Biological Resources Assessment

Thousand Palms Channel Improvement Project

MAY 2023, REVISED JUNE 2024

PREPARED FOR

Coachella Valley Water District
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Coachella, California 92236

PREPARED BY

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FOR THE
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Prepared by

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SWCA Project No. 71080

May 2023, Revised June 2024

EXECUTIVE SUMMARY

Kimley-Horn and Associates, Inc. retained SWCA Environmental Consultants (SWCA) to conduct a biological resources assessment in support of the Thousand Palms Channel Improvements Project (project), proposed by the Coachella Valley Water District (District). The project is located along the Thousand Palms Channel, generally between the Coachella Valley Stormwater Channel (CVSC) and the Coachella Canal near Sun City Shadow Hills in the city of Indio, Riverside County, California. The District proposes to improve the existing unlined Thousand Palms Channel to receive regional flood flows from the North Indio Hills and Thousand Palms areas and improve the channel's confluence with the CVSC.

This report provides the biological assessment of the approximately 80-acre Study Area centered along the Thousand Palms Channel, downstream of the Coachella Canal. The latter is a 122-mile aqueduct system that conveys water from the Colorado River and connects Lake Cahuilla and conveys water to agriculture.

The project site straddles two U.S. Geological Survey 7.5-minute quadrangle maps (quads), lying at the upper northeast corner of the *La Quinta* quad and the upper northwest corner of the *Indio* quad. The project is located at approximate coordinates 33.740115°N, -116.249893°W within Sections 9, 10, 15, and 16 of Township 5 South, Range 7 East.

This assessment was conducted to analyze potential impacts the project may have on biological resources in the study area and to facilitate compliance with the California Environmental Quality Act (CEQA).

ABBREVIATIONS

ACEC	Area of Critical Environmental Concern
City	City of Indio
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CDNPA	California Desert Native Plants Act
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CVAG	Coachella Valley Association of Governments
CVMSHCP	Coachella Valley Multi-Species Habitat Conservation Plan
CVSC	Coachella Valley Stormwater Channel
CWA	Clean Water Act
District	Coachella Valley Water District
ESA	Endangered Species Act
FESA	Federal Endangered Species Act
MCV2	A Manual of California Vegetation. Second edition
MBTA	Migratory Bird Treaty Act
NEPA	National Environmental Policy Act
NPPA	Native Plant Protection Act
NRCS	Natural Resource Conservation Service
Project	Thousand Palms Channel Improvements Project
PRC	Public Resources Code
SWCA	SWCA Environmental Consultants
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USC	United States Code

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1 PROJECT DESCRIPTION & LOCATION

SWCA Environmental Consultants (SWCA) was retained by Kimley-Horn and Associates, Inc. to prepare a biological resource assessment of the Thousand Palms Channel Improvements Project (Project) proposed by the Coachella Valley Water District (District). The project is located along the Thousand Palms Channel, generally between the Coachella Valley Stormwater Channel (CVSC) and the Coachella Canal near Sun City Shadow Hills in the city of Indio, Riverside County, California. The District proposes to improve the existing unlined Thousand Palms Channel to receive regional flood flows from the North Indio Hills and Thousand Palms areas and improve the channel's confluence with the CVSC.

The Thousand Palms Channel (Channel) project includes constructing the last conveyance facility intended to receive regional flood flows from the North Indio Hills and Thousand Palms areas. To this point, the Project would improve the Thousand Palms Channel to the confluence with the Coachella Valley Stormwater Channel (CVSC).

In its existing condition, the Channel is in earthen bottom channel with earthen side slopes. In its existing condition, there are sections of the Channel that have been incised and other sections that have had berms constructed. These berms are not FEMA certified levees. Additionally, there are two at-grade roadway crossings at Madison Street and Avenue 42, as well as a bridge crossing under Interstate (I-) 10. In its existing conditions, the Channel is unable to accommodate the 100-year flow rate throughout the entirety of the Thousand Palms Channel along the project reach. The portion of the Channel north of the Avenue 42 crossing does not have the capacity to convey the 100-year flowrate of 16,836 cubic feet per second.

The project's preliminary design report evaluated four different alternatives and resulted in a preferred alternative consisting of an earthen channel with concrete side slopes. The proposed Thousand Palms Channel from Sun City Shadow Hills to the CVSC would cross Madison Street and Avenue 42, would include three concrete lined drop structures, and improve the confluence point with the CVSC. Currently, the Coachella Canal crosses under the Thousand Palms Channel via a reinforced concrete siphon, and a concrete drop structure is located within the Thousand Palms Channel alignment at the location of the siphon to protect the siphon from scour and erosion. As part of the current project, the Coachella Canal, siphon and drop structure are proposed to be protected in place. The drop structure will be extended further downstream and to a lower level to provide the necessary scour protection associated with the ultimate channel design. Concrete slope lining will be installed along the lower 16'- 6" limits of the existing structure to raise the top of walls to a constant elevation of 32.68 feet, NGVD29 (35.0 ft NAVD88).

1.1 Project Location

The project site is located in the Coachella Valley within the City of Indio (City) in Riverside County California (**Figure 1 and Figure 2**). Work will occur in the manufactured Thousand Palms Channel (Channel), generally between the Coachella Valley Stormwater Channel and the Coachella Canal at Sun City Shadow Hills. The Project encompasses eight parcels (Assessor Parcel Numbers [APNs] 610020006, 610020007, 610020015, 610020016, 610030014, 610030020, 691190007, and 691510010).

The following parcels are under the jurisdiction of the federal government: APNs 691510010, 610020016, 610020006 and 610030014, and the following parcels are under the District's jurisdiction: APNs 610020007, 610030020, 610020007, and 610020015 (ParcelQuest 2023).

The project site straddles two U.S. Geological Survey 7.5-minute quadrangle maps (quads), lying at the upper northeast corner of the *La Quinta* quad and the upper northwest corner of the *Indio* quad (Figure 3). The project is located at approximate coordinates 33.740115°N, -116.249893°W within Sections 9, 10, 15, and 16 of Township 5 South, Range 7 East. Parcel ownership for the property on which the project site is located includes parcels owned by CVWD and Bureau of Reclamation ('USA') (**Figure 4**).

1.2 Site Characteristics

The Channel is heavily disturbed by mechanized equipment, likely for erosion repairs, as well as sediment and vegetation removal. Changes in vegetation and vehicle and equipment tracks over time are visible throughout the Channel on aerial imagery (Google Earth 2023). Madison Street traverses the northwestern portion of the Channel in a north-south direction. Avenue 42, a paved east/west two-lane road, crosses through the Channel as a low water crossing. Madison Street, a paved north/south two-lane road, parallels the western side of the work area north of Interstate 10, crossing the Channel at grade in the northern portion of the site. General surrounding land uses include agriculture, vacant land, and development such as residential, Shadow Hills South Golf Course, and roads. Project elevation ranges from about 2 feet to 30 feet above mean sea level.

Figure 1. Regional location.

