

Commercial Cannabis Cultivation
Management Plan

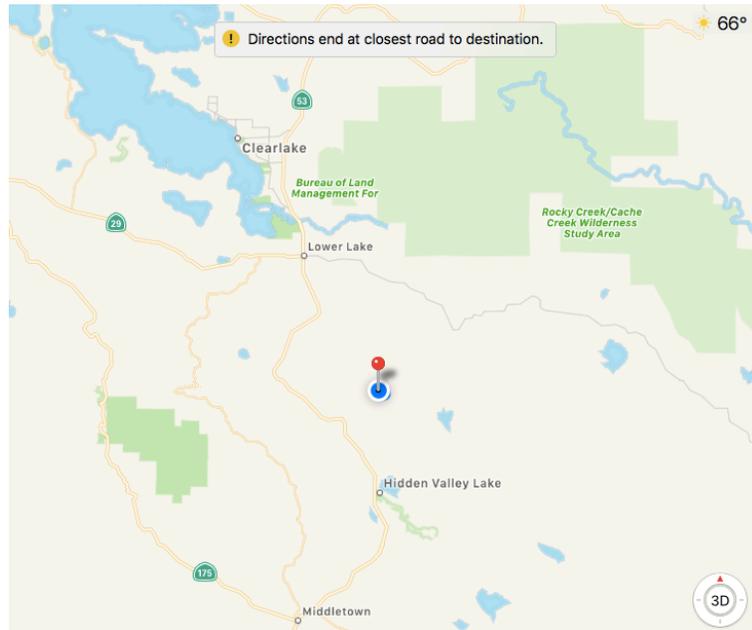
Lake County, California

APN# 012-048-010-00

37.5 acres

18331 Ponderosa Trail

Lower Lake, California 95457



Applicant/owner:

Carol Littlefield

801-209-4404

cieralight@mac.com

Table of Contents

Project Description	3
Air Quality	4
Cultural Resources	6
Energy Use and Greenhouse Gas	8
Fertilizer Management	9
Fish and Wildlife Protection	10
Operations Manual	15
Pest Management	16
Security	17
Storm Water Management	19
Hydrology and Water Quality	20
Waste Management	22
Hazards, Hazardous Materials and Human Health	23
Water Management Plan	28
Conclusions	29

PROJECT DESCRIPTION

The Proposed Project is an existing Cannabis cultivation operation that is applying for licensing under the CalCannabis Cultivation Program. This cannabis cultivation operation is located on a 37.5-acre parcel "Parcel" (012-048-010) at 18331 Ponderosa Trail, in Lower Lake, California. The Project Area is accessed by a private, gated, gravel and dirt road off of Noble Ranch Road. The Project Area is the sum of all the areas used for cultivation. For this cultivation operation, the Project Area is approximately 0.5 acres in size and consists of: two outdoor gardens; material storage area; irrigation system; cannabis drying and processing areas; and access roads. Cultivation Area #1 has a fenced enclosure with dimensions 96.5 feet by 96.5 feet (9,316.5 sq. ft.), with 5,400 sq. ft. of Cannabis canopy grown inside. Cultivation Area #2 has a fenced enclosure with dimensions of 100 feet by 46.5 feet (5,022 sq. ft.), with 1787 sq. ft. of Cannabis canopy grown inside. The fencing is 6-foot tall. Wooden posts with welded wire fencing. Cultivation method is planting stations in the native, tilled soil, smart pots and raised beds. No artificial lighting is used. The gardens are setback over 400 feet from Noble Ranch Road, which is a private road for landowner access. A two-story barn (approximately 730 square feet) is used for equipment and material storage on the ground level and cannabis drying on the upper level. A room within the primary residence is also used for surveillance equipment and Cannabis processing (approximately 144 square feet). The cultivation operation will draw water from the existing residential water supply, which uses an existing, permitted groundwater well and electric pump. Aboveground PVC piping transports water from the well to an automated drip irrigation system in the garden #1. Garden #2 is supplied with buried PVC pipe to another automated drip system. Water will be used from June through October, and estimated usage is between 75,000 and 112,500 gallons per year.

The remainder of the parcel will remain in its current state of use, which includes two rural residences, a vegetable garden, and undeveloped forest land. The topography of the parcel is a saddle between two broad hills. The cultivation operation slopes to the northwest toward Little High Valley. There are no wetlands or channels in the Project Area or on the Parcel. Beyond the Parcel, watercourses drain to Asbill Creek, then to Soda Creek, then to Putah Creek.

The CalCannabis Licensing Program regulations do not address the construction, modification, or replacement of new and/or existing permanent structures or facilities associated with cannabis cultivation sites. Those issues are addressed through land use regulations and environmental review at a local level, and are analyzed in the Cumulative Impacts section of this checklist.

AIR QUALITY

AIR QUALITY	Consistent with the PEIR, Less Than Significant	Inconsistent with the PEIR, Not Potentially Significant	Inconsistent with the PEIR, Potentially Significant	No Similar Impact
<i>Would the proposed activity result in impacts that differ from the following impacts identified and discussed in the CalCannabis Cultivation Licensing PEIR (see PEIR Chapter 4.3)?</i>				
Impact AQ-1: Conflict with or obstruct implementation of an applicable air quality plan, and/or violate any air quality standard or contribute substantially to an existing or projected air quality violation. (See PEIR pages 4.3-29 to 4.3-32.)	X			
Impact AQ-2: Expose sensitive receptors to substantial pollutant concentrations as a result of cannabis cultivation. (See PEIR pages 4.3-32 to 4.3-33.)	X			
Impact AQ-3: Create objectionable odors affecting a substantial number of people as a result of cannabis cultivation. (See PEIR page 4.3-33 to 4.3-34.)	X			
<i>Would the proposed activity have other impacts not addressed above (refer to the checklist questions contained in Appendix G of the CEQA Guidelines)?</i>				
Impact:				

Consistency Analysis and Impact Analysis

Impact AQ-1

Under both baseline conditions and the CalCannabis Licensing Program, cannabis cultivation may include the operation of gasoline- or diesel-fueled equipment (e.g., generators, irrigation pumps, loaders, ventilation fans, and potentially gasoline-fueled landscaping equipment) and truck or vehicle trips to and/or from the site by vendors and workers, which would result in direct criteria air pollutant emissions from fuel combustion.

