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Governor’s Office of Planning & Research

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STATE CLEARINGHOUSE

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MAPES ROAD CANNABIS CULTIVATION AND DISTRIBUTION PROJECT (PROJECT)
 DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (DRAFT IS/MND)
 SCH# 2020050129

Dear Ms. Blais:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt an MND from the City of Perris for the Mapes Road Cannabis Cultivation and Distribution Project (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

We appreciate the extension to June 11, 2020, to submit comments on the Project. 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

¹ 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.

environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

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 Perris

Objective: The objective of the Project is to construct and operate a light industrial building (9,900 sq. ft.) and four greenhouses (75,600 sq. ft.) on an approximately 6-acre, undeveloped parcel in the City of Perris. The Project would involve construction of associated parking lots, paved and gravel roads, and security fencing around the perimeter of the site. Water would be provided by the Eastern Municipal Water District through an existing water line and construction of lateral lines, and the water supply would be a combination of groundwater and water imported from the State Water Project. Wastewater would be disposed of with a septic system, which would be constructed on-site. Catch basins would be used to capture surface runoff from the site, which would be routed to a biotreatment retention basin that would also be constructed on-site.

Location: The Project is located on a vacant, undeveloped parcel (APN 330-080-006; 33°45'31.33" N, 117°13'34.43" W) in the City of Perris, Riverside County. The parcel is on the north side of Mapes Road, between Goetz Road to the east and South A Street to the west. It is surrounded by occupied commercial and residential parcels and a vacant parcel to the east, an occupied commercial parcel to the west, and vacant parcels to the north and south. Major highways (Interstate 215 and Highway 74) are north of the parcel, and the San Jacinto River is in proximity south of the parcel. North of Interstate 215, the Perris Valley Channel drains to the San Jacinto River, and the San Jacinto River drains to Canyon Lake and Lake Elsinore southwest of the parcel. The Project lies within the Perris South subbasin of the San Jacinto Groundwater Basin and is located within the West San Jacinto Groundwater Management Area.

Timeframe: No start and end dates have been provided for the Project.

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 Draft 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:

- Incomplete description of Project activities: The Draft IS/MND does not adequately describe the greenhouses to be constructed, 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. Although the greenhouses will be built on an impermeable surface, structural specifications are lacking, and the construction plan on page 8 of the Draft IS/MND indicates that part of the structures may be "open to the atmosphere," the roof may be impermanent (a "shade curtain" is mentioned), and some panels may be "translucent." In addition, page 65 of the Draft IS/MND indicates that the Project involves "temporary greenhouse structures." Greenhouse structures that are "temporary" and "open 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 "Cannabis-Specific Impacts on Biological Resources" section below). CDFW recommends the IS/MND include a complete description of the greenhouses and fully analyze the impacts to biological resources.
- Management of the biotreatment retention basin: CDFW is concerned there could be potential impacts on biological resources resulting from the biotreatment retention basin. Typically, retention basins have a spillway for high flow. The Draft IS/MND does not indicate where any associated spillway would discharge and if it would have impacts on biological resources in the area. In addition, as biotreatment basins have the potential to create habitat that attracts wildlife, CDFW is concerned that basins be managed properly. The biotreatment retention basin will have to be maintained, which poses concerns about work period/season, nesting birds, vegetation removal, and sensitive species surveys. The Draft IS/MND should analyze these issues.
- Impacts to groundwater-dependent species: Groundwater-dependent species were reported in the 4 quads surrounding the Project area, including species that directly rely on groundwater, such as tricolored blackbird and western pond turtle, and species that rely on groundwater-dependent vegetation/communities, such as western snowy plover, bald eagle, least Bell's vireo, and San Bernardino kangaroo rat (Rohde et al. 2019). The western pond turtle has been reported within a 1-mile buffer of the Project area (see the section "Special Status Species"). Whether or not these species occur on the parcel itself, they may be impacted by drawdown or pollution of groundwater resulting from Project activities. CDFW recommends the City include an analysis of impacts to groundwater-dependent species in the Draft IS/MND.

Section 15074(b) of the CEQA Guidelines requires the City of Perris to consider comments received during the public review process, and CDFW has identified potentially significant environmental impacts. Incorporation of CDFW's comments and inclusion of appropriate mitigation measures or project revisions to reduce the impacts to a less than significant

level in the final adopted document is expected to allow CDFW and other responsible agencies to rely on the CEQA document when issuing subsequent approvals for the proposed Project.

