Appendix B

Biological Resource Assessment,

Desert Hot Springs Research and Development Project

Desert Hot Springs, Riverside County, California

Prepared by
Wood Environment & Infrastructure Solutions, Inc.
March 2022

BIOLOGICAL RESOURCE ASSESSMENT

DESERT HOT SPRINGS RESEARCH AND DEVELOPMENT PROJECT
DESERT HOT SPRINGS
RIVERSIDE COUNTY, CALIFORNIA

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1.0 INTRODUCTION

At the request of Terra Nova Planning & Research, this biological resource assessment report (BRAR) was prepared by Wood Environment & Infrastructure Solutions, Inc. (Wood) for the proposed Desert Hot Springs Research and Development Project (project), located in the city of Desert Hot Springs, 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

The Desert Pacific Properties, Inc. (DPP) proposes the development of a proposed industrial park providing facilities for the research, development and cultivation of medical-grade cannabis. The proposed development includes construction of ten (10) free standing buildings and associated parking and other infrastructure. A total of 116,375 square feet of building space will be available ranging from 6,026 s/f to 24,848 s/f per building. The project site is generally located north of Interstate 10, east of State Route 62, and west of Joshua Tree National Park (Figure 1, Appendix A). It is located within portions of Section 1; Township 3 South; Range 4 East as shown on the United States Geological Survey (USGS) *Desert Hot Springs*, California, 7.5-minute topographic quadrangle (Figure 2, Appendix A). The project site is specifically located north of 16th Street, south of 15th Street, east of Little Morongo Road, and west of Atlantic Avenue (Figure 3, Appendix A). The geographic coordinates near the approximate center of the project area, are 33.935889° north latitude and -116.526682° west longitude. The elevation of the project site ranges from approximately 916 to 943 feet above mean sea level.

Implementation of the proposed project would provide a medical grade cannabis cultivating complex including a walled and gated environment with armed guards for 24-hour protection. The proposed project is included under proposed tentative parcel map 37138.

3.0 REGULATORY FRAMEWORK

3.1 Federal

3.1.1 Federal Endangered Species Act

The United States Fish and Wildlife Service (USFWS) and the National Oceanographic and Atmospheric Administration's National Marine Fisheries Service (NMFS) enforce the provisions stipulated within the Federal Endangered Species Act of 1973 (hereafter, "FESA," 16 USC Section 1531 et seq.). Threatened and endangered species on the Federal list (50 CFR Section 17.11, and 17.12) are protected from take, defined as direct or indirect harm, unless a Section 10 permit is granted to an entity other than a federal agency or a Biological Opinion with incidental take provisions is rendered to a federal lead agency via a Section 7 consultation. Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed species may be present in the study area and determine whether the proposed project will have a potentially significant impact upon such species. Under FESA, habitat loss is considered to be an impact to a species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species that is proposed for listing under FESA or to result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536[3], [4]). Therefore, project related impacts to these species or their habitats would be considered significant and would require mitigation. Other federal agencies (i.e., U.S. Forest Service, Bureau of Land Management) designate species of concern (species that have the potential to become listed), which are evaluated during environmental review although they are not otherwise protected under

FESA. Project related impacts to such species would also be considered a significant impact and may require mitigation.

3.1.2 Clean Water Act

3.1.2.1 Section 401

Pursuant to Section 401 of the Clean Water Act (CWA), states can certify or deny federal permits or licenses that might result in a discharge to state waters, including wetlands (33 USC 1341). Section 404 permit applicants must obtain a “water quality certification” from the state water quality agency indicating that the proposed activity complies with all applicable state water quality standards, limitations, and restrictions. In California, the Regional Water Quality Control Boards (RWQCB) issue water quality certifications within their jurisdictions. The RWQCB reviews the project for consistency with Waste Discharge Requirements under the state land disposal regulations (Subchapter 15). In reviewing the project, the RWQCB will also consider impacts to waters of the State of California (WSC), in addition to filling of wetlands, in accordance with the state wetland policy. Usually, mitigation is required (if not already a condition of the 404 permit) in the form of replacement or restoration of adversely impacted WSC.

3.1.2.2 Section 404

The U.S. Army Corps of Engineers (USACE) has primary federal responsibility for administering regulations that concern waters of the U.S. (WUS) (including wetlands), under Section 404 of the CWA. Section 404 of the CWA regulates the discharge of dredged or fill material into WUS. The USACE requires that a permit be obtained if a project proposes the placement of structures within, over, or under navigable waters and/or discharging dredged or fill material into waters below the ordinary high water mark (OHWM). The USACE has established a series of nationwide permits (NWP) that authorize certain activities in waters of the U.S.

3.1.3 Federal Migratory Bird Treaty Act

Treaties signed by the United States, 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 this document. The Secretary of the Interior can issue permits for incidental take of migratory bird species. The Migratory Bird Treaty Act (MBTA) also allows the Secretary of the Interior to grant permits for specific actions for the incidental take of these protected migratory bird species, but it rarely, if ever, happens.

3.2 State

3.2.1 California Environmental Quality Act

The basic goal of the CEQA is to maintain a high-quality environment now and in the future and 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.

The CEQA applies to "projects" proposed to be undertaken or requiring approval by State and local government agencies. Projects are activities which 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, the CEQA requires one of these public agencies to serve as the "lead agency."

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

1) Determine if the activity is a "project" subject to the CEQA;

2) Determine if the "project" is exempt from the CEQA;

3) 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 CEQA Guidelines provides criteria to lead agencies in determining whether a project may have significant effects.

The purpose of an EIR is to provide state and local agencies and the general public with detailed information on the potentially significant environmental effects which a proposed project is likely to have and to list ways in which the significant environmental effects may be minimized and indicate alternatives to the project.

Project-related impacts to special status species covered under the CVMSHCP would be fully mitigated through payment of the requisite development fee and participation in the plan. Impacts to species not covered under the CVMSHCP must not exceed the significance thresholds as defined by the CEQA. Project design can incorporate avoidance, minimization and/or mitigation measures can be developed and implemented to reduce significant impacts to levels less than significant (where applicable).

3.2.2 **California Endangered Species Act**

The California Endangered Species Act (CESA) of 1970 (CDFG Code Section 2050 et seq., and CCR Title 14, Subsection 670.2, 670.51) prohibits the take (interpreted to mean the direct killing of a species) of species listed under CESA (14 CCR Subsection 670.2, 670.5). Under CESA, state agencies are required to consult with the CDFG when preparing CEQA documents. Consultation ensures that proposed projects or actions do not have a negative effect on state-listed species. During consultation, CDFG determines whether take would occur and identifies “reasonable and prudent alternatives” for the project and conservation of special-status species. CDFG can authorize take of a state-listed species if an incidental take permit is issued by the Secretary of the Interior or Commerce in compliance with FESA, or if the director of CDFG issues a permit under Section 2080 in those cases where it is demonstrated that the impacts are minimized and mitigated. A CESA permit must be obtained if a project will result in the take of listed species, either during construction or over the life of the project. Under CESA, CDFG is responsible for maintaining a list of threatened and endangered species designated under state law (CDFG Code 2070). CDFG also maintains lists of species of special concern, which serve as “watch lists.” Pursuant to the requirements of CESA, a state or local agency reviewing a proposed project within its jurisdiction must determine whether any state-listed species may be present in the project area and determine whether the proposed project will have a potentially significant impact upon such species. Project related impacts to species on the CESA list would be

considered significant and require mitigation. Impacts to species of concern would be considered significant under certain circumstances.

