Appendix C

Biological Resources Assessment &

Coachella Valley Multiple Species Habitat Conservation Plan Compliance Report

for the

Thermal Ranch Development Project

prepared by

WSP USA Environment & Infrastructure, Inc., September 22, 2022.

DRAFT THERMAL RANCH DEVELOPMENT PROJECT
Assessor's Parcel Numbers 751-020-002, 751-020-003, 751-020-006, and 751-020-007

Biological Resources Assessment & Coachella Valley Multiple Species Habitat Conservation Plan Compliance Report

THERMAL, RIVERSIDE COUNTY, CALIFORNIA

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1.0 INTRODUCTION

At the request of Terra Nova Planning & Research (Terra Nova), this biological resource assessment report (BRAR) was prepared by WSP USA Environment & Infrastructure Inc. (WSP) for the proposed Thermal Ranch Development Project (project site/project), located in the unincorporated area of Thermal, Riverside County, California. Information contained herein is intended to be used for compliance with the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), California Environmental Quality Act (CEQA), as well as federal and California Endangered Species Acts.

2.0 PROJECT LOCATION / DESCRIPTION

MSA Consulting is preparing the Specific Plan for a proposed residential development on an approximately 622-acre project site located between 62nd Avenue to the north, 64th Avenue to the south, Harrison Street to the west, and Tyler Street to the east in Thermal, California. It lies between approximately one and two miles south-southwest of the Jacqueline Cochrane Regional Airport (Appendix A – Figure 1). The project proposal includes low, medium, and high-density residential housing. It also proposes inclusion of horse stables, grazing, and training areas, a golf course, and a small lake to be used for recreational purposes. The proposed project site is located on agricultural land that has been plowed and is under partial irrigation, but no crops were present during the September 2022 site survey. Much of the acreage appears to be fallow and consists of areas of sparse herbaceous weedy plant growth, other areas appeared to be completely barren. Five large, open-sided buildings were present near the center of the property, presumably for the storage and transport of hay or other crops when present, but otherwise no permanent infrastructure was present on the site. The project site is surrounded by agricultural lands (including date palm groves) to the north; additional agricultural lands, low density residential development, and equestrian paddocks to the east; and fallow land to the south and west. The currently undeveloped lands to the south and west show evidence of former agricultural use. Specifically, the project site is located within Section 5; Township 7 South; Range 8 East as shown on the United States Geological Survey (USGS) Valerie, California, 7.5-minute topographic quadrangle (Appendix A – Figure 2). The geographic coordinates near the approximate center of the project area are 33°35'27.84" north latitude and 116°10'21.49" west longitude. The elevation of the project site ranges from approximately -132 to -157 feet below mean sea level.

3.0 REGULATORY FRAMEWORK

3.1 Federal

Endangered Species Act (ESA) – The United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service are the designated federal agencies accountable for administering the ESA. The ESA defines species as “endangered” or “threatened” and provides regulatory protection at the federal level.

- Section 9 of the ESA prohibits the “take” of listed (i.e., endangered or threatened) species. The ESA’s definition of take is “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct.” Recognizing that take cannot always be avoided, Section 10(a) includes provisions for take that is incidental to, but not the purpose of, otherwise lawful activities. Specifically, Section 10(a) (1) (A) permits (authorized take permits) are issued for scientific purposes. Section 10(a) (1) (B) permits (incidental take permits) are issued for the incidental take of listed species that does not jeopardize the species.
- Section 7 (a) (2) requires federal agencies to evaluate the proposed project with respect to listed or proposed listed, species and their respective critical habitat (if applicable). Federal

agencies must employ programs for the conservation of listed species and are prohibited from authorizing, funding, or carrying out any action that would jeopardize a listed species or destroy or modify its "critical habitat."

As defined by the ESA, "individuals, organizations, states, local governments, and other non-federal entities are affected by the designation of critical habitat only if their actions occur on federal lands, require a federal permit, license, or other authorization, or involve federal funding.

Section 10(a) of the ESA authorizes the issuance of incidental take permits and establishes standards for the content of habitat conservation plans (see Section 3.3 below).

Migratory Bird Treaty Act (MBTA) – Treaties signed by the U.S., Great Britain, Mexico, Japan, and the countries of the former Soviet Union make it unlawful to pursue, capture, kill, and/or possess, or attempt to engage in any such conduct to any migratory bird, nest, egg or parts thereof listed in the document. As with the ESA, the MBTA also allows the Secretary of the Interior to grant permits for the incidental take of these protected migratory bird species.

National Environmental Policy Act (NEPA) – If portions of a proposed project could fall under the jurisdiction of a federal agency (i.e., U.S. Bureau of Reclamation, U.S. Army Corps of Engineers) they are subject to environmental review pursuant to NEPA. NEPA establishes certain criteria that must be adhered to for any project that is "financed, assisted, conducted or approved" by a federal agency. The federal lead agency is required to "determine whether the proposed action will significantly affect the quality of the human environment."

Section 404 of the Clean Water Act – This section of the Clean Water Act, administered by the U.S. Army Corps of Engineers (USACE), regulates the discharge of dredged and fill material into "waters of the United States." The USACE has created a series of nationwide permits that authorize certain activities within waters of the U.S. provided that the proposed activity does not exceed the impact threshold of 0.5 acre for nationwide permits, takes steps to avoid impacts to wetlands and other designated U.S. waters where practicable, minimizes potential impacts to wetlands, and provides compensation for any remaining, unavoidable impacts through activities to restore or create wetlands. For projects that exceed the threshold for nationwide permits, individual permits under Section 404 can be issued. An inspection of the project site to determine presence or absence of potential jurisdictional wetlands and waters was conducted during the assessment for this project, none were found.

3.2 State

California Endangered Species Act (CESA) – This legislation is similar to the federal ESA, but it is administered by the California Department of Fish and Wildlife (CDFW – formerly Department of Fish and Game). The CDFW is authorized to enter into "memoranda of understanding" with individuals, public agencies, and other institutions to import, export, take, or possess state-listed species for scientific, educational, or management purposes. CESA prohibits the take of state-listed species except as otherwise provided in state law. Unlike the federal ESA, the CESA applies the take prohibitions to species currently petitioned for state-listing status (candidate species). State lead agencies are required to consult with CDFW to ensure that actions are not likely to jeopardize the continued existence of any state-listed species or result in the destruction or degradation of occupied habitat.

California Environmental Quality Act (CEQA) – The basic goal of CEQA is to maintain a high-quality environment now and in the future. The specific goals are for California's public agencies to:

1) identify the significant environmental effects of their actions; and, either
2) avoid those significant environmental effects, where feasible; or

3) mitigate those significant environmental effects, where feasible.

CEQA applies to "projects" proposed to be undertaken or requiring approval by state and local government agencies. Projects are activities that have the potential to have a physical impact on the environment and may include the enactment of zoning ordinances, the issuance of conditional use permits and the approval of tentative subdivision maps. Where a project requires approvals from more than one public agency, CEQA requires one of these public agencies to serve as the "lead agency."

A "lead agency" must complete the environmental review process required by CEQA. The most basic steps of the environmental review process are to:

4) Determine if the activity is a "project" subject to CEQA.
5) Determine if the "project" is exempt from CEQA.
6) Perform an Initial Study to identify the environmental impacts of the project and determine whether the identified impacts are "significant". Based on its findings of "significance", the lead agency prepares one of the following environmental review documents:
    a) Negative Declaration if it finds no "significant" impacts.
    b) Mitigated Negative Declaration if it finds "significant" impacts but revises the project to avoid or mitigate those significant impacts.
    c) Environmental Impact Report (EIR) if it finds "significant" impacts.

While there is no ironclad definition of "significance", Article 5 of the State CEQA Guidelines (California Natural Resources Agency 2014) provides criteria to lead agencies in determining whether a project may have significant effects.

The Native Plant Protection Act (NPPA) – The NPPA includes measures to preserve, protect, and enhance rare and endangered native plant species. Definitions for “rare and endangered” are different from those contained in CESA. However, the list of species afforded protection in accordance with the NPPA includes those listed as rare and endangered under CESA. NPPA provides limitations on take as follows: “no person will import into this state, or take, possess, or sell within this state” any rare or endangered native plants, except in accordance with the provisions outlined in the act. If a landowner is notified by CDFW, pursuant to section 1903.5 that a rare or endangered plant is growing on their property, the landowner shall notify CDFW at least 10 days prior to the changing of land uses to allow CDFW to salvage the plants.

Natural Community Conservation Planning (NCCP) Program – A NCCP, which is managed by the CDFW, is intended to conserve multiple species and their associated habitats, while also providing for compatible use of private lands. Through local planning, the NCCP planning process is designed to provide protection for wildlife and natural habitats before the environment becomes so fragmented or degraded by development that species listing are required under CESA. Instead of conserving small, often isolated “islands” of habitat for just one listed species, agencies, local jurisdictions, and/or other interested parties have an opportunity through the NCCP to work cooperatively to develop plans that consider broad areas of land for conservation that would provide habitat for many species. Partners enroll in the programs, and by mutual consent, areas considered to have high conservation priorities or values are set aside and protected from development. Partners may also agree to study, monitor, and develop management plans for these high value “reserve” areas. The NCCP provides an avenue for fostering economic growth by allowing approved development in areas with lower conservation value. The project site is in a combined Habitat Conservation Plan (HCP) / NCCP, see Section 3.3.

Sections 1600-1603 of the State Fish and Game Code – The California Fish and Game (Wildlife) Code, pursuant to Sections 1600 through 1603, regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or

wildlife resources. Under state code, CDFW jurisdiction is assessed in the field based on one, or a combination, of the following criteria:

7) At minimum, intermittent and seasonal flow through a bed or channel with banks and that also supports fish or other aquatic life.
8) A watercourse having a surface or subsurface flow regime that supports or that has supported riparian vegetation.
9) Hydrogeomorphically distinct top-of-embankment to top-of-embankment limits.
10) Outer ground cover and canopy extents of, typically, riparian associated vegetation species that would be sustained by surface and/or subsurface waters of the watercourse.

The CDFW requires that public and private interests apply for a "Streambed Alteration Agreement" for any project that may impact a streambed or wetland. The CDFW has maintained a "no net loss" policy regarding impacts to streams and waterways and requires replacement of lost habitats on at least a 1:1 ratio.

Section 2081 of the State Fish and Game Code – Under Section 2081 of the California Fish and Game Code, the CDFW authorizes individuals or public agencies to import, export, take, or possess state endangered, threatened, or candidate species in California through permits or memoranda of understanding. These acts, which are otherwise prohibited, may be authorized through permits or "memoranda of understanding" if (1) the take is incidental to otherwise lawful activities, (2) impacts of the take are minimized and fully mitigated, (3) the permit is consistent with regulations adopted in accordance with any recovery plan for the species in question, and (4) the applicant ensures suitable funding to implement the measures required by the CDFW. The CDFW shall make this determination based on the best scientific information reasonably available and shall include consideration of the species' capability to survive and reproduce.

Section 3505.5 of the State Fish and Game Code – This section makes it unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds-of-prey, e.g.: owls, hawks, eagles, etc.) or to take, possess, or destroy the nest or eggs of any bird-of-prey.

Clean Water Act – The Regional Water Quality Control Board (RWQCB) regulates activities pursuant to Section 401(a)(1) of the Clean Water Act (CWA). Section 401 of the CWA specifies that certification from the State is required for any applicant requesting a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities that may result in any discharge into navigable waters. Through the Porter Cologne Water Quality Control Act, the RWQCB asserts jurisdiction over Waters of the State of California (WSC) which is generally the same as WUS but may also include isolated waterbodies. The Porter Cologne Act defines WSC as "surface water or ground water, including saline waters, within the boundaries of the state".

3.3 Coachella Valley Multiple Species Habitat Conservation Plan

Finalized in October 2008, and amended in 2016, the CVMSHCP is a comprehensive regional plan that addresses the conservation needs of 27 species of native flora and fauna and 24 natural vegetation communities occurring throughout the Coachella Valley region of western Riverside County, California. Permits for the CVMSHCP were issued by the CDFW on September 9, 2008 and by the United States Fish and Wildlife Service (USFWS) on October 1, 2008 (TE104604-0). Managed by the Coachella Valley Conservation Commission (CVCC), CVMSHCP participants include Riverside County, the Cities of Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, Rancho Mirage, as well as the Coachella Valley Association of Governments (CVAG), Coachella Valley Water District, Imperial Irrigation

District, Mission Springs Water District and the California Department of Transportation (CVAG 2008, 2016).

