

SECTION 4.12

BIOLOGICAL RESOURCES

This section provides a background discussion of the regulatory framework, the affected environment and impacts to biological resources. The regulatory framework discussion focuses on the federal, state, and local regulations that apply to plants, animals and sensitive habitats. The affected environment discussion focuses on the topography and soils; general vegetation; general wildlife; sensitive biological resources; riparian habitat and sensitive natural communities; jurisdictional waters; and habitat connectivity and wildlife corridors. Information contained in this section is summarized from the *Biological Resources Assessment Report for Seville 4 Solar Project Imperial County, CA* dated August 2017 (ECORP 2017a); the *Jurisdictional Delineation for Seville 4 Solar Project Imperial County, California* dated August 11, 2017 (ECORP 2017b); the “Results of Burrowing Owl Surveys for the Seville 4 Solar Project, Imperial County, California” dated July 20, 2017 (Primrose 2017). Each report along with associated appendices is provided on the attached CD of Technical Appendices as **Appendix L** of this EIR.

For the purposes of this section, “survey area” is inclusive of the 153 acres proposed as part of the Fixed-Frame Configuration and the 174 acres proposed as part of the HSAT Configuration as well as the Gen-Tie Line corridor to Lot D. The survey area also includes a 500-foot buffer beyond the boundaries of both configurations and the Gen-Tie Line corridor (**Figure 4.12-1**).

4.12.1 REGULATORY FRAMEWORK

A. FEDERAL

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 (16 U.S.C. section 1531 et seq.) provides for the conservation of endangered and threatened species listed pursuant to Section 4 of FESA (16 U.S.C. section 1533) and the ecosystems upon which they depend. Two sections of this law mandate protection for species in this category: FESA § 9: It is unlawful for anyone to “take” a listed animal. Take may be direct, e.g., harming or killing species, and indirect, e.g., by significantly modifying its habitat in such a way that it causes harm to the species [United States Fish and Wildlife Service (USFWS) 1973]. The second part, Section 7 of FESA (16 U.S.C. section 1536) requires Federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of Critical Habitat for these species. The USFWS administers this federal program.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 (16 USC sections 703-712) is a federal law that implements international treaties and conventions held to protect migratory birds (USFWS 1918). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10. This includes feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The MBTA requires that project-related disturbance at active nesting territories be reduced or eliminated during critical phases of the nesting cycle (February 1 to August 31, annually) to avoid nest abandonment and/or loss of eggs or young. The loss of habitat upon which the birds depend could constitute a violation of the MBTA. In addition to the MBTA, CDFW also enforces the protection of non-game native birds. Sections 3503, and 3503.5 of the California Fish and Game Code (FGC) mandate the protection of California non-game native birds’ nests, and FGC 3800 makes it unlawful to take California-native non- game birds.

Executive Order 13112 – Invasive Species

Executive Order (EO) 13112 was signed in February 1999 and established the National Invasive Species Council. To the extent practicable and permitted by law, this EO requires agencies to: prevent the

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introduction of invasive species; provide for control of invasive species; and minimize the economic, ecological, and human health impacts that invasive species cause.

Executive Order 11990 – Protection of Wetlands

EO 11990 establishes a national policy to avoid adverse impacts on wetlands whenever there is a practicable alternative. A jurisdictional delineation was performed for the proposed Project.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (The Eagle Act) of 1940 and amended in 1962 was first employed for the protection of bald eagles (*Haliaeetus leucocephalus*). In 1962 the Eagle Act was amended to include golden eagles (*Aquila chrysaetos*) as well. This addition was made to help strengthen the protection of bald eagles who were often times killed by people confusing this species with golden eagles. This act has made it illegal to import, export, take, sell, purchase, or barter bald or golden eagles.

Waters of the United States

This report describes potential WOTUS including wetlands that may be regulated by the USACE under Section 404 of the federal CWA. WOTUS includes both wetlands and other waters, as described below.

Wetlands

Wetlands are “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” [51 FR 41250, Nov. 13, 1986, as amended at 58 FR 45036, Aug. 25, 1993]. Wetlands can be perennial or intermittent.

Other Waters

Other waters that may be found in the Delineation Area are non-tidal, perennial, and intermittent watercourses and tributaries to such watercourses [51 FR 41250, Nov. 13, 1986, as amended at 58 FR 45036, Aug. 25, 1993]. The limit of USACE jurisdiction for non-tidal watercourses (without adjacent wetlands) is defined in 33 CFR 328.4(c)(1) as the “ordinary high-water mark” (OHWM). The OHWM is defined as the “line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” approximation of the lateral limit of USACE jurisdiction. The upstream limits of other waters are defined as the point where the OHWM is no longer perceptible.

Federal Clean Water Act

The Clean Water Act (CWA [33 U.S.C. 1251 *et seq*]) is intended to restore and maintain the quality and biological integrity of the nation’s waters. It prohibits the discharge of pollutants into Waters of the United States (WOTUS) without a National Pollutant Discharge Elimination System (NPDES) permit from the Environmental Protection Agency (EPA). By issuing NPDES permits, the EPA can regulate the discharge of pollutants to protect water quality.

Section 404 of the CWA provides that whenever any person discharges dredged or fill material into WOTUS (e.g., streams, wetlands, lakes, bays), a permit is required from the United States Army Corps of Engineers (USACE). The USACE has issued 50 separate Nationwide Permits (NWP) for different types of projects with impacts to wetlands (as of March 19, 2007). Depending on the level of impact, projects qualifying for an NWP may be required to provide the USACE with Pre-Construction Notification of the

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impacts and meet other restrictions. Projects with greater wetland impacts than those allowed under one of the NWP's require an Individual Permit. The process of obtaining an Individual Permit includes public notice and response to all comments received; the permit decision document includes a discussion of the environmental impacts of the project; the public and private needs, alternatives to achieve project purposes if needed; and beneficial and/or detrimental effects of the project on public and private uses. In *SWANCC vs. USACE*, the Supreme Court ruled that the jurisdiction of the USACE does not extend to isolated, intrastate, non-navigable waters and wetlands such as vernal pools, ephemeral streams, and wetlands not associated with a stream channel. ECORP has conducted a wetland delineation for the proposed Project to determine USACE jurisdictional boundaries (ECORP 2017b). However, only the USACE can make a final determination on the jurisdictional boundaries.