Assessment of Impacts on Biological Resources

The Draft IS/MND bases its analysis of impacts on the “Biological Report and Western Riverside County Multiple Species Habitat Conservation Plan Analysis” (Appendix B; hereafter called the biological report). CDFW is concerned that the field assessment performed for the biological report was not conducted at the appropriate time of year to detect the presence of special status species on-site. In addition, the field assessment is more than a year old; CDFW generally considers field assessments for wildlife valid for a 1-year period.

The biological report identifies 21 special status plants and 32 special status wildlife species in the 4 quads surrounding the Project area. However, the presence of these species on-site was ruled out on the basis that they are not expected to occur. A field assessment was conducted in November 2018. Vegetation mapping was performed at that time to identify vegetation communities. Results showed annual brome grasslands as the only plant community on-site, and because this community was composed primarily of nonnative species, it was concluded that no mitigation would be required for removal of this vegetation, or for removal of nonnative weeds, which were also observed on-site. Birds, including migratory species, use ruderal and grassland vegetation for foraging. Hence, the conclusion that there is no habitat to support migratory birds (Draft IS/MND, p. 34) is premature. The biological report indicates that 6 bird species were observed during the field assessment and that the site contains suitable nesting habitat (sect. 3.7, Appendix B), but the Draft IS/MND makes no mention of these findings. The Project also falls within the burrowing owl survey area for the WRC MSHCP, but the presence of burrowing owls was ruled out based on the field assessment, which did not follow the protocol in the *Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan*.

Special Status Species

The California Natural Diversity Database (CNDDDB) is a positive-detection database only, meaning that the absence of species data reported by CNDDDB does not indicate absence of the species from a project site. The CNDDDB indicates the potential for special status species in or adjacent to the Project area. A query of CNDDDB for all species reported in the 4 USGS quads (Perris, Romoland, Steele Peak, and Lake Elsinore) surrounding the Project area returned 64 species, including 21 special status plants (as listed in the biological report, Appendix B) and 34 special status wildlife species (the 32 listed in the biological report and 2 additional species added since the time of the report: Crotch bumble bee, *Bombus crotchii*, state candidate endangered species; and southern California legless lizard, *Anniella stebbinsi*, CDFW Species of Special Concern [SSC]).

A query of CNDDDB and BIOS (Biogeographic Information and Observation System) for species occurrences reported within a 2-mile buffer of the Project parcel returned 18 species: western spadefoot (*Spea hammondi*; SSC), burrowing owl (*Athene cunicularia*; SSC), coastal California gnatcatcher (*Poliophtila californica californica*; federal threatened species and SSC), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*; CDFW Watch List), Bell's sage sparrow (*Artemisiospiza belli belli*; CDFW Watch List), spreading navarretia (*Navarretia fossalis*; federal threatened species and California Rare Plant Rank 1B.1), smooth tarplant (*Centromadia pungens* ssp. *laevis*; California Rare Plant Rank 1B.1), Parry's spineflower (*Chorizanthe parryi* var. *parryi*; California Rare Plant Rank 1B.1), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*; California Rare Plant Rank 1B.1), San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*; federal endangered species and California Rare Plant Rank 1B.1), Crotch bumble bee (*Bombus crotchii*; state candidate endangered species), Stephens' kangaroo rat (*Dipodomys stephensi*; federal endangered species and state threatened species), southern grasshopper mouse (*Onychomys torridus ramona*; SSC), thread-leaved brodiaea (*Brodiaea filifolia*; federal threatened species, state endangered species, and California Rare Plant Rank 1B.1), coast horned lizard (*Phrynosoma blainvillii*; SSC), orange-throated whiptail (*Aspidoscelis hyperythra*; CDFW Watch List), western pond turtle (*Emys marmorata*; SSC), and California glossy snake (*Arizona elegans occidentalis*; SSC).

A CNDDDB/BIOS query of species within a 1-mile buffer of the Project parcel returned 11 species: spreading navarretia, smooth tarplant, San Jacinto Valley crownscale, Crotch bumble bee, Stephens' kangaroo rat, southern grasshopper mouse, thread-leaved brodiaea, coast horned lizard, orange-throated whiptail, western pond turtle, and California glossy snake. In addition, a reported occurrence of thread-leaved brodiaea overlaps the Project parcel. Finally, the Project parcel is located in proximity to U.S. Fish and Wildlife Service critical habitat for spreading navarretia (less than 0.5 mile), coastal California gnatcatcher (less than 2 miles), and thread-leaved brodiaea (less than 2 miles).

