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June 10, 2021

Governor's Office of Planning & Research

June 14 2021

STATE CLEARINGHOUSE

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**Subject: Canterbury Management, LLC Cannabis Project
Mitigated Negative Declaration (MND)
Cannabis Cultivation and Manufacturing (Project)
SCH No. 2021050224**

Dear Ms. Stowers:

The California Department of Fish and Wildlife (CDFW) received a Notice of Completion for an MND from California City for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide recommendations regarding the activities proposed at the Project site that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects on the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code. While the comment period may have passed, CDFW would appreciate if the City of California City will still consider our comments.

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.

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.

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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.), related authorized as provided by the Fish and Game Code will be required.

In this role, CDFW is responsible for providing, as available, biological expertise during public agency environmental review efforts (e.g., CEQA), focusing specifically on project activities that have the potential to adversely affect fish and wildlife resources. CDFW provides recommendations to identify potential impacts and possible measures to avoid or reduce those impacts.

Protected Furbearing Mammals: CDFW has jurisdiction over furbearing mammals pursuant to Title 14, California Code of Regulations, Section 460 (14 CCR § 460). This Section states, "Fisher, marten, river otter, desert kit fox, and red fox may not be taken at any time;" therefore, CDFW cannot authorize their take.

Bird Protection: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs, and nests include sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

Fully Protected Species: CDFW has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any fully protected species is prohibited and CDFW cannot authorize their incidental take.

Unlisted Species: Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened (E, R, or T) on any State for Federal list to be considered E, R, or T under CEQA. If a species can be shown to meet the criteria for E, R, or T as specified in the CEQA Guidelines (Cal. Code of Regs., tit. 14, Chapter 3, § 15380), CDFW recommends it be fully considered in the environmental analysis for this Project.

PROJECT DESCRIPTION SUMMARY

Proponent: Canterbury Management, LLC

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Objective: The Project proposes construction of a commercial cannabis facility on two parcels totaling 2.25-acres. The facility will consist of five pre-engineered industrial buildings, totaling 48,989 square foot (sf), where the cultivation activities will be contained. The facility will also include one 257 sf office and guard structure, one retention basin totaling 2,440 sf, landscaping, parking spaces, frontage improvements and new paved access points, onsite wastewater treatment system, and onsite generators for electricity. In addition, both parcels will be enclosed by a seven-foot security fence.

The Project anticipates that electrical power will be served through the use of on-site generators which are California Air Resources Board (CARB) certified and will operate continuously until the extension of transmission infrastructure is available to the City by the current electricity provider, Southern California Edison (SCE).

Location: The Project is located east of Isabella Boulevard, between Willow Avenue and Forest Boulevard, in the City of California City, County of Kern, Latitude 35.105068, Longitude -117.991487, Assessor's Parcel Numbers 206-041-07 and 206-041-44.

Timeframe: Unspecified.

RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City of California City Planning Department in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

I. Environmental Setting and Related Impact

Review of the California Natural Diversity Database (CNDDDB) (CDFW 2021) reveals records for several special-status species within the vicinity of the Project site including, but not limited to, the State and Federally threatened desert tortoise (*Gopherus agassizii*), the protected furbearing mammal desert kit fox (*Vulpes macrotis arsipus*), State threatened Mohave ground squirrel (*Xerospermophilus mohavensis*) State Species of Special Concern: American badger (*Taxidea taxus*); loggerhead shrike (*Lanius ludovicianus*), Le Conte's thrasher (*Toxostoma lecontei*), burrowing owl (*Athene cunicularia*), California Rare Plant Ranked (CRPR) the CRPR 1B.2 Barstow woolly sunflower (*Eriophyllum mohavens*), alkali mariposa-lily (*Calochortus striatus* Parish), and desert cymopterus (*Cymopterus deserticola*).