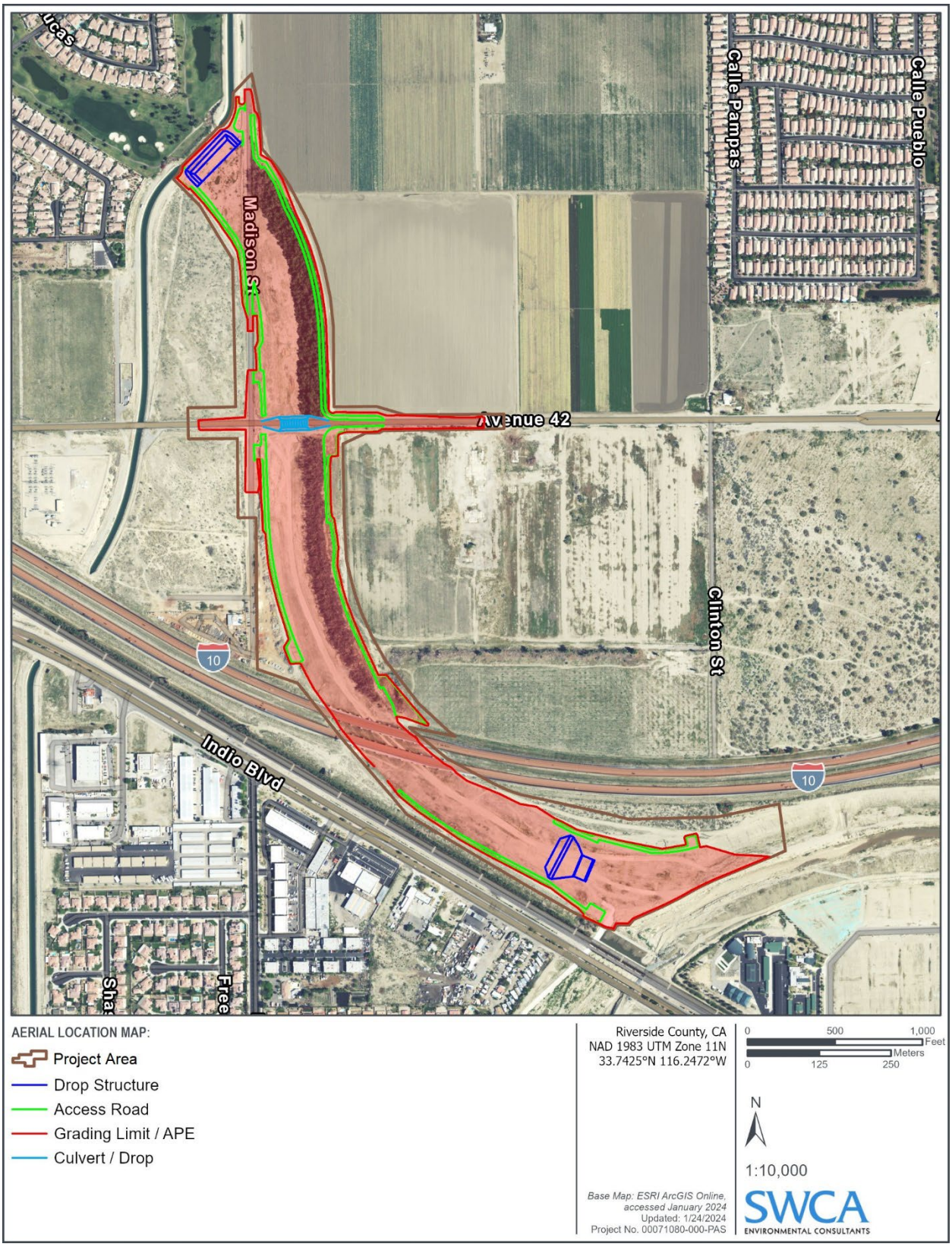

Figure 2. Vicinity location aerial.

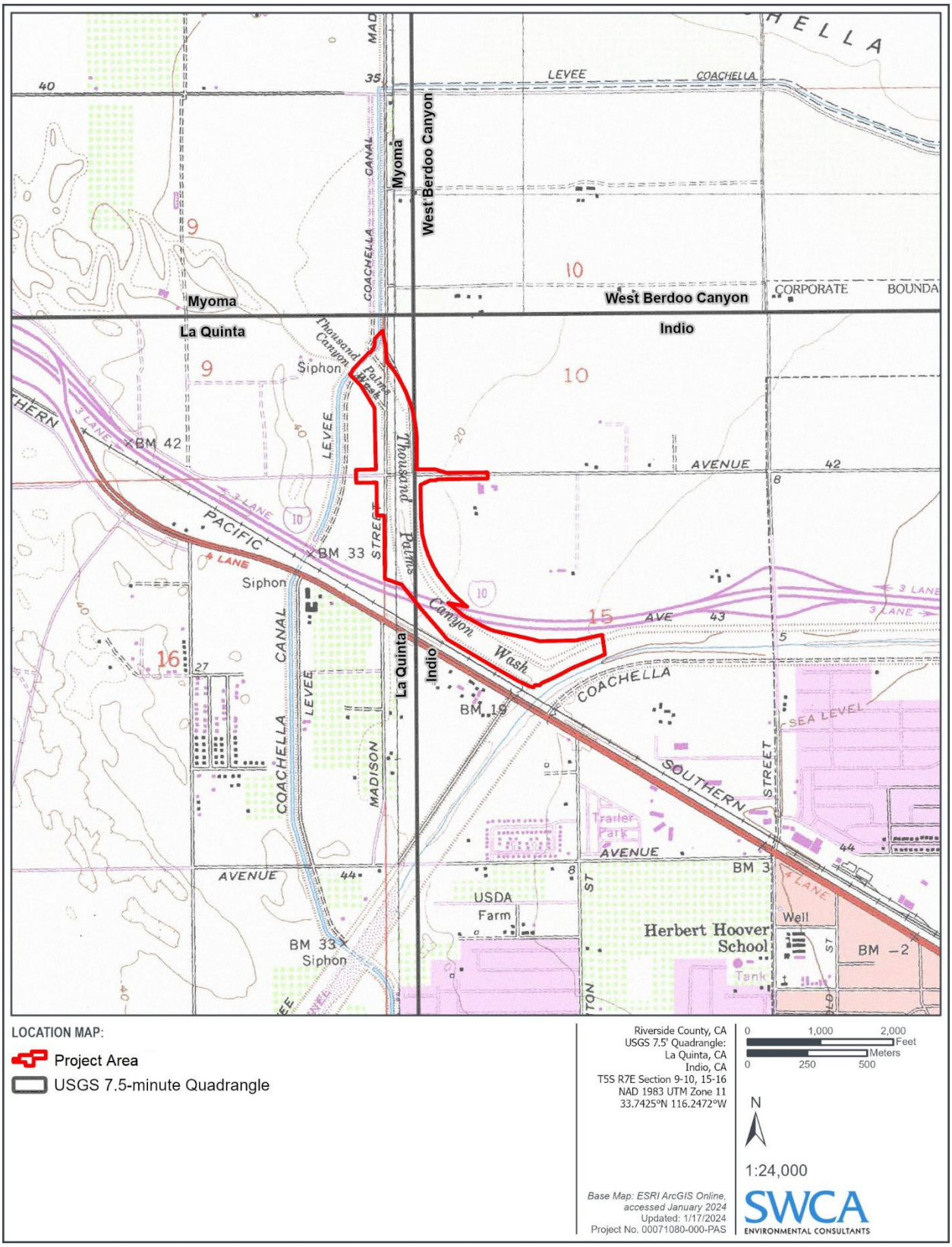

Figure 3. Vicinity topographic map.

