CALIFORNIA PERATINENT OF FISH & WILDLIFE

<u>State of California – Natural Resources Agency</u> DEPARTMENT OF FISH AND WILDLIFE Inland Deserts Region 3602 Inland Empire Boulevard, Suite C-220 Ontario, CA 91764 www.wildlife.ca.gov

June 14, 2021 Sent via e-mail

Governor's Office of Planning & Research

June 15 2021

# STATE CLEARING HOUSE

Patricia Villagomez Associate Planner City of Desert Hot Springs 11999 Palm Drive Desert Hot Springs, CA 92240

DHS 109 PROJECT (PROJECT) INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND) SCH# 2021050334

Dear Ms. Villagomez:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt an Initial Study/Mitigated Negative Declaration (IS/MND) from the City of Desert Hot Springs for the DHS 109 Project (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.<sup>1</sup>

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

# **CDFW ROLE**

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the state (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines, § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

GAVIN NEWSOM, Governor CHARLTON H. BONHAM, Director



<sup>&</sup>lt;sup>1</sup> CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Patricia Villagomez, Associate Planner City of Desert Hot Springs Page 2 of 20

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

## PROJECT DESCRIPTION SUMMARY

## Proponent: City of Desert Hot Springs

**Objective:** The objective of the Project is to construct a 109-acre industrial park that will include cannabis cultivation, manufacturing, and distribution (17.49 acres); general light industrial uses (5.42 acres); energy/utility uses (6.57 acres); 4 retention basins (4.28 acres); a roadway system with 2,879 parking stalls (70.74 acres); and undeveloped land (4.5 acres). The Project will involve construction of 57 lots with "modular industrial buildings" (p. 6 of the IS/MND); carports with solar panels; and a power and reclamation facility, which will involve both thermal and photovoltaic solar arrays, as well as exhaust columns and cooling towers in buildings that are 55 feet in height. The Project would involve installation of 6-foot-tall walls or steel tubular fencing around the perimeter of the site, exterior lighting for security, and landscaping throughout the site.

The cannabis cultivation operation would involve the use of fertilizers, including the use of fertilizers injected into the irrigation system, and would generate wastewater. A sewer connection would be established with Mission Springs Water District (MSWD) to accept wastewater from the Project site. On-site drainage would be captured in the proposed retention basins, as well as increased stormwater runoff due to creation of paved/impervious surfaces. Stormwater that currently flows across the site from the north would be directed into gutters constructed during road improvements and would discharge into Mission Creek. Water would be supplied by MSWD by connecting to existing water lines (MSWD relies entirely on groundwater extracted from subbasins of the Coachella Valley Groundwater Basin).

**Location:** The Project is located on undeveloped land (APNs 665-080-005, 665-080-007, and 665-050-028) southeast of the intersection of Little Morongo Road and 15th Avenue in the City of Desert Hot Springs, Riverside County. Major highways include Interstate 10 to the south and Highway 62 to the west. The Project is situated between Mission Creek (immediately west) and Morongo Wash (immediately east). The site slopes downward to the southwest, toward Mission Creek. The Project is within the Whitewater River watershed. The Whitewater River has its headwaters in the San Bernardino Mountains and drains to the Salton Sea, southeast of the parcel. The Project is located within the Mission Creek subbasin of the Coachella Valley Groundwater Basin.

**Timeframe:** Project construction is expected to start in July 2021 and will be conducted in 4 phases, each including grading, construction, and paving of roads/parking lots: phase 1,

Patricia Villagomez, Associate Planner City of Desert Hot Springs Page 3 of 20

July 2021–December 2023; phase 2, October 2021–November 2023; phase 3, October 2023–October 2025; phase 4, October 2025–October 2027.

## COMMENTS AND RECOMMENDATIONS

CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (i.e., biological resources). The IS/MND has not adequately identified and disclosed the Project's impacts (i.e., direct, indirect, and cumulative) to biological resources and whether those impacts are less than significant. CDFW offers the following comments and recommendations to assist the City in adequately identifying and mitigating the Project's potentially significant impacts to biological resources. In addition to the sections below, CDFW has the following concerns:

- <u>Mitigation measures</u>: Please note that the mitigation measures for biological resources presented on pp. 130–132 of the IS/MND differ from those presented in Appendix M of the IS/MND. The former measures have been referred to in this document.
- Incomplete description of Project activities: The IS/MND does not adequately describe the cannabis cultivation facilities, so it is unclear if impacts to biological resources are less than significant. To be considered indoor cultivation, a structure should have a permanent roof and walls, as well as an impermeable floor. Exhibit 2-6 of the IS/MND indicates that the buildings include large (10 foot by 10 foot) roll-down garage doors that may be opened on the sides of the buildings. Cultivation structures that may be opened to the atmosphere will have different impacts on biological resources than completely enclosed structures (e.g., pesticides and artificial light will have greater impacts if structures are not completely enclosed; see the section "Cannabis-Specific Impacts on Biological Resources" below). The IS/MND also does not adequately describe the extent and locations of proposed rooftop solar arrays and proposed solar panels associated with carports. CDFW recommends that the IS/MND include a complete description of these Project activities and analyze the impacts to biological resources.
- <u>Power and reclamation facility</u>: The power and reclamation facility includes solar and thermal energy and involves construction of exhaust columns and cooling towers in 55foot buildings adjacent to Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) conservation areas that support wildlife. The Project proposes installation of rooftop solar arrays and solar panels on carport structures. The IS/MND does not analyze long-term impacts of either the 55-foot structures or the solar arrays/panels to raptors, other bird species, and bats. These species may be killed or injured by flying through plumes of heat or exhaust or by encountering solar panels. In addition, raptors, other bird species, and bats may use tall structures and towers for roosting or nesting. CDFW recommends the IS/MND analyze long-term impacts to these species and propose measures to avoid, minimize, or mitigate those impacts.
- <u>Management of retention basins</u>: CDFW is concerned that there could be potential impacts to biological resources resulting from the 4 retention basins. Because retention basins have the potential to create habitat that attracts wildlife, CDFW is concerned that the basins be managed properly. The retention basins will have to be maintained, which poses concerns about work period/season, nesting birds, vegetation removal, and sensitive species surveys. The IS/MND should analyze these issues.
- <u>CDFW jurisdictional waters</u>: The IS/MND (p. 113) states that no jurisdictional waters occur on the Project site. However, the US Geological Survey National Hydrography

Patricia Villagomez, Associate Planner City of Desert Hot Springs Page 4 of 20

Dataset (NHD) shows a mapped ephemeral flowline running through the western portion of APN 665-080-005 from north to south and through the northwest corner of APN 665-080-007. CDFW jurisdiction extends to all rivers, lakes, and streams, including those that are ephemeral. CDFW's Lake and Streambed Alteration (LSA) Program should be notified (Fish and Game Code section 1602) of Project activities prior to construction so that impacts to streams and associated resources may be assessed to determine whether an LSA Agreement is required for Project activities. See the section "Role of Lake and Streambed Alteration (LSA) Program in Cannabis Licensing" below.