The CVMSHCP serves two primary purposes: Balancing environmental protection and economic development objectives in the CVMSHCP planning area and simplifying compliance with endangered species related laws. The CVMSHCP accomplishes this by conserving unfragmented habitat to permanently protect and secure viable populations of the covered 27 species within the planning area. The covered species include those plants and animals that are either currently listed as threatened or endangered, are proposed for listing, or are believed by an appointed Scientific Advisory Committee, USFWS and CDFW, to have a high probability of being proposed for listing in the future if not conserved by the CVMSHCP. The goal of the CVMSHCP is to meet the requirements of the ESA and CESA, while at the same time allowing for the economic growth (land development) within the plan area without significant delay or hidden costs. Under the CVMSHCP, land development/mitigation fees are collected from all new development projects occurring in the plan area. The purpose of this fee is to support the assembly of a preserve system for the covered species and natural vegetation communities within areas identified as having high conservation value (CVAG 2008).

4.0 METHODS

4.1 Literature Review

In preparation for the field surveys, a literature search was conducted to identify special status biological resources known from the vicinity of the project site. In the context of this report, and for the purpose of this assessment, vicinity is defined as areas within a 5-mile radius of the project site.

The literature search included a review of the following documents:

- California Natural Diversity Data Base (CNDDB) RareFind 5 (CDFW 2022a)
- Special Animals List (CDFW 2022)
- California Native Plant Society's (CNPS) Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2022a)
- CVMSHCP (CVAG 2008)
- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2019. Web Soil Survey
- USGS 7.5' *Indio, Martinez Mtn., Rabbit Peak, Valerie, and Mecca, Calif.* quadrangles (USGS 1972 - 2015)
- USFWS ECOS-IPaC website: "List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project".

Scientific nomenclature for this document follows standard reference sources: For plant communities, CVMSHCP (CVAG 2008), Sawyer et. al (2009), and/or Holland (1986); for flora, Jepson eFlora (2022) and the USDA NRCS PLANTS Database (2022); for amphibians, reptiles, and mammals, CDFW (2016); and for birds, California Bird Records Committee (2022).

4.2 Field Assessment

The field assessment was conducted on 12 September 2022 between 10:40 and 13:21 by WSP Senior Wildlife Biologist Nathan Moorhatch. The sky was cloudy (~98% clouds), with low wind (0 - 3 mph), and warm to hot temperatures (85°F to 91°F). On-site suitable habitat (or lack thereof) was assessed based on the presence of constituent habitat elements (e.g., soils, vegetation and topography) characteristic of the potentially occurring special status biological resources determined by the literature review. The site was assessed on foot and by vehicle to record

pertinent field data and current site conditions. Covering the entire site on foot was not appropriate since the majority of the site consists of plowed, barren agricultural land (see Appendix C: Site Photographs). Adjacent undeveloped areas within an approximate 150-meter (~500-foot) buffer zone that were unfenced and unsigned (i.e., not posted with "No Trespassing" and/or "Private Property") were also assessed for burrowing owl (*Athene cunicularia*). This area was limited to vacant land located south and west of the project site. The site is surrounded by low density residential development, agricultural land, and equestrian paddocks to the east; active date palm groves and agricultural lands to the north; and fallow, former agricultural lands to the west and south that appear to have lain fallow for quite some time and have revegetated with Saltbush Scrub communities to varying degrees. Inaccessible areas were scanned for burrowing owl habitat and sign (i.e., burrows & perches with whitewash) with binoculars. All on-site flora and fauna observed or otherwise detected (e.g., vocalizations, presence of scat, tracks, and/or bones) during the assessment were recorded in field notes and are included in Appendix B. General weather and site conditions were also recorded at the beginning and end of the survey. Temperatures and wind speeds were recorded with a handheld Kestrel 2000 anemometer. Percent cloud cover was visually estimated. The project site is also surrounded by paved roads on three sides: 62nd Avenue on the north, Tyler Street on the east, and Harrison Street on the west. The south side is bordered by a dirt access road that is an unpaved extension of 64th Avenue.

5.0 RESULTS

The proposed project site is surrounded by development, primarily active and former agricultural development to the north, south, east, and west. South and west of the project site are fallow agricultural lands that are transitioning to Saltbush Scrub communities, but still show signs of former disturbance and agricultural use. The entire project site appears to have been routinely disturbed and is mostly barren, disturbed land with a sparse growth of weedy plants scattered among some portions of the site that currently appear to be fallow (not used for active agriculture). No drainage features occur within the project site. Representative site photos are included in Appendix C.

5.1 Coachella Valley Multiple Species Habitat Conservation Plan

The entire project is located within the CVMSHCP fee area but is not within a conservation area. The southwestern corner of the project site is located approximately 2.21 miles northeast of the Santa Rosa and San Jacinto Mountains Conservation Area (Figure 6, Appendix A). The development of the project site will have no effect on the Santa Rosa and San Jacinto Mountains Conservation Area.

5.2 Weather Conditions

Weather conditions during the field assessment were cloudy and warm. Skies were cloudy (~98% cloud cover). Temperatures ranged from 85 to 91 degrees Fahrenheit. Winds were calm with wind speeds measured between 0 to 3 miles per hour.

5.3 Topography and Soils

The proposed project alignment is relatively flat. Five soil types occur on the project site: 1) Gilman fine sandy loam, wet, 0 to 2 percent slopes (GcA); 2) Indio very fine sandy loam, wet (It); 3) Indio fine sandy loam, wet (Ir); 4) Salton silty clay loam (Sb); and 5) Gilman silt loam, wet, 0 to 2 percent slopes (GfA), (USDA, NRCS. 2019) (Appendix A - Figure 4).

Gilman series consists of very deep, well drained soils that formed in stratified stream alluvium that typically occur on flood plains and alluvial fans. Gilman soils are on flood plains and alluvial

fans. Gilman soils were historically, and still are used for irrigated cropland and livestock grazing (USDA, NRCS. 2019).

Indio soil series consist of “very deep, well or moderately well drained soils formed in young calcareous, silty mixed alluvium derived from mixed rock sources. They are intermittently moist soils typically found on alluvial fans, lacustrine basins and flood plains that were historically, and still are used for irrigated cropland and livestock grazing (USDA, NRCS. 2019).

Salton soil series are “somewhat poorly drained soils formed in alluvium”. Slopes are 0 to 2 percent. Elevations range from 50 feet above to 230 feet below sea level. Native vegetation on these soils often include creosote, mesquite, arrowweed, iodinebush, and saltbush. These soils are used for cotton, alfalfa hay, irrigated pasture, truck crops, dates, and recreation.

The field assessment confirmed that on-site soils and substrates are typical of this area and consistent with the soil survey. Much of the area on and adjacent to the project site has been heavily altered for agricultural development, road right-of-way maintenance, and limited residential and livestock use.

Despite the “wet” designation of the Gilman soil, the site does not contain springs, seeps, or other natural wet areas. It also lacks active sand dunes, drifts, rock outcrops, significant rocky areas, and clay lenses.

5.4 Vegetation

The entire project site is disturbed. Google Earth imagery shows the site under active agricultural use back to at least 1985 and continuing to the present. Vegetation present immediately offsite to the south and west of the site consists of species representative of *Atriplex lentiformis* and *Suaeda moquinii* Shrubland Alliances. There is no native (or even nonnative) plant community present on the Thermal Ranch project site. Although much of the project site is barren, plowed substrate, there are patches of low-growing weedy herbaceous plants scattered sparsely through some of the fallow agricultural field subdivisions. This growth does not represent a fully developed vegetation community. No trees are present on the site.

A total of sixteen (16) plant species were identified growing on the project site during the site survey (Appendix B). These included a mixture of native and nonnative and/or weedy species. Of the 16 species observed, seven were nonnative species (44%). Some of the plant species identified within the project site included big saltbush (*Atriplex lentiformis*), western sea-purslane (*Sesuvium verrucosum*), white pigweed (*Amaranthus albus*), puncture vine (*Tribulus terrestris*), saltcedar [seedlings] (*Tamarix ramosissima*), yellow nutsedge (*Cyperus esculentus*), and Bermuda grass (*Cynodon dactylon*).

5.5 Wildlife

Vertebrate wildlife directly observed and/or detected otherwise (e.g., scat, bones, tracks, feathers, burrows, etc.) during the assessment was not diverse or abundant, limited to just five species (two of which are nonnative introduced species), all of which are common to the region (Appendix B). This very low number of species observed may be attributable to the general lack of habitat and highly disturbed nature of the project site. Wildlife observed included four birds and one amphibian: Rio Grande leopard frog (*Lithobates berlandieri*), Eurasian collared-dove (*Steptopelia decaocto*), common raven (*Corvus corax*), song sparrow (*Melospiza melodia*), and great blue heron [just offsite] (*Ardea herodias*). The number of species detected does not represent the total number of species that may occur on the project site. Brief, one visit assessments are limited by the seasonal timing and short duration of the survey period as well as the nocturnal, fossorial and/or migratory habits of many animals. The highly disturbed condition of the project site reduces the potential for use by most special status species, as many of these require higher quality and/or

more extensive areas of natural habitats. Some are habitat specialists requiring aeolian deposits, which are not currently present on the project site. No actively nesting birds were detected on or adjacent to the site during the assessment. No old, inactive bird nests were observed on or adjacent to the site.

5.6 Special Status Biological Resources

Some plant and/or animal taxa are designated as having special status due to declining populations, limited geographic distributions and/or vulnerability to climate change, habitat loss and/or fragmentation. Some have been listed as threatened or endangered by the USFWS or by the CDFW and are protected by the federal and state ESAs. Others have been identified, and are managed as sensitive by the USFWS, CDFW, or by private conservation organizations, including the CNPS, but have not been formally listed as threatened or endangered. Impacts to such species can still be considered significant under the CEQA, if not avoided, minimized and/or mitigated by specific project design and implementation.

The literature review and field visit resulted in a list of 62 special status biological resources which potentially occur on the project site and greater project vicinity (4 to 5-mile radius). Tables 1-3 provide a summary of these resources, their current conservation status, habitat associations and potential to occur on the project site. No special status species were observed on-site during the assessment (Appendix B), but a great blue heron (rookery sites considered sensitive), was observed just to the south of the site.

Table 1. Special Status Plants

Species	Protective Status	Habitat	Flowering Period	Occurrence Probability
Abronia villosa var. aurita Chaparral sand-verbena	F: ND C: ND CNPS List: 1B.1 State Rank: S2 CVMSHCP: No	Chaparral, coastal scrub, desert dunes; found in sandy areas. 225 to 4,800 feet.	(January) March - September	**Absent** Habitat lacking, site below known elevational range of species
Ambrosia monogyra singlewhorl burrobush	F: ND C: ND CNPS List: 2B.2 State Rank: S2 CVMSHCP: No	Usually on sandy soils in desert washes, floodplains, arroyos, etc., below 1, 640 feet in California.	August - November	**Absent** Habitat not present, nearest CNDDB record is from 1922.
Astragalus lentiginosus var. coachellae Coachella Valley milk-vetch	F: END C: ND CNPS List: 1B.2 State Rank: S1 CVMSHCP: Yes	Annual/Perennial herb found in sandy flats, washes, alluvial fans, sand field, dunes and dune edges, at 130 to 2,150 feet, a CA endemic.	February - May	**Absent** Habitat lacking, site below known elevational range of species.
Astragalus preussii var.laxiflorus Lancaster milk-vetch	F: ND C: ND CNPS List: 1B.1 State Rank: S1 CVMSHCP: No	Alkaline clay flats, gravelly/sandy washes, Chenopod scrub. 2,295 feet elevation	March - May	**Absent** Habitat not present, site is well below known elevational range of species.
Astragalus sabulonum gravel milk-vetch	F: ND C: ND CNPS List: 2B.2 State Rank: S2 CVMSHCP: No	Sandy or gravelly flats, washes, and roadsides in desert dunes, Mojavean/Sonoran desert scrub between 195 – 3,050 feet in elevation.	February - June	**Absent** Habitat not present, site is below known elevational range of species.
Astragalus tricarinatus triple-ribbed milk-vetch	F: END C: ND CNPS List: 1B.2 State Rank: S2 CVMSHCP: Yes	Rocky slopes in canyons and boulder washes, often with creosote bush and brittlebush, between 1,475 – 3,905 feet in elevation.	February - May	**Absent** Habitat not present, site is below known elevational range of species.
Ayenia compacta California ayenia	F: ND C: ND CNPS List: 2B.3 State Rank: S3 CVMSHCP: No	Found on rocky slopes, in canyons, and gravelly/sandy washes between 490 and 3,595 feet in elevation.	March - April	**Absent** No habitat on-site, site below elevation range of species.
Bursera microphylla Little-leaf elephant tree	F: ND C: ND CNPS List: 2B.3 State Rank: S2 CVMSHCP: No	Very localized in southern California (known from around 20 occurrences) on arid, rocky slopes, washes, and canyon sides. Between 655 – 2,295 feet in elevation. In greater project area known from the western edge of the Sonoran desert (foothills of Santa Rosa Mtns. and other ranges).	June - July	**Absent** No habitat on-site, site is both below elevation range and species not known from the "valley floor". No trees on site.