Section 401 of the CWA requires that an applicant for a federal license or permit to discharge into navigable waters must provide the federal agency with a water quality certification. The certification must declare that the discharge would comply with water quality standards requirements of the CWA. USACE issuance of a Section 404 permit triggers the requirement that a Section 401 certification also be obtained. In California, the Regional Water Quality Control Boards (RWQCBs) issue this certification.

Jurisdictional Assessment

Pursuant to the U.S. Environmental Protection Agency (USEPA) and USACE memorandum regarding CWA jurisdiction, issued following the United States Supreme Court's decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (herein referred to as *Rapanos*), the agencies will assert jurisdiction over the following waters: "Traditional Navigable Waters" (TNW); all wetlands adjacent to TNWs; non-navigable tributaries of TNWs that are "relatively permanent" waters (i.e., tributaries that typically flow year-round or have continuous flow at least seasonally); and wetlands that directly abut such tributaries.

Waters requiring a significant nexus determination by the USACE and USEPA to establish jurisdiction include non-navigable tributaries that are not relatively permanent, wetlands adjacent to non-navigable tributaries that are not relatively permanent, and wetlands adjacent to but do not directly abut a relatively permanent non-navigable tributary. The jurisdictional determination is a fact-based evaluation to establish whether a water has a significant nexus with a TNW. The significant nexus analysis will assess the flow characteristics and functions of the non-navigable tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of downstream TNWs (USEPA and USACE 2007).

B. STATE

Note: the name of the California Department of Fish and Game (CDFG) was changed to the California Department of Fish and Wildlife (CDFW) on January 1, 2013.

California Endangered Species Act

The California Endangered Species Act (CESA) (FGC section 2050 et seq.) requires the CDFW to establish a list of endangered and threatened species (section 2070) and to prohibit the incidental taking of any such listed species except as allowed by the Act (sections 2080-2089). In addition, CESA prohibits take of candidate species (under consideration for listing). The definition of "take" includes harass, harm, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.

CESA also requires the CDFW to comply with the California Environmental Quality Act (CEQA) (Pub. Resources Code Section 21000 et seq.) when evaluating incidental take permit applications [FGC section 2081(b) and California Code of Regulations, Title 14, section 783.0 et seq.], and the potential impacts the project or activity for which the application was submitted may have on the environment. The CDFW's

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CEQA obligations include consultation with other public agencies which have jurisdiction over the project or activity [California Code of Regulations, Title 14, section 783.5(d)(3)], but in no event may the CDFW issue an incidental take permit if issuance would jeopardize the continued existence of the species [FGC section 2081(c); California Code Regulations, Title 14, section 783.4(b)].

California Environmental Quality Act

CEQA was enacted in 1970 to provide for full disclosure of environmental impacts to the public before issuance of a permit by state and local public agencies. In addition to federal or state listed species, “sensitive” plants and animals receive consideration under CEQA. Sensitive species include, but are not limited to, wildlife Species of Special Concern listed by CDFW, and plant species on the California native Plant Society’s (CNPS) List 1A (Presumed extinct), List 1B (Rare, threatened, or endangered in California and elsewhere. Eligible for state listing) or List 2 (Rare, threatened, or endangered in California but more common elsewhere. Eligible for state listing.).

State of California Fish and Game Code

State of California Fish and Game Code Section 1602 requires any person, state, or local government agency, or public utility proposing a project that may affect a river, stream, or lake to notify CDFW before beginning the project. If activities will result in the diversion or obstruction of the natural flow of a stream; substantially alter its bed, channel, or bank; impact riparian vegetation; or adversely affect existing fish and wildlife resources, then a Streambed Alteration Agreement is required.

A Streambed Alteration Agreement lists the CDFW conditions of approval relative to the project, and it serves as an agreement between an applicant and CDFW for a term of not more than 5 years for the performance of activities subject to this section. A CDFW Streambed Alteration Notification (SAN) is required for all activities potentially affecting streambeds and/or their associated riparian habitats. Subsequently, implementation of the project may require a 1602 Streambed Alteration Agreement if these areas are determined to be jurisdictional by CDFW. A Streambed Alteration Agreement will be required for potential impacts to drainages within the survey area.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (FGC sections 1900-1913) is a state act that was created to help “preserve, protect, and enhance rare and endangered plants in this state.” The NPPA is regulated by the CDFW. The CDFW has the authority to classify native plants as endangered or rare to help prevent these species from take. Endangered and rare plants species would also be provided additional protection under CESA.

CDFW Jurisdiction

The CDFW regulates projects that propose to (1) substantially divert, obstruct, or change the natural flow or the bed, channel, or bank of any river, stream, or lake designated by the department in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit, (2) use material from the streambeds designated by the department, or (3) result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake designated by the department. If an existing fish or wildlife resource may be substantially adversely affected by that construction, the department shall notify the governmental agency or public utility of the existence of the fish or wildlife resource together with a description thereof and shall propose reasonable modifications in the proposed construction that will allow for the protection and continuance of the fish or wildlife resource, including procedures to review the operation of those protective measures. CDFW jurisdiction includes the definable bed, bank, or channel, areas that support

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periodic or intermittent flows, perennial flows, subsurface flows, support fish or other aquatic life and areas that support riparian or hydrophytic vegetation in association with a streambed.

