COUNTY OF LAKE
COMMUNITY DEVELOPMENT DEPARTMENT
Planning Division
Courthouse - 255 N. Forbes Street
Lakeport, California 95453
Telephone: (707) 263-2221 FAX: (707) 263-2225

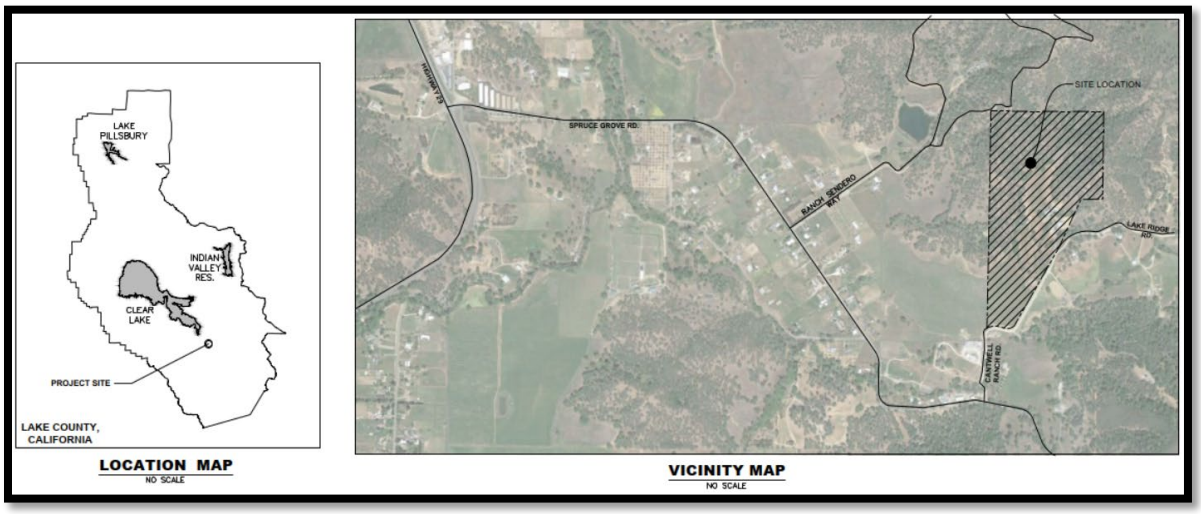
Attachment 5

~~April 25, 2023~~
Revised March 12, 2024

CALIFORNIA ENVIRONMENTAL QUALITY ACT ENVIRONMENTAL CHECKLIST FORM INITIAL STUDY (UP 22-23, IS 22-42)

1. Project Title:	Canna Factory, LLC
2. Permit Numbers:	Initial Study, IS 22-42 for the following: • Major Use Permit (UP 22-23)
3. Lead Agency Name and Address:	County of Lake Community Development Department Courthouse - 255 North Forbes Street Lakeport, CA 95453
4. Supervisor District	District 1
5. Contact Person/Phone Number:	Mary Claybon – Assistant Planner II (707) 263-2221
6. Parcel Number, Size, & Address:	049-290-01 (56.36 Total acres) 1700 Cantwell Ranch Rd. Lower Lake, CA 95497
7. Project Sponsor's Name & Address:	Canna Factory, LLC 6651 Black Oak Drive Ukiah, California 95482
8. General Plan Designation:	A/RL - Agriculture / Rural Lands
9. Zoning:	SPLIT A/RL – Agriculture / Rural Lands
10. Flood Zone:	D. Not in flood zone.
11. Slope:	The proposed cultivation site is relatively flat with some moderately sloped areas, overall ranging from 0 to 10 percent.
12. Natural Hazards:	Wildland Fire Hazard Area
13. Waterways:	Several Class III Watercourses
14. Fire District:	Lake County Fire Protection District
15. School District:	Konocti Unified School District

Figure 1: Location and Vicinity Map



Source: Canna Factory Site Plans

16. Description of Project:

The applicant, Canna Factory, LLC ("Canna Factory", "Applicant") is requesting a Major Use Permit, UP 22-23, for commercial cannabis cultivation at 17900 Cantwell Ranch Road, Lower Lake (APN: 049-290-01), as described below:

- *One (1) A-Type 3 Outdoor License:* Outdoor cultivation in greenhouses for adult-use cannabis using light deprivation techniques and no use of artificial light, up to an acre per license. The applicant proposes 0.93 acres [40,500 square feet (sq. ft.)] of commercial cannabis canopy area within an approximately 1.96 acre-cultivation area (85,000 sq. ft.).

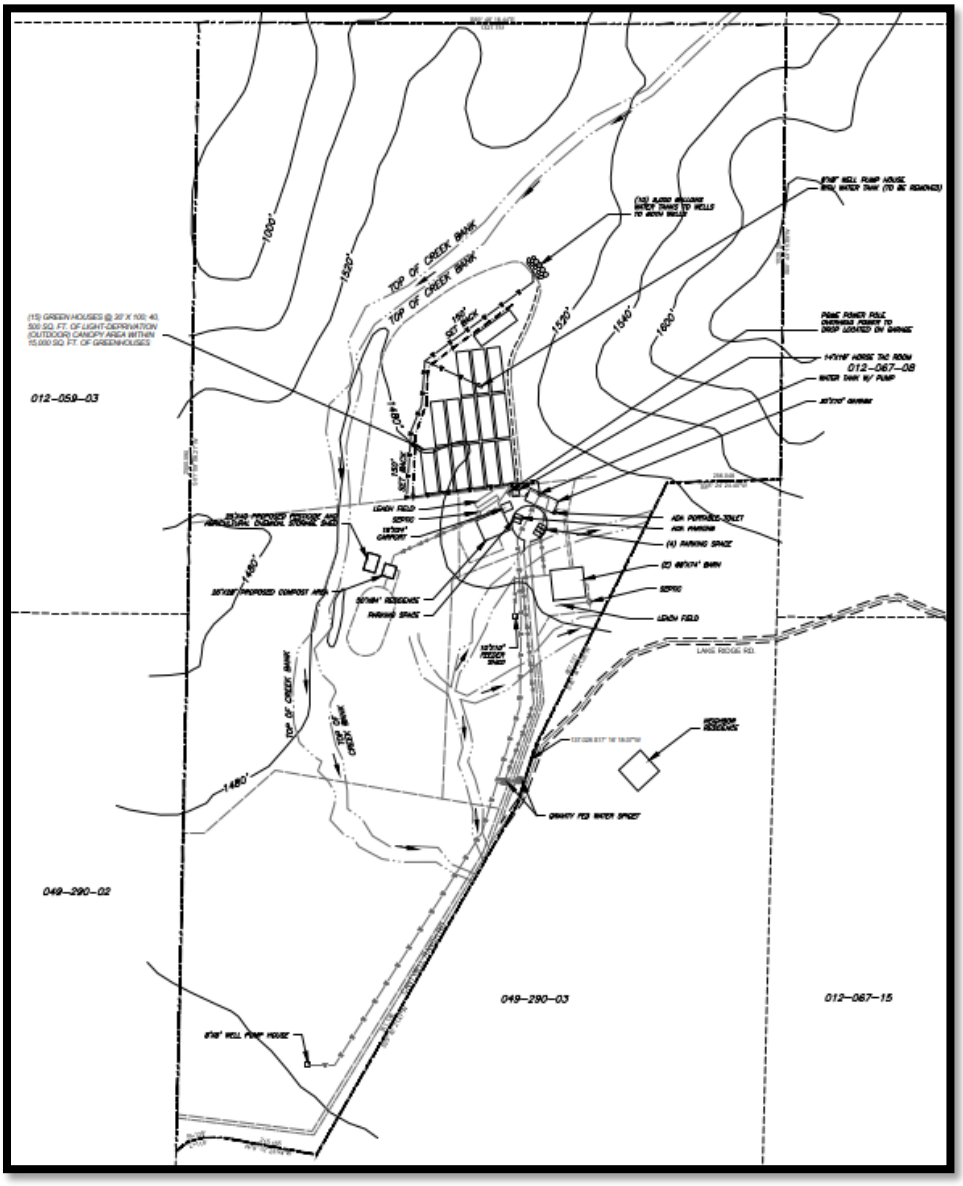
- *One (1) Type 13 Distribution license*

The Proposed Project ("Project") includes the development of facilities appurtenant to cultivation, including fifteen (15) 3,000 sq. ft. light-deprivation greenhouses within one fenced-in cultivation area, as shown in Figure 2, facilities for drying and curing of harvested cannabis, ancillary nursery, storage sheds, and appropriate irrigation infrastructure, including the following:

- Up to 40,500 sq. ft. of outdoor canopy area within a cultivation area of 85,000 sq. ft., within (15) 30'x100' greenhouses for light-deprivation cannabis cultivation with approximately 3-foot of aisleways. (Note no supplemental lighting is proposed).
- Up to 5,032 sq. ft. of harvest storage and administrative hold area within an existing 68'x74' (5,032 sq. ft.) barn (drying and processing would occur offsite)
- Ten (10) 5,000-gallon water storage tanks for irrigation (50,000 gallons total)
- A 6-8 ft. high security fence around the cultivation area, constructed of heavy gauge wire fence (or similar), with a steel gate and padlocks
- A drip irrigation system using water storage tank, valves and filters, polyvinyl chloride (PVC) piping, black poly tubing and drip emitters

- A proposed 25’ x 40’ (1,000 sq. ft.) shed for storage of cultivation materials (fertilizers, pesticides, bulk amendments, hand tools, etc.)
- Use of an existing PG&E service for electricity purposes
- A 25’ x 28’ compost area (700 sq. ft.)
- Parking, portable restrooms with hand washing stations, and trash enclosures will be provided within or adjacent to the fenced cultivation area
- One employee parking area with approximately 10 spaces including one ADA compliant space

Figure 2: Proposed Site Plan



Source: Canna Factory, LLC Site Plans

Site Description: The proposed Canna Factory LLC Project is located at 17900 Cantwell Road (APN 049-290-01), approximately 2.3 miles southeast of Lower Lake, CA (Section 13, Township 12N, Range 7W, Mount Diablo Base and Meridian, in the Lower Lake USGS 7.5-minute quadrangle). The Project is located in the Lower Lake Planning Area.

The site is accessed from a gravel interior driveway which is accessed from Cantwell Ranch Road, and the Project parcel includes an existing 3,200 sq. ft. residence, a 2,100 sq. ft. garage structure with an existing PG&E Service, a 5,032 sq. ft. barn, a 700 sq. ft. hay storage shed, a 1,000 sq. ft. storage shed, a 100 sq. ft. feeder shed, a 224 horse tac room, internal compacted dirt and gravel access roads, two (2) groundwater wells, and two (2) septic systems and leach fields connected to the residence and barn.

The surrounding land uses are largely rural land, agriculture, and rural residential land. The property consists of rolling hills/montane in the northern portion of the property and relatively low-gradient grassland in the southern portion of the property, with elevations ranging from 1,440 to 1,510 feet (Figure 4). The climate of the site is characterized by a Mediterranean-type climate, with distinct seasons consisting of hot, dry summers and wet, moderately cold winters. The vegetation generally consists of clearings within the Douglas fir forested stands, primarily with emergent native/non-native grasses and shrub vegetation.

Three (3) soil types exist on the property, per the United States Department of Agriculture, Natural Resources conservation Service's Web Soil Survey: Kilaga variant loam 0 to 5 percent slopes, Skyhigh-Millsholm loams 15 to 50 percent slopes and Sleeper variant-Sleeper loams 5 to 15 percent slopes.

The Project is located within the Copsey Creek Watershed (HUC-12 180201160601). The property drains primarily to the south of the property, with the flat sloping to the southeast (Figure 4). Water draining south from the site flows into the Copsey Creek, a tributary to Cache Creek watershed, which flows east and then north, eventually reaching Cache Creek and the Sacramento River.

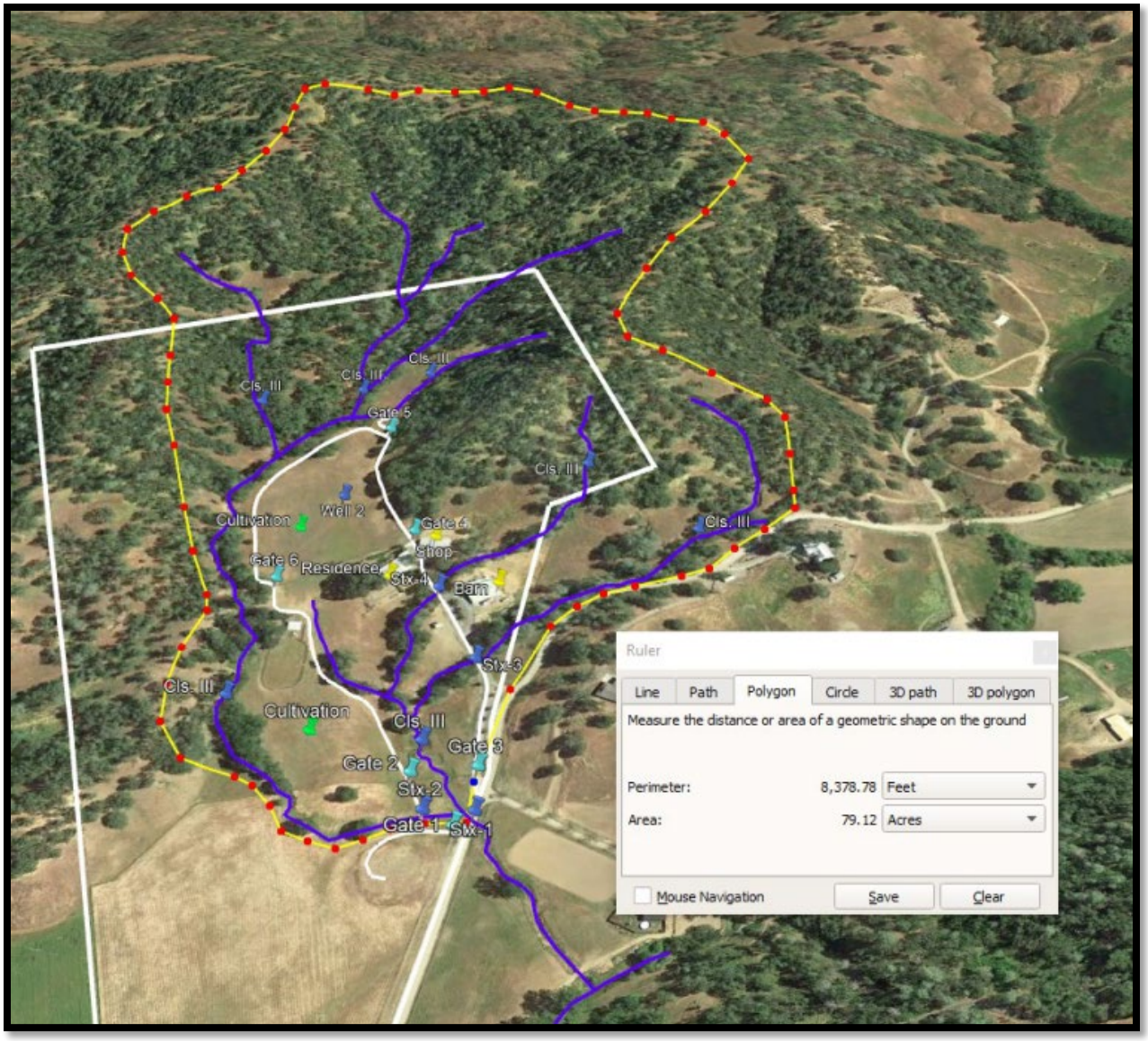
According to the applicant's submitted project Materials, one Class II (seasonal) creek is located onsite, west of the cultivation area. Approximately four (4) ephemeral watercourses drain into this Class II stream in the northern, vegetated area of the property, and approximately three (3) ephemeral drainages flow southerly toward a stream crossing located near the property entrance gate. Per the CDFW Notification, four (4) stream crossings (STX) were identified onsite (Figure 3):

- Stream Crossing 1: STX-1 is located near the property entrance gate and drains all streams onsite southerly off the property. STX-1 is an existing 32"-diameter corrugated metal pipe and is properly sized, functioning, and in good condition. This culvert is under Cantwell Ranch Road, a multiple-ownership shared access road. This culvert was notified as an informational item to CDFW and was proposed to be maintained.
- Stream Crossing 2: STX-2 is located approximately 100 feet west STX-1. STX-2 is a 24"-diameter smooth steel pipe. According to the Notification, this culvert is undersized and should be replaced with a minimum 27"-diameter culvert. This was notified to CDFW as a Project.
- Stream Crossing 3: STX-3 drains a Class III ephemeral drainage under the project driveway. STX-3 is an existing 32"-diameter corrugated metal culvert and is adequately sized, however the outlet is a shotgun outlet that is causing erosion of the road fill and stream banks. The culvert outlet upgrade and armoring was notified to CDFW as a Project.

- Stream Crossing 4: STX-4 is located on the project driveway in between the existing residence and barn. No culvert exists at this location, and an 18”-diameter culvert installed on grade is proposed to return runoff to its natural channel. This was notified as a Project to CDFW.

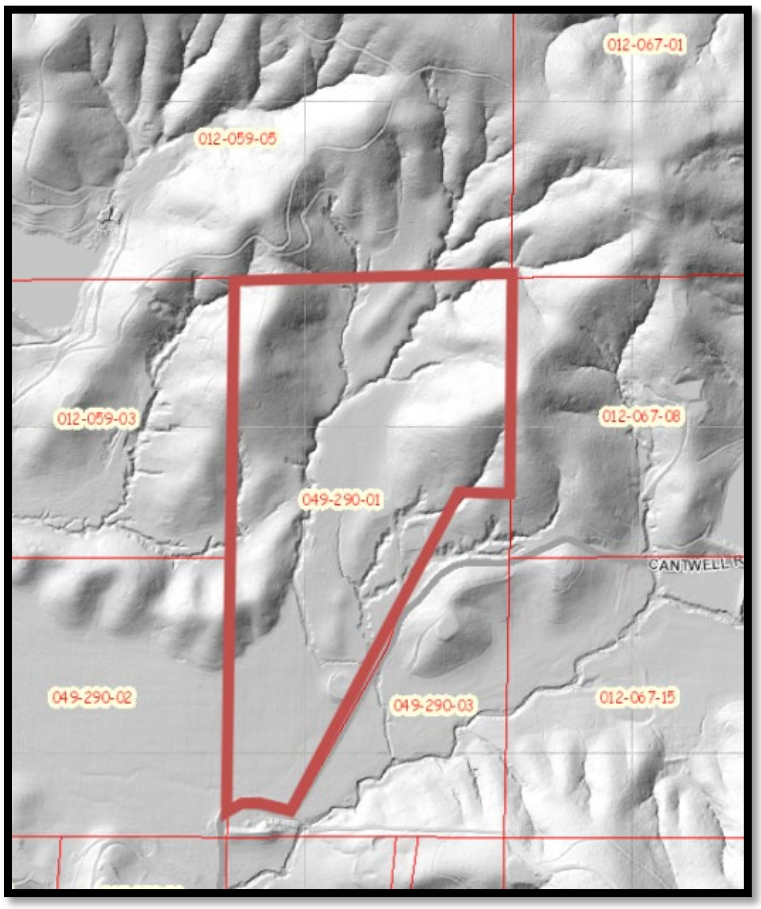
The proposed Project is located on a flat area. No springs, lakes, delineated wetlands, or vernal pools are located onsite. The cultivation area is located greater than 150 feet from the Class II seasonal creek to the west, and greater than 100 feet from any Class III ephemeral watercourses (Figure 2). All areas proposed for cultivation use or development (e.g., existing barn) are located outside of applicable stream setbacks as described in Article 27.11 (at) subsection 2.

Figure 3: Onsite Streams, Stream Crossings, and Drainage Area



Source: Project Fish & Wildlife Notification

Figure 4: Site Topography and Watercourses



Source: Lake County Parcel Viewer, 2023

Water Source and Demand: Water for the cultivation activities will be supplied from an existing groundwater well (latitude/longitude 38.88231, -122.58029). The well is approximately 214 feet in depth with a yield of approximately seven (7) gallons per minute (gpm) and was drilled in January 2022. The well has a solar pump and/or PG&E powered pump with a maximum output of 4.5 gpm. A 6-hour well drawdown test was conducted on February 3, 2022, and the static water level was 16-feet with a drawdown of 143-feet during the test. The well recharged up to 93% within 40 minutes and is expected to recharge 100% within an hour after pumping, per the well drawdown test results.