Species	Protective Status	Habitat	Flowering Period	Occurrence Probability
Ditaxis claryana Glandular ditaxis	F: ND C: ND CNPS List: 2B.2 State Rank: S2 CVMSHCP: No	Mojavean Desert scrub, Sonoran Desert scrub; found in sandy areas. 0 to 1,395 feet.	October - March	**Absent** Site is highly disturbed, no Ditaxis present and site is slightly below known elevational range of species.
Eriastrum harwoodii Harwood's eriastrum	F: ND C: ND CNPS List: 1B.2 State Rank: S2 CVMSHCP: No	Associated with desert dunes (sandy soils) between 410 – 3,000 feet in elevation.	March-June	**Absent** Site is highly disturbed, no dunes on site, no *Eriastrum* present and site is below known elevational range of species
Funastrum crispum wavyleaf twinvine	F: ND C: ND CNPS List: 2B.2 State Rank: S1 CVMSHCP: No	Grows in chaparral and pinyon-juniper woodland habitats between 3,820 – 6,035 feet elevation.	May - August	**Absent** Habitat not present, site is below elevation range of species
Jaffueliobryum raui Rau's jaffueliobryum moss	F: ND C: ND CNPS List: 2B.3 State Rank: S2 CVMSHCP: No	Dry openings, rock crevices, dry limestone or sandstone substrates in alpine dwarf scrub, chaparral, and Mojavean/Sonoran desert scrubs between 1,400 and 6,600 feet elevation.	N/A (mosses are non-flowering plants)	**Absent** No habitat on-site, site also far below elevational range of species.
Leptosiphon floribundus ssp. hallii Santa Rosa Mtns. leptosiphon	F: ND C: ND CNPS List: 1B.3 State Rank: S1S2 CVMSHCP: No	Desert canyons in Sonoran desert scrub between 3,280 – 6,560 feet in elevation.	May-July(Nov)	**Absent** No habitat on-site, site also far below elevational range of species.
Nemacaulis denudata var. *gracilis* slender cottonheads	F: ND C: ND CNPS List: 2B.2 State Rank: S2 CVMSHCP: No	Sandy areas in coastal and desert areas, saltbush scrub, creosote bush scrub, and coastal grasslands between 165 and 1,310 feet elevation	(March) - May	**Absent** No habitat on-site, site also below elevational range of species.
Petalonyx linearis narrow-leaf sandpaper-plalnt	F: ND C: ND CNPS List: 2B.3 State Rank: S3? CVMSHCP: No	Mojavean/Sonoran desert scrub in sandy or rocky canyons between -80 – 3,660 feet.	Mainly March – May, but can bloom year-round	**Absent** No habitat on-site.
Phaseolus filiformis slender-stem bean	F: ND C: ND CNPS List: 2B.1 State Rank: S1 CVMSHCP: No	Gravelly washes bordered by rocky slopes vegetated with creosote bush scrub at around 400 feet elevation.	April	**Absent** No habitat on-site, site also below elevational range of species
Senna covesii Cove's cassia	F: ND C: ND CNPS List: 2B.2 State Rank: S3 CVMSHCP: No	Sandy desert washes and adjacent slopes in Sonoran desert scrub habitats, between 740 and 4,250 feet	Mar-Jun(Aug)	**Absent** No habitat on-site, site also below elevational range of species.

Species	Protective Status	Habitat	Flowering Period	Occurrence Probability
Xylorhiza cognata Mecca-aster	F: ND, BLM sensitive C: ND CNPS List: 1B.2 State Rank: S2 CVMSHCP: Yes	Grows on sandstone and clay substrates on steep canyon slopes between 65 and 1,000 feet elevation.	Jan - June	**Absent** No habitat on-site, site also below elevational range of species. Outside species' range.

Table 2. Special Status Vegetation Communities

Community	Protective Status (F=Federal, C=California)	Occurrence Probability
Desert Fan Palm Oasis Woodland	F: ND C: ND State rank: S3.2 CVMSHCP: No	**Absent** No native palms on-site.

Table 3. Special Status Wildlife

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Invertebrates			
Danaus plexippus Monarch Butterfly	F: C C: CSC State Rank: S2S3 CVMSHCP: No	Can be found in a variety of areas where milkweed and flowering plants are present; milkweeds are necessary for breeding	**Absent** No milkweed present on-site. Insufficient nectar sources on-site.
Euparagia unidentata Algodones euparagia	F: ND C: ND State Rank: S1S2 CVMSHCP: No	Most records of this small wasp are from blow sand-associated habitats. Individuals have been collected from various small flowering annuals.	**Absent** Habitat not present on or adjacent to site. Closest known CNDDB record is from almost 8 miles NE of the project site.
Juniperella mirabilis juniper metallic wood-boring beetle	F: ND C: ND State Rank: S1 CVMSHCP: No	Larvae develop in juniper in the Santa Rosa Mtns. (and other ranges) in Southern California (specifically Pinyon Flats as the closest known record to the project site).	**Absent** Site is not located within range of species. Habitat not present on-site.

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Macrobaenetes valgum Coachella giant sand treader cricket	F: ND C: ND State Rank: S1S2 CVMSHCP: Yes	Found in the sandy areas of the specialized sand dune ecosystem of Coachella Valley (aka "blow sand" habitat)	**Absent** Habitat lacking, site isolated from sand dune areas, site also likely not in range of species.
Oliarces clara cheeseweed owlfly	F: ND C: ND State Rank: S2 CVMSHCP: No	Occur on or near bajadas, attracted to elevated topographic features when mating	**Absent** Habitat lacking
Trichinorhipis knulli Knull's metallic wood-boring beetle	F: ND C: ND State Rank: S1 CVMSHCP: No	Restricted to southern California and has been encountered most often in the vicinity of Mountain Springs in Imperial County (just north of the Mexican border), where it breeds in dead branches of jojoba. Very few individuals have actually been observed in the field – most existing specimens have been reared from caged, infested branches	**Absent** Habitat lacking, no jojoba on or adjacent to site.
Fish			
Cyprinodon macularius desert pupfish	F: END C: END State Rank: S1 CVMSHCP: Yes	Historically occurred in several springs, slow-moving streams, and seeps in the Salton Sink Basin as well as Colorado River backwaters and sloughs.	**Absent** No habitat present
Xyrauchen texanus razorback sucker	F: END C: END State Rank: S1S2 CVMSHCP: No	Inhabits the Colorado River bordering Calfornia, adapted for fast currents but also needs quiet waters with sand/gravel/rocks for spawning.	**Absent** No habitat present, site not in species range.
Amphibians			
Batrachoseps major aridus desert slender salamander	F: END C: END State Rank: S1 CVMSHCP: No	This subspecies is only known from Hidden Palm Cyn. and Guadalupe Creek in palm oasis, desert scrub and wash habitats. Site is not in species range and no habitat is present to support this salamander.	**Absent** No habitat on or adjacent to site, site not in species range (historically or currently)
Scaphiopus couchii Couch's spadefoot	F: ND C: ND State Rank: S2 CVMSHCP: No	In California this species can be found in the vicinity of agricultural fields and rural residential, but usually remains underground for most of the year. Needs rain pools that last at least 7-8 days for reproduction. Tadpoles develop faster than any other North American anuran.	**Low** There is a 2007 CNDDB record from Mecca approx. 5 miles east/southeast of the project site.
Reptiles			

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Gopherus agassizii Desert tortoise	F: THR C: THR State Rank: S2S3 CVMSHCP: Yes	Found in desert environments with high plant diversity, digs burrows in the substate. Not found in areas of high human modification and development.	**Absent** Habitat lacking, site isolated from any adjacent habitat
Phrynosoma mcallii Flat-tailed horned lizard	F: ND C: CSC State rank: S2 CVMSHCP: Yes	Fine sand in desert washes and flats with vegetative cover and ants, generally below 600 feet elevation in Riverside, San Diego, and Imperial Counties.	**Absent** Habitat lacking, site isolated from sand sources.
Uma inornata Coachella Valley fringe-toed lizard	F: THR C: END State rank: S1 CVMSHCP: Yes	Sandy areas of the Coachella Valley (dunes and sand field habitats).	**Absent** Habitat not present, site isolated from sand sources
Birds (*birds covered by the CVMSHCP still cannot be directly impacted while nesting or in burrows)			
Buteo regalis ferruginous hawk	F: MBTA C: WL State: S3S4 CVMSHCP: No	Golden eagles occupy the mountains and coastal areas of southern California and often nest in chaparral and oak woodland/savanna habitats and grassland amongst low rolling hill typified by diverse vegetation. Not common in true desert areas.	**Nesting: Absent** Does not nest in our area, winter visitors and migrants. **Foraging: Low** Favors open, fallow fields during its winter residency in southern California, exceptionally barren areas may not support enough prey base for this raptor.
Ardea alba great egret	F: MBTA C: ND State rank: S4 CVMSHCP: No	Applies to nesting colonies only. Nests can be up to 100 feet above ground (often over water) in or near the top of a large tree or shrub. Rarely nests on the ground or artificial platforms.	**Nesting: Absent** (suitable habitat not present, CNDDB records from greater project vicinity are from the former shore line of the Salton sea.) **Foraging: Low** (mainly adjacent to site)
Ardea herodias great blue heron	F: MBTA C: ND State: S4 CVMSHCP: No	Colonial nester in tall trees, sheltered marshy areas, and cliffsides. Rookery sites near various aquatic habitats.	**Nesting: Absent** Nesting habitat not present (cliffs, tall trees, etc. – also no nests observed adjacent to site) **Foraging: Present** Individual observed in marshy area adjacent to southeast corner of the site.
Egretta thula snowy egret	F: MBTA C: ND State rank: S4 CVMSHCP: No	Applies to nesting colonies only. Nest colonially in thick vegetation in isolated places including barrier islands, dredge-spoil islands, swamps, marshes.	**Nesting: Absent** (suitable habitat not present, CNDDB records from greater project vicinity are from the former shore line of the Salton sea.) **Foraging: Low** (mainly adjacent to site)

