June 13, 2022

Governor's Office of Planning & Research

Jun 14 2022

Anna Quenga, AICP, Principal Planner
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Monterey County Housing and Community Development
1441 Schilling Place, South 2nd Floor
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Subject: Moss Landing Commercial Park, LLC (PLN160401)
Mitigated Negative Declaration
State Clearing House No. 2022050130

Dear Ms. Quenga:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to adopt a Mitigated Negative Declaration (MND) that has been prepared by the County of Monterey for the above Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

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, CDFW appreciates 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. While the comment period may have ended, CDFW would appreciate if you 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 & Game 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.

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 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 authorization as provided by the Fish and Game Code will be required.

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).

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 (California Code of Regulations, Title 14, Chapter 3, § 15380), CDFW recommends it be fully considered in the environmental analysis for this Project.

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 subdivision (a) of the Fish and Game Code requires an entity to notify CDFW before engaging in activities that would substantially change the bed, channel, or bank of a stream or substantially divert or obstruct the natural flow of a stream.

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 watercourses in the Project area 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.

PROJECT DESCRIPTION SUMMARY

Proponent: Moss Landing Commercial Park, LLC

Objective: The Project Proponent, Moss Landing Commercial Park LLC, proposes the modification of existing industrial and warehouse structures, within the Moss Landing Commercial Park, for use in the cultivation, manufacturing, packaging, and distribution of cannabis. Activities will include building and building infrastructure improvements to five of the existing 34 structures.

Location: The project is located at 7697 California State Route (Highway) 1, Moss Landing, Monterey County, California, 95039; Assessor's Parcel Number: 133-172-013-000.

Timeframe: Unspecified

COMMENTS AND RECOMMENDATIONS

CDFW offers the following recommendations to assist the County of Monterey 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. Based on a review of the Project description, a review of the California Natural Diversity Database (CNDDB) records, and a review of aerial photographs of the Project area and surround habitat, several special status species could be potentially impacted by Project activities.

In particular, CDFW is concerned regarding potential impacts to resources including special status species resulting from the ground-disturbing development activities and ongoing facilities operation, including but not limited to the State Threatened bank swallow (*Riparia riparia*). (CDFW 2022)

The Project has the potential to impact biological resources. CDFW recommends that the following modifications, or edits be incorporated into the MND, including proposed avoidance, minimization, and compensatory measures prior to its adoption by the County.

Bank Swallow

Bank swallow (BASW) have the potential to occur near the Project site (CDFW 2022). The proposed Project will involve activities near the bank of the Moro Cojo Slough and the Old Salinas River where BASW may potentially nest. Without appropriate avoidance and minimization measures for BASW, potential significant impacts that may result from

Project activities include: nest abandonment, loss of nest sites, reduced nesting success (loss or reduced health or vigor of eggs or young), and direct mortality. Any take of BASW without appropriate incidental take authorization would be a violation of Fish and Game Code. BASW, historically common in California (Grinnell and Miller 1944), have had a range reduction of approximately 50% since 1900 (CDFG 1988). The main cause of their decline was channelization and stabilization of riverbanks used as nesting habitat as well as other disturbance of this habitat (CDFG 1988). The BASW continues to be threatened by flood and erosion control programs that stabilize banks eliminating them as breeding habitat for the swallow (CDFG 1995).

To evaluate potential impacts to BASW, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the Initial Study prepared for this Project, and that these measures be made conditions of approval for the Project.

- If ground-disturbing or vegetation-disturbing activities as a result of the Project must occur during the normal bird breeding season (February 1 through August 31), CDFW recommends that the Project site, specifically along the bank of the Moro Cojo Slough located along the southern perimeter of the Project site, be surveyed for BASW by a qualified biologist no more than 10 days prior to the start of Project implementation.
- CDFW recommends a minimum 50-foot no-disturbance buffer be delineated around active nest burrows until the breeding season has ended or until a qualified biologist has determined that the young birds have fledged.
- CDFW recommends that in the event that active BASW nests are detected during surveys, consultation with CDFW is warranted to discuss how to implement the project and avoid take. If take cannot be avoided, take authorization through the issuance of an incidental take permit, pursuant to Fish and Game Code section 2081(b) is necessary to comply with CESA.