RWQCB Jurisdiction

The RWQCB regulates wastewater discharges into all surface waters and to groundwater. The RWQCB also regulates storm water discharges from construction, industrial, and municipal activities; discharges from irrigated agriculture; dredge and fill activities; the alteration of any federal water body under the federal Clean Water Act (CWA) Section 401 certification program; and several other activities that could degrade water quality. In most cases, a permit from the local RWQCB is required for proposed discharges or activities from a project that could affect California's surface, coastal, or ground waters.

Regulated waters are broad in definition and scope. Regulated waterbodies include any “surface water or groundwater, including saline waters, within the boundaries of the state.” The regulations encompass all WOTUS, including wetlands, as well as all Waters of the State (WOTS). RWQCB publishes no methodology for determining their jurisdictional boundaries, but rather coordinates with other regulatory agencies and determines their jurisdictional boundaries based on these agency’s findings. The Project is located within the jurisdiction of the Colorado River RWQCB.

C. LOCAL

Imperial County General Plan

The Imperial County General Plan contains a variety of goals, objectives, policies and programs that relate to the preservation and conservation of biological resources. **Table 4.12-1** analyzes the consistency of the proposed Project with the applicable goals, objectives, policies and programs relating to biological resources from the Conservation and Open Space Element. In addition, an agriculture policy and program from the Land Use Element directly applies to the Project with regard to burrowing owl is also included. While this EIR analyzes the Project’s consistency with the General Plan pursuant to State CEQA Guidelines Section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

**TABLE 4.12-1
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS**

General Plan Goals, Objectives Policies and Policies	Consistent with General Plan?	Analysis
CONSERVATION AND OPEN SPACE ELEMENT		
Preservation of Biological Resources		
<p>Goal 2: The County will preserve the integrity, function productivity, and long-term viability of environmentally sensitive habitats, and plant and animal species.</p>	<p>Yes</p>	<p>The Project site includes approximately 60 acres formerly used for agricultural activities surrounded by open desert. As discussed in this section, the Project site does not contain any sensitive vegetation communities or jurisdictional waters. Mitigation measures requiring pre-construction surveys are provided to address potential for nesting birds, loggerhead shrike and burrowing owl. Therefore, the proposed Project is consistent with this objective.</p>

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**TABLE 4.12-1
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS**

General Plan Goals, Objectives Policies and Policies	Consistent with General Plan?	Analysis
<p>Objective 2.1 Conserve wetlands, fresh water marshes, and riparian vegetation.</p>	<p align="center">Yes</p>	<p>The 500-foot buffer surrounding the Project site includes jurisdictional wetland areas. Because Waters of the State (WOS) are located within the buffer rather than on the Project site, the proposed Project is not anticipated to impact these features. Therefore, the proposed Project is consistent with this objective.</p>
<p>Objective 2.2 Protect significant fish, wildlife, plant species, and their habitats.</p>	<p align="center">Yes</p>	<p>The proposed Project area contains potential habitat for several sensitive species. However, the likelihood of presence is low. Pre-construction surveys for loggerhead shrike/nesting birds and burrowing owl were identified mitigation measures to reduce impacts to these species should they be present. Refer to mitigation measures MM 4.12.4a, MM 4.12.4b and 4.12.5. Therefore, the proposed Project is consistent with this objective.</p>
<p>Open Space Conservation Policy: The County shall participate in conducting detailed investigations into the significance, location, extent, and condition of natural resources in the County.</p>	<p align="center">Yes</p>	<p>The Applicant prepared the following reports to identify biological resources that are present and could be affected by the Project: <i>Biological Resources Assessment Report for Seville 4 Solar Project Imperial County, CA</i> dated August 2017 (ECORP 2017a); the <i>Jurisdictional Delineation for Seville 4 Solar Imperial County, California</i> dated August 11, 2017 (ECORP 2017b); the “Results of Burrowing Owl Surveys for the Seville 4 Solar Project, Imperial County, California” dated July 20, 2017 (Primrose 2017). Therefore, the proposed Project is consistent with this policy.</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>	<p align="center">Yes</p>	<p>The Applicant will submit the Jurisdictional Delineation Report to the USACE and is anticipated to consult with CDFW early in 2018. In addition, the USFWS will be provided an opportunity to comment on this EIR prior to the County’s consideration of any Project approvals. Therefore, the proposed Project is consistent with this program.</p>

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**TABLE 4.12-1
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS**

General Plan Goals, Objectives Policies and Policies	Consistent with General Plan?	Analysis
LAND USE ELEMENT		
Agriculture Policies and Programs		
<p>Land Use Element Policy: The General Plan covers the unincorporated area of the County and is not site specific, however, a majority of the privately owned land is located in the area identified by the General Plan as “Agriculture,” which is also classified as important burrowing owl habitat, typically in the berms and banks of agricultural fields.</p>	Yes	<p>Based on the “Agriculture” designation of the proposed Project site, the potential for burrowing owl was examined. Refer to the “Program” discussed below.</p>
<p>Program: Prior to approval of development of existing agricultural land either in form of one parcel or numerous adjoining parcels equally a size of 10 acres or more shall prepare a Biological survey and mitigate the potential impacts. The survey must be prepared in accordance with the United States Fish and Wildlife and California Department of Fish and Wildlife regulations, or as amended.</p>	Yes	<p>As noted under the Open Space Conservation Policy, above, several biological studies were prepared for the Project site including the “Results of Burrowing Owl Surveys for the Seville 4 Solar Project, Imperial County, California” (Primrose 2017). Mitigation measure MM 4.12.5 would address potential impacts to burrowing owl through implementation of a pre-construction survey. Therefore, the proposed Project is consistent with this program.</p>
RENEWABLE ENERGY AND TRANSMISSION ELEMENT		
Goals and Objectives		
<p>Goal 1: Support the safe and orderly development of renewable energy while providing for the protection of environmental resources.</p>	Yes	<p>The proposed Project is within the boundaries of the existing Seville Solar Farm Complex. As such, it is considered safe and orderly in its development and is consistent with this Goal.</p>
<p>Goal 2: Encourage development of electrical transmission lines along routes which minimize potential environmental effects.</p>	Yes	<p>The proposed Gen-Tie Line is within the boundaries of Seville Solar Farm Complex thereby minimizing the potential for environmental effects, including impacts to biological resources. Therefore, the proposed Project is considered consistent with this Goal.</p>
<p>Objective 2.2: Where practicable and cost-effective, design transmission lines to minimize impacts on agricultural, natural and cultural</p>	Yes	<p>Refer to analysis under Goal 2, above. The proposed Project is consistent with Goal 2.</p>