The CalCannabis Licensing Program would implement environmental protection measures found in Sections 8313 and 8315 of the proposed regulations. Section 8313 would prohibit the use of gas- or diesel-powered generators except as a backup energy source in the event of a power outage or emergency

CDFA (2017) summarizes the impacts from small cannabis cultivation operations as follows:

“Despite the potential air quality emission-generating sources described above that are associated with cannabis cultivation activities, it is not anticipated that the Proposed Program would conflict with or obstruct implementation of air quality plans for the numerous reasons outlined below. First, the cannabis cultivation activities under the Proposed Program would not be anticipated to generate a substantial number of vehicle trips (see Section 4.12, Transportation and Traffic) that would affect air quality. In addition, outdoor and mixed-light cultivation activities would generally occur on such small acreages that these activities would often not require intensive use of heavy equipment.” (page 4.3-30)

Cultivation operations may generate fugitive dust emissions through ground-disturbing activities such as ground tilling, uncovered soil or compost piles, and vehicle or truck trips on unpaved roads. Fugitive dust will be controlled by wetting the soil with a mobile water tank and hose, or by delaying ground disturbing activities until site conditions are not windy. Because the Proposed Project will not generate any significant amounts of pollutants, it will not impact regional air quality. Implementation of the Proposed Project will not conflict with or obstruct implementation of the Lake County Air Quality Management Plan, will not violate any air quality standard or contribute substantially to an existing or projected air quality violation, and will not result in a cumulatively considerable net increase of any criteria pollutant.

Impact AQ-2

The nearest sensitive receptors are a church and Coyote Valley Elementary School, 3.5 miles to the south, and churches and schools in Lower Lake 4.5 miles north-northwest of the parcel. Implementation of the Proposed Project will not impact sensitive receptors because no sensitive receptors are close enough to be affected.

Impact AQ-3

In cases where the perception of the odor as objectionable is widespread in a community, CDFA anticipates that the community has developed or will develop odor control requirements which match their local community expectations and standards, including and up to banning cultivation altogether. Cultivators in these locations would be required to comply with applicable local cannabis cultivation-, nuisance- or odor-related policies and regulations. For these reasons, cultivation under the CalCannabis Licensing Program would not be anticipated to emit odors that would be considered objectionable by a substantial number of people, especially when considered on a statewide basis.

Cannabis cultivation can generate objectionable odors, primarily with indoor cultivation operations. In outdoor cultivation, odors are able to disperse. No significant odor impacts that would affect a substantial number of people are anticipated from the Proposed Project because of the limited population in the area and the generous setback from public roads.

Mitigation

None required.

Odor Response Program

Our emergency contact person shall be responsible for our odor response program. All owners and residents of property within 1000 feet of the cannabis facility will be provided our emergency contact information. Odor complaints will be taken seriously and treated with sensitivity. Unfortunately, with outdoor cultivation there is no reasonable way to mitigate odor. We will provide a forecast of when odors will peak and the length of time odors can be expected to remain if necessary.

In our rural environment odor is not a concern. We will apply a charcoal filter when using the ventilation fan in the barn during drying season if necessary.

CULTURAL RESOURCES

CULTURAL RESOURCES	Consistent with the PEIR, Less Than Significant	Inconsistent with the PEIR, Not Potentially Significant	Inconsistent with the PEIR, Potentially Significant	No Similar Impact
<i>Would the proposed activity result in impacts that differ from the following impacts identified and discussed in the CalCannabis Cultivation Licensing PEIR (see PEIR Chapter 4.5)?</i>				
Impact CR-1: Cause substantial adverse impacts on historical resources, archaeological resources, and human remains. (See PEIR pages 4.5-9 to 4.5-11.)	X			
<i>Would the proposed activity have other impacts not addressed above (refer to the checklist questions contained in Appendix G of the CEQA Guidelines)?</i>				
Impact:				

Consistency Analysis and Impact Analysis

Impact CR-1

Ground disturbance and/or other site development activities for the purposes of cannabis cultivation have the potential to affect cultural resources. Site development falls outside of the scope of the CalCannabis Licensing Program, which is a licensing program for the cultivation activities themselves. Potential construction activities associated with site development would need to be performed in accordance with all applicable local, State, and federal regulatory systems, including but not limited to those related to cultural resources. Local agencies would have responsibility for ensuring that site development complies with applicable regulations, including CEQA, through review and issuance of local permit, license, or other authorization for cannabis cultivation site development activities. Site development activities are analyzed in the Cumulative Impacts section of this Checklist.

Existing cultivation activities themselves would generally have limited potential for adverse impacts on cultural resources. However, cultivation may involve excavation within soil that has not been disturbed previously. As such, while considered unlikely, excavation could encounter buried historic or archaeological resources or human remains. A mitigation measure—CR-1—was added that would ensure that any unexpected discoveries of cultural resources during cultivation do not result in significant impacts.

It is also considered unlikely that cultivation itself would result in modification or demolition of historic structures that could affect the characteristics that make the building eligible for listing in the CRHR; such impacts would be more likely to occur as part of site development and, as a result, would be evaluated by the local agency during its approval process for site development. In addition, the CalCannabis Licensing Program’s environmental protection measures related to cultural resources, specifically the accidental discovery of human remains (Section 8313[c] of the proposed regulations), would require applicants to halt cultivation activities and implement Health and Safety Code Section 7050.5 if human remains were discovered.

The existing buildings on the parcel (houses, barn, pump house), were built twenty years ago and are of modern construction. These structures are not at or nearing historic age (50 years). The Project would have no impact upon historic structures.

Mitigation

Mitigation Measure CR-1: Suspend Cultivation Immediately if Cultural Resources Are Discovered, Evaluate All Identified Cultural Resources for CRHR Eligibility, and Implement Appropriate Mitigation Measures for Eligible Resources.

Not all cultural resources are visible on the ground surface. As a result, before initiation of ground-disturbing activities, the licensee shall arrange for cultivation employees to receive training about the kinds of archaeological materials that could be present at the cultivation site and the protocols to be followed should any such materials be uncovered during cultivation. Training shall be conducted by an archaeologist who meets the U.S. Secretary of the Interior's professional standards. Training shall be required during each phase of cultivation to educate new cultivation personnel.

If any cultural resources, including structural features, unusual amounts of bone or shell, flaked or ground stone artifacts, historic-era artifacts, human remains, or architectural remains, are encountered during cultivation activities, work shall be suspended immediately at the location of the find and within a radius of at least 50 feet and the appropriate jurisdiction will be contacted.

All cultural resources uncovered during cultivation within the site shall be evaluated for eligibility for inclusion in CRHR. Resource evaluations shall be conducted by individuals who meet the U.S. Secretary of the Interior's professional standards in archaeology, history, or architectural history, as appropriate. If any of the resources meet the eligibility criteria identified in PRC Section 5024.1 or State CEQA Guidelines Section 21083.2(g), mitigation measures will be developed and implemented in accordance with State CEQA Guidelines Section 15126.4(b) before cultivation resumes.

For any resources eligible for listing in the CRHR that would be significantly adversely affected by cultivation, additional mitigation measures shall be implemented. Mitigation measures for archaeological resources may include (but are not limited to) avoidance; incorporation of sites within parks, green space, or other open space; capping the site; deeding the site into a permanent conservation easement; or data recovery excavation. Mitigation measures for archaeological resources shall be developed in consultation with responsible agencies and, as appropriate, interested parties such as Native American tribes. Implementation of the approved mitigation is required before resuming any cultivation activities with the potential to affect identified eligible resources at the site.

