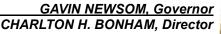


DEPARTMENT OF FISH AND WILDLIFE Central Region 1234 East Shaw Avenue Fresno, California 93710 www.wildlife.ca.gov

June 13, 2023







Rebecca Griswold, Community Services Director City of Woodlake 350 North Valencia Avenue Woodlake, California 93286 rgriswold@ci.woodlake.ca.us

Subject: Woodlake Holdings Industrial Park (Project) Draft Environmental Impact Report (DEIR) State Clearing House No. 2022040640

Dear Rebecca Griswold,

The California Department of Fish and Wildlife (CDFW) received a DEIR that has been prepared for the City of Woodlake by Crawford and Bowen Planning, inc. for the above project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines¹.

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.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all 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.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15831). 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 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 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).

Lake and Streambed Alteration: CDFW has regulatory authority with regard to activities 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 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.

Water Pollution: Pursuant to Fish and Game Code section 5650, it is unlawful to deposit in, permit to pass into, or place where it is permitted to pass into "Waters of the State" any substance or material deleterious to fish, plant life, or bird life, including nonnative 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: Woodlake Holdings, LLC

Objective: The Project proponent, Woodlake Holdings LLC, proposes the construction of a commercial cannabis cultivation, manufacturing, distribution, testing, and retail facility. Activities will include the construction of 17 buildings (1,500,000 square feet); three new ponding basins totaling 32.77-acre feet; 700 parking spaces and associated landscaping; installation of infrastructure to connect to municipal water, sewage, and storm drain systems; and perimeter security fencing, lights, and an alarm system near the community of Woodlake.

Location: The Project will take place within four parcels, equaling 113 acres, approximately 0.5 mile southwest of the community of Woodlake California, Tulare County; Assessor's Parcel Numbers: 060-170-105, 060-170-106, 060-160-044, and 060-160-059. The approximate coordinates of the project are latitude 36.406592, longitude -119.113792.

Time Frame: 2023 - Unspecified

COMMENTS AND RECOMMENDATIONS

In review of the DEIR, CDFW offers the following recommendations to assist the City of Woodlake 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, a review of aerial imagery of the Project area and surrounding habitat, several special status species could potentially be 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 federally endangered and State threatened San Joaquin kit fox (*Vulpes macrotis mutica*); State species of special concern burrowing owl (*Athene cunicularia*), pallid bat (*Antrozous pallidus*), and western mastiff bat (*Eumops perotis californicus*); and candidate State endangered species Crotch's bumble bee (*Bombus crotchii*).

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

San Joaquin Kit Fox (SJKF)

The Project has the potential to temporarily disturb and permanently alter suitable habitat for SJKF and directly impact individuals if present during construction and operational activities. SJKF den in a variety of areas such as rights-of-way (ROW), agricultural and fallow/ruderal habitat, dry stream channels, and canal levees, and populations can fluctuate over time. SJKF are also capable of occupying urban environments (Cypher and Frost 1999). SJKF may be attracted to Project areas due to the type and level of ground disturbing activities and the loose, friable soils resulting from intensive ground disturbance. SJKF will forage in fallow and agricultural fields and utilize streams and canals as dispersal corridors. As a result, there is potential for SJKF to occupy all suitable habitat within the Project boundary and surrounding area.

Without appropriate avoidance and minimization measures for SJKF, potential significant impacts associated with construction include habitat loss, den collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals. Habitat loss resulting from land conversion to agricultural, urban, and industrial development is the primary threat to SJKF (Cypher et al. 2013).

To evaluate potential impacts to SJKF associated with subsequent land conversion, ground disturbance, and construction, CDFW recommends conducting the following evaluation of Project areas and implementing the following mitigation measures:

- Mitigation Measure BIO-1 includes a pre-construction survey within 250 feet of the Project site, CDFW recommends assessing presence/absence of SJKF by having qualified biologists conducting surveys of Project areas and a 500-foot buffer of Project areas to detect SJKF and their sign. CDFW also recommends following the United States Fish and Wildlife Service's "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (2011).
- SJKF detection warrants consultation with CDFW to discuss how to avoid take or, if avoidance is not feasible, acquisition of an Incidental Take Permit (ITP), pursuant to Fish and Game Code section 2081(b), would be necessary to comply with CESA.