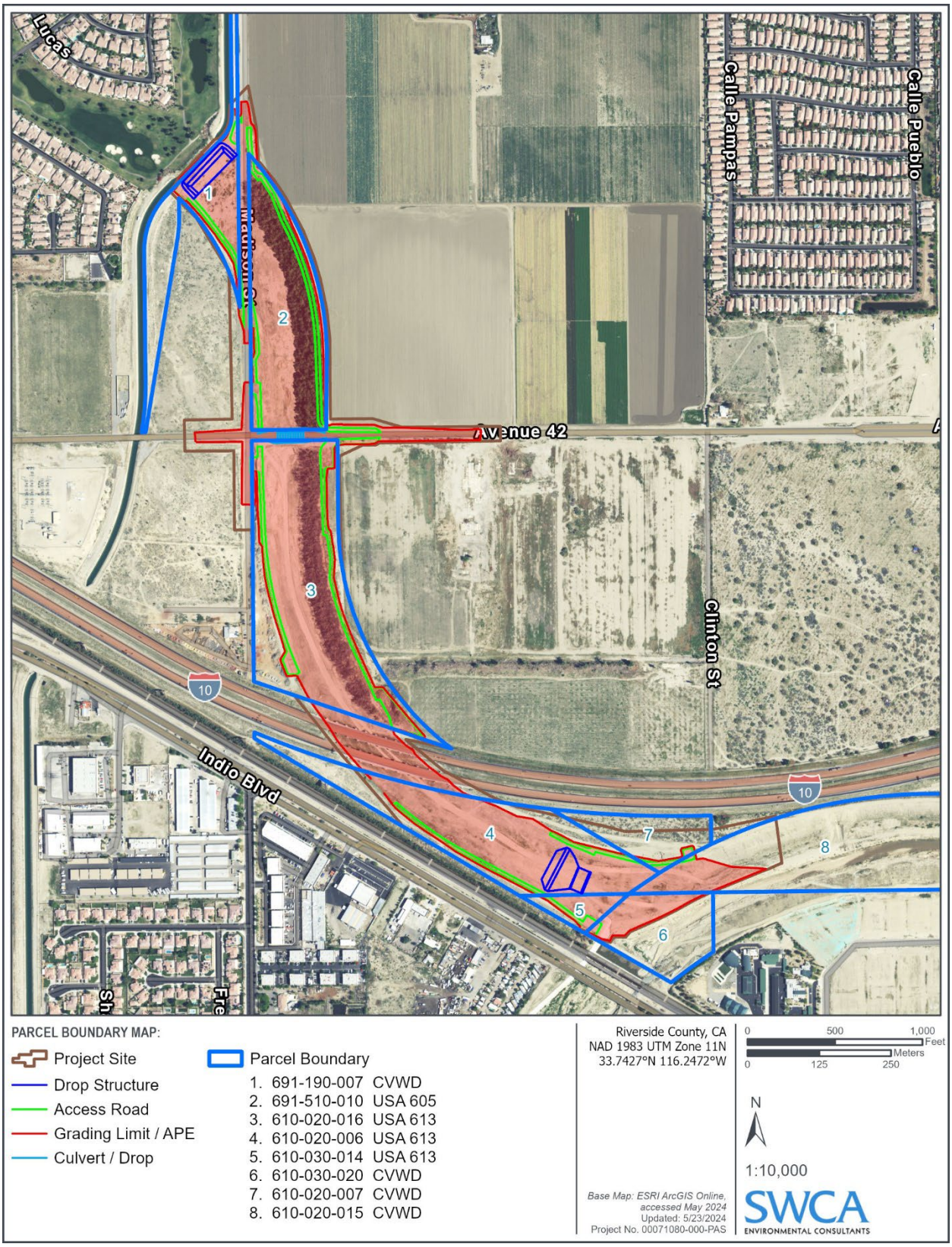

Figure 4. Parcel ownership map.

2 REGULATORY SETTING

2.1 Federal Regulations

2.1.1 Federal Endangered Species Act

The U.S. Congress passed the Endangered Species Act (ESA) in 1973 to protect endangered species and species threatened with extinction (federally listed species). The ESA operates in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

Section 9 of the ESA prohibits the "take" of endangered or threatened wildlife species. The legal definition of "take" is to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 United States Code [USC] 1532 [19]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 Code of Federal Regulations [CFR] 17.3). Harassment is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR 17.3). Actions that result in take can result in civil or criminal penalties. "Incidental take" is defined by the ESA as take that is incidental to, and not for the purpose of, carrying out an otherwise lawful activity.

The ESA authorizes the U.S. Fish and Wildlife Service (USFWS) to issue permits under Sections 7 and 10. Section 7 mandates that all federal agencies consult with the USFWS for terrestrial species and/or National Marine Fisheries Service for marine species to ensure that federal agency actions do not jeopardize the continued existence of a listed species or adversely modify critical habitat for listed species. Any anticipated adverse effects must be assessed to determine potential effects of the Project on listed species and critical habitat. If the Project may adversely affect a listed species or its habitat, the USFWS or National Marine Fisheries Service would need to prepare a Biological Opinion as part of the incidental take permit process. The Biological Opinion may recommend "reasonable and prudent alternatives" to the Project to avoid jeopardizing or adversely modifying habitat, including "take" limits.

Under Section 7, all federal agencies must ensure that any actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species, or destroy or adversely modify its designated critical habitat. The ESA defines critical habitat as habitat deemed essential to the survival of a federally listed species and the federal government is required to designate "critical habitat" for any species it lists under the ESA regulations. A critical habitat designation does not set up a preserve or refuge, and applies only when federal funding, permits, or projects are involved. Critical habitat requirements do not apply to activities on private land and do not involve a federal agency.

Non-federal projects may still pursue Section 7 permitting when a federal nexus, such as federal funding or permitting (e.g., through the U.S. Army Corps of Engineers [USACE] under Section 404 of the federal Clean Water Act [CWA]), is available. When no nexus is available, Section 10(a)(1)(B) authorizes issuance of permits to allow "incidental take" of listed species. To obtain an incidental take permit, an applicant must submit a habitat conservation plan and conduct an assessment on the impacts of the action, outlining steps to minimize and mitigate permitted take impacts to listed species.

2.1.1.1 CRITICAL HABITAT

The Project is outside adopted or proposed designated critical habitat.

2.1.2 Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA), first enacted in 1918, prohibits any person, unless permitted by regulations, to:

"…pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatsoever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention … for the protection of migratory birds ... or any part, nest, or egg of any such bird." (16 USC 703)

The list of migratory birds includes nearly all bird species native to the United States. The Migratory Bird Treaty Reform Act of 2004 further defined species protected under the act and excluded all non-native species. The statute was extended in 1974 to include parts of birds, as well as eggs and nests. Thus, it is illegal under the MBTA to directly kill, or destroy a nest of, nearly any native bird species, not just endangered species. Activities that result in removal or destruction of an active nest (a nest with eggs or young being attended by one or more adults) would violate the MBTA. Removal of unoccupied nests, and bird mortality resulting indirectly from disturbance activities, are not considered violations of the MBTA.

2.1.3 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 USC 668–668c), enacted in 1940, and amended several times since, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald eagles (*Haliaeetus leucocephalus*), including their parts, nests, or eggs. In 1962, Congress amended the act to cover golden eagles (*Aquila chrysaetos*).

The act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

Under USFWS rules (16 USC § 22.3; 72 Federal Register 31,132, June 5, 2007), "disturb" means "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." In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death, or nest abandonment.

2.2 State Regulations

2.2.1 California Endangered Species Act

The California Department of Fish and Wildlife (CDFW; previously California Department of Fish and Game) administers the California Endangered Species Act (CESA), which prohibits the "taking" of listed species except as otherwise provided by state law. Section 86 of the Fish and Game Code defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." In addition to

affording protections for species listed as threatened or endangered, the CESA applies these take prohibitions to species that have not yet been granted threatened or endangered status, but which are accepted as candidates for listing by the California Fish and Game Commission. Pursuant to the requirements of the CESA, State lead agencies (as defined under CEQA Public Resources Code [PRC] Section 21067) are required to consult with the CDFW to ensure that any action or project is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat. Additionally, the CDFW encourages informal consultation on any proposed project that may impact a candidate species. The CESA requires the CDFW to maintain a list of threatened and endangered species. The CDFW also maintains a list of candidates for listing under the CESA and a list of species of special concern (or watch list species).

2.2.2 Fully Protected Species

The California Department of Fish and Game (CDFG) Code provides protection from take for a variety of species, referred to as fully protected species. Section 5050 lists protected amphibians and reptiles, and Section 3515 prohibits take of fully protected fish species. Eggs and nests of fully protected birds are under Section 3511. Migratory nongame birds are protected under Section 3800, and mammals are protected under Section 4700. Except for take related to scientific research, all take of fully protected species is prohibited.

2.2.1 Nesting Birds and Raptors

Section 3503 of the CDFG Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 provides protection for all birds of prey, including their eggs and nests.

2.2.2 Migratory Bird Protection

Take or possession of any migratory non-game bird as designated in the MBTA is prohibited by Section 3513 of the CDFG Code.

2.2.3 Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (CDFG Code Section 1900-1913) directed the CDFG (now CDFW) to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA gave the California Fish and Game Commission (under the CDFW) the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take. The NPPA thus includes measures to preserve, protect, and enhance rare and endangered native plants.

CESA has largely superseded NPPA for all plants designated as endangered by the NPPA. The NPPA nevertheless provides limitations on take of rare and endangered species as follows: "...no person will import into this state, or take, possess, or sell within this State" any rare or endangered native plant, except in compliance with provisions of the CESA. Individual landowners are required to notify the CDFW at least 10 days in advance of changing land uses to allow the CDFW to salvage any rare or endangered native plant material.

2.2.4 California Desert Native Plants Act

The California Desert Native Plants Act (CDNPA) protects non-listed California desert native plants from unlawful harvesting on public and private lands in the counties of Imperial, Inyo, Kern, Los Angeles, Mono, Riverside, San Bernardino, and San Diego (California Food and Agriculture Code, Sections 80001-80006, Division 23). A number of desert plants are protected under this act, including all species in the agave and cactus families.

2.2.5 California Environmental Quality Act

The CEQA was adopted in 1970 and applies to discretionary actions directly undertaken, financed, or permitted by State or local government lead agencies. CEQA requires that a project's effects on environmental resources must be analyzed and assessed using criteria determined by the lead agency. CEQA defines a rare species in a broader sense than the definitions of threatened, endangered, or California species of concern. Under this definition, the CDFW can request additional consideration of species not otherwise protected.