ENERGY USE AND GREENHOUSE GAS (GHG) EMISSIONS

ENERGY USE AND GREENHOUSE GAS EMISSIONS	Consistent with the PEIR, Less Than Significant	Inconsistent with the PEIR, Not Potentially Significant	Inconsistent with the PEIR, Potentially Significant	No Similar Impact
<i>Would the proposed activity result in impacts that differ from the following impacts identified and discussed in the CalCannabis Cultivation Licensing PEIR (see PEIR Chapter 4.6)?</i>				
Impact GHG-1: Potential to conflict with an applicable plan, policy, or regulation adopted to reduce the emissions of GHGs, result in wasteful, inefficient, and unnecessary consumption of energy, or cause a substantial increase in energy demand and the need for additional energy resources.	X			
Impact GHG-2: Use off-road equipment and motor vehicles for outdoor cultivation activities, resulting in GHG emissions.	X			
<i>Would the proposed activity have other impacts not addressed above (refer to the checklist questions contained in Appendix G of the CEQA Guidelines)?</i>				
Impact:				

Consistency Analysis and Impact Analysis

Impact GHG-1 and GHG-2

Typically, a connection to a local electricity provider’s electrical system/network is used as a primary energy source for equipment. Additional energy sources could include on-site solar panels and diesel or gasoline generators. Mixed-light and outdoor cannabis cultivation practices involve a lower energy demand than indoor cultivation. Cultivation operations could also utilize fuel-powered equipment that would contribute to GHG emissions. Additional sources of GHG emissions would include employee vehicle use and truck trips associated with the commuting of workers to and from cultivation sites. Outdoor cannabis cultivation, under both baseline conditions and the CalCannabis Licensing Program, would involve the use of fuel-powered equipment and motor vehicles that would generate GHG emissions and contribute to climate change impacts. Section 8313 of the CalCannabis Licensing Program prohibits the use of gas- or diesel-powered generators except as a backup energy source in the event of a power outage or emergency; this is expected to reduce baseline emissions from cultivators who are relying upon generators as a primary power source. Operation of the proposed cultivation operation would generate small amounts of carbon dioxide from operation of small engines, such as tillers, and from vehicular traffic associated with staff commuting. The proposed cultivation operation would not consume excessive amounts of energy. CDFA (2017) concluded that cannabis cultivation activities under the CalCannabis Licensing Program would not generate a substantial number of vehicle trips and would not require intensive use of heavy equipment, and as such, would not degrade air quality or produce significant amounts of greenhouse gases. Because the proposed cultivation operation will not impact regional air quality, the project will not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Mitigation

None required.

Existing solar array mitigates about 1/4 electrical usage.

FERTILIZER MANAGEMENT

Fertilizer options include: steer manure, chicken manure and bat guano, liquified bat guano, fish emulsion and kelp.

Fertilizers are purchased as needed and very little is stored onsite.

1. We will be following all fertilizer label directions;
2. Fertilizer will be securely stored in a building on the property;
- 3, All spills shall be immediately contained, and clean-up supplies will also be stored in said building;
4. We will apply the absolute minimum amount of fertilizer necessary;
5. To prevent off-site drift, we will be applying fertilizer in controlled environment, using the appropriate tools to minimize the risk;
6. No above ground water exists on the property and so contamination of water sources with fertilization is not an issue.

FISH AND WILDLIFE PROTECTION

BIOLOGICAL RESOURCES

BIOLOGICAL RESOURCES	Consistent with the PEIR, Less Than Significant	Inconsistent with the PEIR, Not Potentially Significant	Inconsistent with the PEIR, Potentially Significant	No Similar Impact
<i>Would the proposed activity result in impacts that differ from the following impacts identified and discussed in the CalCannabis Cultivation Licensing PEIR (see PEIR Chapter 4.4)?</i>				
Impact BIO-1: Cause adverse effects on aquatic and semi-aquatic special-status species. (See PEIR pages 4.4-17 to 4.4-21.)	X			
Impact BIO-2: Cause substantial adverse effects on special-status plant species. (See PEIR pages 4.4-21 to 4.4-22.)	X			
Impact BIO-3: Cause substantial adverse effects on wildlife due to increased light, including special-status terrestrial wildlife species. (See PEIR page 4.4-22.)	X			
Impact BIO-4: Cause substantial adverse effects on special-status terrestrial wildlife species due to increased noise and human presence. (See PEIR pages 4.4-22 to 4.4-23.)	X			
Impact BIO-5: Cause substantial adverse effects on riparian habitat, other sensitive natural communities, or federally protected wetlands. (See PEIR page 4.4-23 to 4.4-24.)	X			
Impact BIO-6: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or wildlife corridor, or impede the use of native wildlife nursery sites. (See PEIR pages 4.4-24 to 4.4-25.)	X			
Impact BIO-7: Conflict with applicable habitat conservation plans or natural community conservation plans. (See PEIR page 4.4-25.)	X			
Impact BIO-8: Conflict with local policies or ordinances protecting biological resources. (See PEIR page 4.4-25.)	X			
Impact BIO-9: Cause substantial adverse effects on wildlife due to pesticide use (besides rodenticides). (See PEIR pages 4.4-25 to 4.4-26.)	X			
Impact BIO-10: Cause substantial adverse effects on wildlife due to rodenticide use. (See PEIR pages 4.4-26 to 4.4-30.)	X			
Impact BIO-11: Cause substantial adverse impact on nesting birds as a result of outdoor cultivation. (See PEIR page 4.4-30.)	X			
<i>Would the proposed activity have other impacts not addressed above (refer to the checklist questions contained in Appendix G of the CEQA Guidelines)?</i>				
Impact:				

Consistency Analysis and Impact Analysis

Impact BIO-1

Because licensed cannabis cultivation operations could occur in habitats and locations throughout the State, there is potential for various special-status species to occur in proximity to cultivation operations. The PEIR concludes that most potential adverse effects on special-status species would occur during development of facilities used for cultivation, which are considered in the Cumulative Impacts section of this Checklist. Therefore, this mechanism for impacts on biological resources is not considered further here.

Cultivation activities could affect aquatic and semi-aquatic special-status species through surface water withdrawals, erosion/sedimentation, and release of hazardous materials to water bodies (e.g., fuels, pesticides) during ongoing operations. The primary concerns related to adverse effects on aquatic and semi-aquatic special-status species arise from unpermitted/illegal cultivation, because these operations have been documented to frequently be out of compliance with applicable regulatory requirements.

The Project Area is not within any listed species' designated critical habitat, but the northwest corner of the Parcel is within a listed species' designated critical habitat: Slender Orcutt grass (*Orcuttia tenuis*). Slender Orcutt grass occurs in vernal pools, and no vernal pools exist on the Parcel. No special-status animal or plant species were observed during the site survey by Natural Investigations Company. The California Department of Fish and Wildlife's rare species database (California Natural Diversity Database) was queried on January 21, 2018. No special-status species or habitats are mapped within the parcel or contiguous parcels. No impacts to special-status species were identified from project implementation.

