland	0.2
Tamarisk Thickets	0.0
Agriculture	0.0
Disturbed/Developed	7.1
Total	122.7

Source: Appendix E of this EIR

Project operations, although requiring minimal active management, have potential to directly or indirectly impact biological resources. Photovoltaic solar panels and the associated gen-tie line may be struck by birds as they fly through the site or may increase the risk of electrocution for larger birds such as raptors. Certain waterfowl species may be lured to the site and become trapped if they are not capable of taking flight from land. Vehicle travel on the site has potential to strike wildlife and introduce non-native plant species. Trash or carcass remains may increase the presence of scavengers, such as ravens and crows, which may prey on other species' eggs or juveniles. Panel washing may change drainage patterns or transport pollutants or sediment off-site where it may adversely impact downstream aquatic resources.

A more detailed analysis of these potential impacts is provided below.

Impact 3.4-1 *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?*

Special-Status Plant Species

FEDERALLY OR STATE-LISTED PLANT SPECIES

The proposed project site does not include suitable habitat and does not have potential to support any federally or state-listed plant species. Therefore, the project would not impact federally or state-listed plant species.

OTHER SPECIAL-STATUS PLANT SPECIES

Construction

According to the BRTR, three special-status plant species have potential to occur within the Project footprint, including Harwood's milkvetch, gravel milk-vetch, and Munz's cholla. Construction of the proposed project would result in the loss of 115.4 acres of potentially suitable creosote bush – white bursage scrub habitat for these three species, as indicated in Table 3.4-5.

Gravel milk-vetch and Munz's cholla actually have a low probability of occurring on the project site. Specifically, there are no recent records of gravel milk-vetch in Imperial County and the only records of this species in California within the past decade are from Inyo County (CCH 2020). Munz's cholla occurs at higher elevation in the Chocolate Mountains to the east of the project site (CCH 2020). Therefore, the proposed project is not anticipated to impact these two species.

The current geographic range of Harwood's milkvetch within California is relatively small. If the project site supported a substantial population of any of this species, direct loss could result in loss of local genetic variation that is important to long-term sustainability of the species. Potential indirect impacts on Harwood's milkvetch, if it occurs on site, could include the introduction of competitive invasive plant species, non-native pests, air and water quality pollutants, dust production, or drainage pattern alteration.

Operations

Project operations would result in minimal, if any, disturbance to potential habitat for special-status plant species adjacent to the project site. During ongoing operations, lighting would be minimized and personnel would only visit the site as-needed for maintenance. In addition, wastewater from panel washing would be directed away from undeveloped lands. Therefore, project operations are not expected to result in impacts on special-status plant species, if they are present in the vicinity of the project site.

Conclusion

Construction and operation of the proposed project could result in significant impacts on Harwood's milkvetch, if present. Implementation of Mitigation Measures BIO-1 and BIO-2 would reduce potential impacts to less than significant.

Special-Status Wildlife Species

FEDERALLY OR STATE-LISTED WILDLIFE SPECIES

The proposed project site occurs on the western margin of the known range of the federally and state-threatened desert tortoise and supports marginally suitable habitat for the species. Although the Coachella Canal, located approximately 0.8 mile to the northeast of the project site, provides a

substantial barrier to tortoise movement, it is porous in that there are periodic gaps in the above ground canal for vehicle traffic and drainage.

Construction

If desert tortoise is present on or in the vicinity of the project site, grading and vehicular traffic could crush and kill individual tortoises or tortoises could become trapped in open trenches and may be killed due to an increased exposure to predators or extreme weather. Indirect impacts from construction would include the long-term loss of 115.4 acres of habitat and could include an increase in desert tortoise predators such as ravens and crows drawn to the project site by ground disturbing activities that expose wildlife and produce carcasses and waste for scavenging. Due to its threatened status, any direct or indirect impacts on this species resulting from construction would be considered significant.

Operation

Although vehicular traffic will be minimal because maintenance requirements are minimal, the risk of a vehicle striking a desert tortoise on site or an access road to the site remains if desert tortoise is present. Also, security fencing could pose a trapping hazard. Additionally, should the solar panels, gen-tie line, or auxiliary facilities pose a strike hazard for birds or bats, the resulting carcasses could lead to an increase in scavenger density. As described above, those scavengers pose a threat to desert tortoise. As indicated above, due to its threatened status, any direct or indirect impacts on this species resulting from operation would be considered significant.

Conclusion

Construction and operation of the proposed project would result in a significant impact on the federally and state-listed threatened desert tortoise, if present.

Implementation of Mitigation Measures BIO-2, BIO-3, BIO-4 and BIO-5 would reduce potential impacts on desert tortoise, if present, to a level less than significant.

OTHER SPECIAL-STATUS WILDLIFE SPECIES

As indicated in Table 3.4-5, suitable habitat for two Species of Special Concern, Sonoran desert toad and lowland leopard frog, is limited to the IID canal, which will not be impacted by the project and are not discussed further in this analysis. Two Species of Special Concern, mountain plover and yellow warbler, have potential as transient visitors only. These species do not rely on the project site for breeding, dispersal or foraging. Therefore, the proposed project would not result in a significant impact on these two species and they are not further addressed in this analysis.

Six other special-status wildlife species have potential to occupy the proposed project site, including five CDFW Species of Special Concern: burrowing owl, loggerhead shrike, Crissal thrasher, Le Conte's thrasher and American badger, and one CDFW Watch List species: black-tailed gnatcatcher. Four other special-status wildlife species have potential to forage on or disperse through the proposed project site, including three Species of Special Concern: Couch's spadefoot, western mastiff bat, and pocketed free-tailed bat, and one Watch List species: merlin.