The irrigation system for the cultivation operations will use water supplied by the existing well and a solar pump and/or PG&E powered pump. Well water will be pumped into ten (10) 5,000-gallon water storage tanks using polyvinyl chloride (PVC) piping and transferred to the cultivation sites. A mixing tank will be used to add liquid fertilizers and other amendments to the irrigation water periodically. The water will be delivered to the cultivation area using a drip irrigation technique.

According to the Water Use section of the applicant's Property Management Plan and the Hydrology Report, the daily water consumption for the full 0.93 acres of canopy would be approximately 4,800 gallons per day (3.3 GPM). The annual irrigation demand, assuming an approximately 300-day growing period between February and November, will be approximately 1,438,700 gallons (4.4 acre-feet).

A second well onsite is for residential purposes and is not proposed for use in the cannabis operation. The second well is located at approximately 38.886461°, -122.578897°.

Power: According to the Property Management Plan, electricity for the Project will be provided by on-grid power (PG&E) and solar power. PG&E will power the activities (fans and automatic black-out covers), security lights, and water pumps. Water pumps will be operated using small solar pumps. No supplemental lighting is proposed; cannabis will be cultivated utilizing light-deprivation techniques. A small propane generator already onsite for the residence is proposed for emergency use only.

Construction Activities and Grading: No grading is proposed for the development of the project. The area proposed for cultivation development is an existing disturbed yard/field with slopes of 0% to 5% (Figure 5). All greenhouses will be placed on the existing grade. Minor scraping and digging of t-post holes would be required to prepare the site for greenhouse construction. Grading and scraping would be required to prepare the site for cultivation operations.

Figure 5: Area Proposed for Cultivation Development

Source: Cultural Resources Evaluation, Dr. John Parker, 2021

Construction is anticipated to take approximately 3 to 6 months, beginning shortly after permit approval (weather-permitting). During construction, approximately three (3) to five (5) employees would be needed for construction, totaling approximately 10 daily trips from employees. Approximately (1) average delivery trip would occur per day. Therefore, average daily trips from construction would total approximately eleven (11) per day.

Cultivation Operations: Cultivation would occur within above-ground raised garden beds or containers (e.g., smart pots) within greenhouses. No supplemental lighting would be used; only light-deprivation techniques to produce two (2) to three (3) cycles of flowering cannabis per year. Drying and any further processing of cultivated cannabis would occur offsite.

Operations will occur up to seven days per week from February through November, with growing periods typically occurring between February through November (depending on weather conditions). The operation hours will be Monday through Sunday during daylight hours from approximately 6:00 a.m. to 8:00 p.m. The Lake County Zoning Ordinance restricts deliveries and pickups to 9:00 a.m. to 7 p.m., Monday through Saturday, and Sunday from 12 noon to 5:00 p.m.

The cultivation site is accessed by private road off Cantwell Ranch Road, a gravel road maintained by the County of Lake. An onsite gravel private driveway averaging 15 feet in width provides access to the cultivation site from Cantwell Ranch Road.

According to the applicant's Property Management Plan, fertilizers will be stored within the nutrient storage shed and other designated storage location and pesticides will be stored proposed buildings. All solid waste will be kept in a secured area and regularly removed to be disposed of at waste disposal facility. Any plant waste will be chipped/mulched and spread around the cultivation area or composted on site within an approximately 700 sq. ft. compost area and reused as soil amendment.

According to the applicant's Property Management Plan, the following erosion control measures will be followed:

- Preserve existing vegetation where required and when feasible;
- Apply temporary erosion control to exposed areas. Reapply as necessary to maintain effectiveness;
- Implement temporary erosion control measures at regular intervals throughout the defined rainy season to achieve and maintain stability. Implement erosion control prior to the defined rainy season;
- Control erosion in concentrated flow paths by applying erosion control devices.

Employees and Traffic: Once operational, the proposed Project would staff approximately three (3) full-time employees and up to two (2) additional seasonal employees for planting and harvesting, for a total of up to five (5) employees during peak seasonal events.

Daily traffic commutes during regular operations would be approximately six (6) trips during regular operations and up to ten (10) commutes during the peak cultivation season. Semi-weekly truck deliveries of various project-related materials would occur throughout the cultivation season (estimated approximately twice weekly). Distribution activities are expected to create two (2) trips per week. Taking a conservative approach, including an overestimation of up to one (1) daily delivery truck trip (from deliveries or distribution activities), the Project would result in up to eleven (11) trips per day from employees and truck trips during peak season.

Waste: The Project would include cannabis green waste (e.g., root balls, leaves, stems, etc.), non-cannabis green waste (e.g., spent soil, landscaping materials, etc.), non-recyclable waste (e.g., spent cultivation materials, non-recyclable containers, etc.), recyclables (e.g., cleaned fertilizer containers, recyclable plastic bags, etc.), and general domestic-related waste (e.g., food wrappers, other garbage generated from employees, etc.) would be produced by the Project. Trash and recycling would be taken off-site as needed.

The Property Management Plan estimates approximately 10 cubic yards of cannabis green waste and approximately 12 cubic yards of non-cannabis green waste would be generated annually. Cannabis green waste would be minimized by chipping/grinding/drying and composting applicable waste onsite, and non-cannabis green waste would be minimized by composting and re-integrating materials onsite. A 25' x 28' compost area is proposed southwest of the cultivation area.

Employees would utilize a portable toilet, which would be serviced weekly or as needed by a licensed servicing company.

Safety and Security: According to the applicant's Property Management Plan, the following General security measures will be followed:

- A security plan, updated as needed;
- Staff screening process, including background checks;
- Personnel rules and responsibilities (to be incorporated into an employee handbook in the future);
- Physical barriers, including signage, road gates, security fencing with locked gates, and commercial-grade locks on all interior doors;
- Theft and loss control program;
- Video surveillance system.

The cultivation sites will be surrounded with 6 to 8-foot wire fencing, with access using 14-foot-wide locked gates at each cultivation area. Security cameras will be installed around the perimeters of the cultivation areas and at other points of access in compliance with the Lake County Zoning Ordinance.

The property entrance will be secured with metal bar gates and padlocks and subject to video surveillance. Adequate perimeter lighting will be installed and maintained inside and around the exterior of the premises. Security lighting will consist primarily of motion-sensor lights and avoid adverse impacts on properties surrounding the lot on which the cannabis activity is located. Any outdoor lighting used for the illumination of parking areas and/or loading areas, and/or for security, shall be fully shielded and directed downward. The cultivation operations are closed to the public. Signage will be posted that states that the operational areas have restricted access and are closed to the public. The signage will not advertise the presence of Cannabis products.

Required Permits: Implementation of the Proposed Project would require approvals from the County of Lake, including potential grading and building permits, as well as a Use Permit. The County's issuance of the required permits triggers the need for compliance with the California Environmental Quality Act (CEQA). As previously mentioned, the Applicant would need a building permit for the proposed greenhouses and existing structures.

Canna Factory LLC is enrolled in the State Water Board's Order No. WQ 2019-001-DWQ as a Tier 2, Low Risk site (WDID No. 5S17CC429387). As required in the Cannabis Order's Policy for coming into compliance with Best Practicable Treatment or Control (BPTC) measures, the applicant had to prepare a Site Management Plan (SMP) and a Nitrogen Management Plan (NMP) within 90 days of enrollment. "The purpose of the Cannabis Policy is to ensure that the diversion of water and discharge of waste associated with cannabis cultivation does not have a negative impact on water quality, aquatic habitat, riparian habitat, wetlands, and springs" (State Water Board, 2019). BPTC measures have been implemented at the site for erosion control and stormwater pollution. The purpose of the NMP is to identify how nitrogen is stored, used, and applied to crops in a way that is protective to water quality. The applicant is required to complete online Annual Monitoring and Reporting to assess compliance with the Cannabis General Order and Notice of Applicability. This includes BPTC measures for winterization.

A Notification was submitted to the North Central Region of the California Department of Fish and Wildlife (CDFW) on May 20th, 2021, to notify the agency of proposed cannabis cultivation activities on the parcel and onsite jurisdictional items. The CDFW did not respond within their required timeframes, and an Operation of Law Letter was issued on November 30, 2021 (EPIMS Notification No. LAK-16261-R2). The Operation of Law Letter included three stream crossing upgrades: Replacement of an existing 24"-diameter culvert with a 27"-inch culvert on grade with the stream channel (STX-2), retrofitting of an existing stream crossing to remedy the shotgun

culvert and armor the discharge to prevent erosion of the channel (STX-3) and installation of an 18”-diameter culvert at a stream crossing that previously obstructed the stream channel creating an impoundment (STX-4).

Technical Studies: A Biological Resources Assessment, dated March 27th, 2021, was prepared for the project by RHYZL. A Cultural Resource Evaluation was conducted for the Project by Dr. John Parker of Wolf Creek Archaeology, dated May 6th, 2021 (Confidential – on file with Lake County). A Hydrology Report to comply with the Urgency Ordinance 3106, dated May 27th, 2022, and a subsequent Drought Management Plan, dated May 27, 2022, were prepared by NorthPoint Consulting Group, Inc.

17. Surrounding Land Uses:

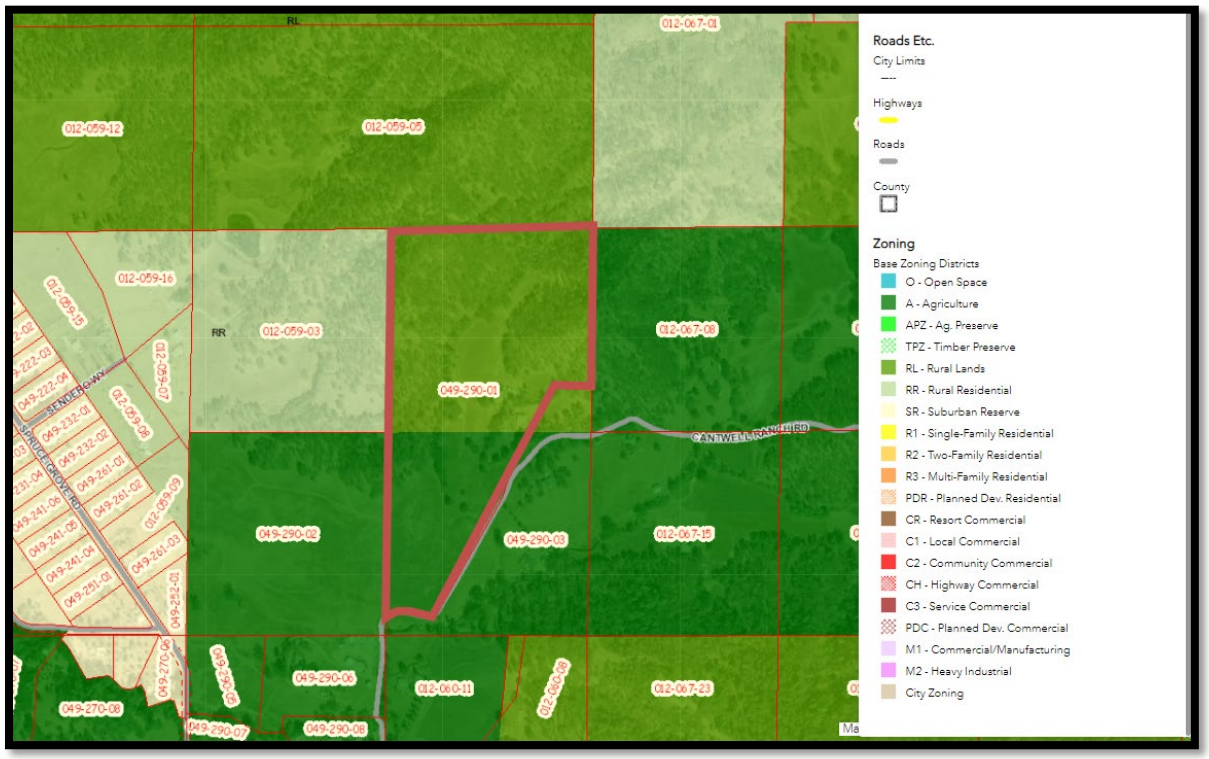
As the parcel for the proposed Project is over (5) acres in size, neighboring parcels that fall within a 725-foot buffer will be notified of the Project. These parcels include:

- North: 11498 Spruce Grove Road; Parcel Number 012-059-05. Developed, residential.
- Northeast: 18225 Morgan Valley Rd; Parcel Number 012-067-01. Undeveloped.
- East: 18100 Cantwell Ranch Rd; Parcel Number 012-067-08. Developed, residential.
- South: 17955 Cantwell Ranch Rd; Parcel Number 049-290-03. Developed, residential.
- Southwest: 17800 Cantwell Ranch Rd; Parcel Number 049-290-02. Undeveloped.
- West: 11924 Spruce Grove Rd; Parcel Number 012-059-03. Undeveloped.

Surrounding Land Zoning:

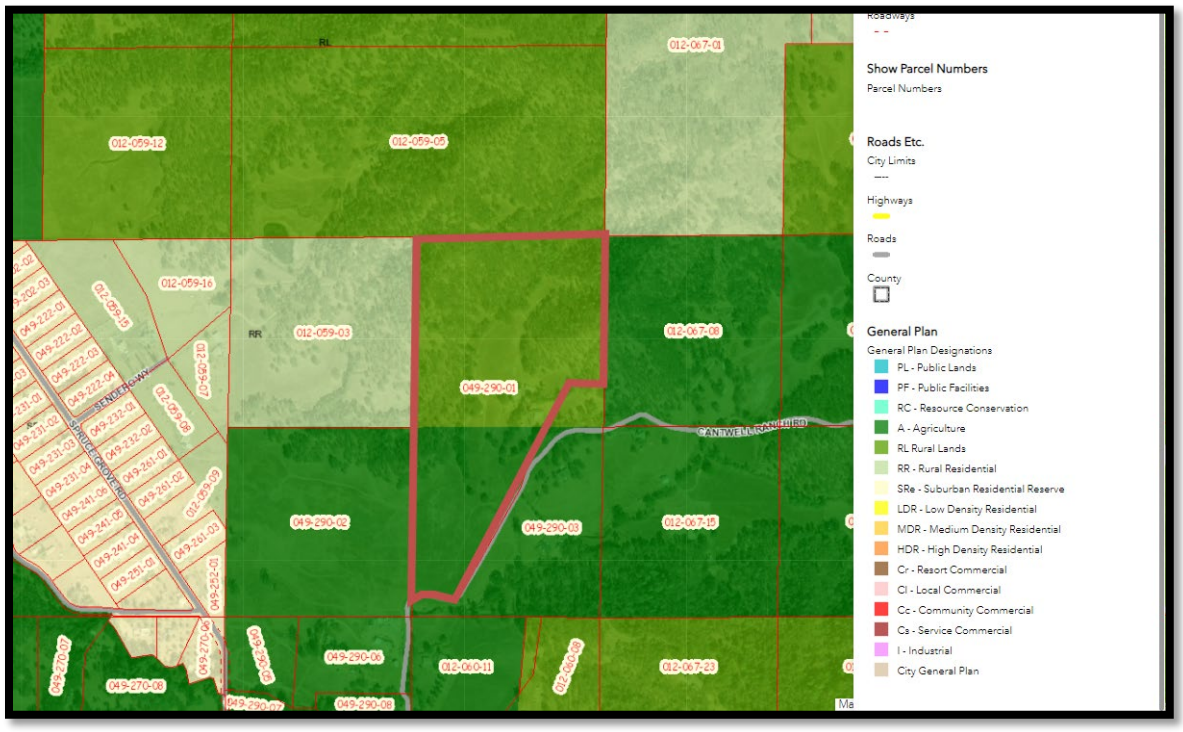
- North: Rural Land
- Northeast: Rural Residential
- East: Agriculture
- South: Agriculture and Rural Lands
- Southwest: Agriculture
- West: Rural Residential

Figure 6: Lake County Base Zoning District



Source: Lake County Parcel Viewer, 2023

Figure 7: General Plan Land Use Designations



Source: Lake County Parcel Viewer, 2023

18. Other public agencies whose approval is required (e.g., Permits, financing approval, or participation agreement).

    The extent of this environmental review falls within the scope of the Lead Agency, the Lake County Community Development Department, and its review for compliance with the Lake County General Plan, the Lower Lake Planning Area, the Lake County Zoning Ordinance, and the Lake County Municipal Code. Other organizations in the review process for permitting purposes, financial approval, or participation agreement can include but are not limited to:

    Lake County Department of Environmental Health
    Lake County Air Quality Management District
    Lake County Department of Public Works
    Lake County Department of Public Services
    Lake County Agricultural Commissioner
    Lake County Sheriff Department
    Lake County Fire Protection District
    Department of Motor Vehicles
    Central Valley Regional Water Quality Control Board
    California State Water Resources Control Board
    California Department of Pesticides Regulations
    California Department of Public Health
    California Department of Cannabis Control
    California Department of Consumer Affairs
    California Department of Fish & Wildlife (CDFW)
    California Department of Forestry & Fire Protection (CALFIRE)
    California Department of Transportation (CALTRANS)

19. Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

    Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and Project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process, per Public Resources Code §21080.3.2. Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3 (c) contains provisions specific to confidentiality.

    Notification of the Project was sent to local tribes on February 23, 2023. The Director of Cultural Resources for the Habematolel Pomo of Upper Lake responded with a letter dated March 15, 2023, and concluded that the Project is not within their territory. No further comments or concerns have been received from local tribes regarding this Project to date.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒ Aesthetics	☐ Greenhouse Gas Emissions	☐ Public Services
☐ Agriculture & Forestry Resources	☒ Hazards & Hazardous Materials	☐ Recreation
☒ Air Quality	☒ Hydrology / Water Quality	☐ Transportation
☒ Biological Resources	☐ Land Use / Planning	☒ Tribal Cultural Resources
☒ Cultural Resources	☐ Mineral Resources	☐ Utilities / Service Systems
☐ Energy	☒ Noise	☒ Wildfire
☒ Geology / Soils	☐ Population / Housing	☒ Mandatory Findings of Significance

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

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed Project 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 Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

Initial Study Reviewed By:
Mary Claybon, Assistant Planner II

Mary Claybon Date: 3/12/2024

Community Development Department

SECTION 1

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to Projects like the one involved (e.g., the Project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on Project-specific factors as well as general standards (e.g., the Project will not expose sensitive receptors to pollutants, based on a Project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as Project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, and then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c) (3) (D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the Project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a Project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:
   a) The significance criteria or threshold, if any, used to evaluate each question; and
   b) The mitigation measure identified, if any, to reduce the impact to less than significance

I. AESTHETICS	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Except as provided in Public Resource Code Section 21099, would the project:					
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐	1, 2, 3, 4, 5, 6, 9, 45
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐	2, 3, 4, 9
c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐	1, 2, 3, 4, 5, 6, 9
d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐	1, 2, 3, 4, 5, 6, 9

Discussion:

a) The General Plan Land Use Zone and Zoning District designation currently assigned to the Project site is Agriculture (A) and Rural Lands (RL). The area proposed for cultivation is located in land zoned and designated RL. The Lake County Zoning Ordinance allows for commercial outdoor cannabis cultivation in the RL land use zone with a major use permit.

   The Project is located off of Cantwell Ranch Road. The site proposed for cultivation is located behind existing trees and will not be clearly visible from the road (Figure 8).

Figure 8: View in the Direction of Cultivation Site from Cantwell Ranch Road; Project driveway shown at left

Source: Google Earth, 2023

No specifically designated scenic vistas are in the area, and the cultivation would be mostly obscured from the general public by existing vegetation.

Less than Significant Impact

b) The Project site is located at 1700 Cantwell Ranch Road. Cantwell Ranch Road is not identified as “Officially Designated” or an “Eligible State Scenic Highway-Not Officially Designated” state scenic road or highway, nor is it identified in the Lower Lake Area Plan or the Lake County General Plan as a potential County scenic highway.

Furthermore, the County of Lake has not applied to the California Department of Transportation for official Scenic Highway status nor does the County’s General Plan (or other policies or directives) require the County to do so.

There are no scenic resources, rock outcroppings, or historic buildings on or in the vicinity of this property.

Less than Significant Impact

c) Given that the cultivation area will not be widely visible to the public, no vegetation is proposed to be removed, and that the Project is not within a designated scenic area, no significant impacts are expected. The proposed use will not substantially degrade the existing visual character of the site or the quality of public views of the surrounding area as there are no additional major structures being proposed.

No major physical changes to the site are proposed or needed other than the preparation of the cultivation areas and the construction of the work and storage areas. The site is not within an urbanized area and is not highly visible from any public property.

Less than Significant Impact

d) The Project has some potential to create additional light and/or glare through the addition of exterior security lighting. Per the Project Description, cultivation cultivation would occur within greenhouses with automated opaque black-out cover tarps. No lighting would be used to flower cannabis within greenhouses. No mixed-light cultivation is proposed, only outdoor (light-deprivation) cultivation techniques will be used.

