4.4 BIOLOGICAL RESOURCES

This section discusses biological resources that may be impacted by the proposed projects. The following identifies the existing biological resources in the project area, analyzes potential impacts due to the implementation of the proposed projects, and recommends mitigation measures to avoid or reduce potential impacts of the proposed projects. Information for this section is summarized from the *Biological Resources Evaluation Technical Report for Iris Cluster Solar Farm* prepared by Barrett's Biological Surveys. The report is included in Appendix E of this EIR.

4.4.1 Environmental Setting

The Biological Technical Report (BTR) integrates information collected from a variety of literature sources and field surveys to describe the biological resources within the vicinity of the project sites. General biological surveys and focused burrowing owl surveys were conducted between April 2013 and July 2013. These surveys were conducted to map vegetation communities, inventory species present at the time of the survey, and assess the presence or potential for occurrence of sensitive and priority plant and animal species within the project area.

4.4.1.1 Regulatory Setting

Federal

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) prohibits anyone without a permit to "take" bald or golden eagles. '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" (USFWS 2011).

Federal Endangered Species Act

Enacted in 1973, the federal Endangered Species Act (ESA) provides for the conservation of threatened and endangered species and their ecosystems. The ESA prohibits the "take" of threatened and endangered species except under certain circumstances and only with authorization from the U.S. Fish and Wildlife Service (USFWS) through a permit under Section 4(d), 7 or 10(a) of the Act. 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.

Migratory Bird Treaty Act

Congress passed the Migratory Bird Treaty Act (MBTA) in 1918 to prohibit 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.

Section 404 Permit (Clean Water Act)

The Clean Water Act (CWA) 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 U.S. Army Corps of Engineers (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. When applying for a permit a company or organization must show that they would avoid wetlands when practicable, minimize wetland impacts, and provide compensation for any unavoidable destruction of wetlands.

State

California Environmental Quality Act

Title 14 California Code of Regulations (CCR) 15380 requires that endangered, rare or threatened species or subspecies of animals or plants be identified within the influence of the project. If any such species are found, appropriate measures should be identified to avoid, minimize or mitigate to the extent possible the effects of the project.

California Department of Fish and Wildlife Code 1600 (as amended)

The California Department of Fish and Wildlife (CDFW) regulates activities that substantially diverts or obstructs the natural flow of any river, stream, or lake or uses materials from a streambed. This can include riparian habitat associated with watercourses.

California Department of Fish and Game Code Codes 3503, 3503.5, and 3513

CDFW Codes 3503, 3503.5, and 3513 protect migratory birds, bird nests and eggs including raptors (birds of prey) and raptor nests from take unless authorized by CDFW. 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. No licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. Most Fully Protected Species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations (CDFW 2011).

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

The Native Plant Protection Act (NPPA) prohibits the taking, possessing, or sale within the state of any plant listed by CDFW as rare, threatened, or endangered. An exception to this prohibition in the Act allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify CDFW at least 10 days prior to the initiation of activities that would destroy them. The NPPA exempts from "take" prohibition "the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right of way."

Porter-Cologne Water Quality Control Act, as Amended

Administered by the State Water Resource Control Board (SWRCB), protects water quality and is an avenue to implement California responsibilities under the CWA. This act regulates discharge of waste into a water resource.

Local

Imperial County General Plan

The 1993 Conservation Element and Open Space Element 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 the Conservation and Open Space 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. Additionally, 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, protect open space for the preservation of natural resources, the managed production of resources, outdoor recreation, and for public health and safety. It should be noted that Imperial County has received funding from the California Energy Commission (CEC) Renewable Energy and Conservation Planning Grant to amend and update the County's General Plan in order to facilitate future development of renewable energy projects. The CEC grant includes an update to the 1993 Conservation/Open Space Element to facilitate future development of renewable energy projects. The update of the 1993 Conservation/Open Space Element will assist in identifying areas that will conserve habitat areas on federal, state, military, tribal and private lands in the County. Table 4.4-1 analyzes the consistency of the projects with specific policies contained in the Imperial County General Plan (Imperial County, as amended through 2008) associated with biological resources.

TABLE 4.4-1. PROJECT CONSISTENCY WITH GENERAL PLAN BIOLOGICAL RESOURCE POLICIES

General Plan Policies	Consistency with General Plan	Analysis
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. **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.	Yes	Biological assessments and reports have been conducted at the project study areas in regard to the proposed projects. Applicable agencies responsible for protecting plants and wildlife will be notified of the proposed projects and provided an opportunity to comment on this EIR prior to the County's consideration of any approvals for the projects.
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 the predominate area where burrowing owls create habitats, typically in the brims and banks of agricultural fields. **Program:** Prior to approval of development of existing agricultural land either in form of one parcel or a 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 Game regulations, or as amended.	Yes	See response to the Open Space Conservation Policy above. Additionally, Burrowing Owl Focused Surveys have been conducted in accordance with the wildlife agency protocols. The results and mitigation are provided in this section of this EIR.

4.4.1.2 Existing Conditions

4.4.1.2.1 Vegetation Communities

Vegetation has been divided into communities that are groups of plants that usually coexist within the same area. A complete list of plant species observed in the project sites can be found in the BTR (Appendix E). One vegetation community, agricultural lands/rights of ways, was mapped within the survey area. Table 4.4-2 depicts the vegetation communities within the project area broken down for each project site.

TABLE 4.4-2. VEGETATION COMMUNITIES/LAND COVER TYPES WITHIN THE PROJECT STUDY AREAS

Vegetation Community/ Land Cover Type	FSF (acres)	RSF (acres)	ISF (acres)	LSF (acres)
Agricultural Lands/Right of ways	~~367.1~~364.27	396.2	~~520.8~~501.88	138.4

Source: Barrett's Biological Surveys 2013.
Notes: FSF = Ferrell Solar Farm
RSF = Rockwood Solar Farm
ISF = Iris Solar Farm
LSF = Lyons Solar Farm

Agriculture

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

The projects are located entirely on active agricultural fields. The project sites are currently subject to agricultural operational activities, with crops including Bermuda, alfalfa, sweet corn, melons, wheat, and Sudan. No rare or special species plants were observed or expected in the agricultural areas.