Burrowing Owl (*Athene cunicularia*)

The Project area falls within the WRC MSHCP survey area for burrowing owl, and the Draft IS/MND concludes, based on the biological report (Appendix B), that the parcel provides suitable foraging habitat, but not nesting habitat. CDFW is concerned that the field assessment conducted for the biological report was not adequate to assess burrowing owl habitat on the parcel because it did not comply with the protocol established by the WRC MSHCP and was conducted more than a year ago. To comply with the MSHCP, a habitat assessment should be conducted using Step I of the *Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan* (https://www.rctlma.org/Portals/3/EPD/consultant/burrowing_owl_survey_instructions.pdf). If burrowing owl habitat is detected, then Step II (focused surveys, census, and mapping) and preconstruction surveys are required. Preconstruction surveys should be conducted using the *Staff Report on Burrowing Owl Mitigation* (2012 or most recent version; <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline>). As a result, CDFW recommends that mitigation measure BIO-1 in the Draft IS/MND be revised as follows:

MM BIO-1: A site visit shall be conducted no less than 60 days prior to the start of Project-related activities to conduct a follow-up burrowing owl habitat assessment, according to the specifications of the *Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan*. If the assessment demonstrates suitable burrowing owl habitat, then focused burrowing owl surveys shall be conducted. If the focused burrowing owl surveys detect active burrowing owl burrows outside the breeding season (September through January), or within the breeding season but owls are not nesting or in the process of nesting, active and/or passive relocation may be conducted following consultation with the California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), and the Western Riverside County Regional Conservation Authority (RCA). A relocation plan will be required by CDFW, USFWS, and RCA if active and/or passive relocation is necessary. The relocation plan will outline the basic process and provide options for avoidance and mitigation, identify short- and long-term habitat management needs of the receiver site, and identify the entity responsible for all financial costs associated with the relocation plan and long-term management of the receiver site.

Preconstruction 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* (2012 or most recent version). Preconstruction surveys should be performed by a qualified biologist following the recommendations and guidelines provided in the *Staff Report on Burrowing Owl Mitigation*. If the preconstruction surveys confirm occupied burrowing owl habitat, project activities shall be immediately halted. The qualified biologist shall coordinate with USFWS, CDFW, and RCA to conduct an impact assessment to develop avoidance, minimization, and mitigation measures to be approved by CDFW prior to commencing Project activities.

Pursuant to the CEQA Guidelines, section 15097(f), CDFW has prepared a draft mitigation monitoring and reporting program (MMRP) for proposed MM BIO-1. The draft MMRP with MM BIO-1 through MM BIO-6 is enclosed as Attachment 1 at the end of this letter.

Crotch Bumble Bee (*Bombus crotchii*)

Crotch bumble bee is a candidate endangered species under the California Endangered Species Act (CESA). As a candidate species, *B. crotchii* receives the same legal protection as endangered or threatened species under CESA (Fish & G. Code, § 2085). The Draft IS/MND does not analyze potential impacts to *B. crotchii*. Therefore, CDFW recommends that the City include results of a focused survey for *B. crotchii* in the revised MND. Special focus should be placed on identifying potential nest and overwintering sites as any ground disturbance may lead to take of adults, eggs, or larvae that are in the ground.

Pesticides have been shown to cause significantly reduced *Bombus* growth rates and queen production, colony founding, and reproductive success (Whitehorn et al. 2012,

Baron et al. 2017, Woodcock et al. 2017, Siviter et al. 2018). Because the Project will involve the use of insecticides in greenhouses that may not be completely enclosed, CDFW recommends that the City include mitigation measure BIO-3 (see Attachment 1) in the revised MND to mitigate for pesticide use on-site.

Stephens' Kangaroo Rat (*Dipodomys stephensi*)

The Project occurs within the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) fee area boundary. State and federal authorizations associated with the SKR HCP provide take authorization for Stephens' kangaroo rat within its boundaries, and the MSHCP provides take authorization for Stephens' kangaroo rat outside of the boundaries of the SKR HCP but within the MSHCP area boundaries. The Draft IS/MND should identify if any portion of the Project will occur on SKR HCP lands or on Stephens' kangaroo rat habitat lands outside of the SKR HCP but within the MSHCP. Note that the SKR HCP allows for encroachment into the Stephens' kangaroo rat Core Reserve for public projects; however, there are no provisions for encroachment into the Core Reserve for privately owned projects. If impacts to Stephens' kangaroo rat habitat will occur from the proposed Project, the Draft IS/MND should specifically quantify permanent impacts to Stephens' kangaroo rat core habitat and the appropriate mitigation to compensate for those impacts.