Licensees must comply with Section 1602 of the Fish and Game Code or receive written verification from CDFW that a streambed alteration agreement is not required, before their cultivation license from CDFW would become effective. The Proposed Project will not divert or withdraw surface water, so there will be no impacts from alterations of streamflow. There are no watercourses or wetlands within the Project Area itself. The U.S. Fish and Wildlife wetland database, the National Wetland Inventory, was queried on January 21, 2018. The nearest wetlands are freshwater pond wetlands located over 2,000 feet southeast of the Project Area. The Proposed Project has established a minimum buffer distance of over 500 feet to the nearest waterbodies or wetlands.

Potential adverse impacts to water resources could occur during operation of cultivation activities by discharge of sediment or other pollutants (fertilizers, human waste, etc.) into receiving waterbodies. However, small quantities of organic pesticides are the only chemicals utilized by this cultivation operation. Additionally, the project proponent is enrolling in the State Water Board's Waste Discharge Requirements for Cannabis Cultivation Order WQ 2017-0023-DWQ. Ongoing compliance with this Order will ensure that cultivation operations will not significantly impact water resources by using a combination of Best Management Practices (BMPs), buffer zones, sediment and erosion controls, inspections and reporting, and regulatory oversight. Therefore, no mitigation is required.

The risk of release of hazardous materials to water bodies will be significantly reduced because cultivators would be required to comply with Sections 8313(e) and (f) of the proposed regulations, which

require compliance with pesticide laws and regulations (including those related to herbicides) as enforced by CDPH, and for any herbicides exempt from registration requirements, licensees must comply with all herbicide label directions, store chemicals in a secure building or shed, contain any chemical leaks and immediately clean up any spills, apply the minimum amount of product necessary to control the target pest (in this case a plant), and prevent off-site drift. This should minimize the potential for hazardous materials or pesticides to pollute waterbodies or affect aquatic species.

Impact BIO-2

Special-status plants could be adversely affected by erosion and sedimentation, trampling, fertilizer runoff from cultivation activities, or misapplication or drift of herbicides used on cultivation sites. Because cultivation sites would have already been developed before beginning operation, it is unlikely that they would contain special-status plant species that could be trampled.

Designated critical habitat for Slender Orcutt grass is generally mapped within the northwestern corner of the parcel; however, there are no vernal pools anywhere near the Project Area and none were identified on the Parcel. No special-status plant species were observed on the parcel during the site survey by Natural Investigations Company. Because the operational areas are situated on areas that are disturbed or lack sensitive habitats, no impacts to special-status species should occur from project implementation.

In addition, cultivators would be required to comply with Sections 8313(e) and (f) of the proposed regulations, which require compliance with pesticide laws and regulations (including those related to herbicides) as enforced by CDPH, and for any herbicides exempt from registration requirements, licensees must comply with all herbicide label directions, store chemicals in a secure building or shed, contain any chemical leaks and immediately clean up any spills, apply the minimum amount of product necessary to control the target pest (in this case a plant), and prevent off-site drift. This should minimize the potential for chemicals to impact special-status plant species.

Impact BIO-3

All types of cultivation operations may result in increased nighttime light compared to baseline conditions.

Increased nighttime light is known to have adverse effects on nocturnal wildlife species. The CalCannabis Licensing Program regulations contain environmental protection measures that would require security lighting at grow operations to be selectively placed and shielded to minimize the effects of the lighting (Section 8313[b]), and would require mixed-light operations to eliminate any nighttime light trespass (Section 8314). In addition, to the extent they are required, a Lake or Streambed Alteration Agreement and/or incidental take permit under CESA (as issued by CDFW) may include protective measures for such impacts. With these measures in place, impacts of increased nighttime light on wildlife from the CalCannabis Licensing Program would not be substantial and this impact would be less than significant. The Proposed Project will not create new light sources.

Impact BIO-4

Cannabis cultivation operations would likely result in increased noise and human presence in some areas. Increased noise levels would reduce the distance and area over which acoustic signals could be perceived by animals. Adverse effects on wildlife from noise could include changes in foraging and antipredator behavior, reproductive success, population density, and community structure. Increased human presence, which is often coupled with increased noise, is also known to cause disturbance to wildlife

For outdoor cultivation operations, the primary sources of noise could include irrigation pumps, diesel generators, various landscaping equipment, vendor/equipment/water trucks, and worker vehicles. The noise-generating equipment with the greatest potential to adversely affect wildlife would be chainsaws and mowers (for outdoor or mixed-light operations), trucks, and emergency generators. In general, the noise generated by cannabis cultivation activities would be consistent with other land uses in the vicinity; for instance, chainsaws and mowers are commonly used in rural environments. As such, many wildlife species are anticipated to be habituated to the noise generated by cultivation.

Impacts would generally occur from new cultivation operations; any new construction pertaining to this cultivation operation is analyzed in Cumulative Impacts section. Section 8313 of the CalCannabis Licensing Program prohibits the use of gas- or diesel-powered generators except as a backup energy source in the event of a power outage or emergency; this is expected to reduce baseline emissions from cultivators who are relying upon generators as a primary power source. The gardens will have restricted use of noise-generating equipment, and will result in less than significant impact upon wildlife.

Impact BIO-5

Water diversion, runoff and sedimentation, and discharges of other contaminants could adversely affect riparian habitat and other sensitive natural communities, such as wetlands, adjacent to cultivation sites. As described in Impact BIO-1, existing regulations and new regulatory programs specific to cannabis cultivation would be protective of aquatic habitats, including riparian areas and wetlands, by imposing limits on water diversions and requiring measures to minimize discharges to these habitats.

The Project Area does not contain riparian habitat or any other sensitive natural community. Potential adverse impacts to water resources could occur during operation of cultivation activities by discharge of sediment or other pollutants (fertilizers, human waste, etc.) into receiving waterbodies. However, small quantities of organic pesticides are the only chemicals utilized by this cultivation operation. Additionally, the project proponent is enrolling in the State Water Board's Waste Discharge Requirements for Cannabis Cultivation Order WQ 2017-0023-DWQ. Ongoing compliance with this Order will ensure that cultivation operations will not significantly impact water resources by using a combination of Best Management Practices (BMPs), buffer zones, sediment and erosion controls, inspections and reporting, and regulatory oversight. Implementation of the proposed project would have no impact upon sensitive natural communities.

Impact BIO-6

CDFA (2017) decided that cannabis cultivation operations under the CalCannabis Licensing Program would be of limited size (no larger than 1 acre), and therefore would typically not be large enough to substantially interfere with movement of wildlife. Even if multiple cultivation sites were located near one another, they would be unlikely to substantially impede wildlife movement because there would be separation between the cultivation sites. Indeed, many local jurisdictions have adopted setbacks or limits on the percentage of a parcel that can be dedicated to cannabis cultivation, allowing wildlife to pass

through or around the area (CDFA 2017). As described in PEIR Impact BIO-1, the water rights process administered by SWRCB would ensure bypass flows that would be protective of fish migration needs and instream habitat, such as low-velocity refugia for immature fish. No fisheries exist in the vicinity of the parcel. Implementation of the project will not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Impact BIO-7

Because the CalCannabis Licensing Program would be implemented throughout the state, it is likely that some licensed cannabis cultivation facilities would be within an area covered by an HCP or natural community conservation plan (NCCP). However, in general, the greatest potential for conflicts with these plans would occur during development of new cultivation facilities, rather than during ongoing cultivation operations. Establishment of new facilities is discussed in the Cumulative Impacts section of this Checklist. The parcel is not in the coverage area of an adopted habitat conservation plan. The Proposed Project would have no conflicts with habitat conservation plans.