Special-Status Amphibian Species

As previously indicated, Couch's spadefoot would use the site only for dispersal. The project site is located at the extreme western margin of its range. Given that the site is also abutted by agriculture

to the west, the project site is not located within a significant dispersal corridor. It also does not prevent movement to the east since it abuts undeveloped lands with suitable Couch's spadefoot habitat to the north, east and south. Therefore, the construction and operation of the proposed project does not impact Couch's spadefoot.

Special-Status Bird Species

Burrowing Owl

Burrowing owls were not present on the project site during the biological surveys. As this project is not within the IID Service District, no IID canals or drains (which are very attractive to burrowing owls) are present within the project site. However, the nearest recorded occurrence to the BSA is less than 1 mile to the west and suitable nesting and foraging habitat is present within the proposed project site. Therefore, burrowing owl could be present at the start of project construction.

Construction

If burrowing owls are present within or adjacent to the proposed project site, project construction could result in take, as defined by California FGC, if burrowing owl were trapped in burrows during grading activities or struck by vehicles. Additionally, take of an active breeding burrow complex would violate the MBTA and California FGC Sections 3503, 3503.5, 3513 and 3800. Indirect impacts from construction activities, although not meeting the definition of take, could include changes in prey diversity and abundance, changes in visibility due to dust that could affect foraging effectiveness, increases in noise levels disrupting communication between individuals, an increased risk of wildfire and an increase in the density of potential predators due to ground disturbance and food waste at the project site. However, the conversion of the project site to a solar field does not preclude burrowing owl use.

Following construction, burrowing owls are expected to persist beneath the solar panels, along the perimeter of the solar fields along canals, drains, or roads, which provide burrowing and foraging opportunities. The owls are also expected to utilize the solar field perimeter fence as a foraging perch. As a result, the proposed project would not result in significant impacts due to loss of foraging habitat. However, direct take of individual burrowing owl would be considered a significant impact. Implementation of Mitigation Measures BIO-2, BIO-3 and BIO-6 would eliminate the potential for take of burrowing owl during construction and would reduce potential impacts on this species from construction to less than significant.

Operations

As indicated above, after the solar fields are constructed, burrowing owls, if present, would be expected to continue utilizing the project site. While searching for prey, burrowing owls characteristically hover for periods of several minutes at heights of 8 to 15 meters. During the night, their foraging behavior changes to suit the reduced visibility of small food items; they may pursue arthropods on the ground by walking and running. They may also glide about 1 meter above the ground when foraging for rodents. Given the static and highly visible nature of the solar panels and transmission towers, burrowing owls are not expected to collide with the structures during daytime foraging activities when they may be hovering or flying in search for prey. No impacts on burrowing owl are anticipated as a result of collision with facility structures, and no mitigation would be required. However, vehicles driving on access roads during operations and maintenance (O&M) activities within the solar fields and along the transmission line where burrowing owls are foraging may result in direct mortality of burrowing owl. Additionally, food waste, if not properly disposed of, could attract predators,

further increasing predation risk if burrowing owl is present on or adjacent to the site. These impacts would be considered significant and mitigation would be required. Mitigation Measure BIO-5 would reduce potential impacts on burrowing owls from O&M activities to a level less than significant.

Other Special-Status Bird Species

Construction

As indicated above loggerhead shrike, Crissal thrasher, Le Conte's thrasher and black-tailed gnatcatcher have potential to reside on the project site while merlin has potential to forage on-site. These species are all relatively wide-ranging and utilize a wide range of habitats (Fink et al. 2020, United States Geological Survey [USGS] 2020). Specifically, merlin is the widest ranging species with its non-breeding range including most of the U.S., Mexico, Central America and a portion of South America. Loggerhead shrike ranges throughout much of North America and Mexico and utilizes agricultural and pasturelands in addition to native habitats. Crissal thrasher and black-tailed gnatcatcher exhibit similar ranges throughout the southwest and northern Mexico while Le Conte's thrasher exhibits the narrowest range generally including inland portions of southern California, southern Nevada, western Arizona and northern Mexico and Baja California but still encompassing over 42 million acres of suitable habitat (USGS 2020). The loss of 115.6 acres of potential live-in or foraging habitat (less than 0.0003-percent of the available habitat even for Le Conte's thrasher with the narrowest range) would have a negligible impact on sustainability of the species. Similarly, indirect impacts to a small number of individuals of these special-status species from noise, dust, night lighting or the attraction of predators and scavengers to the project site during construction would have a negligible impact on sustainability of the species. However, take of active avian nests (including loggerhead shrike, Crissal thrasher, Le Conte's thrasher and black-tailed gnatcatcher, should they reside on the project site) during clearing and grubbing would be considered adverse and significant. Implementation of Mitigation Measure BIO-7 would reduce impacts to less than significant.

Operation

All electrical components on the project site shall be either undergrounded or protected so that there will be no exposure to wildlife and therefore no potential for electrocution. Additionally, based on the Avian Powerline Interaction Committee's (APLIC) 1996 report on power line electrocution in the U.S., avian electrocution risk is highest along distribution lines (generally less than 69 kV) where the distance between energized phases, ground wires, transformers, and other components of an electrical distribution system are less than the length or skin-to-skin contact distance of birds. The distance between energized components along transmission lines (>69 kV) is generally insufficient to present avian electrocution risk. Therefore, no impact to avian or bat species is anticipated to occur due to electrocution along the proposed gen-tie line.