- <u>Landscaping</u>: The IS/MND indicates that landscaping is proposed throughout the property. CDFW recommends xeriscaping with locally native California species and installing water-efficient and targeted irrigation systems (such as drip irrigation). Local water agencies/districts and resource conservation districts in your area may be able to provide information on plant nurseries that carry locally native species. Information on drought-tolerant landscaping and water-efficient irrigation systems is available on California's Save our Water website: <u>http://saveourwater.com/what-you-can-do/tips/landscaping/</u>. In addition, Section 4.0 of the CVMSHCP includes "Table 4-112: Coachella Valley Native Plants Recommended for Landscaping" (pp. 4-180 to 4-182; <u>https://cvmshcp.org/Plan\_Documents.htm</u>).
- <u>Cumulative impacts on biological resources</u>: The IS/MND does not analyze cumulative impacts from the increasing concentration of cannabis projects in the City of Desert Hot Springs and the surrounding area. Cannabis cultivation requires large quantities of water, which can impact groundwater-dependent species and ecosystems. CDFW recommends that the IS/MND include an analysis of cumulative impacts of cannabis projects on biological resources.

## Assessment of Impacts to Biological Resources

## Biological Report and Adequacy of Surveys

The IS/MND bases its analysis of impacts to biological resources on a report by Jericho Systems Inc., which conducted a biological resources assessment of the Project site on August 1, 3, and 6, 2019 (Appendix C of the IS/MND). CDFW is concerned that the survey was not conducted at the appropriate time of year to detect the presence of all special status species on-site, such as special status plant species and desert tortoise. In addition, the survey is now almost 2 years old; CDFW generally considers field assessments for wildlife valid for a 1-year period.

The IS/MND identifies 34 sensitive species within the Desert Hot Springs and Seven Palms Valley USGS quadrangles, including many species not covered by the CVMSHCP. However, only 3 species are discussed in detail—burrowing owl (*Athene cunicularia*; CDFW Species of Special Concern [SSC]), Coachella Valley fringe-toed lizard (*Uma inornata*; federal threatened and state endangered species), and Coachella Valley milk vetch (*Astragalus lentiginosus* var. *coachellae*; federal endangered species and California Rare Plant Rank 1B). Mitigation measures are proposed for only burrowing owl and Coachella Valley milk vetch, despite the IS/MND (pp. 116–123) having identified other special status wildlife and plant species not covered by the CVMSHCP that have high or moderate potential to occur on-site, including the following:

Patricia Villagomez, Associate Planner City of Desert Hot Springs Page 5 of 20

- **Mammals**—pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*; CDFW SSC), San Diego desert woodrat (*Neotoma lepida intermedia*; CDFW SSC), Palms Springs round-tailed ground squirrel (*Xerospermophilus tereticaudus chlorus*; CDFW SSC)
- **Birds**—prairie falcon (*Falco mexicanus*; CDFW Watch List)
- **Reptiles**—coast horned lizard (*Phrynosoma blainvillii*; CDFW SSC), red-diamond rattlesnake (*Crotalus ruber*, CDFW SSC)
- **Plants**—Arizona spurge (*Euphorbia arizonica*; California Rare Plant Rank 2B), spinyhair blazing star (*Mentzelia tricuspis*; California Rare Plant Rank 2B)

A recent guery of the California Natural Diversity Database (CNDDB) and Biogeographic Information and Observation System (BIOS), including unprocessed data, for the USGS quadrangles encompassing the Project site (Desert Hot Springs and Seven Palms Valley) returned 98 records, which include 16 plant species, 52 wildlife species, and 2 vegetation communities. (Note: CNDDB is a positive-detection database only, meaning the absence of species data reported by CNDDB does not indicate absence of species from a project site.) In addition, BIOS data layers showing connectivity modeling for the California Desert Linkage Network indicate that the Project site falls within core breeding habitat (i.e., continuous area of suitable habitat large enough to sustain at least 50 individuals) for desert tortoise (Gopherus agassizii; federal threatened species and state threatened/candidate endangered species), burrowing owl, loggerhead shrike (Lanius *Iudovicianus*; CDFW SSC), and kit fox (*Vulpes macrotis*), as well as patch breeding habitat (i.e., suitable habitat large enough to support successful reproduction by a pair of individuals) for Le Conte's thrasher (Toxostoma lecontei; CDFW SSC). CDFW's California Wildlife Habitat Relationship model indicates that the Project site is located within highquality habitat for desert tortoise, burrowing owl, kit fox, golden eagle (Aquila chrysaetos; CDFW Fully Protected species), and American peregrine falcon (Falco peregrinus anatum; CDFW Fully Protected species), as well as medium-guality habitat for Townsend's bigeared bat (Corvnorhinus townsendii; CDFW SSC).

CDFW is concerned about the potential for special status species, including those not covered under the CVMSHCP, to occur on the Project site (see the section "Minimizing Impacts to Other Species" below for recommendations). Mitigation measures in the IS/MND are largely confined to pre-construction surveys. However, even species covered by the CVMSHCP may require avoidance, minimization, and mitigation measures according to provisions of the plan (see "Desert Tortoise" below). CDFW is concerned that waiting to assess the site for the presence of special status species until the time of construction will not reduce impacts to less than significant, particularly for species such as special status plants, burrowing owl, desert tortoise, and desert kit fox (see below).

## Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)

Within the Inland Deserts Region, CDFW issued Natural Community Conservation Plan Approval and Take Authorization for the CVMSHCP per Section 2800, *et seq.*, of the California Fish and Game Code on September 9, 2008. The CVMSHCP establishes a multiple species conservation program to minimize and mitigate habitat loss and provides for the incidental take of covered species in association with activities covered under the permit. Compliance with approved habitat plans, such as the CVMSHCP, is discussed in CEQA. Specifically, Section 15125(d) of the CEQA Guidelines requires that the CEQA Patricia Villagomez, Associate Planner City of Desert Hot Springs Page 6 of 20

document discuss any inconsistencies between a proposed Project and applicable general plans and regional plans, including habitat conservation plans and natural community conservation plans. An assessment of the impacts to the CVMSHCP as a result of this Project is necessary to address CEQA requirements. To obtain additional information regarding the CVMSHCP please go to: <u>http://www.cvmshcp.org/</u>.

The Project occurs within the CVMSHCP area and is subject to provisions and policies of the CVMSHCP. To be considered a covered activity, Permittees should demonstrate that proposed actions are consistent with the CVMSHCP and its associated Implementing Agreement. The IS/MND includes a mitigation measure (BIO-5) to address the Project occurring within the CVMSHCP. However, CDFW recommends revising BIO-5 (p. 131 of the IS/MND) so that the City of Desert Hot Springs (as the Lead Agency and Permittee of the CVMSHCP), rather than the developer, is the responsible party for ensuring compliance with the CVMSHCP:

#### MM BIO-1: Prior to construction and issuance of any grading permit, the City of Desert Hot Springs shall ensure compliance with the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) and its associated Implementing Agreement and shall ensure that payment of the CVMSHCP Local Development Mitigation Fee for the proposed Project is remitted to the Coachella Valley Conservation Commission.

Pursuant to the CEQA Guidelines, section 15097(f), CDFW has prepared a draft mitigation monitoring and reporting program (MMRP) for proposed MM BIO-1–12 (mitigation measures have been renumbered; see Attachment 1).