The following mitigation measures will be implemented which would reduce the impacts to less than significant:

Less than Significant Impact with Mitigation Measures AES-1 through AES-4 incorporated:

AES-1: All greenhouses shall incorporate blackout screening so that no light is visible from outside each greenhouse. Blackout covers shall in place a half an hour prior to sunset and a half an hour after sunrise.

AES-2: All outdoor lighting shall be directed downward onto the Project site and not onto adjacent properties. All lighting equipment shall comply with the recommendations of www.darksky.org.

AES-3: All indoor lighting shall be fully contained within structures or otherwise shielded to fully contain any light or glare.

AES-4: Security lighting shall be motion activated and all outdoor lighting shall be shielded and downcast or otherwise positioned in a manner that will not shine light or allow light glare to exceed the boundaries of the lot of record upon which they are placed.

II. AGRICULTURE AND FORESTRY RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐	1, 2, 3, 4, 5, 7, 8, 11, 13, 39
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	1, 2, 3, 4, 5, 7, 8, 11, 13

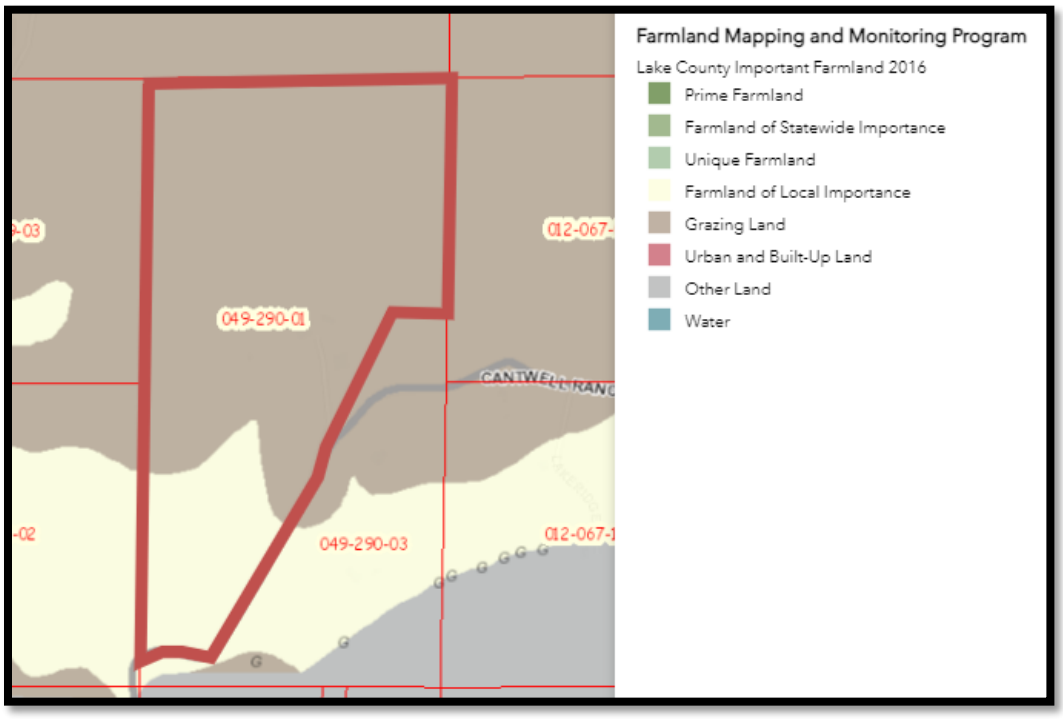
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒	1, 2, 3, 4, 5, 7, 8, 11, 13
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	1, 2, 3, 4, 5, 6, 9
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒	1, 2, 3, 4, 5, 7, 8, 11, 13

Discussion:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest protocols adopted by the California Air Resources Board.

a) According to the California Department of Conversation Farmland Mapping and Monitoring Program the Project site is not mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The Project site is designated as Grazing Land and Farmland of Local Importance. The area proposed for cultivation development falls within the classification of Grazing Land, an agricultural use that can be considered farmland per California Government Code §51201(c) described as "(3) Land which supports livestock used for the production of food and fiber". Farmland of Local Importance is mapped in the southern area of the property, which is not proposed for cultivation development (Figure 9).

Figure 9: Farmland Mapping and Monitoring Program



Source: Lake County Web GIS, 2023

As the area proposed for development is classified as Grazing Land, an agricultural use, and because the proposed cannabis cultivation is an agricultural use, the Project would not be converting farmland that is high quality or significant farmland to a non-agricultural use.

Less than significant impact.

b) The site is not under a Williamson Act Contract. The site is not located within the Lake County Farmland Protection Zone (FPZ) or FPZ buffer.

The parcel has a base zoning of Agriculture (A) and Rural Lands (RL), with cultivation developed located in the "RL"-zoned area of the property. Under Article 27.11 of the Lake County Zoning Ordinance, Outdoor Cannabis Cultivation is permitted on parcels with Base Zoning Districts of "RL" or "A" with a minimum of 20 acres. The Project parcel consists of 56.36 acres.

According to the County of Lake, both Agriculture (A) zoned and Rural Lands (RL) zoned lands allow for agricultural uses with a minimum lot size of 40 acres and 20-65 acres, respectively (A Guide to Zoning Districts, Lake County, 2006). Agricultural uses as described in California Government Code §51201(c) are generally allowed on Rural Lands, and the site is not under a Williamson Act contract.

The cultivation portion of the site would not interfere with the ability of the owner or neighbors to use the remaining land for residential uses, grazing land, or traditional crop production.

No Impact

c) Public Resources Code §12220(g) defines “forest land” as land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

Public Resources Code §4526 defines “timberland” as land, other than land owned by the federal government and land designated by the State Board of Forestry and Fire Protection as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees.

Government Code §51104(g) defines “timberland production zone” as an area that has been zoned pursuant to Government Code Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses.

The Project site is currently zoned Agriculture (A) and Residential Lands (RL). The Project site does not contain any forest lands, timberland, or timberland zoned Timberland Production lands, nor are any forest lands or timberlands located on or nearby the Project site. Because no lands on the Project site are zoned for forestland or timberland, the project has no potential to impact such zoning. The Project does not propose a zone change that would rezone forest land, timberland, or timberland zoned for Timberland Production. No impact would occur.

No Impact

d) The Project site and surrounding properties do not contain forest lands, are not zoned for forest lands, nor are they identified as containing forest resources by the General Plan. Because forest land is not present on the Project site or in the immediate vicinity of the Project site, the proposed Project has no potential to result in the loss of forest land or the conversion of forest land to non-forest use. No impact would occur.

No Impact

e) Lands surrounding the Project site include privately-owned, undeveloped land to the immediate north, east, southeast, south, southwest, west, and northwest, all of which are zoned Rural Lands. Undeveloped land to the northeast zoned Open Space is owned and managed by the Bureau of Land Management. Given the absence of farmland or forest land on the Project site and the undeveloped character of surrounding lands, the proposed Project would have no potential to convert farmland to non-agricultural use or forest land to non-forest use. No impact would occur.

No Impact

III. AIR QUALITY	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					

a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐	1, 3, 4, 5, 21, 24, 31, 36
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under and applicable federal or state ambient air quality standard?	☐	☐	☒	☐	1, 2, 3, 4, 5, 21, 24, 31, 36
c)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐	1, 2, 3, 4, 5, 10, 21, 24, 31, 36
d)	Result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people?	☐	☒	☐	☐	1, 2, 3, 4, 5, 21, 24, 31, 36

Discussion:

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

a) The Project site is located within the Lake County Air Basin, which is under the jurisdiction of the Lake County Air Quality Management District (LCAQMD). The LCAQMD applies air pollution regulations to all major stationary pollution sources and monitors air quality. The Lake County Air Basin is in attainment with both state and federal air quality standards.

   According to the USDA Soil Survey and the ultramafic, ultrabasic, serpentine rock and soils map of Lake County, serpentine soils have not been found within the Project area or Project vicinity and would pose no threat of asbestos exposure during either the construction phase or the operational phase.

   Due to the fact that the Lake County Air Basin is in attainment of both state and federal air quality standards, LCAQMD has not adopted an Air Quality Management Plan, but rather uses its Rules and Regulations to address air quality standards.

   The proposed Project was sent out for review from the LCAQMD on February 23, 2023. No adverse comments or comments in opposition to the Project were received from the LCAQMD.

   According to the Lake County Zoning Ordinance section on Commercial Cannabis Cultivation (§27.11), Air Quality must be addressed in the Property Management Plan. The intent of addressing this is to ensure that “all cannabis permittees shall not degrade the County’s air quality as determined by the Lake County Air Quality Management District” and that “permittees shall identify any equipment or activity that may cause, or potentially cause the issuance of air contaminates including odor and shall identify measures to be taken to reduce, control or eliminate the issuance of air contaminants, including odors”. This includes obtaining an Authority to Construct permit pursuant to LCAQMD Rules and Regulations.

The proposed Project has the potential to result in short- and long-term air quality impacts from construction and operation of the proposed Project. Construction impacts, which are limited to grading, tilling the ground, greenhouse construction, and preparing soils for planting, would be temporary in nature and would occur over about a three (3) to six (6) month period. Ongoing field management is considered an operational, not construction, activity. The Project would not conflict with an applicable air quality plan.

Less than Significant Impact

b) The Project area is in the Lake County Air Basin, which is designated as in attainment for state and federal air quality standards for criteria pollutants (CO, SO_2, NO_x, O_3, PM_{10}, $PM_{2.5}$, VOC, ROG, Pb). Any Project with daily emissions that exceed any of the thresholds of significance for these criteria pollutants should be considered as having an individually and cumulatively significant impact on both a direct and cumulative basis.

As indicated by the Project's Air Quality Management Plan, near-term construction activities and long-term operational activities would not exceed any of the thresholds of significance for criteria pollutants. Lake County has adopted Bay Area Air Quality Management District (BAAQMD) thresholds of significance as a basis for determining the significance of air quality and greenhouse gas impacts. Using the California Emissions Estimator Model, air emissions modeling performed for this Project, in both the construction phase and the operational phase, will not generate significant quantities of ozone or particulate matter and does not exceed the Project-level thresholds. Construction and operational emissions are summarized in the following tables:

Comparison of Daily Construction Emissions Impacts with Thresholds of Significance

Criteria Pollutants	Project Emissions unmitigated (pounds/day)	BAAQMD Threshold (pounds/day)	Significance
ROG (VOC)	1 to 10	54	Less than significant
NO_x	10 to 20	54	Less than significant
CO	10 to 30	548	Less than significant
SO_x	< 1	219	Less than significant
Exhaust PM_{10}	1 to 10	82	Less than significant
Exhaust $PM_{2.5}$	1 to 10	54	Less than significant
Greenhouse Gasses (CO_2e)	2,000 to 3,500	No threshold established	Less than significant

Comparison of Daily Operational Emissions Impacts with Thresholds of Significance

Criteria Pollutants	Project Emissions unmitigated (pounds/day)	BAAQMD Threshold (pounds/day)	Significance
ROG (VOC)	1 to 10	54	Less than significant
NO_x	1 to 5	54	Less than significant
CO	1 to 10	548	Less than significant
SO_x	< 1	219	Less than significant
PM_{10} (total)	1 to 5	82	Less than significant
$PM_{2.5}$ (total)	1 to 5	54	Less than significant
Greenhouse Gasses (CO_2e)	1 to 20	No threshold established	Less than significant

Comparison of Annual Operational Emissions Impacts with Thresholds of Significance

Criteria Pollutants	Project Emissions (tons/year)	BAAQMD Threshold (tons/year)	Significance
ROG (VOC)	0 to 1	10	Less than significant
NO_X	0 to 1	10	Less than significant
CO	0 to 1	100	Less than significant
SO_X	0 to 1	40	Less than significant
PM_{10}	0 to 1	15	Less than significant
$PM_{2.5}$	0 to 1	10	Less than significant
Greenhouse gasses (as CO_2 or methane)	1 to 100	10,000	Less than significant

Less than Significant Impact

c) Sensitive receptors (i.e., children, senior citizens, and acutely or chronically ill people) are more susceptible to the effects of air pollution than the general population. Land uses that are considered sensitive receptors typically include residences, schools, playgrounds, childcare centers, hospitals, convalescent homes, and retirement homes.

Pollutants most likely to result from this project include pesticide / fertilizer drift, and vehicle emissions, particularly CO_2 emissions. According to the EPA, vehicles produce on average 404 grams of CO_2 per vehicle mile traveled. The project anticipates up to eleven (11) trips per day during both construction activities and peak seasonal events. The nearest populated area to the site is Lower Lake, located approximately 4 miles north of the project site.

The Project proposes three (3) full-time employees and up to two additional employees for a total of five (5) employees during peak seasonal events. Using Lower Lake as a likely origin location for employees, the maximum of five (5) employees would drive approximately 4 miles to the site and back each day, for a total of 40 miles per day or 280 miles per week during peak seasonal events (the majority of the season would only require three (3) employees, driving approximately 24 miles per day or 168 miles per week). Assuming a cultivation period of 300 days, with 30% of those days (90 days) requiring peak seasonal events (40 miles per day) and 70% of those days (210 days) requiring regular full-time employees (24 miles per day), total annual miles traveled for employees would be approximately 8,640. Assuming two (2) weekly truck trips traveling 20 miles each (10 miles each way), an additional 40 truck trips miles would occur weekly, or an additional 1,714 miles per cultivation season. Therefore, the Project would result in approximately 10,354 miles driven per year.

Assuming 404 grams of CO_2 emissions driven per mile, anticipated CO_2 emissions from traffic would be 4,183,016 grams, or 4.18 tons of CO_2. Lake County does not have adopted thresholds for determining 'significant levels' of CO_2 and uses Bay Area Air Quality emission standards for projects. BAAQMD has a significance threshold of 1,100 tons per project; this Project is estimated to produce 4.18 tons per year. Therefore, the Project is much less than the 'significance level' of 1,100 tons per project.

There are no schools, parks, childcare centers, convalescent homes, or retirement homes located in proximity to the Project site. The nearest off-site residences are over 700 feet from the Project site, well over the 200-foot setback for offsite residences from commercial cannabis cultivation as described in Article 27.11 of the Lake County Zoning.

Pesticide application will be used during the growing season and as described in the Property Management Plan, will be applied carefully to individual plants. The cultivation area will be surrounded by a fence in order to prevent off-site drift of pesticides. Additionally, no demolition or renovation will be performed which would cause asbestos exposure, and no serpentine soils have been detected and are not mapped onsite.

Impacts would be Less than Significant with Mitigation Measure AQ-7 incorporated:

AQ-1: Prior to obtaining the necessary permits and/or approvals for any phase, applicant shall contact the Lake County Air Quality Management District (LCAQMD) and obtain an Authority to Construct (A/C) permit for all operations and for any diesel-powered equipment and/or other equipment with potential for air emissions. Or provide proof that a permit is not needed.

AQ-2: All mobile diesel equipment used must be in compliance with state registration requirements. Portable and stationary diesel-powered equipment must meet all federal, state, and local requirements, including the requirements of the State Air Toxic Control Measures for compression ignition engines. Additionally, all engines must notify LCAQMD prior to beginning construction activities and prior to engine use.

AQ-3: The applicant shall maintain records of all hazardous or toxic materials used, including a Material Safety Data Sheet (MSDS) for all volatile organic compounds utilized, including cleaning materials. Said information shall be made available upon request and/or the ability to provide the LCAQMD with such information in order to complete an updated Air Toxic emission Inventory.

AQ-4: All vegetation during site development shall be chipped and spread for ground cover and/or erosion control. The burning of vegetation, construction debris, including waste material is prohibited.

AQ-5: The applicant shall have the primary access and parking areas surfaced with chip seal, asphalt, or an equivalent all weather surfacing to reduce fugitive dust generation. The use of white rock as a road base or surface material for travel routes and/or parking areas is prohibited.

AQ-6: All areas subject to infrequent use of driveways, overflow parking, etc., shall be surfaced with gravel, chip seal, asphalt, or an equivalent all weather surfacing. Applicant shall regularly use and/or maintain graveled area to reduce fugitive dust generations.

AQ-7: The cultivation area will be surrounded by a fence during the application of pesticides in order to prevent off-site drift.

d) The proposed Project includes up to 40,500 sq. ft. of outdoor cannabis canopy area. This has the potential to cause objectionable odors, particularly during the harvest season. However, due to the fact that the closest neighboring residence is over 700 feet away, a substantial number of people are unlikely to be adversely affected.

The proposed cultivation would generate minimal amounts of carbon dioxide from operation of small gasoline engines (tillers, weed eaters, lawn mowers, etc.) and from vehicular traffic associated with staff commuting, deliveries and pickups. Additionally, Mitigation Measures AQ-1 and AQ-6 would reduce impacts of dust generation from on-site roads and parking areas.

Less than Significant Impact with Mitigation Measures AQ-1 and AQ-7

IV. BIOLOGICAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐	2, 5, 11, 12, 13, 16, 24, 29, 30, 33,
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐	1, 2, 3, 4, 5, 11, 12, 13, 16, 17, 29, 30, 31, 33

c)	Have a substantial adverse effect on state or federally protected wetlands (including, not limited to, marsh, vernal pool, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐	1, 2, 3, 4, 5, 11, 12, 13, 16, 17, 21, 24, 29, 30, 31, 33,
d)	Interfere substantially 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?	☐	☐	☒	☐	5, 13
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒	1, 2, 3, 4, 5, 11, 12, 13
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒	1, 2, 3, 5, 6, 13

Discussion:

a) Biological Resources Assessment (BA) was prepared by RHYZL on March 27, 2021. The field survey for the BA was also conducted on March 27, 2021. The purpose of the BA was to provide information as to whether the proposed cultivation area contains sensitive plant or wildlife species requiring mitigation under CEQA.

The Study Area is located within a rural property, surrounded by minimally-developed parcels, and is currently used for residential and small farm purposes. The information below is based on the survey results documented in the Biological Resources Assessment prepared for the Project.

Plant Species and Aquatic Resources

According to the BA, the vegetation in Study Area (i.e., cultivation area) generally consists of native/non-native grassland (herbaceous habitat), currently used for residential and small farm purposes. Adjacent to the Project area is Douglas fir forest Alliance, which is not proposed to be impacted by the Project. No trees are proposed to be removed.

The BA identified riparian habitat adjacent to onsite watercourses as potentially sensitive biological communities. The cultivation area is located greater than 150 feet from the nearest watercourse and is therefore unlikely to impact the riparian habitat. No wetlands were identified onsite.

A background database search was conducted for occurrences of rare, threatened, endangered, or plant species of concern within 5 miles of the Study Area. Databases that were searched included the California Native Plant Society's Rare Plant Rank CRPR) and the California Natural Diversity Database (CNDDB) database. The BA identified 59 special-status plant species that could have moderate or high potential to occur within the Study Area. None were observed in the study area during the late March field survey. No further recommendations were noted in the BA with regard to sensitive plant species. As discussed in the project description, upgrade to existing culverts are proposed.

As discussed above, the area proposed for cultivation development is an existing large yard/field that is regularly mowed and maintained. Due to this regular maintenance, it is unlikely that rare or sensitive plant species are in the field. However, due to the number of potential of rare plants to occur onsite and the early nature of the singular field survey, a second late spring or summer botanical survey is recommended to ensure that no rare plants are located within the area proposed to be disturbed. Mitigation Measure BIO-1 has been incorporated to reduce impacts to sensitive plant species to less than significant.

Animal Species

The BA conducted a background database search for special-status wildlife species in the vicinity of the Study Area. A total of 37 special-status wildlife species were found to have been documented within the Vicinity of the Study Area. Of those, sixteen (16) species have a "moderate" potential to occur within the Study Area, including three (3) amphibians, four (4) birds, one (1) insect, and eight (8) mammals, listed below:

Amphibians:

California giant salamander *(Dicamptodon ensatus):* This species is a CDFW Species of Special Concern. California giant salamanders rely on cold, clear streams, lakes, or ponds to reproduce. According to the BA, this species is unlikely to be impacted by the Project as long as no work is conducted within watercourses or watercourse buffers.

Foothill yellow-legged frog *(Rana boylii):* This is a CDFW Species of Special Concern, and is a state candidate for "threatened" listing under the California Endangered Species Act (CESA). This species occupies a range of ephemeral and permanent streams, river, and adjacent moist terrestrial habitats. According to the BA, this species is unlikely to be impacted by the Project as long as no work is conducted within watercourses or watercourse buffers.