However, a potentially significant impact may occur to avian mortality during operations should avian species protected by California FGC collide with solar panels or any ancillary facilities such as the Gen-tie line. These impacts would be considered significant. Implementation of Mitigation Measures BIO-5 and BIO-8 would reduce impacts to a level less than significant.

Special-Status Mammal Species

Also as indicated above American badger has potential to reside on the project site while western mastiff bat and pocketed free-tailed bat have potential to forage on-site. These species are all relatively wide-ranging and utilize a wide range of habitats (USGS 2020, Pierson and Rainey 1998). Specifically, American Badger occupies the western half of the U.S. Western mastiff bat and pocketed free-tailed

bat exhibit similar ranges including the southwest U.S. and northern Mexico. As for the special-status species analyzed above, the loss of 115.6 acres of potential live-in or foraging habitat (less than 0.0003-percent of the available habitat even for Le Conte's thrasher with the narrowest range) would have a negligible impact on sustainability of the species. This would not necessarily be true if the project site supported a maternity roost habitat. However, as previously indicated, the project site does not support roosting habitat. Similarly to the special-status birds above, indirect impacts to a small number of individuals of these special-status species from noise, dust, night lighting or the attraction of predators and scavengers to the project site during construction would have a negligible impact on sustainability of the species. However, take of American Badger if residing on the project site and trapped in a burrow during grading would be considered significant. Implementation of Mitigation Measure BIO-9 will reduce potential impacts to less than significant.

Operation

All electrical components on the project site shall be either undergrounded or protected so that there will be no exposure to wildlife and therefore no potential for electrocution. The distance between energized components along transmission lines (>69 kV) is also presumed to generally insufficient to present bat electrocution risk. Therefore, no impact to bat species is anticipated to occur due to electrocution along the proposed gen-tie line.

However, a potentially significant impact may occur to bat mortality during operations should bat species collide with solar panels or any ancillary facilities such as the Gen-tie line. Implementation of Mitigation Measures BIO-5 and BIO-8 would reduce impacts to a level less than significant.

Mitigation Measure(s)

BIO-1 Pre-Construction Plant Survey. Prior to initiating ground disturbance, a focused survey for Harwood's milkvetch shall occur during its blooming period. A reference population shall be identified and confirmed to be blooming at the time that surveys are conducted on the project site.

Should Harwood's milkvetch be present on site, project design will be evaluated to determine if modifications can be made to avoid at least 90-percent of the observed individuals or compensatory mitigation shall be provided through off-site preservation of an equivalent population.

BIO-2 General Impact Avoidance and Minimization Measures. The following measures will be applicable throughout the life of the project:

- To reduce the potential indirect impact on migratory birds, bats and raptors, the project will comply with the APLIC 2012 Guidelines for overhead utilities, as appropriate, to minimize avian collisions with transmission facilities (APLIC 2012)
- All electrical components on the project site shall be either undergrounded or protected so that there will be no exposure to wildlife and therefore no potential for electrocution.
- The Project proponent shall will designate a Project Biologist who shall be responsible for overseeing compliance with protective measures for the biological resources during vegetation clearing and work activities within and adjacent to areas of native habitat. The Project Biologist will be familiar with the local habitats, plants, and wildlife. The Project Biologist will also maintain communications with

the Contractor to ensure that issues relating to biological resources are appropriately and lawfully managed and monitor construction. The Project Biologist will monitor activities within construction areas during critical times, such as vegetation removal, the implementation of Best Management Practices (BMP), and installation of security fencing to protect native species. The Project Biologist will ensure that all wildlife and regulatory agency permit requirements, conservation measures, and general avoidance and minimization measures are properly implemented and followed.

- The boundaries of all areas to be newly disturbed (including solar facility areas, staging areas, access roads, and sites for temporary placement of construction materials and spoils) will be delineated with stakes and flagging prior to disturbance. All disturbances, vehicles, and equipment will be confined to the flagged areas.
- No potential wildlife entrapments (e.g., trenches, bores) will be left uncovered overnight. Any uncovered pitfalls will be excavated to 3:1 slopes at the ends to provide wildlife escape ramps. Alternatively, man-made ramps may be installed. Covered pitfalls will be covered completely to prevent access by small mammals or reptiles.
- To avoid wildlife entrapment (including birds), all pipes or other construction materials or supplies will be covered or capped in storage or laydown area, and at the end of each work day in construction, quarrying and processing/handling areas. No pipes or tubing of sizes or inside diameters ranging from 1 to 10 inches will be left open either temporarily or permanently.
- No anticoagulant rodenticides, such as Warfarin and related compounds (indandiones and hydroxycoumarins), may be used within the project site, on off-site project facilities and activities, or in support of any other project activities.
- Avoid wildlife attractants. All trash and food-related waste shall be placed in self-closing containers and removed regularly from the site to prevent overflow. Workers shall not feed wildlife. Water applied to dirt roads and construction areas for dust abatement shall use the minimal amount needed to meet safety and air quality standards to prevent the formation of puddles, which could attract wildlife. Pooled rainwater or floodwater within retention basins will be removed to avoid attracting wildlife to the active work areas.
- To minimize the likelihood for vehicle strikes on wildlife, speed limits will not exceed 15 miles per hour when driving on access roads. All vehicles required for O&M must remain on designated access/maintenance roads.
- Avoid night-time construction lighting or if nighttime construction cannot be avoided use shielded directional lighting pointed downward and towards the interior of the project site, thereby avoiding illumination of adjacent natural areas and the night sky.
- All construction equipment used for the Project will be equipped with properly operating and maintained mufflers.