2.2.5.1 CEQA SIGNIFICANCE CRITERIA

Section 15064.7 of the CEQA guidelines encourages local agencies to develop and publish the thresholds that the agency will use in determining the significance of environmental effects caused by projects or actions under its review. Appendix G of the CEQA guidelines provides thresholds to evaluate impacts that would normally be considered significant. Based upon these guidelines, impacts to biological resources would normally be considered significant if the project:

a. Has 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;

b. Has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the CDFW or USFWS;

c. Has 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, filling, hydrological interruption, or other means;

d. Interferes substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedes the use of native wildlife nursery sites;

e. Conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

f. Conflicts with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

An evaluation of whether an impact to biological resources would be significant must consider both the resource itself and how that resource fits into a regional or local context. Significant impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. The

evaluation of impacts considers direct impacts, indirect impacts, cumulative impacts, as well as temporary and permanent impacts.

2.3 Local Polices, Plans and Ordinances

The project is not anticipated to conflict with City of Indio or County of Riverside policies, plans or ordinances.

2.4 Conservation Plans

2.4.1 Coachella Valley Multi-Species Habitat Conservation Plan

The Project is within the Coachella Valley Multi-Species Habitat Conservation Plan (CVMSHCP). This comprehensive multi-jurisdictional document focuses on conservation of species and their habitats in the Coachella Valley. The stated purposed of the CVMSHCP "…is to obtain Take Authorization (Take Permits) pursuant to FESA and the NCCP Act for Covered Activities in the Coachella Valley while balancing environmental protection with regional economic objectives and simplifying compliance with the State and Federal Endangered Species Acts and other applicable laws and regulations." (CVAG, August 2016).

The District is a participating entity. The Project is inside the boundaries of the CVMSHCP but outside its designated Conservation Areas and is not within an Area of Critical Environmental Concern (ACEC). At its closest point, the Project is approximately 1.2 miles southwest of the East Indio Hills Conservation Area, with dense residential development in between. Because the District is a permittee, the Project is a permittee-proposed activity outside a conservation area, and is a water management project, it is a "Covered Activity" per Section 7.1 of the CVMSHCP (Covered Activities Outside Conservation Areas).

3 METHODS

3.1 Literature Search

Existing databases and literature were reviewed to discover previously identified special status biological resources that could occur on or in the immediate vicinity of the project site. The data search centered on the two USGS 7.5-minute quadrangles (quads) where the project site is located, *La Quinta* quad to the west and the *Indio* quad to the east (refer to Figure 3). Additional quads in the search area were Myoma, Rockhouse Canyon, West Berdoo Canyon and Thermal Canyon.

The data search included occurrence records in the California Natural Diversity Database (CNDDB) RareFind 5, California Native Plant Society's (CNPS) Online Inventory of Rare and Endangered Plants (CDFW 2023, CNPS 2023, USFWS 2024a) and USFWS Information for Planning and Consultation (IPaC). This search was used to determine which special status plant and wildlife species required analysis within the survey area based on both previous reports and existing on-site conditions.

Additional resources queried included aerial imagery, USFWS species lists and critical habitat maps, vegetation and land-use mapping, and Natural Resource Conservation Service (NRCS) soils maps and vegetation mapping.

3.2 Biological Field Survey

SWCA biologist Danielle Parsons conducted a one-day reconnaissance-level field survey on March 28, 2023. Flora and fauna of the Project were recorded and representative photographs were collected.

4 RESULTS

Appendix A provides representative photographs of the Study Area. Appendix B lists flora and fauna observed during the March 2023 field survey.

4.1 Flora

The Study Area is highly disturbed with on-going vegetation management visible both during the field survey and on aerial imagery, the latter dating back to September 1996 (earliest Google Earth aerial imagery with sufficient resolution). The result is an overall lack of vegetation and highly disturbed soils. The 2019 City of Indio General Plan Update Environmental Impact Report maps the Project vicinity primarily as Urban and Rural Developed, with areas of Agricultural and Stabilized Desert Sand Fields. These land covertypes do not fit within defined vegetation communities typically used to characterize plant alliances, such as MCV2 or Holland.

The northwestern most portion of the Study Area between the Sun City Shadow Hills South Golf Course and Madison Street exhibited consistently dense vegetation from September 1996 through April 2014. Between April 2014 and March 2023 field survey, the area is consistently unvegetated. Until approximately December 2019, a windrow of Athel tamarisk (*Tamarix aphylla*) lined the berm along the eastern side of the Channel from Madison Street south to the Channel's intersection with Interstate 10. The trees were removed sometime between December 2019 to June 2021. Resprouting Athel tamarisk was observed in this location during the field survey.

Vegetation is absent in the Channel segment east of Madison Street and north of Avenue 42, likely due to vegetation management, and compact and saline soil. The segment of the Channel south of Avenue 42 has been consistently unvegetated since at least September 1996. A well-established dirt road providing access to the Coachella Valley Stormwater Channel is present within the Channel, accessed via a gate from the intersection of Madison Street and Avenue 42.

The Coachella Valley Stormwater Channel remains largely uniform from September 1996 through March 2023; however, signs of vegetation management and mechanized sediment movement can be seen within the Whitewater River on aerial imagery. Vegetation patterns visible in aerial imagery are consistent with the vegetation observed during the field survey. Vegetation along the Coachella Valley Stormwater Channel is largely disturbed and consists of salt cedar (*Tamarix ramosissima*), Bermuda grass (*Cynodon dactylon*), and London rocket (*Sisymbrium irio*).

4.2 Fauna

The lack of vegetation and highly disturbed condition of the Study Area resulted in few species of wildlife being identified during the field survey. Birds typical of open areas and urban-rural interfaces were observed, including Anna's hummingbird (*Calypte anna*), killdeer (*Charadrius vociferus*), rock pigeon (*Columba livia*) and American crow (*Corvus brachyrhynchos*). No insects, amphibians, reptiles, or mammals nor evidence of site usage (e.g., burrows, dens, tracks, nests) were detected.

Nesting bird habitat on-site is limited to ground-nesting birds which may find suitable substrate on the bare soil of the Study Area. Species such as killdeer and lesser nighthawk (*Chordeiles acutipennis*) are known to nest in similar areas. However, the high levels of apparently continuous ground disturbance likely renders the site unsuitable. Nesting habitat may be present in shrubs, trees, and ground cover present in adjacent areas outside the Project site.

4.3 Wildlife Movement Corridors and Habitat Linkages

Wildlife corridors and habitat linkages are features that promote habitat connectivity. Wildlife corridors are typically discrete linear features within a landscape that are constrained by development or other non-habitat areas. Habitat linkages are networks of corridors through and between larger natural open space that facilitate movement of wildlife, thus providing long-term resilience of ecosystems against the detrimental effects of habitat fragmentation. Regional connection between high-quality open space habitats is critical to ongoing interchange of genetic material between populations, wildlife movement to escape natural disasters (fires, floods), colonization and expansion of populations, and plant propagation.

The Project is not within defined regional movement corridors or habitat linkages. Local wildlife movement may occur in the vicinity; however, the highly disturbed condition and lack of cover vegetation of the site greatly reduces its value to wildlife for safe movement across open areas.

4.4 Special-status Flora and Fauna

The Study Area straddles the *La Quinta* quad to the west and the *Indio* quad to the east. The surrounding quads included in the special-status species search area were Myoma, Rockhouse Canyon, West Berdoo Canyon and Thermal Canyon. Appendix C lists the special-status plant and wildlife species previously reported as occurring (refer to Figure 3).

The relative occurrence potential shown in Appendix C is based on habitat suitability, current natural resource conditions of the Study Area, general knowledge of the region, distance to known CNDDB and CNPS observation records, and the age of the records. Each occurrence potential rating is defined as follows:

- Present: Species has recently been documented on-site.
- High: Species has been documented on-site or adjacent to the project boundaries, habitat is suitable in the project area, and records are recent (within 20 years).
- Moderate: Project area is within known range of the species, habitat is suitable in the project area, and records are non-historic (within 40 years).
- Low: Project area is within known range of the species, habitat is marginal, records are distant, or known records are older (within 75 years).
- Not expected: Project area is outside of known range of the species, records are distant, and/or there is no suitable habitat in the project area.
- Absent: Species has been extirpated; records are historic (greater than 75 years), no suitable habitat.

4.4.1 Special-Status Flora

The literature search identified 26 special-status plant species in the search area. No special-status plant species were identified during the 2023 field survey, and none are expected to occur due to the highly disturbed condition of the Study Area.