Impact BIO-8

An applicant for a license must comply with all local ordinances and regulations, including those intended to protect biological resources. An applicant may provide documentation of compliance with local requirements to facilitate the application process. The Applicant has applied for permitting under the Lake County Cannabis cultivation ordinance. Thus, the Proposed Project will not conflict with local policies or ordinances protecting biological resources.

Impact BIO-9 and BIO-10

There is a potential for adverse effects on wildlife from the use of pesticides. Licensees must comply with pesticide laws and regulations as enforced by the Department of Pesticide Regulation. For all pesticides that comply with these laws and regulations, and are exempt from registration requirements, licensees shall comply with pesticide application and storage protocols. The PEIR concluded that application of pesticides in compliance with these regulations and protocols would not result in substantial adverse effects on wildlife. In accordance with CDPR guidance, under the CalCannabis Licensing Program cannabis cultivation operations are only allowed to use the following repellants in and around cannabis cultivation sites to protect their crops from rodent herbivory: capsicum oleoresin (consistent with the label), putrescent whole egg solids, and garlic. Because these are repellants and not rodenticides, they have no potential for secondary poisoning of non-target species. Implementation of the Proposed Project would not result in substantial adverse effects on wildlife from pesticide use.

Impact BIO-11

Increased noise and human presence at outdoor cannabis cultivation sites could adversely affect wildlife, including nesting birds. In particular, chainsaw or truck traffic could result in adverse effects on birds, particularly during the nesting season. Several federal and State laws have been established to protect birds (e.g., MBTA; California Fish and Game Code Sections 3503, 3503.5, and 3513), with which licensees would be required to comply. Compliance with these regulatory requirements would reduce the potential for impacts on nesting birds.

Mitigation Measures

None required.

OPERATIONS MANUAL

County Authorization

The County of Lake, its agents, and employees, are authorized to seek verification of the information contained within the development permit or use permit applications, the Operations Manual, and the Operating Standards at any time before or after development or use permits are issued.

Staff Screening Process

First a hiring need will be identified, and the job request posted. All applicants will be screened to determine if they are qualified for the job. Qualified applicants will be given an interview. The determination will be made on who will be hired. New hires will have to pass a background check as required by law before starting work.

Hours of Operation

No public hours will be kept. Visitation by appointment only.

Measures to minimize/offset carbon footprint

The outdoor cannabis cultivation process uses a very small amount energy. Solar powered water pumps, and restricted vehicle access to the cultivation site will further reduce the carbon footprint.

Chemical Storage/Usage

Small quantities of fuel (5 gallon plastic jugs) are stored and utilized by the cultivation operation. Pesticides consist of food-grade Diatomaceous earth and citric acid, Rosemary and Sesame oil compounds. Other than disinfectants (hydrogen peroxide and alcohol), no other chemicals are used or stored by this cultivation operation. All chemicals will be handled in a safe and appropriate manner. There will be no effluent discharged as a result of operational activities.

Grounds Maintenance

All equipment will have a designated storage location and will be returned to said location at the end of each work day. Machinery is mostly electric and battery operated. Honda ATV is gasoline operated and used minimally to transport workers to garden with equipment. Solar array offsets electrical usage.

Grounds will be maintained with proper storage of equipment, removal of litter/waste. Forest debris will continue to be removed and burned yearly during winter months.

Weekly waste, recycling and green bin pick up will manage most garbage. Kitchen waste bin will be securely stored in Pump house. Larger recycling and waste will be hauled to Clearlake Landfill on an as needed basis. Weeds and grass will be cut on an as needed basis to prevent pests and lower fire danger. In order to prevent sources of contamination in areas where cannabis products are handled all roads, yards, and parking lots will be maintained on an as needed basis. In order to prevent contamination by seepage, foot-borne filth, or the breeding of pests due to unsanitary conditions adequate draining areas will be maintained. The area surrounding the site is brush-land/forest and does not pose a risk of contaminating cannabis products.

The property is rural and does not have public streets, services, public rights-of-way, handicapped parking.

Compacted dirt roads connect public roads with property locations and cultivation sites. A large concrete slab allows parking and deliveries to the primary residence.

PEST MANAGEMENT

Pesticides consist of food-grade Diatomaceous earth and citric acid, Rosemary and Sesame oil compounds. All chemicals will be purchased as need and small left over amounts stored in a secure building with appropriate labeling. All pesticide applications will fully comply with the California Food and Agriculture Code, Division 6 Pest Control Operations and division 7 Agriculture Chemical; Chapter 1 - 3.6 and California Code of Regulations, Division 6 Pest Control Operations, and all the laws and regulations therein.

SECURITY SYSTEM

Prevent Access

- i. Fencing with commercial grade locks will be around the canopy area and gates at all access points to prevent access from unauthorized personnel. The only point of entry into canopy space is through the gate which will be locked at all times.
- ii. The entrance to the property will have a gate with a key pad entry to preventing access from automobiles. Two security cameras will be located at cannabis garden entrances with the capability to notify and record incidents in which the barriers have been breached.
- iii. A sign in and out book designated for authorized personnel, suppliers, and/or visitors will be used.
- iv. Premises will be maintained in a way that there is always visibility in the required areas.
- v. In the event of suspicious activities:
 - a) Immediate investigation of activity;
 - b) If criminal activity is detected the proper authorities will be notified;
 - c) A record of all suspicious activities will be kept on site.

Prevent Theft

- i. All Cannabis products will be track via RFID tags and inventoried using the Metrc track and trace software as a part of the California track and trace program.
- ii. Access to personnel will be limited to the area in which their responsibility is held and in the appropriate timeframe.
- iii. All tasks that propose a threat of diversion, including loading/unloading will be supervised by management on the ground.

- iv. Personnel will store personal items in the residential house on the property.

Emergency Contact

Name: Carol Littlefield

Phone #: (801) 209-4404

Email: cieralight@mac.com

Upon receiving a complaint, it will be recorded in our complaint log, located on the property and immediately responded to. All complaints will be added to the annual report. There will be a perimeter fence around the cultivation site. There will be one access point in the front of the cultivation site that will be locked at all times. Only essential personnel will be granted access to the cultivation site.