Burrowing Owl (BUOW)

BUOW inhabit open grassland or adjacent canal banks, ROWs, and vacant lots, etc. containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover. Review of aerial imagery indicates the Project site is bordered by potentially fallow agricultural fields and canal banks. 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. BUOW rely on burrow habit year-round for their survival and reproduction. Habitat loss and degradation are considered the greatest threats to BUOW in California's Central Valley (Gervais et al. 2008).

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

 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 yet begun egg laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

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)

- If BUOW are found within these recommended buffers and avoidance is not possible, it is important to note that according to the Staff Report (CDFG 2012), exclusion is not a take avoidance, minimization, or mitigation method and is considered a potentially significant impact under CEQA. However, if necessary, CDFW recommends that burrow exclusion 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.
- CDFW recommends the DEIR includes methods that would be used to evict owls from burrows (including passive relocation during the non-breeding season).
 CDFW also recommends that the DEIR specify how the impact of evicting owls would be mitigated to a less than significant level.
- CDFW recommends replacement of occupied burrows with artificial burrows at a ratio of 1 collapsed burrow 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 an area that will be impacted; thus, CDFW recommends ongoing surveillance, at a rate that is sufficient to detect BUOW if they return.

Pallid Bat and Western Mastiff Bat

The DEIR prepared for this Project acknowledges habitat features are present that have the potential to support pallid bat and western mastiff bat. Pallid bat is known to roost in buildings, caves, tunnels, cliffs, crevices, and trees (Lewis 1994). Western mastiff bat are associated with man-made tunnels, signs, buildings, and hollow tree habitat (Cockrum 1960). Project activities have the potential to affect habitat upon which special status bat species depend for successful breeding and have the potential to impact individuals and local populations. Without appropriate avoidance and minimization measures for special status bat species, potential significant impacts resulting from ground and vegetation disturbing activities associated with Project activities include habitat loss, inadvertent entrapment, roost abandonment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals.

To evaluate potential impacts to special status bat species associated with subsequent land conversion, ground disturbance, and construction, CDFW recommends conducting the following evaluation of Project areas and implementing the following mitigation measures:

 If bats are present, CDFW recommends that a 100-foot no-disturbance buffer be placed around the roost and that a qualified biologist who is experienced with bats monitor the roost for signs of disturbance to bats from Project activity. If a bat roost is identified and work is planned to occur during the breeding season, CDFW recommends that no disturbance to maternity roosts occurs and that CDFW be consulted to determine measures to prevent breeding disruption or failure.

Crotch's Bumble Bee (CBB)

CBB occupy areas of grasslands and upland scrub that contain requisite habitat elements, such as small mammal burrows. CBB primarily nest in late February through late October underground in abandoned small mammal burrows but may also nest under perennial bunch grasses or thatched annual grasses, underbrush piles, in old birds' nests, and in dead trees or hollow logs (Williams et al. 2014; Hatfield et al. 2015). Overwintering sites utilized by CBB mated queens include soft, disturbed soils (Goulson 2010), or under leaf litter or other debris (Williams et al. 2014). Without appropriate avoidance and minimization measures for CBB, potential significant impacts associated with the Project's construction could include burrow collapse, inadvertent entrapment, nest abandonment, reduced reproductive success, reduced health and vigor of eggs and young, and direct mortality of individuals.

To evaluate potential impacts to CBB, CDFW recommends conducting the following evaluation of the Project area and its vicinity and implementing the following mitigation measures:

- CDFW recommends that a qualified biologist conduct focused surveys for CBB and their requisite habitat features, as part of the biological studies conducted in support of the CEQA document, to evaluate impacts resulting from potential ground and vegetation disturbing activities.
- CDFW recommends that all suitable burrows and thatched/bunch grass be avoided by a minimum buffer of 50 feet to avoid potentially significant impacts. If ground-disturbing activities will occur during the overwintering period (October through February) consultation with CDFW is recommended to discuss how to implement Project activities and avoid impacts to CBB. Any detection of CBB prior to or during Project implementation warrants consultation with CDFW to discuss how to avoid take, or if avoidance is not feasible, acquisition of an Incidental Take Permit (ITP), pursuant to Fish and Game Code section 2081 subdivision (b), would be necessary to comply with CESA.