4.4.2 Special-Status Fauna

Thirty special-status species of fauna were reported in the literature as occurring within search area. No special-status wildlife species were found on-site during the survey, and none have higher than a low potential for occurrence in the Study Area because of on-going disturbance and lack of vegetative habitat.

4.4.2.1 NESTING BIRDS

The field survey did not include nesting bird surveys and no nesting bird activity was incidentally detected. Marginal habitat for ground-nesting birds is present but its value is greatly diminished by on-going disturbance. Vegetation-based nesting, such as in grasslands, shrubs and/or trees, is not expected on the Project site due to lack of habitat. Suitable nesting areas may be present on adjacent properties, such as the Shadow Hills South golf course located northwest of the Project and along Indio Blvd. and 43rd Avenue in the southeast.

4.5 Aquatic Resources Delineation Report

SWCA completed a separate Aquatic Resources Delineation Report (SWCA, May 2023; revised January 2024). That work included a desktop data review and field survey within the Review Area, identified as approximately 80-acres surrounding the Project footprint.

Briefly, that work identified two distinct non-wetland waters within the Review Area totaling 2.73 acres, including the Coachella Canal (0.2 acre) and the Coachella Valley Stormwater Channel (2.53 acres). No wetland (marsh, vernal pool, coastal) waters or riparian habitats were identified.

5 ENVIRONMENTAL EVALUATION AND MITIGATION MEASURES

This section addresses the Section 7 Consultation requirements and the questions posed in Appendix G of the State CEQA Guidelines, Section IV Biological Resources. Mitigation measures are also provided where necessary.

5.1 Section 7 Consultation

Eleven federally listed or candidate species of fauna were reported in the literature (CNDDB, CNPS, and IPaC) as occurring within the search area. No listed or candidate species were determined to have potential to occur due to frequent disturbance and lack of vegetative suitable habitat. In addition, no mapped designated critical habitat is present in the Study Area. As a result, the Project is likely to result in no effect to federally listed species or critical habitat. However, the ESA Section 7 lead agency, the Bureau of Reclamation, will make recommendations and a final Section 7 determination regarding potential effects to federally listed species and their critical habitat.

5.2 Environmental Evaluation

The following Environmental Evaluation is based on the literature search and one-day field survey described above.

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No Impact. No special-status species were identified during the one-day field survey, nor are they expected to occur based on lack of habitat and high disturbance levels.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

No impact. No riparian habitat or other sensitive natural communities were found on the proposed project site during the field survey or have been reported in the literature. Therefore, there would be no impact.

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

Less than Significant with Mitigation Incorporated. An aquatic resources delineation and report was prepared by SWCA (May 2023) which found non-wetland waters within the survey area. No wetland (marsh, vernal pool, coastal) waters were identified. Per MM BIO-1, the District would avoid, minimize and/or mitigate impacts to regulated aquatic resources and submit necessary permit applications and documentation to each pertinent regulatory agency.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant with Mitigation Incorporated. Potentially suitable nesting bird habitat is present on-site and within 300 feet of the project site. Nesting birds are protected by the California Fish and Game Code and by the Migratory Bird Treaty Act, which prohibit take of all birds and their active nests including raptors and other migratory nongame birds. The nesting season is generally defined as 1 January to 15 September. Construction conducted during this period could result in adverse impacts to nesting birds. This potential impact would be reduced to less than significant levels with pre-construction surveys to identify and avoid active nests. Refer to MM BIO-2.

The project area is not within an established migratory wildlife corridor habitat linkage (SC Wildlands Conservancy, 2012) and does not contain suitable habitat migratory fish movement. No impact would result to such resources from project implementation.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No impact. There are no biological resources present on the project area that are protected by City of Indio or Riverside County policies and/or ordinances, and no impact would occur.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No impact. The Project is within the Coachella Valley Multi-Species Habitat Conservation Plan (CV MSHCP) but outside designated Conservation. Because the District is a permittee, the Project is a permittee-proposed activity outside a conservation area, and is a water management project, it is a "Covered Activity" per Section 7.1 of the CVMSHCP (Covered Activities Outside Conservation Areas). Therefore, the Project would not conflict with the CVMSHCP.

5.3 Mitigation Measures

MM BIO-1: Jurisdictional Waters Permitting: The District would avoid, minimize and/or mitigate impacts to regulated aquatic resources and submit necessary permit applications and documentation to each applicable regulatory agency.

Potential permits required include a U.S. Army Corps of Engineers (USACE) Department of the Army permit, a California State Water Board Section 401 water quality certification, and a CDFW 1600 Lake and Streambed Alteration notification.

MM BIO 2: Nesting Bird Surveys: If construction (including ground-disturbing activities and vegetation trimming and/or removal) would occur during the nesting bird season (1 January to 15 September), a qualified biologist shall conduct preconstruction nesting bird surveys within 30 days of construction start-up and continuing weekly up to three days before start-up. The survey area shall include the project area (disturbance footprint) and a surrounding 300-foot buffer area. The Biologist shall ensure an adequate buffer is identifiable and maintained to ensure no disturbance to nesting activity. Buffer size may be reduced or increased based on the bird species present and on the advice of the qualified biologist (e.g., smaller buffer for songbirds, larger buffer for raptors). No construction work, equipment, or personnel shall enter the buffer area. Protective buffers shall remain in place until the biologist determines that the nest(s) are no longer active, and the chicks have permanently fledged (left the nest) and a second nesting attempt has not begun.

If construction is to occur during 1 February to 15 September, burrowing owl (*Athene cunicularia)* surveys will be conducted. Burrowing owl surveys will be completed following the CDFW 2012 *Staff Report on Burrowing Owl Mitigation.* Any located burrowing owls or potential burrows (burrows with openings > 4 inches) will be reported to CDFW via CNDDB online reporting system.

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APPENDIX A

Photographs

Photo 1. Whitewater River, viewing northeast. Interstate 10 parallels berm above channel (upper photo; note green road sign).

Photo 2. Whitewater River disturbed streambed, viewing west (railroad bridge along Indio Blvd. in upper left).

Photo 3. Berm east of Thousand Palms Channel, viewing south. Madison Street to photo right, Avenue 42 in mid-photo along telephone poles.

Photo 4. Avenue 42 low water crossing of Thousand Palms Channel, viewing south.

Photo 5. Berm along west side of Thousand Palms Channel, north of Interstate 10 and south of Avenue 42, viewing west.

Photo 6. Northern extent of Study Area, viewing south along Madison Street (photo right).

Photo 7. Northern extent of Study Area, viewing south from Coachella Canal overpass.

APPENDIX B

Observed Flora and Fauna

Flora & Fauna Observed March 28, 2023

FLORA

Vernacular Name	Scientific Name	Origin
Desert sand verbena	*Abronia villosa*	N
Cheesebush	*Ambrosia salsola*	N
Fourwing saltbush	*Atriplex canescens*	N
Cattle saltbush	*Atriplex polycarpa*	N
Nettle leaf goosefoot	*Chenopodiastrum murale*	I
Desert willow	*Chilopsis linearis*	N
Browneyes	*Chylismia claviformis*	N
Bermuda grass	*Cynodon dactylon*	I
Desert thorn apple	*Datura discolor*	N
Hairy desert sunflower	*Geraea canescens*	N
False barley	*Hordeum murinum*	I
Narrow-leaved cryptantha	*Johnstonella angustifolia*	N
Small melilot	*Melilotus indicus*	I
Spanish arida	*Palafoxia arida*	N
Arrowweed	*Pluchea sericea*	N
Castor bean	*Ricinus communis*	I
Tumbleweed	*Salsola tragus*	I
Common Mediterranean grass	*Schismus barbatus*	I
London rocket	*Sisymbrium irio*	I
Athel tamarisk	*Tamarix aphylla*	I
Saltcedar	*Tamarix ramosissima*	I
Fan-leaved crinklemat	*Tiquilia plicata*	N

N = Native; I = Introduced/Non-native

FAUNA

Vernacular Name	Scientific Name
Anna's hummingbird	*Calypte anna*
Killdeer	*Charadrius vociferus*
Rock pigeon	*Columba livia*
American crow	*Corvus brachyrhynchos*
Greater roadrunner	*Geococcyx californianus*
Black phoebe	*Sayornis nigricans*
Say's phoebe	*Sayornis saya*

