

State of California – Natural Resources Agenc DEPARTMENT OF FISH AND WILDLIFE Central Region 1234 East Shaw Avenue Fresno, California 93710 (559) 243-4005 www.wildlife.ca.gov



Governor's Office of Planning & Research

August 09 2021

STATE CLEARING HOUSE

Eric Hughes Senior Planner County of San Luis Obispo 976 Osos Street, Room 300 San Luis Obispo, California 93408 <u>ehughes@co.slo.ca.us</u>

Subject: Riparian Biosupport, Inc, Parcel A, Minor Use Permit, DRC2020-00095 (Project) Mitigated Negative Declaration (MND) SCH Number: 2021050416

Dear Mr. Hughes:

August 9, 2021

The California Department of Fish and Wildlife (CDFW) received an MND from San Luis Obispo County for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

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

CDFW ROLE

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

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.

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.

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).

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: Riparian Biosupport, Inc.

Objective: The Project proponent is seeking a Minor Use Permit, for cannabis cultivation, resulting in approximately 5.51 acres of site disturbance on a 50.5-acre parcel. Construction will consist of 3.75 acres of outdoor cannabis cultivation within hoop houses, 33,000 square feet of indoor cannabis cultivation within two greenhouses, five parking spaces, a 3,300 square feet overflow parking area, and 3,000 square-foot ground-mounted solar array. Construction will also include the placement of four 2,500-gallon water storage tanks, two 40-foot cargo storage containers, the use of an on-site existing groundwater well, and the installation of eight-foot perimeter chain-link

fencing around outdoor cannabis cultivation sites and greenhouses. The Project as a whole will have 4,428 cubic yards of cut and 3,650 cubic yards of fill.

Location: 1375 Klau Mine Road, Paso Robles, California 93446, San Luis Obispo County, Assessor's Parcel Number (APN) 014-331-064, Parcel A.

Timeframe: Unspecified.

RECOMMENDATIONS

CDFW offers the following recommendations to assist the county of San Luis Obispo 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.

COMMENT 1: Artificial Light

Issue: Cannabis cultivation operations often use artificial lighting or "mixed-light" techniques in both greenhouse structures as well as outdoor security lighting. If not disposed of properly, these lighting materials pose significant environmental risks as they contain mercury and other toxins (O'Hare et al. 2013). In addition to containing toxic substances, artificial lighting often results in light pollution, which has the potential to affect fish and wildlife significantly and adversely.

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

Recommendations to minimize significant impacts: Light should not be visible outside of any structure used for cannabis cultivation. Use of blackout curtains where artificial light is installed is recommended to prevent light escapement. Eliminate all non-essential lighting from cannabis sites and avoid or limit the use of artificial light between dusk and dawn, as this window of time is 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 https://www.darksky.org). Use LED lighting with a correlated color temperature of 3,000 Kelvins or less, properly dispose of lighting-generated hazardous waste, and recycle all lighting that contains toxic compounds with a qualified recycler.

COMMENT 2: Pesticide Use

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

Evidence impact would be significant: Wildlife, including beneficial arthropods, birds, mammals, amphibians, reptiles, and fish can be poisoned by pesticides after exposure to a toxic dose through ingestion, inhalation, or dermal contact (Fleischli et al. 2004, Pimentel 2005, Berny 2007). They can also experience secondary poisoning through feeding on animals that have been directly exposed to the pesticides. Raptors (e.g., hawks and owls) and mammalian carnivores (e.g., coyotes, foxes, etc.) are some of the common victims of secondary poisonings by anticoagulant rodenticides (Mendelssohn and Paz 1977, Gabriel et al. 2015, 2018). Even non-lethal 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 2005, Li and Kawada 2006, Relyea and Diecks 2008).