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.).

The biological report (Appendix B, Draft IS/MND) states that "this site contains suitable nesting bird habitat" (sect. 3.7 of Appendix B), but the Draft IS/MND fails to analyze impacts of the Project to nesting birds. CDFW recommends that the revised document include the results of avian surveys as well as 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 the peak breeding season), monitoring of project-related noise (where applicable), sound walls, and buffers, where appropriate. The revised document should also include specific avoidance and minimization measures that will be implemented should a nest be located within the project site. CDFW recommends that preconstruction surveys be conducted as a mitigation measure and that they be completed no more than

three (3) days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner.

MM BIO-2: Nesting bird surveys shall be conducted by a qualified biologist no more than three (3) days prior to vegetation clearing or ground disturbance activities. If active nests are found during the preconstruction nesting bird surveys, a Nesting Bird Plan (NBP) shall be prepared and implemented by the qualified biologist. At a minimum, the NBP shall include guidelines for addressing active nests, establishing buffers, monitoring, and reporting. The size and location of all buffer zones, if required, shall be based on the nesting species, 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.

Cannabis-Specific Impacts on Biological Resources

The City should be aware that there are many impacts to biological resources associated with cannabis cultivation, whether indoor or outdoor cultivation. CDFW recommends that the City consider the following cannabis-specific impacts to biological resources that may result from the Project activities, as well as those delineated in Attachment 2.

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, pesticides such as rodenticides may result in secondary poisoning through ingestion of sickened animals that leave the premises or ingestion of lethally poisoned animals that are disposed of outside.) Even 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 pesticides appetizing to a variety of species should not be used at cultivation sites. Alternatives to toxic rodenticides may be used to control pest populations at and around cultivation sites, including sanitation (removing food sources such as pet food, cleaning up

refuse, and securing garbage in sealed containers), physical barriers, and snap traps for indoor use only (when used outdoors, snap traps pose a hazard to wildlife).

In addition, the California Department of Pesticide Regulation (CDPR) stipulates that pesticides meeting the following criteria should not be used on cannabis: pesticides containing chemicals on the Groundwater Protection List (California Code of Regulations, § 6800; <https://www.cdpr.ca.gov/docs/legbills/calcode/040101.htm>), pesticides containing California Restricted Materials (California Code of Regulations, § 6400; <https://www.cdpr.ca.gov/docs/legbills/calcode/020401.htm>), and pesticides not registered for food use. For legal pest management practices for cannabis cultivators, visit: <https://www.cdpr.ca.gov/docs/county/cacltrs/penfltrs/penf2015/2015atch/attach1502.pdf>. For more information, visit: <https://www.cdpr.ca.gov/docs/cannabis/index.htm>.

The Draft IS/MND indicates that the Project cultivation activities “would involve plant treatment with organic fertilizers, insecticides, fungicides, and other crop protection agents” (p. 53). Because of the potential for Project activities to involve the use of pesticides, and because the greenhouses may not have fully enclosed, permanent walls and roof, CDFW recommends that the City of Perris include a mitigation measure conditioning the Project to development of a plan to avoid, minimize, and mitigate the impacts of pesticides used in cannabis cultivation. CDFW recommends inclusion of the following mitigation measure:

MM BIO-3: Prior to construction and issuance of any grading permit, the City of Perris 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 be used on cannabis in the state of California, as set forth by the Department of Pesticide Regulation, including the following: pesticides not registered for food use in California, pesticides containing chemicals on the California Restricted Materials list (California Code of Regulations, § 6400), and pesticides containing chemicals on the Groundwater Protection List (California Code of Regulations, § 6800). (4) Avoidance of anticoagulant rodenticides and rodenticides with “flavorizers.” (5) Inclusion of alternatives to toxic rodenticides, such as sanitation (removing food sources such as pet food, cleaning up refuse, and securing garbage in sealed containers), physical barriers, and snap traps (indoor use only).

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 Project activities include use of artificial light for cultivation in greenhouse structures that may not be entirely enclosed and for nighttime security lighting. Because the Project is located immediately adjacent to WRC MSHCP Criteria Cell 3470 to the south, which includes conservation lands, and because of the potential for the use of artificial light to impact nocturnal wildlife species and migratory birds that fly at night, CDFW recommends the following mitigation measure:

MM BIO-4: Light shall 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, as these windows of time are 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.