APPENDIX C

Special-Status Flora & Fauna

SPECIAL-STATUS SPECIES OF FLORA AND FAUNA REPORTED IN THE PROJECT AREA*

Common Name (*Scientific Name*)	Status Federal / State*	Range or Habitat Requirements	Potential to Occur in the Project Area
Plants			
Abrams' spurge (*Euphorbia abramsiana*)	CRPR 2B.2	This annual herb is found in sandy soils within Mojave Desert scrub and Sonoran Desert scrub. Elevation range: -15–4,300 feet. Blooming period: (August) September–November.	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
Arizona spurge (*Euphorbia arizonica*)	CRPR 2B.3	This perennial herb is found in Sonoran Desert scrub. Elevation range: 165–985 feet. Blooming period: March–April.	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
Booth's evening-primrose (*Eremothera boothii* ssp. *boothii*)	CRPR 2B.3	This annual herb is found in sandy soils within Joshua tree "woodland", Pinyon, and juniper woodland. Elevation range: 2,675–7,875 feet. Blooming period: April–September.	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
California ditaxis (*Ditaxis serrata* var. *californica*)	CRPR 3.2	This perennial herb is found in Sonoran Desert scrub. Elevation range: 100–3,280 feet. Blooming Period: March–December.	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
California marina (*Marina orcuttii* var. *orcuttii*)	CRPR 1B.3	This perennial herb is found in Chaparral, Pinyon and juniper woodland, Sonoran desert scrub. Elevation range: 3,445–3,805 feet. Blooming Period: May–October.	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
Chaparral sand-verbena (*Abronia villosa* var. *aurita*)	CRPR 1B.1, BLM_S	This annual herb is found in sandy soils within chaparral, coastal scrub, and desert dunes. Elevation range: 245–5,250 feet. Blooming Period: (January) March–September.	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*)	FE, CRPR 1B.2	This annual/perennial herb is found in desert dunes and Sonoran Desert scrub. Elevation range: 130–2,150 feet. Blooming period: February–May.	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
Deep Canyon snapdragon (*Pseudorontium cyathiferum*)	CRPR 2B.3	This annual herb is found in Sonoran Desert scrub. Elevation range: 0–2,625 feet. Blooming period: February–April.	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
Desert spike-moss (*Selaginella eremophila*)	CRPR 2B.2	This perennial rhizomatous herb is found in chaparral and Sonoran Desert scrub. Elevation range: 655–4,250 feet. Blooming period: (May) June (July).	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
Flat-seeded spurge (*Euphorbia platysperma*)	CRPR 1B.2	This annual herb is found in sandy soils within Desert dunes and Sonoran Desert scrub. Elevation range: 215–330 feet. Blooming period: February–September.	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
Glandular ditaxis (*Ditaxis claryana*)	CRPR 2B.2	This perennial herb is found in sandy soils within Mojavean desert scrub and Sonoran Desert scrub. Elevation range: 0–1,525 feet. Blooming Period: October–March.	**Not expected.** The project area is within the known range of this species. However, suitable habitat is absent within the project site.
Gravel milk-vetch (*Astragalus sabulonum*)	CRPR 2B.2	This annual/perennial herb is found in flats, gravelly (sometimes) roadsides, sandy (usually) washes within desert dunes, Mojavean desert scrub, Sonoran Desert scrub. Elevation range: -195–3,050 feet. Blooming period: February–June.	**Not expected.** The project area is within the known range of this species. However, suitable habitat is absent within the project site.
Horn's milk-vetch (*Astragalus hornii* var. *hornii*)	CRPR 1B.1, BLM_S	This annual herb is found in alkaline soils and lake margins within meadows, seeps, and playas. Elevation range: 195–2,790 feet. Blooming period: May–October.	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.

Common Name (*Scientific Name*)	Status Federal / State*	Range or Habitat Requirements	Potential to Occur in the Project Area
Lancaster milk-vetch (*Astragalus preussii* var. *laxiflorus*)	CRPR 1B.1	This perennial herb is found in sandy soils within Chenopod scrub. Elevation range: 2,295–2,295 feet. Blooming period: March–May	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
Lassics lupine (*Lupinus constancei*)	FE, SE, CRPR 1B.1	Lower montane coniferous forest. Serpentine barrens. Elevation range: 4,920–6,560 feet. Blooming period: July	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
Latimer's woodland-gilia (*Saltugilia latimeri*)	1B.2, BLM_S	This annual herb is typically found in granitic soils and sometimes on rocky soils, sandy soil or in washes within Chaparral, Mojavean desert scrub, Pinyon, and juniper woodland. Elevation range: 1,310–6,235 feet. Blooming period: March–June.	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
Mecca-aster (*Xylorhiza cognata*)	CRPR 1B.2, BLM_S	This perennial herb is found in Sonoran Desert scrub. Elevation range: 65–1,310 feet. Blooming Period: January–June.	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
Narrow-leaf sandpaper-plant (*Petalonyx linearis*)	CRPR 2B.3	This perennial herb is found in rocky or sandy soils within Mojavean desert scrub and Sonoran Desert scrub. Elevation range: -80–3,660 feet. Blooming Period: (January–February) March–May (June–December).	**Not expected.** The project area is within the known range of this species. However, suitable habitat is absent within the project site.
Purple stemodia (*Stemodia durantifolia*)	CRPR 2B.1	This perennial herb is found in Sonoran Desert scrub. Elevation range: 590–985 feet. Blooming period: (January) April–December.	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
San Bernardino milk-vetch (*Astragalus bernardinus*)	CRPR 1B.2, BLM_S	This perennial herb is found in carbonate or granitic soils within Joshua tree woodland, Pinyon and juniper woodland. Elevation range: 2,955-6,560 feet. Blooming period: April–June.	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
Slender cottonheads (*Nemacaulis denudata* var. *gracilis*)	CRPR 2B.2	This annual herb is found in coastal dunes, desert dunes, Sonoran Desert scrub. Elevation range: -165–1,310 feet. Blooming period: (March) April–May.	**Not expected.** The project area is within the known range of this species. However, suitable habitat is absent within the project site.
Spear-leaf matelea (*Matelea parvifolia*)	CRPR 2B.3	This perennial herb is found in rocky soils within Mojavean desert scrub, Sonoran Desert scrub. Elevation range: 1,445–3,595 feet. Blooming period: March–May (July).	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
triple-ribbed milk-vetch (*Astragalus tricarinatus*)	FE, CRPR 1B.2	This perennial herb is found in rocky (sometimes), sandy (sometimes) soils within Joshua tree woodland, Sonoran Desert scrub. Elevation range: 1,475–3,905 feet. Blooming period: February–May.	**Not expected.** The project area does not fall within the known range of this species and lacks suitable habitat.
Invertebrates			
Monarch - California overwintering population (*Danaus plexippus plexippus* pop. 1)	FC	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	**Absent.** No suitable roost sites present in the project site. The species, however, may be observed during migration.
Casey's June beetle (*Dinacoma caseyi*)	FE	This beetle prefers fine silts and sands on the southwest side of the Coachella Valley. Casey's June beetles are restricted to only two populations in the southern part of Palm Springs, California. Remaining habitat is roughly 600 acres in approximately nine fragments and actively declining. The species is not known to migrate.	**Not expected.** The highly disturbed condition of the project site does not provide suitable habitat.
Reptiles			