Recommendations to minimize significant impacts: CDFW recommends minimizing use of synthetic pesticides, and, if they are used, to always use them as directed by the manufacturer, including proper storage and disposal. Toxic pesticides should not be used where they may pass into waters of the state, including ephemeral streams, in violation of Fish and Game Code section 5650(6). Anticoagulant rodenticides and rodenticides that incorporate "flavorizers" that make the pesticides appetizing to a variety of species should not be used at cultivation sites. Note that with the passage of AB 1788, signed by the governor on September 29, 2020, the general use of second-generation anticoagulants is now banned in California. Alternatives to toxic rodenticides may be used to control pest populations at and around cultivation sites, including sanitation (removing food sources like pet food, cleaning up refuse, and securing garbage in sealed containers), and physical barriers (e.g., sealing holes in roofs/walls). Snap traps should not be used outdoors as they pose a hazard to 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 details, visit: https://www.cdpr.ca.gov/docs/cannabis/guestions.htm; https://www.cdpr.ca.gov/docs/county/cacltrs/penfltrs/penf2015/2015atch/attach1502. pdf.

Recommended Potentially Feasible Mitigation Measures

CDFW recommends the MND address and fully analyze the use of pesticides, including the risk of secondary poisoning to native species caused by the use of rodenticides. CDFW recommends the MND include a measure that requires the use

of herbicides, rodenticides, or fertilizers on the Project site to be restricted to those approved by United States Environmental Protection Agency (USEPA) and DPR.

Editorial Comments and/or Suggestions

Mitigation measure BIO-2 Site Maintenance and General Operations. Page 54.

In **BIO-2** CDFW recommends adding to the MND the following: Speed signs of 15 mph (or lower) shall be posted for all construction traffic to avoid potential impacts to wildlife.

As currently drafted, **BIO-2** states, "Any temporary construction lighting shall avoid nighttime illumination of suitable habitat features (i.e. drainages, riparian corridor, sensitive species habitat). Temporary construction lighting shall be kept to the minimum amount necessary and shall be directed toward active work areas and away from open spaces and/or drainages." CDFW recommends that the Project related activities occur during daylight hours to avoid impacts to nocturnal wildlife.

Mitigation measure **BIO-3** Pre-construction survey for Special-status Reptiles and Amphibians. Page 55.

As currently drafted, **BIO-3** states, "If any special-status reptile or amphibian species are discovered during surveys or monitoring, construction activities that may result in the take of species shall cease and they will be allowed to leave on their own or, following authorization by the USFWS, will be hand-captured by a qualified biologist and relocated to suitable habitat outside the area of impact." CDFW recommends, if relocation is necessary, individuals shall be captured by a qualified biologist with the appropriate handling permits and relocated to suitable habitat outside of the construction/work area.

Mitigation measure BIO-5 Bat Roost Avoidance. Page 56.

As currently drafted, **BIO-5** states, "A qualified biologist shall conduct a survey before any grading or removal of trees, particularly trees 12 inches in diameter or greater at 4.5 feet above grade with loose bark or other cavities within 48 hours prior to removal of trees." CDFW recommends that a qualified biologist conduct focused level survey to establish species and seasonal usage, well in advance of the Project activities. Furthermore, CDFW recommends an additional pre-construction activity surveys occur within two weeks prior to the start of ground disturbing activities; to allow adequate time for the implementation and planning of exclusionary measure, if necessary.

Focused level survey methodology is advised to include visual surveys of bats (observation of presence of bats during foraging period), inspection for suitable habitat or bat sign (guano) and use of ultrasonic detectors during all dusk

emergence and pre-dawn re-entry. To maximize detectability, surveys should be conducted within one 24-hour period.

Mitigation measure **BIO-6** Preconstruction Survey for Sensitive and Nesting Birds, page 56 and 57.

As currently drafted, **BIO-6** states "A 50-foot exclusion zone shall be placed around non-listed, passerine species, and a 250-foot exclusion zone will be implemented for raptor species. Each exclusion zone shall encircle the nest and have a radius of 50 feet (non-listed passerine species) or 250 feet (raptor species)." CDFW recommends that if a fully protected raptor species such as white-tailed kite (*Elanus leucurus*), bald eagle (*Haliaeetus leucocephalus*), or golden eagle (*Aquila chrysaetos*) is found within 0.5 mile of the Project site, implementation of avoidance measures is warranted. CDFW recommends that a qualified wildlife biologist be on-site during all Project-related activities and that a 0.5-mile no-disturbance buffer be implemented. If the 0.5-mile no disturbance buffer cannot feasibly be implemented, contacting CDFW for assistance with additional avoidance measures is recommended. Fully addressing potential impacts to fully protected raptor species and requiring measurable and enforceable mitigation in the MND is recommended.

