



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

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



August 17, 2020

Governor's Office of Planning & Research

Aug 18 2020

STATE CLEARINGHOUSE

Eric Hughes
County of San Luis Obispo
Department of Planning and Building
976 Osos Street, Room 200
San Luis Obispo, California 93408-2040
ehughes@co.slo.ca.us

**Subject: Integrated Agriculture Inc. Minor Use Permit (DRC2018-00076 Powers)
Mitigated Negative Declaration (MND)
Outdoor Cannabis Cultivation (Project)
SCH Number: 2020070341**

Dear Mr. Hughes:

The California Department of Fish and Wildlife (CDFW) received a Project Referral from San Luis Obispo County for the 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.

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 & 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

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.

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 2

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.

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

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 3

Light Pollution: Cannabis cultivation operations often use artificial lighting or “mixed-light” techniques in both greenhouse structures as well as indoor operations to increase yields. Night lighting can disrupt the circadian rhythms of many wildlife species. Many species use photoperiod cues for communication (i.e., bird song; Miller, 2006), determining when to begin foraging (Stone et al., 2009), behavior thermoregulation (Beiswenger, 1977), and migration (Longcore and Rich, 2004). Even aquatic species can be affected; migration of salmonids can be slowed or halted by the presence of artificial lighting (Tabor et al., 2004, Nightingale et al., 2006). 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). CDFW recommends CEQA documents address light pollution in the analysis of impacts.

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.

Oak Woodlands: CEQA was amended to include Public Resources Code (PRC) section 21083.4, which states that a county shall determine whether a project within its jurisdiction may result in a conversion of oak woodlands that will have a significant effect on the environment. If a county determines that there may be a significant effect to oak woodlands, the county shall require appropriate oak woodlands mitigation alternatives to mitigate the significant effect of the conversion of oak woodlands. It is unclear if oaks within the two parcels will be removed after the lot line adjustment. CDFW considers the removal of oaks in the Project area as significant. As a result, CDFW recommends the county require oak mitigation as required by CEQA section 21083.4 if oaks are going to be removed as part of future development.

In addition to the mitigation required by CEQA section 21083.4, retaining large oak trees (greater than 12 inches in diameter as measured at breast height) on the Project site to the maximum extent possible is recommended during any construction activities. Large, acorn-bearing oak trees are a critical source of food for wintering deer and other wildlife. Location and routing of access roads, utility connections, septic systems and building sites where they will require the minimum amount of disturbance to large oak trees is advised.

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 4

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).

Fully Protected Species: CDFW has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any fully protected species is prohibited and CDFW cannot authorize their incidental take.

Unlisted Species: Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened (E, R, or T) on any State or 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: Eric Powers

Objective: The Project proponent is seeking a Minor Use Permit for three (3) acres (130,680 square feet) of outdoor cannabis cultivation within cannabis hoop structures. Project will also include extension of existing driveway, installing: a 400-square foot storage container, irrigation lines, and a 9,500-gallon water storage tank. The Project would result in approximately six (6) acres of site disturbance including 209 cubic yards of cut and 209 cubic yards of fill to be balanced on-site. Water would be supplied by existing groundwater well.

Location: The Project will take place at 2500 Highway 41 in Shandon, California; Assessor's Parcel Number (APN) 017-251-070 and 017-251-071.

Timeframe: Unspecified.

RECOMMENDATIONS

CDFW offers the following recommendations to assist San Luis Obispo County in adequately identifying and/or mitigating future development of the Project site as a result of the lot line adjustment. Editorial comments or other suggestions may also be included to improve the document.

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 5

I. Environmental Setting and Related Impact

Review of the California Natural Diversity Database (CNDDDB) reveals records for several special-status species within the vicinity of the Project area including, but not limited to the State Threatened and federally Endangered giant kangaroo rat (*Dipodomys ingens*) and San Joaquin kit fox (*Vulpes macrotis mutica*), the State Threatened San Joaquin antelope squirrel (*Ammospermophilus nelsoni*), Swainson's hawk (*Buteo swainsoni*), bank swallow (*Riparia riparia*), and tricolored blackbird (*Agelaius tricolor*); the State of North American Birds Watch List prairie falcon (*Falco mexicanus*); State species of special concern American badger (*Taxidea taxus*), northern California legless lizard (*Anniella pulchra*), California glossy snake (*Arizona elegans occidentalis*), burrowing owl (*Athene cunicularia*), San Joaquin coachwhip (*Masticophis flagellum ruddocki*), western pond turtle (*Emys marmorata*), and western spadefoot (*Spea hammondi*), and the State candidate for listing Crotch bumble bee (*Bombus crotchii*), (CDFW, 2020).

Review of aerial imagery indicates that the site has existing structures, trees, ephemeral stream tributaries off Estella River, and grassland. The Project has the potential to impact biological resources. An analysis of potential impacts and recommended mitigation measures summarized by species follows below.

CDFW recommends that focused biological surveys be conducted by a qualified wildlife biologist during the appropriate survey period(s) and prior to any project-related activities to determine if the above special-status species are present and if they could be impacted. Survey results can then be incorporated into the Initial Study (IS) and used to identify any mitigation, minimization, and avoidance measures to reduce potential impacts to special status biological resources to less than significant and are advised to be enforceable by inclusion in the CEQA document prepared for this Project.

COMMENT 1: Giant Kangaroo Rat (GKR)

Issue: GKR occupy both grasslands and shrub communities on a variety of soil types and on slopes up to about 22 percent and 2,850 feet above sea level (ESRP 2020). The Project site has the potential for suitable habitat for GKR, and GKR have been documented to occur within the vicinity of the Project site (CDFW 2020). The MND discounts occurrence of GKR in the Project area, stating that the Project area does not contain suitable habitat. However, the Project area is comprised of San Ysidro sandy loam, which are friable and suitable for burrowing by GKR.