Video Surveillance

- i. Premises will have complete video surveillance system of at least 1080 pixels.
- ii. Video will be capable of recording all surveillance areas in all lighting conditions.
- iii. Live surveillance will be available in remote locations via internet.
- iv. Cameras will be installed in a strategic location to ensure no tampering or obstruction is involved Areas that will be recorded:
 - a) Perimeter of cultivation site;
 - b) Areas where cannabis is weighed, stored, packed, quarantined, loaded/unloaded, prepared or moved within the premises – Area between drying rooms and entrance;
 - c) Areas where we are destroying cannabis;
 - d) Limited access areas including canopy area, storage sheds, and house;
 - e) Security/curing room in house;
- v. Surveillance will operate 24/7 at a minimum at a minimum of 30 frames per second.
- vi. Exterior cameras are waterproof with an I-66 rating.
- vii. Interior cameras are moisture proof.

- viii. Cameras are all color capable.
- ix. Video software is capable of integration with alarm doors.
- x. Video recordings are digital.
- xi. Thermal technology will be used for perimeter fencing.
- xii. Cameras include motion sensors that activate camera upon detection of motion.
- xiii. Lighting is provided in areas with inadequate lighting.
- xiv. Recordings will be located in secure room, separate from computer and monitoring equipment.
- xv. Recording will be kept on device for at least 30 days.
- xvi. We authorize the county to inspect recordings at any time.
- xvii. Recordings will display the date in area that will not obstruct view of picture.

Fencing

- i. The cultivation site will be fully enclosed by a fence constructed of wood 4x4 posts with concrete footings. All terminal posts will be reinforced. The fence post interval will not exceed 10 feet. The wire fencing will be attached to the posts.
 - ii. No barbed/razor wire or similar design will be used.
 - iii. Cultivation area is screened from public view via natural surroundings and shade cloth as needed.

STORM WATER MANAGEMENT

Storm Water Management Plan

- a) The cultivation site does not divert water, there will be no effect on any lake county-maintained drainage or conveyance system for storm water.
- c) The cultivation site does not divert water, there will be no effect on the volume of water that historically has flowed onto adjacent properties.

- d) The cultivation site does not divert water, there will be no effect on flood elevations downstream.
- e) The cultivation site does not divert water, there will be not affect water quality of any waterbody.
- f) The cultivation site is compliant with the requirements of Chapter 29, Storm Water Management Ordinance of the Lake County Ordinance Code.
- g) The is no purposed grading of the property.
- h) All storm water travels though natural water courses.
- i) Post construction best management practices (BMIs) include:
 - i. Establishment and maintenance of buffer zones and sediment and erosion controls;
 - ii. site management plans;
 - iii. inspections and reporting;
 - iv. regulatory oversight.

HYDROLOGY AND WATER QUALITY

HYDROLOGY AND WATER QUALITY	Consistent with the PEIR, Less Than Significant	Inconsistent with the PEIR, Not Potentially Significant	Inconsistent with the PEIR, Potentially Significant	No Similar Impact
<i>Would the proposed activity result in impacts that differ from the following impacts identified and discussed in the CalCannabis Cultivation Licensing PEIR (see PEIR Chapter 4.8)?</i>				
Impact HWQ-1: Cause adverse effects on beneficial uses from surface water diversions for crop irrigation, or cause insufficiency of surface water supplies. (See PEIR pages 4.8-35 to 4.8-36.)	X			
Impact HWQ-2: Cause aquifer depletion from use of groundwater for crop irrigation and result in insufficiency of groundwater supplies. (See PEIR pages 4.8-36 to 4.8-38.)	X			
Impact HWQ-3: Cause discharges of sediment, nutrients, or other contaminants (excluding pesticides) from outdoor or mixed-light cultivation. (See PEIR pages 4.8-38 to 4.8-39.)	X			
Impact HWQ-4: Cause water quality impacts from pesticide use in outdoor or mixed-light cultivation. (See PEIR pages 4.8-39 to 4.8-40.)	X			

Impact HWQ-5: Cause discharges of sediment, nutrients, and other contaminants (excluding pesticides) from indoor cultivation operations. (See PEIR pages 4.8-40 to 4.8-41.)				X
Impact HWQ-6: Cause water quality impacts from pesticide use in indoor cultivation. (See PEIR page 4.8-41.)				X
<i>Would the proposed activity have other impacts not addressed above (refer to the checklist questions contained in Appendix G of the CEQA Guidelines)?</i>				
Impact:				

Consistency Analysis and Impact Analysis

Impact HWQ-1

The diversion of surface water for use in irrigating cannabis crops has the potential for several impacts on water quality or quantity. As part of the application process, Proposed Program applicants would be required to identify their operations' water supply source and provide supplemental information regarding the source (Sections 8102(b)(24) and 8109 of the Proposed Regulations). An applicant proposing to use a surface water diversion (or a diversion of underflow from a surface waterbody) would need to provide evidence that the diversion is authorized by the SWRCB. For an applicant planning to obtain surface water supplies from a water purveyor, the purveyor also would be required to have a valid water right and would be subject to the same requirements of SWRCB. The measures that would be required by the SWRCB to protect water quality, instream beneficial uses, and other legal users of water would avoid substantial impacts on water quality and water supplies from surface water diversions. Cultivation without a sufficient water supply would be infeasible and could not be licensed under the CalCannabis Licensing Program. Water use requirements for outdoor cannabis production are similar to water use requirements for other agricultural crops such as corn (CDFA 2017). The Proposed Project will not divert surface water. Therefore, this impact would be less than significant.

Impact HWQ-2

The CalCannabis Licensing Program regulations would require license applicants to provide information in the cultivation plan regarding the water source(s) to be used for cultivation. Water use requirements for outdoor cannabis production are generally in line with water use for other agricultural crops. Based on the relatively low quantities of water use (from 0.002 to 1.8 acre-feet per year), the likelihood that an individual cultivator or group of cultivators using groundwater from a defined alluvial aquifer would, by themselves, cause substantial groundwater overdraft is considered unlikely. Cultivation activities under the CalCannabis Licensing Program would have low potential to substantially interfere with groundwater recharge, because the acreage restrictions established in the regulations would limit the amount of impervious surface that could be added as a result of any new cultivation operation. The Proposed Project will use a permitted groundwater well for the water supply, and the annual water consumption is estimated between 0.23 and 0.35 acre-feet per year. This water consumption rate is consistent with the baseline conditions analyzed in the PEIR. The Proposed Project's impact upon groundwater supplies is less than significant.

Impact HWQ-3 and HWQ-4

Outdoor cultivation operations involve ground-disturbance during planting and soil preparation activities that could mobilize sediment, as well as exposed soils that could be mobilized during storm events, causing erosion to surface waterbodies. These activities could potentially result in exceedances of applicable water quality standards in receiving waterbodies; however, it is anticipated that many of these activities would not continue or would improve under the CalCannabis Licensing Program. CalCannabis Licensing Program regulations (Section 8305[b]) would require that licensees manage all hazardous waste in compliance with all applicable hazardous waste statutes and regulations. The Applicant is enrolling in the State Water Board's Waste Discharge Requirements for Cannabis Cultivation Order WQ 2017-0023-DWQ. Ongoing compliance with this Order will ensure that cultivation operations will not significantly impact water resources by using a combination of Best Management Practices (BMPs), buffer zones, sediment and erosion controls, inspections and reporting, and regulatory oversight. The Proposed Project does not intend to discharge any waste. Therefore, no mitigation is required.