The Project site shares borders with the following CVMSHCP conservation areas: Upper Mission Creek/Big Morongo Conservation Area (on the east and west) and Willow Hole Conservation Area (on the west). The IS/MND includes a mitigation measure (BIO-6) to ensure compliance with Land Use Adjacency Guidelines in Section 4.5 of the CVMSHCP (https://cvmshcp.org/Plan%20Documents/11.%20CVAG%20MSHCP%20Plan%20Section%204.0. pdf). CDFW appreciates the inclusion of this mitigation measure but recommends revising the timing and implementation. Currently, the measure requires implementation no more than 14 days prior to construction; however, plans to meet the guidelines should be drafted further in advance so that there is adequate time for the Coachella Valley Conservation Commission to review the plans and determine whether they are consistent with the requirements of the CVMSHCP. In addition, the City of Desert Hot Springs (as the Lead Agency and Permittee of the CVMSHCP), rather than the developer, is the responsible party for ensuring compliance with the CVMSHCP. CDFW recommends revising BIO-6 (pp. 131–132 of the IS/MND) as follows:

MM BIO-2: Because the Project site is adjacent to the Upper Mission Creek/Big Morongo Conservation Area and Willow Hole Conservation Area, the City of Desert Hot Springs shall ensure compliance with the Land Use Adjacency Guidelines in Section 4.5 of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). Prior to construction and issuance of any grading permit, the City of Desert Hot Springs shall ensure that plans to implement the Land Use Adjacency Guidelines have been reviewed and approved by the Coachella Conservation Commission to determine whether the proposed improvements are consistent with the CVMSHCP. The City of Desert Hot

# Springs shall also ensure that the approved plans are implemented throughout Project activities and that encroachment into the adjacent conserved areas does not occur.

## Special Status Plants

Based on review of CNDDB and BIOS, plant species that are state and/or federally listed as endangered and plant species with California Rare Plant Ranks of 1B and 2B have the potential to occur in the Project area. The California Rare Plant Rank 1B indicates plants that are rare, threatened, or endangered in California and elsewhere, and California Rare Plant Rank 2B indicates plants that are rare, threatened, or endangered in California but more common elsewhere. Impacts to these species must be analyzed during preparation of environmental documents relating to CEQA because they meet the definition of rare or endangered under CEQA Guidelines §15125 (c) and/or §15380.

The IS/MND (p. 126) indicates that Coachella Valley milk-vetch has "a confirmed presence on/adjacent to" the Project site but was not found during the August 2019 biological resources assessment. The IS/MND also indicates the potential for special status plant species not covered by the CVMSHCP to occur on the Project site. CDFW is concerned that the biological resources assessment was not conducted at the appropriate time of year to detect the presence of special plant status species on the Project site. CDFW therefore recommends a thorough, floristic-based assessment of special status plants at the appropriate time(s) of year, using the most recent version of *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline), before the City of Desert Hot Springs adopts the MND. CDFW recommends revising BIO-3 on p. 130 of the IS/MND as follows:

MM BIO-3: A thorough floristic-based assessment of special status plants and natural communities, following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018 or most recent version) shall be performed by a gualified biologist prior to commencing Project activities. Should any state-listed plant species be present in the Project area, the Project proponent shall obtain an Incidental Take Permit for those species prior to the start of Project activities. Should other special status plants or natural communities be present in the Project area, a qualified restoration specialist shall assess whether perennial species may be successfully transplanted to an appropriate natural site or whether onsite or off-site conservation is warranted to mitigate Project impacts. If successful transplantation of perennial species is determined by a qualified restoration specialist. the receiver site shall be identified, and transplantation shall occur at the appropriate time of year. Additionally, the qualified restoration specialist shall perform seed collection and dispersal from special status annual plant species to a natural site as a conservation strategy to minimize and mitigate Project impacts. If these measures are implemented, monitoring of plant populations shall be conducted annually for 5 years to assess the mitigation's effectiveness. The performance standard for mitigation shall be no net reduction in the size or viability of the local population.

## Burrowing Owl (Athene cunicularia)

The IS/MND indicates that burrowing owls were found on the Project site both in 2016 and during the 2019 biological resources assessment (p. 114 of the IS/MND). (Please note that

Patricia Villagomez, Associate Planner City of Desert Hot Springs Page 8 of 20

survey data from 2016 and 2019 confirming the presence of burrowing owls should be submitted to CNDDB; see the "Environmental Data" section below for more information.) CNDDB/BIOS also indicates that burrowing owl has been reported in the southwest portion of the Project site. Although burrowing owl is covered under the CVMSHCP, it is also protected under the Migratory Bird Treaty Act. Fish and Game Code section 3513 makes it unlawful to take or possess any migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 703 et seq.).

CDFW is concerned that waiting until pre-construction surveys to assess whether burrowing owl is on the Project site will not reduce impacts to less than significant. CDFW is also concerned that the biological resources assessment for the IS/MND was conducted almost 2 years ago. Therefore, CDFW recommends that the City of Desert Hot Springs follow the recommendations and guidelines provided in the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012 or most recent version). The *Staff Report on Burrowing Owl Mitigation* specifies that project impact evaluations include the following steps: (1) habitat assessment, (2) surveys, and (3) an impact assessment. The three progressive steps are effective in evaluating whether a project will result in impacts to burrowing owls, and the information gained from the steps will inform any subsequent avoidance and minimization measures. As a result, CDFW recommends revising BIO-1 and BIO-2 (p. 130 of the IS/MND) to include both focused and pre-construction surveys:

MM BIO-4: Burrowing owl presence has been confirmed on the Project site; therefore, focused burrowing owl surveys shall be conducted in accordance with the *Staff Report* on Burrowing Owl Mitigation (CDFG 2012 or most recent version). If the focused burrowing owl surveys detect active burrowing owl burrows outside the breeding season (September 1 through January 31), or within the breeding season (February 1 through August 31) but owls are not nesting or in the process of nesting, passive relocation may be conducted following consultation with the CDFW and USFWS. A relocation plan will be required by CDFW and USFWS if relocation is necessary. The relocation plan will outline the basic relocation process, provide options for avoidance and minimization, and identify the entity responsible for all financial costs associated with the relocation plan.

Pre-construction burrowing owl surveys shall be conducted no less than 14 days prior to the start of Project-related activities and within 24 hours prior to ground disturbance, in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012 or most recent version). Pre-construction surveys should be performed by a qualified biologist following the recommendations and guidelines provided in the *Staff Report on Burrowing Owl Mitigation*. If the pre-construction surveys confirm occupied burrowing owl habitat, Project activities shall be immediately halted. CDFW shall be notified of burrowing owl survey results within 48 hours of detection. The qualified biologist shall coordinate with CDFW and USFWS to conduct an impact assessment to develop avoidance and minimization measures to be approved by CDFW prior to commencing Project activities.

#### Desert Tortoise (Gopherus agassizii)

BIOS data layers showing connectivity modeling for the California Desert Linkage Network indicate that the Project site falls within core breeding habitat for desert tortoise, and CDFW's California Wildlife Habitat Relationship model indicates the Project site is within

Patricia Villagomez, Associate Planner City of Desert Hot Springs Page 9 of 20

habitat that is highly suitable for desert tortoise. CDFW is concerned that the timing and scope of the August 2019 biological resources assessment were insufficient to determine the presence of desert tortoise on the Project site. Chapter 4 of the *Desert Tortoise* (*Mojave Population*) Field Manual indicates that "surveys should be conducted during the desert tortoise's most active periods (April through May or September through October)" (USFWS 2009, p. 4–8).

