

Haggerty, Nicole@Wildlife



From: Ramirez, Richard@Wildlife
Sent: Thursday, August 10, 2023 2:31 PM
To: trish.turner@lakecountyca.gov
Cc: Wildlife R2 CEQA; Sheridan, Kursten@Wildlife; Garcia, Jennifer@Wildlife; Haggerty, Nicole@Wildlife
Subject: CEQA Comments: UP 20-33 Liu Farms
Attachments: CEQA_PT2020-0187-0000-R2-CmntRef.docx

Hello,

My name is Richard Ramirez, I am an Environmental Scientist contacting you on behalf of the California Department of Fish and Wildlife, North Central Region Cannabis Program (CDFW). CDFW received and reviewed the Initial Study (IS) from Lake County regarding the Notice of Intent (NOI) to file for a Mitigated Negative Declaration (MND) for Liu Farms Cannabis Cultivation Project (Project). This email is in regard to the request for CEQA comments, received by CDFW Staff on August 1, 2023. The following comments have been provided:

Mitigation Measure BIO-2

Mitigation Measures BIO-2 (MM BIO-2) acknowledges the potential presence of active bird nests and the need for inspections before any tree felling or ground clearing, however it states that the nesting bird season occurs during March to September. CDFW recognizes the nesting bird season occurring from approximately February 15th to August 31st and recommends a similar time frame for any potential surveys.

Bat Roosting Sites

The IS for the project does not recognize the potential for the occurrence of bat species in the surrounding area and does not disclose concern for bat roosting sites. Roosting sites for bats are considered by CDFW to be a significant biological resource. Based on review of Project materials the Project site contains potential habitat for structure and tree roosting bats. Bats are considered non-game mammals and are afforded protection by state law from take and/or harassment, (Fish & G. Code, § 4150; Cal. Code of Regs, § 251.1). CDFW recommends bat preconstruction surveys are conducted for suitable roosts (i.e. hollows or crevices) prior to any tree felling or ground disturbing activities, and incorporating a new measure to construct replacement roost structures (bat houses or other structures) if the removal of a bat roost (inactive or active) is necessary for the Project.

Tricolored Blackbird

Issue: The CEQA document does not adequately analyze Project impacts on tricolored blackbird (*Agelaius tricolor*).

Evidence impact would be significant: Consistent with CEQA Guidelines, Section 15380, the status of the tricolored blackbird as a threatened species under the California Endangered Species Act (Fish & G. Code, § 2050 *et seq.*) qualifies it as an endangered, rare, or threatened species under CEQA.

Tricolored blackbird populations, which once numbered in the millions in California, have declined significantly in recent years according to state censuses (CDFW 2018). The long-term decline is primarily related to habitat loss and degradation (including both the nesting vegetation and the larger foraging landscape) from urbanization and conversion to agriculture, particularly in the Central Valley (Beedy et al. 2017). Tricolored Blackbirds require three resources for successful nesting: 1) secure nesting vegetation, 2) a source of water, and 3) foraging habitat (usually much larger in extent than the nesting vegetation) that provides sufficient insect

food resources. Loss of any of these habitat components can result in an area becoming unsuitable for breeding. Additional known or suspected threats to the tricolored blackbird include destruction of breeding colonies when nesting vegetation is harvested, high levels of predation by native and nonnative predators, direct and indirect (food resources) effects of pesticides, killing as an agricultural pest through shooting or poisoning, drought, and climate change. The species' colonial breeding nature puts them at increased risk to many of these threats (CDFW 2018).

Based on the foregoing, Project impacts would potentially substantially reduce the number and restrict the range of tricolored blackbirds.

The following are potential impacts of cannabis cultivation on tricolored blackbirds.

Pesticides used at cannabis cultivation sites may impact tricolored blackbirds by:

- Poisoning (Fleischli et al. 2004, Pimentel 2005, Mineau and Palmer 2013)
- Starvation or reductions in reproductive success from decreased prey availability (Goulson 2014, Hallmann et al. 2014, Forister et al. 2016)
- Alterations of the thyroid gland that negatively impacts thyroid homeostasis and metabolism (Pandey and Mohanty 2015)
- Impaired immune function (Gibbons et al. 2015)
- Reduction in reproductive capacity, including declines in egg production and reduced clutch sizes (Beedy and Hayworth 1992, Pimentel 2005, Berny 2007, Gibbons et al. 2015)
- Decreased ability to thermoregulate and short-term hypothermia (Grue et al. 1997)
- Declines in fat stores and body mass (Gibbons et al. 2015, Eng et al. 2017)
- Disorientation which may inhibit regular behavior and movement

Pesticides and fertilizers can also run-off into watersheds polluting them and degrading habitat quality (Bauer et al. 2015, Carah et al. 2015). Fertilizer run-off has also been shown to cause algae outbreaks in wetlands.

Vegetation removal for cultivation sites may impact tricolored blackbirds as they require sufficient vegetation to provide cover for the nest (Beedy 2008). This is especially true at sites where Tricolored Blackbird colonies have bred in the past, or when the vegetation removed includes plant species that provide high quality nesting habitat (e.g. emergent wetland plants, Himalayan blackberry, thistles, nettles, and certain agricultural grain fields). Vegetation removal can also reduce the extent of available foraging habitat, which is critical for successful nesting by Tricolored Blackbird colonies. Additionally, vegetation clearing can cause fragmentation and create edge effects that permeate far beyond the cultivation site (Harris 1988, Murcia 1995).

Invasive plant species may also reduce habitat quality for tricolored blackbirds, and many activities involved in cannabis cultivation can exacerbate this issue. Imported soils used on many cultivation sites can often contain invasives (Butsic and Brenner 2016), and road use can increase the spread of invasive plant species (Brothers and Spingarn 1992, Greenberg et al. 1997). Areas where greenhouses are constructed also often become degraded and are prone to establishment of invasives as are areas where vegetation removal is taking place (Mallery 2010).

Noise from road use, generators, and other equipment may disrupt tricolored blackbird mating calls or songs which could impact their reproductive success (Patricelli and Blickley 2006, Halfwerk et al. 2011). Noise has been shown to reduce the density of nesting birds (Francis et al. 2009). Bayne et al. (2008) found that songbird abundance and density was significantly reduced in areas with high levels of noise.

Artificial light may attract or disorient tricolored blackbirds, disrupting their navigation (Ogden 1996, Longcore and Rich 2004, 2016). It can also suppress the immune system of birds (Moore and Siopes 2000). Additionally, songbirds that live in areas with artificial lights often begin morning choruses during night hours (Derrickson 1988, Miller 2006, Fuller et al. 2007).

Therefore, Project impacts on tricolored blackbirds would be **potentially significant**.

Pursuant to Public Resources Code §21092 and §21092.2, CDFW requests written notification of proposed actions and pending decisions regarding the proposed project. Written notifications shall be directed to: California Department of Fish and Wildlife North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670 or emailed to R2CEQA@wildlife.ca.gov.

CDFW appreciates the opportunity to comment on the Project to assist in identifying and mitigating Project impacts on biological resources. CDFW personnel are available for consultation regarding biological resources and strategies to minimize and/or mitigate impacts. Please direct any questions or action items to my email or phone number, provided below.

Thank You,

Richard Ramirez, Environmental Scientist

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