- Hazardous materials and equipment stored overnight, including small amounts of fuel to refuel hand-held equipment, will be stored within secondary containment when within 50 feet of open water to the fullest extent practicable. Secondary containment will consist of a ring of sand bags around each piece of stored equipment/structure. A plastic tarp/visqueen lining with no seams shall be placed under the equipment and over the edges of the sandbags, or a plastic hazardous materials secondary containment unit shall be utilized by the Contractor.
- The Contractor will be required to conduct vehicle refueling in upland areas where fuel cannot enter waters of the U.S. and in areas that do not have potential to support federally threatened or endangered species. Any fuel containers, repair materials, including creosote-treated wood, and/or stockpiled material that is left on site overnight, will be secured in secondary containment within the work area and staging/assembly area and covered with plastic at the end of each work day.
- In the event that no activity is to occur in the work area for the weekend and/or a period of time greater than 48 hours, the Contractor will ensure that all portable fuel containers are removed from the project site.
- All equipment will be maintained in accordance with manufacturer's recommendations and requirements.
- Equipment and containers will be inspected daily for leaks. Should a leak occur, contaminated soils and surfaces will be cleaned up and disposed of following the guidelines identified in the Stormwater Pollution Prevention Plan or equivalent, Materials Safety Data Sheets, and any specifications required by other permits issued for the project.
- The Contractor will utilize off-site maintenance and repair shops as much as possible for maintenance and repair of equipment.
- If maintenance of equipment must occur onsite, fuel/oil pans, absorbent pads, or appropriate containment will be used to capture spills/leaks within all areas. Where feasible, maintenance of equipment will occur in upland areas where fuel cannot enter waters of the U.S. and in areas that do not have potential to support federally threatened or endangered species.
- Appropriate BMPs will be used by the Contractor to control erosion and sedimentation and to capture debris and contaminants from bridge construction to prevent their deposition in waterways. No sediment or debris will be allowed to enter the creek or other drainages. All debris from construction of the bridge will be contained so that it does not fall into channel. Appropriate BMPs will be used by the Contractor during construction to limit the spread of resuspended sediment and to contain debris.
- Erosion and sediment control devices used for the proposed project, including fiber rolls and bonded fiber matrix, will be made from biodegradable materials such as jute, with no plastic mesh, to avoid creating a wildlife entanglement hazard.
- Firearms, open fires, and pets would be prohibited at all work locations and access roads. Smoking would be prohibited along the Project alignment.

- Cross-country vehicle and equipment use outside of approved designated work areas and access roads shall be prohibited to prevent unnecessary ground and vegetation disturbance.
- Any injured or dead wildlife encountered during project-related activities shall be reported to the project biologist, biological monitor, CDFW, or a CDFW-approved veterinary facility as soon as possible to report the observation and determine the best course of action. For special-status species, the Project Biologist shall notify the County, USFWS, and/or CDFW, as appropriate, within 24 hours of the discovery.
- Stockpiling of material will be allowed only within established work areas.
- Actively manage the spread of noxious weeds (See Mitigation Measure BIO-5)
- The ground beneath all parked equipment and vehicles shall be inspected for wildlife before moving.

BIO-3

Worker Environmental Awareness Program. Prior to project construction, a Worker Environmental Awareness Program shall be developed and implemented by a qualified biologist, and shall be available in both English and Spanish. Handouts summarizing potential impacts to special-status biological resources and the potential penalties for impacts to these resources shall be provided to all construction personnel. At a minimum, the education program shall including the following:

- the purpose for resource protection;
- a description of special status species including representative photographs and general ecology;
- occurrences of USACE, RWQCB, and CDFW regulated features in the Project study area;
- regulatory framework for biological resource protection and consequences if violated
- sensitivity of the species to human activities;
- avoidance and minimization measures designed to reduce the impacts to special-status biological resources
- environmentally responsible construction practices;
- reporting requirements;,,
- the protocol to resolve conflicts that may arise at any time during the construction process; and
- workers sign acknowledgement form indicating that the Environmental Awareness Training and Education Program that has been completed and would be kept on record

BIO-4

Desert Tortoise Avoidance and Minimization A qualified biologist shall conduct focused presence/absence surveys for Desert Tortoise for 100-percent of the project footprint pursuant to the October 19, 2019 Version of the USFWS Desert Tortoise Survey Protocol. If no live desert tortoise or sign of active desert tortoise is detected, no further avoidance and minimization is required.

If live desert tortoise or sign of active desert tortoise is detected, the project proponent shall initiate consultation with USFWS and CDFW to obtain the necessary federal and state ESA authorizations and the following avoidance, minimization and compensatory mitigation measures will be implemented:

- Permanent tortoise-proof fencing shall be along the perimeter of the project site. Fencing shall be installed, inspected, and maintained according to specifications in the current USFWS *Desert Tortoise (Mojave Population) Field Manual (Gopherus agassizii)*. An authorized desert tortoise biologist shall conduct pre-construction clearance surveys for the project site no more than 14-days prior to the initiation of fence installation. All potentially active burrows shall be identified for hand excavation. Pre-construction clearance surveys shall be repeated within the fenced impact area after fence installation is complete. If desert tortoise are observed they shall be relocated from within the work area to outside the fenced area by a permitted biologist.
- The authorized biologist shall conduct desert tortoise pre-construction clearance surveys along all existing and new dirt access road alignments, and the Gen-tie alignment before any ground disturbing activities are initiated and prior to the start of construction activities each day during ground-disturbing activities and weekly thereafter. Relocate desert tortoises as necessary. Any handling of special-status species must be approved by the appropriate Federal and State agencies and be done in accordance with species-specific handling protocols.
- Where burrows would be unavoidably destroyed, they would be excavated carefully using hand tools under the supervision of the authorized biologists with demonstrated prior experience with this species.
- Inspect construction pipes, culverts, or similar structures: (a) with a diameter greater than 3 inches, (b) stored for one or more nights, (c) less than 8 inches aboveground and (d) within desert tortoise habitat, before the materials are moved, buried, or capped.
- Incorporate Raven Management into the Pest Control Plan (See BIO-5)
- Inspect the ground under vehicles and equipment for the presence of desert tortoise any time a vehicle or construction equipment is parked in desert tortoise habitat. If a desert tortoise is seen, it may move on its own. If it does not move within 15 minutes, an authorized biologist or biological monitor under the direction of the authorized biologist may remove and relocate the animal to a safe location.
- All culverts for access roads or other barriers will be designed to allow unrestricted access by desert tortoises and will be large enough that desert tortoises are unlikely to use them as shelter sites (e.g., 36 inches in diameter or larger). Desert tortoise exclusion fencing may be utilized to direct tortoise use of culverts and other

passages. If possible, pipes and culverts greater than 3 inches in diameter would be stored on dunnage to prevent wildlife from taking refuge in them, to the extent feasible.

- To fully mitigate for habitat loss and potential take of the Mojave desert tortoise, the Applicant will provide compensatory mitigation at a ratio of 3:1. For the purposes of this measure, the project site (i.e., footprint) means all Project areas with new direct ground disturbance during construction and operation of the Project. This includes all lands directly disturbed that will no longer provide viable long-term habitat for the Mojave desert tortoise, such as the solar field, substation and new access roads. Areas within the gen-tie line corridor where no ground disturbance will occur are not included in the area to be mitigated through compensation. Compensatory mitigation could include agency-approved payment of an in-lieu fee; acquiring mitigation land or conservation easements; restoration or habitat enhancement activities on preservation lands; or a combination of the three.

BIO-5 Prepare and Implement an Operation and Maintenance Worker Education Plan.

An Operation and Maintenance Worker Education Plan shall be prepared to advise personnel on general operations measures. The Worker Education Plan shall be submitted to the County of Imperial Planning and Development Services Department for review and approval prior to issuance of building permits. The following provisions shall be included in the Worker Education Plan and implemented throughout the operational lifespan of the Project: Operation and maintenance personnel shall be prohibited from:

- Exceeding nighttime and daytime vehicle speeds of 10 miles per hour and 25 miles per hour, respectively, within the facility, on access roads and within the Gen-Tie line corridor. Speed limit signs shall be posted throughout the project site to remind workers of travel speed restrictions.
- Harming, harassing, or feeding wildlife and/or collecting special-status plant or wildlife species.
- Disturbing active avian nests
- Traveling (either on foot or in a vehicle) outside of the Project footprint except on public roads.
- Littering on the Project area.
- Allowing persons not employed at the facility to remain on site after daylight hours.
- Exceeding normal nighttime operational noise or lighting levels
- Bringing domestic pets and firearms to the site.

The Operation and Maintenance Worker Education Plan shall require that:

- All operation and maintenance vehicles and equipment park in approved designated areas only.

- The project site and Gen-Tie line corridor be kept clear of trash and other litter to reduce the attraction of opportunistic predators such as common ravens, coyotes, and feral dogs that may prey on sensitive species.
- Operation and maintenance employees maintain Hazardous Materials Spill Kits on-site. All operation and maintenance staff shall be trained in how to use Hazardous Materials Spill Kits in the event of a spill.
- An approved Long-Term Maintenance Plan for the retention/detention basins be developed and implemented.
- Weed and Raven management shall be addressed in a project-specific pest management plan (See BIO-5)
- Maintain shielding on external lighting to direct down and towards the project site and away from adjacent undeveloped land.
- Workers sign acknowledgement form indicating that the Environmental Awareness Training and Education Program that has been completed and would be kept on record
- desert tortoise avoidance and minimization measures be implemented if desert tortoise is detected during pre-construction surveys
- The ground beneath all parked equipment and vehicles shall be inspected for wildlife before moving.
- Personnel are trained to avoid causing wildfires and manage them safely and promptly if necessary

BIO-6 Burrowing Owl Avoidance and Minimization. Take Avoidance (pre-construction) surveys for burrowing owl shall be completed prior to project construction. Surveys shall be conducted as detailed within Appendix D of the Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game [CDFG] 2012). If burrowing owl is not detected, construction may proceed.

- If burrowing owl is identified during the non-breeding season (September 1 through January 31), then a 50 meter buffer will be established by the biological monitor. Construction within the buffer will be avoided until a qualified biologist determines that burrowing owl is no longer present or until a CDFW-approved exclusion plan has been implemented. The buffer distance may be reduced if noise attenuation buffers such as hay bales are placed between the occupied burrow and construction activities.
- If burrowing owl is identified during the breeding season (February 1 through August 31), then an appropriate buffer will be established by the biological monitor in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). Construction within the buffer will be avoided until a qualified biologist determines that burrowing owl is no longer present or until young have fledged. The buffer distance may be reduced in consultation with CDFW if noise attenuation buffers such as hay bales are placed between the occupied burrow and construction activities.