3.2.3 Section 2081 of the State Fish and Game Code

Under Section 2081 of the California Fish and Game Code, the California Department of Fish and Wildlife (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.

3.2.4 Section 3505.5 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.

3.2.5 Sections 3503, 3505.5, & 3513 of the State Fish and Game Code

Section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3505.5 makes it unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds-of-prey, i.e.: owls, hawks, eagles, etc.) or to take, possess, or destroy the nest or eggs of any bird-of-prey. Section 3513 makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA.

3.3 Regional

3.3.1 Coachella Valley Multiple Species Habitat Conservation Plan

Finalized in October 2008, 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 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 (Caltrans) (CVAG 2008).

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, 2016).

3.3.2 City of Desert Hot Springs General Plan

The City of Desert Hot Springs' (City) General Plan outlines policy, goals, standards, and guidelines for the physical development of the lands; residential, commercial, and industrial structures; circulation; recreation; open space and conservation; safety; air quality; noise; and community design which are set forth in the City's General Plan and Zoning Ordinance. More specifically, the City's Planning Division is responsible for the physical planning which includes development review, analysis and compliance, environmental review, long-range planning, and development policies.

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 1-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 2022b)
- California Native Plant Society's (CNPS) Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2022a)
- CVMSHCP (CVAG 2008, 2016)
- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2022a. Web Soil Survey
- USGS 7.5' *Desert Hot Springs, Calif.* quadrangles (USGS 2022)
- City of Desert Hot Springs General Plan (City of Desert Hot Springs 2021)

Scientific nomenclature for this document follows standard reference sources: For plant communities, CVMSHCP (CVAG 2008, 2016), Sawyer et. al (2009), and Holland (1986) for flora, Jepson eFlora (2022) and the USDA NRCS PLANTS Database (2022b); 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 23 February 2022 by Wood Senior Wildlife Biologist Nathan Moorhatch and Wood Biologist Alec Williams. On-site suitable habitat 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 entire site and adjacent properties (where accessible) were assessed on foot to record pertinent field data and current site conditions. 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*). 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.

5.0 RESULTS

The un-fenced triangular-shaped project site is largely undeveloped natural open-space. Similar natural open-space continues to the south. Little Morongo Road and an existing self-storage facility occur to the west. North and east of the project site is the channelize portion of Mission Creek, followed by undeveloped natural open-space. The project site is in an area that is designated as an “industrial cannabis zone” under the city’s general plan existing land use designations (City of Desert Hot Springs 2021). Representative site photos are included in Appendix D.

5.1 Coachella Valley Multiple Species Habitat Conservation Plan

The project is not located within any of the CVMSHCP-designated conservation areas. However, it is located immediately west of the Upper Mission Creek/Big Morongo Canyon Conservation Area (Figure 5, Appendix A). No wildlife corridors or biological linkages are mapped on or adjacent to the project site. The project site is located within the city limits of Desert Hot Springs, which as of 2016 is a signatory to the CVMSHCP.

5.2 Weather Conditions

Weather conditions during the field assessment were cool with a brief rainfall in the early afternoon. Skies were cloudy with 100% cloud cover. Temperatures ranged from 49 to 55 degrees Fahrenheit. Winds were calm with wind speeds measured between 0 to 5 miles per hour.

5.3 Topography and Soils

The proposed project is relatively flat. A single soil series occurs on the project site. This includes Carsitas fine sand, 0 to 5 percent slopes (Soil Survey Staff 2022) (Figure 4, Appendix A).

The Carsitas fine sand soils are excessively drained soils found in nearly level to gently sloping areas on alluvial fans, fan aprons, valley fills, dissected remnants of alluvial fans, and in drainageways. These soils consist of fine sand from a depth of 0 to 10 inches and then gravelly sand from 10 to 60 inches. Carsitas soils are formed in sandy alluvium derived from granite. The soils are non-saline to slightly saline and are located within an area that rarely floods. This soil series is associated with 96.3 percent of the project site.

The field surveys confirmed that on-site soils and substrates are typical of this area and consistent with the soil mapping (Figure 4 - Appendix A). Although sandy, the site does not appear to contain active sand dunes. No drifts, hummocks, rock outcrops, significant rocky areas, clay lenses, springs, seeps, or bodies of water were detected. Additionally, no creeks, rivers, dry washes, streams, lakes, ponds, or vernal pools are mapped or were observed on the project site. Mission Creek, an ephemeral, dry wash is located immediately to the east of the project site.

5.4 Vegetation

The on-site vegetation community is Sonoran creosote bush scrub (CVAG 2008). Sawyer et. al. (2009) refers to this community as "Larrea tridentata-Ambrosia dumosa shrubland alliance (creosote bush-white bursage scrub)" (Figure 6, Appendix A). Dominant perennial plant species observed included creosote bush (*Larrea tridentata*) and burrobush (*Ambrosia dumosa*). The dominant annual species, identified entirely through the presence of dead remnants was Sahara mustard (*Brassica tournefortii*). Other representative, but less abundant plant species observed included, Nevada jointfir (*Ephedra nevadensis*), silver cholla (*Cylindropuntia echinocarpa*), Mojave indigo bush (*Psorothamnus arborescens*), Mediterranean schismus (*Schismus barbatus*) and red-stemmed filaree (*Erodium cicutarium*). Sonoran creosote bush scrub is the predominant vegetation community occurring below 762 m (2500 ft) in the Colorado Desert from the Little San Bernardino Mountains south and eastward into Arizona and Mexico (Holland 1986). No wetland, riparian or otherwise special-status vegetation communities were observed on the project site. A list of the plant species observed during the surveys, including common and scientific names, is appended to this report (Appendix B).

5.5 Wildlife

Vertebrate wildlife directly observed and/or detected otherwise (e.g., scat, bones, tracks, feathers, burrows, etc.) during the surveys was not notably diverse or abundant, limited to only nine species common to the region. This included one reptile, four birds and three mammals (Appendix C).

The reptile observed on-site included side-blotched lizard (*Uta stansburiana*), which is a common reptile species in the Coachella Valley. Other common reptiles expected to occur on-site include but are not limited to zebra-tailed lizard (*Callisaurus draconoides*), western whiptail (*Aspidoscelis tigris*), desert iguana (*Dipsosaurus dorsalis*), desert horned lizard (*Phrynosoma platyrhinos*), red coachwhip (*Coluber flagellum*), glossy snake (*Arizona elegans*), Colorado Desert shovel-nosed snake (*Chionactis occipitalis annulata*), Colorado Desert sidewinder (*Crotalus cerastes laterorepens*). The site supports no suitable habitat for amphibians of any kind.

The four bird species observed onsite included: turkey vulture (*Cathartes aura*), common raven (*Corvus corax*), Horned lark (*Eremophila alpestris*), and white-crowned sparrow (*Zonotrichia leucophrys*). Other common species expected to occur include but are not limited to red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*) and greater roadrunner (*Geococcyx californianus*).

The three mammals detected on-site included desert cottontail (*Sylvilagus audubonii*), black-tailed jackrabbit (*Lepus californicus*) and coyote (*Canis latrans*). Larger carnivores such as the desert kit fox (*Vulpes macrotis*) and/or bobcat (*Lynx rufus*) were not detected, however, there is potential for them to forage on or move through the site.