Red-bellied newt *(taricha rivularis):* This is a CDFW Species of Special Concern. Red-bellied newts inhabit coastal forests and other forest types, and use strong-flowing streams to breed. According to the BA, this species is unlikely to be impacted by the Project as long as no work is conducted within watercourses or watercourse buffers.

For all amphibian species, if work is to occur within watercourses (e.g., during culvert upgrades or replacement), a pre-construction survey would be implemented per the recommendations in the BA. This has been incorporated as Mitigation Measure BIO-2, which would reduce impacts to amphibian species to less than significant.

Birds:

Cooper's hawk *(Accipiter cooperii):* This species is on the CDFW Watch List. Cooper's hawks build their nests in pines, oaks, Douglas firs, beeches, spruces, and other tree species. Some potential habitat exists onsite, but as no active nests or nest cavities were observed in the Study Area, and as no trees are proposed to be removed, the BA did not provide further recommendations for this species and it is unlikely to be impacted by the Project.

Bald eagle *(Haliaeetus Leucocephlus):* This is a State "Endangered" Species under the CESA and is a Federally Protected CDFW Species. Bald eagles nest in large, dominant trees such as Ponderosa pines within old-growth or coniferous forests. As no active nests or nest cavities were observed in the Study Area, and as no trees are proposed to be removed, the BA did not provide further recommendations for this species and it is unlikely to be impacted by the Project.

Great blue heron *(Ardea Herodias):* This is a California Dept. of Forestry and Fire Protection "sensitive" species. Great blue herons inhabit shallow estuaries and wetlands, and forage along creek banks, ponds, and watercourses in mountainous areas. As no active nests or nest cavities were observed in the Study Area, and as no trees are proposed to be removed, the BA did not provide further recommendations for this species and it is unlikely to be impacted by the Project.

Burrowing owl *(Athene cunicularia):* This is a CDFW Species of Special Concern. Burrowing owls are located across California, and create burrows for roosting and nesting in short vegetation. Potential habitat exists onsite, however as no active nests or nest cavities were observed in the Study Area, and as no trees are proposed to be removed, the BA did not provide further recommendations for this species and it is unlikely to be impacted by the Project.

Insects:

Western bumble bee *(Bombus occientalis):* This is a CDFW Species of Special Concern and is listed as "imperiled" by the Xerces Society for Invertebrate Conservation. Western bumble bees occur in a wide variety of habitat types, commonly along stream banks, meadows, or fields. Potentially suitable foraging and nesting habitat for this species exists within the Study Area adjacent to the cultivation area. No further recommendations were provided for this species by the BA.

Mammals:

Fisher *(Pekania pennati):* This is a CDFW Species of Special Concern and is listed as "sensitive" by USFS. Fishers utilize forest stands and riparian areas with high canopy area. No signs of fishers were observed during the site inspection, and no further recommendations were provided in the BA.

Pallid bat *(Antrozous pallidus):* This is a CDFW Species of Special Concern and is listed as "sensitive" by BLM and USFS. Pallid bats are found in a wide variety of habitats, including grasslands, shrublands, woodlands, and forests, with suitable crevices or trees for roosting. Low roosting habitat suitability exists within the Study Area. No signs of this species were located onsite. As all proposed work is confined to previously disturbed shrub habitat that does not provide quality roosting habitat for Pallid bats. Therefore, no further recommendations were provided for this species.

Townsend's big-eared Bat *(Corynorhinus townsendii):* This is a CDFW Species of Special Concern and is listed as "sensitive" by BLM And USFS. Townsend's big-eared bats utilize a wide variety of habitats, including mixed coniferous-deciduous forests, and forage in open forest habitats. Suitable habitat exists near the Study Area. No signs of this species were located onsite, including guano or roosts and no trees are proposed to be removed. No further recommendations were provided for this species.

Western red bat *(Lasiurus blossevillii):* This species is a CDFW Species of Special Concern, and roosts in mixed-coniferous forests near riparian areas. No signs of this species were located onsite, including guano or roosts and no trees are proposed to be removed. No further recommendations were provided for this species.

Hoary bat *(Lasiurus cinereus):* This species is a CDFW Species of Special Concern. Hoary bats utilize open habitats or habitat mosaics with access to trees for cover and open areas for foraging. While potential suitable habitat exists onsite, no signs of this species were located onsite, including guano or roosts and no trees are proposed to be removed. No further recommendations were provided for this species.

Long-eared myotis *(Myotis evotis):* This is a CDFW Species of Special Concern and is listed as "sensitive" by BLM. This species is found in brush, woodland, and forested habitats. While potential suitable habitat exists onsite, no signs of this species were located onsite, including guano or roosts and no trees are proposed to be removed. No further recommendations were provided for this species.

Fringed myotis *(Myotis thysanodes):* This species is listed as "sensitive" by BLM and USFS. The fringed myotis utilizes oak, pinion, and juniper woodlands or ponderosa pine forests and mid-elevations. Potential suitable habitat could exist near the Study Area, however, no signs of this species were located onsite, including guano or roosts and no trees that could impact nesting are proposed to be removed. No further recommendations were provided for this species in the BA.

Yuma myotis *(Myotis yumanensis):* This species is a CDFW Species of Special Concern and is listed as "sensitive" by BLM. This species will use a variety of forests and scrub lowland habitats. According to the BA, the habitat requirements for this species "do not occur within the Project area or buffer". The closest recorded occurrence of this species is over 5 miles from the Project. In addition, no signs of this species were located onsite, including guano or roosts and no trees are proposed to be removed. No further recommendations were provided in the BA for this species.

According to the BA, the Project area does not contain mapped wildlife corridors or critical habitat for federal or state-listed species. No change to migratory bird patterns is anticipated from the impacts of this proposed Project. All cultivation would be located outside of a 100-foot setback from any watercourse. In addition, there are no wetlands or riparian areas within the proposed cultivation areas.

Special-status species may occur in aquatic habitat in the watercourses on the parcel, but the proposed Project areas are over 150 feet away from these features and will not impact aquatic habitat. The BA recommended that if work is conducted within watercourses, that pre-construction surveys should be completed following CDFW protocols prior to excavation. In the event that culvert upgrades occur as a result of this project, BIO-2 has been incorporated to ensure impacts to sensitive riparian species are less than significant.

Less than Significant Impact with Mitigation Measures BIO-1 and BIO-2 incorporated:

BIO-1: A late spring or summer floristic botanical survey shall be conducted in the area proposed for development prior to the start of construction. The survey shall be conducted by a qualified botanist familiar with floristic survey protocols and plant identification to ensure that no sensitive plant species are present within the proposed cultivation area. If any listed species or special-status species are detected, construction shall be delayed, and the California Department of Fish and Wildlife shall be consulted, and Project impacts and mitigation shall be reassessed.

BIO-2: If construction activities, including replacement of culverts are within watercourses, pre-construction surveys for sensitive species shall be completed following CDFW protocols as described in the BA. The surveys shall be conducted by a qualified biologist. If sensitive species are found, the California Department of Fish and Wildlife or the US Fish and Wildlife Service shall be consulted to develop measures to avoid a "take" of active nests prior to the initiation of any construction activities.

b) According to the Lake County General Plan Chapter 9.1 Biological Resources, "the County should ensure the protection of environmentally sensitive wildlife and plant life, including those species designated as rare, threatened, and/or endangered by State and/or Federal government," and upon review of the biological report on the parcel, it was determined that no substantial adverse effect will result from the project.

The Biological Resources Assessment (BA) identified several small drainages on the proposed Project parcel, but not within the cultivation areas. The nearest intermittent watercourse is located greater than 150 feet from the proposed cultivation area; in excess of the state-required 100 feet. There are no wetlands or vernal pools on the subject parcel.

No development is proposed within 100-feet of the identified watercourses or wetlands, which is consistent with Article 27 of the Lake County Zoning Ordinance that regulates commercial cannabis cultivation. The applicant has provided a Property Management Plan, which addresses controlled water runoff in a manner that reduces impacts to this stream. No development would occur within the drainage buffers and setbacks and there are no sensitive natural communities within the Project area.

The Project is enrolled with the SWRCB for Tier 2, Low Risk coverage under Order No. WQ 2019-001-DWQ (Cannabis Cultivation General Order). The Cannabis Cultivation General Order implements Cannabis Policy requirements with the purpose of ensuring that the diversion of water and discharge of waste associated with cannabis cultivation does not have a negative impact on water quality, aquatic habitat, riparian habitat, wetlands, or springs. The Cannabis Cultivation General Order requires the preparation of a Site Management Plan (SMP), a Nitrogen Management Plan (NMP), and the submittal of annual technical and monitoring reports demonstrating compliance. The purpose of the SMP is to identify BPTC measures that the site intends to follow for erosion control purposes and to prevent stormwater pollution. The purpose of the NMP is to identify how nitrogen is stored, used, and applied to crops in a way that is protective to water quality. The SMP and NMP are required prior to commencing cultivation activities and were submitted with the application materials.

All proposed development is to occur on an existing flat grassy field that has historically been used as a yard and for livestock. Cultivation operations are not expected to alter the hydrology of the parcels significantly. Erosion control measures to control erosion and sedimentation during construction and operation have been identified in the Property Management Plan. Measures include straw wattles, vegetated swales, and buffer strips.

In addition, the BA concludes the Study Area is not inside any federally designated critical habitat. The Project Area contains no special-status habitats or natural communities, but special-status habitats are directly adjacent to some Project areas. If the establishment of cultivation operations requires the destruction of sensitive habitats, such as undisturbed closed-cone pine forest habitat, Mitigation Measures BIO-3 should be implemented.

Less Than Significant Impact

c) The area proposed for development is an existing maintained yard/field that has been previously disturbed. No wetlands or vernal pools were identified in the BA. Additionally, per the National Wetlands Inventory Wetland Mapping, no wetlands are present within the proposed cultivation area. Mapped riverine habitat is located along the intermittent stream, located greater than 150 feet away from proposed development. Therefore, Project implementation is unlikely to directly impact any wetlands.

Refer to Section IV(a) and (b).

Less Than Significant Impact

d) The Biological Resources Assessment (BA) stated that no specific wildlife corridors exist within or near the Study Area. Although no mapped wildlife corridors (such as the California Essential Habitat Connectivity Area layer in the CNDDB) exist within or near the Study Area, the open space and the stream corridors in the Study Area facilitate animal movement and migrations. Although the Study Area may be used by wildlife for movement or migration, the proposed Project would not have a significant impact on this movement because the majority of the Study Area will still be available for corridor and migration routes. Of the 56.36 acres on the parcel, only 1.96 acres are proposed to be fenced, leaving approximately 54 acres of unimpacted parcel space remaining available for natural habitat and wildlife corridors. acres would remain available for natural habitat and wildlife corridors.

Implementation of the Project will therefore not interfere substantially 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.

Less than Significant Impact

e) In Article 27 of the County of Lake, CA Zoning Ordinance, under §27.13 on Conditions for Commercial Cannabis Cultivation, Tree Removal is listed under Prohibited Activities, whereas “(the) removal of any commercial tree species as defined by the California Code of Regulations section 895.1, Commercial Species for the Coast Forest District and Northern Forest District, and the removal of any true oak species (Quercus species) or Tan Oak (Notholithocarpus species) for the purpose of developing a cannabis cultivation site should be avoided and minimized.”

Furthermore, the County of Lake General Plan Policy OSC-1.13 states the County shall support the conservation and management of oak woodland communities and their habitats, and Resolution Number 95-211 was adopted as a Management Policy for Oak Woodlands in Lake County, whereas the County of Lake aims to monitor oak woodland resources, pursue education of the public, federal, state and local agencies on the importance of oak woodlands, promote incentive programs that foster the maintenance and improvement of oak woodlands, and, through federal, state, and local agency land management programs, foster oak woodlands on their respective lands within the county.

The Project does not propose to remove any trees. Implementation of the Project does not conflict with any county or municipal policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

No Impact

f) No special conservation plans have been adopted for this site and no impacts are anticipated.

No Impact

V. CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☒	☐	☐	1, 3, 4, 5, 14, 15
b) Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?	☐	☒	☐	☐	1, 3, 4, 5, 14, 15
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐	1, 3, 4, 5, 14, 15

Discussion:

a) A Cultural Resources Evaluation (CRE) for the proposed cultivation Project was completed by Dr. John Parker of Wolf Creek Archaeology to identify potentially significant cultural resources onsite. The CRE is dated May 6th, 2021. As part of the CRE, a site inspection was conducted on April 14th, 2021. The field survey conducted for the CRE did not find any artifacts necessary to be considered "significant" historic or cultural resources for the purposes of CEQA.

As part of the referral process, Lake County sent a referral request to the California Historic Resources Information System (CHRIS) on February 23, 2023. The CHRIS results were returned on March 9th and indicated that no studies other than the CRE prepared for this Project had been completed in the area. The CHRIS recommendations concluded that the proposed project area has a "low" possibility of containing unrecorded archaeological sites. The CRE did not contain further recommendations other than contacting local Native American tribe(s).

As discussed in the Tribal Cultural Resources Section of this Initial Study, notification of the Project was sent to local tribes, including Middletown Rancheria, as part of the referral process on February 23, 2023. The Director of Cultural Resources for the Habematolel Pomo of Upper Lake responded with a letter dated March 15, 2023, and concluded that the Project is not within their territory. No further comments or concerns have been received from local tribes regarding this Project to date. Additionally, a request was sent to the California Native American Heritage Commission (NAHC) on April 29th, 2021, for a review of the Sacred Lands File (SLF) concerning the project area. NAHC returned the results of the SLF search on May 4th, 2021. The SLF search from NAHC returned negative results for Native American cultural resources within the Project vicinity.

Based on the negative findings of the CHRIS search, field survey, and outreach efforts with local tribes, there is no indication that the Project would impact any historical or archaeological resources as defined under CEQA Section 15064.5~~ or tribal cultural resources as defined under Public Resources Code Section 21074.~~ It is possible, but unlikely, that significant artifacts or human remains could be discovered during Project construction. If, however, significant resources or human remains of any type are encountered it is recommended that the Project sponsor contact the Archeologist and culturally affiliated tribe and a qualified archaeologist to assess the resources. The Sheriff's Department must also be contacted if any human remains are encountered.

Less than Significant Impact with Mitigation Measures CUL-1 and CUL-2:

~~CUL-1: Should any archaeological, paleontological, or cultural materials be discovered during site development, all activity shall be halted in the vicinity of the find(s), the applicant shall notify the culturally affiliated Tribe, and a qualified archaeologist to evaluate the find(s) and recommend mitigation procedures, if necessary, subject to the approval of the Community Development Director. Should any human remains be encountered, the applicant shall notify the Sheriff's Department, the culturally affiliated Tribe, and a qualified archaeologist for proper internment and Tribal rituals per Public Resources Code Section 5097.98 and Health and Safety Code 7050.5.~~

~~CUL-2: All employees shall be trained in recognizing potentially significant artifacts that may be discovered during ground disturbance. If any artifacts or remains are found, the culturally affiliated Tribe shall immediately be notified; a licensed archaeologist shall be~~

~~notified, and the Lake County Community Development Director shall be notified of such findings.~~

CUL-1: Should any archaeological, paleontological, or cultural materials be discovered during site development, all activity shall be halted within 100' of the find(s). A professional Archaeologist certified by the Registry of Professional Archaeologists (RPA) shall be notified to evaluate the find(s) and recommend mitigation procedures, if necessary, subject to the approval of the Community Development Director.

Should any human remains be encountered, the applicant shall notify the Sheriff's Department, the culturally affiliated Tribe(s), and a qualified Archaeologist for proper internment and Tribal rituals per Public Resources Code Section 5097.98 and Health and Safety Code 7050.5.

CUL-2: Prior to ground disturbing activities, the Permittee shall submit a Cultural Resources Plan, identifying methods of sensitivity training for site workers, procedures in the event of an accidental discovery, and documentation and reporting procedures. Prior to ground disturbing activities, the Permittee shall submit verification that all site workers have reviewed the Cultural Resources Plan and received sensitivity training.

b) The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate site vicinity. In the event that human remains are discovered on the Project site, the Project would be required to comply with the applicable provisions of Health and Safety Code §7050.5, Public Resources Code §5097 et. seq. and CEQA Guidelines §15064.5(e). California Health and Safety Code §7050.5 states that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Pursuant to California Public Resources Code §5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner.

If the Coroner determines the remains to be Native American, the California Native American Heritage Commission must be contacted and the Native American Heritage Commission must then immediately notify the "most likely descendant(s)" of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours and engage in consultations concerning the treatment of the remains as provided in Public Resources Code §5097.98. Mandatory compliance with these requirements would ensure that potential impacts associated with the accidental discovery of human remains would be less than significant.

Less than Significant Impacts with Mitigation Measures CUL-1 through CUL-2

VI. ENERGY	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					

a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resource, during construction or operation?	☐	☐	☒	☐	1, 5
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐	1, 3, 4, 5, 46

Discussion:

a) Onsite electricity will be supplied by an existing Pacific Gas and Electric Company (PG&E) service. Power needs for the Project are minimal, as there is no supplemental lighting proposed for the cannabis cultivation and all drying and processing would occur offsite. Power is required for operation of the automated black-out covers on the greenhouses, security systems, and water pumps, in addition to miscellaneous hand tools or equipment. The well pump may also be powered by solar panels.

A back-up generator, currently onsite in use for the residence, is proposed for emergency use only. The backup generator is a small propane generator and would only be used in the event of a power outage.

The Project was referred to PG&E on February 23, 2023. PG&E responded with a letter dated February 28th, 2023. No concerns or comments opposed to the Project were noted.

Less than Significant Impact

b) According to the California Department of Cannabis Control's Title 4 Division 19 §15010 on compliance with the CEQA, all cannabis applications must describe their project's anticipated operational energy needs, identify the source of energy supplied for the project and the anticipated amount of energy per day, and explain whether the project will require an increase in energy demand and the need for additional energy resources. Prior to obtaining a state license for cannabis cultivation, the applicant will comply with this requirement.

No mandatory energy reductions for cultivation activities within Article 27 of the Lake County Zoning Ordinance unless the applicant proposes indoor cultivation. No indoor cannabis cultivation is proposed.

Less than Significant Impact

VII. GEOLOGY AND SOILS	Potentially Significant Impact	Less Than Significant With Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Directly or indirectly cause potentially substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☒	☐	1, 2, 3, 4, 5, 18, 19, 39, 41

	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special. Publication 42. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides?					
b)	Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐	1, 3, 4, 5, 19, 21, 24, 25, 30, 39, 41
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐	1, 2, 3, 5, 6, 9, 18, 21, 30, 39, 41
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☒	☐	☐	4, 5, 7, 30, 39, 41
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☒	☐	2, 4, 5, 7, 13, 30, 39, 41
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐	1, 2, 3, 4, 5, 14, 15, 30, 39, 41

Discussion:

a) The Project site is in a seismically active area of California and is expected to experience moderate to severe ground shaking during the lifetime of the Project. That risk is not considered substantially different than that of other similar properties and projects in California.

Earthquake Faults (i)

According to the USGS Earthquake Faults map available on the Lake County GIS Portal, there is a linear earthquake fault approximately 5.9 miles west of the subject site. (2) miles southwest of the subject site. The linear faults run parallel to the Clear Lake shoreline. The last estimated rupture for these faults was less than 1,600,000 years ago. Because there are no known faults located on the Project site, there is little potential for the Project site to rupture during a seismic event. All drying and processing (cultivation activities within structures) would be located offsite. Thus, no rupture of a known earthquake fault is anticipated, and the proposed Project would not expose people or structures to an adverse

effects related rupture of a known earthquake fault as no structures for human occupancy are being proposed.

Seismic Ground Shaking (ii) and Seismic–Related Ground Failure, including liquefaction (iii)
Lake County contains numerous known active faults. Future seismic events in the Northern California region can be expected to produce seismic ground shaking at the site. All proposed greenhouses are required to be built under Current Seismic Safety Construction Standards, as required, and no large structures are proposed on this project site.

Landslides (iv)
The Project cultivation site is generally level without significant slopes. There are some risks of landslides on the parcel, however the proposed project's cultivation site is located on a flat yard area not located near steep slopes. According to the Landslide Hazard Identification Map prepared by the California Department of Conservation's Division of Mines and Geology, the area is considered generally stable, and no historic landslides are mapped onsite. As such, the Project's cultivation site is considered moderately susceptible to landslides and will not likely expose people or structures to substantial adverse effects involving landslides, including losses, injuries, or death.

Less Than Significant Impact

b) No grading is proposed to prepare the Project site for cultivation. The project also includes the import of soil for other cultivation activities, and according to the Property Management Plan this would not involve any adverse effects on the potential for erosion or the loss of topsoil.