Please note that the CNDDDB is populated by, and records, voluntary submissions of species detections. As a result, species may be present in locations not depicted in the

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CNDDDB but where there is suitable habitat and features capable of supporting species. Therefore, a lack of an occurrence record in the CNDDDB is not tantamount to a negative species finding.

COMMENT 1: Desert Tortoise

Issue: While the Project site has been previously disturbed, aerial imagery indicates that there has been some element of natural recruitment and reclamation of desert habitat on-site. The Project site is also less than 1000 feet from desert scrub and desert wash habitat and is within the range of desert tortoise (CDFW 2021). Desert tortoise are most common in desert scrub vegetation, desert wash, and Joshua tree habitats (CDFW 2018). Therefore, desert tortoise have the potential to be on-site as a result of transient movement or future colonization and impacted by Project-related activities.

Specific impact: Potentially significant impacts that may result from Project-related activities include loss of foraging habitat, habitat degradation and fragmentation, burrow destruction, and direct mortality.

Evidence impact is potentially significant: Primary threats to desert tortoise are habitat loss resulting from urban/industrial development, agriculture development, degradation of habitat by off-highway vehicles (OHV), intentional killing of tortoises, and killing by cars and OHV (Doak, et al. 1994). Project activities may result in the loss of potential desert tortoise habitat through conversion, may increase habitat fragmentation, and expand urbanization into the area.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential Project-related impacts to desert tortoise, CDFW recommends conducting the following evaluation of the Project site and including the following measures in the MND.

Recommended Mitigation Measure 1: Desert Tortoise Surveys

CDFW advises surveys for desert tortoise be conducted by a qualified wildlife biologist who understands the pre-project survey protocol as outlined in "Preparing for any action that may occur within the range of the Mojave Desert tortoise (USFWS 2010) and has previous experience surveying for desert tortoise. Survey results are advised to be submitted to both CDFW and the USFWS. According to the protocol, if neither tortoises nor sign are encountered during the action area surveys and the project, or any portion of the project is less than or equal to 200 acres, three additional 10-meter belt transects at 200-meter intervals parallel to and/or encircling the project site perimeter should be surveyed. Please note desert tortoise surveys

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are valid for one year and should be conducted within a year of the start of Project implementation.

Recommended Mitigation Measure 2: Desert Tortoise Avoidance

Avoidance whenever possible is encouraged via delineation and observance of a 50-foot no-disturbance buffer around burrows.

Recommended Mitigation Measure 3: Desert Tortoise Take Authorization

If conducting surveys is not feasible, the applicant can assume presence and acquire a State Incidental Take Permit (ITP) pursuant Fish and Game Code section 2081 subdivision (b) prior to initiating any vegetation or ground-disturbing activities. Or if a desert tortoise is found within the Project site during surveys or construction activities, consultation with CDFW is advised to discuss how to implement the Project and avoid take; or if avoidance is not feasible, acquisition of an ITP pursuant to Fish and Game Code section 2081(b) would be required to comply with CESA.

COMMENT 2: Mohave Ground Squirrel (MGS)

Issue: While the Project site has been previously disturbed, aerial imagery indicates that there has been some element of natural recruitment and reclamation of desert habitat on-site. The Project site is also less than 1000 feet from desert scrub and desert wash habitat and is within the range of MGS (CDFW 2021). Though the Biological Resource Assessment (BRA) for the Project states that MGS were not observed on-site, it is unclear that CDFW recommended survey protocol were used. There is also potential for the species to colonize the Project site prior to Project construction and be impacted by Project-related activities.

Specific impact: Without appropriate avoidance and minimization measure for MGS, potential significant impacts associated with the Project's construction include burrow collapse, inadvertent entrapment, reduced reproductive success, and mortality of individuals.

Evidence impact is potentially significant: Major threats to MGS are drought, habitat destruction, habitat fragmentation, and habitat degradation (Gustafson, 1993). MGS is restricted to a small geographic range and the greatest habitat loss has occurred near desert towns including California City (Gustafson, 1993). Natural cycling is anticipated in MGS populations therefore the true indicators of the status of the species are the quantity, pattern of distribution, and quality of habitat (Gustafson, 1993). Project activities may result in the loss of potential MGS habitat through conversion, may increase habitat fragmentation, and expand urbanization into the area.