It should be noted that relatively short-term biological studies of this nature are often limited by the seasonality of annual plants, the migratory habits of many birds, the fossorial and nocturnal habits of many mammals and reptiles, and the timing of field surveys. A complete inventory of the wildlife on the site would require extensive year-round surveys for birds, amphibians, and reptiles, and additional surveys, such as placement of scent stations or tracking stations, for the detection of nocturnal animals.

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 and the CNPPA. Others have been identified, and are managed as sensitive by the USFWS, CDFW, United States Forest Service (USFS), Bureau of Land Management (BLM) 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.

One special status species, loggerhead shrike (*Lanius ludovicianus*), was observed on-site during the assessment (Appendix B). This species is not listed as threatened or endangered, however is designated as a California Species of Special Concern (CSC), while nesting, by the CDFW. The literature review resulted in 30 special biological resources occurring, or potentially occurring in the vicinity (3 mile radius) of the project site. Tables 1-3 provide a summary of these resources, their current conservation status, habitat associations and potential to occur on the project site.

Table 1. Special Status Plants

Species	Protective Status	Habitat	Flowering Period	Occurrence Probability
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	**High** Marginally suitable habitat present, 2006 CNDDB record from project site, not observed during current field survey, but may not be optimal year for identification
Astragalus tricarinatus triple-ribbed milkvetch	F: END C: None CNPS List: 1B.2 State Rank: S2 MSHCP: Yes (site contains Core habitat for this species)	Sandy or gravelly areas in Joshua tree woodland & Sonoran Desert scrub, 450-1,190 m (1,476-3,904 ft.) AMSL.	February - May	**Absent** Habitat potentially suitable, but records from the vicinity are in the hills to the north (closest is within 5 mi). Project site below elevation limit for this species
Chorizanthe xanti var. *leucotheca* white-bracted spineflower	F: None C: None CNPS List: 1B.2 State Rank: S3 MSHCP: No	Sandy or gravelly areas in Mojave Desert scrub, pinyon-juniper woodland, and coastal scrub; 300-1200 m (984-4003 ft.) AMSL.	April - June	**Absent** Habitat lacking, project site is below elevation limit for this species.
Dodecahema leptoceras slender-horned spineflower	F: END C: END CNPS List: 1B.1 State Rank: S1 MSHCP: No	Chaparral, cismontane woodland, alluvial fan coastal scrub (sandy); 200-760 m (656-2493 ft.) AMSL.	April - June	**Absent** Only record from Whitewater Canyon is from 1876, author has extensive survey experience w/ this species and observed that habitat is lacking

Species	Protective Status	Habitat	Flowering Period	Occurrence Probability
Eriastrum hardwoodii Harwood's eriastrum	F: END C: END CNPS List: 1B.2 State Rank: S2 MSHCP: No	Desert Dune Sandy Soils 15-1100 m (49-3608 ft.) AMSL.	March - July	**Absent** Only record in Mission Creek from 1939, 5 miles northwest of the project site. No suitable dune habitat on-site.
Euphorbia arizonica Arizona spurge	F: ND C: ND CNPS List: 2B.3 State Rank: S3 CVMSHCP: No	Sandy habitats in Sonoran Desert scrub, from 165 – 985 feet.	March - April	**Absent** Very few records in Riverside Co., most well south of project area, none in project area.
Euphorbia misera cliff spurge	F: ND C: ND CNPS List: 2B.2 State Rank: S2 CVMSHCP: No	Usually found in coastal bluff scrub overlooking the ocean, but a relict population used to be found on the east flank of Whitewater Canyon.	December - August	**Absent** The only known location is on the east cliff wall of Whitewater Canyon, site does not have the habitat required by this species.
Linanthus maculatus ssp. *maculatus* Little San Bernardino Mountains linanthus	F: None C: None CNPS List: 1B.2 State Rank: S2 MSHCP: Yes (site contains Other Conserved Habitat for this species)	Desert dunes, Mojave Desert scrub, Sonoran Desert scrub, Joshua tree woodland, often associated w/ wash habitats; 140-1,220 m (459-4,003 ft.) AMSL.	March - May	**Moderate** Habitat suitable, 2001 CNDDB record from 2.5 mi. to the northwest
Mentzelia tricuspis spiny-hair blazing star	F: None C: None CNPS List: 2B.1 State Rank: S2 MSHCP: No	Mojave Desert scrub/sandy, gravelly, slopes, and washes; 150-1280 m (492-4199 ft.) AMSL.	March - May	**Absent** Habitat lacking, one 1876 record from Whitewater questionable, no other records in vicinity (A. Sanders pers. com)
Nemacaulis denudata var. *gracilis* Slender cottonheads	F: ND C: ND CNPS: List 2B.2 State Rank: S2 CVMSHCP: No	Sandy places in coastal dunes, desert dunes, & Sonoran Desert scrub. 164-1312 ft.	March – May	**Absent** Habitat lacking, site below known elevational range of species

Table 2. Special Status Vegetation Communities

Community	Protective Status (F=Federal, C=California)	Occurrence Probability
Mesquite Bosque	F: ND C: ND State rank: S2.1 CVMSHCP: No	**Absent** (Habitat not present on or adjacent to the project site)
Desert Fan Palm Oasis Woodland	F: ND C: ND State rank: S3.2 CVMSHCP: No	**Absent** (Habitat not present on or adjacent to the project site)

Table 3. Special Status Wildlife

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Invertebrates			
Stenopelmatus cahuilaensis Coachella Valley Jerusalem cricket	F: ND C: ND State rank: S1S2 CVMSHCP: Yes	Dune and sand field habitats in the eastern San Gorgonio Pass and southwestern Coachella Valley areas.	**Absent** Site is not in the currently understood range of the species.
Reptiles			
Gopherus agassizii desert tortoise	F: THR C: THR State rank: S2S3 CVMSHCP: Yes	Inhabits desert scrubs, washes (most desert habitats), prefers creosote bush scrub over alkaline plant communities. Blooming annuals are an important food source.	**Low – Absent** Potentially suitable habitat present, but no burrows capable of supporting tortoises seen onsite, site is also directly adjacent to a well-used paved road (mortalities) and developed areas. CNDDB recorded occurrence is 6 miles northeast of the site.
Phrynosoma blainvillii coast horned lizard	F: ND C: CSC State rank: S3S4 CVMSHCP: No	Found in a wide variety of habitats (primarily cismontane), most common in lowlands along sandy washes with riparian, coastal sage scrub, or chaparral vegetation.	**Absent** Not the expected species of horned lizard at this desert location, desert horned lizard (*Phrynosoma platyrhinos*) would be the expected species). CNDDB record is from upper Whitewater Cyn >6 miles west of site.)
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.	**Low - Absent** Habitat potentially suitable, but site is small and located near developed areas and paved roads, nearest CNDDB record (1994) is from ~2.5 miles south of the site south of Hwy 111
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)	**Low - Absent** Habitat lacking, sandy areas are fluvial in nature, not high quality aeolian. Several CNDDB records from project vicinity, most are from 2013)
Crotalus ruber red-diamond rattlesnake	F: ND C: CSC State rank: S3 CVMSHCP: No	Inhabits a variety of habitats including chaparral, woodland, grassland, and desert edge areas from Coastal San Diego County to eastern slopes of mountains bordering the Colorado Desert.	**Low - Absent** More common in desert edge areas [rocky], INaturalist records north of site near Little San Bernardino Mountains
Birds			