Western Riverside County Multiple Species Habitat Conservation Plan

Within the Inland Deserts Region, CDFW issued Natural Community Conservation Plan Approval and Take Authorization for the WRC MSHCP per section 2800, et seq., of the California Fish and Game Code on June 22, 2004. The MSHCP 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 MSHCP, is discussed in CEQA. Specifically, section 15125(d) of the CEQA Guidelines requires that the CEQA 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 MSHCP as a result of this Project is necessary to address CEQA requirements. To obtain additional information regarding the MSHCP please visit: <http://rctlma.org/epd/WR-MSHCP>.

The proposed Project occurs within the MSHCP area and is subject to the provisions and policies of the MSHCP. To be considered a covered activity, Permittees need to demonstrate that proposed actions are consistent with the MSHCP and its associated Implementing Agreement. The City of Perris is the Lead Agency and is a signatory to the Implementing Agreement of the MSHCP. The Project does not fall within a Criteria Cell;

however, it is located in proximity to several Criteria Cells with conservation lands and areas described for conservation, and the following MSHCP policies and procedures apply to the proposed Project (<https://rctlma.org/Portals/0/mshcp/volume1/index.html>):

- Guidelines Pertaining to the Urban/Wildlands Interface (MSHCP, vol. 1, sect. 6.1.4): The Draft IS/MND incorrectly concludes that the Project “does not occur adjacent to any area conserved or targeted for conservation by the MSHCP” (p. 34). Urban/Wildlands interface guidelines, including those for drainage, toxics, lighting, noise, and invasives, should be used because the Project is directly adjacent to several Criteria Cells with conservation lands and areas described for conservation, including Criteria Cells 3470 (immediately south of the Project parcel), 3565, 3377, and 3467.
- Additional Survey Needs and Procedures (MSHCP, vol. 1, sect. 6.3.2): The Project is within the required survey area for burrowing owls, and a habitat suitability assessment should have been conducted according to the specifications of the WRC MSHCP. See the “Burrowing Owl (*Athene cunicularia*)” section above for recommendations.
- Appendix C Standard Best Management Practices: The Project should follow the best management practices set forth in Appendix C of the MSHCP, Volume 1. This includes water quality best management practices to prevent runoff of toxic materials such as sediment, pesticides, fertilizers, and petroleum products.

If biological resources included in Section 6 of the MSHCP are found on-site, the City should complete a Determination of Biologically Equivalent or Superior Preservation (DBESP). All surveys required by the MSHCP policies and procedures to determine consistency with the MSHCP should be conducted and results included in the Draft IS/MND so that CDFW can adequately assess whether the Project will impact the MSHCP. The Draft IS/MND should also include an analysis of impacts to conservation lands in Criteria Cells adjacent to the Project site, which are groundwater dependent, especially during drought years. Potential drawdown or pollution of groundwater resulting from the Project should be analyzed and mitigation proposed. In addition, the Project’s potential for toxic runoff to Criteria Cells and the San Jacinto River should also be analyzed and mitigated. CDFW recommends that the City of Perris include the following mitigation measure conditioning the Project to demonstrate compliance with the MSHCP and its associated Implementing Agreement:

MM BIO-5: Prior to construction and issuance of any grading permit, the City of Perris shall demonstrate compliance with the MSHCP and its associated Implementing Agreement via the completion of an MSHCP Consistency Analysis and if needed a Determination of Biologically Equivalent or Superior Preservation process that shall be submitted for review and approval by the Western Riverside County Regional Conservation Authority, the U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife.

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. The 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 the Environmental Permit Information Management System (EPIMS; <https://epims.wildlife.ca.gov>). Cannabis cultivators may learn more about cannabis cultivation permitting at <https://wildlife.ca.gov/Conservation/Cannabis/Permitting>. CDFW recommends the following mitigation measure:

MM BIO-6: Prior to construction and issuance of any grading permit, the Applicant 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 Applicant should obtain a copy of 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 CNDDDB. The CNDDDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

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 Draft IS/MND to assist the City of Perris in identifying and mitigating Project impacts on biological resources. CDFW concludes that the Draft IS/MND does not adequately identify the Project's significant, or potentially significant, impacts on biological resources. Deficiencies in the City of Perris's CEQA documentation can affect later project approval by CDFW in its role as a Responsible Agency. CDFW recommends that prior to adoption of the MND, the City of

Mary Blais, Contract Planner
City of Perris
June 9, 2020
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Perris revise the document to include a complete assessment of biological resources on the Project parcel and analysis of the Project's potential impacts on those resources, as well as appropriate avoidance, minimization, and mitigation measures.