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Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential Project-related impacts to MGS, CDFW recommends conducting the following evaluation of the Project site and including the following measures in the MND.

Recommended Mitigation Measure 4: MGS Surveys

CDFW recommends that a qualified biologist, with appropriate permits, conduct protocol surveys for MGS following the methods described in the “Mohave Ground Squirrel Survey Guidelines” (CDFG 2003) during the appropriate survey season prior to Project implementation. Survey methods include trapping by a qualified biologist up to three times per trapping season. The MGS survey reported in the Report did not follow the methods described in the “Mohave Ground Squirrel Survey Guidelines”. Results of the MGS surveys are advised to be submitted to the CDFW. Please note MGS surveys are valid for one year and should be conducted within a year of the start of ground-disturbing activities.

Recommended Mitigation Measure 5: MGS Avoidance

In order to implement full avoidance for MGS, CDFW recommends a 50-foot no-disturbance buffer be employed around all burrows that could be used by MGS.

Recommended Mitigation Measure 6: MGS Take Authorization

If MGS are found within the Project site during preconstruction surveys or construction activities, consultation with CDFW is recommended to discuss how to implement the Project and avoid take; or if avoidance is not feasible, acquisition of an ITP pursuant to Fish and Game Code section 2081(b) would be required to comply with CESA.

COMMENT 3: Burrowing Owl (BUOW)

Issue: While the Project site has been previously disturbed, aerial imagery indicates that there has been some element of natural recruitment and reclamation of desert habitat on-site. The Project site is also less than 1000 feet from desert scrub and BUOW have been documented within the vicinity of the Project site (CDFW, 2021). While the BRA for the Project indicated that no BUOW were documented on-site, there is the potential for the site to be colonized by BUOW prior to construction. Habitat both within and surrounding the Project site has the potential provide suitable nesting and foraging habitat for BUOW. Therefore, there is a potential that BUOW could be impacted by Project-related activities.

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Specific impact: Without appropriate avoidance and minimization measures for BUOW, potentially significant direct impacts associated with subsequent activities include burrow collapse, inadvertent entrapment, nest abandonment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

Evidence impact is potentially significant: BUOW rely on burrow habitat year-round for their survival and reproduction. Habitat loss and degradation are considered the greatest threats to BUOW in California (Gervais et al. 2008). The Project and surrounding area contain undeveloped land; therefore, subsequent ground-disturbing activities associated with the Project have the potential to significantly impact local BUOW populations. In addition, and as described in CDFW's "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), excluding and/or evicting BUOW from their burrows is considered a potentially significant impact under CEQA.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential Project-related impacts to burrowing owl, CDFW recommends conducting the following evaluation of the Project site and including the following measures in the MND.

Recommended Mitigation Measure 7: BUOW Surveys

CDFW recommends assessing presence/absence of BUOW by having a qualified biologist conduct surveys following the California Burrowing Owl Consortium's "Burrowing Owl Survey Protocol and Mitigation Guidelines" (CBOC 1993) and CDFW's Staff Report on Burrowing Owl Mitigation" (CDFG 2012) prior to Project implementation. Specifically, CBOC and CDFW's Staff Report suggest three or more surveillance surveys conducted during daylight with each visit occurring at least three weeks apart during the peak breeding season (April 15 to July 15), when BUOW are most detectable.