Furthermore, the project is enrolled with the SWRCB for Tier 2, Low Risk coverage under Order No. WQ 2019-001-DWQ (Cannabis Cultivation General Order). The Cannabis Cultivation General Order implements Cannabis Policy requirements with the purpose of ensuring that the diversion of water and discharge of waste associated with cannabis cultivation does not have a negative impact on water quality, aquatic habitat, riparian habitat, wetlands, or springs. The Cannabis Cultivation General Order requires the preparation of a Site Management Plan (SMP), a Nitrogen Management Plan (NMP), and the submittal of annual technical and monitoring reports demonstrating compliance. The purpose of the SMP is to identify BPTC measures that the site intends to follow for erosion control purposes and to prevent stormwater pollution. The purpose of the NMP is to identify how nitrogen is stored, used, and applied to crops in a way that is protective to water quality. The SMP and NMP are required prior to commencing cultivation activities and were submitted with the application materials. As part of the Applicant's enrollment, they are required to complete Annual Monitoring and Reporting to the State Water Board, which requires that winterization BPTC measures for erosion and sediment control are in place prior to the winter period.

Less Than Significant Impacts with Mitigation Measures GEO-1 through GEO-4, and BIO-3, incorporated:

GEO-1: Prior to any ground disturbance for building construction, the permittee shall submit erosion control and sediment plans to the Water Resource Department and the Community Development Department for review and approval. Said erosion control and sediment plans shall protect the local watershed from runoff pollution through the implementation of appropriate Best Management Practices (BMPs) in accordance with the Grading Ordinance. Typical BMPs include the placement of straw, mulch, seeding, straw

wattles, silt fencing, and the planting of native vegetation on all disturbed areas. No silt, sediment, or other materials exceeding natural background levels shall be allowed to flow from the project area. The natural background level is the level of erosion that currently occurs from the area in a natural, undisturbed state. Vegetative cover and water bars shall be used as permanent erosion control after project installation.

GEO-2: Excavation, filling, vegetation clearing, or other disturbance of the soil shall not occur between October 15 and April 15 unless authorized by the Community Development Department Director. The actual dates of this defined grading period may be adjusted according to weather and soil conditions at the discretion of the Community Development Director.

GEO-3: The permit holder shall monitor the site during the rainy season (October 15 – May 15), including post-installation, application of BMPs, erosion control maintenance, and other improvements as needed.

GEO-4: If greater than fifty (50) cubic yards of soils are moved, a Grading Permit shall be required as part of this project. The project design shall incorporate Best Management Practices (BMPs) to the maximum extent practicable to prevent or reduce the discharge of all construction or post-construction pollutants into the County storm drainage system. BMPs typically include scheduling of activities, erosion and sediment control, operation and maintenance procedures, and other measures in accordance with Chapters 29 and 30 of the Lake County Code.

GEO- 5: All work shall incorporate erosion control measures consistent with the State Water Resources Control Board Order No. WQ 2019-001-DWQ.

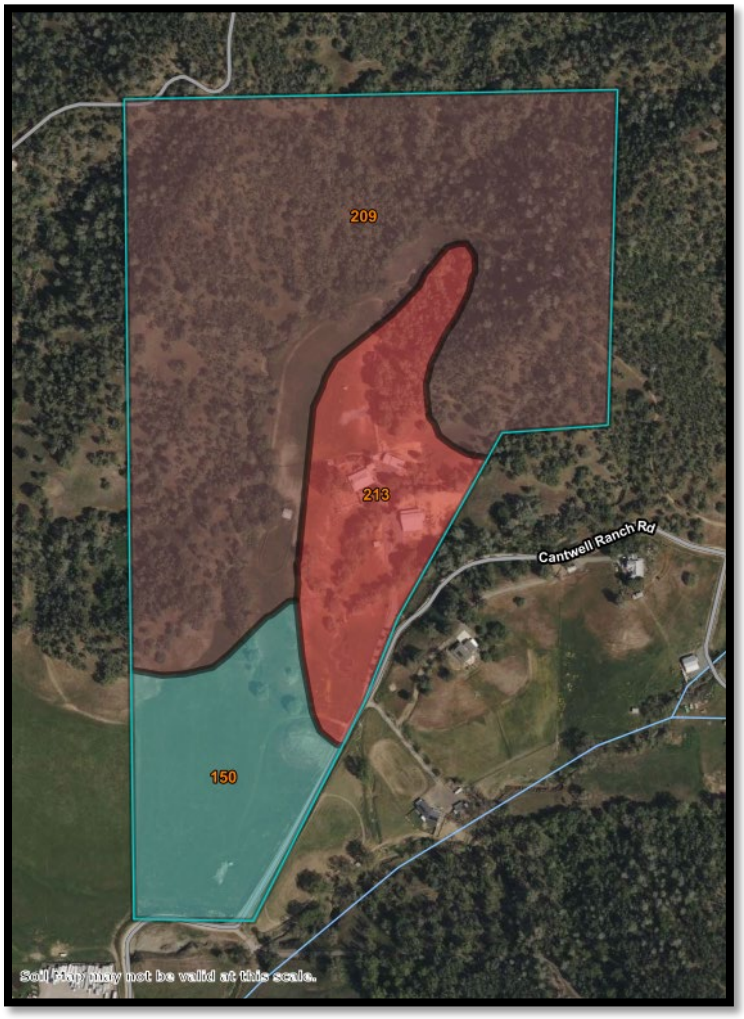
c) The primary geologic unit or soil types where the proposed Project site is situated are as follows, according to the BA and to NCRS Web Soil Survey (see also Figure 10):

Map Unit Symbol: 150 – Kilaga variant loam, 0 to 5 percent slopes
Kilaga series consists of deep and very deep, moderately well drained soils. These soils formed in alluvium from mixed rock sources, and are comprised of loam, clay loam, and silty clay. This soil type comprises approximately 16% of the subject property, primarily in the southern area, and does not overlap with the proposed cultivation area.

Map Unit Symbol: 209 – Skyhigh-Millsholm loams, 15 to 50% slopes
This soil series is comprised of Skyhigh loam and Millsholm loam soil types (approximately 45% Skyhigh loam, 25% Millsholm loam, and 10% Bressa loam). This soil series consists of moderately deep to shallow, well-drained soils formed from sandstone, mudstone, and shale. Slopes range from 5% to 50%, underlaying with some of the steeper areas on the subject parcel. This soil type comprises approximately 66% of the subject parcel and overlaps minimally with the proposed cultivation area.

Map Unit Symbol: 213 – Sleeper variant – Sleeper loams, 5 to 15% slopes
This soil series is comprised of approximately 45% Sleeper variant, 35% Sleeper loam, and smaller areas of Millsholm and Skyhigh soils, rock outcrops, and rocks. The typical profile contains loam, clay loam, clay, clay loam, and then bedrock. These soils are deep, well-drained soils formed in material weathered from sandstone, shale, and siltstone. Slopes range from 5% to 15%. This soil type comprises approximately 17% of the subject parcel, including a majority of the area proposed for cultivation development.

Figure 10: Soil Types Onsite



Source: NRCS Web Soil Survey, 2023

The majority of the cultivation area would be located within Sleeper variant-Sleeper loams soil series (Map Unit Symbol 213), as shown in Figure 10. This soil type does consist of clay, leading to a moderate possibility of liquefaction. However, no major structures other than greenhouses constructed in a pier-to-post format are proposed onsite. The area proposed for development is a flat grassland area currently used as a yard and historically used for small livestock.

Additionally, as described above, the proposed project's cultivation site is located on a flat yard area not located near steep slopes. According to the Landslide Hazard Identification Map prepared by the California Department of Conservation's Division of Mines and Geology, the area is considered generally stable, and no historic landslides are mapped onsite.

It is unlikely that any subsidence will occur as no large structures are proposed in for the project. Due to this, the impacts would be less than significant with mitigation measures described in the Section XII(b).

Less Than Significant Impacts with Mitigation Measures GEO-1 through ~~GEO-4~~ GEO-5

d) Expansive soils possess a "shrink-swell" characteristic. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying. Structural damage may occur over a long period of time due to expansive soils, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils.

Cultivation activities proposed in the project would occur primarily on one type of soil: 213 – Sleeper variant-sleeper loams of 5 to 15% slopes, according to the Soil Survey of Lake County and the USDA Web Soil Survey website. Soil Type 213 has a moderate risk of shrink-swell potential. However, no permanent new buildings other than greenhouses are proposed. No grading is proposed.

The Uniform Building Code is a set of rules that specify standards for structures. Although no new buildings are proposed, any new construction requiring a building permit, including the proposed greenhouses, would be subject to the Uniform Building Code and California Building Code for foundation design to meet the requirements associated with expansive soils, if they are found to exist within a site-specific study.

Less Than Significant Impact with Mitigation Measures GEO-1 through ~~GEO-6~~ GEO-8 incorporated:

~~GEO-5~~ GEO 6: Prior to operation, all buildings, accessible compliant parking areas, routes of travel, building access, and/or bathrooms shall meet all California Building Code Requirements.

~~GEO-6~~ GEO 7: Prior to operation, all structure(s) used for commercial cultivation shall meet accessibility and CALFIRE standard. Please contact the Lake County Community Development Department's Building Division for more information.

e) The proposed project will be served by an American Disability Act compliant portable toilet. The portable toilet will be serviced regularly by a licensed septic provider. No onsite septic system exists onsite or is proposed. Therefore, the proposed project will not have soils incapable of adequately supporting the use of septic tanks for the disposal of wastewater.

Therefore, the proposed project will not have soils incapable of adequately supporting the use of septic tanks for the disposal of wastewater.

Less Than Significant Impact

f) The project site does not contain any known unique geologic features or paleontological resources. Disturbance of these resources is not anticipated.

Less than Significant Impact with Mitigation Measure GEO-7 incorporated:

~~GEO-7~~ GEO-8: If paleontological resources are encountered during implementation of the Project, ground disturbing activities will be temporarily redirected from the vicinity of the find. A qualified paleontologist shall be retained by the developer to make an evaluation of the find. If a significant paleontological resource(s) is discovered on the property, the qualified paleontologist / archaeologist shall develop a plan of mitigation which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation in the find a local qualified repository, and preparation of a report summarizing the find.

VIII. GREENHOUSE GAS EMISSIONS	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	1, 3, 4, 5, 36
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	1, 3, 4, 5, 36, 47, 48

Discussion:

a) The Project consists of 40,500 sq. ft. of commercial canopy area within a 1.96-acre cultivation area. Cultivation is proposed to use light-deprivation techniques within greenhouses; no supplemental lighting is proposed.

Power for the Project would be sourced from an existing PG&E service and solar power. A backup generator would be used sparingly during emergencies and is not proposed for regular use.

The project site is located within the Lake County Air Basin, which is under the jurisdiction of the Lake County Air Quality Management District (LCAQMD). The LCAQMD applies air pollution regulations to all major stationary pollution sources and monitors countywide air quality. The Lake County Air Basin is in attainment for all air pollutants with a high air quality level, and therefore the LCAQMD has not adopted thresholds of significance for Greenhouse Gas (GHG) emissions.

The BAAQMD threshold for GHG (including CO_2, CH_4, N_2O, HFCs, PFCs, SF_6) for projects other than stationary sources (power generating plants, mining sites, petroleum facilities, chemical plants, etc.) that are not under a GHG Reduction Plan is 1,100 metric tons of CO_2e per year.

Greenhouse gas emissions will be released during the construction phase of the project operation, from equipment and tools. Construction operation will take between 3 to 6 months. No grading is proposed; all greenhouses will be erected using post-to-pier construction on the existing flat yard. Construction emissions are not thought to be consistent sources and will be temporary in nature.

Consistent operational sources of greenhouse gas primarily include emissions from vehicular traffic (from employees and delivery trucks) as well as smaller gas-powered equipment and tools for operational use (e.g., weed eater, lawn mower, etc.). According to the Property Management Plan, five (5) employees are proposed to operate at full build-out to run the cultivation operations. Using Lower Lake as a likely origin location for employees, the maximum of five (5) employees would drive approximately 4 miles to the site and back each day, for a total of 40 miles per day or 280 miles per week during peak seasonal events (the majority of the season would only require three (3) employees, driving approximately 24 miles per day or 168 miles per week). Assuming a cultivation period of 300 days, with 30% of those days (90 days) requiring peak seasonal events (40 miles per day) and 70% of those days (210 days) requiring regular full-time employees (24 miles per day), total annual miles traveled for employees would be approximately 8,640. Assuming two (2) weekly truck trips traveling 20 miles each (10 miles each way), an additional 40 truck trips miles would occur weekly, or an additional 1,714 miles per cultivation season, or approximately 10,354 miles driven per year.

Assuming 404 grams of CO_2 emissions driven per mile, anticipated CO_2 emissions from traffic would be 4,183,016 grams, or 4.18 tons of CO_2, which is well below BAAQMD threshold. The remaining vegetated areas of the property would not be impacted or disturbed.

Less than Significant Impact

b) For purposes of this analysis, the Project was evaluated against the following applicable plans, policies, and regulations:

- The Lake County General Plan
- The Lake County Air Quality Management District
- Assembly Bill (AB) 32 Climate Change Scoping Plan
- AB 1346 Air Pollution: Small Off-Road Equipment

Policy HS-3.6 of the Lake County General Plan on Regional Agency Review of Development Proposals states that the “County shall solicit and consider comments from local and regional agencies on proposed projects that may affect regional air quality. The County shall continue to submit development proposals to the Lake County Air Quality Management District for review and comment, in compliance with the California Environmental Quality Act (CEQA) prior to consideration by the County.” The proposed Project was sent out for review from the LCAQMD and the only concern was restricting the use of an onsite generator to emergency situations only.

The Lake County Air Basin is in attainment for all air pollutants with a high air quality level, and therefore the LCAQMD has not adopted an Air Quality Management Plan, but rather uses its rules and regulations for the purpose of reducing the emissions of greenhouse gases. The proposed Project does not conflict with any existing LCAQMD rules or regulations and would therefore have no impact at this time.

The 2017 AB Climate Change Scoping Plan recognizes that local government efforts to reduce emissions within their jurisdiction are critical to achieving the State’s long term GHG goals, which includes a primary target of no more than six (6) metric tons CO_2e per capita by 2030. As described in the Property Management Plan, the Project will have up to three (3) individuals working on site (owners/operators) during normal operational

hours, and up to five (5) employees during peak season. As described above, the estimated greenhouse gas emissions from this employee traffic are approximately 4.18 tons CO_2e, which is less than the 2017 Climate Change Scoping Plan's 2030 target.

On October 9, 2021, AB 1346 Air Pollution: Small Off-Road Equipment (SORE) was passed, which will require the state board, by July 1, 2022, consistent with federal law, to adopt cost-effective and technologically feasible regulations to prohibit engine exhaust and evaporative emissions from new small off-road engines, as defined by the state board. The bill would require the state board to identify and, to the extent feasible, make available funding for commercial rebates or similar incentive funding as part of any updates to existing applicable funding program guidelines to local air pollution control districts and air quality management districts to implement to support the transition to zero-emission small off-road equipment operations, and the applicant should be aware of and expected to make a transition away from SOREs by the required future date.

Less than Significant Impact

IX. HAZARDS AND HAZARDOUS MATERIALS	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐	1, 3, 5, 13, 21, 24, 29, 31, 32, 33, 34, 40, 41
b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐	1, 3, 5, 13, 21, 24, 29, 31, 32, 33, 34
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒	1, 2, 5
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒	2, 40
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒	1, 3, 4, 5, 20, 22

f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐	1, 3, 4, 5, 20, 22, 35, 37, 38
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐	1, 3, 4, 5, 20, 35, 37

a) Materials associated with the proposed cultivation of commercial cannabis, such as gasoline, pesticides, fertilizers, alcohol, hydrogen peroxide and the equipment emissions may be considered hazardous if unintentionally released and could create a significant hazard to the public or the environment if done so without intent and mitigation. According to the Property Management Plan for the proposed Project, all potentially harmful chemicals would be stored and locked in a secured building on site and measures will be taken to avoid any accidental release and environmental exposure to hazardous materials.

The Project will comply with Section 41.7 of the Lake County Zoning Ordinance that specifies that all uses involving the use or storage of combustible, explosive, caustic, or otherwise hazardous materials shall comply with all applicable local, state, and federal safety standards and shall be provided with adequate safety devices against the hazard of fire and explosion, and adequate firefighting and fire suppression equipment.

The Lake County Division of Environmental Health, which acts as the Certified Unified Program Agency (CUPA) for Hazardous Materials Management, has been consulted about the project and the project is required to address Hazardous Material Management in the Property Management Plan, which has been reviewed by the Lead Agency to ensure the contents are current and adequate. In addition, the Project will require measures for employee training to determine if they meet the requirements outlined in the Plan and measures for the review of hazardous waste disposal records to ensure proper disposal methods and the amount of wastes generated by the facility.

The Property Management Plan also addresses the following:

Bulk fertilizers will be incorporated into the soil shortly after delivery and will not typically be stockpiled or stored on site. Should bulk fertilizers need to be stockpiled, they will be placed on a protective surface, covered with tarps, and secured with ropes and weights. Dry and liquid fertilizers will be stored in a stormproof shed inside each cultivation compound.

All other pesticides and fertilizers will be stored within one of the stormproof storage sheds, in their original containers with labels intact, and in accordance with the product labeling. Agricultural chemicals and petroleum products will be stored in secondary containment, within separate storage structures alongside compatible chemicals. The pesticide, fertilizer, chemical, and petroleum product storage buildings will have impermeable floors. The storage building will be located over 150 feet from any watercourses.

Any petroleum products brought to the site, such as gasoline or diesel to fuel construction equipment, will be stored and covered in containers deemed appropriate by the Certified Unified Program Agency. All pesticides and fertilizers products will be stored a minimum of 100 feet from all potentially sensitive areas and watercourses.

Cannabis waste will be chipped and spread on site or composted as needed. The burning of cannabis waste is prohibited in Lake County and will be not take place as part of Project operations.

A spill containment and cleanup kit will be kept on site in the unlikely event of a spill. All employees would be trained to properly use all cultivation equipment, including pesticides. Proposed site activities would not generate any additional hazardous waste.

All equipment shall be maintained and operated in a manner that minimizes any spill or leak of hazardous materials. Hazardous materials and contaminated soil shall be stored, transported, and disposed of in accordance with applicable local, state, and federal regulations.

As long as the Project is in operation, the Certified Uniform Program Agency and Lead Agency will conduct regular and/or annual inspections and monitor activities to ensure that the routine transport, use, and disposal of hazardous materials will not pose a significant impact.

Less Than Significant Impact with Mitigation Measures HAZ-1 through HAZ-2 incorporated:

HAZ-1: All equipment will be maintained and operated to minimize spillage or leakage of hazardous materials. All equipment will be refueled in locations more than 100 feet from surface water bodies. Servicing of equipment will occur on an impermeable surface. In the event of a spill or leak, the contaminated soil will be stored, transported, and disposed of consistent with applicable local, state, and federal regulations.

HAZ-2: With the storage of hazardous materials equal to or greater than fifty-five (55) gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of compressed gas, a Hazardous Materials Inventory Disclosure Statement and Business Plan shall be submitted and maintained in compliance with requirements of Lake County Environmental Health Division. Industrial waste shall not be disposed of on site without review or permit from Lake County Environmental Health Division or the California Regional Water Quality Control Board. The permit holder shall comply with petroleum fuel storage tank regulations if fuel is to be stored on site.

b) The Project involves the use of fertilizers and pesticides which will be stored in a secure, stormproof structure. Flood risk at the Project site is minimal and according to Lake County GIS Portal data and the Project is not located in or near an identified earthquake fault zone. Fire hazard risks on the Project site range from moderate to very high.

The project site does not contain any identified areas of serpentine soils or ultramafic rock, and the risk of asbestos exposure during construction is minimal. The site preparation would require some construction equipment and would last for about two to four weeks. All equipment staging shall occur on previously disturbed areas on the site.

A spill kit would be kept on site in the unlikely event of a spill of hazardous materials. All equipment shall be maintained and operated in a manner that minimizes any spill or leak of hazardous materials. Hazardous materials and contaminated soil shall be stored, transported, and disposed of consistent with applicable local, state, and federal regulations.

Less than Significant Impact with Mitigation Measures HAZ-1 through HAZ-7 incorporated:

HAZ-3: Prior to operation, the applicant shall schedule an inspection with the Lake County Code Enforcement Division within the Community Development Department to verify adherence to all requirements of Chapter 13 of the Lake County Code, including but not limited to adherence with the Hazardous Vegetation requirements.