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:

8091B1A9242F49C...

Scott Wilson
Environmental Program Manager

Attachment 1: Mitigation Monitoring and Reporting Program for CDFW-Proposed Mitigation Measures

Attachment 2: Cannabis-Specifics Impacts to Biological Resources

ec: Heather Brashear, Environmental Scientist
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HCPB CEQA Coordinator
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ATTACHMENT 1: MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

Mitigation Measures	Schedule	Responsible Party
<p>MM BIO-1: Burrowing owl surveys. A site visit shall be conducted no less than 60 days prior to the start of Project-related activities to conduct a follow-up burrowing owl habitat assessment, according to the specifications of the <i>Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan</i>. If the assessment demonstrates suitable burrowing owl habitat, then focused burrowing owl surveys shall be conducted. If the focused burrowing owl surveys detect active burrowing owl burrows outside the breeding season (September through January), or within the breeding season but owls are not nesting or in the process of nesting, active and/or passive relocation may be conducted following consultation with the California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), and the Western Riverside County Regional Conservation Authority (RCA). A relocation plan will be required by CDFW, USFWS, and RCA if active and/or passive relocation is necessary. The relocation plan will outline the basic process and provide options for avoidance and mitigation, identify short- and long-term habitat management needs of the receiver site, and identify the entity responsible for all financial costs associated with the relocation plan and long-term management of the receiver site.</p> <p>Preconstruction 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> (2012 or most recent version). Preconstruction surveys should be performed by a qualified biologist following the recommendations and guidelines provided in the <i>Staff Report on Burrowing Owl Mitigation</i>. If the preconstruction surveys confirm occupied burrowing owl habitat, project activities shall be immediately halted. The qualified biologist shall coordinate with USFWS, CDFW, and RCA to conduct an impact assessment to develop avoidance, minimization, and mitigation measures to be approved by CDFW prior to commencing Project activities.</p>	<p>Habitat assessment: No less than 60 days prior to start of Project-related activities.</p> <p>Pre-construction surveys: No less than 14 days prior to start of Project-related activities and within 24 hours prior to ground disturbance.</p>	<p>City of Perris.</p>
<p>MM BIO-2: Nesting bird surveys. Nesting bird surveys shall be conducted by a qualified biologist no more than three (3) days prior to vegetation clearing or ground disturbance activities. If active nests are found during the preconstruction nesting bird surveys, a Nesting Bird Plan (NBP) shall be prepared and implemented by the qualified biologist. At a minimum, the NBP shall include guidelines for addressing active nests, establishing buffers, monitoring, and reporting. The size and location of all buffer zones, if required, shall be based on the nesting species, 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.</p>	<p>No more than three (3) days prior to vegetation clearing or ground disturbance activities.</p>	<p>City of Perris.</p>
<p>MM BIO-3: Pesticide management plan. Prior to construction and issuance of any grading permit, the City of Perris 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</p>	<p>Prior to construction and issuance of any grading permit.</p>	<p>City of Perris.</p>

<p>streams. (3) Avoidance of pesticides that cannot be used on cannabis in the state of California, as set forth by the Department of Pesticide Regulation, including the following: pesticides not registered for food use in California, pesticides containing chemicals on the California Restricted Materials list (California Code of Regulations, § 6400), and pesticides containing chemicals on the Groundwater Protection List (California Code of Regulations, § 6800). (4) Avoidance of anticoagulant rodenticides and rodenticides with “flavorizers.” (5) Inclusion of alternatives to toxic rodenticides, such as sanitation (removing food sources such as pet food, cleaning up refuse, and securing garbage in sealed containers), physical barriers, and snap traps (indoor use only).</p>		
<p>MM BIO-4: Artificial light. Light shall 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, as these windows of time are 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.</p>	<p>During Project activities.</p>	<p>City of Perris.</p>
<p>MM BIO-5: Compliance with MSHCP and its associated Implementing Agreement. Prior to construction and issuance of any grading permit, the City of Perris shall demonstrate compliance with the MSHCP and its associated Implementing Agreement via the completion of an MSHCP Consistency Analysis and if needed a Determination of Biologically Equivalent or Superior Preservation process that shall be submitted for review and approval by the Western Riverside County Regional Conservation Authority, the U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife..</p>	<p>Prior to construction and issuance of any grading permit.</p>	<p>City of Perris.</p>
<p>MM BIO-6: Compliance with CDFW LSA Program. Prior to construction and issuance of any grading permit, the Applicant 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 Applicant should obtain a copy of a CDFW-executed Lake and Streambed Alteration Agreement, authorizing impacts to Fish and Game Code section 1602 resources associated with the Project..</p>	<p>Prior to construction and issuance of any grading permit.</p>	<p>City of Perris.</p>