Recommended Mitigation Measure 8: BUOW Avoidance

CDFW recommends no-disturbance buffers, as outlined in the "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), be implemented prior to and during any ground-disturbing activities. Specifically, CDFW's Staff Report recommends that impacts to occupied burrows be avoided in accordance with the following table unless a qualified biologist approved by CDFW verifies through non-invasive methods that either: 1) the birds have not begun egg laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

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Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting	April 1-Aug 15	200 m*	500 m	500 m
Nesting	Aug 16-Oct 15	200 m	200 m	500 m
Nesting	Oct 16-Mar 31	50 m	100 m	500 m

* meters (m)

Recommended Mitigation Measure 9: BUOW Passive Relocation and Mitigation

If BUOW are found, CDFW recommends adding the following mitigation measures as described in the Staff Report to the MND:

“If adherence to the buffers and avoidance is not possible, if necessary, burrow exclusion may be conducted by qualified biologists and only during the non-breeding season, before breeding behavior is exhibited and after the burrow is confirmed empty through non-invasive methods, such as surveillance. All occupied burrows will be replaced with artificial burrows at a ratio of 1 burrow collapsed to 1 artificial burrow constructed (1:1) as mitigation for the potentially significant impact of evicting BUOW. BUOW may attempt to colonize or re-colonize a site that will be impacted; thus, ongoing surveillance by a qualified biologist will continue at a rate that is sufficient to detect BUOW if they return.”

COMMENT 4: American Badger

Issue: While the Project site has been previously disturbed, aerial imagery indicates that there has been some element of natural recruitment and reclamation of desert habitat on-site. The Project site is also less than 1000 feet from desert scrub and desert wash habitat and is within the range of American badger (CDFW 2021). Badgers occupy sparsely vegetated land cover with dry, friable soils to excavate dens, which they use for cover, and that support fossorial rodent prey populations (i.e., ground squirrels, pocket gophers, etc.) (Zeiner et al. 1990). Therefore, there is the potential for American badger to be present on-site or to colonize the Project site prior to construction and be impacted by Project-related activities.

Specific impact: Without appropriate avoidance and minimization measures for American badger, potential significant impacts include den abandonment, which may result in reduced health or vigor of young, in addition to direct mortality.

Evidence impact is potentially significant: The American badger population in California has been declining due to agriculture and urban development (Williams, 1986). Habitat loss is a primary threat to American badger (Gittleman et al. 2001).

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Projects, such as the one being proposed, have the expectation to promote the growth of the City of California City, resulting in a high degree of land conversion and potential habitat fragmentation. The Project site is within the range of American badger and may contain suitable habitat both on-site and within the vicinity of the Project. As a result, Project activities have the potential to significantly impact local populations of American badger.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential Project-related impacts to American badger, CDFW recommends conducting the following evaluation of the Project site and including the following measures in the MND.

Recommended Mitigation Measure 10: American Badger Surveys

To evaluate potential Project-related impacts to the American badger, CDFW recommends that a qualified biologist conduct focused surveys for American badger and their requisite habitat features, well in advance of Project implementation.

Recommended Mitigation Measure 11: American Badger Avoidance

Avoidance whenever possible is encouraged via delineation and observing a 50-foot no-disturbance buffer around dens.

COMMENT 5: State Species of Special Concern: Loggerhead Shrike and Le Conte's Thrasher (SSC)

Issue: While the Project site has been previously disturbed, aerial imagery indicates that there has been some element of natural recruitment and reclamation of desert habitat on-site. The Project site is also less than 1000 feet from desert scrub and desert wash habitat and is within the range of the of the loggerhead shrike and Le Conte's thrasher and have been documented to occur within the vicinity of the Project site (CDFW 2021). These species have been documented to occur in the vicinity of the Project site. The Project site and surrounding areas could provide suitable nesting habitat for these species. Therefore, the subject parcel may be suitable for occupation, foraging, and/or colonization by these species.

Specific impact: Without appropriate avoidance and minimization measures for loggerhead shrike and Le Conte's thrasher potentially significant impacts associated with the Project's construction could include nest abandonment, which may result in reduced health or vigor of eggs and/or young, and/or direct mortality.