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Nycticorax nycticorax black-crowned night heron	F: MBTA C: ND State rank: S4 CVMSHCP: No	Applies only to nesting colony of this species. A colony can have dozens of nests in a single tree. Usually in an area that is relatively safe from predators: island, swamp, or over water. Nesting colonies can persist for over 50 years.	**Nesting: Absent** (suitable habitat not present, CNDDB records from greater project vicinity are from the former shore line of the Salton sea.) **Foraging: Low** (mainly adjacent to site)
Plegadis chihi White-faced ibis	F: MBTA C: WL State rank: S3S4 CVMSHCP: No	Frequent shallow freshwater marshes, occasionally flooded agricultural fields. Need dense tule thickets for nesting with adjacent open shallow water.	**Nesting: Absent** (suitable habitat not present on site, CNDDB records from greater project vicinity are from the former shore line of the Salton sea. Potential breeding habitat adjacent to south edge of site.) **Foraging: Low** (mainly adjacent to site)
Athene cunicularia Burrowing Owl	F: MBTA, BCC C: SSC State: S3 CVMSHCP: Yes	Occupies open, dry grasslands, scrub habitats, agricultural, railroad rights-of-way, and margins of highways, golf courses, and airports. Utilizes ground squirrel burrows and man-made structures, such as earthen berms, cement culverts, cement, asphalt, and debris piles for nesting and shelter.	**Nesting: Low/Absent** No suitable burrows or burrow surrogates observed during site survey. **Foraging: Low** Foraging habitat present, but no burrowing owl sign seen on site, however dispersing birds could utilize the site in the future. Closest CNDDB record is ~3.25 miles NE of the site, but is from 1927 and has been converted to residential development.
Empidonax traillii extimus Southwestern willow flycatcher	F: END C: END State: S1 CVMSHCP: Yes	Nests in large areas of riparian forests and woodlands	**Nesting: Absent** No suitable nesting habitat **Foraging: Absent** No suitable foraging habitat on-site.
Falco mexicanus Prairie falcon	F: MBTA C: WL State: S4 CVMSHCP: No	Another raptor that favors dry, open terrain for foraging, although smaller open areas adjacent to human development are not as commonly used. Usually nests on cliff ledges.	**Nesting: Absent** No suitable nesting habitat **Foraging: Low** Low quality foraging habitat on-site, not likely to occur except if moving through the area (rare).
Polioptila melanura Black-tailed gnatcatcher	F: MBTA C: WL State rank: S3S4 CVMSHCP: No	Nests in wooded desert wash habitat containing mesquite, palo verde, ironwood, and acacia. May also occur in areas with salt cedar, especially when adjacent to native wooded desert wash habitat. Also occurs in desert scrub habitat in winter.	**Nesting: Absent** No suitable habitat present **Foraging: Absent** Site is highly disturbed and barren.

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Pyrocephalus rubinus Vermilion flycatcher	F: MBTA C: SSC State Rank: S2S3 CVMSHCP: No	Usually found near water in habitats including arid scrub, farmlands, golf courses, desert or savanna, and riparian woodlands	**Nesting: Absent** Suitable habitat not present on site (potential south of site) **Foraging: Absent** site is essentially treeless, not enough vegetation present to support foraging habitat for this species. (Again, could forage adjacent to site).
Rallus obsoletus yumanensis Yuma Ridgway's (clapper) rail	F: END C: THR, FP State rank: S1S2 CVMSHCP: Yes	Well-developed marsh habitats of cattails and California bulrush. Also requires water depths varying from 6.5 cm to 20 cm.	**Nesting: Absent** No suitable nesting habitat onsite. Potential breeding habitat adjacent to southern edge of site. **Foraging: Absent** No suitable foraging habitat on-site, but potential habitat just offsite to south.
Gelochelidon nilotica gull-billed tern	F: MBTA C: SSC State rank: S1 CVMSHCP: No	Applies to nesting colony only. CNDDB record in general area is from 1993-1994 at the end of Johnson Street ~ 7.7 miles southeast of the project site. Birds were nesting on bare, dirt levee remnants with scattered bush seepweed.	**Nesting: Absent** (No nesting habitat present) **Foraging: Absent** (no habitat present on site, potential to forage in habitat adjacent to southern edge of site.)
Rynchops niger black skimmer	F: MBTA, BCC C: SSC State rank: S2 CVMSHCP: No	1994 CNDDB record is from the north end of the Salton Sea. Nests on gravel bars, low islets, and sandy beaches (usually unvegetated).	**Nesting: Absent** (No nesting habitat present) **Foraging: Absent** (no habitat present on site, usually requires more open water than is present in habitat adjacent to southern edge of site.)
Toxostoma crissale Crissal thrasher	F: MBTA, BLM S C: SSC State rank: S3 CVMSHCP: Yes*	Dense thickets of shrubs or low trees in desert riparian and desert wash habitats. Southeastern California to Texas and northern Mexico.	**Nesting: Absent** No nesting habitat present **Foraging: Absent** Same as above, site is largely barren
Toxostoma lecontei LeConte's thrasher	F: MBTA, BCC C: SSC State rank: S3 CVMSHCP: Yes	Resident of open desert wash, scrub, alkali scrub, succulent scrub habitats, nests in dense spiny shrubs and cacti in washes, usually within 2-8 feet of the ground.	**Nesting: Absent** No habitat present onsite. **Foraging: Absent** Same as above, site is almost devoid of vegetation.
Icteria virens Yellow-breasted chat	F: MBTA C: SSC State rank: S3 CVMSHCP: Yes	Riparian vegetation communities. The species nests in early successional riparian habitats with a well-developed shrub layer and an open canopy. Nesting habitat usually restricted to the narrow border of streams, creeks, sloughs and rivers (Shuford & Gardali 2008)	**Nesting: Absent** (No potentially suitable nesting habitat) **Foraging: Absent** (Same as above, possible in dense shrubs in adjacent habitat to south of site, but not likely to utilize the site due complete lack of onsite habitat.)

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Vireo bellii pusillus Least Bell's vireo	F: END C: END State rank: S2 CVMSHCP: Yes*	Riparian woodland habitats along the riverine systems of Southern California	**Nesting: Absent** No suitable nesting habitat **Foraging: Absent** No suitable foraging habitat.
Mammals			
Chaeotodipus fallax pallidus pallid San Diego pocket mouse	F: ND C: SSC State rank: S3S4 CVMSHCP: No	Usually in desert border areas in desert wash, scrub, and pinyon-juniper communities. Often in sandy areas with associated rocks or coarse gravel.	**Absent** No suitable habitat on project site, site has been under intensive agricultural use.
Antrozous pallidus pallid bat	F: ND, BLM S C: SSC State rank: S3 CVMSHCP: No WBWG: H	Most common in open, dry habitats w/ rocky areas for roosting in: deserts, grasslands, shrub- and woodlands, etc.	**Absent (roosting)** No suitable habitat on project site for roosting, low possibility to forage over the site.
Corynorhinus townsendii Townsend's big-eared bat	F: ND, BLM S C: SSC State rank: S2 CVMSHCP: No WBWG: H	Found throughout the State in a variety of habitats, but most common in mesic areas. Roosts in the open on the ceilings of caves or abandoned structures.	**Absent (roosting)** No suitable habitat on project site for roosting, low possibility to forage over the site.
Euderma maculatum spotted bat	F: ND C: SSC State rank: S3 CVMSHCP: No WBWG: H	Occupies a wide variety of habitats (arid grasslands and deserts to coniferous forest): Feeds over water and along washes (almost entirely on moths), needs rock crevices in cliffs or caves for roosting.	**Absent (roosting)** No suitable habitat on project site for roosting, very low chance of foraging over water south of site.
Eumops perotis californicus Western mastiff bat	F: ND, BLM S C: SSC State rank: S3S4 CVMSHCP: No WBWG: H	Many open, semi-arid to arid areas including conifer and deciduous forests, grasslands, chaparral, and coastal scrubs. Roosts in crevices in cliff faces, buildings, trees and tunnels.	**Absent (roosting)** Suitable roosting habitat lacking and low probability to forage due to poor quality of on-site habitat.
Lasiurus xanthinus western yellow bat	F: ND C: SSC State rank: S3 CVMSHCP: Yes WBWG: H	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis. Roosts in trees, particularly palms. Forages over water and among trees.	**Absent (roosting)** No suitable habitat on project site, but site is surrounded by areas of date palms, so could possibly forage over or near the site.
Neotoma lepida intermedia San Diego desert woodrat	F: ND C: SSC State rank: S3S4 CVMSHCP: No	Prefers habitats with moderate to dense canopy cover, especially with rock outcrops, rocky cliffs, and slopes. Usually in coastal sage scrub.	**Absent** No suitable habitat on project site.

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Nyctinomops femorosaccus pocketed free-tailed bat	F: ND C: SSC State rank: S3 CVMSHCP: No WBWG: M	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 (rarely) under roof tiles.	**Absent (roosting)** No suitable habitat on project site.
Taxidea taxus American badger	F: ND C: SSC State rank: S3 CVMSHCP: No	Favors dry open areas within shrubby, forested, and herbaceous habitats with friable soils for digging.	**Absent** Site has been intensively farmed for agriculture, not likely to support prey for this species.
Ovis canadensis nelson pop.2 Peninsular bighorn sheep DPS	F: END C: THR, Fully Protected State Rank: S2 CVMSHCP: Yes	Eastern slopes of the Peninsular Ranges below 4,600 ft. Steep-walled canyons and ridges divided by rocky or sandy washes with access to water.	**Absent** No suitable habitat on project site, site is on the valley floor. Surrounded by agricultural lands.
Perognathus longimembris bangsi Palm Springs pocket mouse	F: BLM Sensitive C: SSC State Rank: S1 CVMSHCP: Yes	Sonoran Desert habitats with level to gently sloping topography, sparse to moderate vegetative cover, and loosely packed or sandy soils.	**Absent** Habitat marginal and degraded, project site has been under intensive agriculture.
Xerospermophilus tereticaudus chlorus Coachella Valley (Palm Springs) round-tailed ground squirrel	F: ND C: SSC State Rank: S2 CVMSHCP: Yes	Prefers open, flat, grassy areas in fine-textured, sandy soil in desert succulent scrub, desert wash, desert scrub, alkali scrub, & levees.	**Absent** Suitable habitat lacking and project site has been completely cleared (repeatedly) for agricultural use.

Definitions of occurrence probability:

Occurs: Observed on the site by WSP personnel or recorded on-site by other qualified biologists.
High: Observed in similar habitat in region by qualified biologists, or habitat on the site is a type often utilized by the species and the site is within the known range of the species.
Moderate: Reported sightings in surrounding region, or site is within the known range of the species and habitat on the site is a type occasionally used by the species.
Low: Site is within the known range of the species but habitat on the site is rarely used by the species.
Absent: A focused study failed to detect the species, or no suitable habitat is present.

Definitions of status designations and occurrence probabilities.

Federal designations: (federal Endangered Species Act, US Fish and Wildlife Service):

END: Federally listed, Endangered.
THR: Federally listed, Threatened.
BCC: Bird of Conservation Concern
C: Candidate for Federal listing
ND: Not designated.

State designations: (California Endangered Species Act, California Dept. of Fish and Game)

END: State listed, Endangered.
THR: State listed, Threatened.
RARE: State listed as Rare (Listed "Rare" animals have been re-designated as Threatened, but Rare plants have retained the Rare designation.)
CSC: California Special Concern Species.
WL: Watch List Species.
ND: Not designated.

CDFW CNDDB rankings: Animals

S1 = Extremely endangered: <6 viable occurrences or <1,000 individuals, or < 2,000 acres of occupied habitat
S2 = Endangered: about 6-20 viable occurrences or 1,000 - 3,000 individuals, or 2,000 to 10,000 acres of occupied habitat
S3 = Restricted range, rare: about 21-100 viable occurrences, or 3,000 – 10,000 individuals, or 10,000 – 50,000 acres of occupied habitat
S4 = Apparently secure; some factors exist to cause some concern such as narrow habitat or continuing threats
S5 = Demonstrably secure; commonly found throughout its historic range
SH = all sites are historical, this species may be extinct, further field work is needed

CDFW CNDDB rankings: Plants and Vegetation Communities

S1 = Less than 6 viable occurrences OR less than 1,000 individuals OR less than 2,000 acres
S1.1 = very threatened
S1.2 = threatened
S1.3 = no current threats known
S2 = 6-20 viable occurrences OR 1,000-3,000 individuals OR 2,000-10,000 acres
S2.1 = very threatened
S2.2 = threatened
S2.3 = no current threats known
S3 = 21-80 viable occurrences or 3,000-10,000 individuals OR 10,000-50,000 acres
S3.1 = very threatened
S3.2 = threatened
S3.3 = no current threats known
S4 = Apparently secure within California; this rank is clearly lower than S3, but factors exist to cause some concern. i.e., there is some threat, or somewhat narrow habitat.
S5 = Demonstrably secure to ineradicable in California.