Specific impact: Without appropriate avoidance and minimization measures for GKR, potential significant impacts associated with the Project's construction include burrow collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals.

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 6

Evidence impact is potentially significant: Habitat loss resulting from development is the primary threat to GKR and they exist on less than 2% of their previous range (William & Germano 1992). The Carrizo Plain Natural Area is one of the six major fragmented geographic units where the population exists and genetically differs from the northern populations (ESRP 2020). The Project site has the potential to support GKR. As a result, if the Project site is occupied by GKR, Project activities have the potential to significantly impact local populations of the species.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential Project-related impacts to GKR, CDFW recommends conducting the following evaluation of the Project site and including the following measures in the MND.

Recommended Mitigation Measure 1: GKR Habitat Assessment and Trapping Surveys

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation to determine if the Project site contains suitable habitat for GKR. If suitable habitat is present, CDFW recommends that focused protocol-level trapping surveys be conducted by a qualified wildlife biologist who is permitted to do so by both CDFW and the United States Fish and Wildlife Service (USFWS), to determine if the Project site is occupied. CDFW advises that these surveys be conducted in accordance with the USFWS “Survey Protocol for Determining Presence of San Joaquin Kangaroo Rats” (2013). CDFW recommends that these surveys be conducted well in advance of ground-disturbing activities in order to determine if impacts to GKR could occur.

Recommended Mitigation Measure 2: GKR Avoidance

If suitable habitat is present and trapping is not feasible, CDFW advises full avoidance for GKR through maintenance of a 50-foot minimum no-disturbance buffer around all small mammal burrows of suitable size for GKR.

Recommended Mitigation Measure 3: GKR Take Authorization

If GKR are found within the Project site during small mammal trapping or if full avoidance is not feasible and take could potentially occur as a result of Project implementation, acquisition of a State Incidental Take Permit (ITP) pursuant to Fish and Game Code section 2081(b) would be warranted to comply with CESA prior to initiating ground-disturbing activities. Alternatively, the Project proponent has the option of assuming presence of GKR and securing a State ITP.

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 7

COMMENT 2: San Joaquin Kit Fox (SJKF)

Issue: SJKF have been documented within multiple occurrences within 0.5 mile to 5 miles of the Project area (CDFW 2020). Review of aerial imagery indicates that the Project area consists of grassland habitat, which could serve as habitat to SJKF. SJKF also can den in rights-of-way, vacant lots, etc., and populations can fluctuate over time. Presence/absence in any one year is not necessarily a reliable indicator of SJKF potential to occur on a site. 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. As a result, there is potential for SJKF to occupy or colonize the Project area.

Specific impact: Without appropriate avoidance and minimization measures for SJKF, potential significant impacts associated with the Project's construction could include den collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals.

Evidence impact is potentially significant: Habitat fragmentation, degradation and loss resulting from agricultural, urban, and industrial development is the primary threat to SJKF (Cypher et al. 2013). The Project area contains potentially suitable SJKF habitat. Therefore, subsequent ground-disturbing activities have the potential to significantly impact local SJKF populations.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential Project-related impacts to SJKF, CDFW recommends conducting the following evaluation of the Project site and including the following measures in the MND.

Recommended Mitigation Measure 4: SJKF Surveys

CDFW recommends assessing presence/absence of SJKF and their dens by conducting surveys both on and within 200 feet of the Project site well in advance of the Project. Pre-construction surveys are also recommended, and CDFW advises conducting these surveys in all areas of potentially suitable habitat no less than 14 days and no more than 30 days prior to beginning of ground-disturbing activities.

Recommended Mitigation Measure 5: SJKF Avoidance

If dens are found during surveys, CDFW recommends implementing no-disturbance buffers, in accordance with USFWS' "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (2011). Specifically, if SJKF are found occupying atypical (i.e. manmade structure) den sites, a 50-foot no-disturbance is recommended around the occupied den structure. If potential

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 8

dens are found during surveys, CDFW advises implementing a 50-foot no-disturbance buffer around these structures as well. Consultation with CDFW and implementation of a 100-foot no-disturbance buffer around dens that are used or known to have been used at any time in the past by SJKF, are found during pre-construction surveys. If a natal or pupping den is found during surveys, consultation with CDFW is recommended.

Recommended Mitigation Measure 6: SJKF Take Authorization

SJKF detection warrants consultation with CDFW to discuss how to implement the Project and avoid take, or if avoidance is not feasible, to acquire a State ITP, pursuant to Fish and Game Code section 2081(b).

COMMENT 3: San Joaquin Antelope Squirrel (SJAS)

Issue: SJAS have been documented to occur within the vicinity of the Project area (CDFW, 2019). Suitable SJAS habitat includes areas of grassland, upland scrub, and alkali sink habitats that contain requisite habitat elements, such as small mammal burrows.

Specific impact: Without appropriate avoidance and minimization measures for SJAS, potential significant impacts associated with the Project's construction include burrow collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals.

Evidence impact is potentially significant: Habitat loss resulting from agricultural, urban, and industrial development is the primary threat to SJAS. SJAS have disappeared from many of their smaller habitat clusters and habitat loss due to agriculture, urbanization, and the use of rodenticides for ground squirrel control are primary threats (ESRP 2020). As a result, ground-disturbing activities and cultivation activities at the Project area have the potential to significantly impact local populations of SJAS.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential Project-related impacts to SJAS, CDFW recommends conducting the following evaluation of the Project site and including the following measures in the MND.