Some sparse vegetation was found on site that would be considered ruderal vegetation (listed with scientific names in Appendix C of the BTR). The term "ruderal" refers to the type of vegetation which grows in response to human disturbance. In addition, the Imperial Irrigation District (IID) owns the canals, drains, and roads surrounding the agricultural fields. The IID facilities are also classified as disturbed/developed land of ruderal vegetation.

The proposed projects would include development of solar facilities adjacent to productive agricultural lands. A majority of the currently vacant agricultural lands surrounding the project study areas have been approved for the development of utility-scale solar energy projects, and are anticipated to transition into solar energy use over time. Vegetation communities within the Transmission Line are limited to agriculture and disturbed/developed land.

4.4.1.2.2 Wildlife

The wildlife species observed during the surveys were typical of the agricultural habitats, which provide cover, foraging, and breeding habitat for a variety of native wildlife species. A complete list of all wildlife species observed on the FSF, RSF, ISF, LSF, and Transmission Line is included in the BTR (Appendix E). The observed species are summarized below:

Invertebrates

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

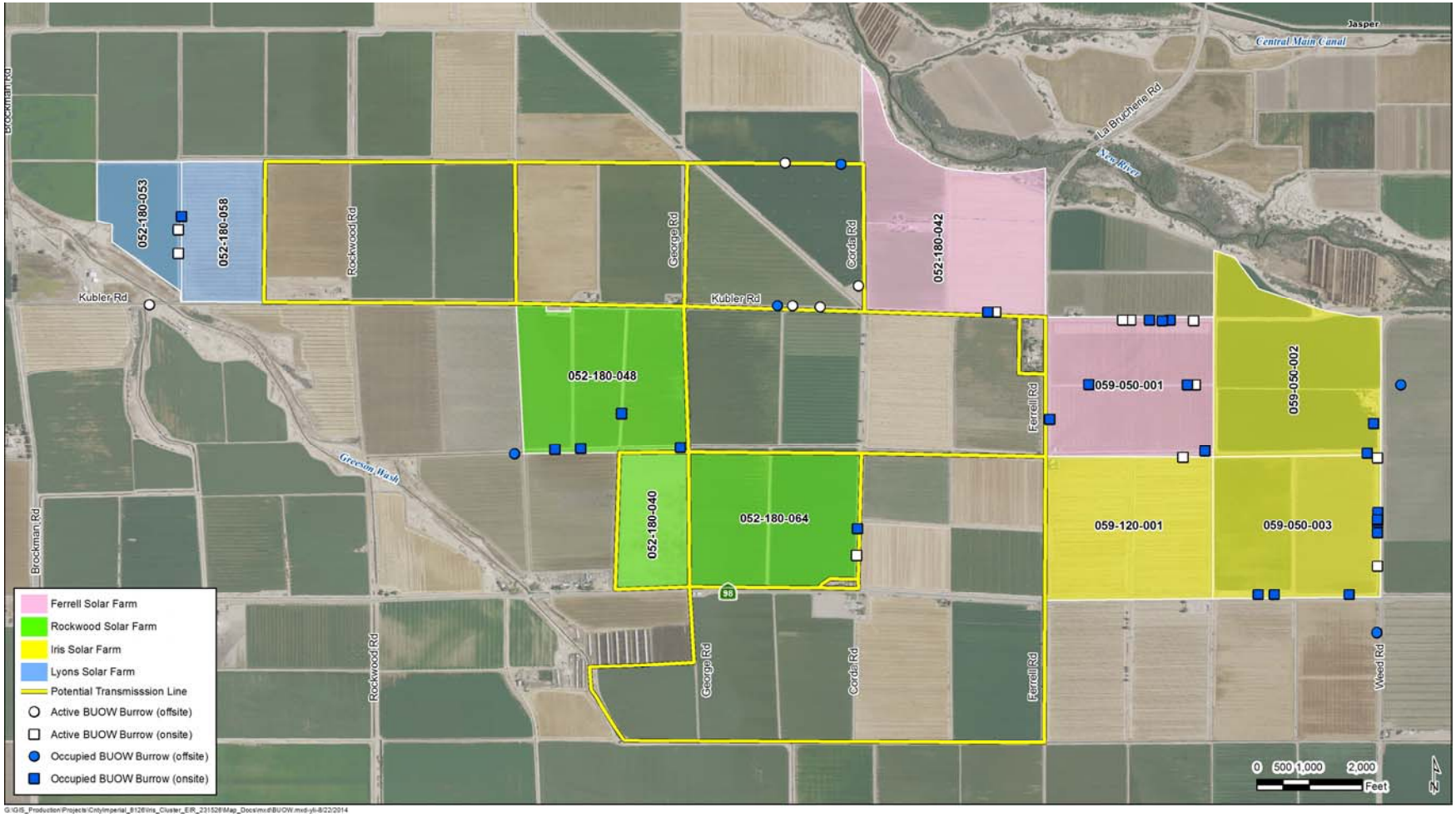
The project area contains suitable habitat for a wide variety of invertebrates. alfalfa butterfly (*Colias eurytheme*), assassin bug (*Reduviidae*), house fly (*Musca domestica*), ladybug (*Hippodamia spp.)*, mosquito (*Culiseta longiareolata*) were observed on site.

Amphibians

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

Most amphibians require moisture for at least a portion of their life cycle, with many requiring a permanent water source for habitat and reproduction. Terrestrial amphibians have adapted to more arid conditions and are not completely dependent on a perennial or standing source of water. These species avoid desiccation by burrowing beneath the soil or leaf litter during the day and during the dry season. Reliable moisture is a requirement for a portion of amphibian life cycle. The agricultural production cycle does not meet this requirement. The constant cultivating and harvesting of crops does not promote a habitat favorable to amphibians. No amphibians were observed on site. Due to the lack of available water, none would be expected. A bullfrog (*Rana catesbeiana*) was observed within the irrigation channels near the LSF.

Figure 4.4-1. Existing Biological Resources – Iris Cluster



Reptiles

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

Reptiles utilize habitat dependent upon their dietary requirements. Some species' diet includes vegetation while others consume insects. All require vegetation for shelter. Reptiles could be expected in ruderal vegetation surrounding the project areas. A collared lizard (*Crotaphytus collaris*) was observed within LSF.

Birds

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

Observed bird species include cattle egret (*Bubulcus ibis ibis*), killdeer (*Charadrius vociferous vociferous*), grackle (*Quiscalus mexicanus*), and red-winged blackbird (*Agelaius phoeniceus*). These species occurred as scattered individuals as well as flocks foraging in the agricultural fields.