California Native Plant Society (CNPS) designations:
California Rare Plant Ranks (CRPR) Note: According to the CNPS (http://www.cnps.org/programs/Rare_Plant/inventory/names.htm), ALL plants on Lists 1A, 1B, 2A, and 2B meet definitions for state listing as threatened or endangered under Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code. Certain plants on Lists 3 and 4 do as well.
The CDFW (http://www.dfg.ca.gov/hcpb/species/t_e_spp/nat_plnt_consv.shtml) states that plants on Lists 1A, 1B, 2A, and 2B of the CNPS Inventory consist of plants that may qualify for listing, and recommends they be addressed in CEQA projects (CEQA Guidelines Section 15380). However, a plant need not be in the Inventory to be considered a rare, threatened, or endangered species under CEQA. In addition, CDFW recommends, and local governments may require, protection of plants which are regionally significant, such as locally rare species, disjunct populations of more common plants, or plants on the CNPS Lists 3 and 4.
List 1A: Plants presumed extinct in California.
List 1B: Plants rare and endangered in California and throughout their range.
List 2A: Plants presumed extirpated in California, but more common elsewhere.
List 2B: Plants rare, threatened, or endangered in California, but more common elsewhere.
List 3: Plants for which more information is needed.
List 4: Plants of limited distribution; a "watch list."
CA Endemic: Taxa that occur only in California
CNPS Threat Code:
.1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 – Fairly endangered in California (20-80% occurrences threatened)
.3 – Not very endangered in California (<20% of occurrences threatened, or no current threats known)
Note: All List 1A (presumed extinct in California) and some List 3 (need more information- a review list) plants lacking any threat information receive no threat code extension. Also, these Threat Code guidelines represent a starting point in the assessment of threat level. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are also considered in setting the Threat Code.

Western Bat Working Group (WBWG) designations:
The Western Bat Working Group is comprised of agencies, organizations and individuals interested in bat research, management and conservation from the 13 western states and provinces. Its goals are (1) to facilitate communication among interested parties and reduce risks of species decline or extinction; (2) to provide a mechanism by which current information on bat ecology, distribution and research techniques can be readily accessed; and (3) to develop a forum to discuss conservation strategies, provide technical assistance and encourage education programs.
H: High: Species which are imperiled or are at high risk of imperilment based on available information on distribution, status, ecology and known threats.
M: Medium: Species which warrant a medium level of concern and need closer evaluation, more research, and conservation actions of both the species and possible threats. A lack of meaningful information is a major obstacle in adequately assessing these species' status and should be considered a threat.
L: Low: Species for which most of the existing data support stable populations, and for which the potential for major changes in status in the near future is considered unlikely. There may be localized concerns, but the overall status of the species is believed to be secure. Conservation actions would still apply for these bats, but limited resources are best used on High and Medium status species.
P: Periphery: This designation indicates a species on the edge of its range, for which no other designation has been determined.

CVMSHCP designations
Yes: Conserved by the CVMSHCP
No: Not Specifically Conserved by the CVMSHCP
C: Considered, but not included in the CVMSHCP

5.7 Discussion of the Special-status Species Tables

None of the 18 sensitive plant species known from the greater project vicinity (based on CNDDB records within a five-mile radius of the project site) are expected to occur on the site. Many of these plants are known from the mountain ranges that flank the southern and western edges of the Coachella Valley and occur in completely different habitats and elevations that do not exist on the valley floor. The remaining species are not expected on the site due to a lack of habitat. The site consists of mainly barren ground (having a long history of use for agriculture) and does not support a native plant community. Only sixteen plant species were observed on the site, and almost half of these are nonnative, introduced species. Although components of both the *Atriplex lentiformis* Shrubland Alliance and *Suaeda moquinii* Shrubland Alliance are present adjacent to the southern and western portions of the site, neither of these Alliances are present on this site. Please refer to Table 1 for details regarding potential presence/absence of sensitive plant species on the site. Similarly, the single sensitive habitat known from the general project vicinity (Desert Fan Palm Oasis Woodland) is not present on the site.

Of the 43 sensitive wildlife species listed in Table 3 as potentially occurring in the project vicinity only one species (great blue heron) was observed just off the southern edge of the site in an adjacent wet area; seven (7) other species are thought to have potential to forage over the project site or in the immediate area, and one additional species (Couch's spadefoot) is thought to have a low probability of occurring or directly adjacent to the project site. None of these species are listed as threatened or endangered by the State or Federal agencies. The seven species that could forage over the site are all birds and include: ferruginous hawk (*Buteo regalis*), prairie falcon (*Falco mexicanus*), great egret (*Ardea alba*), snowy egret (*Egretta thula*), black-crowned night heron (*Nycticorax nycticorax*), white-faced ibis (*Plegadis chihi*), and burrowing owl (*Athene cunicularia*). It should be noted that these species are expected to have a low to very low probability of foraging occasionally over or around the site, none are expected to nest on or adjacent to the project site due to a lack of suitable habitat. The five heron, egret, and ibis species are only considered sensitive when at their nesting rookeries, and there is no potential for these species to nest on the project site. Ferruginous hawks are only present as occasional wintering species in our area and are considered a "Watch List" species by the CDFW. The potential for this species to winter on the project site is likely very low, due to a lack of suitable prey items. Prairie falcons are also considered a "Watch List" species by the CDFW and are considered sensitive when nesting. No cliff-nesting habitat is present on or adjacent to the project site to support Prairie falcon nesting. No burrows or appropriate manmade structures capable of supporting burrowing owls were observed on the site. No burrowing owls or their sign were observed on the site. Couch's spadefoots (*Scaphiopus couchii*) are small, stout-bodied toads that are adapted to dry conditions and spend much of their life underground. There is a 2007 CNDDB record from approximately 5 miles east-southeast of the project site in Mecca, between Highway 111 and the railroad tracks, south of 4th Street. Although ongoing plowing and general disturbance of this site greatly reduces the likelihood of this species inhabiting the project site, there is a low probability that this species could inhabit the adjacent undeveloped lands immediately to the south and west of the site and could access the site from these areas. Couch's spadefoot is considered a "Species of Special Concern" by the CDFW. The only amphibian observed on the project site during the site survey were several young individuals of the nonnative Rio Grande leopard frog (*Lithobates berlandieri*). As discussed previously, the site has been extensively disturbed/altered and does not support the appropriate natural habitats required by the majority of the sensitive wildlife species presented in Table 3. Additionally, many of these species occur in habitats that are not present on or adjacent to site (for example no riparian habitat for least Bell's vireo or other riparian-obligate species). In short, this is a highly disturbed site that has little potential to support both common and sensitive wildlife and plant species. Please see

Appendix C Site Photographs for a representation of conditions present on the site at the time of this survey.

5.7.1 CVMSHCP Covered Species

Nineteen (19) of the species presented in Tables 1 – 3 are conserved under the CVMSHCP: Coachella Valley milkvetch, triple-ribbed milkvetch, Mecca aster, Coachella Valley giant-sand-treader cricket, desert pupfish, desert tortoise, Coachella Valley fringe-toed lizard, flat-tailed lizard, burrowing owl, crissal thrasher, Le Contes' thrasher, yellow-breasted chat, least Bell's vireo, southwestern willow flycatcher, Yuma clapper rail, western yellow bat, Palm Springs round-tailed ground squirrel, Peninsular bighorn sheep (DPS), and Palm Springs pocket mouse. Participation in the CVMSHCP, payment of the CVMSHCP development/mitigation fee and participation in the plan will fully mitigate project related impacts (although none are anticipated due to lack of presence) to these species. It should be remembered that apart from burrowing owl, none of these species are expected to occur on or adjacent to the site. Burrowing owls have a very low potential to forage on or adjacent to the site but are not expected to permanently occupy the project site due to ongoing disturbance from active agricultural use.

Suitable nesting habitat for burrowing owl was not observed on the site, and no burrows or burrow surrogates suitable for burrowing owl use were observed within the survey area. For these reasons, burrowing owl is currently not considered to be present on the project site at this time.

5.7.2 Potentially Occurring Species Covered in the USFWS IPAC Report

Seven special status species are presented in the USFWS IPAC report generated specifically for the project location. All seven species are included in and addressed in Tables 1-3 of this document. These include monarch butterfly, desert tortoise, Coachella Valley fringe-toed lizard, least Bell's vireo, southwestern willow flycatcher, Yuma Ridgway's rail, and Peninsular bighorn sheep.

None of these sensitive species are expected on the project site due to the lack of appropriate habitat (including food plant in the case of the Monarch butterfly) and the overall degraded/disturbed nature of the site.

Monarch butterfly are known to occur in the general area, but the project site did not have any of the larval host plants (milkweed species). This species is not listed as threatened or endangered by any of the resource agencies. It is, however, a recent Candidate Species under the Federal Endangered Species Act.

No riparian habitat is present on or adjacent to the project site to support least Bell's vireo or southwestern willow flycatcher. However, there is a ponded area with cattails adjacent to the southern edge of the site that has some potential to support Yuma Ridgway's (clapper) rail. This area is offsite and is not expected to be impacted by development of this site. No habitat exists on site for either desert tortoise, Coachella Valley fringe-toed lizard, or Peninsular bighorn sheep. Should project-related disturbance be conducted during the native bird nesting season (1 February through 31 August), a nesting bird clearance survey is recommended to ensure that implementation of the proposed project does not impact nesting birds and complies with the MBTA.

6.0 DISCUSSION

The proposed project includes the development of approximately 622-acres as a mixed residential, recreational, and equestrian community. The project site is mostly barren ground with

sparse areas of low-growing disturbance-tolerant plants scattered throughout those areas not under active agriculture. It is surrounded by active and former agricultural lands, as well as some low-density residential development and equestrian use to the east of the site. It provides no connectivity to any adjacent well-developed native habitat or conservation areas. The project site does not contain any United States Army Corps of Engineers, Regional Water Quality Control Board, or CDFW jurisdictional waters. The project site is not within and/or adjacent to any CVMSHCP Conservation Areas, so will not be subject to CVMSHCP land use adjacency guidelines. To prevent impacts to potentially nesting native birds protected by the MBTA and state fish and game code, the following measures should be taken:

6.1 Protection of Nesting Birds

Special status bird species covered by the CVMSHCP as well as a variety of common bird species that are excluded from coverage under the plan are all still protected by the MBTA and the state Fish and Game Code. This includes virtually all native migratory and resident bird species. Avoidance of impacts to these birds is a requirement of the federal permit issued for the CVMSHCP. To avoid impacting nesting birds both within and outside conservation areas, either avoidance of project-related disturbance during the nesting season (1 February through 31 August) or nesting bird surveys conducted by a qualified ornithologist or biologist immediately prior to on-site disturbance during the nesting season would be required. If nesting birds are found, no work would be permitted near the nest until young have fledged. There is no established protocol for nest avoidance, however, when consulted the CDFW generally recommends avoidance buffers of about 500 feet for birds-of-prey and species listed as threatened or endangered, and 100–300 feet for unlisted songbirds.

6.2 Burrowing Owl

As noted above, no burrowing owls or their sign were observed on the site. Burrowing owls often occupy barren, open sites similar to the project site. This species nests and roosts underground so is uniquely vulnerable to ground disturbing activities. No burrows or “burrow surrogates” such as small culverts or abandoned concrete pipe sections suitable for use by burrowing owls were found on the site during the survey. Since burrowing owls can disperse from nearby occupied areas, a preconstruction survey following CDFG (2012) guidelines must be conducted prior to initiating ground-disturbing activities. Unless avoidable, all burrowing owls present must be relocated prior to any ground disturbing activities. If burrowing owls remain on-site, a Burrowing Owl Relocation and Management Plan will be prepared to describe and outline how the burrowing owl will be actively or passively relocated per CDFW guidelines. Relocation will require prior permission from the CDFW, at a minimum. Since the burrowing owl is a covered species under the CVMSHCP, additional mitigation/conservation measures will not be required.

7.0 CONCLUSION

With the implementation of the recommendations above, impacts to special status biological resources are anticipated to be avoided, minimized, and/or mitigated in accordance with the CVMSHCP and other resource agency requirements.

