



State of California – Natural Resources Agency  
 DEPARTMENT OF FISH AND WILDLIFE  
 Northern Region  
 601 Locust Street  
 Redding, CA 96001  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



March 3, 2021

Governor's Office of Planning & Research

**Mar 03 2021**

Cliff Johnson  
 Humboldt County Planning and Building Department  
 3015 H Street  
 Eureka, CA. 95501  
[cjohnson@co.humboldt.ca.us](mailto:cjohnson@co.humboldt.ca.us)  
 707-445-7541

**STATE CLEARINGHOUSE**

**Subject: Maple Creek Ranch Conditional Use Permits and Zoning Clearance Certificate (SCH# [2021020037](#))**

Dear Cliff Johnson:

The California Department of Fish and Wildlife (CDFW) received from the County of Humboldt (Lead Agency) an Initial Study and Draft Mitigated Negative Declaration (IS/MND), dated February 2, 2021, for the Maple Creek Ranch Conditional Use Permits and Zoning Clearance Certificate (Project), in Maple Creek, Humboldt County, California. CDFW understands the Lead Agency will accept comments on the Project through March 3, 2021.

As the Trustee for the State's fish and wildlife resources, CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants and the habitat necessary to sustain their populations. As a Responsible Agency, CDFW administers the California Endangered Species Act and other provisions of the Fish and Game Code (FGC) that conserve the State's fish and wildlife public trust resources. CDFW offers the following comments and recommendations in our role as Trustee and Responsible Agency pursuant to the California Environmental Quality Act (CEQA; California Public Resource Code §21000 *et seq.*). CDFW participates in the regulatory process in its roles as Trustee and Responsible Agency to minimize Project impacts and avoid potential significant environmental impacts by recommending avoidance and minimization measures. These comments are intended to reduce the Projects impacts on public trust resources.

### **Project Description**

The Project is located on Humboldt County Assessor's Parcel Number (APN) 313-145-006. The Project proposes 4.6 acres of new outdoor cannabis cultivation on the parcel and an additional 4,800-square feet of ancillary support facility as well as 6,600-square feet of nursery facilities for propagation of immature plants. The Project proposes use of one existing and one new water well for irrigation in addition to a 200,000-gallon rainwater catchment storage tank. An additional four 50,000 gallon hard-sided tanks are proposed for water storage. The IS/MND states projected annual water usage for the Project is approximately 800,000 gallons. The Project will be powered by combination of a 25-kilowatt diesel generator and a solar power system installed on the roof of the proposed drying/processing facility.

Cliff Johnson  
Humboldt County Planning and Building Department  
March 3, 2021  
Page 2

## **CDFW Consultation History**

On February 11, 2021, CDFW received a Lake or Streambed Alteration (LSA) Notification (EPIMS-HUM-16565-R1) for the Project. However, the LSA Notification states there are no Project element subject to the FGC 1602 Notification requirement. This Notification is currently in review with CDFW.

## **CDFW Comments on the IS/MND:**

### **Northern Spotted Owl**

The Project occurs approximately 0.5 miles from the closest documented northern spotted owl (*Strix occidentalis caurina*, a State and Federally Threatened species [NSO]) activity center and as close as 300 feet to previous NSO pair detections (Keiser 2021). CDFW appreciates IS/MND mitigation measure BIO-6 (rodenticides prohibited from use associated with the Project) and the Project being limited to an outdoor cannabis cultivation style that will not use artificial light or generators for flower production areas. However, the Project proposes ancillary use of lights and generators for nursery and processing areas.

A mitigation measure for a Project-specific noise and light attenuation plan with monitoring requirements should be included in the Project's IS/MND or as a County condition of approval (**Recommendation 1**). The plan should specify security and other outdoor lighting be motion activated and comply with the International Dark-Sky Association standards and Fixture Seal of Approval Program (<https://www.darksky.org/our-work/lighting/lighting-for-citizens/lighting-basics/>).

Standards include but are not limited to the following: 1) light will be shielded and downward facing, 2) will consist of low-pressure sodium light or low spectrum light emitting diodes with a color temperature of 3000 kelvins or less and 3) only placed where needed. The IS/MND mitigation measure BIO-4 (Project-generated sound does not exceed 50 decibels at 100 feet from the generator [or other noise sources] or at the edge of forest habitat, whichever is closer) should also be periodically monitored for compliance.