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Evidence impact is potentially significant: Habitat loss and degradation is a primary threat to the loggerhead shrike and Le Conte's thrasher (Brooks and Temple 1990, Yosef 1996, Pruitt 2000, and Laudenslayer et al. 1992). Both species often build their nests in thorny vegetation, which may help keep predators away (Yosef 1996). In the absence of thorny trees or bushes, they can nest in brush piles or tumbleweeds (Yosef 1996). Impacts to desert scrub vegetation within the Project site have the potential to significantly impact local populations of these species.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to these species, CDFW recommends conducting the following evaluation of the subject parcel and its vicinity and implementing the following mitigation measures into the MND.

Recommended Mitigation Measure 12: SSC Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation to determine if the Project site or its immediate vicinity contains suitable habitat and/or are occupied by the species mentioned above.

Recommended Mitigation Measure 13: SSC Surveys

CDFW recommends that Project activities be timed to avoid the normal Le Conte's thrasher breeding season (Late January through early June) and loggerhead shrike breeding season (early January through July). However, if the Project activities must take place during that time, CDFW recommends that a qualified wildlife biologist conduct surveys for nesting Le Conte's thrasher and loggerhead shrike no more than 10 days prior to the start of implementation to evaluate presence/absence these species in proximity to Project activities and to evaluate potential Project-related impacts.

Recommended Mitigation Measure 14: SSC Avoidance

Avoidance whenever possible is encouraged via delineation and observing a 50-foot no-disturbance buffer around nests.

COMMENT 6: Desert Kit Fox (DKF)

Issue: While the Project site has been previously disturbed, aerial imagery indicates that there has been some element of natural recruitment and reclamation of desert habitat on-site. The Project site is also less than 1000 feet from desert scrub and desert wash habitat and is within the range of DKF (CDFW 2021). DKF populations

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can fluctuate over time; therefore, presence/absence in any one year is not necessarily a reliable indicator of DKF potential to occur on a site, repeat surveys may be warranted. Additionally, over time DKF may be attracted to the Project site due to the type and level of ground-disturbing activities and the loose, friable soils resulting from intensive ground disturbance. As a result, there is potential for DKF to occupy or colonize the Project site.

Specific impact: Without appropriate avoidance and minimization measures for DKF, potential significant impacts associated with the Project's construction could include den collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals.

Evidence impact is potentially significant: Habitat loss and fragmentation from the rapid expansion of, industrial buildings, large-scale industrial solar, and wind energy development are the primary threat to DKF (Kadaba et al. 2013). The desert kit fox populations are closely connected with creosote bush scrub communities (McGrew 1979), which is present in the vicinity of the Project site. Kit foxes are also able to adapt to open habitats including creosote flats and grasslands (Rodrick and Mathews 1999). Projects, such as the one being proposed, have the expectation to promote the growth of the City of California City, resulting in a high degree of land conversion and potential habitat fragmentation. The Project site is within the range of DKF and may contain suitable habitat both on-site and within the vicinity of the Project. As a result, Project activities have the potential to significantly impact local populations of DKF.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential Project-related impacts to DKF, CDFW recommends conducting the following evaluation of the Project site and including the following measures in the MND.

Recommended Mitigation Measure 15: DKF Surveys

CDFW recommends assessing presence/absence of DKF and their dens by conducting further surveys both on, and within 200 feet of the Project site well in advance of the Project. Pre-construction surveys are also recommended, and CDFW advises conducting these surveys in all areas of potentially suitable habitat no less than 14 days and no more than 30 days prior to beginning of ground-disturbing activities.

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Recommended Mitigation Measure 16: DKF Avoidance

If dens are found during surveys, CDFW recommends implementing no-disturbance buffers, in accordance with USFWS's "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (USFWS 2011). Specifically, if DKF are found occupying atypical (i.e., manmade structure) den sites, a 50-foot no-disturbance is recommended around the occupied den structure. If potential dens are found during surveys, CDFW advises implementing a 50-foot no-disturbance buffer around these structures as well. Consultation with CDFW and implementation of a 100-foot no-disturbance buffer around dens that are used or known to have been used at any time in the past by DKF, are found during pre-construction surveys. If a natal or pupping den is found during surveys, consultation with CDFW is recommended.