8.0 LITERATURE CITED AND REFERENCES

California Bird Records Committee. 2022. Official California Checklist. Accessed online at: http://californiabirds.org/ca_list.asp.

California Department of Fish and Game (CDFG). 2012. Staff report on Burrowing Owl Mitigation. CDFG, Sacramento, CA.

California Department of Fish and Wildlife (CDFW). 2022a. California Natural Diversity Data Base, Rarefind 5. Report for the *Valerie, Indio, Martinez Mtn., Rabbit Peak, Mecca, Calif.* quadrangles. Accessed at: dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp

CDFW. 2022b. Special Animals List. April. Periodic publication. Sacramento, CA. Accessed online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline=1

CDFW. 2016. Complete List of Amphibian, Reptile, Bird and Mammal Species in California. Accessed online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=87155&inline

California Legislative Information. 2021. Fish and Game Code of California. https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=FGC&tocTitle=+Fish+and+Game+Code+-+FGC

CDFW. 2015a. California Wildlife Habitat Relationships, Life History Accounts and Range Maps. Accessed online at: http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx

CDFW. 2015b. Threatened and Endangered Species, Species Lists and Accounts, Species Accounts-Fish. Accessed online at: https://www.dfg.ca.gov/wildlife/nongame/t_e_spp/

CDFW. 2016. Complete List of Amphibian, Reptile, Bird and Mammal Species in California. Accessed online at: nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=87155&inline=1

California Native Plant Society (CNPS). 2022a. Inventory of Rare, Threatened, and Endangered Plants of California. Report for the *Indio and West Berdoo, Calif.* quadrangles. Accessed online at: http://www.rareplants.cnps.org

CNPS. 2022b. The California Rare Plant Ranking System. Accessed online at: https://www.cnps.org/cnps/rareplants/ranking.php

California Natural Resources Agency. 2014. CEQA Guidelines. Accessed online at: http://resources.ca.gov/ceqa/guidelines/

CVAG. 2016. Final Major Amendment to the Coachella Valley Multiple Species Habitat Conservation Plan/Natural Community Conservation Plan. Accessed online at: https://www.cvmshcp.org/Plan%20Documents/10.%20CVAG%20MSHCP%20Plan%20Section%203.0.pdf

CVAG. 2008. Coachella Valley Multiple Species Habitat Conservation Plan. Accessed online at: cvmshcp.org

Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Prepared for the California Department of Fish and Game.

Jepson eFlora Project (2nd ed.). 2022. Jepson eFlora. Accessed online at: http://ucjeps.berkeley.edu/IJM.html

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. A manual of California vegetation (2nd ed.). California Native Plant Society, Sacramento, CA.

Shuford, W. D., and Gardali, T. (Ed.). 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate

conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

United States Department of Agriculture (USDA), Soil Conservation Service. 1980. A Soil Survey of Riverside County, California, Coachella Valley Area. https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/riversideCA1980/riversideCA1980.pdf

USDA, Natural Resources Conservation Service (NRCS). 2022. The PLANTS Database. National Plant Data Team. Accessed online at: plants.usda.gov

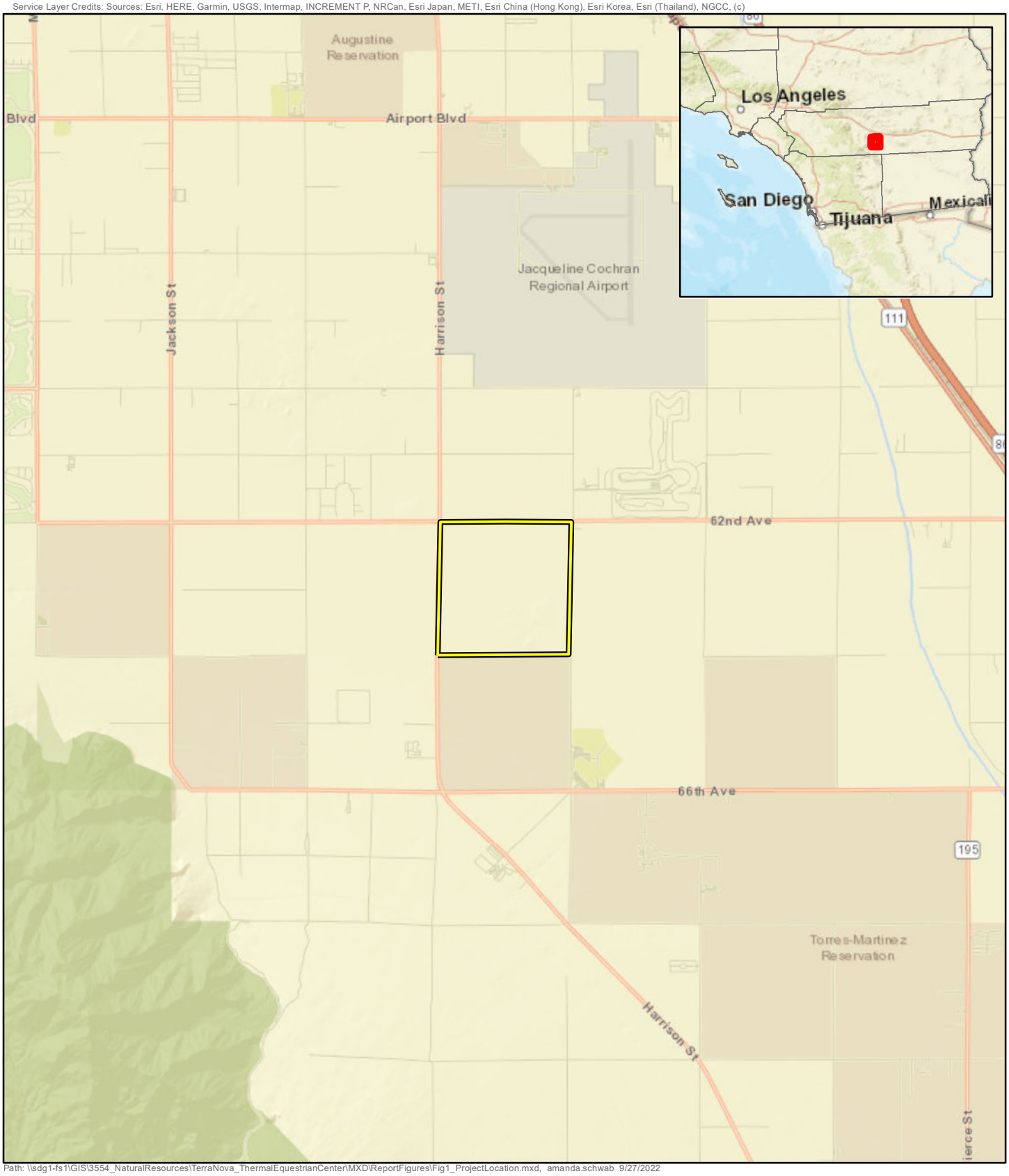
USDA, NRCS. 2019. Web Soil Survey. Accessed online at: http://websoilsurvey.nrcs.usda.gov/app/

USFWS. 2016. Bird Laws and Treaties. Accessed online at: http://www.fws.gov/migratorybirds/RegulationsandPolicies.html

USGS 7.5' *Valerie, Indio, Martinez Mtn., Rabbit Peak,* and *Mecca, Calif.* 7.5-minute topographic quadrangles (USGS 1972 1 2015)

APPENDIX A

FIGURES



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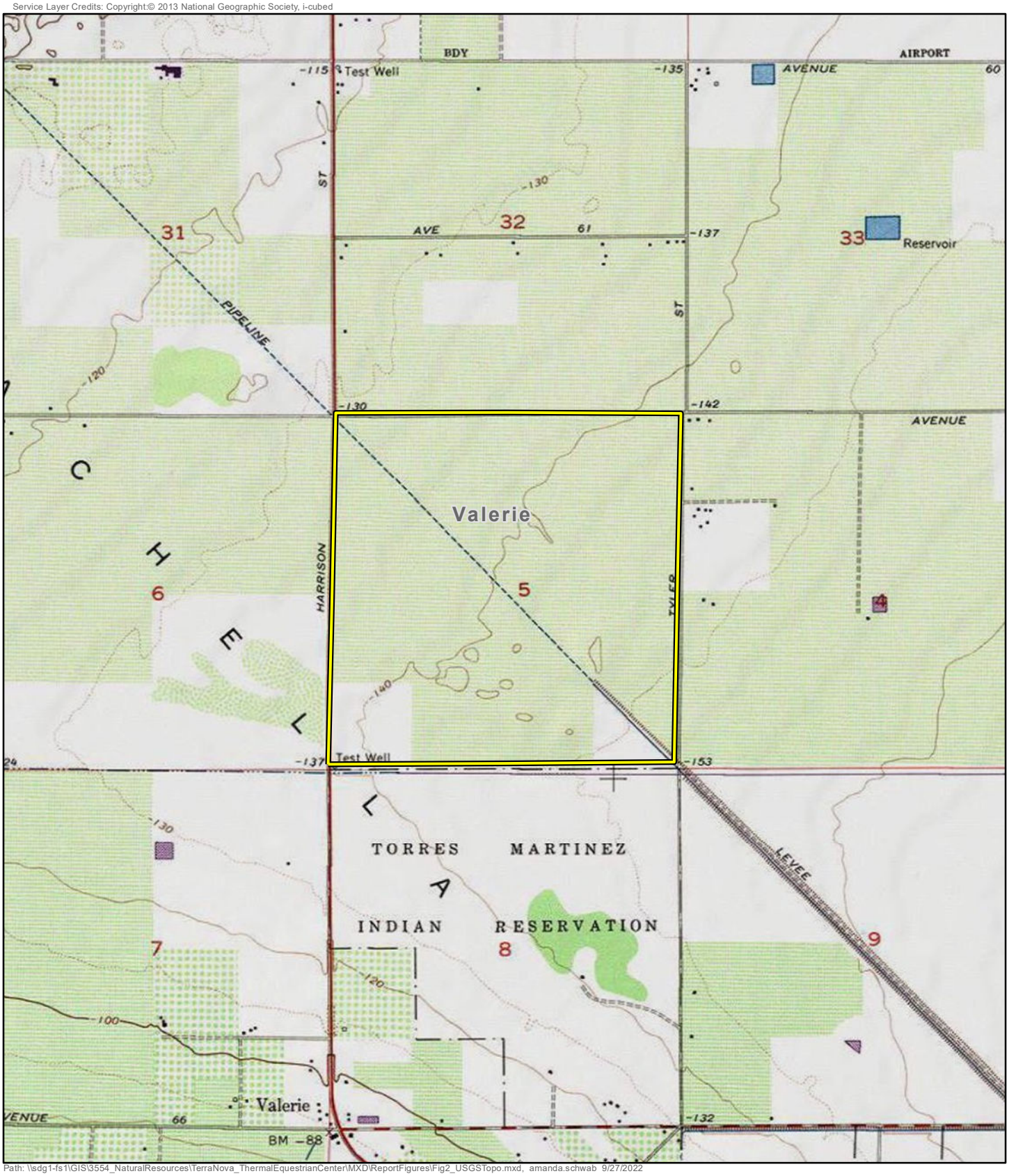
1 inch = 1 miles
0 0.5 1 Miles

wood.

Project Boundary

FIGURE 1

Project Location
Thermal Ranch Project
Thermal, Riverside County, CA



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1 inch = 2,000 feet
0 1,000 2,000 Feet

wood.