Recommended Mitigation Measure 7: SJAS Surveys

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if the Project area contains suitable

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 9

habitat for SJAS. CDFW recommends that a qualified biologist conduct focused daytime visual surveys for SJAS using line transects with 10 to 30 meters spacing. CDFW further advises that these surveys be conducted between April 1 and September 20, during daytime temperatures between 68 and 86° F (CDFG, 1990).

Recommended Mitigation Measure 8: SJAS Avoidance

If suitable habitat is present and surveys are not feasible, CDFW advises maintenance of a 50-foot minimum no-disturbance buffer around all small mammal burrows, active and non-active, of suitable size for SJAS.

Recommended Mitigation Measure 9: SJAS Take Authorization

If SJAS are found within the Project area at any time or if full avoidance is not feasible and take could potentially occur as a result of Project implementation, acquisition of a State Incidental Take Permit (ITP) pursuant to Fish and Game Code section 2081(b) would be warranted to comply with CESA prior to initiating ground-disturbing activities. Alternatively, the Project proponent has the option of assuming presence of SJAS and securing a State ITP.

COMMENT 4: Swainson's Hawk (SWHA)

Issue: The Project site includes potential foraging habitat for SWHA and have been documented to occur near the Project area (CDFW 2020). Foraging habitat can include natural grasslands, pasture, hay crops and some irrigated crops (CDFW, 2016). SWHA nest in lone trees in agricultural fields or pastures, roadside trees adjacent to suitable foraging habitat, or within riparian trees (CDFW, 2016).

Review of aerial imagery indicates that the Project area contains grassland and large trees which could serve as suitable foraging and nesting habitat for SWHA.

Specific impact: Without appropriate avoidance and minimization measures for SWHA, potential significant impacts associated with the Project's construction could include nest abandonment, reduced reproductive success, reduced health and vigor of eggs and/or young, and direct mortality of individuals. Any take of SWHA without appropriate incidental take authorization would be a violation of Fish and Game Code.

Evidence impact is potentially significant: Threats to SWHA include loss of native foraging habitat and breeding grounds due to land conversion (CDFW 2018). Trees within the Project area represent some of the last the remaining suitable nesting habitat within the vicinity. Surrounding areas contain low growing crops and grasslands, both suitable for foraging. The presence of these two requisite habitat features increases the likelihood of occurrence of SWHA. Depending on timing,

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 10

ground-disturbing activities that have the potential to result from the Project including noise, vibration, odors, and movement of workers or equipment, could affect SWHA nests and have the potential to result in nest abandonment, potentially significantly impacting local nesting SWHA.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to SWHA, CDFW recommends conducting the following evaluation of the subject parcel and implementing the following mitigation measures.

Recommended Mitigation Measure 10: SWHA Surveys

To evaluate potential impacts, CDFW recommends that a qualified wildlife biologist conduct surveys for nesting SWHA following the survey methods developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC, 2000) prior to project implementation. The survey protocol includes early season surveys to assist the project proponent in implementing necessary avoidance and minimization measures, and in identifying active nest sites prior to initiating ground-disturbing activities.

Recommended Mitigation Measure 11: SWHA No-disturbance Buffer

If ground-disturbing Project activities are to take place during the normal bird breeding season (March 1 through September 15), CDFW recommends that additional pre-activity surveys for active nests be conducted by a qualified biologist no more than 10 days prior to the start of Project implementation. While Mitigation Measure 3.4-1e states that a no-disturbance buffer range of 1,320-2,640 feet for an active Swainson's hawk nest will be implemented, CDFW recommends a minimum no-disturbance buffer of ½-mile be delineated around active nests 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 parental care for survival.

Recommended Mitigation Measure 12: SWHA Take Authorization

CDFW recommends that in the event an active SWHA nest is detected during surveys and the ½-mile no-disturbance buffer around the nest cannot feasibly be implemented, 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 (ITP), pursuant to Fish and Game Code Section 2081(b) is necessary to comply with CESA.

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 11

COMMENT 5: Tricolored blackbird (TRBL)

Issue: TRBL occurrences have been documented near the Project site (CDFW 2018a). TRBL colonies require suitable nesting habitat, nearby freshwater, and nearby foraging habitat including semi-natural grasslands, agricultural croplands or alkali scrub (Beedy et al. 2017). Habitat both within and surrounding the Project area may provide suitable foraging habitat for TRBL and a pond located on-site may be suitable nesting habitat

Specific impact: Without appropriate avoidance and minimization measures for TRBL, potential significant impacts associated with Project activities include nest and/or colony abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young.

Evidence impact is potentially significant: The Project site contains elements that have the potential to support TRBL nesting colonies. TRBL aggregate and nest colonially, forming colonies of up to 100,000 nests (Beedy et al., 2017). This species has been steadily declining due to annual breeding losses due to crop-harvesting activities, insufficient insect resources, and habitat loss due to land conversion for agriculture, rangeland, and urban development (Beedy et al., 2017).

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential Project-related impacts to TRBL, CDFW recommends conducting the following evaluation of the Project site and including the following measures in the MND.

Recommended Mitigation Measure 13: TRBL Surveys

CDFW recommends that Project activities be timed to avoid the typical bird breeding season (February 1 through September 15). However, if Project activities must take place during that time, CDFW recommends that a qualified wildlife biologist conduct surveys for nesting TRBL no more than 10 days prior to the start of implementation to evaluate presence/absence of TRBL nesting colonies in proximity to Project activities and to evaluate potential Project-related impacts.

Recommended Mitigation Measure 14: TRBL Avoidance

If an active TRBL nesting colony is found during preconstruction surveys, CDFW recommends implementation of a minimum 300-foot no-disturbance buffer in accordance with CDFW's "Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agriculture Fields in 2015" (2015). CDFW advises that this buffer remain in place until the breeding season has ended or until a qualified biologist has determined that nesting has ceased, the birds have

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 12

fledged, and are no longer reliant upon the colony for survival. It is important to note that TRBL colonies can expand over time and for this reason, the colony should be reassessed to determine the extent of the breeding colony within 10 days for Project initiation.