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ATTACHMENT 2: CANNABIS-SPECIFIC IMPACTS TO BIOLOGICAL RESOURCES

Cannabis-Specific Impacts	CDFW Recommendations
<p>Fertilizers/Imported Soils: Many cannabis cultivators use fertilizers and imported soils to increase the nitrogen content of the local soils. Nutrient enrichment can increase the abundance of pests and pathogens. Imported soils can contain invasive plant or animal species that harm native biodiversity. Excess nutrients from fertilizers that run off into watersheds can cause nutrient imbalances that impact fish and other wildlife and decrease aquatic species activity. Fertilizer runoff can cause algae outbreaks that deplete the water of oxygen.</p>	<p>The Draft IS/MND indicates that fertilizers will be used in Project activities. CDFW recommends using organic fertilizers and avoiding synthetic fertilizers, as well as minimizing use of fertilizers in areas where it is likely that they could run off into watersheds.</p>
<p>Water Pollution: Cannabis cultivation and associated construction can result in the delivery of pollutants into nearby streams and waterways in violation of Fish and Game Code § 5650(6). Cultivation can result in delivery of sediment, fertilizers/nutrients, petroleum products, and pesticides into streams and other waters, degrading the water quality and increasing turbidity. Other toxic chemicals found on cultivation sites also pose a threat to water quality.</p>	<p>The Draft IS/MND indicates that the Project activities will involve “organic fertilizers, insecticides, fungicides, and other crop protection agents” (p. 53). The Project has a southeasterly slope, with the potential for erosion from construction and toxic runoff from cultivation to drain to the Perris Valley Channel/San Jacinto River. CDFW recommends using best management practices to ensure minimal runoff and sediment delivery into waters near cultivation sites and confirming that all Regional Water Quality Control Board requirements are met.</p>
<p>Groundwater Depletion/Groundwater-Dependent Ecosystems and Species: California has a Mediterranean climate in which most precipitation occurs during the winter months. During the growing season for cannabis (May–Sept), there is very little precipitation. Growers acquire water through alternate means, including the use of groundwater. In California, groundwater depletion is a statewide problem because of increased use combined with cycles of drought. Groundwater depletion may impact rivers, streams, lakes, and wetlands, as well as the wildlife and vegetation they support, by decreasing surface water flows to these ecosystems. The Sustainable Groundwater Management Act (SGMA), passed in California in 2014, provides the framework for managing connected groundwater and surface waters to avoid adverse impacts. Groundwater depletion may also have cumulative impacts on biological resources if multiple cannabis cultivation operations use groundwater for irrigation.</p>	<p>Groundwater-dependent species were reported in the 4 quads surrounding the Project area, including species that directly rely on groundwater, such as tricolored blackbird and western pond turtle, and species that rely on groundwater-dependent vegetation, such as western snowy plover, bald eagle, least Bell’s vireo, and San Bernardino kangaroo rat (Rohde et al. 2019). The western pond turtle has been reported within a 1-mile buffer of the Project area. Whether or not these species occur on the parcel itself, they may be impacted by drawdown or pollution of groundwater resulting from Project activities. CDFW recommends a thorough analysis of potential impacts to groundwater-dependent ecosystems and species when considering proposed projects, including current and historic groundwater level data to demonstrate that the proposed usage would be sustainable.</p>
<p>Vegetation Clearing: Construction for cannabis operations can often include clearing of existing vegetation. Vegetation removal may result in the loss</p>	<p>The Draft IS/MND indicates that annual brome grasslands and ruderal vegetation, which bird species use for foraging, occur on the Project site.</p>