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**TABLE 4.12-1
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS**

General Plan Goals, Objectives Policies and Policies	Consistent with General Plan?	Analysis
resources, urban areas, military operation areas, and recreational activities.		
Goal 8: Develop overlay zones that will facilitate the development of renewable energy resources while preserving and protecting agricultural, natural, and cultural resources. Development of overlay zones shall include coordination with Federal, State, County, Tribal governments, educational entities, the public and local industries.	Yes	The Project is immediately adjacent to lands currently designed as Renewable Energy (RE) Overlay Zone. The Project is requesting a zone change to add the RE Overlay Zone to the existing A-2 General Agriculture Zone. Therefore, the proposed Project is consistent with this Goal.

4.12.2 ENVIRONMENTAL SETTING

A. SEVILLE 4 PROJECT SITE AND GEN-TIE

Literature Review

The California Natural Diversity Database (CNDDDB) and CNPS Electronic Inventory searches were conducted on July 5, 2017. ECORP searched CNDDDB and CNPS Electronic Inventory records within the Project boundaries as depicted on the USGS 7.5-minute Harpers Well and Borrego Mountain Southeast topographic quadrangles, plus the surrounding seven topographic quadrangles, including Shell Reef, Kane Spring, Kane Spring Northwest, Kane Spring Northeast, Superstition Mountain, Plaster City Northwest, and Carrizo Mountain Northeast. The literature review and database searches resulted in records for 22 special-status plant species and six special-status wildlife species that could occur on and/or in the vicinity of the survey area. The survey area is depicted in **Figure 4.12-1**.

Special-Status Plants

Twenty-two special-status plant species appeared in the literature review and database searches for the Project site. A list was generated from the results of the literature review and the Project site was evaluated for suitable habitat that could support any of the special-status plant species on the list. With Fish Creek Wash and San Felipe Creek approximately 2.5 miles to the southeast of the Project site, any aquatic species that appeared in the literature review were outside of the range of the Project site and are thus presumed absent since no aquatic habitat was present.

Despite the results of the literature review, most special-status plant species are not expected to occur on the Project site due to the extensive ground disturbance associated with past agricultural operations and recent disturbance found on the Project site. Of the 22 special-status plants identified, only one species, gravel milk-vetch (*Astragalus sabulonum*; CNPS List 2B.2) was found to have a low potential to occur on the Project site. This species is typically found in sandy, sometimes gravelly, flats or washes within desert dunes, Mojavean desert scrub, and Sonoran desert scrub habitats. However, it can also occur along disturbed roadsides adjacent to desert dunes and other desert scrub habitats. The eastern boundary of the Project site is bordered by an existing IID Transmission Line Road right-of-way access that

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is very sandy and separates the Project site from native mesquite series habitat to the east. This portion of the Project site is disturbed and sandy and could provide minimal habitat for gravel milk-vetch. In addition, one historic record of this species (1980) has been documented 1.3 miles east of the Project site (CDFW 2017a). Based on the limited habitat observed along the eastern edge of the Project boundary and the documented historic record of the species within five miles, this species has been determined to have a low potential to occur on the Project site.

The remaining 21 species identified in the literature review are presumed absent from the Project site due to the lack of suitable habitat, soil type, and/or elevation range at the Project site. Although known occurrences have been reported in the database, they were either not within five miles of the site, or suitable habitat strongly associated with the species occurs on site, but no records or only historic records (greater than 20 years old) were found in the database search. **Table 4.12-2** lists these species, potential for occurrence, and status. Descriptions of the CNPS designations are also provided.