### **Botanical Surveys and Impact Analysis**

The Project botanical survey is not complete and does not follow CDFW's botanical survey protocol (CDFW 2018a). The botanical report only includes late-season survey dates (July 19 and August 18, 2019) and appears to utilize a "focused" survey method rather than a "floristic" survey. CDFW appreciates mitigation measure BIO-5 (pre-road work survey for Howell's Montia (*Montia howellii*; California Rare Plant Rank [CRPR] 2B.2), but this species may also be present and impacted in non-road areas of the Project. Additionally, suitable habitat for Siskiyou checkerbloom (*Sidalcea malviflora* ssp. *patula*, CRPR 1B.2) is present within the Project area and could be impacted but Project botanical surveys were likely too late in the season for flowering at this location (Nelson 2021).

Cliff Johnson  
Humboldt County Planning and Building Department  
March 3, 2021  
Page 3

To adequately address CEQA §15125(c), §15380, Guidelines Checklist IV, and avoid deferred analysis and potential deferred mitigation, the IS/MND should include the results of floristic botanical surveys including the presence of special status plants and a characterization of natural communities sufficient to determine the presence of any Sensitive Natural Communities. Surveys and reporting should be in accordance with CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* and propose avoidance/mitigation where appropriate (**Recommendation 2**).

### Cumulative Impacts

The Lead Agency's Commercial Medical Marijuana Land Use Ordinance states no more than 20 percent of the area of prime agricultural soils on a parcel may be permitted for commercial cannabis cultivation. It is unclear if the ordinance and its supporting CEQA analysis intended new cultivation sites to be located within remote, undeveloped, hillside grassland prairies (where sensitive species may occur) as opposed to traditional agricultural lands already associated with crop production. An unintended consequence of requiring new cultivation on prime agricultural soils (and allowing new areas to be classified as such with no minimum size) is the targeting of small, isolated, flat grasslands within larger prairie complexes on steeper slopes. These habitats are vital elements of biodiversity and provide important habitat for wildlife (Stromberg et al. 2007, CNPS 2011, CDFW 2014, CDFW 2018b, CDFW 2020a). The IS/MND does not adequately disclose or address potential cumulative impacts from the proposed Project's development of 4.6 acres of grassland, in addition to other existing or proposed cannabis projects in grasslands. Additionally, the IS/MND does not adequately disclose or address potential cumulative impacts from upcoming timber harvest activity immediately adjacent to the Project and on the same parcel (CalFire 1-01NTMP-011). These associated activities could have a cumulative effect on grasslands and grassland-dependent wildlife species.

Cumulative impacts could occur to grassland-dependent special status species such as northern red-legged frog (*Rana aurora*), grasshopper sparrow (*Ammodramus savannarum*), golden eagle (*Aquila chrysaetos*), northern harrier (*Circus hudsonius*), white-tailed kite (*Elanus leucurus*), Pacific gilia (*Gilia capitata* ssp. *pacifica*), short-leaved evax (*Hesperis matronalis* var. *brevifolia*), Baker's navarretia (*Navarretia leucocephala* ssp. *bakeri*), Kneeland prairie pennycress (*Noccaea fendleri* ssp. *californica*), maple-leaved checkerbloom (*Sidalcea malachroides*), Siskiyou checkerbloom (*Sidalcea malviflora* ssp. *patula*), beaked tracyina (*Tracyina rostrata*), leafy reed grass (*Calamagrostis foliosa*), Hitchcock's blue-eyed grass (*Sisyrinchium hitchcockii*), and other special status species (CDFW 2020b).

Cumulative impacts could also occur to rare vegetation types known as Sensitive Natural Communities. Using the best available data on the abundance, distribution, and threat, CDFW assigns natural communities rarity ranks and/or a designation as "Sensitive" (\*). Rarity ranks range from 1 (very rare and threatened) to 5 (demonstrably secure). Sensitive Natural Communities (State rank of S1 through S3) should be addressed in the environmental review processes of CEQA and its equivalents (CDFW

Cliff Johnson  
Humboldt County Planning and Building Department  
March 3, 2021  
Page 4

2020c). Cumulative impacts could occur to grassland-associated Sensitive Natural Communities in Humboldt County including California brome – blue wildrye prairie (*Bromus carinatus* – *Elymus glaucus*; S3), Oatgrass - Tufted Hairgrass - Camas wet meadow (*Danthonia californica* – *Deschampsia cespitosa* – *Camassia quamash*; S4\*), Idaho fescue - California oatgrass grassland (*Festuca idahoensis* – *Danthonia californica*; S3), California goldfields – dwarf plantain – small fescue flower fields (*Lasthenia californica* – *Plantago erecta* – *Vulpia microstachys*; S4\*), and other Sensitive Natural Communities.