Recommended Mitigation Measure 15: TRBL Take Avoidance

In the event that a TRBL nesting colony is detected during surveys, consultation with CDFW is warranted to discuss how to implement the Project and avoid take, or if avoidance is not feasible, to acquire a State ITP, pursuant to Fish and Game Code section 2081(b), prior to Project activities.

COMMENT 6: Crotch Bumble Bee (CBB)

Issue: On June 28, 2019, the Fish and Game Commission published findings of its decision to advance CBB to candidacy as endangered. Pursuant to Fish and Game Code section 2074.6, CDFW has initiated a status review report to inform the Commission's decision on whether listing of CBB, pursuant to CESA, is warranted. During the candidacy period, consistent with CEQA Guidelines, section 15380, the status of the CBB as an endangered candidate species under CESA (Fish & G. Code, § 2050 et seq.) qualifies it as an endangered, rare, or threatened species under CEQA. It is unlawful to import into California, export out of California or take, possess, purchase, or sell within California, CBB and any part or product thereof, or attempt any of those acts, except as authorized pursuant to CESA. Under Fish and Game Code section 86, take means to hunt, pursue, catch, capture, or kill, or to attempt to hunt, pursue, catch, capture, or kill. Consequently, take of CBB during the status review period is prohibited unless authorization pursuant to CESA is obtained.

CBB have been documented to occur within the vicinity of the Project area (CDFW, 2019). Suitable CBB habitat includes 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 bird 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 soil (Goulson, 2010), or under leaf litter or other debris (Williams et al., 2014). Therefore, ground disturbance and vegetation removal associated with Project implementation has the potential to significantly impact local CBB populations.

Specific impact: Without appropriate avoidance and minimization measures for CBB, potentially significant impacts associated with ground- and

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 13

vegetation-disturbing activities associated with construction of the Project include loss of foraging plants, changes in foraging behavior, burrow collapse, nest abandonment, reduced nest success, reduced health and vigor of eggs, young and/or queens, in addition to direct mortality in violation of Fish and Game Code.

Evidence impact is potentially significant: CBB was once common throughout most of the central and southern California, however, it now appears to be absent from most of it, especially in the central portion of its historic range within California's Central Valley (Hatfield et al., 2014). Analyses by the Xerces Society et al. (2018) suggest there have been sharp declines in relative abundance by 98% and persistence by 80% over the last ten years.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to CBB associated with the Project, CDFW recommends including the following mitigation measure in the MND.

Recommended Mitigation Measure 16: CBB Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation to determine if the Project area or its immediate vicinity contains suitable habitat for the species mentioned above.

Recommended Mitigation Measure 17: CBB Avoidance

CDFW recommends that all small mammal burrows and thatched/bunch grasses be avoided by a minimum of 50 feet to avoid take and potentially significant impacts. If the Project area includes brush piles, unmowed/overgrown areas, dead trees, hollow logs, those areas should be avoided by a minimum of 50 feet to avoid take and potentially significant impacts. If ground-disturbing activities will occur during the overwintering period (October through February), consultation with CDFW is warranted to discuss how to implement Project activities and minimize potential impacts.

Recommended Mitigation Measure 18: CBB Take Authorization

If CBB is identified during surveys, consultation with CDFW is warranted to determine what, if any, take authorization is necessary to comply with CESA.

COMMENT 7: Burrowing Owl (BUOW)

Issue: BUOW inhabit open grassland containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover. The Project area consists of

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 14

suitable grassland habitat that has the potential to support BUOW. Therefore, there is potential for BUOW to colonize the Project site.

Specific impact: Without appropriate avoidance and minimization measures for BUOW, 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/or young, and direct mortality of individuals.

Evidence impact is potentially significant: Habitat loss and degradation are considered the greatest threats to BUOW in California's Central Valley (Gervais et al. 2008). The Project area is bordered by grass land habitat that has the potential to support BUOW. Therefore, subsequent ground-disturbing activities associated with the Project has the potential to significantly impact local BUOW populations. In addition, and as described in CDFW's "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), excluding and/or evicting BUOW from their burrows is considered a potentially significant impact under CEQA.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to BUOW, CDFW recommends conducting the following evaluation of the subject parcel and its vicinity and implementing the following mitigation measures.

Recommended Mitigation Measure 19: BUOW Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if the Project area or its vicinity contains suitable habitat for BUOW.

Recommended Mitigation Measure 20: BUOW Surveys

CDFW recommends that a qualified biologist conduct surveys for BUOW following the California Burrowing Owl Consortium's (CBOC) "Burrowing Owl Survey Protocol and Mitigation Guidelines" (CBOC 1993) and CDFW's "Staff Report on Burrowing Owl Mitigation" (CDFG 2012). Specifically, CBOC and CDFW's Staff Report suggest three or more surveillance surveys conducted during daylight with each visit occurring at least three weeks apart during the peak breeding season (April 15 to July 15), when BUOW are most detectable. In addition, CDFW advises that surveys include a 500-foot buffer around the Project area.

Eric Hughes
 County of San Luis Obispo
 August 17, 2020
 Page 15

Recommended Mitigation Measure 21: BUOW Avoidance

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 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 sites	April 1-Aug 15	200 m*	500 m	500 m
Nesting sites	Aug 16-Oct 15	200 m	200 m	500 m
Nesting sites	Oct 16-Mar 31	50 m	100 m	500 m

* meters (m)

Recommended Mitigation Measure 22: BUOW Passive Relocation and Mitigation

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 replacement of occupied burrows with artificial burrows at a ratio of 1 burrow collapsed 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.