Tree nesting raptors such as red-tailed hawk (*Buteo jamaicensis*) and American kestrel (*Falco sparverius sparverius*) were infrequently observed flying over or foraging over the agricultural fields. Burrowing owl (*Athene cunicularia hypugaea*) and their associated burrows were observed at numerous locations in the survey area. The burrows are often found in earthen berms adjacent to the smaller irrigation channels and ditches. The burrowing owl is a California species of special concern (see Section 4.4.1.2.4 below).

Mammals

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

The constant cultivating and harvesting of crops does not promote a habitat favorable to mammals within agricultural fields. The following mammals are expected to occur around the peripheral areas of agricultural fields such as soil berms and other topographic features: cottontail (Sylvilagus audubonii), feral dogs and cats. Signs such as tracks, scat and direct observation were found during surveys.

4.4.1.2.3 Sensitive Plant Species

Special Status Plant Species

Sensitive plant species are determined by their rarity, endangerment and limited distribution. There are three listing authorities for sensitive plants in California: the CNPS, a private organization; CDFW; and the USFWS. Appendix A of the attached BTR (Appendix E of this EIR) lists all species found in the data search that have been found within quadrangles in which the projects are located and lists all plants found within the project sites during surveys.

Federal Listed Species

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

No federally listed plant species were found or expected to be found within the project sites. The current use of the project sites for agriculture does not promote a habitat favorable to special status plant species.

State Listed Species

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

No state listed plant species were found or expected to be found within the project sites. The current use of the project sites for agriculture does not promote a habitat favorable to special status plant species.

Priority Plant Species

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

No priority plant species were found or expected to be found within the project sites.

4.4.1.2.4 Sensitive Wildlife Species

Special Status Wildlife Species

Special-status species are defined as plants and animals that are legally protected under the ESA, California Endangered Species Act (CESA), CDFW, or other regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing. These species are typically the focus of avoidance, minimization, and mitigation requirements under CEQA. As a result of the data search, endangered, threatened species, and CDFW species of special concern were evaluated for the potential to occur within the project area. Special-status species with potential to occur in the vicinity of the project sites are detailed in Appendix A of the attached BTR.

Federally Listed Species

No federally listed species were observed in the project sites. No favorable habitat was found that would support species such as southwestern willow flycatcher (*Empidonax trailii exgtimus*), Yuma clapper rail (*Rllus longirostris yumanensis*), least Bell's vireo (*Vireo bellii pusilllus*), or desert pupfish (*Cyprinidon macularis*).

State Listed Species

Greater Sandhill Crane

One state-listed bird was evaluated based on known occurrences in Imperial County and habitat availability in the project area: greater sandhill crane (*Grus Canadensis tabida)*. The greater sandhill crane is state listed as threatened and is also on the MBTA list of sensitive birds. The Colorado River Valley population is estimated at 1,400-2,100 and is considered stable. The population breeds in northeastern Nevada and southwestern Idaho, migrates through Nevada and winters along the lower Colorado River Valley in California's Imperial Valley.

The greater sandhill crane is a very large bird with long neck, long legs with a gray body, which may be stained reddish. The head has a red forehead, white cheek; another characteristic is tufted feathers over rump.

There are bermuda fields adjacent the project sites and other adjacent fields that could rotate to either alfalfa and bermuda. The greater sandhill crane could be found on the project sites and could be found in adjacent fields, but not expected as this species has not been observed south of Interstate 8 (I-8).

State Species of Special Concern and Fully Protected Species

Burrowing Owl

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

In California, burrowing owls (*Athene cunicularia)* are yearlong residents of flat, open, dry grassland and desert habitats at lower elevations (Bates 2006). They can inhabit annual and perennial grasslands and scrublands characterized by low-growing vegetation. They may be found in areas that include trees and shrubs if the cover is less than 30 percent (Bates 2006); however, they prefer treeless grasslands. Although burrowing owls prefer large, contiguous areas of treeless grasslands, they have also been known to occupy fallow agriculture fields, golf courses, cemeteries, road allowances, airports, vacant lots in residential areas and university campuses, and fairgrounds when nest burrows are present (Bates 2006; County of Riverside 2008). Suitable habitat within the project area was searched with a pedestrian survey for burrowing owls and their sign (burrows, pellets, feathers, scat, litter, and animal dung). The pedestrian surveys were conducted April 2013 through July 2013.

The Imperial Valley has a majority of the burrowing owl in southern California. Irrigation canals and drains are commonly used as nesting sites in this area. The burrowing owl is a CDFW Species of Special Concern, and a Federal Species of Concern listed on the MBTA. This survey was done using The CDFW Staff Report (CDFW 1995), which addresses survey and mitigation guidelines for the owl and communications with CDFW wildlife biologists, Bermuda Dunes, CA office. The burrowing owl is a small, pale, buffy-brown owl that nests in borrowed burrows. The entrances to burrows often have bits of animal dung, prey carcasses, feathers, and litter, among other objects. Up to 12 eggs are laid, primarily from February to May.

Burrowing owls were observed within the boundaries of the project sites and were also found off-site within the IID right-of-way (ROW). The project sites support active burrowing owl foraging habitat. Table 4.4-3 summarizes the burrowing owl and burrow observations within the project sites and IID ROW. There are 15 adult burrowing owls and one juvenile burrowing owl using eight occupied burrows and six active burrows within the project sites. There are 37 adults and seven juveniles using 22 occupied burrows and 10 active burrows off-site within the IID ROW.

TABLE 4.4-3. SUMMARY OF BURROWING OWLS/BURROWS

Location	Burrowing Owls	Burrows Active/Occupied
FSF		
On Property	9 adults; 1 juvenile	3/5
IID Drain (off site)	7 adults; 1 juvenile	2/10
FSF Total	16 adults; 2 juveniles	5/15
RSF		
On Property	4 adults	1/2
IID Drain (off site)	6 adults	1/3
RSF Total	10 adults	2/5
ISF		
On Property	1 adult	1/0
IID Drain (off site)	21 adults; 6 juveniles	2/10
ISF Total	22 adults; 6 juveniles	3/10
LSF		
On Property	0	0
IID Drain (off site)	1 adult	3/0
LSF Total	1 adult	3/0
Transmission Line		
On Property	2 adults	1/1
IID Drain (off site)	2 adults	1/4
Transmission Line Total	4 adults	2/5

Golden Eagle (Aquila chrysaetos)

This fully protected species is found throughout the United States, but is rarely observed in Imperial County and was not found in data base searches for the Mt. Signal and Heber Quadrangles. No suitable habitat was observed. Therefore this species is not expected to be found within or in the vicinity of the project area.