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Aquila chrysaetos golden eagle	F: MBTA, BCC C: WL, FP State: S3 CVMSHCP: No	Foothill and mountain areas, open flats and desert areas. Needs cliffs or cliff-walled canyons for nesting, sometimes large trees.	**Nesting: Absent** No potentially suitable habitat present on or adjacent to site **Foraging: Low** Small site near developed areas
Athene cunicularia burrowing owl	F: MBTA, BCC C: CSC 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** Potentially suitable habitat present but no burrows observed during initial site visit **Foraging: Low - Moderate** 2004 CNDDB record directly adjacent to SE corner of project site, breeding suspected in 2007 – no recent sign observed during this site survey)
Falco mexicanus Prairie falcon	F: MBTA, BCC C: WL State: S4 CVMSHCP: No	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	**Nesting: Absent** Suitable nesting habitat lacking **Foraging: Low - Moderate** If nesting in greater region & during migration
Lanius ludovicianus Loggerhead shrike	F: MBTA, BCC C: CSC State rank: S4 CVMSHCP: No	Prefers open fields with scattered trees or shrubs, open country with short vegetation, pastures, old orchards, cemeteries, golf courses, riparian areas, and open woodlands.	**Nesting: Moderate-High** Suitable nesting habitat present, species detected **Foraging: Occurs** Observed in the vicinity of the project site
Toxostoma lecontei LeConte's thrasher	F: BCC C: CSC (San Joaquin population only) 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** Habitat present but limited (lacking dense spiny shrubs), species in region not CSC San Joaquin pop.) **Foraging: Low** Same as above, small site near developed areas
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, primarily in San Diego, Santa Barbara, and Riverside Counties. Needs dense shrub cover within 1 to 2 meters (3 to 6 feet) of the ground for nesting, and stratified canopy for foraging	**Nesting: Absent** No nesting habitat present on or adjacent to project site **Foraging: Absent** No riparian habitat w/ requisite tree species and understory species present
Mammals			

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Chaetodipus fallax pallidus Pallid San Diego pocket mouse	F: ND C: CSC State rank: S3S4 CVMSHCP: No	Desert border areas in desert wash, desert scrub, desert succulent scrub, pinon-juniper, etc. Associated with sandy herbaceous areas usually in association with rocks or coarse gravel from sea level to 1350 m (4500 ft).	**Absent** Site largely outside preferred range of species and lacking rocky and/or coarse gravelly substrates.
Corynorhinus townsendii Townsend's big-eared bat	F: ND C: CSC State rank: S2 CVMSHCP: No WBWG: H	Occurs throughout the state in a variety of habitats, most common in mesic areas though. Roosting sites (walls and ceilings of enclosed areas) are limited, and this species is extremely sensitive to human disturbance.	**Absent** Habitat lacking, human presence and activity in the immediate project vicinity likely too much for this extremely sensitive species; slightly higher potential for foraging over the Mission Creek channel bordering the east side of the site.
Neotoma lepida intermedia San Diego desert woodrat	F: ND C: CSC State rank: S3S4 CVMSHCP: No	Most often in Coastal scrub in southern California (San Diego to San Luis Obispo Counties) but does range into desert areas. Most common in areas with rock outcrops, cliffs, and slopes.	**Low** Site lacks rocky habitat, no "stick nests" characteristic of this species observed on site during survey. Cacti and succulent plants largely absent, 1995 CNDDB record from ~5 miles west of site.
Ovis canadensis nelsoni pop 2 Peninsular bighorn sheep DPS	F: END C: THR, FP State rank: S2 CVMSHCP: Yes	Eastern slopes of the Peninsular Ranges generally below 4,600 ft. elev., range of this DPS is from the San Jacinto Mtns. South to the international border. Optimal habitat includes steep-walled canyons and ridges bisected by rocky/sandy washes w available water.	**Absent** No suitable habitat on site, site is adjacent to, but not actually in the inhabited range of the subspecies.
Perognathus longimembris bangsi Palm Springs pocket mouse	F: BLM Sensitive C: CSC State Rank: S2 CVMSHCP: Yes	Sonoran Desert habitats with level to gently sloping topography, sparse to moderate vegetative cover, and loosely packed or sandy soils.	**Low** Potentially suitable habitat present, CNDDB record from Mission Creek ~4 miles NW of site.
Xerospermophilus tereticaudus chlorus Coachella Valley (Palm Springs) round-tailed ground squirrel	F: ND C: CSC 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.	**Low – Moderate** Suitable habitat limited, CNDDB record is from 1940, over 10 miles southeast of site

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: Birds of Conservation Concern
C: Candidate for Federal listing
ND: Not designated.
BCC: Bird of Conservation Concern.

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.

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

California Native Plant Society (CNPS) designations: (Non-regulatory, compilation by a non-profit organization which tracks rare plants)
CNPS 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.

Definitions of occurrence probability:
Occurs: Observed on the site by AMEC 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.

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.

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.

5.7 Discussion of the Special-status Species Tables

A review of the CNDDB, CNPS and the collective knowledge of Wood senior biologists resulted in a total of 30 special status biological resources that are known from the vicinity of the project site (Tables 1-3). These include: ten plants, two vegetation communities, one invertebrate, five reptiles, 6 birds and 6 mammals. Of these, twenty-two (22) are absent from the site due to a lack of suitable habitat and/or the location of the site is outside of the known elevational range requirements. These include: triple-ribbed Milkvetch (*Astragalus tricarinatus*), white bracted spineflower (*Chorizanthe xanti* var. *leucotheca*) , slender horned spineflower (*Dodecahema leptoceras*), Harwood's eriastrum (*Eriastrum hardwoodii*), Arizona surge (*Euphorbia arizonica*), cliff spurge (*Euphorbia misera*), spiny hair blazing star (*Mentzelia tricuspis*), slender cottonheads (*Nemacaulis denudata* var*. gracilis*), mesquite bosque, desert fan palm oasis woodland, Coachella Valley Jerusalem cricket (*Stenopelmatus cahuilaensis*), desert tortoise (*Gopherus agassizii*), coastal horned lizard (*Phrynosoma blainvillii*), flat-tailed horned lizard (*Phrynosoma mcallii*), Coachella valley fringed toed lizard (*Uma inornata*), red-diamond rattlesnake (Crotalus ruber), golden eagle (*Aquila chrysaetos*), prairie falcon (*Falco mexicanus*), LeConte's thrasher (*Toxostoma lecontei*), least Bell's vireo (*Vireo bellii pusillus*), Townsend's big-eared bat (*Corynorhinus townsendii*), Peninsular big-horn sheep (*Ovis canadensis nelsoni* pop. 2). These special status biological resources will not be discussed further.

Five (5) of the remaining eight (8) species are fully covered and conserved under the CVMSHCP. Participation in the CVMSHCP, payment of the CVMSHCP development/mitigation fee and participation in the plan is expected to fully mitigate project related impacts (if any) to these species, with some exceptions (if projects are within a conservation area or are covered under additional protection). Conserved species considered to have some potential of occurrence include Coachella Valley milk vetch (*Astragalus lentiginosus* var. *coachellae*), little San Bernardino Mountains linanthus (*Linanthus maculatus* ssp*. maculatus*), burrowing owl (*Athene cunicularia*), Palm Springs pocket mouse (*Perognathus longimembris bangsi*), and Coachella round-tailed ground squirrel (*Xerospermophilus tereticaudus*). Since the project site is not within a conservation area, no additional protocol-level surveys are required under the MSHCP.