Project Boundary

FIGURE 2

USGS 7.5' Topo Quad: Valerie
Thermal Ranch Project
Thermal, Riverside County, CA

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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1 inch = 1,000 feet
0 500 1,000 Feet

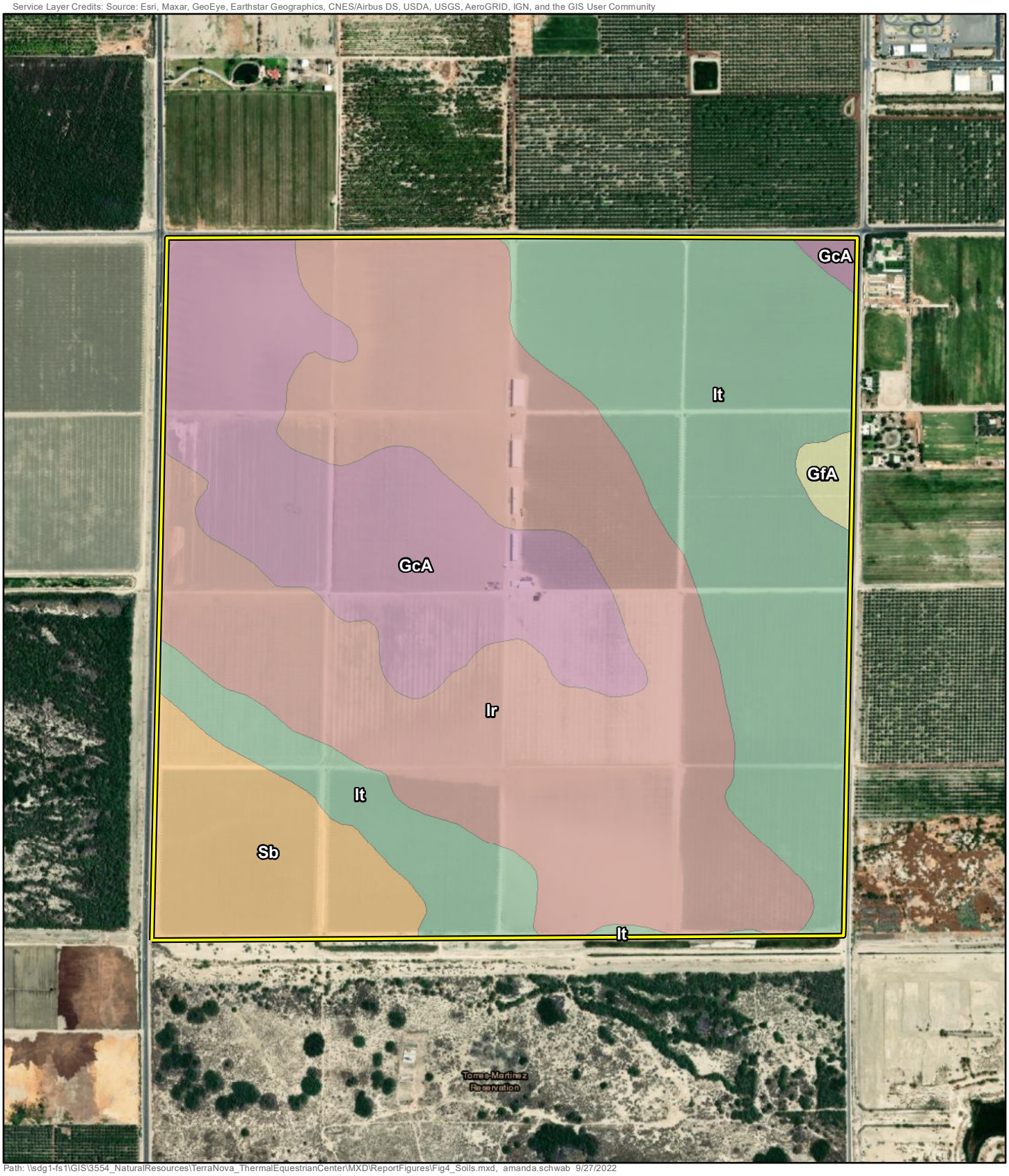
wood.

Project Boundary
Project Parcels

FIGURE 3

Site Vicinity
Thermal Ranch Project
Thermal, Riverside County, CA

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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1 inch = 1,000 feet

0 500 1,000 Feet

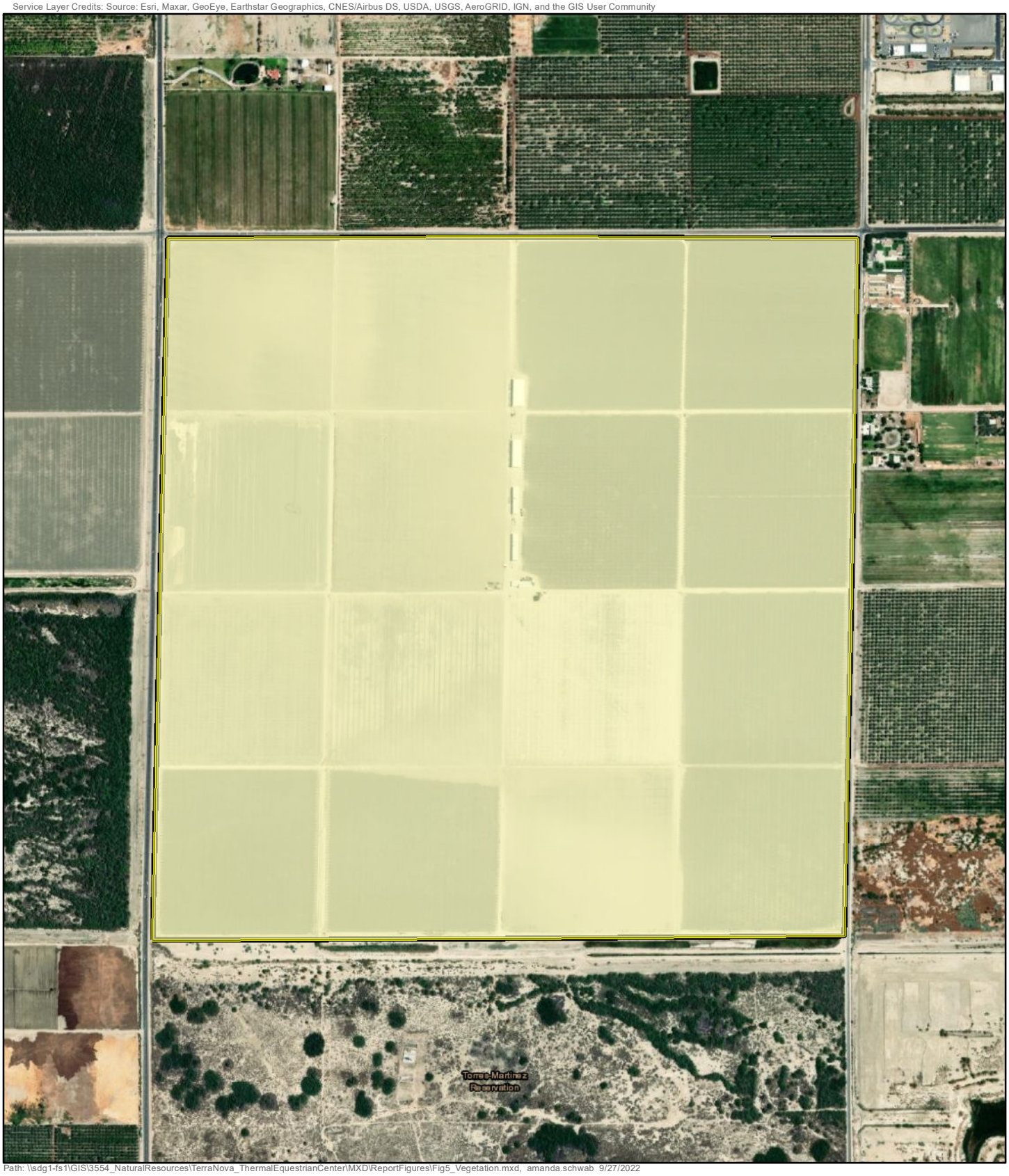
- Project Boundary
- GcA - Gilman fine sandy loam, wet, 0 to 2 percent slopes
- GfA - Gilman silt loam, wet, 0 to 2 percent slopes
- Ir - Indio fine sandy loam, wet
- It - Indio very fine sandy loam, wet
- Sb - Salton silty clay loam

wood.

FIGURE 4

Soils
Thermal Ranch Project
Thermal, Riverside County, CA

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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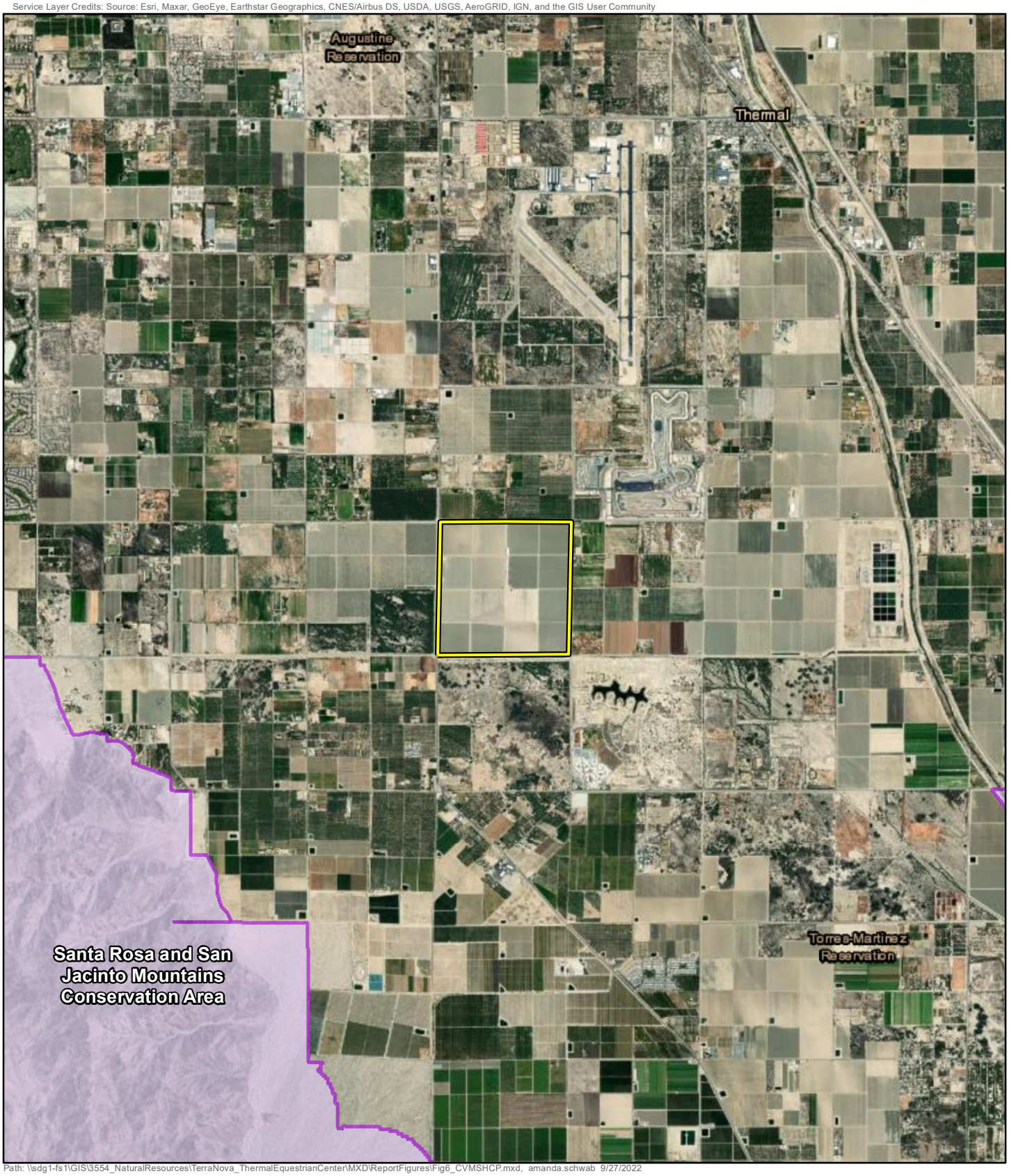
1 inch = 1,000 feet
0 500 1,000 Feet

wood.

Project Boundary
Agriculture

FIGURE 5

Vegetation
Thermal Ranch Project
Thermal, Riverside County, CA



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1 inch = 1 miles
0 0.5 1 Miles

wood.