Common Name (*Scientific Name*)	Status Federal / State*	Range or Habitat Requirements	Potential to Occur in the Project Area
Coachella Valley fringe-toed lizard (*Uma inornata*)	FT, SE	The distribution of this species is heavily affected by sand characteristics (such as grain size and compaction), and is only found in areas of windblown sand (versus compacted sand dunes). Various studies have confirmed that *Uma inornata* requires sand grains with diameters of between 0.1 mm and 1 mm, and that the lizard heavily favors areas with deep, loose sand. Due to the need for windblown sand, *Uma inornata* tends to avoid areas of high plant density, instead preferring a habitat with sparse, shrub-like vegetation—primarily *Larrea divaricate*, *Franseria dumosa*, *Dalea emoryi, Dicoria canescens,* and *Astragalus lentiginosus*.	**Absent.** The project lacks suitable habitat and is likely too highly and continuously disturbed.
Desert tortoise (*Gopherus agassizii)*	FT, ST, SCE	Mojave population of desert tortoise lives in a variety of habitats from sandy flats to rocky foothills, including alluvial fans, washes, and canyons. Arid land with usually sparse vegetation.	**Not expected.** The highly disturbed & unvegetated condition of the project site does not provide suitable habitat.
Flat-tailed horned lizard (*Phrynosoma mcallii*)	SSC, BLM_S	Typical habitat is sandy desert hardpan or gravel flats with scattered sparse vegetation of low species diversity. Most common in areas with a high density of harvester ants and fine windblown sand, but occurs rarely on dunes.	**Not expected.** The highly disturbed & unvegetated condition of the project site does not provide suitable habitat.
Red-diamond rattlesnake (*Crotalus ruber*)	SSC	Found in a variety of habitats from the coast to the deserts, from San Bernardino County into Baja California, Mexico (below 5,000 feet in elevation). It commonly occurs in rocky areas within coastal sage scrub, chaparral, juniper woodlands, and desert habitats, but can also be found in areas devoid of rocks.	**Not expected.** The highly disturbed & unvegetated condition of the project site does not provide suitable habitat.
Mammals			
American badger (*Taxidea taxus*)	SSC	Badgers are generally associated with dry, open, treeless regions, prairies and grasslands, low-intensity agriculture (e.g., pasture, dryland crops), drier open scrublands and forest, parklands, and cold desert areas.	**Absent.** The project area does lacks suitable habitat for this species.
Pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*)	SSC	This species prefers sandy, herbaceous areas, usually in association with rocks or coarse gravel. This subspecies occurs in desert border areas in eastern San Diego County in desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc.	**Not expected.** The project area does not contain suitable habitat for this species.
Palm Springs pocket mouse (*Perognathus longimembris bangsi*)	SSC, BLM_S	This species is known from various vegetation communities, including creosote scrub, desert scrub, and grasslands, generally occurring on loosely packed or sandy soils with sparse to moderately dense vegetative cover. The populations within Coachella Valley are abundant in creosote-dominated desert scrub on flat to gentle slopes with sandy soils. The most common plant species where this species was abundant *are Larrea tridentata, Encelia farinosa, Ambrosia dumosa,* and *Ephedra californica*. Palm Springs pocket mice are typically absent or present in low numbers in areas with compacted, stony, and cobbly soils, in saltbush (*Atriplex* sp.)–dominated communities, in areas disturbed by human habitation, and on wind-formed dunes devoid of vegetation.	**Not expected.** The project area lacks suitable habitat for this species.
Palm Springs round-tailed ground squirrel (*Xerospermophilus tereticaudus chlorus*)	SSC, BLM_S	This species inhabits sandy arid regions of the Lower Sonoran Life Zone. It often occupies dunes and shrubs in lower flatter areas. Its burrows have been found among shrubs, and in sand of dunes, especially in areas with dense sand. Its habitats are normally characterized by extreme temperatures with low humidity.	**Not expected.** The highly disturbed & unvegetated condition of the project site does not provide suitable habitat.

Common Name (*Scientific Name*)	Status Federal / State*	Range or Habitat Requirements	Potential to Occur in the Project Area
Peninsular bighorn sheep DPS (*Ovis canadensis nelsoni* pop. 2)	FE, ST, FP, BLM_S	The distribution of bighorn sheep is determined by topography, visibility, water availability, and forage quality and quantity. Throughout North America, bighorn sheep distribution is associated with steep, rugged mountainous terrain. Bighorn sheep typically do not outrun their predators but, rather, use their climbing abilities to escape their enemies. The predator evasion behavior of bighorn sheep is also dependent on the ability to visually detect danger at a distance. Bighorn sheep therefore prefer areas with high visibility and avoid habitat with dense vegetation, such as chaparral, which is found at the higher elevational extent of their habitat in the Peninsular Ranges.	**Not expected.** The project area lacks suitable habitat for this species.
San Diego desert woodrat (*Neotoma lepida intermedia*)	SSC	Desert woodrats are found in a variety of shrub and desert habitats and are primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	**Absent.** The highly disturbed & unvegetated condition of the project site does not provide suitable habitat.
Pocketed free-tailed bat (*Nyctinomops femorosaccus*)	SSC	The pocketed free-tailed bat is colonial and roosts primarily in crevices of rugged cliffs, high rocky outcrops, and slopes. It has been found in a variety of plant associations, including desert shrub and pine-oak forests. The species may also roost in buildings, caves, and under roof tiles.	**Absent.** The project area lacks suitable roosting habitat for this species.
Western mastiff bat (*Eumops perotis californicus*)	SSC, BLM_S	This species requires tall ledges and cliffs for roosting. The cliffs must be 20 feet tall, at minimum. They feed on moths primarily, as well as other insects. They can forage in chaparral, desert, forest, shrubland, as well as developed suburban habitat.	**Absent.** The project area lacks suitable roosting habitat for this species.
Western yellow bat (*Lasiurus xanthinus*)	SSC	Western yellow bats are most commonly found in riparian woodland habitats that include an abundance of trees, including Fremont cottonwood (*Populus fremontii*), Arizona sycamore tree (*Platanus wrightii*), and Arizona white oak (*Quercus arizonica*). The bats are associated with desert regions in the southwest United States where they occupy thorny, dry environments. They tend to be found in dry tropical forests but can occupy semi-tropical wet forests as well.	**Absent.** The project area lacks suitable roosting habitat for this species.
Fish			
Desert pupfish (*Cyprinodon macularius*)	FE, SE	The desert pupfish is found in shallow waters of desert springs, small streams, and marshes below 1,524 m (5,000 feet) in elevation. The species can tolerate high salinities, water temperatures, and lower oxygen content than most fish, and will occupy habitats inhospitable to invasive fish.	**Absent.** The project site lacks aquatic habitat.
Birds			
Black-tailed gnatcatcher (*Polioptila melanura*)	WL	In Mojave, Great Basin, Colorado, and Sonoran Desert communities, prefers nesting and foraging in densely lined arroyos and washes dominated by creosote bush (*Larrea tridentata*, *L. divaricata*), salt bush (*Atriplex* sp.)	**Not expected.** The project area lacks suitable habitat for this species.
Burrowing owl (*Athene cunicularia*)	SSC, BLM_S; burrow sites; some wintering sites	Found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel.	**Not expected.** The highly & continually disturbed condition of the project site does not provide suitable habitat.
Crissal thrasher (*Toxostoma crissale*)	SSC, BLM_S	Crissal thrashers live in deserts and dry, scrubby, or brushy habitats, especially along dry creek beds (arroyos) or in canyons and foothills. They show a strong preference for mesquite thickets, brushy riparian corridors (including those with invasive saltcedar), and chaparral-like scrub in canyons. They tend to avoid very open, low desert with yucca and cholla (habitat favored by LeConte's thrasher).	**Not expected.** The project lacks suitable habitat for this species.

Common Name (*Scientific Name*)	Status Federal / State*	Range or Habitat Requirements	Potential to Occur in the Project Area
Ferruginous hawk (*Buteo regalis*)	WL; wintering	Breeds in flat and rolling terrain in grassland or shrub steppe regions. Avoids high elevation, forest interior, and narrow canyons. Occurs in grassland, sagebrush (*Artemisia*), saltbush–greasewood (*Atriplex*–*Sarcobatus*) shrubland, and the periphery of pinyon–juniper (*Pinus*–*Juniperus*) and other forest types	**Not expected.** The project lacks suitable habitat for this species.
Le Conte's thrasher (*Toxostoma lecontei*)	SSC, BLM_S	The typical desert habitat consists of dunes, alluvial fans, and flat to gently rolling hills with shallow washes with sparse vegetation. The vegetation it may utilize includes low vegetation such as saltbush, creosote, cholla cacti, and Mojave yucca. It does not generally coexist with other thrashers due to its habitat but does overlap breeding ranges and general habitat with the California thrasher in the higher desert regions of its range. Nest building can begin as early as late December and early January.	**Not expected.** The highly & continually disturbed condition of the project site does not provide suitable habitat.
Prairie falcon (*Falco mexicanus*)	WL; nesting	Breeding habitats include grasslands, shrub-steppe desert, areas of mixed shrubs and grasslands, or alpine tundra that supports abundant ground squirrel or pika populations. Breeding birds sometimes forage in agricultural fields. The majority of prairie falcons spend the winter in the Great Plains and Great Basin, in habitat that supports the horned larks and western meadowlarks that make up much of their wintertime diet. This includes grasslands, sage scrub, dry-farmed wheat fields, irrigated cropland, and cattle feedlots, where the falcons also prey on European starlings.	**Absent.** The project lacks suitable nesting habitat for this species.
Southwestern willow flycatcher (*Empidonax traillii extimus*)	FE, SE; nesting	Prefers to nest in low shrubby/brushy riparian habitats including early successional growth, riparian scrub, coast live oak, and tamarisk. Will only nest in areas where ground is saturated. Will nest in most *Salix* spp., tamarisk species, coyote willow, and coast live oaks.	**Absent.** The project area does not contain suitable nesting habitat for this species.
Vermilion flycatcher (*Pyrocephalus rubinus*)	SSC; nesting	Found in any open country in the American Southwest, including arid scrublands, farmlands, deserts, parks, and canyon mouths. They are especially reliant on stream corridors within the scrub ecosystem, in areas where willow, sycamore, cottonwood, mesquite, and other bottomland trees grow.	**Absent.** The project area does not contain suitable nesting habitat for this species.
Least Bell's vireo (*Vireo bellii pusillus*)	FE, SE, nesting	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2,000 feet. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	**Absent.** The project area does not contain suitable nesting habitat for this species.