<p>of special status plant species and the loss of habitat that supports wildlife species. Clearing may cause fragmentation and loss of sensitive habitats and create edge effects. Activities associated with clearing may disturb associated soil seed banks that sustain local plant populations. Removal of vegetation can make communities vulnerable to colonization by invasive plant species and spread pathogens (Mallery 2010). Additionally, the abundance of dried vegetation remaining after removals may increase risk for fires.</p>	<p>CDFW recommends that before vegetation removal a qualified biologist survey for special status plants and habitat for special status wildlife species (at the appropriate time of year and weather conditions). Vegetation removal should be conducted outside of nesting season for bird species (Fish and Game Code 3503, 3511, 3513). If present, coordinate with CDFW to develop appropriate avoidance, minimization, and mitigation plans. Plan the site to minimize edge habitat and fragmentation.</p>
<p>Greenhouse/Infrastructure Construction and Other Development in Floodplains: Construction of greenhouses and other operation-related structures can result in degradation of habitat, habitat loss, and fragmentation. Floodplains are an important physical and biological part of riverine ecosystems. All rivers flood, and flooding is a natural and reoccurring event. Ecological services provided by riverine floodplains include trees and vegetation that anchor riverbanks, preventing bank erosion; sustaining commercial fisheries and listed anadromous salmonid populations by providing river habitat such as shade, overhanging banks, habitat complexity, large woody debris, insect and foliage drop contributing to the aquatic food chain, and high-flow refugia for fish during flood events; vitally important habitat to numerous riparian-dependent wildlife species, such as reptiles, amphibians, bats, and migratory songbirds; and natural filters, absorbing nutrients and other pollutants from water and making rivers healthier for drinking, swimming, and supporting fish and wildlife species. Development in floodplains can reduce the benefits of natural flooding regimes including deposition of river silt on valley floor soils and recharging of wetlands. Greenhouses and other operation-related structures may require fuel clearance; these areas often become degraded and are prone to establishment by invasive species. The response of local wildlife populations to development can last several decades after habitat alterations have occurred (Hansen et al. 2005). In addition, the effects of development can alter ecological processes and biodiversity in areas that are far removed from the construction area (Hansen et al. 2005, Johnson and Klemens 2005).</p>	<p>The Draft IS/MND indicates that the Project will be constructed in the 100-year floodplain of the San Jacinto River. CDFW recommends that no greenhouses or any operation-related structures be constructed within floodplains. If construction cannot be prevented, CDFW recommends the following avoidance and minimization measures: Ensure that construction minimizes site degradation and uses mechanisms to prevent establishment of invasive species. Create a physical buffer between structures and natural waterbodies. Where project construction necessitates temporary ground disturbance and vegetation removal in the habitat buffer, the disturbed buffer area should be restored to enhance fish and wildlife habitats and water quality. This enhancement could include decompacting soil, site recontouring, and revegetation with native species.</p>
<p>Roads: Cannabis operations often require the construction of new roads or maintenance and increased use of existing ones to access cultivation areas. Roads can cause soil erosion and surface runoff that can transfer sediment into streams. Vehicle traffic on roads can have a number of environmental impacts such as soil compaction (Helvey and Kochenderfer 1990), dust mobilization that limits plants' ability to photosynthesize (Farmer 1993), disruption of surface water flow, and increased spread of invasive species. Road use can result in wildlife</p>	<p>The Draft IS/MND indicates that the Project activities include construction of a fire lane. CDFW recommends limiting the construction of new roads and properly using and maintaining existing roads when possible. Restore drainage areas connected to current roadways to limit environmental impacts like erosion and diversion of surface flow. When new roads must be constructed or reconstructed, use practices that minimize environmental impacts (http://www.pacificwatershed.com/sites/default/files/roadsenglishbookapril2015b_0.pdf).</p>

<p>mortality, altered abundances and diversity of wildlife, and modification of animal behavior (Trombulak and Frissell 2000). Cumulatively, roads can have an even more significant impact as increased road density may compound the documented effects of roads.</p>	
<p>Fencing: Temporary and/or permanent fencing is often erected around cultivation sites or structures. Fencing can impede wildlife movement, resulting in habitat fragmentation or elimination of wildlife corridors. It can also be a hazard to wildlife causing entanglement and mortality (van der Ree 1999, Stuart et al. 2001, Harrington and Conover 2006).</p>	<p>CDFW recommends using wildlife-friendly fencing at cultivation sites or structures.</p>
<p>Noise: Construction for cannabis operations 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 cues (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).</p>	<p>The Project activities include construction, which involves noise that may impact nesting birds, as well as wildlife on adjacent Criteria Cells of the WRC MSHCP. CDFW recommends restricting the use of equipment to hours least likely to disrupt wildlife (e.g., not at night or in the early morning). Do not use generators except for temporary use in emergencies. (Generators may also involve the use of petroleum products in proximity to streams where they may contribute to toxic runoff.) Power to sites can be provided by solar PV (photovoltaic) systems, cogeneration systems (natural gas generator), small micro-hydroelectric systems, or small wind turbine systems. Consider use of noise suppression devices such as mufflers or enclosures for generators. Sounds generated from any means should be below the 55- to 60-decibel range within 50 feet from the source.</p>

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