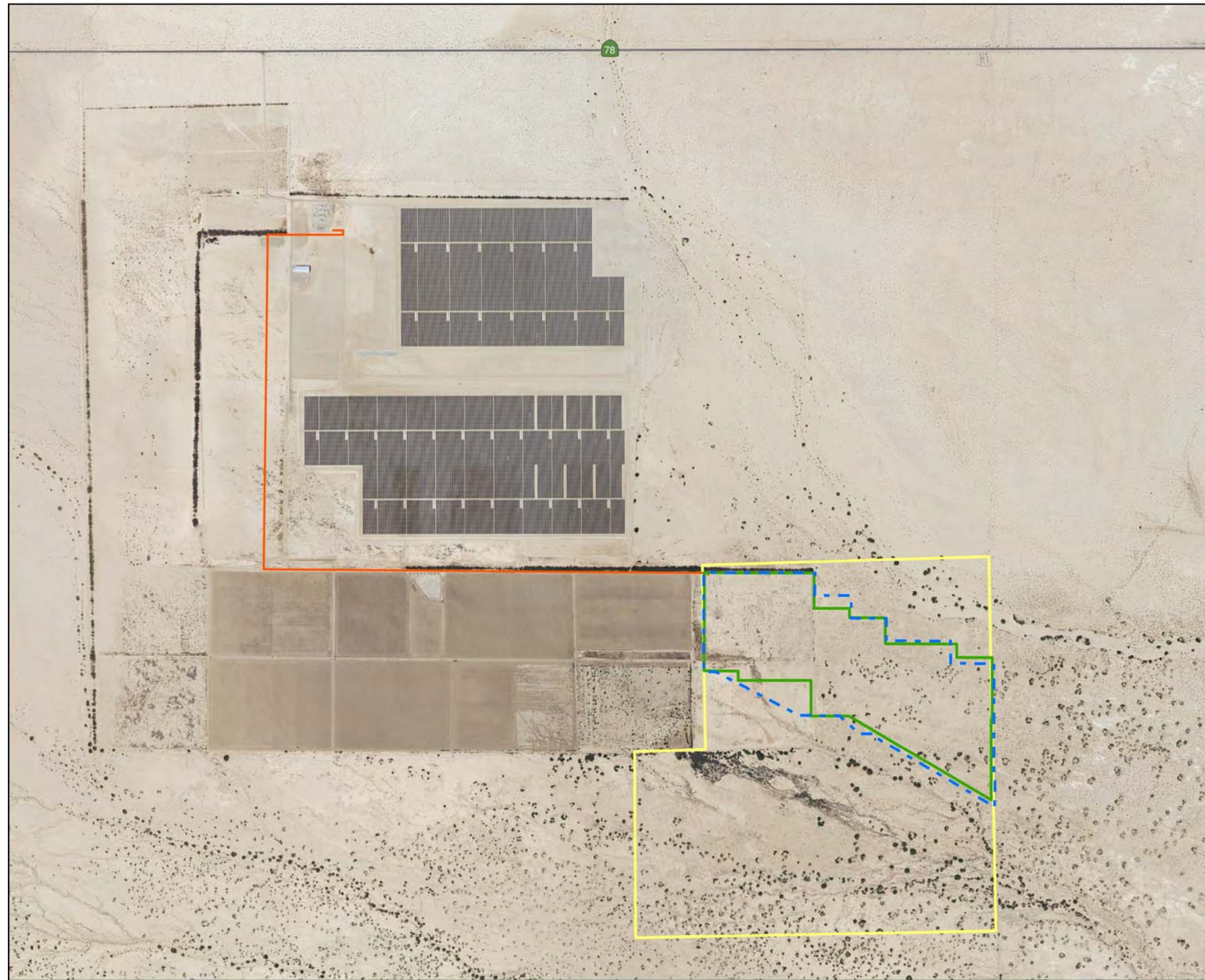
Special-Status Wildlife

Of the six special-status wildlife species identified in the literature review, one species (loggerhead shrike) was found to have a high potential to occur. One species (burrowing owl) was found to have a low potential to occur. The remaining four species are presumed absent from the Project site due to the extensive ground disturbance associated with past agricultural operations and recent disturbance found on the Project site.





The loggerhead shrike is a CDFW SSC (CDFW 2017b) and prefers open areas with scattered trees and shrubs including savanna, desert scrub, and open woodland habitats. Its diet includes large insects and other invertebrates, but it will also prey upon small mammals, lizards, and snakes. Suitable foraging habitat is present throughout the Project site. One recent observation has been recorded (2013) in the vicinity of the Project approximately 0.5 mile to the west (HELIX 2014b). The Project site provided suitable foraging habitat for this species but nesting habitat (i.e., trees and large shrubs) is limited. Because one record was identified within five miles of the Project site and suitable foraging habitat is present on the site, this species has a high potential to occur on the Project site.

The burrowing owl is a CDFW SSC and is typically found in dry open areas with few trees and short grasses. It is also found in vacant lots near human habitation. It uses uninhabited mammal burrows for roosts and nests. It primarily feeds on large insects and small mammals but will also eat birds and amphibians. The Project site contained marginally suitable open habitat with soils suitable for burrowing. However, no burrows of adequate size were observed during the survey. Because there have not been any

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Map Features

-  Fixed-Frame Configuration
-  HSAT Configuration
-  Proposed Gen-tie
-  Lot 8

Source: ECORP 2017a.

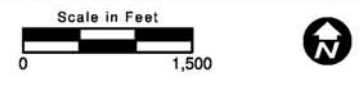


Photo Source: NAIP 2016

FIGURE 4.12-1
BIOLOGICAL SURVEY AREA

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documented occurrences of burrowing owl within five miles and only marginally suitable habitat is present on the Project site. burrowing owl has a low potential to occur on the Project site.