Project Boundary
CVMSHCP Boundary

FIGURE 6

CVMSHCP
Thermal Ranch Project
Thermal, Riverside County, CA

APPENDIX B

PLANTS AND VERTEBRATE WILDLIFE OBSERVED

Plants Observed or Detected
Thermal Ranch Project Site, Thermal, Riverside County, California

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ANGIOSPERMAE **DICOTYLEDONEAE**	**DICOT FLOWERING PLANTS**
Aizoaceae	**Fig-Marigold or Iceplant Family**
Sesuvium verrucosum	western sea-purslane
Amaranthaceae	**Amaranth Family**
**Amaranthus albus*	white pigweed
Amaranthus fimbriatus	fringed amaranth
Chenopodiaceae	**Goosefoot Family**
Atriplex lentiformis	big saltbush
Convolvulaceae	**Morning-glory Family**
Cressa truxillensis	alkali weed
Heliotropiaceae	**Heliotrope Family**
Heliotropium curassavicum var. *oculatum*	alkali heliotrope
Portulacaceae	**Purslane Family**
**Portulaca oleracea*	common purslane
Tamaricaceae	**Tamarisk Family**
**Tamarix ramosissima*	saltcedar (seedlings)
Zygophyllaceae	**Caltrop Family**
**Tribulus terrestris*	puncture vine
MONOCOT ANGIOSPERMS	
Arecaceae	**Palm Family**
Washingtonia sp. (seedlings)	unidentified fan palm
Cyperaceae	**Sedge Family**
Bolboschoenus maritimus ssp. *paludosus*	alkali bulrush
Cyperus esculentus	yellow nutsedge
Poaceae	**Grass Family**
**Cynodon dactylon*	Bermuda grass
Leptochloa fusca	sprangletop
**Polypogon interruptus*	ditch grass
Typhaceae	**Cattail Family**
Typha domingensis	southern cattail

* - denotes a non-native species

Vertebrate Wildlife Observed or Detected
Thermal Ranch Project Site, Thermal, Riverside County, California

CHORDATES	**CHORDATA**
AMPHIBIANS	**AMPHIBIA**
*Rio Grande leopard frog	*Lithobates berlandieri*
BIRDS	**AVES**
Columbidae	**Pigeons and Doves**
*Eurasian collared-dove	*Streptopelia decaocto*
Ardeidae	**Herons, Bitterns, and Allies**
great blue heron	*Ardea herodias*
Jays, Magpies, and Crows	**Corvidae**
common raven	*Corvus corax*
Passerellidae	**New World Sparrows**
song sparrow	*Melospiza melodia*

* - non-native species
** - special status species
cf – compares favorably with

APPENDIX C

SITE PHOTOS

Photo 1. Looking west from the northeast corner of the project site. Showing 62nd Avenue and date palm groves to the north of the site.

Photo 2. Looking south (along Tyler Street) from the northeast corner of the site.

Photo 3. Looking south from 62nd Avenue at northeast quarter of site under active agriculture.

Photo 4. Looking south from northcentral edge of the site. Showing extensive barren ground and hay/crop storage buildings near the center of the site.

Photo 5. Looking west along 62nd Avenue at northwest corner of site.

Photo 6. Looking south along Harrison Street from the northwest corner of the site.

Photo 7. View of the southwest area of the site as seen from Harrison Street.

Photo 8. View of the southwest corner of the site, with fallow agricultural lands in the background south of the site.

Photo 9. Looking east from the southwest corner of the site, showing barren condition of the site compared to adjacent saltbush scrub growing offsite.

Photo 10. View of the central portion of the site from the southern edge.

Photo 11. Water body adjacent to south edge of site (not on project site).

Photo 12. View of the southeastern area of project site showing barren ground with sparse weedy plant growth.

Photo 13. Looking east at the southeast corner of the site.

Photo 14. Looking north along Tyler Steet from southeast corner of site.

Photo 15. Equestrian paddock east of the site.

APPENDIX D

CVMSHCP Table 4-112:
Coachella Valley Native Plants Recommended for Landscaping

Coachella Valley Native Plants Recommended for Landscaping

BOTANICAL NAME	**COMMON NAME**
Trees	
Washingtonia filifera	California fan palm
Cercidium floridum	blue palo verde
Chilopsis linearis	desert willow
Olneya tesota	ironwood tree
Prosopis glandulosa var. *torreyana*	honey mesquite
Shrubs	
Acacia greggii	cat's claw acacia
Ambrosia dumosa	burro bush
Atriplex canescens	four wing saltbush
Atriplex lentiformis	quailbush
Atriplex polycarpa	cattle spinach
Baccharis sergiloides	squaw water-weed
Bebia juncea	sweet bush
Cassia (Senna) covesii	desert senna
Condalia parryi	crucilllo
Crossosoma bigelovii	crossosoma
Dalea emoryi	dye weed
Dalea (Psorothamnus) schottii	indigo bush
Datura meteloides	jimson weed
Encelia farinosa	brittle bush
Ephedra aspera	Mormon tea
Eriogonum fasciculatum	California buckwheat
Eriogonum wrightii membranaceum	Wright's buckwheat
Fagonia laevis	no common name
Gutierrezia sarothrae	matchweed
Haplopappus acradenius	goldenbush
Hibiscus denudatus	desert hibiscus
Hoffmannseggia microphylla	rush pea
Hymenoclea salsola	cheesebush
Hyptis emoryi	desert lavender
Isomeris arborea	bladder pod
Juniperus californica	California juniper
Krameria grayi	ratany
Krameria parvifolia	little-leaved ratany
Larrea tridentata	creosote bush
Lotus rigidus	desert rock pea
Lycium andersonii	box thorn
Petalonyx linearis	long-leaved sandpaper plant
Petalonyx thurberi	sandpaper plant
Peucephyllum schottii	pygmy cedar
Prunus fremontii	desert apricot
Rhus ovata	sugar-bush
Salazaria mexicana	paper-bag bush
Salvia apiana	white sage
Salvia eremostachya	Santa Rosa sage

Salvia vaseyi	wand sage
Simmondsia chinensis	jojoba
Sphaeralcia ambigua	globemallow (desert mallow)
Sphaeralcia ambigua rosacea	apricot mallow
Trixis californica	trixis
Zauschneria californica	California fuchsia

Groundcovers

Mirabilis bigelovii	wishbone bush (four o'clock)
Mirabilis tenuiloba	white four o'clock (thin-lobed)

Vines

Vitis girdiana	desert grape

Accent

Muhlenbergia rigens	deer grass

Herbaceous Perennials

Adiantum capillus-veneris	maiden-hair fern
Carex alma	sedge
Dalea parryi	Parry dalea
Eleocharis montevidensis	spike rush
Equisetum laevigatum	horsetail
Juncus bufonis	toad rush
Juncus effuses	juncus
Juncus macrophyllus	juncus
Juncus mexicanus	Mexican rush
Juncus xiphioides	juncus
Notholaena parryi	Parry cloak fern
Pallaea mucronata	bird-foot fern

Cacti and Succulents

Agave deserti	desert agave
Asclepias albicans	desert milkweed (buggy-whip)
Asclepias subulata	ajamete
Dudleya arizonica	live-forever
Dudleya saxosa	rock dudleya
Echinocereus engelmannii	calico hedgehog cactus
Ferocactus acanthodes	barrel cactus
Fouquieria splendens	ocotillo
Mamillaria dioica	nipple cactus
Mamillaria tetrancistra	corkseed cactus
Nolina parryi	Parry nolina
Opuntia acanthocarpa	stag-horn or deer-horn cholla
Opuntia bigelovii	teddy bear or jumping cholla
Opuntia basilaris	beavertail cactus
Opuntia echinocarpa	silver or golden cholla
Opuntia ramosissima	pencil cholla, darning needle cholla
Yucca schidigera	Mojave yucca, Spanish dagger
Yucca whipplei	Our Lord's candle

APPENDIX E

Prohibited Invasive Ornamental Plants

Prohibited Invasive Ornamental Plants

BOTANICAL NAME	COMMON NAME
Acacia spp. (all species except A. greggii)	(all species except native catclaw acacia)
Arundo donax	giant reed or arundo grass
Atriplex semibaccata	Australian saltbush
Avena barbata	slender wild oat
Avena fatua	wild oat
Brassica tournefortii	African or Saharan mustard
Bromus madritensis ssp. rubens	red brome
Bromus tectorum	cheat grass or downy brome
Cortaderia jubata [syn.C. atacamensis]	jubata grass or Andean pampas grass
Cortaderia dioica [syn. C. selloana]	pampas grass
Descurainia sophia	tansy mustard
Eichhornia crassipes	water hyacinth
Elaegnus angustifolia	Russian olive
Foeniculum vulgare	sweet fennel
Hirschfeldia incana	Mediterranean or short-pod mustard
Lepidium latifolium	perennial pepperweed
Lolium multiflorum	Italian ryegrass
Nerium oleander	oleander
Nicotiana glauca	tree tobacco
Oenothera berlandieri	Mexican evening primrose
Olea europea	European olive tree
Parkinsonia aculeata	Mexican palo verde
Pennisetum clandestinum	Kikuyu grass
Pennisetum setaceum	fountain grass
Phoenix canariensis	Canary Island date palm
Phoenix dactylifera	date palm
Ricinus communis	castorbean
Salsola tragus	Russian thistle
Schinus mole	Peruvian pepper tree
Schinus terebinthifolius	Brazilian pepper tree
Schismus arabicus	Mediterranean grass
Schismus barbatus	Saharan grass, Abu Mashi
Stipa capensis	no common name
Tamarix spp. (all species)	tamarisk or salt cedar
Taeniatherum caput-medusae	Medusa-head
Tribulus terrestris	puncturevine
Vinca major	periwinkle
Washingtonia robusta	Mexican fan palm
Yucca gloriosa	Spanish dagger

Sources: California Exotic Pest Plant Council, United States Department of Agriculture-Division of Plant Health and Pest Prevention Services, California Native Plant Society, Fremontia Vol. 26 No. 4, October 1998, The Jepson Manual; Higher Plants of California, and County of San Diego Department of Agriculture.

APPENDIX F

USFWS IPAC Report

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901

In Reply Refer To:
Project Code: 2022-0085965
Project Name: Thermal Equestrian Center

September 15, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A biological assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a biological assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a biological assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found at the Fish and Wildlife Service's Endangered Species Consultation website at:

https://www.fws.gov/endangered/what-we-do/faq.html

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

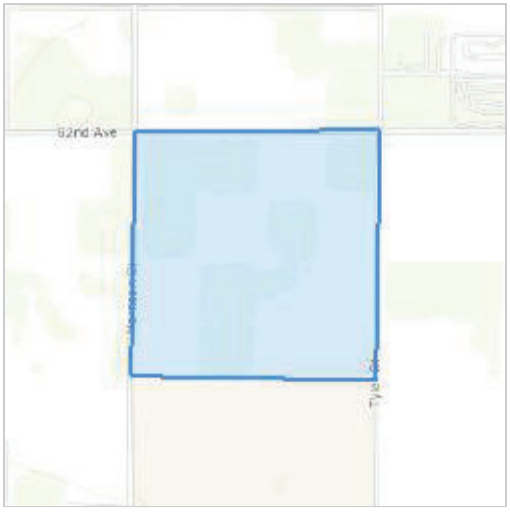
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

Project Summary

Project Code: 2022-0085965
Project Name: Thermal Equestrian Center
Project Type: New Constr - Above Ground
Project Description: The proposed Thermal Equestrian Center project is located on 622 acres of land between 62nd Avenue to the north, 64th Avenue to the south, Harrison Street to the west, and Tyler Street to the east in Thermal, California. The project proposal includes low, medium, and high density residential housing. It also proposes inclusion of horse stables, grazing, and training areas, a golf course, and a small lake to be used for recreational purposes.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@33.59113525,-116.17269683512762,14z



Counties: Riverside County, California

Endangered Species Act Species

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. 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.

Mammals

NAME	STATUS
Peninsular Bighorn Sheep *Ovis canadensis nelsoni* Population: Peninsular CA pop. There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/4970	Endangered

Birds

NAME	STATUS
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Yuma Ridgway"s Rail *Rallus obsoletus yumanensis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3505	Endangered

Reptiles

NAME	STATUS
Coachella Valley Fringe-toed Lizard *Uma inornata*	Threatened
There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2069	
Desert Tortoise *Gopherus agassizii*	Threatened
Population: Wherever found, except AZ south and east of Colorado R., and Mexico There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/4481	

Insects

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

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

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