Impact HWQ-5 and HWQ-6

Pertains only to indoor cultivation. The Proposed Project is an outdoor cultivation operation.

Mitigation

None required.

WASTE MANAGEMENT

Solid Waste Management

Solid Waste Estimate

Material	Annual	Daily Peak Season
Paper	1yd3	0.125 yd3
Glass	0 yd3	0 yd3
Metal	0 yd3	0 yd3
Electronics	0 yd3	0 yd3

Plastic	3 yd3	0.375 yd3
Organics	0 yd3	0 yd3
Inert	0 yd3	0 yd3
Household Hazardous Waste	0 yd3	0 yd3
Special Waste	0 yd3	0 yd3
Mixed Residue	1 yd3	0.125 yd3
Total	5 yd3	0.625 yd3

5. Cannabis Cultivation generates very little waste. Waste will be hauled away as needed.
6. Waste will be temporarily stored in waste bins with in a designated enclosure prior to transport to the final disposal location.
7. The materials listed above will be taken to the South Lake Landfill for final disposal.

HAZARDS, HAZARDOUS MATERIALS, AND HUMAN HEALTH

HAZARDS, HAZARDOUS MATERIALS, AND HUMAN HEALTH	Consistent with the PEIR, Less Than Significant	Inconsistent with the PEIR, Not Potentially Significant	Inconsistent with the PEIR, Potentially Significant	No Similar Impact
<i>Would the proposed activity result in impacts that differ from the following impacts identified and discussed in the CalCannabis Cultivation Licensing PEIR (see PEIR Chapter 4.7)?</i>				
Impact HAZ-1: Release hazardous materials from routine transport, use, and disposal. (See PEIR pages 4.7-17 to 4.7-18.)	X			
Impact HAZ-2: Create a significant hazard through release of hazardous materials from upset or accident conditions. (See PEIR page 4.7-18.)	X			
Impact HAZ-3: Cause health risks from pesticide use. (See PEIR pages 4.7-18 to 4.7-19.)	X			
Impact HAZ-4: Emit hazardous emissions or materials within 0.25 mile of a school. (See PEIR pages 4.7-19 to 4.7-20.)				X

Impact HAZ-5: Locate project activities on a hazardous materials site. (See PEIR page 4.7-20.)				X
Impact HAZ-6: Locate project activities near an airport or private airstrip such as to increase hazards. (See PEIR page 4.7-21.)	X			
Impact HAZ-7: Expose people or structures to substantial risk of loss from wildfire. (See PEIR pages 4.7-21 to 4.7-22.)	X			
Impact HAZ-8: Create substantial hazards for firefighters and first responders from indoor cultivation. (See PEIR pages 4.7-22 to 4.7-23.)	X			
<i>Would the proposed activity have other impacts not addressed above (refer to the checklist questions contained in Appendix G of the CEQA Guidelines)?</i>				
Impact:				

Consistency Analysis and Impact Analysis

Impact HAZ-1 and HAZ-2

Cannabis cultivation operations (both under baseline conditions and the CalCannabis Licensing Program) may involve the use of hazardous materials, such as fuel for power equipment and backup generators, and pesticides. Routine transport, handling, use, and disposal of these types of materials could expose people to hazards if adequate precautions are not taken.

Under the CalCannabis Licensing Program, cultivators would be required to store, use, and dispose of hazardous materials in accordance with a broad range of applicable laws and regulations. Depending on the size of the cultivation facility and nature of activities, licensees may be required to prepare a hazardous material business plan. Additionally, licensees under the CalCannabis Licensing Program would be required to comply with OSHA and Cal/OSHA requirements, such as maintaining SDSs for each chemical they use and providing personal protective equipment, as necessary, to protect the health of workers.

Compliance with existing laws and regulations related to transport, use, and disposal of hazardous materials would avoid creating a substantial hazard to the public. In addition, the CalCannabis Licensing Program would require that applicants identify designated pesticide and other agricultural chemical storage areas as part of their cultivation plan (Sections 8301[a][4] and 8302[a][5]). The CalCannabis Licensing Program regulations also would implement environmental protection measures which would limit potential releases of hazardous materials.

During a typical growing season, this cultivation operation utilizes the following materials: 200 pounds of bat guano, 200 pounds of steer manure, 200 pounds of chicken manure, 200 pounds of alpaca manure, 15 gallons of liquid fertilizers, and 16 ounces of organic pesticides. Generally, materials are purchased as needed and are not stored on site, other than 1-gallon bottles of alcohol and 8-ounce bottles of PyGanic, an organic pesticide. These chemicals are stored in a storm-proof area of the barn. Best Management

Practices for chemical use and storage will be implemented. Operation of the Proposed Project will have a less than significant impact on hazardous materials.

Impact HAZ -2

As discussed above, cannabis cultivation operations may involve the use of hazardous materials, such as fuel for power equipment and generators, and pesticides. Transport, storage, and use of these materials could endanger human health and the environment in the event that upset or accident conditions cause a release of the materials. Numerous existing laws and regulations are designed to prevent spills of hazardous materials and limit damage in the event that such materials are released. The CalCannabis Licensing Program would only authorize lawful cultivation activities that comply with existing laws regarding storage and use of hazardous materials. California Health and Safety Code provisions and the CalARP program would require any cannabis cultivation facility storing more than a threshold quantity of regulated substances to prepare an HMBP. These plans would include emergency response procedures to coordinate response in the event of a release and chemical accident prevention measures. With adherence to existing hazardous materials laws, the risk of accidental releases of hazardous materials from cultivation activities that could cause substantial hazards is considered low.

In addition, the CalCannabis Licensing Program's environmental protection measures (Sections 8301[a] [4], 8302[a][5], and 8313 of the proposed regulations, as provided in Appendix A) would minimize potential accidental releases of hazardous materials by requiring licensees to store chemicals in a secure building or shed, and to contain any chemical leaks and immediately clean up any spills. Therefore, the risk of accidental releases of hazardous materials from lawful cannabis cultivation operations would be lower than many other ongoing activities in the state, including existing unpermitted cannabis cultivation activities.

Impact HAZ-3

The requirements contained in the proposed regulations (Sections 8313[e] and [f]) require compliance with pesticide laws and regulations as enforced by CDPR. For all pesticides that are compliant with CDPR's laws and regulations and are exempt from registration requirements, licensees will be required to comply with pesticide application and storage protocols. The proposed regulations limit both the types of pesticides that may be used, as well as direct the methods in which pesticides may be used. With these measures in place, in consideration of likely reductions in risk at many locations over baseline conditions, this impact would be less than significant. The Proposed Project will use only small quantities of organic pesticides such as PyGanic.