Loggerhead Shrike (*Laniius ludovicianus*)

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

This species is a CDFW species of special concern and is year-round resident of Imperial County. They have the interesting habit of impaling prey upon sticks or thorns. Mesquites are often utilized for this activity. They are generally associated with open areas such as agricultural fields for foraging and thickets for nesting. Due to suitable habitat found within the project area, there is potential for this species to be found on-site.

Yellow Warbler (*Dendroica petechial brewsteri*)

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

The yellow warbler is a CDFW species of special concern and protected by the MBTA. It is known to both winter and breed in Imperial County. Due to suitable habitat found within the project area, there is potential for this species to be found on-site.

Ferruginous hawk (*Buteo regalis*)

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

The ferruginous hawk is a CDFW species of special concern. This species is found in arid to semiarid regions, as well as grasslands and agricultural areas in the western United States. Due to suitable habitat found within the project area, there is potential for this species to be found on-site.

Mountain Plover (*Charadrius montanus*)

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

These species are CDFW species of special concern and proposed for federal listing. Additionally, this species is protected under the MBTA. The mountain plover avoids high dense cover and occurs in open grass plains, plowed fields with little vegetation, and open sagebrush areas. None were observed within the project area; however, suitable habitat is present for this species to occur.

LeConte's (*Toxostoma lecontei lecontei*) and Crissal Thrasher (*Toxostoma crissale*)

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

These species are CDFW species of special concern. The crissal thrasher prefers dense thickets of shrubs or low trees. The LeConte's thrasher occurs in desert scrub or desert wash areas. They were not observed or expected due to the lack of suitable habitat.

Long Billed Curlew (*Numenius americanus*)

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

These species are CDFW species of special concern. They typically nest in wet and dry uplands and can be found on wetlands, grain fields, lake and river shores, marshes, and beaches during wintertime and

migration. Due to suitable habitat found within the project area, there is a high propensity for this species to be found on-site.

Short Billed Dowitcher (*Limnodromus griseus*)

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

These species are CDFW species of special concern. They typically breed in muskegs of taiga to timberline, and barely into subartic tundra. They winter on coastal mud flats and brackish lagoons. During migration, they prefer saltwater tidal flats, beaches, and salt marshes. They can also be found in freshwater mud flats and flooded agricultural fields. Due to suitable habitat found within the project area, there is a high propensity for this species to be found on-site.

Horned Lark (*Eremophlia alpestris*)

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

These species are CDFW species of special concern. They are typically found in open, barren country, including dirt fields, gravel ridges, and shores and prefer bare ground to short grasses. Due to suitable habitat found within the project area, there is potential for this species to be found on-site.

4.4.1.2.5 Riparian Habitat or Sensitive Natural Communities

Sensitive vegetation communities are those that are considered rare or sensitive based on the level of disturbance or habitat conversion within their range. A high level of disturbance or habitat conversion within the range could convert the status of vegetative communities to rare or sensitive. Wetland or riparian habitat communities are considered sensitive by CDFW. No riparian habitat or sensitive natural communities were observed on site. The only riparian habitat that might be present would be found within IID drains and canals which are ROWs maintained by the IID and are covered by the draft Water Conservation and Transfer Project Habitat Conservation Plan.

4.4.1.2.6 Jurisdictional Waters

Wetlands and other "waters of the United States" that are subject to Section 404 of the CWA and/or Section 10 of the Rivers and Harbors Act are under the jurisdiction of the USACE. Typically, these waters include naturally occurring traditional navigable waters (TNWs), relatively permanent waters (RPWs), and/or ephemeral waters with a significant nexus to a TNW. Agricultural water conveyance systems which are manmade and constructed wholly in uplands are typically only considered jurisdictional if they are RPWs. Conversely, man-made drainages constructed solely in uplands that are not RPWs are generally not federally jurisdictional. IID drains and canals are part of an agricultural system and therefore by definition (USACE Wetlands Delineation Manual) are not classified as wetlands although typical wetland/riparian plant species are found within canals and drains. Canals and drains do not flow continuously as they are dependent upon irrigation events. Also, canals are non-flowing for three days each month as part of an IID pest control program.

With respect to non-tidal waters, federal jurisdiction over non-wetlands extends to the "Ordinary High Water Mark" (OHWM). 33 C.F.R. § 328.4(c)(1). The Ordinary High Water (OHW) zone in low gradient, alluvial ephemeral/intermittent channel forms in the Arid West is defined as the active floodplain. The dynamics of arid channel forms and the transitory nature of traditional OHWM indicators in arid environments render the limit of the active floodplain the only reliable and repeatable feature in terms of OHW zone delineation. The extent of flood model outputs for effective discharges (5 to 10 year events in arid channels) aligns well with the boundaries of the active floodplain. IID canals, drains, farmer head or tail ditches would not be considered an "arid or ephemeral channel" as they are manmade expressly for the conveyance of irrigation waters.

IID drains and canals are rights of ways maintained by the IID and are covered by the draft Water Conservation and Transfer Project Habitat Conservation Plan and are not part of the project area. No IID drains or canals will be removed or relocated. Therefore, no USACE, CDFW, or Regional Water Quality Control Board (RWQCB) resources would be affected.

4.4.1.2.7 Habitat Connectivity and Wildlife Corridors

The ability for wildlife to freely move about an area and not become isolated is considered connectivity and is important to allow dispersal of a species to maintain exchange genetic characteristics, forage (food and water), and escape from predation.

The proposed projects are agricultural in nature, which is surrounded by agricultural land use. All species are able to freely move throughout the survey area.

4.4.1.2.8 California Desert Conservation Area

The FSF, RSF, ISF, LSF, and Transmission Line are not within or immediately adjacent to the Yuha Basin which is an Areas of Critical Environmental Concern (ACEC) of the California Desert Conservation Area.

4.4.2 Impacts and Mitigation Measures

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

4.4.2.1 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 and USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filing, 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; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.4.2.2 Methodology

This analysis evaluates the potential for the projects, as described in Chapter 3, Project Description, to interact with local biological resources in the project area. Based on the extent of these interactions, this analysis considers whether these conditions would result in an exceedance of one or more of the applied significance criteria as identified above.