BIO-7 Pre-Construction Nesting Bird Surveys. To the extent possible, construction shall occur outside the typical avian breeding season (February 15 through September 15). If construction must occur during the general avian breeding season, a pre-construction nest survey shall be conducted within the impact area and a 500-foot (150-meter) buffer by qualified biologist no more than 7 days prior to the start of vegetation clearing and/or ground disturbing construction activities in any given area of the Project footprint. Construction crews shall coordinate with the qualified biologist at least 7 days prior to the start of construction in a given area to ensure that the construction area has been adequately surveyed. A nest is defined as active once birds begin constructing or repairing the nest in readiness for egg-laying. A nest is no longer an “active nest” if abandoned by the adult birds or once nestlings or fledglings are no longer dependent on the nest. If no active nests are discovered, construction may proceed. If active nests are observed that could be disturbed by construction activities, these nests and an appropriately sized buffer (typically a 200-foot (61-meter) buffer for non-raptor species nests and at least a 500-foot (150-meter) buffer for raptor or federally listed species nests) would be avoided until the young have fledged. Final construction buffers or setback distances shall be determined by the qualified biologist in coordination with USFWS and CDFW on a case-by-case basis, depending on the species, season in which disturbance shall occur, the type of disturbance, and other factors that could influence susceptibility to disturbance (e.g., topography, vegetation, existing disturbance levels, etc.). Active nests shall be avoided until the young have fledged and/or the monitor determines that no impacts are anticipated to the nesting birds or their young. If vegetation clearing and/or ground disturbing activities cease for 14 or more consecutive days during the nesting season in areas where suitable nesting habitat remains, repeat nesting bird surveys shall be required to ensure new nesting locations have not been established within the impact area and the defined buffers.

BIO-8 Develop a Bird and Bat Conservation Strategy (BBCS). A BBCS shall be developed by the Project Applicant in coordination with the County of Imperial, USFWS, and CDFW.

The BBCS will include the following components:

- A description and assessment of the existing habitat and avian and bat species;
- An avian and bat risk assessment and specific measures to avoid, minimize, reduce, or eliminate avian and bat injury or mortality during all phases of the project.
- A post-construction monitoring plan that will be implemented to assess impacts on avian and bat species resulting from the Project.
- The post-construction monitoring plan will include a description of standardized carcass searches, scavenger rate (i.e., carcass removal) trials, searcher efficiency trials, and reporting. Statistical methods will be used to estimate Project avian and bat fatalities if sufficient data is collected to support statistical analysis.
- An injured bird response plan that delineates care and curation of any and all injured birds.

- A nesting bird management strategy to outline actions to be taken for avian nests detected within the impact footprint during operation of the Project.
- A conceptual adaptive management and decision-making framework for reviewing, characterizing, and responding to monitoring results.
- Monitoring studies following commencement of commercial operation of each CUP area. Monitoring results will be reviewed annually by the Applicant and the County of Imperial, in consultation with CDFW and USFWS, to inform adaptive management responses. During Project construction, incidental avian carcasses or injured birds found during construction shall be documented. Should a carcass be found by Project personnel, the carcass shall be photographed, the location shall be marked, the carcass shall not be moved, and a qualified biologist shall be contacted to examine the carcass. When a carcass is detected, the following data shall be recorded (to the extent possible): observer, date/time, species or most precise species group possible, sex, age, estimated time since death, potential cause of death or other pertinent information, distance and bearing to nearest structure (if any) that may have been associated with the mortality, location (recorded with Global Positioning System), and condition of carcass.
- If any federal listed, state listed or fully protected avian carcasses or injured birds are found during construction or post-construction monitoring, the Project Applicant shall notify USFWS and CDFW within 24 hours via email or phone and work with the resource agencies to determine the appropriate course of action for these species. For such listed species, the CUP owner shall obtain or retain a biologist with the appropriate USFWS Special Purpose Utility Permit(s) and CDFW Scientific Collecting Permit(s) to collect and salvage all dead and injured birds, and store/curate them in freezers for later disposition and analysis.

BIO-9

Pre-Construction Surveys for American Badger Preconstruction surveys shall be conducted by a qualified biologist for the presence of American badger dens within 14 days prior to commencement of construction activities. The surveys shall be conducted in areas of suitable habitat for American badger, which include desert scrub habitats. Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur within 14 days prior to that portion of the project site disturbed. If potential dens are observed and avoidance is feasible, the following buffer distances shall be established prior to construction activities:

- American badger potential den: 30 feet.
- American badger active den: 100 feet.
- American badger natal den: 500 feet.
- If avoidance of the potential dens is not possible, the following measures are required to avoid potential adverse effects to the American badger
- Outside the reproductive season defined as February 1 through September 30 for American badger if the qualified Lead Biologist determines through camera monitoring for three consecutive days that potential dens are inactive, the biologist shall excavate these dens by hands with a shovel to prevent American badgers from re-using them during construction.

- Outside of the reproductive season defined as February 1 through September 30 for American badger if the Lead Biologist determines that potential dens may be active, an onsite passive relocation program shall be implemented. This program shall consist of excluding American badgers from occupied burrows by installation of one-way doors at burrow entrances, monitoring of the burrow for seven days to confirm usage has discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that American badgers have stopped using the dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent use during construction.

Impact 3.4-2 Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?

Arrow weed thickets are recognized by CDFW as a sensitive vegetation type. Arrow weed thickets occurs on approximately 0.41 acres along the small section of the East Highline Canal within the southwestern corner of the BSA. However, as shown on Figure 3.4-1, the proposed project would avoid the arrow weed thickets. Therefore, the proposed project would not impact a sensitive natural community and no impact would occur.