COMMENT 8: Western Pond Turtle (WPT)

Issue: WPT have been documented to occur within the vicinity of the Project area (CDFW 2020). Review of aerial imagery indicates that water pond and ephemeral streams north and west of project, which could serve as suitable habitat for WPT. WPT are known to nest in the spring or early summer within 100-meters of a waterbody, although nest sites as far away as 500-meters have also been reported (Thomson et al. 2016).

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 16

Specific impact: Without appropriate avoidance and minimization measures for WPT, potential significant impacts associated with the Project's construction could include nest destruction, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals.

Evidence impact is potentially significant: Habitat loss resulting from agricultural and urban development is the primary threat to WPT, as well as possible impacts of competition and predation by introduced species (Thomson et al. 2016). Ephemeral streams are in the vicinity of the Project area to the north and west, which could serve as habitat to WPT. WPT are known to nest in the spring or early summer within 100-meters of a waterbody, although nest sites as far away as 500-meters have also been reported (Thomson et al. 2016). Therefore, subsequent ground-disturbing activities have the potential to significantly impact WPT populations.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Environmental Setting)

To evaluate potential impacts to WPT, CDFW recommends conducting the following evaluation of the subject parcel and implementing the following mitigation measures.

Recommended Mitigation Measure 23: WPT Surveys

Because the timeframe for construction is unspecified, CDFW believes the Project does have the potential to impact WPT. Because of this, CDFW recommends that a qualified biologist conduct focused surveys for WPT 10-days prior to Project implementation on the subject parcel. In addition, CDFW recommends that focused surveys for nests occur during the egg-laying season (March through August) and that any nests discovered remain undisturbed until the eggs have hatched.

Recommended Mitigation Measure 24: Relocation of WPT

CDFW recommends that if any WPT are discovered at the site immediately prior to or during Project activities, they be allowed to move out of the area on their own.

COMMENT 9: Other State Species of Special Concern

**American badger, California glossy snake, northern California legless lizard
San Joaquin coachwhip, and Western spadefoot**

Issue: American badger can occupy a diversity of habitats and requires sufficient food, friable soils, and open, uncultivated ground (Williams 1986). California glossy snake are found in a variety of habitat including grasslands and in areas with loose soil which allows for burrowing (Thomson et al. 2016). Northern California legless

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 17

lizard are found primarily in areas with sandy or loose loamy soils, loose organic soils, or where there is plenty of leaf litter (Thomson et al. 2016). San Joaquin coachwhip occur in open, dry areas with little or no tree cover (Thomas et al., 2016). Western spadefoot occurs in grassland in playas and alkali flats (Thomson et al. 2016). The subject parcel is within the range of the species mentioned above. These species have been documented to occur in the vicinity of the parcel and grassland on the site likely supports the habitat elements mentioned above. Therefore, the subject parcel is suitable for occupation or colonization by these species.

Specific impact: Without appropriate avoidance and minimization measures for American badger, California glossy snake, northern California legless lizard, San Joaquin coachwhip, Western spadefoot, potentially significant impacts associated with the Project's construction could include den/burrow abandonment, which may result in reduced health or vigor of eggs and/or young, and/or direct mortality.

Evidence impact is potentially significant: Habitat loss and degradation is a primary threat to all five (5) of these species mentioned above (Williams 1986 and Thomson et al. 2016). Impacts to grasslands within the Project area has the potential to significantly impact local populations of these species.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to these species, CDFW recommends conducting the following evaluation of the subject parcel and its vicinity and implementing the following mitigation measures.

Recommended Mitigation Measure 25: Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation to determine if the Project area or its immediate vicinity contains suitable habitat for the species mentioned above.

Recommended Mitigation Measure 26: Species of Special Concern Surveys

If suitable habitat is present, CDFW recommends that a qualified biologist conduct focused surveys for each species and their requisite habitat features to evaluate potential impacts resulting from ground-disturbance.

Recommended Mitigation Measure 27: Avoidance

Avoidance whenever possible is encouraged via delineation and observing a 50-foot no-disturbance buffer around burrows and dens.

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 18

COMMENT 10: Special-Status plants

Issue: Special-status plant species have the potential to occur on the Project site, including the California rare-plant ranked Lemmon's jewelflower (*Caulanthus lemmonii*), shining navarretia (*Navarretia nigelliformis* ssp. *radians*), La Panza mariposa-lily (*Calochortus simulans*), Munz's tidy-tips (*Layia munzii*), showy golden madia (*Madia radiata*), and oval-leaved snapdragon (*Antirrhinum ovatum*) (CDFW 2020). As a result, the Project has the potential to impact these plant species.

Specific impact: Potentially significant impacts to special-status plant species associated with proposed Project activities include inability to survive and reproduce and direct mortality.

Evidence impact is potentially significant: Lemmon's jewelflower, shining navarretia, La Panza mariposa-lily, Munz's tidy-tips, showy golden madia, and oval-leaved snapdragon occur in valley and foothill grassland (CNPS 2020a-f). As a result, these species have the potential to occur at the Project area. Habitat loss and degradation resulting from grazing, agricultural, non-native plants, and development are among the primary threats for all the species listed (CNPS 2020a-f).

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential Project-related impacts to special-status plant species, CDFW recommends conducting the following evaluation of the Project site and including the following measures in a CEQA document.

Recommended Mitigation Measure 28: Special-Status Plant Surveys

CDFW recommends that the Project site 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 2020c). 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. In the absence of protocol-level surveys being performed, additional surveys may be necessary.