Special Status Plants

Several special status plants have been documented to occur within the vicinity of the Project site, including Greene's tuctoria (Tuctoria greenei), spiny sepaled button celery (Eryngium spinosepalum), and recurved larkspur (Delphinium recurvatum) (CDFW 2022).

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. The Project site may provide suitable habitat for special status plants. As a result, habitat loss and degradation resulting from ground-disturbing activities have the potential to significantly impact these special status plant species.

To evaluate potential impacts to special status plant species, CDFW recommends conducting the following evaluation of the Project area and its vicinity and implementing the following mitigation measures:

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

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

General Species Recommendations

Please note that if suitable habitat is present and species surveys are warranted, some protocols require specific seasons and/or an extended period of time (e.g., CBB, special status plants). Frequently recommended survey and monitoring protocols can be found at https://wildlife.ca.gov/Conservation/Survey-Protocols. CDFW is also available for consultation about survey methods and mitigation measures prior to completion of the environmental document.

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 Cannabis Control 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. Cannabis cultivators may apply (notify) online for an LSA Agreement through

the Environmental Permit Information Management System (EPIMS; <u>https://epims.wildlife.ca.gov</u>) and learn more about permitting at <u>https://wildlife.ca.gov/Conservation/Cannabis/Permitting</u>.

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.

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 the city of Woodlake 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 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 is a phenomenon that results in attraction and movement toward light or away from light. Therefore, wildlife species exposed to artificial light may have a negative phototaxis response causing disorientation, entrapment, and temporary 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. 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 <u>https://www.darksky.org</u>). 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 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. Non-lethal doses of pesticides can negatively affect many wildlife species by compromising their immune systems, causing hormone imbalances, affecting reproduction, and altering their growth rates (Pimentel 2005; Li and Kawada 2006; Relyea and Diecks 2008).

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: <u>https://www.cdpr.ca.gov/docs/cannabis/questions.htm.</u>

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 Assembly Bill 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 a prolonged/inhumane death. California Department of Pesticide Regulation 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: <u>https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=160552&inline.</u>

Cumulative Impacts: General impacts from projects include habitat fragmentation, degradation, habitat loss, migration/movement corridor limitations, and potential loss of individuals to the population. 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 1st through September 15th), 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 Code sections as referenced above.

To evaluate Project-related impacts on nesting birds, CDFW recommends that a qualified biologist conduct pre-construction 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.

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 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. For CDFW "Survey and Monitoring Protocols and Guidelines," visit <u>https://wildlife.ca.gov/Conservation/Survey-Protocols</u>. 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 CNDDB field survey form can be found at the following link: <u>https://www.wildlife.ca.gov/Data/CNDDB/SubmittingData</u>. The completed form can be mailed electronically to CNDDB at the following email address: <u>CNDDB@wildlife.ca.gov</u>. The types of information reported to CNDDB can be found at the following link: <u>https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals</u>.

FILING FEES

If it is determined 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 Woodlake 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 (599) 899-9758, or by email at <u>Jackson.Powell@wildlife.ca.gov</u>.