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

Business and Professions Code 26060.1 subsection (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 an LSA Notification to CDFW for the proposed Project prior to initiation of any cultivation activities. Cannabis cultivators may apply (notify) online for an LSA Agreement through EPIMS (Environmental Permit Information Management System; https://epims.wildlife.ca.gov)

and learn more about permitting at https://wildlife.ca.gov/Conservation/Cannabis/Permitting.

Please note that 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 prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation); or (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes features that are ephemeral or intermittent as well as those that are perennial. In addition, CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration Agreement. CDFW recommends that staff within the Central Region Cannabis Permitting Program be contacted well in advance of construction so that impacts to streams and associated resources may be analyzed and, if appropriate, avoidance and minimization measures may be proposed.

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Cannabis-Specific Impacts on Biological Resources

There are many impacts to biological resources associated with cannabis cultivation, whether indoor or outdoor cultivation (i.e., pesticides, fertilizers/imported soils, water pollution, groundwater depletion, vegetation clearing, construction and other development in floodplains, fencing, roads, noise, artificial light, dams and stream crossings, water diversions, and pond construction). CDFW recommends that the County of Monterey consider cannabis-specific impacts to biological resources that may result from the Project activities.

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 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 the CEQA document address the impacts to groundwater and surface water that may occur from Project activities.

Cannabis Lighting Use

Cannabis cultivation operations often use artificial lighting or "mixed-light" techniques in 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 or away from light; therefore, wildlife species exposed artificial light may have a negative phototaxis response causing disorientation, entrapment, and temporarily blindness (Longcore and Rich 2004).

CDFW recommends that 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; and ensuring 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 https://www.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.

Pesticides, Including Fungicides, Herbicides, 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 et al. 2005, Berny 2007). They can also experience secondary poisoning through feeding on animals that have been directly exposed to the pesticides. (Even if used indoors, rodenticides may result in secondary poisoning through ingestion of sickened animals that leave the premises or ingestion of lethally poisoned animals disposed of outside.) Nonlethal doses of pesticides can negatively affect wildlife; pesticides can compromise immune systems, cause hormone imbalances, affect reproduction, and alter growth rates of many wildlife species

(Pimentel et al. 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). For details, visit: https://www.cdpr.ca.gov/docs/cannabis/questions.htm.

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 non-target wildlife. Sticky or glue traps should be avoided altogether; these pose a hazard to non-target wildlife and result in prolonged/inhumane death. California Department of Pesticide Regulation (DPR) stipulates that pesticides must meet certain criteria to be legal for use on cannabis. For pest management practices visit: https://www.cdpr.ca.gov/docs/county/cacltrs/penfltrs/penf2015/2015atch/attach1502.pdf.

Impacts of Cannabis Cultivation on Fish and Wildlife Resources

For more information on potential impacts to fish and wildlife resources as a result of cannabis cultivation visit:

https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=160552&inline.

Cumulative Impacts: General impacts from Projects include habitat fragmentation, degradation, habitat loss, migration/movement corridor limitations, and potential loss of individuals to the population. The project site has been developed and used for industrial purposes the last 30 years. CDFW agrees that the cumulative impacts of the project will be low to negligible. CDFW recommends the lead agency consider all approved and future projects when determining impact significance to biological resources.

Editorial Comments and Suggestions

Nesting birds

CDFW encourages that Project implementation occur during the bird non-nesting season; however, if ground-disturbing or vegetation-disturbing activities must occur during the breeding season (February through mid-September), the Project applicant is

responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes as referenced above.

To evaluate Project-related impacts on nesting birds, CDFW recommends that a qualified biologist conduct pre-activity surveys for active nests no more than 10 days prior to the start of ground or vegetation 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 the Project. In addition to direct impacts (i.e., nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. Prior to initiation of construction activities, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once construction begins, CDFW recommends having a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests 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 that the birds have fledged and are no longer reliant upon the nest or on-site 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 biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

Biological Surveys

Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary. For CDFW "Survey and Monitoring Protocols and Guidelines" visit: https://wildlife.ca.gov/Conservation/Survey-Protocols. Note that CDFW generally

considers biological field assessments for wildlife and plants to be valid for a **one-year** period, except when significant environmental changes occur, such as disturbance resulting from urbanization or wildfire. Surveys should be conducted during wildlife's active season when the wildlife species is most likely to be detected and plant surveys conducted during the species blooming/flowering period. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if

the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought.