Recommended Mitigation Measure 29: Special-Status Plant Avoidance

Further, CDFW recommends special-status plant species be avoided whenever possible by delineation and observation of 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

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 19

CDFW is warranted to determine appropriate minimization and mitigation measures for impacts to special-status plant species.

Recommended Mitigation Measure 30: Special-Status Plant Consultation

If a State listed plant species is identified during botanical surveys, consultation with CDFW is advised to determine permitting needs.

COMMENT 11: Pesticide Use

Issue: The Project has the potential to temporarily and permanently impact biological resources through the use of pesticides. The United States Environmental Protection Agency (USEPA) regulates pesticides at the Federal level and the California Department of Pesticide Regulation (DPR) regulates pesticides at the State Level. There are currently no pesticides registered specifically for use directly on cannabis. Based on DPR guidance, the only pesticide products not illegal to use on cannabis are those that contain an active ingredient that is exempt from residue-tolerance requirements and (1) registered and labeled for use that is broad enough to include use on cannabis (i.e., unspecified green plants) or (2) exempt from registration requirements as a minimum risk pesticide under Federal Insecticide, Fungicide, and Rodenticide Act section 25(b) and California Code of Regulations, Title 3, section 6147.

Specific impact: Baker (2018) reports the direct effects of pesticides on wildlife include “acute poisoning, immunotoxicity, endocrine disruption, reproductive failure, altered morphology and growth rates, and changes in behavior” (p. 1). Increased anticoagulant rodenticide use has been noted by CDFW staff at clandestine cannabis cultivation sites throughout the State, including the use of illegal rodenticides in endangered species habitat in San Luis Obispo County (D. Hacker, personal communication, March 28, 2017). The use of pesticides, including anticoagulants and their potential for secondary poisoning to native species, is a significant concern. According to Baker (2018), “pesticides can indirectly impact wildlife through reduction of food resources and refuges, starvation due to decreased prey availability, hypothermia, and secondary poisoning” (p. 3).

Evidence impact is potentially significant: The Project includes a 3.75-acre outdoor cultivation area and does not make clear if pesticides will be used. The Project area contains potentially suitable habitat and features that could support several special-status species. As a result, Project activities have the potential to significantly impact special-status species through the use of pesticides.

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 20

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 area to be restricted to those approved by USEPA and DPR.

COMMENT 12: Lake and Streambed Alteration

Issue: The Project has the potential to temporarily and/or permanently impact a potential wetland and ephemeral streams that flow to unnamed stream tributaries off the Estella River. Activities within or adjacent to these streams may be subject to CDFW's lake and streambed alteration regulatory authority, pursuant Fish and Game Code section 1600 et seq.

Specific impact: Work within or adjacent to stream channels have the potential to result in substantial diversion or obstruction of natural flows; substantial change or use of material from the bed, bank, or channel (including removal of riparian vegetation); deposition of debris, waste, sediment, toxic runoff or other materials into water causing water pollution and degradation of water quality.

Evidence impact is potentially significant: The Project area includes activities adjacent to an ephemeral stream that may be subject to CDFW's lake and streambed alteration regulatory authority. With the presence of ephemeral streams, the Project activities within and or near streams, have the potential to impact downstream waters. Although mostly dry, recent studies have shown that biodiversity and habitat values of dryland streams are considerably higher than in the adjacent uplands, transporting and delivering water, and providing linear habitat connectivity and refuge, and concentrating seeds, organic matter and sediment. Moreover, the ecological viability of the dryland environment depends on the sustainability of the physical/hydrological processes that form and maintain episodic streams and the habitat they support (Brady and Vyverberg, 2013).

Ephemeral streams, such as the ones on site, function in the collection of water from rainfall, storage of various amounts of water and sediment, discharge of water as runoff and the transport of sediment, they provide diverse sites and pathways in which chemical reactions take place and provide habitat for fish and wildlife species. Disruption of stream systems such as these can have significant physical, biological, and chemical impacts that can extend into the adjacent uplands adversely effecting not only the fish and wildlife species dependent on the stream itself, but also the

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 21

flora and fauna dependent on the adjacent upland habitat for feeding, reproduction, and shelter.

Recommended Potentially Feasible Mitigation Measure(s)

Notification of Lake and Streambed Alteration

Based on aerial imagery, the Project site appears to contain features indicating ephemeral streams may be present. 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 section 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 or use any material from the bed, channel, or bank of any stream or substantially divert or obstruct the natural flow of a stream. Future and on-going project operations may involve activities within streams that are jurisdictional under Fish and Game Code section 1602. CDFW recommends coordination with CDFW staff prior to ground-breaking activities on-site or submit a Lake or Streambed Alteration Notification to determine if the activities proposed within the streams are subject to CDFW's jurisdiction. Please note that CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration Agreement.

Additionally, Business and Professions Code 26060.1 (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.

II. Editorial Comments and/or Suggestions

Mitigation Measure BIO-12(a), San Joaquin Kit Fox Avoidance and Protection Measures, page 35

Mitigation Measure BIO-12(a) describes prior to any ground disturbance or on-site construction activities, and within 30 days prior to initiation of site disturbance and/or construction, the biologist shall conduct a pre-activity survey for known or potential kit fox dens. At a minimum, if kit fox burrows/dens are found, 'no construction' buffers/exclusion zones shall be established as follows:

- Potential kit fox den/burrow: 50 feet
- Known or active kit fox den: 100 feet
- Kit fox pupping den: 150 feet

CDFW recommends that a qualified biologist assess presence/absence of SJKF and/or

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 22

their dens by conducting surveys within 200 feet of the Project area, following the USFWS “Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance” (USFWS, 2011). Pre-construction surveys are also recommended, and CDFW advises conducting these surveys in all areas of potentially suitable habitat no less than 14 days and no more than 30 days prior to beginning of ground-disturbing activities. If dens are found during surveys, CDFW recommends implementing full avoidance for SJKF by employing no-disturbance buffers, in accordance with USFWS’ (2011) recommendations. Specifically, if SJKF are found occupying atypical (i.e. manmade structure) den sites, a 50-foot no-disturbance is recommended around the occupied den structure. If potential dens are found during surveys, CDFW advises implementing a 50-foot no-disturbance buffer around these structures as well.