**TABLE 4.12-2
SPECIAL-STATUS SPECIES ON THE PROJECT SITE**

Species	Latin	CNPS Designation
Abrams' spurge	<i>Euphorbia abramsiana</i>	2B.2
Borrego milk-vetch	<i>Astragalus lentiginosus var. borreganus</i>	4.3
Brown turbans	<i>Malperia tenuis</i>	2B.3
Chaparral sand-verbena	<i>Abronia villosa var. aurita</i>	1B.1
Emory's crucifixion-thorn	<i>Castela emoryi</i>	2B.2
Flat-seeded spurge	<i>Euphorbia platysperma</i>	1B.2
Harwood's milk-vetch	<i>Astragalus insularis var. harwoodii</i>	2B.2
Little-leaf elephant tree	<i>Bursera microphylla</i>	2B.3
Narrow-leaf sandpaper-plant	<i>Petalonyx linearis</i>	2B.3
Orcutt's woody-aster	<i>Xylorhiza orcuttii</i>	1B.2
Parish's club-cholla	<i>Grusonia parishii</i>	2B.2
Parish's desert-thorn	<i>Lycium parishii</i>	2B.3
Peirson's pincushion	<i>Chaenactis carphoclinia var. peirsonii</i>	1B.3
Ribbed cryptantha	<i>Johnstonella costata</i>	4.3
Salton milk-vetch	<i>Astragalus crotalariae</i>	4.3
Sand food	<i>Ammobroma sonorae</i>	1B.2
Thurber's pilostyles	<i>Pilostyles thurberi</i>	4.3
Torrey's box-thorn	<i>Lycium torreyi</i>	4.2
Wiggins' cholla	<i>Opuntia wigginsii</i>	3.3
Winged cryptantha	<i>Johnstonella holoptera</i>	4.3
Wolf's cholla	<i>Cylindropuntia wolfii</i>	4.3
List Designation	Meaning	
1A	Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere	
1B	Plants Rare, Threatened, or Endangered in California and Elsewhere	
2A	Plants Presumed Extirpated in California, But Common Elsewhere	
2B	Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere	
.3	Plants about which we need more information; a review list	
.4	Plants of limited distribution; a watch list	
List 1B, 2, and 4 extension meanings:		
.1	Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)	
.2	Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)	

Source: ECORP 2017a.

Note: According to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California FGC (CDFG 1984). This interpretation is inconsistent with other definitions.

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The following species are presumed absent due to the lack of suitable habitat on the Project site:

1. California black rail (*Laterallus jamaicensis coturniculus*), CDFW fully protected
2. Desert pupfish (*Cyprinodon macularis*), federally and state-listed (endangered)
3. Flat-tailed horned lizard, CDFW Special Status Species (SSC)
4. Lowland leopard frog (*Lithobates yavapaiensis*), CDFW SSC

Biological Resources Assessment

The survey for the Biological Resources Assessment was conducted on July 7, 2017 by ECORP biologists Scott Taylor and Jon Renard. **Table 4.12-3** summarizes weather conditions during the survey.

**TABLE 4.12-3
WEATHER CONDITIONS DURING THE BIOLOGICAL SURVEY**

Date	Time		Temperature (°F)		Cloud Cover (%)		Wind Speed (mph)	
	start	end	min	max	min	max	min	max
7/7/17	0545	1040	83	107	15	30	0	2

Source: ECORP 2017a.

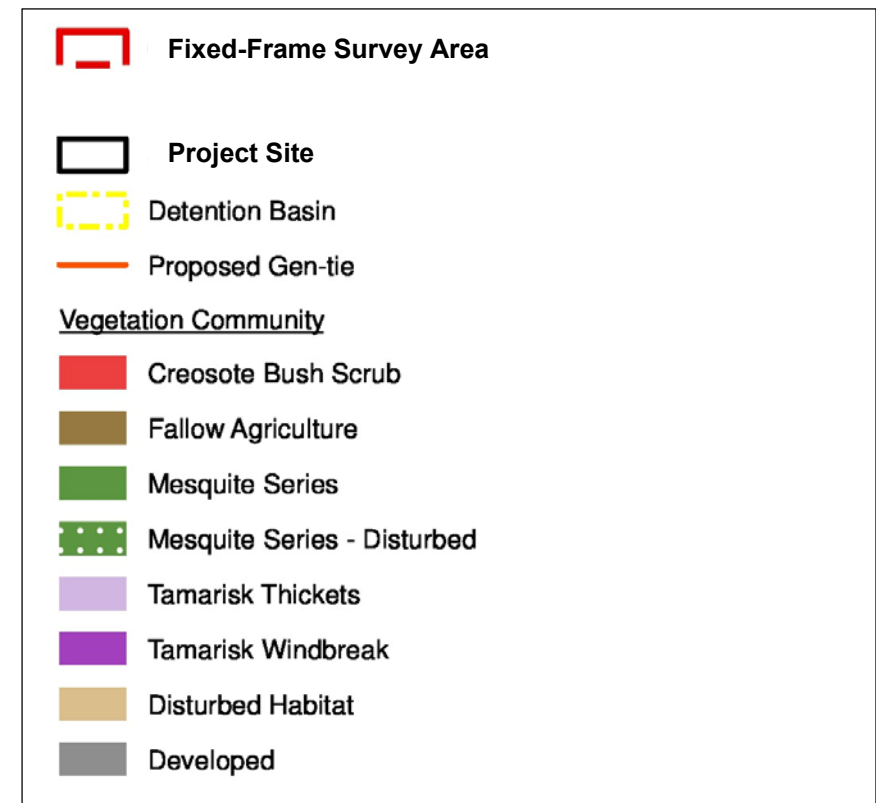
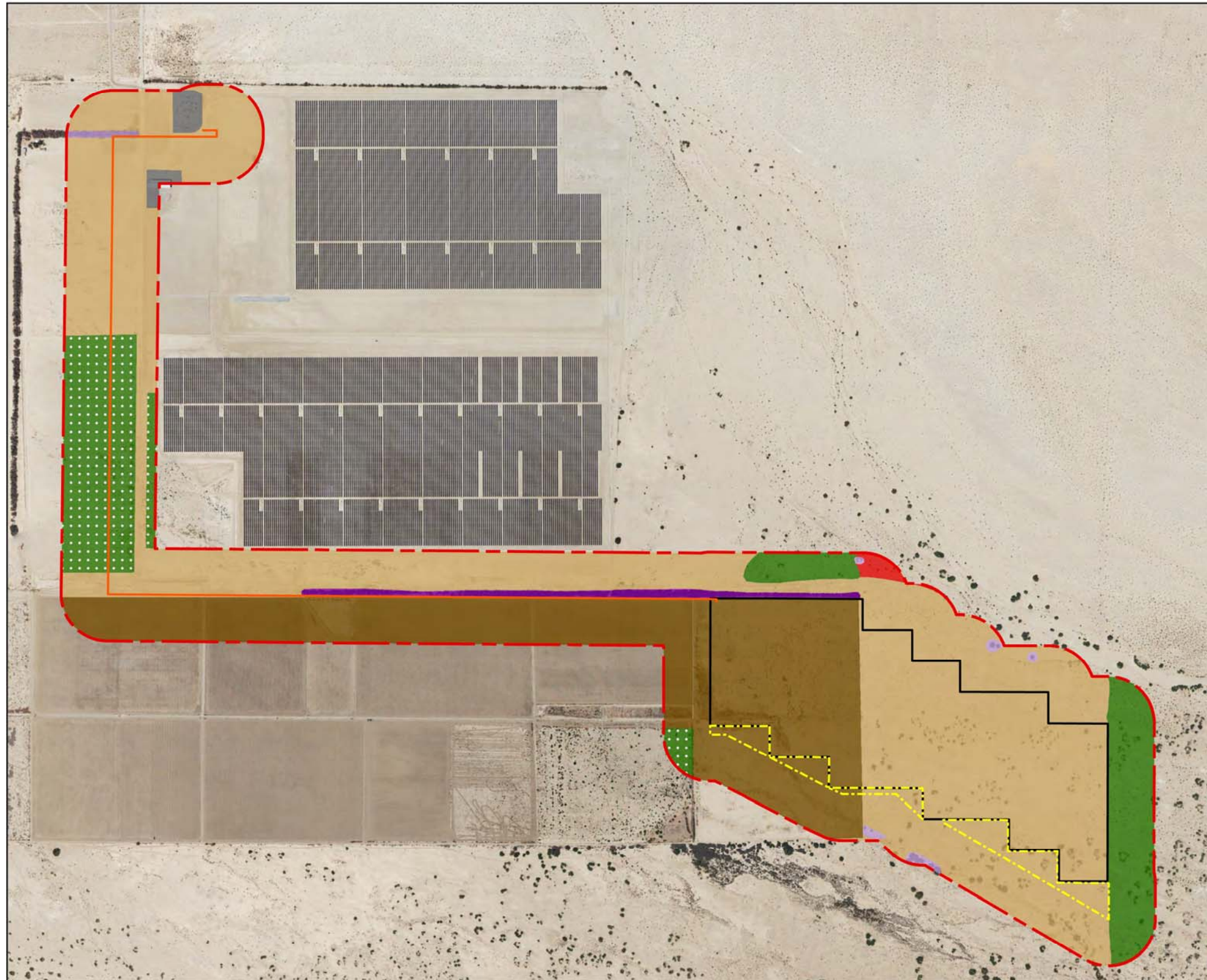
The results of the biological resources assessment, including site characteristics, plant communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors) are summarized in the discussion below.