The IS/MND indicates that Project activities include substantial construction or improvement of roadways and parking lots (70.74 acres), which may pose a hazard to desert tortoises and result in mortality and habitat fragmentation (Peaden et al. 2017). Although desert tortoise is covered under the CVMSHCP, Section 9.6.1.4 of the plan indicates: "Both inside and outside Conservation Areas, avoidance, minimization, and mitigation measures require relocation of individual tortoises if required surveys locate individuals on the site of Covered Activities. For more information about avoidance, minimization, and mitigation measures see Section 4.4." CDFW is concerned that waiting until pre-construction surveys to assess whether desert tortoise is on the Project site will not reduce impacts to less than significant. CDFW recommends that prior to commencing Project activities, a focused survey for desert tortoise following the *Desert Tortoise (Mojave Population) Field Manual* should be conducted by a qualified biologist. CDFW recommends the following mitigation measure, which includes both focused and preconstruction surveys:

MM BIO-5: Prior to commencing Project activities, a focused survey for desert tortoise shall be conducted by a qualified biologist, according to protocols in chapter 4 of the *Desert Tortoise (Mojave Population) Field Manual* (USFWS 2009 or most recent version), during the species' most active periods (April through May or September through October). CDFW recommends working with USFWS and CDFW concurrently to ensure a consistent and adequate approach to planning survey work and that biologists retained to complete desert tortoise protocol-level surveys submit their qualifications to CDFW and USFWS prior to initiation of surveys.

No more than 14 calendar days prior to start of Project activities, a qualified biologist shall conduct pre-construction surveys for desert tortoise as described in the USFWS *Desert Tortoise (Mojave Population) Field Manual* (USFWS 2009 or most recent version). Pre-construction surveys shall be completed using perpendicular survey routes within the Project area and 50-foot buffer zone. Pre-construction surveys cannot be combined with other surveys conducted for other species while using the same personnel. Project activities cannot start until two negative results from consecutive surveys using perpendicular survey routes for desert tortoise are documented. Should desert tortoise presence be confirmed during the survey, the qualified biologist shall immediately notify CDFW and USFWS to determine appropriate avoidance, minimization, and mitigation measures.

#### Desert Kit Fox (Vulpes macrotis arsipus)

Desert kit fox is protected as a fur-bearing mammal under Title 14 of the California Code of Regulations (Chap. 5, § 460) and may not be taken at any time. BIOS data layers showing connectivity modeling for the California Desert Linkage Network indicate that the Project site falls within core breeding habitat for kit fox, and CDFW's California Wildlife Habitat Relationship model indicates the Project site is within habitat that is highly suitable for kit fox. Because desert kit fox has high fidelity to natal dens, it is crucial to adequately assess

Patricia Villagomez, Associate Planner City of Desert Hot Springs Page 10 of 20

whether desert kit fox is present on the Project site well in advance of commencing Project activities. If desert kit fox is found on-site during breeding season, it could delay Project activities until appropriate vegetation and construction buffers can be established on the Project site. Therefore, CDFW recommends that the City of Desert Hot Springs conduct both focused and pre-construction surveys for desert kit fox as follows:

MM BIO-6: Prior to commencing Project activities, a qualified biologist shall conduct a focused survey for desert kit fox, including assessment of all burrows in the Project area. If potential burrows are located, they should be monitored by the qualified biologist. If a burrow is determined to be active, the qualified biologist shall immediately notify CDFW and USFWS to determine appropriate avoidance, minimization, and mitigation measures.

No more than 14 days prior to the beginning of ground disturbance and/or Project activities, a qualified biologist shall conduct pre-construction surveys to determine if potential desert kit fox burrows/dens are present in the Project area. Pre-construction surveys should include 100-percent visual coverage of the Project area and cannot be combined with other surveys conducted for other species while using the same personnel. If the pre-construction surveys confirm occupied desert kit fox habitat, Project activities shall be immediately halted, and the qualified biologist shall notify CDFW and USFWS to develop avoidance, minimization, and mitigation measures. No disturbance of active dens shall take place when juvenile desert kit fox may be present and dependent on parental care.

#### Nesting Birds

It is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Fish and Game Code sections 3503, 3503.5, and 3513 afford protective measures as follows: section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by Fish and Game Code or any regulation made pursuant thereto. Fish and Game Code section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by Fish and Game Code or any regulation adopted pursuant thereto. Fish and Game Code section 3513 makes it unlawful to take or possess any migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 703 et seq.).

CDFW is concerned about impacts to nesting birds from vegetation removal on the Project site and from construction of the cultivation facility and roads/parking lots (e.g., noise/disturbance). Although the IS/MND includes a mitigation measure (BIO-4) to address nesting birds, the timing and scope of the mitigation measure are insufficient. CDFW recommends the revised document include specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur. Project-specific avoidance and minimization measures may include, but are not limited to, Project phasing and timing (avoiding peak breeding season), monitoring of Project-related noise (where applicable), sound walls, and buffers, where appropriate. CDFW recommends that pre-construction surveys be conducted as a mitigation measure and that they be completed no more than 3 days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner. Note that nesting bird surveys must be

Patricia Villagomez, Associate Planner City of Desert Hot Springs Page 11 of 20

conducted regardless of the time of year to protect species that may nest outside the peak breeding season, such as raptors and hummingbirds. CDFW recommends BIO-4 (pp. 130–131 of the IS/MND) be revised as follows:

MM BIO-7: Regardless of the time of year, nesting bird surveys shall be conducted by a qualified avian biologist no more than three (3) days prior to vegetation clearing or ground disturbance activities. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified avian biologist will make every effort to avoid potential nest predation as a result of survey and monitoring efforts. If active nests are found during the pre-construction nesting bird surveys, a Nesting Bird Plan (NBP) shall be prepared and implemented by the qualified avian biologist. At a minimum, the NBP shall include guidelines for addressing active nests, establishing buffers, ongoing monitoring, establishment of avoidance and minimization measures, and reporting. The size and location of all buffer zones, if required, shall be based on the nesting species, individual/pair's behavior, nesting stage, nest location, its sensitivity to disturbance, and intensity and duration of the disturbance activity. To avoid impacts to nesting birds, any grubbing or vegetation removal should occur outside peak breeding season (typically February 1 through September 1).

#### Minimizing Impacts to Other Species

CDFW is concerned about the potential for special status species, including those not covered under the CVMSHCP, to occur on the Project site. Because of the high potential for special status species to occur on-site, CDFW recommends inclusion of the following mitigation measure:

MM BIO-8: A qualified biologist shall be on-site prior to and during all ground- and habitatdisturbing activities to move out of harm's way wildlife that would otherwise be injured or killed from Project-related activities. Movement of wildlife out of harm's way should be limited to only those individuals that would otherwise by injured or killed, and individuals should be moved only as far a necessary to ensure their safety. Measures shall be taken to prevent wildlife from re-entering the Project site. Only biologists authorized by a Memorandum of Understanding issued by CDFW shall move CESA-listed species.

