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October 15, 2020

Governor's Office of Planning & Research

Oct 15 2020

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STATE CLEARINGHOUSE

**Subject: Lemoore Farm, LLC Cannabis Cultivation Project
Mitigated Negative Declaration (MND)
Indoor Cannabis Cultivation (Project)
SCH Number: 2020090305**

Dear Ms. Holwell:

The California Department of Fish and Wildlife (CDFW) received an MND from the City of Lemoore 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.

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

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.

Judy Holwell
SCH Number: 2020090305
October 15, 2020
Page 2

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.), 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.

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 Regs., tit. 14, § 15380), CDFW recommends it be fully considered in the environmental analysis for this Project.

PROJECT DESCRIPTION SUMMARY

Proponent: Lemoore Farm, LLC

Objective: The Project consists of indoor cannabis cultivation on approximately 35 acres of previously disturbed land. The Project proponent proposes to conduct indoor

Judy Holwell
SCH Number: 2020090305
October 15, 2020
Page 3

cannabis cultivation within steel hoop houses and includes a cargo container that will have an office area, house the computerized irrigation and security monitoring system, and stock tanks.

Location: The Project will take place at latitude 36.26741, longitude -119.80089; located west of South 19th Avenue, north of Jackson Avenue, east of State Route (SR) 41, and south of Idaho Avenue in the City of Lemoore, Kings County, California. Assessor's Parcel Numbers (APN) 024-080-068 and 024-080-070.

Timeframe: Unspecified.

RECOMMENDATIONS

CDFW offers the following recommendations to assist the City of Lemoore 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

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or the United States Fish and Wildlife Service (USFWS)?

Review of the California Natural Diversity Database (CNDDDB) reveals records for several special status species within the vicinity of the Project site including, but not limited to the State Endangered and federally Endangered Tipton Kangaroo Rat (*Dipodomys nitratooides nitratooides*); the State Threatened and federally Endangered San Joaquin kit fox (*Vulpes macrotis mutica*), the State Threatened Swainson's hawk (*Buteo swainsoni*), State species of special concern burrowing owl (*Athene cunicularia*), and western pond turtle (*Emys marmorata*), (CDFW, 2020). The Project has the potential to impact biological resources. An analysis of potential impacts and recommended mitigation measures summarized by species follows below.

COMMENT 1: Tipton Kangaroo Rat (TKR)

Issue: TKR have been documented to occur within areas of suitable habitat within and adjacent to the Project.

Specific impact: Without appropriate avoidance and minimization measures for TKR, potential significant impacts include loss of habitat, burrow collapse, inadvertent entrapment of individuals, reduced reproductive success such as

Judy Holwell
SCH Number: 2020090305
October 15, 2020
Page 4

reduced health or vigor of young, and direct mortality of individuals. Specifically, TKR has been documented as recently as 2019 in the lands east of SR 41 and north and south of Jackson Avenue (CDFW 2020). The Project site is within dispersal distance of these known occupied locations for TKR. Suitable TKR habitat includes areas of grassland, upland scrub, and alkali sink habitats that contain requisite habitat elements, such as small mammal burrows.

Evidence impact is potentially significant: Habitat loss resulting from agricultural, urban, and industrial development is the primary threat to TKR. Very little suitable habitat for this species remains along the western floor of the San Joaquin Valley (ESRP 2020). Areas of suitable habitat within the Project represent some of the only remaining undeveloped land in the vicinity, which is otherwise intensively managed for agriculture. As a result, ground-disturbing activities within the Project area may have the potential to significantly impact local populations of TKR.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to TKR associated with subsequent development, CDFW recommends conducting the following evaluation of Project areas and implementing the following mitigation measures.

Recommended Mitigation Measure 1: TKR Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if the Project area or its immediate vicinity contains suitable habitat for TKR.

Recommended Mitigation Measure 2: TKR Avoidance

If suitable habitat is present, CDFW advises maintenance of a 50-foot minimum no-disturbance buffer around all small mammal burrow entrances of suitable size for TKR use.