Suitable habitat for burrowing owl was observed within the project site and a known record of burrowing owl is located immediately adjacent to the project site within Mission Creek (2013). During the reconnaissance-level survey, no suitable burrows were identified within the project site. For these reasons, the potential for burrowing owl to occur within the project site low, however, we can't rule out the possibility that burrowing owls may utilize the project site for foraging. This species nests and roosts underground and is particularly sensitive to ground disturbing activities, loud noise created by operation of heavy equipment up to 500 feet away and may abandon nests or burrows if/when such activities occur.

Therefore, in addition to on-site impacts, potential direct and indirect impacts to burrowing owls potentially occurring in nearby off-site locations, must also be considered. The burrowing owl is not listed as threatened or endangered by the USFWS or CDFW. It is, however, managed as a Bird of Conservation Concern (BCC) by the USFWS and designated as a California Species of Concern (CSC) by the CDFW. It is also protected under the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code 3505.5. The burrowing owl is a covered species under the CVMSHCP, however the federal permit for the CVMSHCP does not allow take of this species under the MBTA. Since suitable burrows were not identified within the project site, full focused presence/absence surveys will not be required. However, to ensure that no direct or indirect impacts to burrowing owl result from project implementation, pre-construction surveys are recommended prior to any vegetation removal or soil disturbance activities.

The remaining three species, which are considered to have some potential to occur and are not covered by the CVMSHCP, are discussed below.

5.7.1 **Potentially Occurring Species Not Covered, or Not Fully Covered Under the CVMSHCP**

Three special status species that are not covered, or not fully covered by the CVMSHCP are considered to have at least some potential to occur on the project site. These include loggerhead shrike (*Lanius ludovicianus*), San Diego pocket mouse (*Chaetodipus fallax pallidus*), and San Diego desert woodrat (*Neotoma lepida intermedia*). Due to a lack of significant rodent burrow observations during the site visit, if present, the loss of a few individual San Diego pocket mouse and/or San Diego desert woodrat would not reduce the population size to a less than self-sustaining level in this area. Therefore, impacts to San Diego pocket mouse (*Chaetodipus fallax pallidus*), and San Diego desert woodrat are not considered potentially significant, and no additional discussion is required. Loggerhead shrike, like burrowing owl, is protected under the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code 3505.5. This species is discussed further below.

Loggerhead shrike was observed within the vicinity of the project site during the assessment. This species is also widespread and known to occur throughout the region in a variety of desert habitats, including creosote bush scrub, saltbush scrub and disturbed areas. Loggerhead shrike nests in spiny trees and shrubs, which are intermittently present within the project. It is not listed as threatened or endangered by any of the regulatory agencies, however, is designated as a CSC by the CDFW while nesting, managed as a BCC by the USFWS and afforded protection by California Fish and Game Code 3505.5 while nesting. Due to the presence of suitable habitat intermittently present along and immediately adjacent to the project alignment, Wood considers there to be a high potential for loggerhead shrike to nest on and/or adjacent to the site. Should project-related disturbance be conducted during the 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 loggerhead shrike.

6.0 DISCUSSION

6.1 Potential Impacts of the Proposed Project

The proposed project would impact approximately 7.83 acres of creosote bush scrub. The proposed medical grade cannabis cultivating complex project includes the development of 10 individual buildings and associated infrastructure and parking within the city of Desert Hot Spring, Riverside County, California. Since the project is located within the city of Desert Hot Spring, it is Wood's understanding that the entire project will require CVMSHCP consistency. The project falls within the CVMSHCP plan area but is not within a conservation area. The applicant will be required to pay the CVMSHCP fee for the proposed development.

CVMSHCP-covered species potentially occurring on and/or immediately adjacent to the alignment include Coachella Valley milk vetch, little San Bernardino Mountains linanthus, burrowing owl, Palm Springs pocket mouse, and Coachella round-tailed ground squirrel. Although there is potential (very low to moderate) for these species to occur, respectively, on and/or immediately adjacent to the project site, the CVMSHCP provides full coverage for covered species for plan participants. Signatories, or participants in the plan generally pay a standard development/mitigation fee prior to receiving requisite grading or development permits with some exceptions and special provisions or requirements (i.e., surveys burrowing owl, surveys for other species in the conservation area and nesting birds during the nesting season).

Special status species that are not covered by the CVMSHCP but are considered to have at least some potential to occur include San Diego pocket mouse and San Diego desert woodrat, although extremely low. Since impacts to these species are likely considered adverse, but less than significant under California Environmental Quality Act (CEQA) guidelines, protocol-levels surveys are not required.

Since burrowing owl and loggerhead shrike are also protected under the MBTA and California Fish and Game Code, pre-construction nesting bird clearance surveys will be required within the project footprint plus a 500-foot buffer surrounding the project, if construction activities occur between February and August. This survey should be conducted within 30-days of any ground disturbance or vegetation removal activities associated with the project development to ensure that no burrowing owl or loggerhead shrikes will be impacted by construction activities.

If active nests of any native avian species are found on the site, they will be avoided to the fullest extent possible until after the young have fledged. Additional standard construction measures and best management practices that should be implemented for this project include:

- Worker Environmental Awareness Program (WEAP) training to educate workers about the sensitive biological resources with potential to occur in the project area and how to avoid impacting these species.
- Ensuring that project personnel check under their vehicles prior to moving them for wildlife species that may have crawled under the vehicles while parked.
- Except on maintained public roads designated for higher speeds, driving speeds will not exceed 20 miles per hour.
- To prevent inadvertent entrapment of animals during the construction phase of this project, all excavated, steep-walled holes or trenches more than 2 feet deep should be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.
- No firearms or pets should be brought to the work area.
- Workers must dispose of their trash in trash bags or an approved container and removed from the site. Trash is not to be deposited in the work area or surrounding habitat.

6.1.1 Land Use Adjacency Guidelines

Project-related activities conducted within and/or adjacent the Upper Mission Creek/Big Morongo Canyon Conservation Area are also subject to CVMSHCP Land Use Adjacency Guidelines. The purpose of the guidelines is to avoid or minimize project-related indirect effects adjacent to or within the conservation area. The guidelines are as follows:

Drainage

Proposed development adjacent to or within a conservation area shall incorporate plans to ensure that the quantity and quality of runoff discharged to the conservation area is not altered in an adverse way when compared with existing conditions. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the conservation area.

Toxics

Land uses proposed adjacent to or within a conservation area that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife and plant species, Habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in any discharge to the conservation area.

Lighting

For proposed development adjacent to or within a conservation area, lighting shall be shielded and directed toward the developed area. Landscape shielding or other appropriate methods shall be incorporated in project designs to minimize the effects of lighting adjacent to or within the adjacent conservation area in accordance with the guidelines to be included in the Implementation Manual.

Noise

Proposed development adjacent to or within a Conservation Area that generates noise in excess of 75 dBA Leq hourly shall incorporate setbacks, berms, or walls, as appropriate, to minimize the effects of noise on the adjacent conservation area in accordance with the guidelines to be included in the Implementation Manual.