Notification of Lake and Streambed Alteration: Review of aerial imagery and United States Geological Survey 3D Elevation Program indicates that there are several unnamed ephemeral streams, that are tributaries to Las Tablas Creek, on the property and adjacent to the Project site. 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.

Additionally, 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 a Lake and Streambed Alteration Notification to CDFW for the proposed Project prior to initiation of any cultivation activities.

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 implemented and proposed throughout San Luis Obispo 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 1 gallon and 14.9-gallons 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 the CEQA document address the impacts to groundwater and surface water that may occur from Project activities.

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

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/Submitting-Data</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 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 county of San Luis Obispo in identifying and mitigating Project impacts on biological resources.

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

Sincerely,

-DocuSigned by: Julie Vance -FA83F09FE08945A...

Julie A. Vance Regional Manager

ec: Shannon Dellaquila California Department of Fish and Wildlife

REFERENCES

Bauer, S., J. Olson, A. Cockrill, M. Van Hattem, L. Miller, M. Tauzer, and G. Leppig. 2015. Impacts of surface water diversions for marijuana cultivation on aquatic habitat in four northwestern California watersheds. PLoS ONE 10: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.

Brady, Roland H. III, Kris Vyverberg. 2013. Methods to describe and delineate episodic stream processes on arid landscapes for permitting utility-scale solar power plants. California Energy Commission

California Department of Fish and Wildlife (CDFW), 2010. A Review of Stream Processes and Forms in Dryland Watersheds. Prepared by Kris Vyverberg, Conservation Engineering. 32p

California Department of Fish and Wildlife (CDFW), 2021. Biogeographic Information and Observation System (BIOS). https://www.wildlife.ca.gov/Data/BIOS. Accessed June 11, 2021.

Fleischli, M. A., J. C. Franson, N. J. Thomas, D. L. Finley, and W. Riley, Jr. 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 46:542–550.

Gabriel, M. W., L. W. Woods, G. M. Wengert, N. Stephenson, J. M. Higley, C. Thompson, S. M. Matthews, R. A. Sweitzer, K. Purcell, R. H. Barrett, S. M. Keller, P. Gaffney, M. Jones, R. Poppenga, J. E. Foley, R. N. Brown, D. L. Clifford, and B. N. Sacks. 2015. Patterns of natural and human-caused mortality factors of a rare forest carnivore, the fisher (Pekania pennanti) in California. PLoS ONE 10:e0140640.

Gabriel, M. W., L. V. Diller, J. P. Dumbacher, G. M. Wengert, J. M. Higley, R. H. Poppenga, and S. Mendia. 2018. Exposure to rodenticides in Northern Spotted and Barred Owls on remote forest lands in northwestern California: evidence of food web contamination. Avian Conservation and Ecology 13: part 2.

Gomi, T., R.C. Sidle and J.S. Richardson. 2002. Understanding processes and downstream linkages of headwater systems: Bioscience. 52(10):905-916.

Levick, L., J. Fonseca, D. Goodrich, M. Hernandez, D. Semmens, J. Stromberg, R. Leidy, M. Scianni, D.P. Guertin, M. Tluczek, and W. Kepner. 2008. The Ecological and Hydrological Significance of Ephemeral and Intermittent Streams in the Arid and Semiarid American Southwest. U.S. Environmental Protection Agency and USDA/ARS Southwest Watershed Research Center. EPA/600/R-08/134, ARS/233046. 116 p.

Longcore, T., and Rich, C. 2004. Ecological light pollution - review. Frontiers in Ecology and the Environment 2:191–198.

Mendelssohn, H., and U. Paz. 1977. Mass mortality of birds of prey caused by Azodrin, an organophosphate insecticide. Biological Conservation 11:163–170.

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. 2005. Environmental and economic costs of the application of pesticides primarily in the United States. Environment, Development and Sustainability 7:229–252.

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.

Shaw, J.R. and D.J. Cooper. 2007. Linkages among watersheds, stream reaches, and riparian vegetation in dryland ephemeral stream networks. Journal of Hydrology. 350:68-82.

Stone, E. L., Jones, G., and Harris, S., 2009. Street lighting disturbs commuting bats. Current Biology 19:1123–1127. Elsevier Ltd.