Recommended Mitigation Measure 17: DKF Take Avoidance

Desert kit fox (*Vulpes macrotis arsipus*) is protected under the California Code of Regulations, Chapter 5, section 460 (14 CCR § 460), which prohibits "take" of DKF for any reason.

COMMENT 7: Special status plants

Issue: While the Project site has been previously disturbed, aerial imagery indicates that there has been some element of natural recruitment and reclamation of desert habitat on-site. The Project site is also less than 1000 feet from desert scrub and desert wash habitat and several special-status plants have been documented to occur within the vicinity of the Project site, including Barstow woolly sunflower, alkali mariposa-lily, and desert cymopterus (CDFW 2021). While the BRA for the Project indicated that these species were not detected on-site, it is unclear that appropriate survey protocols were followed. Therefore, the species have the potential to be present on-site and impacted by Project related activities.

Specific impact: Without appropriate avoidance and minimization measures for special status plants, potential significant impacts associated with the future development of the Project site could include inability to reproduce, direct mortality, and habitat modification.

Evidence impact is potentially significant: The Project site may provide suitable habitat for special status plant Barstow woolly sunflower, alkali mariposa-lily, and desert cymopterus. As a result, habitat loss and degradation resulting from ground-disturbing activities have the potential to significantly impact these special status plant species.

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Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to special status plant species, CDFW recommends conducting the following evaluation of the subject parcel and surrounding areas adjacent to the Project site and implementing the following mitigation measures.

Recommended Mitigation Measure 18: Special Status Plant Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of the Project implementation to determine if special status plant species or their habitats are present on or in the vicinity of the Project and propose appropriate mitigation measures to avoid impacts to those resources.

Recommended Mitigation Measure 19: Special Status Plant Surveys

If suitable habitat is present, CDFW recommends the Project site and surrounding areas be surveyed for special status plants by a qualified botanist following the "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (CDFW 2018). The CDFW 2018 plant survey protocol specifically states, "*Conduct botanical field surveys in the field at the times of year when plants will be both evident and identifiable. Usually this is during flowering or fruiting. Space botanical field survey visits throughout the growing season to accurately determine what plants exist in the project area. This usually involves multiple visits to the project area (e.g. in early, mid, and late-season) to capture the floristic diversity at a level necessary to determine if special status plants are present.*" This protocol, which is intended to maximize detectability, includes identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period.

Recommended Mitigation Measure 20: Special Status Plant Avoidance

CDFW recommends special status plant species be avoided whenever possible by delineation and observing a no-disturbance buffer of at least 50-feet from the outer edge of the plant population(s) or specific habitat type(s) required by special status plant species. If buffers cannot be maintained, then consultation with CDFW is warranted to determine appropriate minimization and mitigation measures for impacts to special status plant species.

Recommended Mitigation Measure 21: Special Status Plant Take Authorization

If a plant species listed pursuant to CESA or the Native Plant Protection Act is identified during botanical surveys, consultation with CDFW is warranted to

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determine if the Project can avoid take. If take cannot be avoided, acquisition of an ITP pursuant to Fish and Game Code section 2081(b) would be required to comply with CESA.

COMMENT 8: Pesticide Use

Issue: Cannabis cultivation sites often use substantial quantities of pesticides, including insecticides, and rodenticides, to discourage wildlife foraging on cannabis plants and to decrease damage to irrigation lines.

Evidence impact would be significant: 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. Raptors (e.g., hawks and owls) and mammalian carnivores (e.g., coyotes, foxes, etc.) are some of the common victims of secondary poisonings by anticoagulant rodenticides (Mendelsohn and Paz 1977, Gabriel et al. 2015, 2018). Even non-lethal doses of pesticides can negatively affect wildlife; pesticides can comprise 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).