CONSTRUCTION

The proposed project results in the direct long-term (20-25-year) loss of riparian Blue Palo Verde-Ironwood Woodland associated with the northwestern wash where on-site drainage will be discharged. As described above in the *Regulatory Setting* and *Jurisdictional Waters* sections, the ephemeral washes on site may also be regulated by USACE and RWQCB pursuant to the Clean Water Act, RWQCB pursuant to the Porter-Cologne Act and CDFW pursuant to California FGC Section 1600. As such, impacts to these features are included in this analysis. As depicted on Figure 3.4-2 and in Table 3.4-6, construction on the proposed project would result in long-term (20-25 year) discharge of fill to 6.00 acres of potential Waters of the U.S. and 8.20 acres CDFW State Waters and temporary discharge of fill to 0.07 acre of potential USACE non-wetland Waters of the U.S. and 0.10 acre of CDFW State Waters. These impacts are considered significant. Implementation of Mitigation Measure BIO-10 would reduce impacts to less than significant.

Table 3.4-6. Jurisdictional Features Occurring within the Biological Study Area and Impacts

Non-Wetland Waters of the U.S. (acres)			CDFW Jurisdictional Waters (acres)		
BSA	Project Temporary Impact Area	Project Permanent Impact Area	BSA	Project Temporary Impact Area	Project Permanent Impact Area
19.15	0.07	6.00	28.53	0.10	8.20

Source: Appendix E of this EIR

The ephemeral washes and associated riparian habitat adjacent or downstream of the proposed project could be indirectly impacted by the introduction of non-native species that alter biogeomorphic function of the washes, alteration of drainage patterns and introduction of pollutants such as sediment or hydrocarbons into surface waters. These impacts would be considered significant. Implementation

of Mitigation Measures BIO-2 and BIO-3 would reduce potentially significant impacts to less than significant.

Although the project is not within a parcel zoned for agriculture, it is adjacent to and near parcels currently being farmed. The proposed project would have potential to introduce pest such as insects, vertebrates, weeds and plant pathogens. These pests would have potential to significantly adversely affect the adjacent Important Farmlands and are subject to management by the County’s Agricultural Commissioner. These impacts would be considered significant. Implementation of Mitigation Measure BIO-11 would reduce potentially significant impacts to less than significant.

OPERATION

Operation of the proposed project could also result in indirect impacts to ephemeral washes and associated riparian habitat adjacent or downstream of the proposed project could be indirectly impacted by the introduction of non-native species that alter biogeomorphic function of the washes, alteration of drainage patterns and introduction of pollutants such as sediment or hydrocarbons into surface waters. Implementation of Mitigation Measures BIO-2 and BIO-3 would reduce potential impacts to less than significant.

Mitigation Measure(s)

BIO-10 Compensatory Mitigation for Riparian Woodland and Ephemeral Wash. Following the completion of project construction, Palo Verde- Ironwood Woodland will be created, enhanced and or conserved within the undeveloped portions of the project site at a ratio of 3:1 (i.e., 3 acres created or enhanced for each acre impacted)by permanent or temporary project activities).

Permanent impacts to jurisdictional waters and wetlands shall be mitigated at a minimum 1:1 ratio either through on-site and/or off-site re-establishment, enhancement and conservation of jurisdictional waters or through an approved-mitigation bank or in lieu fee program, if one is available. The type of mitigation, mitigation location and the final mitigation ratios will be established during the permit process for the Project’s USACE Section 404 permit, the RWQCB Section 401 Water Quality Certification, and a CDFW Streambed Alteration Agreement.

BIO-11 Develop and Implement a Pest Management Plan. The Project shall develop and implement a Pest Management Plan that will reduce negative impacts to surrounding (not necessarily adjacent) farmland during construction, operation and reclamation. The Plan shall include:

- Methods for Preventing the Introduction and Spread of pests, including weeds.
- Monitoring methods for all agricultural pests and weeds with potential to adversely impact adjacent native habitat (Species on California Invasive Plants Council Inventory rated as Moderately to Highly Invasive) to including insects, vertebrates, weeds, and pathogens.
- Eradication and Control Methods All treatments must be performed by a qualified applicator or a licensed pest control business.

- "Control" means to reduce the population of common pests below economically damaging levels, and includes attempts to exclude pests before infestation, and effective control methods after infestation.
- Effective control methods may include physical/mechanical removal, biocontrol, cultural control, or chemical treatments.
- Use of "permanent" soil sterilants to control weeds or other pests is prohibited due to the fact that this would interfere with reclamation.
- Notification Requirements:
 - Notify the Agricultural Commissioner's office immediately regarding any suspected exotic/invasive pest species as defined by the California Department of Food Agriculture (CDFA) and the USDA.
 - Request a sample be taken by the Agricultural Commissioner's Office of a suspected invasive species.
- Eradication of exotic pests will be done under the direction of the Agricultural Commissioner's Office and/or CDFA.
- Obey all pesticide use laws, regulations, and permit conditions.
- Allow access by Agricultural Commissioner staff for routine visual and trap pest surveys, compliance inspections, eradication of exotic pests, and other official duties.
- Ensure that all project employees that handle pest control issues are appropriately trained and certified, that all required records are maintained and available for inspection, and that all permits and other required legal documents are current.
- Maintain records of pests found and treatments or pest management methods used. Records should include the date, location/block, project name (current and previous if changed), and methods used. For pesticides include the chemical(s) used, EPA Registration numbers, application rates, etc. A pesticide use report may be used for this.
- Reporting Methods
 - Submit a report of monitoring, pest finds, and treatments, or other pest management methods to the Agricultural Commissioner quarterly within 15 days after the end of the previous quarter, and upon request.
 - The report is required even if no pests were found or treatment occurred. It may consist of a copy of all records for the previous quarter, or may be a summary letter/report as long as the original detailed records are available upon request.