#### Employee Awareness of Wildlife Resources

CDFW is concerned that because the Project area is surrounded by open desert to the north, east, and south of the Project site, development will bring biological hazards common to urban-wildland interface areas. Waste management must be a priority as accessible waste can encourage opportunistic species such as rats, ravens, and coyotes to become more prevalent, posing a substantial predation hazard to wildlife. Predators like ravens and coyotes are both known to prey on desert tortoise and other sensitive species. Waste management plans should include waste receptacles with closing, lockable lids and a waste removal schedule that does not allow for excess waste to accrue. Increased traffic may also pose a hazard to species in the form of vehicle-animal collisions, which often lead to the death of the animal. For slow-moving species like desert tortoise, busy roads or driveways in their territory can have a significant impact on populations. Project activities, including construction and routine work for the life of the Project, will affect local wildlife. Part of the Project Proponent's responsibility is to educate individuals that will be on-site,

Patricia Villagomez, Associate Planner City of Desert Hot Springs Page 12 of 20

whether they are employees or contractors, on the wildlife species that may be present and how to limit impacts to wildlife species in the area. CDFW recommends that the following Employee Education Program be added to the IS/MND as a mitigation measure:

MM BIO-9: A gualified biologist shall conduct an education program for all persons employed or otherwise working on the Project site prior to performing any work on-site. The program shall consist of a presentation that includes a discussion of the biology of the habitats and species that may be present at the site. The gualified biologist shall also include as part of the education program information about the distribution and habitat needs of any special status species that may be present, legal protections for those species, penalties for violations, and mitigation measures. The Employee Education Program should include, but not be limited to: (1) best practices for managing waste and reducing activities that can lead to increased occurrences of opportunistic species and the impacts these species can have on wildlife in the area; (2) protected species that have the potential to occur on the Project site including, but not limited to, rare and sensitive plants, burrowing owl, desert tortoise, desert kit fox, and nesting birds; (3) the location of Mission Creek, Morongo Wash, the Upper Mission Creek/Big Morongo Canyon Conservation Area, and the Willow Hole Conservation Area, as well as the importance of ensuring that no refuse or pollution enters the streams or conservation areas and that encroachment into the streams and conservation areas is not permitted during construction or other Project activities. Interpretation shall be provided for any non-English-speaking workers, and the same instruction shall be provided for any new workers prior to their performing any work on-site.

## **Cannabis-Specific Impacts on Biological Resources**

CDFW recommends that the City consider cannabis-specific impacts to biological resources that may result from the Project activities.

## Pesticides, Including Fungicides, Herbicides, Insecticides, and Rodenticides

Cannabis cultivation sites (whether indoor or outdoor) often use substantial quantities of pesticides, including fungicides, herbicides, insecticides, and rodenticides. Wildlife, including beneficial arthropods, birds, mammals, amphibians, reptiles, and fish, can be poisoned by pesticides after exposure to a toxic dose through ingestion, inhalation, or dermal contact (Fleischli et al. 2004, Pimentel 2005, Berny 2007). They can also experience secondary poisoning through feeding on animals that have been directly exposed to the pesticides. (Even if used indoors, rodenticides may result in secondary poisoning through ingestion of sickened animals that leave the premises or ingestion of lethally poisoned animals disposed of outside.) Nonlethal doses of pesticides can negatively affect wildlife; pesticides can compromise immune systems, cause hormone imbalances, affect reproduction, and alter growth rates of many wildlife species (Pimentel 2005, Li and Kawada 2006, Relyea and Diecks 2008, Baldwin et al. 2009).

CDFW recommends minimizing use of synthetic pesticides, and, if they are used, to always use them as directed by the manufacturer, including proper storage and disposal. Toxic pesticides should not be used where they may pass into waters of the state, including ephemeral streams, in violation of Fish and Game Code section 5650(6). Anticoagulant rodenticides and rodenticides that incorporate "flavorizers" that make the

Patricia Villagomez, Associate Planner City of Desert Hot Springs Page 13 of 20

pesticides appetizing to a variety of species should not be used at cultivation sites. (Note that with the passage of AB 1788, signed by the governor on September 29, 2020, the general use of second-generation anticoagulants is now banned in California.) Alternatives to toxic rodenticides may be used to control pest populations at and around cultivation sites, including sanitation (removing food sources like pet food, cleaning up refuse, and securing garbage in sealed containers) and physical barriers (e.g., sealing holes in roofs/walls). Snap traps should not be used outdoors as they pose a hazard to nontarget wildlife. Sticky or glue traps should be avoided altogether; these pose a hazard to nontarget wildlife and result in prolonged/inhumane death. California Department of Pesticide Regulation stipulates that pesticides must certain criteria to be legal for use on cannabis. For details, visit: <a href="https://www.cdpr.ca.gov/docs/cannabis/questions.htm">https://www.cdpr.ca.gov/docs/cannabis/questions.htm</a>; <a href="https://www.cdpr.ca.gov/docs/cannabis/questions.htm">htt

The IS/MND does not indicate whether Project cultivation activities will involve pesticides. CDFW recommends that the City of Desert Hot Springs include a mitigation measure conditioning the Project to develop a plan to avoid, minimize, and mitigate the impacts of pesticides used in cannabis cultivation. CDFW recommends inclusion of the following mitigation measure focused on avoiding impacts to biological resources:

MM BIO-10: Prior to construction and issuance of any grading permit, the City of Desert Hot Springs shall develop a plan with measures to avoid, minimize, or mitigate the impacts of pesticides used in cannabis cultivation, including fungicides, herbicides, insecticides, and rodenticides. The plan should include, but is not limited to, the following elements: (1) Proper use, storage, and disposal of pesticides, in accordance with manufacturers' directions and warnings. (2) Avoidance of pesticide use where toxic runoff may pass into waters of the State, including ephemeral streams. (3) Avoidance of pesticides that cannot legally be used on cannabis in the state of California, as set forth by the Department of Pesticide Regulation. (4) Avoidance of anticoagulant rodenticides and rodenticides with "flavorizers." (5) Avoidance of sticky/glue traps. (6) Inclusion of alternatives to toxic rodenticides, such as sanitation (removing food sources like pet food, cleaning up refuse, and securing garbage in sealed containers) and physical barriers.

## Artificial Light

Cannabis cultivation operations often use artificial lighting or "mixed-light" techniques in greenhouse structures and indoor operations to increase yields. If not disposed of properly, these lighting materials pose significant environmental risks because they contain mercury and other toxins (O'Hare et al. 2013). In addition to containing toxic substances, artificial lighting often results in light pollution, which has the potential to significantly and adversely affect fish and wildlife. Night lighting can disrupt the circadian rhythms of many wildlife species. Many species use photoperiod cues for communication (e.g., birdsong; Miller 2006), determining when to begin foraging (Stone et al. 2009), behavioral thermoregulation (Beiswenger 1977), and migration (Longcore and Rich 2004). Phototaxis, a phenomenon that results in attraction and movement toward light, can disorient, entrap, and temporarily blind wildlife species that experience it (Longcore and Rich 2004).

The IS/MND indicates that Project activities will involve new sources of artificial light for buildings and security. Because of the potential for artificial light to impact nocturnal wildlife

Patricia Villagomez, Associate Planner City of Desert Hot Springs Page 14 of 20

species and migratory birds that fly at night, CDFW recommends the following mitigation measure:

MM BIO-11: Light should not be visible outside of any structure used for cannabis cultivation. Employ blackout curtains where artificial light is used to prevent light escapement. Eliminate all nonessential lighting from cannabis sites and avoid or limit the use of artificial light during the hours of dawn and dusk when many wildlife species are most active. Ensure that lighting for cultivation activities and security purposes is shielded, cast downward, and does not spill over onto other properties or upward into the night sky (see the International Dark-Sky Association standards at http://darksky.org/). Use LED lighting with a correlated color temperature of 3,000 Kelvins or less, properly dispose of hazardous waste, and recycle lighting that contains toxic compounds with a qualified recycler.