Recommendations to minimize significant impacts: 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. (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 (DPR) stipulates that pesticides must certain criteria to be legal for use on cannabis. For details, visit: <https://www.cdpr.ca.gov/docs/cannabis/questions.htm>; <https://www.cdpr.ca.gov/docs/county/cacltrs/penfltrs/penf2015/2015atch/attach1502.pdf>.

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Recommended Potentially Feasible Mitigation Measures

CDFW recommends the MND address and fully analyze the use of pesticides, including the risk of secondary poisoning to native species caused by the use of rodenticides. CDFW recommends the MND include a measure that requires the use of herbicides, rodenticides, or fertilizers on the Project site to be restricted to those approved by USEPA and DPR.

COMMENT 9: Artificial Light

Issue: Cannabis cultivation operations often use artificial lighting or “mixed-light” techniques in both greenhouse structures as well as outdoor security lighting. If not disposed of properly, these lighting materials pose significant environmental risks as 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.

Evidence the impact would be significant: Night lighting can disrupt the circadian rhythms of many wildlife species. Many species use photoperiod cues for communication (e.g., bird song; Miller 2006), determining when to begin foraging (Stone et al. 2009), behavior thermoregulation (Beiswenger 1977), and migration (Longcore and Rich 2004). Phototaxis, a phenomenon which results in attraction and movement towards light, can disorient, entrap, and temporarily blind wildlife species that experience it (Longcore and Rich 2004).

Recommendations to minimize significant impacts: Light should not be visible outside of any structure used for cannabis cultivation. Use blackout curtains where artificial light is used to prevent light escapement. Eliminate all non-essential 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 upwards 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 all lighting that contains toxic compounds with a qualified recycler.

II. Editorial Comments and/or Suggestions

Notification of Lake and Streambed Alteration: CDFW has regulatory authority with regard to activities occurring in streams and/or lakes that could adversely affect any fish or wildlife resource, pursuant to Fish and Game Code sections 1600 et seq. Section 1602(a) of the Fish and Game Code requires an entity to notify CDFW

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before engaging in activities that would substantially change or use any material from the bed, channel, or bank of any stream or substantially divert or obstruct the natural flow of a stream.

Additionally, Business and Professions Code 26060.1 (b)(3) includes a requirement that California Department of Food and Agriculture (CDFA) cannabis cultivation licensees demonstrate compliance with Fish and Game Code section 1602 through written verification from CDFW. CDFW recommends submission of a Lake and Streambed Alteration Notification to CDFW for the proposed Project prior to initiation of any cultivation activities. Additional information can be found here: <https://www.wildlife.ca.gov/Conservation/Cannabis/Permitting>.

Land Conversion: Project activities that result in land conversion may also result in habitat loss for special status species, migration/movement corridor limitations, or fragmentation of sensitive habitat. Loss of habitat to development, renewable energy, and agriculture are contributing factors to the decline of many special status species and game species. CDFW recommends CEQA documents generated for cannabis activities address cumulative impacts of land conversion.

Cumulative Impacts: General impacts from Projects include habitat fragmentation, degradation, habitat loss, migration/movement corridor limitations, and potential loss of individuals to the population. Multiple cannabis-related Projects have been proposed throughout California City with similar impacts to biological resources. CDFW recommends the lead agency consider all approved and future projects when determining impact significance to biological resources.

Cannabis Water Use: Water use estimates for cannabis plants are not well established in literature and estimates from published and unpublished sources range between 3.8 liters and 56.8 liters per plant per day. Based on research and observations made by CDFW in northern California, cannabis grow sites have significantly impacted streams through water diversions resulting in reduced flows and dewatered streams (Bauer, S. et al. 2015). Groundwater use for clandestine cannabis cultivation activities have resulted in lowering the groundwater water table and have impacted water supplies to streams in northern California. CDFW recommends that CEQA document address the impacts to groundwater and surface water that may occur from Project activities.