As indicated in the environmental setting, Barrett's Biological Surveys prepared a BTR which covered the FSF, RSF, ISF, LSF, and transmission line site locations. The BTR is included as Appendix E of this EIR. The analysis prepared for this EIR also relied on GIS maps. The information obtained from these sources was reviewed and summarized to present the existing conditions and to identify potential environmental impacts, based on the significance criteria presented in this section. Impacts associated with biological resources that could result from project construction and operational activities were evaluated qualitatively based on site conditions; expected construction practices; materials, locations, and duration of project construction and related activities; and several field visits. Conceptual site plans for the project were also used to evaluate potential impacts. These conceptual exhibits are provided in Figures 3.0-6 through 3.0-9.

4.4.2.3 Impact Analysis

IMPACT 4.4-1 *Possible Habitat Modification.*

The construction and operation of the proposed projects within the project area could result in the indirect or direct habitat alteration on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or the CDFW or USFWS.

Impact to Vegetation Communities

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

The vegetation community type identified for the FSF, RSF, ISF, LSF, and transmission line is agricultural. The solar farms and transmission line have been in active agricultural cultivation and therefore does not support habitat for sensitive vegetation communities. Therefore, **no impact** is identified to sensitive vegetation communities.

Impact to Special Status Species

Special Status and Priority Plants

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

The constant cultivating and harvesting of crops does not promote a habitat favorable to special status plant species within the agricultural fields or peripheral areas and therefore **no impacts** to special status plant species are identified.

Impacts to Sensitive Wildlife

Burrowing Owl

Construction Impacts

The CDFW Staff Report on Burrowing Owl (2012) lists impacts to burrowing owl as:

- Disturbance within 160 feet (September through January non-nesting season) or within 250 feet (February through August nesting season) of active burrows.
- Destruction of active burrows.
- Destruction/degradation of forage within 300-feet of active burrows.

Direct Impacts

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

A total of 15 adult burrowing owls and one juvenile burrowing owl were observed using eight occupied burrows and six active burrows within the project area. A total of 37 adults and seven juveniles using 22 occupied burrows and 10 active burrows off-site within the IID ROW.

The agricultural fields within the proposed solar fields provide habitat for burrowing owl. In accordance with the CDFW Staff Report on Burrowing Owl Mitigation (2012), impacts to the foraging habitat within 100 meters (approximately 300 feet; 6.5 acres) of each active burrow would be considered significant and would require mitigation. Eight occupied burrows and six active burrows were observed within the active agricultural fields, within the limits of grading for the proposed solar fields. Based on a 100-meter radius around each active burrow within the proposed solar fields, the impact to burrowing owl foraging habitat is considered a **significant impact** and will require mitigation. Therefore, potentially significant impacts are identified for burrowing owl. However, with the implementation of Mitigation Measures 4.4-1a and 4.4-1b, impacts would be reduced to levels **less than significant**.

An additional 10 active burrows and 22 occupied burrows were observed adjacent to the proposed solar fields, within IID easements (berms, drains, canals, etc.). The IID drains and canals, which provide foraging habitat for these burrowing owls, will not be impacted by the proposed projects. These burrows are covered under IID's Draft HCP, and no mitigation would be required for impacts adjacent to these burrows.

Additionally, a pre-construction survey should be conducted prior to grading, as the number and location of owls may change from year to year. These fields will be graded during construction activities, but no IID canals, drainages, or roads will be impacted. Direct impacts to any burrowing owl individuals and/or active burrowing owl burrows within the agricultural land to be graded would be considered **potentially significant**, and mitigation in the form of avoidance and impact minimization would be required to reduce the impacts to a level of **less than significant**. Similar measures would be required for any future decommissioning, restoration activities that may occur at the end of the currently anticipated 40-year life of the projects.

Indirect Impacts

Noise and vibrations from construction equipment may disturb or disrupt burrowing owl nesting behavior if construction takes place within 250 feet of an active burrow during breeding season for the burrowing owl. These impacts would be considered a **significant impact** and mitigation would be required to minimize and/or avoid these impacts. Implementation of these measures would reduce the impact to a level **less than significant**. Similar measures would be required for any future decommissioning, restoration activities that may occur at the end of the currently anticipated 40 year life of the projects.

Operation Impacts

After construction of the solar field is complete, burrowing owls are expected to persist along the perimeter of the solar fields along the IID canals, drains, and roads, which provide burrowing and foraging opportunities. The owls are also expected to utilize the solar field perimeter fence as a foraging perch.

Direct impacts to burrowing owls may occur during O&M activities within the solar fields and along the transmission line. Vehicles driving on access roads where burrowing owls are foraging may result in the direct mortality, injury, or harassment of this species. These impacts would be considered a **significant impact** and mitigation would be required. Mitigation Measure 4.4-1c requires preparation of a Worker Environmental Awareness Program (WEAP) and Mitigation Measure 4.4-1d requires that construction vehicles maintain a speed limit of 15 miles while driving on access roads. Implementation of these mitigation measures would reduce impacts to burrowing owls from O&M activities to **less than significant**.

After the solar fields are constructed, burrowing owls are expected to forage within the areas underneath the solar panels and within the solar facilities that provide foraging opportunities. While searching for prey, burrowing owls characteristically hover for periods of several minutes at heights of 8-15 meters (Coulumbe 1971). During the night the foraging behavior changes to suit the reduced visibility of small food items; they may pursue arthropods on the ground by walking and running. They also may glide about one meter above the ground when foraging for rodents (Coulumbe 1971). 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. When foraging at night, they are not expected to collide with facility structures given their walking/hopping manner of foraging, coupled with the static and highly visible nature of the solar panels. **No impacts** to burrowing owl are anticipated due to collision with facility structures, and no mitigation would be required.

All permanent lighting within the solar field will be by low-profile fixtures that point inward toward the solar field with directional hoods or shades to reduce light from shining into the adjacent lands. In addition, any lighting not required daily for security purposes will have motion sensor or temporary use capabilities. No significant impacts due to lighting are expected to occur to this species, and no mitigation is required. No equipment or component of the solar field or transmission lines is expected to produce noise that would exceed ambient noise in the vicinity. **No significant impacts** due to noise are expected to occur to this species, and no mitigation is required.