Recommended Mitigation Measure 3: TKR Surveys

If burrow avoidance is not feasible, CDFW recommends that focused protocol-level trapping surveys be conducted by a qualified wildlife biologist that is permitted to do so by both CDFW and USFWS, to determine if TKR occurs in the Project area. CDFW advises that these surveys be conducted in accordance with the USFWS (2013) "Survey Protocol for Determining Presence of San Joaquin Kangaroo Rats," well in advance of ground-disturbing activities in order to determine whether impacts to TKR could occur.

Judy Holwell
SCH Number: 2020090305
October 15, 2020
Page 5

Recommended Mitigation Measure 4: TKR Take Authorization

TKR detection warrants consultation with CDFW to discuss how to avoid take or, if avoidance is not feasible, to acquire a State Incidental Take Permit (ITP) prior to ground-disturbing activities, pursuant to Fish and Game Code section 2081(b).

II. Editorial Comments and/or Suggestions

Mitigation Measure BIO-1, San Joaquin Kit Fox Avoidance and Protection Measures, page 3-27.

Mitigation Measure BIO-1 states “prior to initial ground disturbing activities, a qualified wildlife biologist shall conduct a biological clearance survey 14-30 calendar days prior to the onset of construction. The clearance survey shall include walking transects to identify presence of San Joaquin kit fox or diagnostic signs of that species (e.g., dens, tracks, prey remains), and other special-status species or protected species including but not limited to Western burrowing owls, Swainson’s hawk, etc. If a known, active, or natal kit fox den is discovered during the clearance survey, the appropriate buffers shall be established using fencing or flagging as follows: (1) at least 50 feet around potential or atypical (any manmade structure such as pipes, culverts, and diggings below concrete slabs, that may be occupied by San Joaquin kit fox) den(s) and (2) at least 100 feet around known den(s).”

CDFW recommends that a qualified biologist assess presence and absence of San Joaquin kit fox (SJKF) and/or their dens by conducting surveys to detect SJKF individuals and their sign, both on and within 200 feet of the Project site, following the USFWS “Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance” (USFWS, 2011). SJKF detection warrants consultation with CDFW to discuss how to implement the Project and avoid take, or if avoidance is not feasible, to acquire a State ITP, pursuant to Fish and Game Code section 2081(b).

Mitigation Measure BIO-3, Swainson’s Hawk Surveys, page 3-28.

As currently drafted, Mitigation measure BIO-3 states “If all project activities are completed outside of the Swainson’s hawk nesting season (February 15 through August 31), this mitigation measure may be disregarded. If no Swainson’s hawk nests are found, no further action is required. Nesting surveys for the Swainson’s hawks shall be conducted in accordance with the protocol outlined in the Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys, in California’s Central Valley (Swainson’s Hawk Technical Advisory Committee 2000). If potential Swainson’s hawk nests or nesting substrates are located within 0.5 miles of the project site, then those nests or substrates must be monitored for activity on a routine and repeating basis

Judy Holwell
SCH Number: 2020090305
October 15, 2020
Page 6

throughout the breeding season, or until Swainson's hawks or other raptor species are verified to be using them."

CDFW recommends a minimum no-disturbance buffer of ½ mile shall be delineated around active nests, regardless of when they are found, until the breeding season has ended or until a qualified biologist has determined and CDFW confirmed in writing the birds have fledged and are no longer reliant upon the nest site for survival. If the ½ mile buffer is not feasible or cannot be implemented, consultation with CDFW would be warranted to determine if take can be avoided. If take cannot be avoided, acquisition of a State ITP, pursuant to Fish and Game Code section 2081(b) is advised.

Mitigation Measure BIO-5, Nesting Bird Surveys and Avoidance, page 3-29.

As currently drafted, Mitigation Measure BIO-5 states "If construction is planned during the nesting season for migratory birds and raptors, a preconstruction survey to identify active bird nests shall be conducted by a qualified biologist to evaluate the site and a 250-foot buffer for migratory birds and a 500-foot buffer for raptors. If nesting birds are identified during the survey, active raptor nests shall be avoided by 500 feet and all other migratory bird nests shall be avoided by 250 feet. Avoidance buffers may be reduced if a qualified onsite monitor determines that encroachment into the buffer area is not affecting nest building, the rearing of young, or otherwise affecting the breeding behaviors of the resident birds."