Invasives

Invasive, non-native plant species shall not be incorporated in the landscape for land uses adjacent to or within a conservation area. Landscape treatments within or adjacent to a conservation Area shall incorporate native plant materials to the maximum extent feasible; recommended native species are listed in CVMSHCP Table 4-112 (Appendix D). Plant species listed in CVMSHCP Table 4-113 shall not be used within or adjacent to a conservation area (Appendix E).

6.1.2 Jurisdictional Areas

The proposed project does not impact any portion of Mission Creek or any tributaries that may fall under the jurisdiction of the USACE, CDFW and/or RWQCB. If the project proposes to disturb or impact any portion of Mission Creek, in any way, a formal wetland delineation report and regulatory permitting may be required.

6.1.3 Additional Bird Species Protected by the Migratory Bird Treaty Act and California Fish and Game Code

Excluded from coverage under the CVMSHCP are a variety of common bird species that are protected by the MBTA and the state Fish and Game Code. This includes virtually all native migratory and resident bird species, including birds known to occur in the vicinity. Avoidance of impacts to these nesting migratory and resident birds is a requirement of the federal permit issued for the CVMSHCP. To avoid impacting nesting birds both within the adjacent conservation area and outside of the conservation area, 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.

7.0 Conclusions

The proposed project occurs within the CVMSHCP planning area and a portion of the project alignment is located immediately adjacent to the Upper Mission Creek/Big Morongo Canyon Conservation Area. CVMSHCP-covered species and special status biological resources are considered to have potential to occur on-site and be potentially affected by implementation of the proposed project, if present. Impacts to these species (if present) and their habitats, are expected to be fully covered and mitigated under the requirements of the CVMSHCP with the payment of the requisite development/mitigation fee and participation in the requirements of the plan, which may include implementation of Land Use Adjacency Guidelines.

Pre-construction nesting bird clearance surveys would also be required for any grading, vegetation clearance, trimming and/or ground disturbance conducted within the nesting season (1 February-31 August) to avoid potential impacts to nesting bird species protected by the MBTA and California Fish and Game Code.

If potential impacts to areas that fall under the jurisdiction of the USACE, CDFW and/or RWQCB, cannot be avoided by project activities, a jurisdictional delineation may be required.

With the implementation of the recommendations above, in addition to any additional measures required by the city of Desert Hot Springs as part of their conditions of approval, 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.

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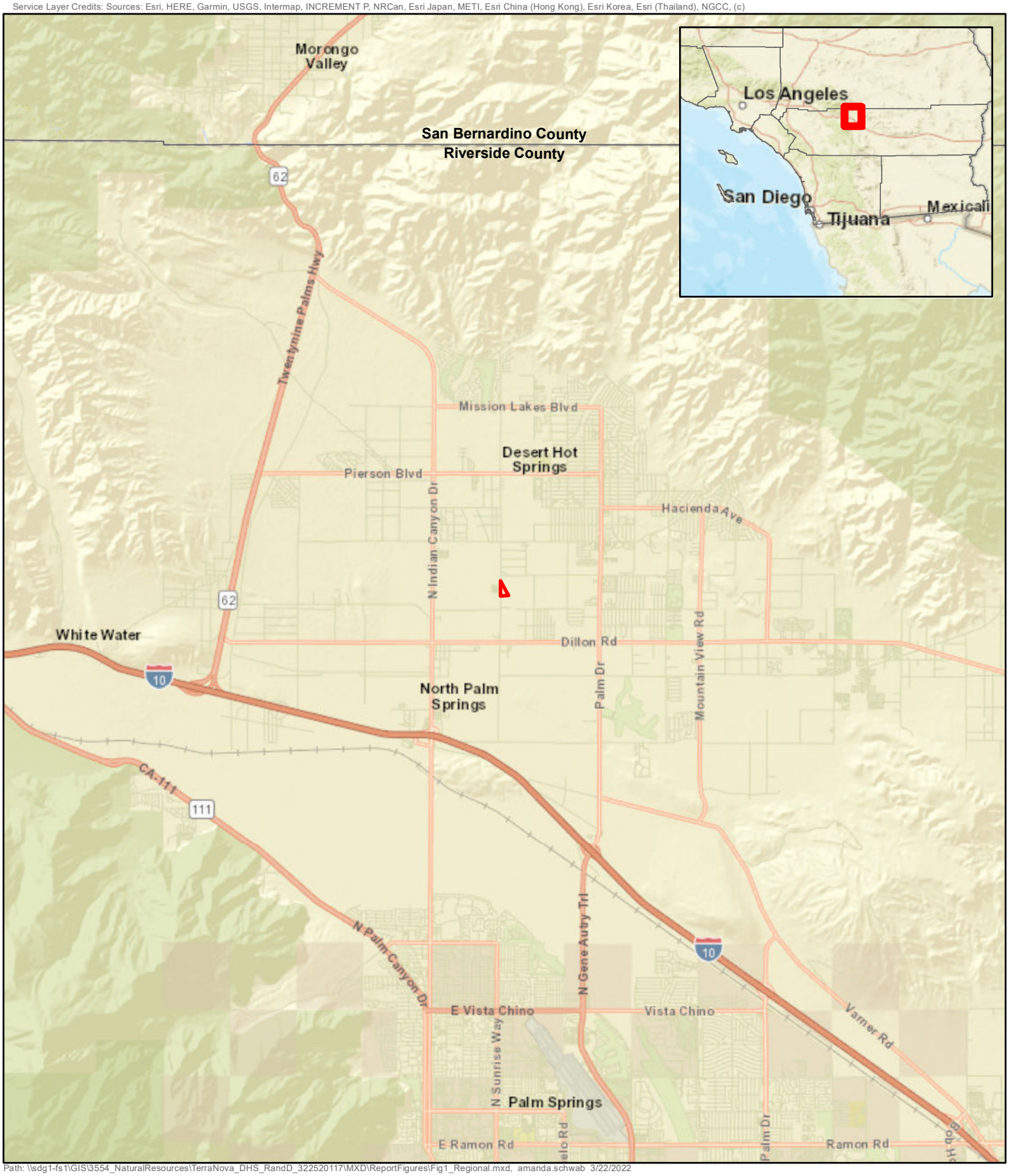
APPENDIX A