*Project area queried consisted of Indio & La Quinta (project location straddles both quads), Myoma, Rockhouse Canyon, West Berdoo Canyon and Thermal Canyon.

Records

Source: Listing status is based on CNPS (2023) &CDFW (2023). Habitat associations are based on the California Wildlife Habitat Relationships (CWHR) USFWS (2023), and CNPS (2023). Plant species descriptions are based on Jepson Online Interchange for California Floristics, and CNPS (2023).

***Status Codes:**

Federal Status for fish and wildlife:

FE = Federally Listed Endangered

FT = Federally Listed Threatened

FC = Federal Candidate for Listing

BGEPA = Bald and Golden Eagle Protection Act

BLM_S = Bureau of Land Management: Sensitive

California Rare Plant Ranking (CRPR):

1B = Plants rare, threatened, or endangered in California and elsewhere

2B = Plants rare, threatened, or endangered in California, but more common elsewhere

3 = Plants about which more information is needed

4 = Plants of limited distribution

CRPR Threat Ranks:

0.1 = Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

0.2 = Moderately threatened in California (20–80% of occurrences threatened / moderate degree and immediacy of threat)

0.3 = Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat)

California state status for fish and wildlife:

SE = California State-Listed Endangered

ST = California State-Listed Threatened

SCE = California Candidate Endangered

FP = CDFW Fully Protected

SSC = CDFW Species of Special Concern

WL = CDFW Watch List

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Riverside County, California

Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Peninsular Bighorn Sheep Ovis canadensis nelsoni There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/4970	Endangered

Birds

NAME	STATUS
Least Bell's Vireo Vireo bellii pusillus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher Empidonax traillii extimus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered

Reptiles

NAME	STATUS
Coachella Valley Fringe-toed Lizard Uma inornata Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2069	Threatened
Desert Tortoise Gopherus agassizii There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/4481	Threatened

Fishes

NAME	STATUS
Desert Pupfish Cyprinodon macularius Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/7003	Endangered

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Coachella Valley Milk-vetch Astragalus lentiginosus var. coachellae Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/7426	Endangered
Lassics Lupine Lupinus constancei There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/7976	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read

"Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

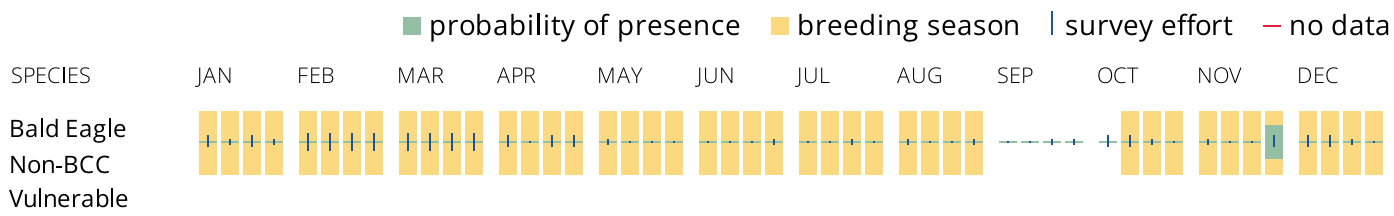
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Avocet Recurvirostra americana This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 21 to Aug 10

Bald Eagle Haliaeetus leucocephalus — Breeds Oct 15 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1626

Costa's Hummingbird Calypte costae — Breeds Jan 15 to Jun 10
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9470

Lawrence's Goldfinch Spinus lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Leconte''s Thrasher Toxostoma lecontei — Breeds Feb 15 to Jun 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8969

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Western Grebe aechmophorus occidentalis — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6743

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

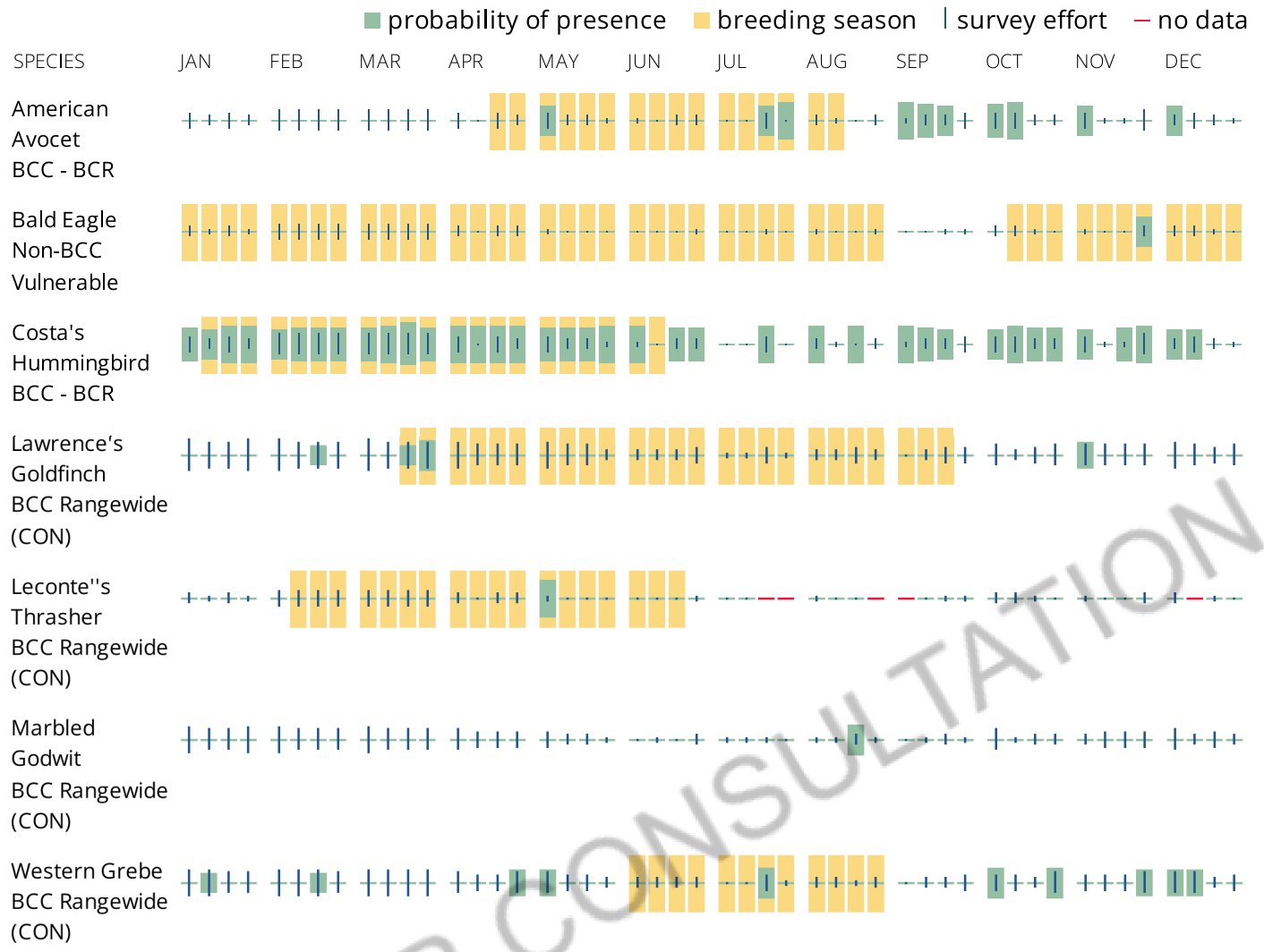
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring

in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

R4SBAx

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.