HAZ-4: Prior to operation, all employees shall have access to restrooms and hand-wash stations. The restrooms and hand wash stations shall meet all accessibility requirements.

HAZ-5: The proper storage of equipment, removal of litter and waste, and cutting of weeds or grass shall not constitute an attractant, breeding place, or harborage for pests.

HAZ-6: All food scraps, wrappers, food containers, cans, bottles, and other trash from the project area should be deposited in trash containers with an adequate lid or cover to contain trash. All food waste should be placed in a securely covered bin and removed from the site weekly to avoid attracting animals.

HAZ-7: The applicant shall maintain records of all hazardous or toxic materials used, including a Material Safety Data Sheet (MSDS) for all volatile organic compounds utilized, including cleaning materials. Said information shall be made available upon request and/or the ability to provide the Lake County Air Quality Management District with such information to complete an updated Air Toxic Emission Inventory.

c) There are no schools located within one-quarter mile of the proposed Project site. The nearest schools are Highlands Academy and Lower Lake High School, both located approximately 3.9 driving miles and approximately 2.5 air miles northwest of the project site. The Project is located within the Konocti Unified School District. Impacts would be less than significant, and no mitigation measures would be required.

No Impact

d) The California Environmental Protection Agency (CALEPA) has the responsibility for compiling information about sites that may contain hazardous materials, such as hazardous waste facilities, solid waste facilities where hazardous materials have been reported, leaking underground storage tanks and other sites where hazardous materials have been detected. Hazardous materials include all flammable, reactive, corrosive, or toxic substances that pose potential harm to the public or environment.

The following databases compiled pursuant to Government Code §65962.5 were checked for known hazardous materials contamination within ¼-mile of the project site:

- The SWRCB GeoTracker database
- The Department of Toxic Substances Control EnviroStor database
- The SWRCB list of solid waste disposal sites with waste constituents above hazardous waste levels outside the waste management unit.

The Project site is not listed in any of these databases as a site containing hazardous materials as described above.

No Impact

e) The Project site is located approximately 22 driving miles and 18 air miles from Lampson Field, administered by the Lake County Airport Land Use Commission, which has not adopted an Airport Land Use Compatibility Plan. In accordance with regional Airport Land Use Compatibility Plans, the site would not be located within an area of influence for the airport. Therefore, there will be no hazard for people working in the Project area from Lampson Field.

No Impact

f) Access to the Project site is from Cantwell Ranch Road, which is in compliance with California Public Resources Code §4290. The Project site does not contain any emergency facilities, nor does it serve as an emergency evacuation route or is located adjacent to an emergency evacuation route. An emergency turnaround for vehicles is included in the plans, located south of the proposed cultivation area near the existing residence.

During long-term operation, adequate access for emergency vehicles via Cantwell Ranch Road will be available. Furthermore, the Project would not result in a substantial alteration to the design or capacity of any public road that would impair or interfere with the implementation of evacuation procedures. Because the Project would not interfere with an adopted emergency response or evacuation plan, impacts are less than significant, and no mitigation measures are required.

Less than Significant Impact

g) The Project site sits in an area of moderate Fire Hazard Severity Zone. A turnaround for emergency vehicles is proposed west of the cultivation areas. Additionally, the proposed project proposes a California Public Resources Code §4290-compliant water tank dedicated to wildfire protection.

The applicant would adhere to all federal, state, and local fire requirements and regulations for setbacks and defensible space required for any new buildings that require a building permit. All proposed construction will comply with current State of California Building Code construction standards.

Less than Significant Impact

X. HYDROLOGY AND WATER QUALITY	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐	1, 2, 3, 5, 6, 29, 30, 41, 42, 49, 50
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☒	☐	☐	1, 2, 3, 5, 6, 29, 30, 41, 42, 49, 50

c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: i) Result in substantial erosion or siltation on-site or off-site; ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) Impede or redirect flood flows?	☐	☐	☒	☐	1, 2, 3, 5, 6, 7, 15, 18, 29, 32, 41, 49, 50
d)	In any flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐	1, 2, 3, 5, 6, 7, 9, 23, 32, 41
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☒	☐	☐	1, 2, 3, 5, 6, 29, 41, 42, 49, 50

Discussion:

a) Per the Project Materials, one Class II (seasonal) creek is located onsite, west of the cultivation area. Approximately four (4) ephemeral watercourses drain into this Class II stream in the northern, vegetated area of the property, and approximately three (3) ephemeral drainages flow southerly toward a stream crossing located near the property entrance gate. Per the CDFW Notification, four (4) stream crossings (STX) are located onsite.

Potential adverse impacts to water resources from the Proposed Project could occur during construction by modification or destruction of stream banks or riparian vegetation, or by increased erosion and sedimentation in receiving water bodies due to soil disturbance. Project implementation will not directly impact any channels or wetlands (no wetlands were identified onsite, per the BA). Soil disturbance from project implementation could increase erosion and sedimentation.

The County's Cannabis Ordinance requires that all cultivation operations be located at least 100-feet away from all waterbodies (i.e., spring, top of bank of any creek or seasonal stream, edge of lake, wetland or vernal pool). Additionally, cultivators who enroll in the State Water Board's Waste Discharge Requirements for Cannabis Cultivation Order WQ 2019-001-DWQ must comply with the Minimum Riparian Setbacks. Cannabis cultivators must comply with these setbacks for all land disturbances, cannabis cultivation activities, and facilities (e.g., material or vehicle storage, diesel powered pump locations, water storage areas, and chemical toilet placement).

The proposed Project is located on a flat area. No springs, lakes, delineated wetlands, or vernal pools are located onsite. The cultivation area is located greater than 150 feet from the Class II seasonal creek to the west, and greater than 150 feet from any Class III ephemeral watercourses. All areas proposed for cultivation use or development (e.g., existing barn) are located outside of applicable stream setbacks as described in Article

27.11 (at) subsection 2, and outside of all applicable state-required stream setbacks as described in the State Water Resources Control Board's Cannabis Policy.

The cultivation operation is enrolled in the State Water Resources Control Board's Order *WQ 2019-0001-DWQ General Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities* (General Order). The site has been assigned WDID Number 5S17CC429387 and is enrolled as a Tier 2, Low Risk discharger. Compliance with this Order will ensure that cultivation operations will not significantly impact water resources by using a combination of BPTC measures, buffer zones, sediment and erosion controls, inspections and reporting, and regulatory oversight. Note also that a sediment and erosion control plan is being implemented as part of the greater Site Management Plan.

As described above, the current Project site has been placed as far away as possible from waterbodies and in the flattest practical areas to reduce the potential for water pollution and erosion.

Less than significant impact

b) Due to the existing exceptional drought conditions, on July 27, 2021, the Lake County Board of Supervisors passed an Urgency Ordinance (Ordinance 3106) requiring land use applicants to provide enhanced water analysis during a declared drought emergency. A Hydrology Report was prepared for the Project by NorthPoint Consulting Group in April 2023. Ordinance 3106 require includes all projects that require a CEQA analysis of water use include the following items in a Hydrology Report prepared by a licensed professional experienced in water resources:
    - Approximate amount of water available for the project's identified water source,
    - Approximate recharge rate for the project's identified water source, and
    - Cumulative impact of water uses to surrounding areas due to the project

    <u>Water Demand and Irrigation</u>

    The Project's *Hydrology Report – Projected Water Demand* section discusses the proposed water budget for the Project and how it was calculated. Using a conservative estimate of 6.0 gallons per day (per the CalCannabis Environmental Impact Report [CDFA,2017]), the demand is 3,000 gallons per day per acre of canopy. The Property Management Plan for the Project states a higher demand of 6,970 gallons per day per acre during the flowering period, and 4,180 gallons per day per acre of canopy during the vegetative period. Assuming that 35% of the time cultivation is in flowering state, and that 65% of the time the cultivation is in vegetative state, the average daily demand per acre of canopy is 5,160 gallons per day. The applicant is proposing 0.93 acres of canopy area, which corresponds to approximately 4,800 gallons per day (3.3) GPM), with a maximum daily demand per day during the flowering period of 6,500 gallons per day (4.5 GPM). Assuming a 300-day outdoor cultivation season between February and November, as proposed by the applicant, this corresponds to a water demand of 4.4 acre-feet per year, or approximately 1,438,700 gallons annually.

    The irrigation water source is an existing groundwater well (Lat/Long: 38.88231, -122.58029). The well was drilled on January 31st, 2022, to a depth of 214 ft below ground surface (bgs) through 40 ft of soft topsoil and clays into interbeds of shale, clay, fractured basalt, and hard basalt with quartz. Water was noted in the geologic log at 84 and 168 ft

bgs, static water level was recorded at 16 feet bgs. The well casing was installed to a depth of 194 ft bgs with one 40 ft screened interval and three 20 ft screened intervals occurring between 24 and 184 ft bgs.

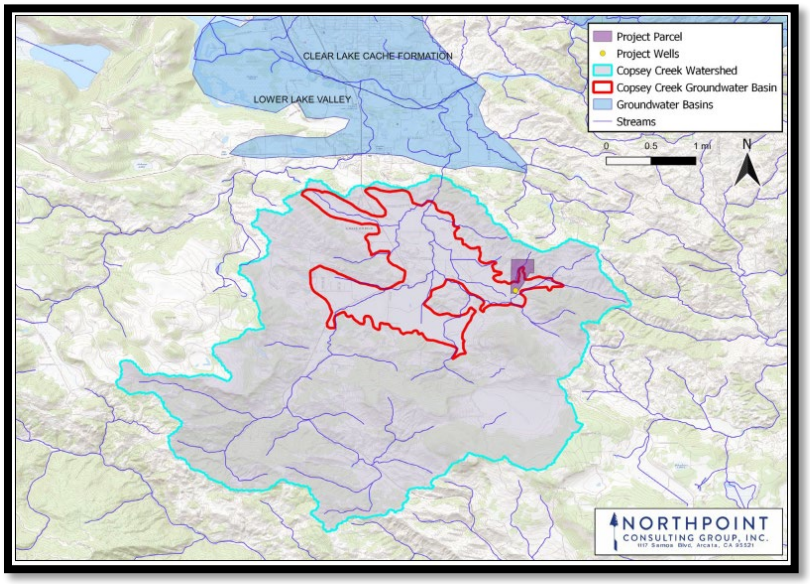
The well has a yield of 7 gpm, per a 6-hour well production test conducted by JAK Drilling & Pump on February 3rd, 2022. The initial pumping rate was 25 gpm, but it tapered down to 7 gpm where the water level stabilized. The static water level was 16-feet with a drawdown of 143-feet during the test (from 34 feet to 177 feet). The drawdown test results are included as part of the Hydrology Report.

Irrigation for the cultivation operation will use water supplied by the existing well and 5-HP pump. The irrigation water will be pumped from the well, via PVC piping, to ten (10), 5,000-gallon water storage tanks, totaling 50,000 gallons of water storage, and then delivered to a drip irrigation system in each of the greenhouses. The drip lines will be sized to irrigate the cultivation areas at a rate slow enough to maximize absorption and prevent runoff. Drip irrigation systems, when done properly, can conserve more water compared to other irrigation techniques.

Groundwater Basin Information and Hydrogeology

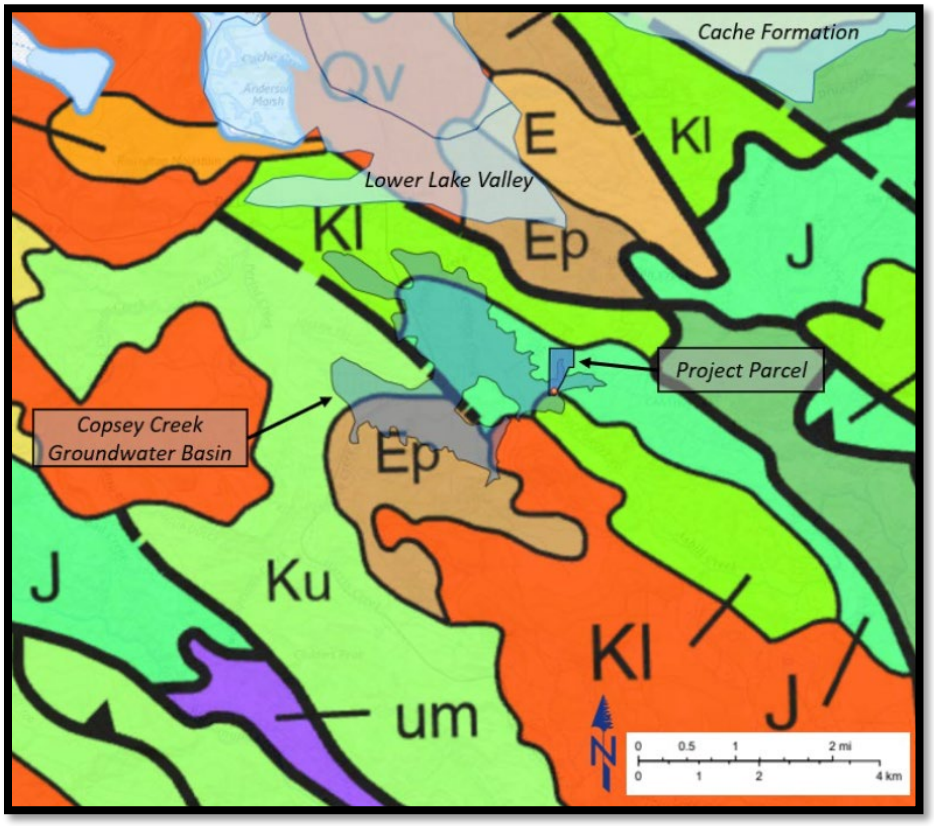
The irrigation well and cultivation area are located at the eastern edge of an alluvial valley within the Copsey Creek Watershed and Copsey Creek Groundwater Basin (Figure 11; Figure 12). This basin is not identified as a California Bulletin 118 Groundwater Basin, however USGS topographic mapping and Well Completion Reports in the area indicate the presence of an alluvial basin within the lower Copsey Creek Watershed (shown in red in Figure 11).

Figure 11: Project Parcel, Copsey Creek Watershed, Copsey Creek Groundwater Basin, and nearby Groundwater Basins



Source: Hydrology Report, NorthPoint Consulting Group, 2023

Figure 12: Geologic Map of California with the Copsey Creek Groundwater Basin and the project irrigation well



Source: Hydrology Report, NorthPoint Consulting Group, Inc., April 2023

Lower Lake Valley Groundwater Basin (#5-30), a basin recognized by the California Bulletin 118 Groundwater Basin, is the nearest mapped groundwater basin and is located approximately 1.75 miles away from the project site.

Neither of these basins have been identified by the California Department of Water Resources (DWR) as critically over-drafted basins. Critically over-drafted basins are defined by DWR as, “A basin subject to critical overdraft when continuation of present water management practices would probably result in significant adverse overdraft-related environmental, social, or economic impacts."

In addition, as part of the California Statewide Groundwater Elevation Monitoring (CASGEM) Program, DWR created the CASGEM Groundwater Basin Prioritization statewide ranking system to prioritize California groundwater basins in order to help identify, evaluate, and determine the need for additional groundwater level monitoring. California’s groundwater basins were classified into one of four categories: 1) high-priority; 2) medium-priority; 3) low-priority; or 4) very low-priority. The Copsey Creek Groundwater Basin (CCGB) is not identified or ranked by CASGEM. The Lower Lake Valley Groundwater Basin is ranked as a very low-priority basin by the CASGEM.

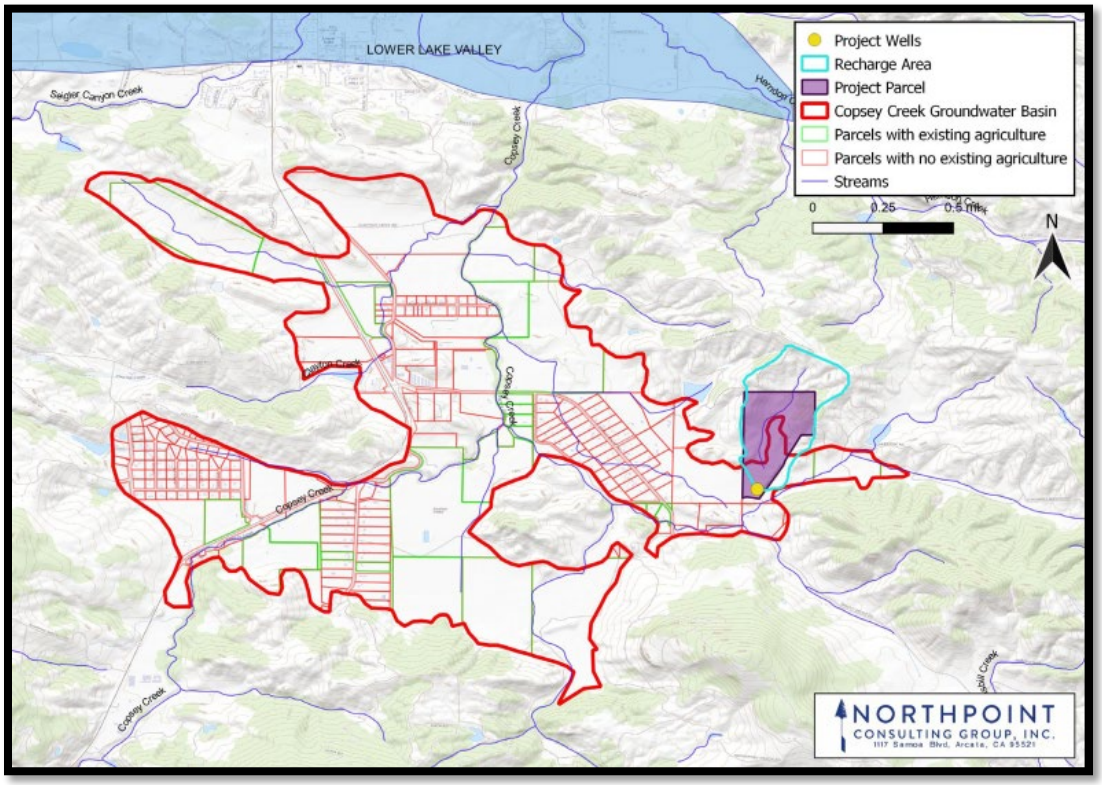
The Copsey Creek Groundwater Basin (CCGB) is located within the Copsey Creek Watershed, which drains northerly to Cache Creek, tributary to the Sacramento River. The

estimated alluvial area of the CCGB is approximately 1,630 acres (2.54 square miles), and consists of unconsolidated alluvium comprised of clay, silt, sand, and gravel deposits. The main sources of groundwater recharge are likely from infiltration of precipitation and streamflow percolation. Sixty (60) Well Completion Reports (WCRs) in the basin were reviewed in the Hydrology Report.

Copsey Creek Groundwater Basin Storage and Water Demand

The Hydrology Report estimates that the CCGB has a storage capacity of 2,600-acre feet, calculated by multiplying the volume of the aquifer by the specific yield of unconsolidated alluvial sediments. The volume of the aquifer was calculated by multiplying the aquifer area of 1,630 acres by the average aquifer thickness of 20 ft (taken to be the Average Depth of Alluvium of 37 ft BGS minus the Average Static Groundwater Depth of 17 ft BGS). The volume was then multiplied by the specific yield of 8% for unconsolidated alluvial sediments used for nearby alluvial groundwater basins.

Water demand in the CCGB, based on 276 parcels containing domestic and agricultural uses in the basin (Figure 13), was estimated at 1,109 acre-feet, or approximately 42.7% of the basin's storage capacity. This included approximately 1,025 AF/year for agriculture irrigation demand, and approximately 84 AF/year for domestic water use for 250 households. The Hydrology Report noted that this is likely a conservative estimate of water demand, because maximum water use assumptions were used to calculate water demand. Figure 13: Copsey Creek Groundwater Basin Parcels, Project Recharge Area



Source: Hydrology Report, NorthPoint Consulting Group, Inc., April 2023

Recharge Rate

The annual recharge can be estimated using a water balance equation, where recharge is equal to precipitation (P) less runoff (Q), and abstractions that do not contribute to infiltration (e.g., evapotranspiration). A simple tool that can be used to estimate runoff and abstractions, that uses readily available data, is the Natural Resources Conservation Service (NRCS) Curve Number (CN) Method (NRCS, 1986). Determination of the CN depends on the watershed's soil and cover conditions, cover type, treatment, and hydrologic condition. The CN Method runoff equation is:

$$Q = (P - I_a)^2 / (P - I_a) + S$$

Where:

Q = runoff (inches)
P = rainfall (inches)
S = potential maximum retention after runoff begins (inches)
I_a = initial abstraction (inches)

The initial abstraction (I_a) represents all losses before runoff begins, including initial infiltration, surface depression storage, evapotranspiration, and other factors. The initial abstraction is estimated as $I_a = 0.2S$. S is related to soil and cover conditions of the watershed through the CN, determined as S = 1000/CN -10. Using these relations, the runoff equation becomes:

$$Q = (P - 0.2S)^2 / (P + 0.8S)$$

The CN is estimated based on hydrologic soil group (HSG), cover type, condition, and land use over the area of recharge. The approximate recharge area around the site, which is the contributing area to the well, is approximately 84 acres (Figure 13). The recharge area soils are classified into four HSGs (A, B, C, and D) according to the soils ability to infiltrate water, where HSG-A has the highest infiltration potential and HSG-D has the lowest infiltration potential. HSGs are based on soil type and are determined from the NRCS Web Soil Survey. The recharge area is comprised of two HSGS: HSG C (18-acres or 21% of the recharge area) and HSG D (66 acres or 79% of the recharge area) and have cover types of a combination of Douglas Fir forest alliance and disturbed grassland. Thus, the weighted CN for the recharge area is 81.