The IS/MND should evaluate cumulative impacts to grassland prairies, particularly special status species and Sensitive Natural Communities (**Recommendation 3**).

### **Invasive Species**

The IS/MND does not address potential significant impacts from introduction or spread of invasive plant and animal species. Invasive species are known to result in habitat loss and other impacts to native species and may result in an overall loss of biodiversity, particularly special status species (Duenas et al. 2018). Invasive plant species may enter or spread through the Project area from imported soil, attachment to vehicles, and other means of accidental introduction. Additionally, the Project botanical report discloses the occurrence of gorse (*Ulex europaeus*), a highly invasive plant species.

A mitigation measure to require an invasive species management plan to manage existing invasive species and prohibit planting, seeding or otherwise introducing terrestrial or aquatic invasive species on Project parcels, including all access roads should be included in the Project's IS/MND or as a County condition of approval (**Recommendation 4**).

### **Use of Water Wells**

The scientific and engineering community accepts the connectivity of surface water and groundwater systems and that groundwater discharge to streams constitutes a sizeable and important fraction of streamflow (Fetter 1988, Winter et al. 1998, Department of Water Resources 2003, Barlow and Leake 2012, Province of British Columbia 2016). The existing well is stated to be 260-feet deep and located approximately the same horizontal distance from Maple Creek, a perennial stream that contains coho salmon (*Oncorhynchus kisutch*, a state and federally threatened species). The grasslands of this parcel are surrounded by at least eight springs mapped in CalFire's hydrography dataset, some as close as 100-feet from the Project, however the location of the proposed second well was not disclosed in the IS/MND. The IS/MND should disclose the proposed location of the second well (**Recommendation 5**).

A mitigation measure that the applicant retains a qualified professional (e.g., geologist or engineer with hydrogeology background) licensed to practice in California to conduct a preliminary evaluation of the Project's potential impacts to local surface water flows, and to provide recommendations that ensure Project activities will not substantially affect aquatic resources should be included in the Project's IS/MND or as a County

Cliff Johnson  
Humboldt County Planning and Building Department  
March 3, 2021  
Page 5

condition of approval (**Recommendation 6**). The preliminary evaluation should also include a discussion on potentially significant cumulative effects of well-related impacts to local surface water flows


### **Post-Project Reclamation and Restoration**

As described in the IS/MND, the Project will occur in a remote area of the County that supports numerous special status species and habitats. The Project's 4.9 acres of new cannabis facility development and infrastructure may have lasting effects on the landscape if the Project permanently ceases operations at some point in the future. Similar to other industries with this spatial magnitude of ground disturbance, it is appropriate to decommission facilities and restore the area at the end of a Project's life.

A mitigation measure to require a Post-Project Reclamation and Restoration Plan should be included in the Project's IS/MND or as a County condition of approval (**Recommendation 7**). That plan should be implemented if Project activities cease for five years.

We appreciate the opportunity to comment on this IS/MND. If you have any questions please contact Environmental Scientist Greg O'Connell by email at [Gregory.OConnell@Wildlife.ca.gov](mailto:Gregory.OConnell@Wildlife.ca.gov).

Sincerely,

DocuSigned by:  
  
19DB3234CB3B411...

### **Curt Babcock**

Northern Region Habitat Conservation Program Manager  
California Department of Fish and Wildlife

ec:

State Clearinghouse, Office of Planning and Research  
[state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov)

Humboldt County Planning Commission Clerk  
[planningclerk@co.humboldt.ca.us](mailto:planningclerk@co.humboldt.ca.us)

Curt Babcock, Jennifer Garrison, Scott Bauer, Laurie Harnsberger, Greg O'Connell, Cheri Sanville  
California Department of Fish and Wildlife  
[Curt.Babcock@wildlife.ca.gov](mailto:Curt.Babcock@wildlife.ca.gov); [Jennifer.Garrison@wildlife.ca.gov](mailto:Jennifer.Garrison@wildlife.ca.gov);  
[Scott.Bauer@wildlife.ca.gov](mailto:Scott.Bauer@wildlife.ca.gov); [Laurie.Harnsberger@wildlife.ca.gov](mailto:Laurie.Harnsberger@wildlife.ca.gov);