Mountain Plover, Long Billed Curlew, Short Billed Dowitcher, Loggerhead Shrike, Horned Lark

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

Construction Impacts

Although these species were not observed during site visits to the project study areas, due to the availability of suitable foraging habitat, there is a potential for these species to occur. Because the mountain plover is a naturally evasive species, they will readily move out of harms way to avoid construction related activities, such as site clearing and any possible grading activities. Additionally, minimal light and noise from the heavy equipment during construction is not expected to adversely modify the behavioral patterns of the foraging mountain plover. Long billed curlew, short billed dowitcher, horned lark, and loggerhead shrike typically use agricultural areas for foraging. Although the removal of potential forage areas for these species would not result in a reduction of sufficient prey base found within the vicinity, impacts are considered **potentially significant** in the absence of mitigation due to the possibility that these species could find suitable foraging habitat within the project area and mitigation measures would be provided. Implementation of Mitigation Measure 4.4-1e would reduce construction impacts to **less than significant**. Similar measures would be required for any future decommissioning, restoration activities that may occur at the end of the currently anticipated 40-year life of the projects.

Operation Impacts

General operation related activities, such as equipment inspection and/or repairs, solar panel washing, and site security are expected to result in minimal noise and therefore, would not result in disturbance to these species nor would it affect adjacent agricultural areas where they may forage. As a result, a **less than significant** impact is identified for this issue area.

Migratory Birds and Other Sensitive Non-Migratory Bird Species

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

Construction Impacts

There are few tall trees within the project area that would encourage raptor nesting. The crops in the area do not encourage ground nesting of raptors such as northern harriers (Circus cyaneus). No osprey (Pandion haliaetus) nests were observed or expected due to the lack of available food sources. If nesting raptors are found within the project area, during construction, impacts to this issue area would be considered **potentially significant** and mitigation would be required in order to reduce the impact to a level less than significant. Implementation of Mitigation Measures 4.4-1f and 4.4-1g would reduce impacts to nesting birds during construction to **less than significant**.

Operations and Maintenance Impacts

Electrocution

All electrical components within the solar projects shall be either undergrounded or protected so that there will be no exposure to wildlife and therefore no potential for electrocution. The transmission line would be constructed in such a manner that energized components do not present an opportunity for "skin to skin" or wing span contact. However, the Avian Powerline Interaction Committee's (APLIC) 1996 report on power line electrocution in the United States reports that 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. **No impact** to raptors is anticipated to occur due to electrocution along the proposed transmission line. Therefore, no mitigation would be required. However, a **potentially significant impact** may occur to avian mortality during O&M activities along the transmission lines. Therefore, an Avian and Bat Protection Plan (ABPP) will be developed that will incorporate guidance from USFWS (2010e) and the Avian Powerline Interaction Committee (APLIC 2006), and will include a wildlife mortality reporting program. Mitigation Measure 4.4-1f, specifically the ABPP, will provide the project applicant the vehicle to comply with the Bald and Golden Eagle Protection Act as well as the MBTA. Implementation of that mitigation measure would reduce impacts to **less than significant**.

Collisions

No incidences of avian ground wire collisions of existing transmission wires were observed during surveys. If collisions are found to be a problem, marking shall be applied to ground wires, which has been shown to decrease the incidence of bird collisions by 60 percent (Alonso, Alonso and Munoz-Pulido 1994); therefore, this impact is considered **less than significant**.

Mitigation Measure(s)

Burrowing Owls

The following mitigation measures are required for the FSF, RSF, ISF, LSF, and transmission line.

4.4-1a **Burrowing Owl Mitigation**. Burrowing owls have been observed in the active agricultural fields within the project sites. The following measures will avoid, minimize, or mitigate potential impacts to burrowing owl during construction activities:

1. During non-breeding season (September through January) a distance of 160 feet shall be maintained between active burrows and construction activities. A qualified biologist may also employ the technique of sheltering in place (using hay bales to

shelter the burrow from construction activities). If this technique is employed, the sheltered area shall be monitored weekly by a qualified biologist.

2. If construction is to begin during the breeding season, the following measures (Measure 4 below) shall be implemented prior to February 1 to discourage the nesting of the burrowing owls within the project footprint. As construction continues, any area where owls are sighted shall be subject to frequent surveys by the qualified biologist for burrows before the breeding season begins, so that owls can be properly relocated before nesting occurs.

3. Within 30 days prior to initiation of construction, pre-construction clearance surveys for this species shall be conducted by qualified and agency-approved biologists to determine the presence or absence of this species within the project footprint. This is necessary, as burrowing owls may not use the same burrow every year; therefore, numbers and locations of burrowing owl burrows at the time of construction may differ from the data collected during previous focused surveys. The proposed project footprint shall be clearly demarcated in the field by the project engineers and biologist prior to the commencement of the pre-construction clearance survey. The surveys shall follow the protocols provided in the *Burrowing Owl Survey Protocol and Mitigation Guidelines*.

4. If active burrows are present within the project footprint, the following mitigation measures shall be implemented. Passive relocation methods are to be used by the biological monitors to move the owls out of the impact zone. Passive relocation shall only be done in the non-breeding season in accordance with the guidelines found in the *Imperial Irrigation District Artificial Burrow Installation Manual*. This includes covering or excavating all burrows and installing one-way doors into occupied burrows. This will allow any animals inside to leave the burrow, but will exclude any animals from re-entering the burrow. A period of at least one week is required after the relocation effort to allow the birds to leave the impacted area before construction of the area can begin. The burrows shall then be excavated and filled in to prevent their reuse. The destruction of the active burrows on-site requires construction of new burrows at a mitigation ratio of 2:1 at least 50 meters from the impacted area and must be constructed as part of the above-described relocation efforts. The construction of new burrows will take place within open areas in the solar fields such as detention basins.

5. As the project construction schedule and details are finalized, an agency-approved biologist shall prepare a Burrowing Owl Mitigation and Monitoring Plan that will detail the approved, site-specific methodology proposed to minimize and mitigate impacts to this species. Passive relocation, destruction of burrows, construction of artificial burrows, and a Forage Habitat Plan shall only be completed upon prior approval by and in cooperation with the CDFW. The Mitigation and Monitoring Plan shall include success criteria, remedial measures, and an annual report to CDFW and shall be funded by the project applicant to ensure long-term management and monitoring of the protected lands.