The PRISM Climate Group gathers climate observations from a wide range of monitoring networks and provides time series values of precipitation for individual locations. Using the annual precipitation from 1895 to 2020, as predicted by PRISM, the annual average precipitation over this period is 30.2 inches and the minimum precipitation over this period is 6.0 inches.

Using the above information, and assuming that 100 percent of the initial abstraction is evapotranspiration (0.47 inches or 3.3 acre-feet per year [AFY]), the estimated annual recharge area of 84 acres is 17 AFY during an average year and 13 AFY during a dry year. All data is sourced from the Hydrology Report (NorthPoint Consulting Group, Inc., April 2023).

Recharge Area (acres)	P (inches)	CN	S (inches)	I_a (inches)	Q (inches)	Recharge (inches)	Recharge (AF)
84	6.0	81	2.35	0.47	3.9	1.9	**13**
84	30.2	81	2.35	0.47	27.6	2.4	**17**

Cumulative Impact to Surrounding Areas

Annual water demand of the proposed project could be up to 4.4 AFY. The project recharge area of 84 acres is only 0.8% of the recharge area of Copsey Creek Watershed, which is 10,500 acres. Estimated recharge over the project parcel is 17 AFY and 13 AFY during an average and dry year, respectively. The annual water demand of 4.4 AFY is only 25% of annual recharge during an average year and 33% of annual recharge during a drought year. Thus, there is sufficient recharge on an annual basis to meet the project's water demand, even during dry years.

The well pump test for the project irrigation well demonstrated a yield of 7 gpm for the duration of the 6-hour test. Without storage to temper the pump rate, the proposed project requires approximately 3.3 – 4.5 gpm to meet the project water demand. However, the project proposes 50,000 gallons or approximately 7-10 days of storage to meet irrigation demand. Thus, the project would not be required to pump consistently at 7 gpm to meet the Project's demand, minimizing the potential impact to the surrounding area and surrounding wells, which are over 175-feet away from the project well.

The estimated storage capacity of the basin is approximately 2,600 AF. The proposed project would utilize about 0.1% of the available storage capacity. Existing annual groundwater demand in the CCGB is approximately 1,109 AFY. Cumulatively, the estimated demand plus the proposed project's demand represents approximately 42.7% of the usable storage capacity of the CCGB. Thus, there is sufficient storage capacity to meet the proposed project's demand.

Although it appears there is sufficient groundwater recharge to meet the project's demand, the Hydrology Report recommended monitoring of water levels in the wells to ensure no impact to neighboring well capacity or groundwater. This is also required by the Lake County Zoning Ordinance. The purpose of the monitoring is to evaluate the functionality of the well to meet the long-term water demand of the proposed project and validate the annual recharge of the water-bearing formation.

Since there is sufficient estimated recharge to meet the project's demand during average and dry years; with the inclusion of 50,000 gallons of water storage, implementation of water conservation measures (refer to the project's PMP and DMP), and with required monitoring and reporting, the proposed project water use would not have a cumulative impact on the surrounding area.

Less Than Significant Impact with Mitigation Measures ~~HYD-2~~ HYD- 1 incorporated:

~~HYD-2~~ HYD-1: A Water Monitoring Program, including seasonal static water level monitoring and water level monitoring during extraction, shall be followed as described in

the Hydrology Report prepared by NorthPoint Consulting Group, Inc., in April of 2023. The applicant shall maintain a record of all data collected and shall provide a report of the data collected to the County annually and/or upon made upon request.

c) According to Lake County Ordinance Section 27.13 (at) 3, the Property Management Plan must have a section on Storm Water Management based on the requirements of the California Regional Water Quality Control Board Central Valley Region or the California Regional Water Quality Control Board North Coast Region, with the intent to protect the water quality of the surface water and the stormwater management systems managed by Lake County and to evaluate the impact on downstream property owners. All cultivation activities shall comply with the California State Water Board, the Central Valley Regional Water Quality Control Board, and the North Coast Region Water Quality Control Board orders, regulations, and procedures as appropriate.

The cultivation operation is enrolled in the State Water Resources Control Board's Order *WQ 2019-0001-DWQ General Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities* (General Order). Compliance with this Order will ensure that cultivation operations will not significantly impact water resources by using a combination of Best Management Practices, buffer zones, sediment and erosion controls, inspections and reporting, and regulatory oversight. A sediment and erosion control plan is also being implemented as part of the larger Site Management Plan.

According to the Storm Water Management Plan, the cultivation operations are not expected to alter the hydrology of the parcels significantly. Establishment of the cultivation operations will require minimal scraping, but they are located in areas partially cleared for past, non-Cannabis land uses (including a domestic yard and grading of small farm animals).

The fifteen (15) 30' x 100' greenhouses proposed for cannabis cultivation establishes a new 45,000 sq. ft. of impervious surface area onsite. No other significant new buildings or permeable surfaces are proposed that would alter onsite runoff. The Project site is 56.36 acres. Proposed new greenhouses total 1.03 acres of new impervious surface area, or 1.8% of the total subject parcel. As this is such a small fraction of the overall parcel area, onsite stormwater is not expected to be significantly impacted. In addition, greenhouse covers may be removed prior to the rainy season, allowing precipitation to naturally infiltrate.

In addition to significantly exceeding all setback requirements, generous vegetative buffers exist between the cultivation area and the nearest water resource. These vegetated areas will be preserved as much as possible, with the exception of any fire breaks needed for wildfire protection.

BPTC measures will be deployed in a sequence to follow the progress of site preparation, tilling, and cultivation. As the locations of soil disturbance change, erosion and sedimentation controls should be adjusted accordingly to control stormwater runoff at the downgrade perimeter and drain inlets. BPTCs to be implemented include monitoring weather to track conditions and alert crews to the onset of rainfall events, stabilizing disturbed soils with temporary erosion control or with permanent erosion control as soon as possible after grading or construction is completed, and establishing temporary or permanent erosion control measures prior to rain events. Typical BMPs include the

placement of straw, mulch, seeding, straw wattles, silt fencing, and planting of native vegetation on all disturbed areas to prevent erosion.

Due to the natural conditions of the Project site and with these erosion mitigation measures, the Project i) will not result in substantial erosion or siltation on-site or off-site; ii) will not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite; iii) will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; and iv) will not impede or redirect flood flows.

Less than Significant Impact

d) The Project site is not located in an area of potential inundation by seiche or tsunami. The Project site is not in a designated Flood Zone. While some soils on the parcel are susceptible to erosion, soils at the project site are relatively stable and flat, with a minimal potential to induce mudflows.

Less than Significant Impact

e) The Project has adopted a Drought Management Plan (DMP) as part of the requirements of Lake County Ordinance 3106, passed by the Board of Supervisors on July 27, 2021, which depicts how the applicant proposes to reduce water use during a declared drought emergency and ensures both the success and decreased impacts to surrounding areas. The Drought Management Plan was prepared by NorthPoint Consulting Group, Inc., in May 2022. The project also proposes water metering and conservation measures as part of the standard operating procedures, and these measures will be followed whether or not the region is in a drought emergency.

As part of the project's standard operational procedures, the project proposes to implement ongoing water monitoring and conservation measures that would reduce the overall use of water. These measures are included in the Water Use Management Plan (Section 15.2) as required by Article 27, Section 27.13 (at) 3 of the Lake County Zoning Ordinance. On-going water conservation measures include:

- No surface water diversion
- The selection of plant varieties that are suitable for the climate of the region
- The use of driplines and drip emitters rather than spray irrigation
- Covering drip lines with straw mulch or similar materials to reduce evaporation
- Using water application rates modified from data obtained from soil moisture meters and weather monitoring
- Utilizing shutoff valves on hoses and water pipes
- Daily visual inspections of irrigation systems
- Immediate repair of leaking or malfunctioning equipment
- Water-use metering and budgeting

In addition to water use metering, water level monitoring is also required by Lake County Zoning Ordinance Article 27 Section 27.11 (at) 3, specifically that wells must have a meter to measure the amount of water pumped as well as a water level monitor. Well water level

monitoring and reporting will be performed as follows, which has been incorporated as Mitigation Measure ~~HYD-2~~ HYD-1:

Seasonal Static Water Level Monitoring

The purpose of seasonal monitoring of the water level in a well is to provide information regarding long-term groundwater elevation trends. The water level in each well will be measured and recorded once in the Spring (March or April), before cultivation activities begin, and once in the fall (October) after cultivation is complete, as the California Statewide Groundwater Monitoring Program (CASGEM) monitors semi-annually, around April 15 and October 15 of each year. Records shall be kept, and elevations reported to the County as part of the project's annual reporting requirements. Reporting shall include a hydrograph plot of all seasonal water level measurements, for all project wells, beginning with the initial measurements. Seasonal water level trends will aid in the evaluation of the recharge rate of the well. If the water level in a well measured during the Spring remains relatively constant from year to year, then the water source is likely recharging each year.

Water Level Monitoring During Extraction

The purpose of monitoring the water level in a well during extraction is to evaluate the performance of the well and determine the effect of the pumping rate on the water source during each cultivation season. This information will be used to determine the capacity and yield of the Project's wells and to aid the cultivators in determining pump rates and the need for water storage. The frequency of water level monitoring will depend on the source, the source's capacity, and the pumping rate. It is recommended that initially the water level be monitored twice per week or more, and that the frequency be adjusted as needed depending on the impact that the pumping rate has on the well water level. Records will be kept and elevations reported to the County as part of the project's annual reporting requirements. Reporting will include a hydrograph plot of the water level measurements for all project wells during the cultivation season and compared to prior seasons.

Measuring a water level in a well can be difficult and the level of difficulty will depend on site-specific conditions. As part of the well monitoring program, the well owner or operator will work with a well expert to determine the appropriate methodology and equipment to measure the water level, as well as who will conduct the recording and monitoring of the well level data. The methodology of the well monitoring program will be described and provided in the project's annual report.

In addition to monitoring and reporting, an analysis of the water level monitoring data will be provided and included in the project's annual report, demonstrating whether or not use of the project wells is causing significant drawdown and/or impacts to the surrounding area and what measures can be taken to reduce their impacts. If there are impacts, a revised Water Management Plan will be prepared and submitted to the County for review and approval, which demonstrates how the project will mitigate the impacts in the future.

Drought Emergency Water Conservation Measures

In addition to the above on-going water monitoring and conservation measures, during times of drought emergencies or water scarcity the project may implement the following additional measures as needed or appropriate to the site to reduce water use and ensure both the success and decreased impacts to surrounding areas:

- Install moisture meters to monitor how much water is in the soil at the root level and reduce watering to only what is needed to avoid excess
- Cover the soil and drip-lines with removable plastic covers or similar to reduce evaporation
- Irrigate only in the early morning hours or before sunset
- Cover plants with shaded meshes during peak summer heat to reduce plant water needs
- Use a growing medium that retains water in a way to conserve water and aid plant growth. Organic soil ingredients like peat moss, coco coir, compost and other substances like perlite and vermiculite retain water and provide a good environment for cannabis to grow
- Install additional water storage

In the event that the well cannot supply the water needed for the project, the following measures may be taken:

- Reduce the amount of cultivation and/or length of cultivation season
- Install additional water storage
- If possible, develop an alternative, legal, water source that meets the requirements of Lake County Codes and Ordinances.

Less Than Significant Impact with Mitigation Measures HYD- 1 and HYD-2 ~~and HYD-3~~ incorporated:

HYD-2 ~~3~~: The applicant will adhere to the measures described in the Drought Management Plan during periods of a declared drought emergency.

XI. LAND USE PLANNING	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Physically divide an established community?	☐	☐	☐	☒	1, 2, 3, 4, 5, 6
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐	1, 3, 4, 5, 20, 21, 22, 27

Discussion:

a) The project site consists of 56 acres of land in the Lower Lake Planning Area. The closest community growth boundary accessible by road is Lower Lake, which is approximately 3.5 miles away.

The area is characterized by large parcels of rural, residentially developed land within some proximity to limited agricultural uses such as vineyards, orchards, cannabis projects, and small horse ranches. There are no established networks of horse or pedestrian trails on or around the project site.

The proposed project site would not physically divide any established community.

No Impact

b) The General Plan Land Use Zone and Zoning District designation currently assigned to the Project site is Agriculture (A) and Rural Lands (RL). The area proposed for cultivation is located in land zoned and designated RL. The Lake County Zoning Ordinance allows for commercial outdoor cannabis cultivation in the RL land use zone with a major use permit. No Scenic combining zones are designated onsite.

Less than Significant Impact.

XII. MINERAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒	1, 3, 4, 5, 26
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒	1, 3, 4, 5, 26

Discussion:

a) The Lake County Aggregate Resource Management Plan does not identify the portion of the Project parcel planned for cultivation as having an important source of aggregate resources. The California Department of Conservation describes the generalized rock type for the Project parcel as KJf: Marine sedimentary and metasedimentary rocks (Cretaceous-Jurassic) - Franciscan Complex: Cretaceous and Jurassic sandstone with smaller amounts of shale, chert, limestone, and conglomerate. Includes Franciscan melange, except where separated. Additionally, according to the California Department of Conservation, Mineral Land Classification, there are no known mineral resources on the project site, and thus no impact.

No Impact

b) According to the California Geological Survey's Aggregate Availability Map, the Project site is not within the vicinity of a site being used for aggregate production. In addition, the site not delineated on the County of Lake's General Plan, the Lower Lake Communities Area Plan nor the Lake County Aggregate Resource Management Plan as a mineral resource site. Therefore, the project has no potential to result in the loss of availability of a local mineral resource recovery site.

No Impact

XIII. NOISE	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐	1, 3, 4, 5, 13
b) Result in the generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐	1, 3, 4, 5, 13
c) Result in the generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☐	☒	1, 3, 4, 5, 11, 14, 15

Discussion:

a) Noise related to the cannabis cultivation typically occurs either during construction, or as the result of machinery related to post construction equipment such as well pumps or emergency backup generators during power outages. Emergency generators are not proposed as part of this project. Energy will be supplied by existing PG&E power.

This project will have some noise related to site preparation, and hours of construction are limited through standards described in the conditions of approval.

Although the property size and location will help to reduce any noise detectable at the property line, mitigation measures will still be implemented to further limit the potential sources of noise.

With regard the Lake County General Plan Chapter 8 - Noise, there are no sensitive noise receptors within one (1) mile of the project site, and Community Noise Equivalent Levels (CNEL) are not expected to exceed the 55 dBA during daytime hours (7am – 10pm) or 45 dBA during night hours (10pm – 7am) when measured at the property line.

Less than Significant Impact with Mitigation Measures NOI-1 and NOI-2 incorporated:

NOI-1: All construction activities including engine warm-up shall be limited Monday Through Friday, between the hours of 7:00am and 7:00pm, and Saturdays from 12:00 noon to 5:00 pm to minimize noise impacts on nearby residents. Back-up beepers shall be adjusted to the lowest allowable levels. This mitigation does not apply to night work.

NOI-2: Maximum non-construction related sounds levels shall not exceed levels of 55 dBA between the hours of 7:00AM to 10:00PM and 45 dBA between the hours of 10:00PM to 7:00AM within residential areas as specified within Zoning Ordinance Section 21-41.11 (Table 11.1) at the property lines.

b) Under existing conditions, there are no known sources of ground-borne vibration or noise that affect the Project site such as railroad lines or truck routes. Therefore, the Project would not create any exposure to substantial ground-borne vibration or noise.

The Project would not generate ground-borne vibration or noise, except potentially during the construction phase from the use of heavy construction equipment. There will be some scraping and hole-digging required for greenhouse construction, however, grading is not proposed. All greenhouses will be placed on the existing flat slope. This ground disturbance is not expected to generate ground-borne vibration or noise levels. According to California Department of Transportation's Transportation and Construction-Induced Vibration Guidance Manual, ground-borne vibration from heavy construction equipment does not create vibration amplitudes that could cause structural damage, when measured at a distance of 10 feet. The nearest existing off-site residence is located approximately 700 feet south of the proposed development area and would not be exposed to substantial ground-borne vibration due to the operation of heavy construction equipment on the Project site.

Furthermore, the Project is not expected to employ any rock blasting or rock crushing equipment during construction activities, which are the primary sources of ground-borne noise and vibration during construction. As such, impacts from ground-borne vibration and noise during near-term construction would be less than significant.

Less Than Significant Impact

c) The Project site is located approximately 18 miles from Lampson Field, administered by the Lake County Airport Land Use Commission, which has not adopted an Airport Land Use Compatibility Plan. Therefore, no impact is anticipated.

No Impact

XIV. POPULATION AND HOUSING	Potentially Significant Impact	Less Than Significant With Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒	1, 3, 4, 5
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1, 3, 4, 5

Discussion:

a) The Project is not anticipated to induce significant population growth to the area. The increased employment will be approximately two (2) full-time and up to five (5) seasonal employees to be hired locally.

No Impact

b) The Project site contains a single-family dwelling. No impacts are proposed to this dwelling. No additional housing proposed, and no existing housing will be displaced, thus no impact is expected.

No Impact

XV. PUBLIC SERVICES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: 1) Fire Protection? 2) Police Protection? 3) Schools? 4) Parks? 5) Other Public Facilities?	☐	☐	☒	☐	1, 2, 3, 4, 5, 20, 21, 22, 23, 27, 28, 29, 32, 33, 34, 36, 37

Discussion:

1) Fire Protection
   The Lake County Fire Protection District provides fire protection services to the proposed Project area. The proposed Project would be served by the Lake County Fire Protection District station in Lower Lake, located approximately 3 miles from the Project. of the proposed Project would impact fire protection services by increasing the demand on existing County Fire District resources. To offset the increased demand for fire protection services, the proposed Project would be conditioned by the County to provide a minimum of fire safety and support fire suppression activities and installations, including compliance with State and local fire codes, as well as minimum private water supply reserves for emergency fire use. With these measures in place, the project would have a less than significant impact on fire protection.

2) Police Protection
   The Project site falls under the jurisdiction of the Lake County Sheriff's Department and is in a remote area not easily reached by law enforcement the event of an emergency. Article 27 of the Lake County Zoning Ordinance lays out specific guidelines for security measures for commercial cannabis cultivation to prevent access of the site by unauthorized personnel and protect the physical safety of employees. This includes 1) establishing a physical barrier to secure the perimeter access and all points of entry; 2) installing a security alarm system to notify and record incident(s) where physical barriers have been breached; 3) establishing an identification and sign-in/sign-out procedure for authorized personnel, suppliers, and/or visitors; 4) maintaining the premises such that visibility and security monitoring of the premises is possible; and 5) establishing procedures for the investigation of suspicious activities. Accidents or crime emergency incidents during operation are expected to be infrequent and minor in nature, and with these measures the impact is expected to be less than significant.

3) Schools
   The proposed Project is not expected to significantly increase the population in the local area and would not place greater demand on the existing public school system by generating additional students. No impacts are expected.

4) Parks
   The proposed Project will not increase the use of existing public park facilities and would not require the modification of existing parks or modification of new park facilities offsite. No impacts are expected.

5) Other Public Facilities
   As the owners and operators currently reside in Lake County, and the staff will be hired locally, and no impacts are expected.

   Less than Significant Impact

XVI. RECREATION	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒	1, 2, 3, 4, 5
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒	1, 3, 4, 5

Discussion:

a) As the owners and operators currently reside in Lake County, and the small staff will be hired locally, there will be no increase in the use of existing neighborhood and regional parks or other recreational facilities and no impacts are expected.

No Impact

b) The proposed Project does not include any recreational facilities and will not require the construction or expansion of existing recreational facilities, and no impacts are expected.