#### <u>Noise</u>

Construction and operation of cannabis facilities may result in a substantial amount of noise through road use, equipment, and other project-related activities. This may adversely affect wildlife species in several ways as wildlife responses to noise can occur at exposure levels of only 55 to 60 decibels (Barber et al. 2009). (For reference, normal conversation is approximately 60 decibels, and natural ambient noise levels [e.g., forest habitat] are generally measured at less than 50 decibels.) Anthropogenic noise can disrupt the communication of many wildlife species including frogs, birds, and bats (Sun and Narins 2005, Patricelli and Blickley 2006, Gillam and McCracken 2007, Slabbekoorn and Ripmeester 2008). Noise can also affect predator-prey relationships as many nocturnal animals such as bats and owls primarily use auditory cures (i.e., hearing) to hunt. Additionally, many prey species increase their vigilance behavior when exposed to noise because they need to rely more on visual detection of predators when auditory cues may be masked by noise (Rabin et al. 2006, Quinn et al. 2017). Noise has also been shown to reduce the density of nesting birds (Francis et al. 2009) and cause increased stress that results in decreased immune responses (Kight and Swaddle 2011).

The IS/MND includes a mitigation measure to address noise generated by Project activities (BIO-7). CDFW also recommends restricting the use of equipment to hours least likely to disrupt wildlife (e.g., not at night or in the early morning). Consider use of noise suppression devices such as mufflers or enclosures for generators.

## Role of Lake and Streambed Alteration (LSA) Program in Cannabis Licensing

Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may adversely impact any river, stream, or lake. California Department of Food and Agriculture (CDFA) requires cannabis cultivators to demonstrate compliance with Fish and Game Code section 1602 prior to issuing a cultivation license (Business and Professions Code, § 26060.1). To qualify for an Annual License from CDFA, cultivators must have an LSA Agreement or written verification from CDFW that one is not needed. Cannabis cultivators may apply online for an LSA Agreement through EPIMS (Environmental Permit Information Management System; <u>https://epims.wildlife.ca.gov</u>) and learn more about permitting at <u>https://wildlife.ca.gov/Conservation/Cannabis/Permitting</u>. Patricia Villagomez, Associate Planner City of Desert Hot Springs Page 15 of 20

Section 2.4 of the IS/MND indicates public agencies whose approval is required for the Project. This section fails to mention the state licensing required for cannabis cultivation, including notifying CDFW's LSA Program as discussed above. The Project is situated between Mission Creek and Morongo Wash. In addition, US Geological Survey National Hydrography Dataset (NHD) shows a mapped ephemeral flowline running through the western portion of APN 665-080-005 from north to south and through the northwest corner of APN 665-080-007. CDFW's LSA Program should be notified of Project activities prior to construction so that impacts to streams and associated resources may be assessed, and, if appropriate, avoidance and minimization measures may be proposed. CDFW recommends the following mitigation measure:

MM BIO-12: Prior to construction and issuance of any grading permit, the Project Sponsor shall obtain written correspondence from the California Department of Fish and Wildlife (CDFW) stating that notification under section 1602 of the Fish and Game Code is not required for the Project, *or* the Project Sponsor should obtain a CDFW-executed Lake and Streambed Alteration Agreement, authorizing impacts to Fish and Game Code section 1602 resources associated with the Project.

## **ENVIRONMENTAL DATA**

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database that may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special status species and natural communities detected during Project surveys to CNDDB. The CNNDB field survey form can be found at the following link: <u>http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDB\_FieldSurveyForm.pdf</u>. The completed form can be mailed electronically to CNDDB at the following email address: <u>CNDDB@wildlife.ca.gov</u>. The types of information reported to CNDDB can be found at the following link: <u>http://www.dfg.ca.gov/biogeodata/cnddb/plants\_and\_animals.asp</u>.

## **FILING FEES**

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required for the underlying project approval to be operative, vested, and final (Cal. Code Regs., title 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

## CONCLUSION

CDFW appreciates the opportunity to comment on the IS/MND to assist the City of Desert Hot Springs in identifying and mitigating Project impacts on biological resources. CDFW concludes that the IS/MND does not adequately identify or mitigate for the Project's significant, or potentially significant, impacts on biological resources. CDFW recommends that prior to adoption of the MND, the City of Desert Hot Springs revise the document to include a more complete assessment of the Project's potential impacts on biological resources, as well as appropriate avoidance, minimization, and mitigation measures. Patricia Villagomez, Associate Planner City of Desert Hot Springs Page 16 of 20

CDFW has Cannabis Unit staff who are available to provide guidance on impacts to biological resources and CDFW permitting. If you have any questions or would like to set up a meeting with CDFW staff to discuss this letter, please contact Heather Brashear, Environmental Scientist, at (909) 948-9625 or Heather.Brashear@Wildlife.ca.gov.

Sincerely,

DocuSigned by: Alisa Ellsworth -84FBB8273E4C480...

Alisa Ellsworth, Environmental Program Manager

## Attachment 1: MMRP for CDFW-Proposed Mitigation Measures

ec: Heather Brashear, Environmental Scientist, CDFW heather.brashear@wildlife.ca.gov

HCPB CEQA Program, Habitat Conservation Planning Branch <u>CEQAcommentletters@wildlife.ca.gov</u>

Office of Planning and Research, State Clearinghouse, Sacramento <u>state.clearinghouse@opr.ca.gov</u>

## REFERENCES

- Baldwin, D. H., J. A. Spromberg, T. K. Collier, and N. L. Scholz. 2009. A fish of many scales: Extrapolating sublethal pesticide exposures to the productivity of wild salmon populations. Ecological Applications 19:2004–2015.
- Barber, J. R., K. R. Crooks, and K. M. Fristrup. 2009. The costs of chronic noise exposure for terrestrial organisms. Trends in Ecology and Evolution 25:180–189.
- Beiswenger, R. E. 1977. Diet patterns of aggregative behavior in tadpoles of *Bufo americanus*, in relation to light and temperature. Ecology 58:98–108.
- Berny, P. 2007. Pesticides and the intoxication of wild animals. Journal of Veterinary Pharmacology and Therapeutics 30:93–100.
- California Department of Fish and Game (CDFG). 2012. Staff report on burrowing owl mitigation. State of California, Natural Resources Agency. Available for download at: https://www.dfg.ca.gov/wildlife/nongame/survey\_monitor.html
- California Department of Fish and Wildlife (CDFW). 2018. Protocols for surveying and evaluating impacts to special status native plant populations and natural communities. State of California, Natural Resources Agency. Available for download at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline
- Fleischli, M. A., J. C. Franson, N. J. Thomas, D. L. Finley, and W. Riley, Jr. 2004. Avian mortality events in the United States caused by anticholinesterase pesticides: A retrospective summary of national wildlife health center records from 1980 to 2000. Archives of Environmental Contamination and Toxicology 46:542–550.
- Francis, C. D., C. P. Ortega, and A. Cruz. 2009. Noise pollution changes avian communities and species interactions. Current Biology 19:1415–1419.
- Gillam, E. H., and G. F. McCracken. 2007. Variability in the echolocation of *Tadarida brasiliensis*: effects of geography and local acoustic environment. Animal Behaviour 74:277–286.
- Kight, C. R., and J. P. Swaddle. 2011. How and why environmental noise impacts animals: An integrative, mechanistic review. Ecology Letters 14:1052–1061.