Sincerely,

DocuSigned by: Julie Vaner

Julie A. Vance Regional Manager

ec: State Clearinghouse State.clearinghouse@opr.ca.gov

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. https://doi.org/10.1371/journal.pone.0120016.
- 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.. "Pesticides and the intoxication of wild animals." *Journal of veterinary pharmacology and therapeutics* 30.2 (2007): 93-100.
- California Burrowing Owl Consortium. 1993. Burrowing owl survey protocol and mitigation guidelines. April 1993.
- Cockrum, E., Lendell. "Distribution, Habitat and Habits of the Mastiff Bat, Eumops Perotis, in North America." *Journal of the Arizona Academy of Science*, vol. 1, no. 3, 1960, pp. 79–84, <u>https://doi.org/10.2307/40025030</u>.
- CDFG. 2012. Staff Report on Burrowing Owl Mitigation. California Department of Fish and Game.
- CDFW, March 2018 "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities". <u>https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline</u>
- Cypher, B. L., and Frost, N. "Condition of San Joaquin kit foxes in urban and exurban habitats." *The Journal of wildlife management* (1999): 930-938.
- Cypher, B. L., Phillips, S. E., Kelly, P. A., 2013. Quantity and distribution of suitable habitat for endangered San Joaquin kit foxes: conservation implications. Canid Biology and Conservation 16(7): 25–31.
- Fleischli, M. A., et al. "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 (2004): 542-550.
- Gervais, J.A., Rosenberg, D. D., and Comrack, L.A. Burrowing Owl (*Athene cunicularia*) *in* Shuford, W.D. and T. Gardali, editors. 2008. California Bird Species of Special Concern.

- Goulson, D., 2010. *Bumblebees:* behaviour, *ecology, and conservation*. Oxford University Press, New York. 317pp.
- Hatfield, R., Jepsen, S., Thorp, R., Richardson, L. and Colla, S., 2015. Bombus crotchii. The IUCN Red List of Threatened Species. <u>http://dx.doi.org/10.2305/IUCN.UK.2015--2.RLTS.T44937582A46440211.en</u>. Accessed 16 August 2019.
- Lewis, S. E., 1994. Night roosting ecology of pallid bats (*Antrozous pallidus*) in Oregon. The American Midland Naturalist, Vol. 132, pp. 219-226.
- Li, Q., and Kawada, T. "The mechanism of organophosphorus pesticide-induced inhibition of cytolytic activity of killer cells." *Cell. Mol. Immunol* 3.3 (2006): 171-178.
- Longcore, T., and Rich, C., 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., Sanchez, D. L., and Alstone, P., 2013. Environmental risks and opportunities in cannabis cultivation. BOETC Analysis Corp. University of California, Berkeley, CA, USA.
- Pimentel, D., et al. Organic and conventional farming systems: Environmental and economic issues. 2005.
- Relyea, R. A., and Diecks, N., 2008. An unforeseen chain of events: lethal effects of pesticides on frogs at sublethal concentrations. Ecological Applications 18:1728– 1742.
- Stone, E. L., Jones, G. and Harris, S. 2009. Street lighting disturbs commuting bats. Current Biology 19:1123–1127. Elsevier Ltd.
- USFWS. 2011. Standard recommendations for the protection of the San Joaquin kit fox prior to or during ground disturbance. United States Fish and Wildlife Service, January 2011.
- Williams, P. H., Thorp, R. W., Richardson, L. L., and Colla, S. R., 2014. *The Bumble Bees of North America: An Identification guide*. Princeton University Press, Princeton, New Jersey, USA. pp. 208.

Attachment 1

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

PROJECT: Woodlake Holding Industrial Park

Draft Environmental Impact Report

Cannabis Cultivation and Manufacturing

Mitigation Measure	Status/Date/Initials
Before Disturbing Soil or Vegetation	
Mitigation Measure: SJKF	
SJKF Surveys	
 SJKF Take Authorization 	
Mitigation Measure: BUOW	
BUOW Surveys	
Mitigation Measure: Special Status	
Bat Species	
Special Status Bat Species	
Surveys	
Mitigation Measure: CBB	
CBB Habitat Assessment	
CBB Surveys	
CBB Take Authorization	
Mitigation Measure: Special Status	
Plant Species	
Special Status Plant Habitat	
Assessment	
Special Status Plant Surveys	
 Special Status Plant Take 	
Authorization	
During Construction	
Mitigation Measure: SJKF	
SJKF Avoidance Buffer	
Mitigation Measure: BUOW	
BUOW Avoidance Buffer	
Mitigation Measure: Special Status	
Bat Species	

Special Status Bat Species	
Avoidance Buffer	
Mitigation Measure: CBB	
CBB Avoidance Buffer	
Mitigation Measure: Special Status	
Plants	
Special Status Plant Avoidance	
Buffer	