Water Pollution: Pursuant to Fish and Game Code section 5650, it is unlawful to deposit in, permit to pass into, or place where it can pass into "Waters of the State" any substance or material deleterious to fish, plant life, or bird life, including non-native species. It is possible that without mitigation measures this Project could result in pollution of Waters of the State from storm water runoff or construction-related erosion. Potential impacts to the wildlife resources that utilize

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watercourses in the Project site include the following: increased sediment input from road or structure runoff; toxic runoff associated with Project-related activities and implementation; and/or impairment of wildlife movement. The Regional Water Quality Control Board and United States Army Corps of Engineers also have jurisdiction regarding discharge and pollution to Waters of the State.

ENVIRONMENTAL DATA

CEQA requires that information developed in Environmental Impact Reports and Negative Declarations be incorporated into a database, which 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: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. 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: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

FILING FEES

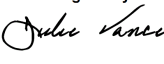
If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CONCLUSION

CDFW appreciates the opportunity to comment on the Project to assist the City of California City in identifying and mitigating Project impacts on biological resources.

Should you have questions regarding this letter or for further coordination, please contact Shannon Dellaquila, Senior Environmental Scientist (Specialist), by phone at (559) 899-9758 or electronic mail at Shannon.Dellaquila@wildlife.ca.gov.

Sincerely,

DocuSigned by:

FA83F09FE08945A
Julie A. Vance
Regional Manager

Attachment

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Attachment 1

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM
(MMRP)**

**PROJECT: Canterbury Management, LLC
Mitigated Negative Declaration (MND)
Indoor Cannabis Cultivation (Project)**

SCH No.: 2021050224

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Project Disturbing Soil or Vegetation</i>	
Recommended Mitigation Measure 1: Desert Tortoise Surveys	
Recommended Mitigation Measure 2: Desert Tortoise Avoidance	
Recommended Mitigation Measure 3: Desert Tortoise Take Authorization	
Recommended Mitigation Measure 4: Mohave Ground Squirrel (MGS) Surveys	
Recommended Mitigation Measure 5: MGS Avoidance	
Recommended Mitigation Measure 6: MGS Take Authorization	
Recommended Mitigation Measure 7: Burrowing Owl (BUOW) Surveys	
Recommended Mitigation Measure 8: BUOW Avoidance	
Recommended Mitigation Measure 9: BUOW Passive Relocation and Mitigation	
Recommended Mitigation Measure 10: American Badger Surveys	
Recommended Mitigation Measure 11: American Badger Avoidance	
Recommended Mitigation Measure 12: State Species of Special Concern: Loggerhead Shrike and Le Conte's Thrasher (SSC) Habitat Assessment	
Recommended Mitigation Measure 13: SSC Surveys	
Recommended Mitigation Measure 14: SSC Avoidance	
Recommended Mitigation Measure 15: Desert Kit Fox (DKF) Surveys	
Recommended Mitigation Measure 16: DKF Avoidance	
Recommended Mitigation Measure 17: DKF Take Avoidance	
Recommended Mitigation Measure 18: Special Status Plant Habitat Assessment	
Recommended Mitigation Measure 19: Special Status Plant Surveys	

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
Recommended Mitigation Measure 20: Special Status Plant Avoidance	
Recommended Mitigation Measure 21: Special Status Plant Take Authorization	
<i>During Construction</i>	
Recommended Mitigation Measure 3: Species of Special Concern Avoidance	
Recommended Mitigation Measure 5: MGS Avoidance	
Recommended Mitigation Measure 8: BUOW Avoidance	
Recommended Mitigation Measure 11: American Badger Avoidance	
Recommended Mitigation Measure 14: SSC Avoidance	
Recommended Mitigation Measure 16: DKF Avoidance	
Recommended Mitigation Measure 17: DKF Take Avoidance	
Recommended Mitigation Measure 20: Special Status Plant Avoidance	