Impact HAZ-4

There is a low probability that cannabis cultivation would emit substantial hazardous emissions based on the nature of such cultivation activities. Given MCRSA and AUMA requirements that cannabis facilities be located a minimum of 600 feet from existing and proposed schools, and the various Proposed Program measures and other legal requirements described throughout this section which would minimize the intentional or accidental release of emissions, there is no reason to believe that impacts related to emissions of hazardous materials near schools would be significant. To the extent that such impacts could occur, they would be considered based on site-specific information provided as part of the application process to determine if additional measures are needed to prevent or avoid significant impacts. The nearest schools are Coyote Valley Elementary School, 3.5 miles to the south, and schools in Lower Lake, 4.5 miles to the north-northwest of the parcel. Operation of the Proposed Project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances.

Impact HAZ-5

The CalCannabis Licensing Program regulations (Section 8102[b][19]) would require that applicants have conducted a hazardous materials record search of the EnviroStor database for the proposed premises. If hazardous sites were encountered, the regulations require that applicants provide documentation of protocols implemented to protect employee health and safety.

The following hazardous materials databases were queried on January 21, 2018:

- EnviroStor is an online search and Geographic Information System tool for identifying sites that have known contamination or sites for which there may be reasons to investigate further. The EnviroStor database includes the following site types: Federal Superfund sites (National Priority List); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites.
- GeoTracker is a geographic information system maintained by the California State Water Resources Control Board (SWRCB) that provides online access to environmental data at the Internet address (URL) = <http://geotracker.waterboards.ca.gov/>.

The GeoTracker database and EnviroStor database did not report contamination cases or hazardous material usage on the parcel or adjacent properties. The nearest contamination case is over 3 miles away. The site survey revealed no evidence of buried storage tanks or soil contamination. There was no indication that the parcel has previously been used for an industrial purpose.

Impact HAZ-6

Siting of cannabis cultivation operations in relation to airports or private airstrips would be determined through local land use permitting and environmental review. In general, cannabis cultivation operations would not include tall structures, substantial sources of glare or dust, or other characteristics that could interfere with air traffic. Therefore, this impact would be less than significant. The nearest airstrip or airport is Crazy Creek Glider Airport, which is 5.5 miles to the south of the parcel. The project site is not within an airport land use plan and is not in the vicinity of approach/departure flight path of a private airstrip.

Impact HAZ-7 and HAZ-8

Cannabis cultivation sites may be located in areas of high risk for wildfire. Cannabis cultivation also could increase risk of fire and/or introduce ignition sources or flammable materials to an area. While

cannabis cultivation operations located in rural areas, areas designated as High Fire Hazard Severity Zones, or at the urban-wildland interface could expose workers and structures at the site to risk of loss from wildfire, this hazard would not be substantially worse than that for other types of land uses in the same areas, and would be reduced compared to cannabis cultivation occurring under baseline conditions. Existing laws, such as requirements for maintenance of defensible space around structures in SRA, and implementation of environmental protection measures specified in the CalCannabis Licensing Program regulations would be anticipated to reduce potential impacts. The combination of these existing regulations and protective measures would reduce fire risk from grow operations to a less-than-significant level.

Mitigation

No mitigation is needed.

Hazard Analysis

We will provide a hazardous analysis to identify/evaluate known or reasonable foreseeable hazards for each type of cannabis product produced at our facility to determine whether preventative control is necessary.

Identification of potential hazards, including:

- i. Biological hazards: insects, animals, bacteria, viruses, birds, and humans
- ii. Chemical hazards: N/A
- iii. Physical hazards: cultivation equipment

Evolution of the Hazards Identified:

This is a cannabis cultivation facility, flowers will be grown, dried, trimmed, and broken down into one-pound increments. No other cannabis related activities will take place on-site. Best management practices, sanitation of equipment, and personal protective equipment, will be used to ensure our cannabis product is safe for the customers. Prior to shipment to distributors, finished cannabis product will be temporarily stored in the drying facility.

Management Plan:

No hazardous or universal wastes will be produced or handled in any way.

Cannabis Vegetative Material Waste Management:

- a) All vegetative waste will be chipped and tilled back into the soil.

Growing medium management:

- a) All growth medium will be amended and reused at the beginning of each season;
- b) Vermiculite can be found in the current growth medium, red lava rock will be added in the future.

Water Resources: A metered ground water well on the premises – no other water bodies/sources;

Water use management plan:

- a) Water is supplied via a domestic well with a meter and electric pump near the rural residence. A record of which is held at the County of Sanitation Department.
- b) A target drip irrigation system will be used to deliver water to the plants as efficiently as possible. There will be three stations on automatic timers. The water pump will be electrically powered, with a high efficiency gasoline generator for emergency back up only.
- c) The primary water usage will be the cultivation site. Personal and culinary water will be used by both residences. Significant amounts of water will not be used for any other purpose.

Aproximate Monthly Water Usage at cultivation sites - gallons:

Jan - 0 Feb - 0 March - 0 April - 0 May - 0

June - 50,000 July 113,000 August - 109,000 September - 113,000 October 50,000

November - 0 December - 0

- d) Irrigation calculations as shown in the California Code of Regulations could not be done because a plant factor for cannabis could not be determined. From experience we know that in June and October each plant requires 13 gallons of water per day; July through September plants require 28.5 gallons of water per day.
- e) Water usage will be monitored on a routine basis via a metered water pump and a log will be kept on-site. System will be inspected for clogs and leaks on a daily basis. Drone photograph will be utilized to monitor overall health of crop and the efficiency of the irrigation system.

CONCLUSIONS

The environmental factors checked below would be potentially affected by the proposed activity, involving at least one new or substantially more severe significant impact that was not covered in the certified CalCannabis Cultivation Licensing Program PEIR (State Clearinghouse #2016082077) as indicated by the checklists on the preceding pages.

- Aesthetics
- Agriculture & Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy Use / Greenhouse Gas Emissions
- Geology / Soils
- Hazards / Hazardous Materials / Human Health
- Hydrology / Water Quality
- Land Use / Planning
- Mineral Resources
- Noise
- Population / Housing
- Public Services
- Recreation
- Transportation / Traffic
- Tribal Cultural Resources
- Utilities / Service Systems
- Cumulative Impacts

This Tiering Checklist document the extent to which the PEIR addresses the impacts of the applicant's project. The Proposed Project is consistent with the activities described and evaluated in the PEIR. The Proposed Project does not have the potential for any new impacts or more significant impacts than disclosed in the PEIR. Thus, no additional CEQA compliance steps are be required.

DETERMINATION

(To be completed by the Lead Agency) On the basis of this initial evaluation:

- I find that the proposed activity falls within the scope of the PEIR and/or other CEQA documentation, and no further environmental documentation is needed.
- I find that the proposed activity is not entirely within the scope of the PEIR and/or other CEQA documentation, but could not have a significant effect on the environment, and an ADDENDUM will be prepared.
- I find that although the proposed activity could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed activity MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

(name and title)
California Department of Food and Agriculture

Date