Survey Area Characteristics

The majority of the survey area consisted of idle agriculture and disturbed habitat (**Figure 4.12-2A** and **Figure 4.12-2B**). Soils were generally sandy and consisted of Indio-vint complex, Meloland fine sand, Vint fine sandy loam, Rositas fine sand, and Glenbar clay loam. The Project site is bordered by idle agriculture to the west, and mostly undisturbed native habitat to the north, south, and east. Surrounding land uses consist of old agriculture and open land, and the Seville Solar Complex Project to the northwest. Vegetation within the disturbed areas was scarce, and all of the larger shrubs had been removed and were piled throughout portions of the Project site. The Project site does not contain any habitat for special-status species. One large drainage, Tarantula Wash, was present north of the Project site and flows southeast. A second drainage was located south of the Project site and flows southeast as well. Neither of these drainages is located within the Project boundary. Representative site photographs are presented below in Figures 4 through 6.

Vegetation Communities

Two land cover types were present within the Fixed-Frame Configuration and HSAT Configuration (**Figure 4.12-2A** and **Figure 4.12-2B**): idle agriculture and disturbed habitat. Four vegetation communities and land cover types were present within the proposed gen-tie line: Disturbed habitat, idle agriculture, mesquite series-disturbed, and tamarisk thickets. No special-status habitats or vegetation communities were observed on the Project site. **Table 4.12-3** lists acreages for each vegetation community or land cover type that was located within each Project Configuration and within the proposed Gen-Tie Line corridor. Descriptions and photographs of the vegetation communities and land cover type documented within each configuration and the Gen-Tie Line are provided below.



Source: ECORP 2017a.