FIGURES



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1 inch = 2 miles

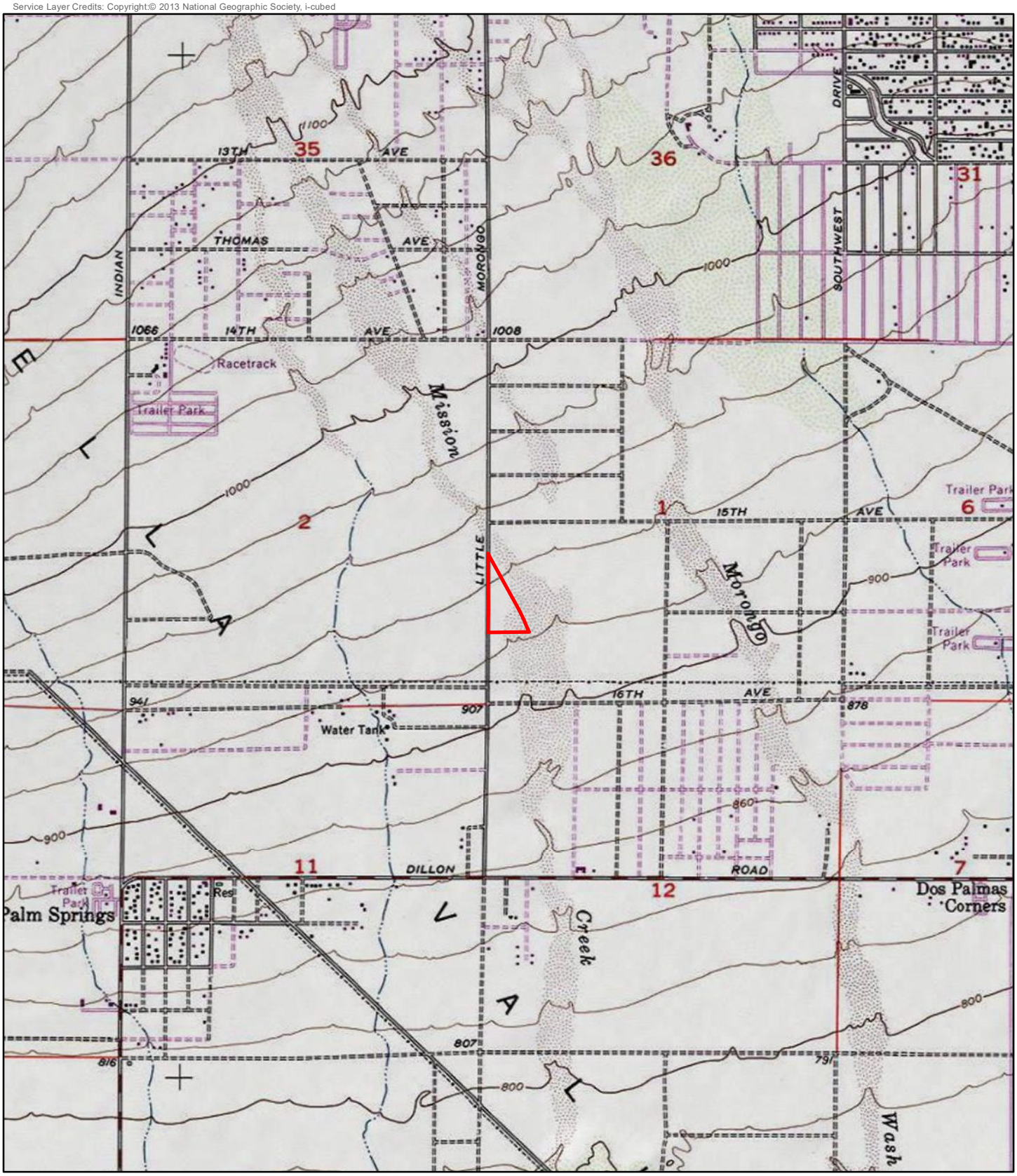
0 1 2 Miles

wood.

Site Boundary

FIGURE 1

Regional Map
Desert Hot Springs R & D Park
Riverside County, California



Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_DHS_RandD_322520117\MXD\ReportFigures\Fig2_USGS.mxd, amanda.schwab 3/23/2022

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

wood.

Site Boundary

FIGURE 2

USGS 7.5' Topo Quad: Desert Hot Springs
Desert Hot Springs R & D Park
Riverside County, California

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 = 500 feet

0 250 500 Feet

wood.

Site Boundary

FIGURE 3

Site Location
Desert Hot Springs R & D Park
Riverside County, California

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 = 500 feet

0 250 500 Feet

wood.

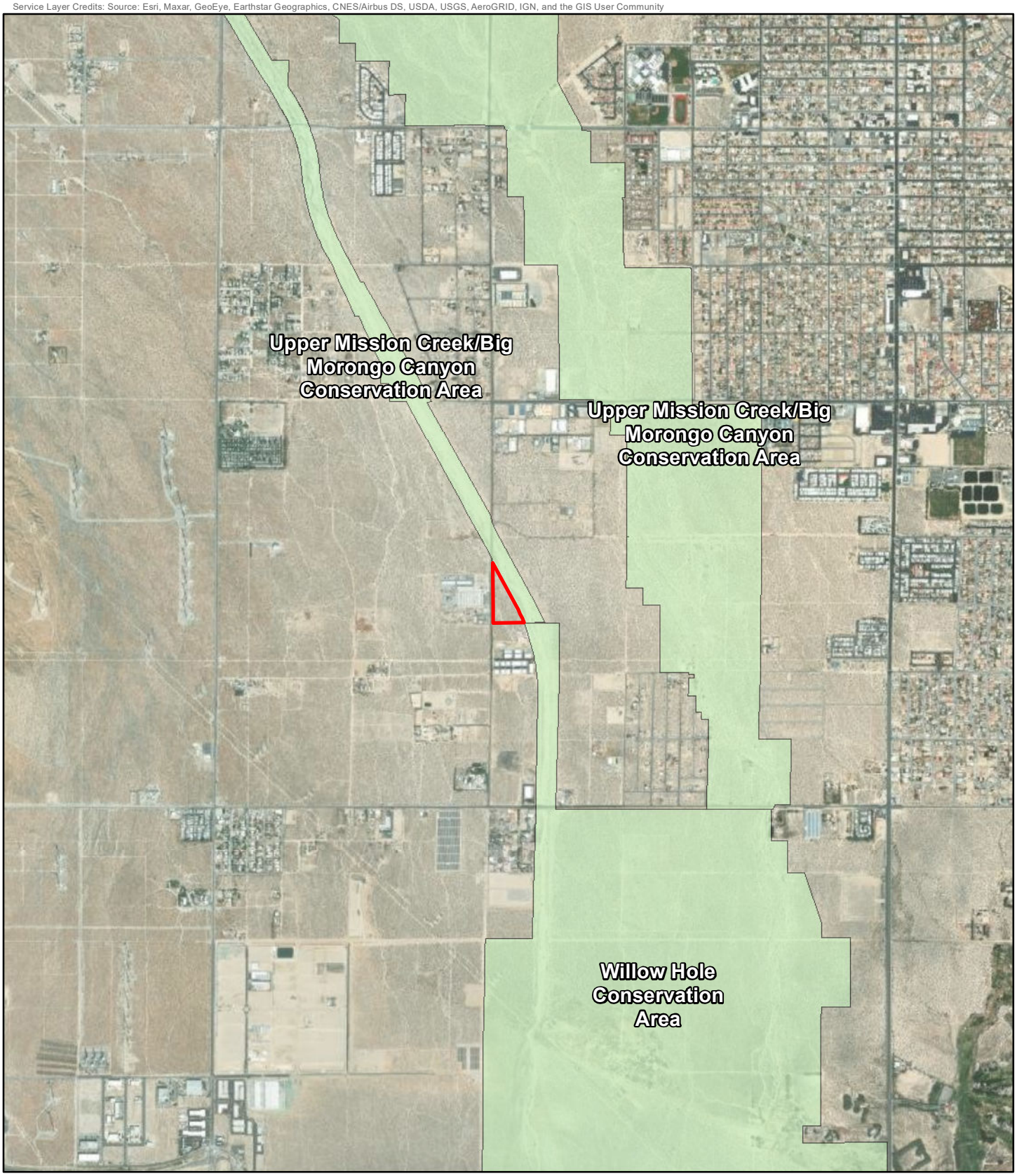
Site Boundary

Project Soils

Carsitas fine sand, 0 to 5 percent slopes

FIGURE 4

Soils
Desert Hot Springs R & D Park
Riverside County, California



Path: \\sdg1-fs1\gis\3554_NaturalResources\TerraNova_DHS_RandD_322520117\MXD\ReportFigures\Fig5_CVMSHP.mxd, aaron.johnson 3/23/2022

1 inch = 0.5 miles

0 0.25 0.5 Miles

wood.