Impact 3.4-3 Would the project have a substantial adverse effect on state or federally-protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filing, hydrological interruption, or other means?

The proposed project would not impact USACE wetlands. Please refer to Impact 3.4-2 above for a discussion of CDFW-regulated aquatic features.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.4-4 Would the project interfere substantially with the movement of any native resident or migratory fish and wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

As previously indicated, the project site is located at the eastern edge of the Imperial Valley and generally abutting agricultural lands to the west and undeveloped lands to the east. The project site is not situated within is significant dispersal corridor. In fact several north-south trending features already disrupt east to west movement including SR 111, Coachella Canal and East Highline Canal. Local North-South movement can continue east of the project.

Following construction of the project, ground-dwelling wildlife will continue to be able to move locally through the area using the surrounding agricultural lands, undeveloped lands and margins of the irrigation canals. As previously discussed, the project site does include a Gen-tie line with which birds may collide as they move through the area. Significant impacts could occur if CDFW-regulated bird or bat species collide with the Gen-tie line. Implementation of Mitigation Measures BIO-5 and BIO-8 would reduce this potential impact to less than significant.

Mitigation Measure(s)

Implement Mitigation Measures BIO-5 and BIO-8.

Impact 3.4-5 Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The proposed project consists of the construction and operation of a solar energy facility and associated electrical transmission lines. Development of the solar facility is subject to the County's zoning ordinance.

Pursuant to Title 9, Division 5, Chapter 19, the following uses are permitted in the S-2 zone subject to approval of a CUP from Imperial County: Major facilities relating to the generation and transmission of electrical energy provided such facilities are not under State or Federal law, to approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the IID for electrical matters. Such uses shall include but be limited to the following:

- Electrical generation plants
- Facilities for the transmission of electrical energy (100-200 kV)
- Electrical substations in an electrical transmission system (500 kv/230 kv/161 kV)

As demonstrated in Table 3.4-4 and discussed further in Section 3.9 Land Use Planning, with approval of a CUP and General Plan Amendment, the project would be consistent with Imperial County General Plan, and with biological resources policies contained therein. Therefore, implementation of the

proposed project would not result in a significant impact associated the project's potential to conflict with local policies protecting biological resources.

Mitigation Measure(s)

No mitigation measures are required.

Impact 3.4-6 *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The project site is not located in a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Implementation of the proposed project would result in no impact associated with the potential to conflict with local conservation plans.

Mitigation Measure(s)

No mitigation measures are required.

Impact Analysis – Fiberoptic Cable

The proposed project includes the installation of approximately two miles of fiber optic cable to connect the proposed substation to the existing Niland Substation. The installation process involves aerial stringing of the fiber optic cable between existing transmission poles and would not require grading or vegetation removal. No new transmission structures would be required to install the fiberoptic cable.

Construction

Staging and preparation of the poles would require vehicle traffic along the proposed route. Staging and access to each pole has the potential to crush vegetation and burrows and the temporary increase in vehicle traffic has potential to increase the risk of collision with wildlife. If desert tortoise was struck, the impact would be considered significant. Additionally, if construction was conducted during the breeding season there would be potential to damage active nests or disrupt nesting that may occur on the power poles. Taking active nests during construction would be considered a significant impact. Implementation of Mitigation Measures BIO-2, BIO-3, BIO-4, BIO-6, BIO-7 and BIO-9 shall reduce potential impacts to less than significant.

Because the fiberoptic cable is being strung on existing transmission line poles no significant new collision risk is being created. However, if traffic on the transmission line alignment is increased or maintenance activity at the poles is increased, operations could continue to result in increased risk of vegetation and burrows being crushed or of wildlife being struck by maintenance vehicles. As indicated above, if desert tortoise was struck, the impact would be considered significant. Implementation of Mitigation Measure BIO-5 would reduce potential impacts to less than significant.

3.4.4 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

If at the end of the PPA term, no contract extension is available for a power purchaser, no other buyer of the energy emerges, or there is no further funding of the project, the project will be decommissioned and dismantled. Project decommissioning activities will require construction vehicles to drive across

the solar facility, transmission line, and access roads. Concrete footings, foundations, and pads would be removed using heavy equipment and recycled at an off-site location. All remaining components would be removed, and all disturbed areas would be reclaimed and recontoured. Similar to project construction, if desert tortoise is present, there would be potential for individual tortoises to be struck when vehicles are moving on access roads and along the transmission line. Nesting birds and burrowing owl could occupy the project site as well as habitat abutting the access roads or transmission line and fiber optic cable corridor. Adjacent native habitats could be degraded by the introduction of invasive species or by wildlife caused by construction activities. These impacts could be significant. Implementation of Mitigation Measures BIO-2, BIO-3, BIO-4, BIO-6 and BIO-9 would reduce this impact to less than significant.

Residual

The proposed project does not impact state or federally-protected wetlands, does not conflict with any local policies or ordinances protecting biological resources and does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

With the implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-6, BIO-7, BIO-8 and BIO-9 the project would reduce potential impacts to special-status species, including Harwood's milkvetch, desert tortoise, burrowing owl, migratory birds, western mastiff bat, pocketed free-tailed bat and American Badger to a level less than significant.

With the implementation of Mitigation Measures BIO-2, BIO-3, BIO-5, BIO-10, and BIO 11, the project reduces potential impacts to special status ecological communities, to less than significant.

With the implementation of Mitigation Measure BIO-8 the project reduces any potential impact to avian or bat movement to less than significant.

Therefore, the project would not result in residual significant and unmitigable impacts related to biological resources.

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