Patricia Villagomez, Associate Planner City of Desert Hot Springs Page 17 of 20

- Li, Q., and T. Kawada. 2006. The mechanism of organophosphorus pesticide-induced inhibition of cytolytic activity of killer cells. Cellular & Molecular Immunology 3:171–178.
- Longcore, T., and C. Rich. 2004. Ecological light pollution. Frontiers in Ecology and the Environment 2:191– 198.
- Miller, M. W. 2006. Apparent effects of light pollution on singing behavior of American robins. Condor 108:130–139.
- O'Hare, M., D. L. Sanchez, and P. Alstone. 2013. Environmental risks and opportunities in cannabis cultivation. BOETC Analysis Corp. University of California, Berkeley, CA, USA.
- Patricelli, G., and J. J. L. Blickley. 2006. Avian communication in urban noise: causes and consequences of vocal adjustment. Auk 123:639–649.
- Peaden, M., A. J Nowakowski, T. D. Tuberville, K. A. Buhlmann, B. D. Todd, 2017. Effects of roads and roadside fencing on movements, space use, and carapace temperatures of a threatened tortoise, Biological Conservation. 214:13-22.
- Pimentel, D. 2005. Environmental and economic costs of the application of pesticides primarily in the United States. Environment, Development and Sustainability 7:229–252.
- Quinn, J. L., M. J. Whittingham, S. J. Butler, W. Cresswell, J. L. Quinn, M. J. Whittingham, S. J. Butler, W. Cresswell, and W. Noise. 2017. Noise, predation risk compensation and vigilance in the chaffinch *Fringilla coelebs*. Journal of Avian Biology 37:601–608.
- Rabin, L. A., R. G. Coss, and D. H. Owings. 2006. The effects of wind turbines on antipredator behavior in California ground squirrels (*Spermophilus beecheyi*). Biological Conservation 131:410–420.
- Relyea, R. A., and N. Diecks. 2008. An unforeseen chain of events: Lethal effects of pesticides on frogs at sublethal concentrations. Ecological Applications 18:1728–1742.
- Slabbekoorn, H., and E. A. P. Ripmeester. 2008. Birdsong and anthropogenic noise: Implications and applications for conservation. Molecular Ecology 17:72–83.
- Stone, E. L., G. Jones, and S. Harris. 2009. Street lighting disturbs commuting bats. Current Biology 19:1123–1127.
- Sun, J. W. C., and P. M. Narins. 2005. Anthropogenic sounds differentially affect amphibian call rate. Biological Conservation 121:419–427.
- U.S. Fish and Wildlife Service [USFWS]. 2009. Desert tortoise (Mojave population) field manual (*Gopherus agassizii*). Region 8, Sacramento, CA, USA. Available for download at: https://www.fws.gov/nevada/desert\_tortoise/documents/field\_manual/Desert-Tortoise-Field-Manual.pdf

#### ATTACHMENT 1: MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

	Calcaduda	Deemeneiht
mitigation measures	Schedule	Responsible
		Party
MM BIO-1: CVMSHCP compliance and fees. Prior to construction and	Prior to	City of Desert
issuance of any grading permit, the City of Desert Hot Springs shall ensure	construction	Hot Springs.
compliance with the Coachella Valley Multiple Species Habitat Conservation	and issuance	
Plan (CVMSHCP) and its associated Implementing Agreement and shall	of any	
ensure that payment of the CVMSHCP Local Development Mitigation Fee for	grading	
the proposed Project is remitted to the Coachella Valley Conservation	permit.	
Commission.		
MM BIO-2: CVMSHCP Land Use Adjacency Guidelines. Because the	Prior to	City of Desert
Project site is adjacent to the Upper Mission Creek/Big Morongo	construction	Hot Springs.
Conservation Area and Willow Hole Conservation Area, the City of Desert Hot	and issuance	
Springs shall ensure compliance with the Land Use Adjacency Guidelines in	of any	
Section 4.5 of the Coachella Valley Multiple Species Habitat Conservation	grading	
Plan (CVMSHCP). Prior to construction and issuance of any grading permit,	permit.	
the City of Desert Hot Springs shall ensure that plans to implement the Land		
Use Adjacency Guidelines have been reviewed and approved by the		
Coachella Conservation Commission to determine whether the proposed		
improvements are consistent with the CVMSHCP. The City of Desert Hot		
Springs shall also ensure that the approved plans are implemented		
throughout Project activities and that encroachment into the adjacent		
conserved areas does not occur.		

<b>MM BIO-3: Rare plant surveys.</b> A thorough floristic-based assessment of special status plants and natural communities, following CDFW's <i>Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities</i> (CDFW 2018 or most recent version) shall be performed by a qualified biologist prior to commencing Project activities. Should any state-listed plant species be present in the Project area, the Project proponent shall obtain an Incidental Take Permit for those species prior to the start of Project activities. Should other special status plants or natural communities be present in the Project area, a qualified restoration	Prior to commencing Project activities.	City of Desert Hot Springs.
transplanted to an appropriate natural site or whether on-site or off-site conservation is warranted to mitigate Project impacts. If successful transplantation of perennial species is determined by a qualified restoration specialist, the receiver site shall be identified, and transplantation shall occur at the appropriate time of year. Additionally, the qualified restoration specialist shall perform seed collection and dispersal from special status annual plant species to a natural site as a conservation strategy to minimize and mitigate Project impacts. If these measures are implemented, monitoring of plant populations shall be conducted annually for 5 years to assess the mitigation's effectiveness. The performance standard for mitigation shall be no net reduction in the size or viability of the local population.		
<b>MM BIO-4: Burrowing owl surveys.</b> Burrowing owl presence has been confirmed on the Project site; therefore, focused burrowing owl surveys shall be conducted in accordance with the <i>Staff Report on Burrowing Owl Mitigation</i> (CDFG 2012 or most recent version). If the focused burrowing owl surveys detect active burrowing owl burrows outside the breeding season (September 1 through January 31), or within the breeding season (February 1 through August 31) but owls are not nesting or in the process of nesting, passive relocation may be conducted following consultation with the CDFW and USFWS. A relocation plan will be required by CDFW and USFWS if relocation is necessary. The relocation plan will outline the basic relocation process, provide options for avoidance and minimization, and identify the entity responsible for all financial costs associated with the relocation plan. Pre-construction burrowing owl surveys shall be conducted no less than 14 days prior to the start of Project-related activities and within 24 hours prior to ground disturbance, in accordance with the <i>Staff Report on Burrowing Owl Mitigation</i> . If the pre-construction surveys confirm occupied burrowing owl habitat, Project activities shall be immediately halted. CDFW shall be notified of burrowing owl survey results within 48 hours of detection. The qualified biologist shall coordinate with CDFW and USFWS to conduct an impact assessment to develop avoidance and minimization measures to be approved by CDFW prior to commencing Project activities.	Focused surveys: Prior to commencing Project activities. Pre- construction surveys: No less than 14 days prior to start of Project- related activities and within 24 hours prior to ground disturbance.	City of Desert Hot Springs.
<b>MM BIO-5: Desert tortoise surveys.</b> Prior to commencing Project activities, a focused survey for desert tortoise shall be conducted by a qualified biologist, according to protocols in chapter 4 of the <i>Desert Tortoise (Mojave Population) Field Manual</i> (USFWS 2009 or most recent version), during the species' most active periods (April through May or September through October). CDFW recommends working with USFWS and CDFW concurrently to ensure a consistent and adequate approach to planning survey work and that biologists retained to complete desert tortoise protocol-level surveys submit their qualifications to CDFW and USFWS prior to initiation of surveys. No more than 14 calendar days prior to start of Project activities, a qualified biologist shall conduct pre-construction surveys for desert tortoise as described in the <i>USFWS Desert Tortoise (Mojave Population) Field Manual</i>	Focused surveys: Prior to commencing Project activities. Pre- construction surveys: No more than 14 days prior to	City of Desert Hot Springs.