Cliff Johnson  
Humboldt County Planning and Building Department  
March 3, 2021  
Page 6

[Gregory.OConnell@Wildlife.ca.gov](mailto:Gregory.OConnell@Wildlife.ca.gov); [Cheri.Sanville@wildlife.ca.gov](mailto:Cheri.Sanville@wildlife.ca.gov);  
[CEQAComentLetters@wildlife.ca.gov](mailto:CEQAComentLetters@wildlife.ca.gov)

## Citations

- Barlow, P.M., and Leake, S.A. (2012). Streamflow depletion by wells—Understanding and managing the effects of groundwater pumping on streamflow: U.S. Geological Survey Circular 1376, 84 p. (Also available at <https://pubs.usgs.gov/circ/1376/>.)
- CDFW. (2014). California Wildlife Habitat Relationships. Sacramento, CA. Accessed at <https://wildlife.ca.gov/data/cwhr>
- CDFW. (2018a). Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. California Department of Fish and Wildlife, Habitat Conservation Branch. Sacramento, CA. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959>
- CDFW. (2018b). A Review of the Potential Impacts of Cannabis Cultivation on Fish and Wildlife Resources. California Department of Fish and Wildlife, Habitat Conservation Planning Branch. Sacramento, CA.
- CDFW. (2020a). Impacts of Cannabis Cultivation on Fish and Wildlife Resources. California Fish and Wildlife Journal. Sacramento, CA.
- CDFW. (2020b). California Natural Diversity Database Quick View Tool. Biogeographic Data Branch, California Department of Fish and Wildlife. Retrieved December 14, 2020 from <https://wildlife.ca.gov/Data/CNDDDB>.
- CDFW. (2020c). Vegetation Classification and Mapping Program. Biogeographic Data Branch, California Department of Fish and Wildlife. Retrieved December 14, 2020 from <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities>.
- CDFW. (2021). California Natural Diversity Database Quick View Tool. Biogeographic Data Branch, California Department of Fish and Wildlife. <https://wildlife.ca.gov/Data/CNDDDB>
- [CNPS] California Native Plant Society. (2011). California's Prairies and Grasslands. Fremontia. Vol. 39, No. 2 and 3.
- Department of Water Resources. (2003). California's Groundwater: State of California, The Resources Agency, Department of Water Resources Bulletin 118, 2003 Update, 246 p.

Cliff Johnson  
Humboldt County Planning and Building Department  
March 3, 2021  
Page 7

Duenas, M. A., Ruffhead, H. J., Wakefield, N. H., Roberts, P. D., Hemming, D. J., & Diaz-Soltero, H. (2018). The role played by invasive species in interactions with endangered and threatened species in the United States: a systematic review. *Biodiversity and Conservation*, 27(12), 3171-3183.

Fetter Jr., C.W. (1988). *Applied Hydrogeology*: Charles E. Merrill Publishing Company.

Keiser, K. (2021). Spotted Owl Observations [ds704]. California Department of Fish and Wildlife. Biogeographic Information and Observation System (BIOS). Retrieved February 23, 2021 from <http://bios.dfg.ca.gov>

Nelson, M. (2021). California Natural Diversity Database (CNDDDB) Government [ds45]. California Department of Fish and Wildlife. Biogeographic Information and Observation System (BIOS). Retrieved February 23, 2021 from <http://bios.dfg.ca.gov>

Province of British Columbia. (2016). Determining the likelihood of hydraulic connection – Guidance for the purpose of apportioning demand from diversion of groundwater on streams: Version 1.0, Water Science Series, WSS2016-01, Province of British Columbia, Victoria, British Columbia, <http://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-science-data/water-science-series>.

Stromberg, M. R., Corbin, J. D., and Antonio, C. M. (2007). *California grasslands: ecology and management*. Univ of California Press.

U.S. Fish and Wildlife Service. (2019). Northern Spotted Owl Take Avoidance Analysis and Guidance for Private lands in California. Accessed at: [https://www.fws.gov/yreka/NSO-TakeAvoidanceAnalysis\\_Att\\_A-B\\_2019-1101.pdf](https://www.fws.gov/yreka/NSO-TakeAvoidanceAnalysis_Att_A-B_2019-1101.pdf)

Winter, T.C., J.W. Harvey, O.L. Franke, and W.M. Alley. (1998). *Ground Water and Surface Water A Single Resource*: U.S. Geological Survey Circular 1139, Denver, Colorado, 79 p.