As currently drafted, BIO-12(a) describes if SJKF dens that are occupied or have been known to be occupied in the past, or a natal or pupping den is found during surveys, consultation with CDFW should occur to discuss how to implement the project and avoid take. CDFW recommends in addition to consultation with CDFW, the implementation of a 100-foot no-disturbance buffer around dens that are used or known to have been used at any time in the past by SJKF. If a natal or pupping den is found during surveys, consultation with CDFW is recommended.

Mitigation Measure BIO-12(d), San Joaquin Kit Fox Avoidance and Protection Measures., Kit Fox Entrapment Avoidance. Page 35 and 36.

As drafted, the measure states to prevent entrapment of SJKF, all excavations, steep-walled holes and trenches in excess of two feet in depth shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Trenches shall also be inspected for entrapped kit fox each morning prior to onset of field activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they shall be thoroughly inspected for entrapped kit fox. Any kit fox so discovered shall be allowed to escape before filed activities resume or be removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.

Take as defined in Fish and Game Code section 86 means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill. Entrapping a State threatened species, such as the SJKF is considered take (Fish & G. Code, § 86). SJKF detection warrants consultation with CDFW to discuss how to implement the Project and avoid take, or if avoidance is not feasible, to acquire a State ITP, pursuant to Fish and Game Code section 2081(b). Full avoidance measures need to be incorporated into the MND. Mitigation Measure BIO-12(d) should be amended to include a statement

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 23

requiring the qualified biologist to have the necessary State and Federal permits authorizing incidental take in order to physically remove an entrapped kit fox.

Nesting birds: 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).

Habitat within the Project area likely provides nesting habitat for birds. For this reason, CDFW encourages Project implementation occur during the non-nesting bird season. However, if ground-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 wildlife biologist conduct pre-activity surveys for active nests no more than 10 days prior to the start of ground 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 work site to identify nests and determine their status. A sufficient area means any area potentially affected by a project. In addition to direct impacts (i.e., nest destruction), noise, vibration, odors, and movement of workers or equipment could also affect nests. Prior to initiation of construction activities, CDFW recommends a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once construction begins, CDFW recommends a qualified biologist continuously monitor nests to detect behavioral changes resulting from the project. If behavioral changes occur, CDFW recommends the work causing that change cease and CDFW consulted for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified wildlife 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 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 wildlife biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 24

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

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).

If you have any questions, please contact Shannon Dellaquila, Senior Environmental Scientist (Specialist), at the address provided on this letterhead by electronic mail at Shannon.Dellaquila@wildlife.ca.gov.

Sincerely,

DocuSigned by:

FA83F09FE08945A...

Julie A. Vance
Regional Manager

Attachment

ec: Office of Planning and Research, State Clearinghouse

Shannon Dellaquila
California Department of Fish and Wildlife

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 25

Literature Cited

- Baker, A. 2018. A review of the potential impacts of cannabis cultivation of fish and wildlife resources. California Department of Fish and Wildlife, Sacramento, California.
- Beedy, E. C., W. J. Hamilton III, R. J. Meese, D. A. Airola, and P. Pyle. 2017. Tricolored Blackbird (*Agelaius tricolor*), version 3.0. *in* The birds of North America. P. G. Rodewald (Ed.). Cornell Lab of Ornithology, Ithaca, New York, USA. <https://doi.org/10.2173/bna.tribla.03>
- 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. Publication Number: CEC-500-2014-013.
- Beiswenger, R. E., 1977. Diet patterns of aggregative behavior in tadpoles of *Bufo americanus*, in relation to light and temperature. *Ecology* 58:98–108.
- California Burrowing Owl Consortium (CBOC), 1993. Burrowing owl survey protocol and mitigation guidelines. Pages 171-177 *in* Lincer, J. L. and K. Steenhof (editors). 1993. The burrowing owl, its biology and management. Raptor Research Report Number 9.
- California Department of Fish and Game (CDFG), 2012. Staff Report on Burrowing Owl Mitigation. California Department of Fish and Game. March 7, 2012.
- CDFW. 2016. Five Year Status Review for Swainson's Hawk (*Buteo swainsoni*). California Department of Fish and Wildlife. April 11, 2016.
- California Department of Fish and Wildlife (CDFW), 2020. Biogeographic Information and Observation System (BIOS). <https://www.wildlife.ca.gov/Data/BIOS>. Accessed July 30, 2020
- CDFW, 2018b. Swainson's Hawks in California. <https://www.wildlife.ca.gov/Conservation/Birds/Swainson-Hawks>. Accessed April 30, 2018.
- CDFW, 2018c. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. State of California, California Natural Resources Agency, Department of Fish and Wildlife. March 20, 2018.
- California Nature Plant Society (CNPS), 2020a. Lemmon's jewelflower. <http://www.rareplants.cnps.org/detail/1864.html>. Accessed August 5, 2020.

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 26

CNPS, 2020b. shining navarretia August 5, 2020.
<http://www.rareplants.cnps.org/detail/1738.html>. Accessed, 2018.

CNPS, 2020c. La Panza mariposa lily. <http://www.rareplants.cnps.org/detail/52.html>.
Accessed August 5, 2020.

CNPS, 2020d. Munz's tidy-tips. <http://www.rareplants.cnps.org/detail/964.html>.
Accessed August 5, 2020.