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 CNDDB. The CNNDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

FILING FEES

If it is determined that the Project has the potential to impact biological resources an assessment of filling 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 County of Monterey in identifying and mitigating Project impacts on biological resources. Questions regarding this letter or further coordination should be directed to Jackson Powell, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 899-9758, or by email at Jackson.Powell@wildlife.ca.gov.

Sincerely,

Valuric (sok 96D42C58E092466... Valerie Cook Acting Regional Manager

Attachment

ec: State Clearinghouse

state.clearinghouse@opr.ca.gov

REFERENCES

- Baldwin, D. H, J. A. Spromberg, T. K Collier, and N. L. Scholz. 2009. A Fish of Many Scales: Extrapolating Sublethal Pesticides Exposures to The Productivity of Wild Salmon Populations. *Ecological Applications* 19:2004-2015.
- Bauer S., J. Olson, A. Cockrill, M. Van Hattem, L. Miller, and M. Tauzer. 2015. Impacts of Surface Water Diversions for Marijuana Cultivation on Aquatic Habitat in Four Northwestern California Watersheds. PLoS ONE 10(3): e0120016.
- Beiswenger, R. E. 1977. Diet patterns of aggregative behavior in tadpoles of *Bufo americanus*, in relation to light and temperature. Ecology 58:98–108.
- Berny, P. 2007. "Pesticides and the intoxication of wild animals." *Journal of veterinary pharmacology and therapeutics* 30: 93-100.
- California Department of Fish and Game (CDFG). 1988. 1988 annual report on the status of California's state listed threatened and endangered plants and animals. CDFG, Sacramento, CA, USA.
- CDFG. 1995. Five-year status review: Bank swallow (*Riparia riparia*). Report to the California Fish and Game Commission, Sacramento, CA, USA.
- California Department of Fish and Wildlife. 2022. Biogeographic Information and Observation System (BIOS). https://www.wildlife.ca.gov/Data/BIOS. Accessed March 24, 2022.
- Fleischli, M., N. J. Thomas, W. Jr. Riley, J. C Franson, and D. L. Finley. 2004. "Avian mortality events in the United States caused by anticholinesterase pesticides: a retrospective summary of National Wildlife Health Center records from 1980 to 2000." *Archives of environmental contamination and toxicology* 46.4: 542-550.
- Grinnell, J., and A. H. Miller. 1944. The Distribution of Birds of California. Pacific Coast Avifauna 27. Cooper Ornithological Club, Berkeley, CA, USA.
- Li, Q, and T. Kawada. 2006. "The mechanism of organophosphorus pesticide-induced inhibition of cytolytic activity of killer cells." *Cell. Mol. Immunol* 3.3: 171-178.
- Longcore, T., and C. Rich. 2004. Ecological light pollution Review. Frontiers in Ecology and the Environment 2:191–198.
- Miller, M. W. 2006. Apparent effects of light pollution on singing behavior of American robins. The Condor 108:130–139.

- O'Hare, M., D. L. Sanchez, and P. Alstone. 2013. Environmental risks and opportunities in cannabis cultivation. BOETC Analysis Corp. University of California, Berkeley, CA, USA.
- Pimentel, D, J. H. Hepperly, J. Hanson, R. Seidel, and D. Douds. 2005. *Organic and conventional farming systems: Environmental and economic issues.*
- Relyea, R. A., and N. Diecks. 2008. An unforeseen chain of events: lethal effects of pesticides on frogs at sublethal concentrations. Ecological Applications 18:1728–1742.
- Stone, E. L., G. Jones, and S. Harris. 2009. Street lighting disturbs commuting bats. Current Biology 19:1123–1127. Elsevier Ltd.

Attachment 1

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

PROJECT: Moss Landing Commercial Park, LLC
Mitigated Negative Declaration (MND)
Cannabis Cultivation and Manufacturing (Project)
State Clearing House No.: 2022050130

Mitigation Measure	Status/Date/Initials
Before Disturbing Soil or Vegetation	
Mitigation Measure: Bank Swallow	
 Bank Swallow Assessment 	
 Bank Swallow Surveys 	
Bank Swallow Avoidance	
During Construction	
Mitigation Measure: Bank Swallow	
Bank Swallow Avoidance	