CDFW recommends that a qualified wildlife biologist conduct preconstruction surveys for active nests no more than two weeks prior to the start of ground disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the Project site to identify nests and determine their status. A sufficient area means any area potentially affected by a project. In addition to direct impacts (i.e., nest destruction), noise, vibration, odors, and movement of workers or equipment could also affect nests. If active nests are located, then all construction work shall be conducted outside a no-disturbance buffer zone to be developed by the project biologist based on the species (i.e., 250-feet for common species and at least 500-feet for raptors and special status species), slope aspect and surrounding vegetation. Prior to initiation of construction activities, CDFW recommends a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once construction begins, CDFW recommends a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends the work causing that change cease and CDFW be consulted for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250-feet around active nests

Judy Holwell
SCH Number: 2020090305
October 15, 2020
Page 7

of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined the birds have fledged and are no longer reliant upon the nest or parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. CDFW recommends that a qualified wildlife biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

Mitigation Measure BIO-6 (c) and (d) San Joaquin Kit Fox Avoidance and Protection Measures, page3-29.

As currently drafted, Mitigation Measure BIO-6 (c) states “To prevent inadvertent entrapment of kit fox or other animals during construction, the contractor shall cover all excavated, steep-walled holes or trenches more than two feet deep at the close of each workday with plywood or similar materials. If holes or trenches cannot be covered, one or more escape ramps constructed of earthen fill or wooden planks shall be installed in the trench. Before such holes or trenches are filled, the contractor shall thoroughly inspect them for entrapped animals. All construction-related pipes, culverts, or similar structures with a diameter of four-inches or greater that are stored on the project site shall be thoroughly inspected for wildlife before the pipe is subsequently buried, capped, or otherwise used or moved in anyway. If at any time an entrapped or injured kit fox is discovered, work in the immediate area shall be temporarily halted and USFWS and CDFW shall be consulted.”

As currently drafted Mitigation measure BIO-6(d) states “If a kit fox is discovered inside a pipe, that section of pipe shall not be moved until the individual is allowed to escape on its own. If necessary, and under the direct supervision of the biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped.”

Take as defined in Fish and Game Code section 86 means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill. Entrapping a State threatened species, such as the SJKF is considered take (Fish & G. Code, § 86). SJKF detection warrants consultation with CDFW to discuss how to implement the Project and avoid take, or if avoidance is not feasible, to acquire a State ITP, pursuant to Fish and Game Code section 2081(b). Full avoidance measures should be incorporated into the MND. Mitigation Measure BIO-6(c) is advised to be removed as absent securing a State ITP as described above, removal of an entrapped kit fox constitutes take that must be authorized under the State ITP.

Judy Holwell
SCH Number: 2020090305
October 15, 2020
Page 8

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 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 Kings County 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 documents address the impacts to groundwater and surface water that may occur from Project activities.

NOTIFICATION OF LAKE AND STREAMBED ALTERATION

Business and Professions Code 26060.1 (b)(3) includes a requirement that California Department of Food and Agriculture 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. Please note, CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration Agreement.

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->

Judy Holwell
SCH Number: 2020090305
October 15, 2020
Page 9

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

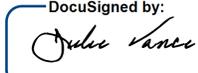
If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is 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 Lemoore 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), at the address provided on this letterhead or by electronic mail at Shannon.Dellaquila@wildlife.ca.gov.

Sincerely,

DocuSigned by:

FA83F09FE08945A...
Julie A. Vance
Regional Manager

ec: Shannon Dellaquila
California Department of Fish and Wildlife

Judy Holwell
SCH Number: 2020090305
October 15, 2020
Page 10

REFERENCES

Bauer, S. Olson, J., Cockrill, A., van Hattem, M., Miller, L., Tauzer, M., et al., 2015. Impacts of surface water diversions for marijuana cultivation on aquatic habitat in four northwestern California watersheds. PLoS ONE 10(3): e0120016. doi:10.1371/journal.pone.0120016

California Department of Fish and Wildlife (CDFW), 2020. Biogeographic Information and Observation System (BIOS). <https://www.wildlife.ca.gov/Data/BIOS>. Accessed September 24, 2020.

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