CNPS, 2020e. showey golden madia. <http://www.rareplants.cnps.org/detail/1054.html>.
Accessed August 5, 2020.

CNPS, 2020f. oval-leaved snapdragon. <http://www.rareplants.cnps.org/detail/136.html>
ccessed August 5, 2020.

Cypher, B. L., S. E. Phillips, P. A. Kelly, 2013. Quantity and distribution of suitable habitat for endangered San Joaquin kit foxes: conservation implications. *Canid Biology and Conservation* 16(7): 25–31.

Endangered Species Recovery Program (ESRP). 2020. Giant kangaroo rat.

<http://esrp.csustan.edu/publications/pubhtml.php?doc=sjvrp&file=chapter02H00.html>.
Accessed July 30, 2020.

Gervais, J. A., D. K. Rosenberg, and L. A. Comrack, 2008. Burrowing Owl (*Athene cunicularia*) In California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California (W. D. Shuford and T. Gardali, editors). *Studies of Western Birds* 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Goulson, D. 2010. Bumblebees: behaviour, ecology, and conservation. Oxford University Press, New York. 317pp.

Hatfield, R, S. Colla, S. Jepsen, L. Richardson, R. Thorp, and S. Foltz Jordan. 2014. Draft IUCN assessments for North American *Bombus* spp. for the North American IUCN bumble bee specialist group. The Xerces Society for Invertebrate Conservation, www.xerces.org, Portland, OR.

Hatfield, R., Jepsen, S., Thorp, R., Richardson, L., Colla, S. & Foltz Jordan, S. 2015. *Bombus occidentalis*. The IUCN Red List of Threatened Species 2015.

Miller, M. W., 2006. Apparent effects of light pollution on singing behavior of American robins. *The Condor* 108:130–139

Eric Hughes
County of San Luis Obispo
August 17, 2020
Page 27

Swainson's Hawk Technical Advisory Council (SWHA TAC) 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee, May 31, 2000.

Tabor, R. A., G. S. Brown, and V. T. Luiting, 2004. The effect of light intensity on sockeye salmon fry migratory behavior and predation by cottids in the Cedar River, Washington. *North American Journal of Fisheries Management* 24:128–145.

Thomson, R. C., A. N. Wright, and H. Bradley Shaffer, 2016. California Amphibian and Reptile Species of Special Concern. California Department of Fish and Wildlife and University of California Press: 186-191.

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, D., 1986. Mammalian Species of Special Concern in California. California Department of Fish and Game, February 1986.

Williams, P. H., R. W. Thorp, L. L. Richardson, and S. R. Colla. 2014. Bumble bees of North America: an identification guide. Princeton University Press, Princeton, New Jersey. 208pp

Attachment 1

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

**PROJECT: Integrated Agriculture Inc. Minor Use Permit
(DRC2018-00076 Powers) Outdoor Cannabis Cultivation
(Project)**

SCH No.: 2020070341

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
Mitigation Measure 1: Giant Kangaroo Rat (GKR) Habitat Assessment and Trapping Surveys	
Mitigation Measure 4: San Joaquin Kit Fox (SJKF) Surveys	
Recommended Mitigation Measure 7: San Joaquin Antelope Squirrel Surveys	
Mitigation Measure 10: Swainson's Hawk (SWHA) Surveys	
Mitigation Measure 13: Tri-Colored Blackbird (TRBL) Surveys	
Mitigation Measure 16: Crotch Bumble Bee (CBB) Habitat Assessment	
Mitigation Measure 19: Burrowing Owl (BUOW) Habitat Assessment	
Mitigation Measure 20: BUOW Surveys	
Mitigation Measure 22: BUOW Passive Relocation and Mitigation	
Mitigation Measure 23: Western Pond Turtle (WPT) Surveys	
Mitigation Measure 25: Species of Special Concern Habitat Assessment	
Mitigation Measure 28: Special-Status Plant Surveys	
Measure 30: Special-Status Plant Consultation	
<i>During Construction</i>	
Mitigation Measure 2: GKR Avoidance	
Mitigation Measure 3: GKR Take Authorization	
Mitigation Measure 5: SJKF Avoidance	
Mitigation Measure 6: SJKF Take Authorization	
Mitigation Measure 8: SJAS Avoidance	
Mitigation Measure 9: SJAS Take Authorization	
Mitigation Measure 11: SWHA No-disturbance Buffer	
Mitigation Measure 12: SWHA Take Authorization	
Mitigation Measure 15: TRBL Take Avoidance	
Mitigation Measure 17: CBB Avoidance	

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
Mitigation Measure 18: CBB Take Authorization	
Measure 22: BUOW Passive Relocation and Mitigation	
Mitigation Measure 24: Relocation of WPT	
Mitigation Measure 27: Species of Special Concern Avoidance	
Mitigation Measure 29: Special-Status Plant Avoidance	
<i>During the Project</i>	
Mitigation Measure 2: GKR Avoidance	
Mitigation Measure 3: GKR Take Authorization	
Mitigation Measure 5: SJKF Avoidance	
Mitigation Measure 8: SJAS Avoidance	
Mitigation Measure 9: SJAS Take Authorization	
Mitigation Measure 11: SWHA No-disturbance Buffer	
Mitigation Measure 12: SWHA Take Authorization	
Mitigation Measure 15: TRBL Take Avoidance	
Mitigation Measure 17: CBB Avoidance	
Mitigation Measure 18: CBB Take Authorization	
Mitigation Measure 20: BUOW Surveys	
Measure 22: BUOW Passive Relocation and Mitigation	
Mitigation Measure 24: Relocation of WPT	
Mitigation Measure 27: Species of Special Concern Avoidance	
Mitigation Measure 29: Special-Status Plant Avoidance	