4.4-1b **Burrowing Owl Compensation.** The project applicant shall compensate for impacts to burrowing owl habitat through the following measures:

1. CDFW's mitigation guidelines for burrowing owl (2012) require the acquisition and protection of replacement foraging habitat per pair or unpaired resident bird to offset the loss of foraging and burrow habitat on the project sites.

   The project applicant shall landscape small pockets of land along the perimeter of the solar fields, and/or within the solar fields themselves, with native vegetation that will provide suitable foraging habitat for burrowing owls, pursuant to a Mitigation and

Monitoring Plan that is reviewed and approved by CDFW prior to the commencement of construction. Although the site plans show almost 100 percent coverage of solar panels, it is anticipated that due to the nature of solar panel configuration, there will be spaces at various locations, such as between the edges of the agricultural fields (i.e., outside of IID easements) and the solar project footprints. Sufficient open areas shall be set aside for burrowing owl habitat and burrow relocation for the lifespan of the solar projects. Due to County of Imperial requirements that the solar fields be returned to active agriculture after the life of the solar projects, it is assumed that when the land is returned to active agricultural crops, it will continue to provide habitat for burrowing owl. If the vegetation that is planted does not succeed, sufficient areas cannot be provided on-site, or planting is not feasible, alternative mitigation shall be provided, which CDFW determines provides equivalently effective mitigation. Such alternative mitigation may include off-site preservation of the required amount of foraging habitat through a CDFW-approved conservation easement, or an in-lieu fee in an amount approved by CDFW that is sufficient to acquire such conservation easements, or some combination of the two.

4.4-1c **Worker Awareness Program.** Prior to project initiation, a Worker Environmental Awareness Program (WEAP) shall be developed and implemented by a qualified biologist, and shall be available in both English and Spanish. Wallet-sized cards summarizing this information shall be provided to all construction, operation, and maintenance personnel. The education program shall include the following aspects:

- Biology and status of the burrowing owl;
- CDFW/USFWS regulations;
- Protection measures designed to reduce potential impacts to the species, function of flagging designated authorized work areas;
- Reporting procedures to be used if a burrowing owl (dead, alive, injured) is encountered in the field.

4.4-1d **Speed Limit.** The Designated Biologist or Biological Monitor(s) shall evaluate and implement best measures to reduce burrowing owl mortality along access roads.

- A speed limit of 15 miles per hour when driving access roads. All vehicles required for O&M must remain on designated access/maintenance roads.

Mountain Plover, Long Billed Curlew, Short Billed Dowitcher, Loggerhead Shrike, and Horned Lark

The following mitigation measures are required for the FSF, RSF, ISF, LSF, and transmission line.

4.4-1e **Temporary Construction Suspension.** If a Designated Biological Monitor observes these species foraging within the project site, or in adjacent agricultural fields, construction shall cease until they disperse. Additionally, in order to reduce impacts to the Mountain Plover, Long Billed Curlew, Short Billed Dowitcher, Horned Lark, and Loggerhead Shrike, an Avian Bat Protection Plan (ABPP) shall be prepared following USFWS guidelines and subsequently implemented by the project applicant. The requirements of the ABPP are described in Mitigation Measure 4.4-1f.

Migratory Birds and Other Sensitive Non-Migratory Bird Species

The following mitigation measures are required for the FSF, RSF, ISF, LSF, and transmission line.

4.4-1f **Construction and O&M Mitigation Measures.** In order to reduce the potential indirect impact to migratory birds, bats and raptors, an Avian Bat Protection Plan ABPP shall be prepared following the USFWS's guidelines and implemented by the project applicant. This ABPP shall outline conservation measures for construction and O&M activities that might reduce potential impacts to bird populations and shall be developed by the project applicant in conjunction with and input from the USFWS.

Construction conservation measures to be incorporated into the ABPP include:

1. Minimizing disturbance to vegetation to the maximum extent practicable.
2. Clearing vegetation outside of the breeding season. If construction occurs between February 1 and September 15, an approved biologist shall conduct a pre-construction clearance survey for nesting birds in suitable nesting habitat that occurs within the project footprint. Pre-construction nesting surveys will identify any active migratory birds (and other sensitive non-migratory birds) nests. Direct impact to any active migratory bird nest should be avoided.
3. Minimize wildfire potential.
4. Minimize activities that attract prey and predators.
5. Control of non-native plants.

O&M conservation measures to be incorporated into the ABPP include:

1. Incorporate APLIC guidelines for overhead utilities as appropriate to minimize avian collisions with transmission facilities (APLIC 2006).
2. Minimize noise.
3. Minimize use of outdoor lighting.
4. Implement post-construction avian monitoring that will incorporate of the Wildlife Mortality Reporting Program.

4.4-1g **Raptor and Active Raptor Nest Avoidance.** Raptors and active raptor nests are protected under CFGC 3503.5, 3503, 3513. In order to prevent direct and indirect noise impact to nesting raptors such as red-tailed hawk, the following measures shall be implemented:

1. Initial grading and construction within the project sites should take place outside the raptors' breeding season of February 1 to July 15.
2. If construction occurs between February 1 and July 15, a qualified biologist shall conduct a pre-construction clearance survey for nesting raptors in suitable nesting habitat (e.g., tall trees or transmission towers) that occurs within 500 feet of the survey area. If any active raptor nest is located, the nest area will be flagged, and a 500-foot buffer zone delineated, flagged, or otherwise marked. No work activity may occur within this buffer area, until a qualified biologist determines that the fledglings are independent of the nest.

Significance After Mitigation

The implementation of Mitigation Measures 4.4-1a through 4.4-1d would reduce impacts to burrowing owls to a level **less than significant.** Implementation of Mitigation Measure 4.4-1e would reduce the potential impact to mountain plover, long billed curlew, short billed dowitcher, horned lark, and loggerhead shrike to levels **less than significant**. Mitigation Measures 4.4-1f and 4.4-1g would reduce impacts to migratory and non-migratory birds and nesting raptors to levels **less than significant**.

IMPACT 4.4-2 *Possible Impact to Riparian Habitats or Other Sensitive Natural Communities.*

Construction and operation of the proposed projects within the project sites would not impact riparian or other sensitive natural communities identified in local or regional plans, policies, regulations, or by the CDFW and USFWS.

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

The project study areas contain active agricultural and ruderal vegetative communities and therefore do not have riparian or other sensitive natural communities. **No impacts** are identified for this issue area.

Mitigation Measure(s)

No mitigation measures are required.