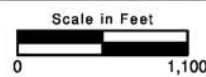
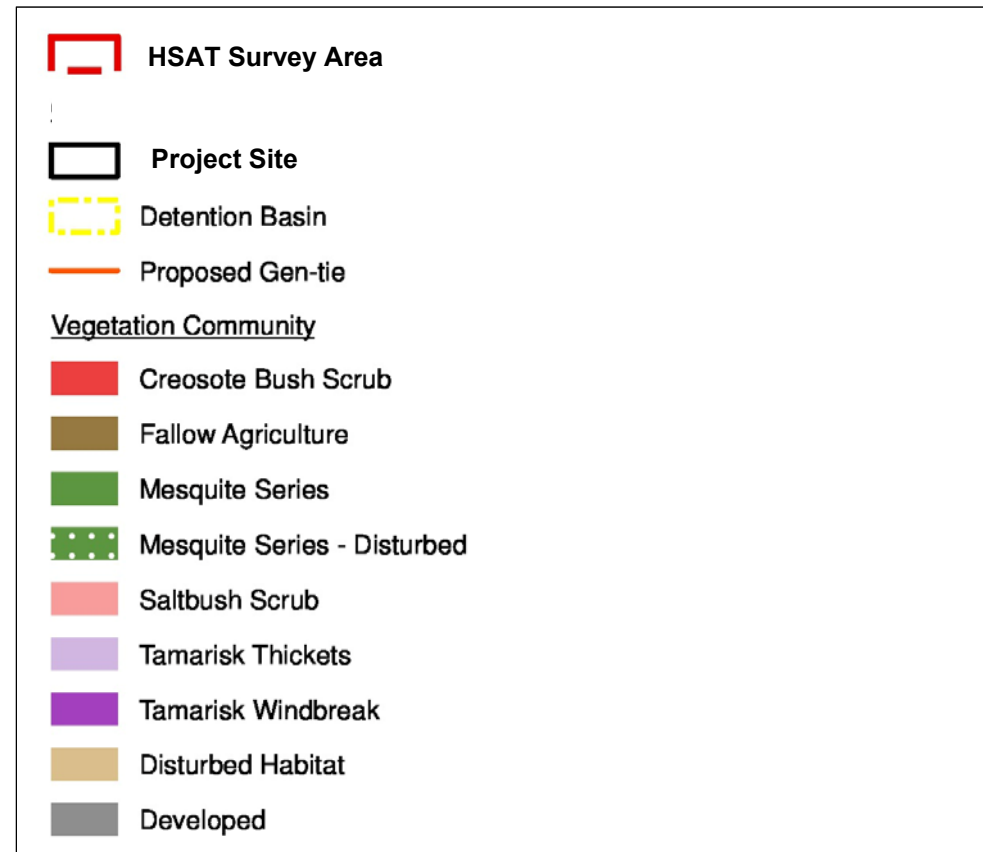
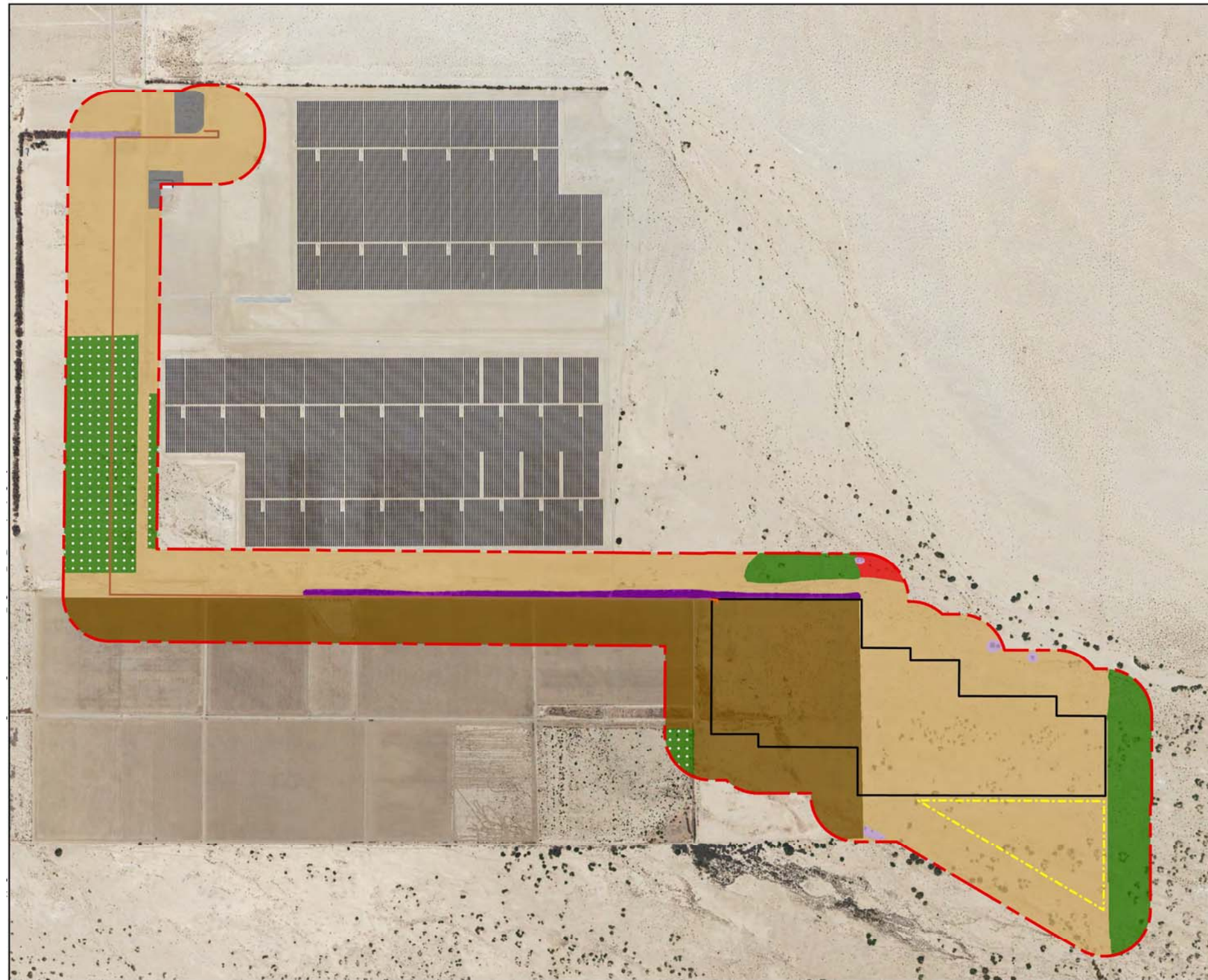


Photo Source: NAIP 2016

FIGURE 4.12-2A
FIXED-FRAME CONFIGURATION VEGETATION COMMUNITIES

4.12 BIOLOGICAL RESOURCES



Source: ECorp 2017a.

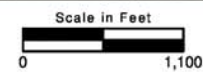


Photo Source: NAIP 2016

FIGURE 4.12-2B
HSAT VEGETATION COMMUNITIES