(USFWS 2009 or most recent version). Pre-construction surveys shall be	start of	
completed using perpendicular survey routes within the Project area and 50-	Project-	
foot buffer zone. Pre-construction surveys cannot be combined with other	related	
surveys conducted for other species while using the same personnel. Project	activities.	
activities cannot start until two negative results from consecutive surveys		
using perpendicular survey routes for desert tortoise are documented. Should		
desert tortoise presence be confirmed during the survey, the qualified		
biologist shall immediately notify CDEW and USEWS to determine		
appropriate avoidance, minimization, and mitigation measures		
MM BIO-6: Desert kit fox surveys. Prior to commencing Project activities a	Focused	City of Desert
qualified biologist shall conduct a focused survey for desert kit fox including	SURVEVS:	Hot Springs
assessment of all burrows in the Project area. If potential burrows are	Prior to	not opinigo.
located they should be monitored by the qualified biologist. If a burrow is	commencing	
determined to be active, the qualified biologist shall immediately notify CDEW	Project	
and LISEWS to determine appropriate avoidance, minimization, and	activities	
mitigation moscures	activities.	
No more than 14 days prior to the beginning of ground disturbance and/or	Bro	
Project activities, a qualified biologist shall conduct are construction curveys	construction	
to determine if potential depart kit for burrows/departs procent in the Project		
to determine it potential desert kit tox burlows/dens are present in the Project	surveys. NO	
the Dreiset eres and earned he combined with other surveys conducted for	dove prior to	
the Project area and cannot be combined with other surveys conducted for	days prior to	
other species while using the same personnel. If the pre-construction surveys	Start of	
commode of the sublified biologist shall notify ODEW and USEW() to develop	Project-	
nated, and the qualified biologist shall notify CDFW and USFWS to develop	related	
avoidance, minimization, and mitigation measures. No disturbance of active	activities.	
dens shall take place when juvenile desert kit fox may be present and		
dependent on parental care.		01 ( D )
<b>MM BIO-7: Nesting bird surveys.</b> Regardless of the time of year, nesting	No more than	City of Desert
bird surveys shall be conducted by a qualified avian biologist no more than	three (3)	Hot Springs.
three (3) days prior to vegetation clearing or ground disturbance activities.	days prior to	
Pre-construction surveys shall focus on both direct and indirect evidence of	vegetation	
nesting, including nest locations and nesting behavior. The qualified avian	clearing or	
biologist will make every effort to avoid potential nest predation as a result of	ground	
survey and monitoring efforts. If active nests are found during the pre-	disturbance	
construction nesting bird surveys, a Nesting Bird Plan (NBP) shall be	activities.	
prepared and implemented by the qualified avian biologist. At a minimum, the		
NBP shall include guidelines for addressing active nests, establishing buffers,		
ongoing monitoring, establishment of avoidance and minimization measures,		
and reporting. The size and location of all buffer zones, if required, shall be		
based on the nesting species, individual/pair's behavior, nesting stage, nest		
location, its sensitivity to disturbance, and intensity and duration of the		
disturbance activity. To avoid impacts to nesting birds, any grubbing or		
vegetation removal should occur outside peak breeding season (typically		
February 1 through September 1).		
MM BIO-8: Minimizing impacts to other species. A qualified biologist shall	During	City of Desert
be on-site prior to and during all ground- and habitat-disturbing activities to	Project	Hot Springs.
move out of harm's way wildlife that would otherwise be injured or killed from	activities.	
Project-related activities. Movement of wildlife out of harm's way should be		
limited to only those individuals that would otherwise by injured or killed, and		
individuals should be moved only as far a necessary to ensure their safety.		
Measures shall be taken to prevent wildlife from re-entering the Project site.		
Only biologists authorized by a Memorandum of Understanding issued by		
CDFvv shall move CESA-listed species.		011 ( -
MM BIO-9: Employee education program. A qualified biologist shall	Prior to	City of Desert
conduct an education program for all persons employed or otherwise working	employees	Hot Springs.
on the Project site prior to performing any work on-site. The program shall	performing	
consist of a presentation that includes a discussion of the biology of the		

habitats and species that may be present at the site. The qualified biologist shall also include as part of the education program information about the distribution and habitat needs of any special status species that may be present, legal protections for those species, penalties for violations, and mitigation measures. The Employee Education Program should include, but not be limited to: (1) best practices for managing waste and reducing activities that can lead to increased occurrences of opportunistic species and the impacts these species can have on wildlife in the area; (2) protected species that have the potential to occur on the Project site including, but not limited to, rare and sensitive plants, burrowing owl, desert tortoise, desert kit fox, and nesting birds; (3) the location of Mission Creek, Morongo Wash, the Upper Mission Creek/Big Morongo Canyon Conservation Area, and the Willow Hole Conservation Area, as well as the importance of ensuring that no refuse or pollution enters the streams or conservation areas and that encroachment into the streams and conservation areas is not permitted during construction or other Project activities. Interpretation shall be provided for any non-English-speaking workers, and the same instruction shall be provided for any new workers prior to their performing any work on-site.	any work on- site.	
<b>MM BIO-10: Pesticide management plan.</b> Prior to construction and issuance of any grading permit, the City of Desert Hot Springs shall develop a plan with measures to avoid, minimize, or mitigate the impacts of pesticides used in cannabis cultivation, including fungicides, herbicides, insecticides, and rodenticides. The plan should include, but is not limited to, the following elements: (1) Proper use, storage, and disposal of pesticides, in accordance with manufacturers' directions and warnings. (2) Avoidance of pesticide use where toxic runoff may pass into waters of the State, including ephemeral streams. (3) Avoidance of pesticides that cannot legally be used on cannabis in the State of California, as set forth by the Department of Pesticide with "flavorizers." (5) Avoidance of sticky/glue traps. (6) Inclusion of alternatives to toxic rodenticides, such as sanitation (removing food sources like pet food, cleaning up refuse, and securing garbage in sealed containers) and physical barriers.	Prior to construction and issuance of any grading permit.	City of Desert Hot Springs.
<b>MM BIO-11: Artificial light.</b> Light should not be visible outside of any structure used for cannabis cultivation. Employ blackout curtains where artificial light is used to prevent light escapement. Eliminate all nonessential lighting from cannabis sites and avoid or limit the use of artificial light during the hours of dawn and dusk when many wildlife species are most active. Ensure that lighting for cultivation activities and security purposes is shielded, cast downward, and does not spill over onto other properties or upward into the night sky (see the International Dark-Sky Association standards at http://darksky.org/). Use LED lighting with a correlated color temperature of 3,000 Kelvins or less, properly dispose of hazardous waste, and recycle lighting that contains toxic compounds with a qualified recycler.	During Project activities.	City of Desert Hot Springs.
MM BIO-12: Compliance with CDFW Lake and Streambed Alteration (LSA) Program. Prior to construction and issuance of any grading permit, the Project Sponsor shall obtain written correspondence from the California Department of Fish and Wildlife (CDFW) stating that notification under section 1602 of the Fish and Game Code is not required for the Project, or the Project Sponsor should obtain a CDFW-executed Lake and Streambed Alteration Agreement, authorizing impacts to Fish and Game Code section 1602 resources associated with the Project.	Prior to construction and issuance of any grading permit.	City of Desert Hot Springs.