Site Boundary

Conservation Area

FIGURE 5

CVMSHCP
Desert Hot Springs R & D Park
Riverside County, California

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

Path: \\sdg1-fs1\GIS\3554_NaturalResources\TerraNova_DHS_RandD_322520117\MXD\ReportFigures\Fig6_Vegetation.mxd, amanda.schwab 3/23/2022

1 inch = 500 feet

0 250 500 Feet

wood.

Site Boundary

Vegetation

Sonoran Creosote Bush Scrub

FIGURE 6

Vegetation
Desert Hot Springs R & D Park
Riverside County, California

APPENDIX B

PLANTS AND VERTEBRATE WILDLIFE OBSERVED ON THE DESERT HOT SPRINGS 7-ACRE PROJECT SITE

Plants Observed or Detected
Desert Hot Springs 7-Acre Project, Riverside County, California

ANGIOSPERMAE	
DICOTYLEDONEAE	**DICOT FLOWERING PLANTS**
Asteraceae	**Sunflower family**
Ambrosia dumosa	white bur-sage
Ambrosia salsola	cheesebush
Encelia farinosa	brittlebush
Ericameria paniculata	black-banded rabbitbrush
Malacothrix glabrata	desert dandelion
Palafoxia arida	Spanish needles
Rafinesquia neomexicana	desert chicory
Boraginaceae	**Forget-Me-Not family**
Cryptantha angustifolia	narrow-leaved cryptantha
Tiquilia palmeri	Palmer's tiquilia
Tiquilia plicata	krinklemat
Brassicaceae	**Mustard family**
**Brassica tournefortii*	Saharan mustard
**Sisymbrium orientale*	hedge mustard
Chenopodiaceae	**Goosefoot Family**
Atriplex canescens	four-wing saltbush
**Chenopodium murale*	nettle leaf goosefoot
Euphorbiaceae	**Legume Family**
Croton californicus	California croton
Euphorbia polycarpa	smallseed sandmat
Fabaceae	**Legume Family**
Acmispon (sic) strigosus	near strigose lotus
Dalea mollissima	silky dalea
Lupinus arizonicus	Arizona lupine
Psorothamnus arborescens var. *simplicifolius*	California indigobush
Geraniaceae	**Geranium Family**
**Erodium cicutarium*	redstem filaree
Hydrophyllaceae	**Waterleaf Family**
Phacelia crenulata var. *ambigua*	notch-leaved phacelia
Krameriaceae	**Rhatany Family**
Krameria bicolor	white rhatany
Loasaceae	**Loasa Family**
Petalonyx thurberi	sandpaper plant

Nyctaginaceae	**Four O'Clock Family**
Abronia villosa	sand verbena
Onagraceae	**Evening-Primrose Family**
Eremothera boothii	Booth's suncup
Eulobus californicus	California primrose
Papaveraceae	**Poppy Family**
Eschscholzia glyptosperma	desert gold poppy
Solanaceae	**Night Shade Family**
Datura discolor	desert thorn apple
Zygophyllaceae	**Caltrop Family**
Larrea tridentata	creosote bush

MONOCOT ANGIOSPERMS

Poaceae	**Grass Family**
**Schismus* sp.	Mediterranean grass

* - denotes a non-native species

Vertebrate Wildlife Observed or Detected
Desert Hot Springs 7-Acre Project, Riverside County, California

CHORDATES	**CHORDATA**
Phrynosomatidae	**Horned Lizards, Spiny Lizards**
Uta stansburiana	side-blotched lizard
BIRDS	**AVES**
Cathartidae	**New World Vultures**
turkey vulture	*Cathartes aura*
Jays, Magpies, and Crows	**Corvidae**
common raven	*Corvus corax*
Alaudidae	**Larks**
horned lark	*Eremophila alpestris*
Passerellidae	**New World Sparrows**
white-crowned sparrow	*Zonotrichia leucophrys*
MAMMALS	**MAMMALIA**
Rabbits and Hares	**Leporidae**
desert cottontail	*Sylvilagus audubonii*
black-tailed jackrabbit	*Lepus californicus*
Foxes, Wolves, and Relatives	**Canidae**
coyote (scat)	*Canis latrans*

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

APPENDIX C

SITE PHOTOS

Photo 1. Northern-most portion of the site facing south. Little Morongo Boulevard is in the background to the right and Mission Creek is in the background to the left.

Photo 2. Central portion of the project facing south. Vegetation coverage is considered representative of the entire project site.

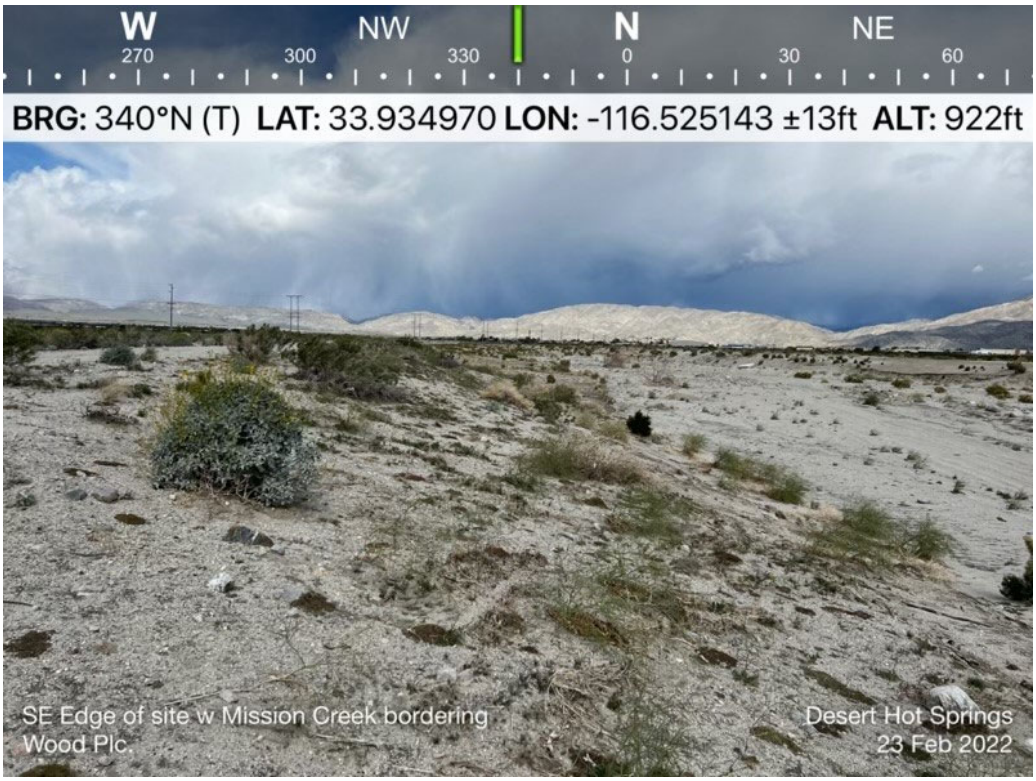


Photo 3. Looking north at the edge of Mission Creek from the southeastern corner of the project site. The project boundary ends at the edge of the dirt access road.

Photo 4. Looking north along the western edge of the project site along Little Morongo Road.

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.