IMPACT 4.4-3 *Possible Impact to Wetlands.*

Construction and operation of the proposed projects within the project sites would not impact jurisdictional resources as defined by Section 404 of the CWA (including, but not limited to: marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

No IID canal or drain structures would be removed; therefore, there would be no impact to riparian habitat or sensitive natural communities. No IID drains or canals would be removed or relocated and no washes are found within the project sites; therefore, no USACE, CDFW, or RWQCB jurisdictional resources will be directly affected and **no impact** is identified.

The development of approximately ~~1,422~~1,400 acres of land to a solar farm will decrease the amount of surface (tail water) and subsurface water (tile water) into several IID drains (e.g., Wistaria Drain) servicing these properties. Less water in these drains will result in a decrease in weed growth and gopher and muskrat washouts, which will reduce both the maintenance operations and total suspended solids (TSS) within the drains and ultimately to the Salton Sea. Less TSS will improve water quality in support of the drain water quality improvement plan. These drains will still receive agricultural runoff from agricultural fields not developed into solar farms and storm water flows to maintain a vegetative base to support habitat. In addition, storm water flows are estimated to be 3.6 percent of surface water inputs, and that water will still end up in the drains.

There are approximately 1,400 miles of drains which transport subsurface and surface agricultural drain water, storm water flows, municipal wastewater treatment plant effluent, ground water from East and West mesas and industrial effluent discharges. All aforementioned discharge sources contribute to the degradation of water quality within the IID water conveyance system. The IID is currently implementing a drain water quality improvement plan (Resolution No 93-145) to achieve water quality objectives to comply with the Clean Water Act 303(d). A component of the IID plan is to reduce maintenance operations which will result in a reduction of TSS.

These drains are all located within the far southernmost part of Imperial County and are not considered direct-to-Sea drains and therefore would not impact desert pupfish (*Cyprinodon macularius).* The drains are in the southwest corner of Imperial County and at the end of the water conveyance system; drain water generated by the agricultural fields that will be developed into a solar farm must travel over 35 miles to reach the Salton Sea. No more than 31 percent surface and subsurface runoff into the drains actually reaches the Salton Sea. Therefore, eliminating the volume this acreage has generated in the past should not adversely affect the elevation of the Salton Sea as the waters not utilized by these solar farms are expected to remain within the All American Canal Service area. It is expected that this water will be used on other agricultural crops and therefore will not be lost to the drainage system and the Salton Sea drainage. This impact is considered **less than significant**.

The potential effects to IID drainages as a result of shifting water use in the Imperial Valley is also discussed in EIR Chapter 6.0 Cumulative Impacts.

Mitigation Measure(s)

No mitigation measures are required.

IMPACT 4.4-4 *Possible Impact to Wildlife Movement and Nursery Sites.*

Construction and operation of the proposed projects within the project area would not interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

The projects are located in a ruderal vegetative community which is surrounded by agricultural and industrial activities. The existing agricultural uses of the solar fields provide limited connectivity for terrestrial species based on the continued disturbance from cultivation practices. Under the proposed use, the mechanized disturbance would decrease once the solar panels are in place. The projects' ABPP will also ensure that movement and corridor uses to avian species will not be impacted by the proposed projects (Mitigation Measure 4.4-1f). Thus, there are no anticipated impacts to wildlife movement or nursery sites, and no additional mitigation would be required. Therefore, impacts identified for this issue area are **less than significant**.

Mitigation Measure(s)

No mitigation measures are required beyond those previously identified in this section for raptors (Mitigation Measure 4.4-1f).

Significance After Mitigation

With the implementation of the mitigation measure previously identified for raptors (Mitigation Measure 4.4-1f), impacts to wildlife movement would be reduced to **less than significant.**

IMPACT 4.4-5 *Possible Conflict with Policies Protecting Biological Resources.*

The projects do not conflict with local policies, such as a tree preservation policy, or ordinances.

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

The projects consist of the construction and operation of solar energy facilities and associated electrical transmission lines. Development of the solar facilities is subject to the County's zoning ordinance. Pursuant to Title 9, Division 5, Chapter 9, "Solar Energy Plants" is a use that is permitted in the A-2, A-2-R, and A-3 zones, subject to securing a Conditional Use Permit (CUP). "Transmission lines, including supporting towers, poles, microwave towers, utility substations" are permitted uses within the A-3 Zone. Pursuant to Title 9, Division 5, Chapter 8, "Solar energy electrical generator," "Electrical power generating plant," "Major facilities relating to the generation and transmission of electrical energy," and "Resource extraction and energy development," are uses that are permitted in the A-2, A-3, and A-2-R zone subject to approval of a CUP from the County. As demonstrated in Table 4.4-1, with implementation of CUPs, and because the project sites are located in a disturbed, agricultural region, the projects would be consistent with Imperial County General Plan biological resources policies. Therefore, **no impacts** are identified for this issue area.

Mitigation Measure(s)

No mitigation measures are required.

IMPACT 4.4-6 *Possible Conflict with Local Conservation Plan(s).*

Construction and operation of the proposed projects within the project area does not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Iris Cluster (FSF, RSF, ISF, and LSF) and Transmission Line

The project sites are not located in a Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan. **No impact** is identified.

Mitigation Measure(s)

No mitigation measures are required.

4.4.3 Decommissioning/Restoration and Residual Impacts

Decommissioning/Restoration

Decommissioning activities will require construction vehicles to drive across the solar farms, transmission line, and access roads, which could result in ground disturbance and transportation of invasive weeds. Mitigation measures required to reduce potential impacts to sensitive wildlife species (e.g., burrowing owl [BUOW], mountain plover, long billed curlew, short billed dowitcher, horned lark, loggerhead shrike, wildlife) would be applicable during the decommissioning phase of the project as well including the following Mitigation Measures: 4.4-1a through 4.4-1g, and would reduce this impact to a level **less than significant**.

Residual

The implementation of Mitigation Measures 4.4-1a through 4.4-1d would reduce impacts to burrowing owls to a level less than significant. Implementation of Mitigation Measure 4.4-1e would reduce the potential impact to mountain plover, long billed curlew, short billed dowitcher, horned lark, and loggerhead shrike to levels less than significant. Mitigation Measures 4.4-1f and 4.4-1g would reduce impacts to migratory and non-migratory birds and nesting raptors to levels less than significant. The projects would not result in residual significant and unmitigable impacts related to Biological Resources.

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