No Impact

XVII. TRANSPORTATION	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐	1, 3, 4, 5, 9, 20, 22, 27, 28, 35
b) For a land use project, would the project conflict with or be inconsistent with CEQA guidelines section 15064.3, subdivision (b)(1)?	☐	☐	☒	☐	1, 3, 4, 5, 9, 20, 22, 27, 28, 35
c) For a transportation project, would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(2)?	☐	☐	☐	☒	1, 3, 4, 5, 9, 20, 22, 27, 28, 35

d)	Substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒	1, 3, 4, 5, 9, 20, 22, 27, 28, 35
e)	Result in inadequate emergency access?	☐	☐	☒	☐	1, 3, 4, 5, 9, 20, 22, 27, 28, 35, 38

Discussion:

a) Roadway Analysis

The proposed Canna Factory LLC Project is located at 17900 Cantwell Road (APN 049-290-01), approximately 2.3 miles southeast of Lower Lake, CA. The site is accessed from a gravel interior driveway which is accessed from Cantwell Ranch Road. Cantwell Ranch Road is a gravel road maintained by the County of Lake. The access road is approximately 15-20 feet wide, meeting California Public Resource Code 4290 (PRC 4290) road standards for fire equipment access, including a Cal fire turnaround for emergency vehicles.

The proposed Project does not conflict with any existing program plan, ordinance or policy addressing roadway circulation, including the Lake County General Plan Chapter 6 – Transportation and Circulation, and a less than significant impact on road maintenance is expected.

Transit Analysis

The Lake County Transit Authority Route 3 – Highway 29 – Clearlake to Deer Park, runs along Highway 29, with a transit stop in Lower Lake at Highway 53 and Highway 29 intersection, approximately 3 miles from the Project Site. There is no direct stop located at the intersection of Highway 29 and Spruce Grove Road, however it is conceivable that employees could use public transportation to get to that point and then walk or bike the additional 1.75 miles to the site. Regardless, the proposed Project would not conflict existing transit patterns or with any existing program plan, ordinance or policy addressing transit issues, including Chapter 6 of the General Plan.

Bicycle Lane and Pedestrian Path Analysis

The proposed Project does not conflict with any existing program plan, ordinance or policy addressing bicycle and/or pedestrian issues, including Chapter 6 of the General Plan.

Less than Significant Impact

b) State CEQA Guidelines Section 15064.3, Subdivision (b) states that for land use projects, transportation impacts are to be measured by evaluating the proposed Project's vehicle miles traveled (VMT), as follows:

"*Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact*."

To date, the County has not yet formally adopted its transportation significance thresholds or its transportation impact analysis procedures. As a result, the project-related VMT impacts were assessed based on guidelines described by the California Office of Planning and Research (OPR) in the publication *Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory*, 2018. The OPR Technical Advisory identifies several criteria that may be used to identify certain types of projects that are unlikely to have a significant VMT impact and can be "screened" from further analysis. One of these screening criteria pertains to small projects, which OPR defines as those generating fewer than 110 new vehicle trips per day on average. OPR specifies that VMT should be based on a typical weekday and averaged over the course of the year to take into consideration seasonal fluctuations.

The estimated trips per day for the proposed Project are between 7 to 11 during both construction and operation, based on between three (3) to five (5) employees (comprising 6 to 10 trips daily) and an average of two (2) weekly truck trips, or a conservative estimate of an additional trip per day. Therefore, the daily trips generated by the proposed project, even during peak seasonal events, are less than OPR's threshold and would not have a significant impact on VMT.

The applicants will be operating under an A-Type 13 Cannabis Distributor Transport Only, Self-distribution License. In the "RL" and "A" zoning districts the Type 13 Distributor Only, Self-distribution State licenses are an accessory use to an active cannabis cultivation or cannabis manufacturing license site with a valid minor or major use permit. The parcel where the Type 13 license will is located, as required by Article 27.11, shall front and have direct access to a State or County maintained road or an access easement to such a road, the permittee shall not transport any cannabis product that was not cultivated by the permittee, and all non-transport related distribution activities shall occur within a locked structure.

The proposed Project would not generate or attract more than 110 trips per day, and therefore it is not expected for the Project to have a potentially significant level of VMT. Impacts related to CEQA Guidelines section 15064.3. subdivision (b) would be less than significant.

Less than Significant Impact

c) The Project is not a transportation project. The proposed use will not conflict with and/or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)(2).

No Impact

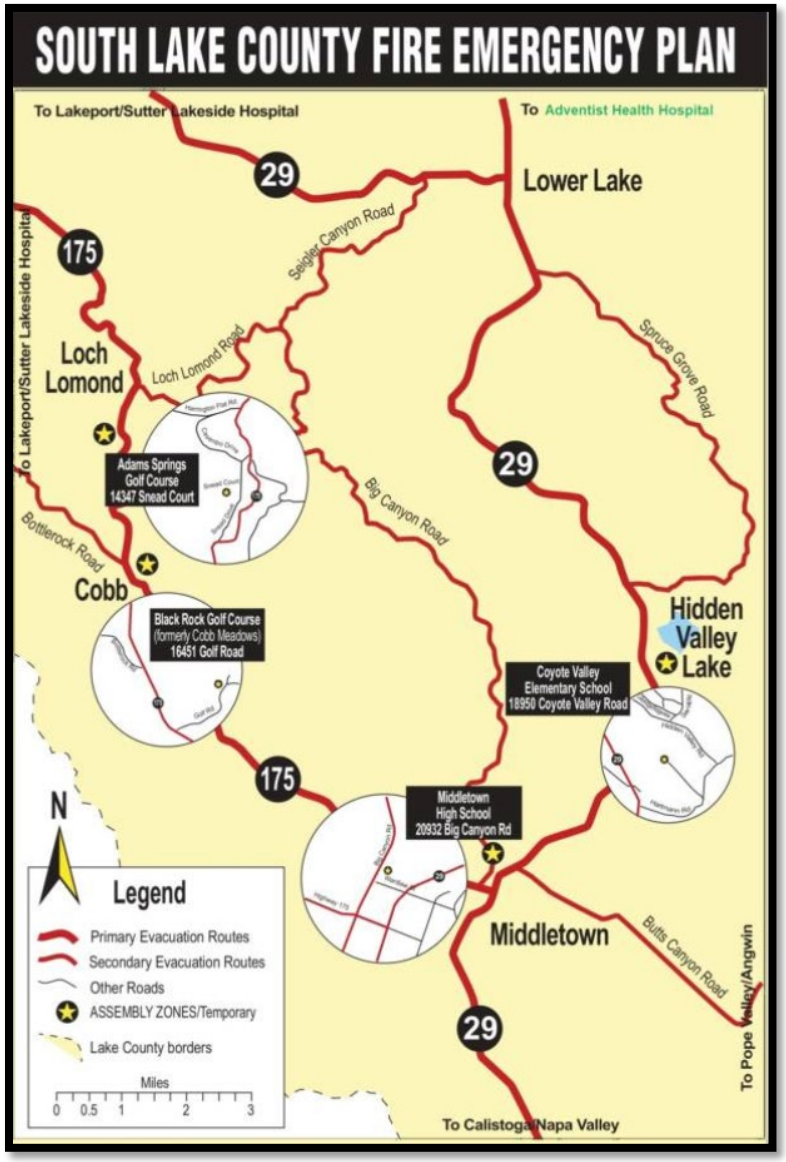
d) The Project does not propose any changes to road alignment or other features, does not result in the introduction of any obstacles, nor does it involve incompatible uses that could increase traffic hazards. A turnaround for emergency vehicles is located onsite, per the Site Maps submitted by the applicant, allowing for adequate emergency vehicle access. Equipment used in cultivation will be transported to the Project site as needed and will not need to be operated on Cantwell Ranch Road.

No Impact

e) The proposed Project would not alter the physical configuration of the existing roadway network serving the area and will have no effect on access to local streets or adjacent uses (including access for emergency vehicles). Internal gates and roadways will meet CALFIRE requirements for vehicle access according to PRC §4290, including adequate width requirements. Furthermore, as noted above under impact discussion (a), increased project-related operational traffic would be minimal.

Lake County has a Fire Emergency Plan that includes Spruce Grove Road, the access road to Cantwell Ranch Road, as a designated secondary evacuation route (Figure 14). The Project would employ up to five (5) people during peak seasonal events, which is unlikely to significantly contribute to a safe evacuation during an emergency on Spruce Grove Road. The proposed Project would not inhibit the ability of local roadways to continue to accommodate emergency response and evacuation activities.

Figure 14: South Lake County Emergency Fire Plan



Source: Lake County Fire Safe Council, 2023

In addition, Lake County Sherriff's Department and the Office of Emergency Services has developed a Strategic Plan for the years 2022 – 2025 to increase Lake County's resilience to disaster. The Proposed Project would not interfere with this plan or any other adopted emergency response plans or evacuation plans.

Less than Significant Impact

XVIII. TRIBAL CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☒	☐	☐	1, 3, 4, 5, 11, 14, 15
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the +resource to a California Native American tribe?	☐	☒	☐	☐	1, 3, 4, 5, 11, 14, 15

Discussion:

a) A Cultural Resources Evaluation (CRE) for the proposed cultivation Project was completed by Dr. John Parker of Wolf Creek Archaeology to identify potentially significant cultural resources onsite. The CRE is dated May 6th, 2021. As part of the CRE, a site inspection was conducted on April 14th, 2021. The field survey conducted for the CRE did not find any artifacts necessary to be considered "significant" cultural resources for the purposes of CEQA.

   A request was sent to the California Native American Heritage Commission (NAHC) on April 29th, 2021, for a review of the Sacred Lands File (SLF) concerning the project area. NAHC returned the results of the SLF search on May 4th, 2021. The SLF search from NAHC returned negative results for Native American cultural resources within the Project vicinity. In addition, the archaeologist sent an e-mail to the Middletown Rancheria Tribe requesting any information they might have concerning cultural resources in the Project Area. As of the date of the CRE, no response has been received.

~~As part of the referral process, Lake County sent a referral request to the California Historic Resources Information System (CHRIS) on February 23, 2023. The CHRIS results were returned on March 9th and indicated that no studies other than the CRE prepared for this Project had been completed in the area. The CHRIS recommendations concluded that the proposed project area has a "low" possibility of containing unrecorded archaeological sites.~~ The CRE did not contain further recommendations other than contacting local Native American tribe(s).

Notification of the Project was sent to local tribes, including Middletown Rancheria, as part of the referral process on February 23, 2023. The Director of Cultural Resources for the Habematolel Pomo of Upper Lake responded with a letter dated March 15, 2023, and concluded that the Project is not within their territory. No further comments or concerns have been received from local tribes regarding this Project to date.

Based on the negative findings of the CHRIS search, field survey, and outreach efforts with local tribes, there is no indication that the Project will impact any historical or archaeological resources as defined under CEQA Section 15064.5 or tribal cultural resources as defined under Public Resources Code Section 21074. It is possible, but unlikely, that significant artifacts or human remains could be discovered during Project construction. If, however, significant artifacts or human remains of any type are encountered it is recommended that the Project sponsor contact the culturally affiliated tribe and a qualified archaeologist to assess the situation. The Sheriff's Department must also be contacted if any human remains are encountered.

~~In response to the Cultural Resources Report and the California Historical Resources Information System records search, both of which indicate no presence of tribal cultural resources on the Project site, the lead agency has determined that, in its discretion and supported by substantial evidence, no resources pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1 will be affected by the proposed Project.~~ With mitigation measures CUL-1 and CUL-2, the impact will be less than significant.

Less than Significant Impact with Mitigation Measures CUL-1 and CUL-2

b) In response to the Cultural Resources Report and the California Historical Resources Information System records search, both of which indicate no presence of tribal cultural resources on the Project site, the lead agency has determined that, in its discretion and supported by substantial evidence, no known resources pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1 will be affected by the proposed Project. However, based on the rich tribal cultural history of Lake County and the Project site's proximity to water resources or other areas where culturally-affiliated tribes were known to gather, mitigation measures related to unanticipated discoveries are suggested. With mitigation measures CUL-1 and CUL-2 and TCR-1 and TCR-2, impacts would be less than significant.

Less than Significant Impact with Mitigation Measures CUL-1 through CUL-2 and TCR-1 through TCR-2

TCR-1: All on-site personnel of the project shall receive tribal cultural resource sensitivity training prior to initiation of ground disturbance activities on the project. The training must be according to the standards of the NAHC or the culturally affiliated Tribe(s). Training will address the potential for exposing subsurface resources and procedures if a potential resource is identified. The training will also provide a process for notification of discoveries to culturally affiliated Tribes, protection, treatment, care and handling of tribal cultural resources discovered or disturbed during ground disturbance activities of the Project. Tribal monitors will be required to participate

in any necessary environmental and/or safety awareness training prior to engaging in any tribal monitoring activities for the project.

TCR-2: If previously unidentified tribal cultural resources are encountered during the project altering the materials and their stratigraphic context shall be avoided and work shall halt immediately. Project personnel shall not collect, move, or disturb cultural resources. A representative from a locally affiliated Tribe(s) shall be contacted to evaluate the resource and prepare a Tribal Cultural Resources plan to allow for identification and further evaluation in determining the tribal cultural resource significance and appropriate treatment or disposition.

XIX. UTILITIES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐	1, 3, 4, 5, 29, 32, 33, 34, 37
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☒	☐	☐	1, 2, 3, 5, 6, 22, 31, 49, 50
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐	1, 2, 3, 5, 6, 22
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐	1, 2, 3, 5, 6, 35, 36
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐	1, 2, 3, 5, 6, 35

Discussion:

a) The proposed Project will be served by an existing onsite irrigation well, PG&E, solar energy systems, and portable restrooms for all project-related energy, wastewater, and water demands. Septic is proposed to be served by an ADA-compliant portable toilet and handwashing station on the Project site.

No expansion of utilities, including the PG&E service or additional wells, are proposed. No new onsite wastewater systems are proposed. Therefore, the Project will not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Less than Significant Impact

b) The subject parcel is served by an existing well as described in the Hydrology Study and Drought Management Plan submitted with the Use Permit application, and the cultivation operation is enrolled as a Tier II / Low Risk cultivation operation in the State Water Resources Control Board's *Order WQ 2019-0001-DWQ General Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities* (General Order). Compliance with this Order will ensure that cultivation operations will not significantly impact water resources by using a combination of BPTC measures for water conservation, including shut-off valves on water tanks, drip irrigation, continued maintenance of equipment, in addition to buffer zones, sediment and erosion controls, inspections and reporting, and regulatory oversight.

Less than Significant Impact with Mitigation Measures HYD-1 through HYD-4 implemented.

c) The Project was referred to the Lake County Division of Environmental Health on February 23, 2023. To date, no response has been received. Typically for Lake County cannabis projects, the use of portable toilets and hand washing station for cultivation operations is acceptable. Per the applicant's Property Management Plan, the onsite portable toilet will be serviced bi-monthly or as needed by a licensed service provider.

Less than Significant Impact

d) The existing landfill has sufficient capacity to accommodate the project's solid waste disposal needs.

According to the *Property Management Plan – Waste Management* at least one waste bin will be located within the fenced-in area of the cultivation site and one adjacent to the garage. Waste bins will consist of trash cans (20 or 35 gallon) with lids or roll-off dumpsters with lids. Recyclables will be separated from solid waste and stored in bins. At bi-monthly intervals, or as needed, staff will transfer them by truck in trash cans, with tight lids or plastic garbage bags and tarped loads and deposit them in an appropriate recycling facility. Yard waste, green waste, and other compostable materials, estimated at approximately 10 cubic yards per year, will be separated from solid waste and composted onsite in the designated 25' x 28' compost area located southwest of the cultivation area.

Eastlake Landfill, South Lake Refuse Center, and Quackenbush Mountain Resource Recovery and Compost Facility are located within reasonable proximity of the Project site. Lake County Waste Solutions Transfer Station and Recycling Center is located approximately 23 miles northwest of the subject parcel. As of 2019, the Eastlake Landfill had 659,200 cubic yards available for solid waste, with an additional 481,000 cubic yards approved in 2020.

The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure.

Less than Significant

e) The project will be in compliance with federal, state, and local management and reduction statutes and regulations related to solid waste.

Less than Significant

XX. WILDFIRE	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐	1, 2, 3, 4, 5, 6, 23, 25, 28, 29, 37, 38
b) Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐	1, 2, 3, 5, 6, 23, 25, 28, 29, 37, 38
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☒	☐	☐	1, 2, 3, 5, 6, 37, 38
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☒	☐	☐	1, 2, 3, 5, 6, 21, 23, 32, 37, 38

Discussion:

a) The project is located within a State Responsibility Area per Cal FIRE, and is designated as having a “moderate” Fire Hazard Severity Zone. As described above in XVIIe), above, the Project would not impede or conflict with an existing emergency access or evacuation plan. The applicant will adhere to all regulation of California Code Regulations Title 14, Division 1.5, Chapter 7, Subchapter 2, and Article 1 through 5 shall apply to this project; and all regulations of California Building Code, Chapter 7A, Section 701A, 701A.3.2.A.

The Project was referred to Lake County Building Division staff, CalFire Staff, and local fire department staff on February 23, 2023. Lake County Building Division staff replied that the Project is required to conform with PRC §4290 and §4291 standards.

Less than Significant

b) The Project site is identified as a “Moderate” Fire Hazard Severity Zone and is located within a Wildland Fire Hazard Area, as is the majority of Lake County (Lake County Parcel Viewer, 2023). The Project site and access to the project site is relatively flat. The cultivation area is an existing field/yard, and development of it does not further exacerbate the risk of wildfire, or the overall effect of pollutant concentrations on area residents in the event of a wildfire. The Project would improve fire access and the ability to fight fires at or from the Project site and other sites accessed from the same roads through the upkeep of the property area and the installation of a PRC §4290-compliant water tank, in addition to the proposed water tanks.

Less than Significant Impact

c) The proposed Project, as described in the application documents and confirmed through site visits to the property, would not exacerbate fire risk through the installation of maintenance of associated infrastructure. The proposed Project will require maintenance to meet and/or maintain roadway and driveway standards. A steel or fiberglass fire suppression water tank will be located at the cultivation site.

Less than Significant Impact with Mitigation Measure WDF-1:

WDF-1: Construction activities will not take place during a red flag warning (per the local fire department and/or national weather service) and wind, temperature and relative humidity will be monitored in order to minimize the risk of wildfire. Scraping would not occur on windy days that could increase the risk of wildfire spread should the equipment create a spark.

d) There is little chance of increased risks associated with post-fire slope runoff, instability, or drainage changes based on the lack of site changes that would occur by the Project parcel.

The Project site, along with much of the parcel, burned in 2018 in the Mendocino Complex fire, and the stability of the soil on the relatively flat sections where the Project parcel is located. Steeper sections of the parcel are heavily vegetated and remain stable. The erosion mitigation measures and BMPs to be implemented will provide further stability on and around the Project site, and with no neighboring people or structures within range of downstream flooding or landslides, the impact will be less than significant impact with mitigation measure WDF-2 implemented.

Less than Significant Impact with Mitigation Measures WDF-2:

WDF-2: Any vegetation removal or manipulation will take place in the early morning hours before relative humidity drops below 30 percent.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐	ALL
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐	ALL
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐	ALL

Discussion:

a) According to the biological and cultural studies conducted, the Canna Factory cannabis cultivation project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory when mitigation measures are implemented.

All setbacks for watercourses will exceed local, state, and federal regulations to prevent significant impacts on water quality. With the implementation of mitigation measures described in the biological assessment and the Best Management Practices and other mitigation measures described throughout this initial study, the potential impact on important biological resources will be reduced to less than significant.

Less than significant with AES-1 through AES-4; AQ-1 through AQ-7; BIO-1 through BIO-~~32~~; CUL-1 through CUL-2; GEO-1 through ~~GEO-7~~ GEO-8; HAZ-1 through HAZ-7; HYD-1 through HYD-2; NOI-1 through NOI-2; TCR-1 through TCR-2; WDF-1 through WDF-2

b) Potentially significant impacts have been identified related to Aesthetics, Air Quality, Biological Resources, Cultural and Tribal Resources, Geology and Soils, Hazardous Material, Hydrology, Noise, and Wildfire. These impacts in combination with the impacts of other past, present, and reasonably foreseeable future projects could cumulatively contribute to significant effects on the environment. Of particular concern would be the cumulative effects on hydrology and water resources.

To address this issue, the Lake County Board of Supervisors adopted Ordinance 3106 on July 27, 2021, requiring the applicant to submit a Hydrological Study and Drought Management Plan. Upon review of the Hydrological Study and Drought Management Plan, along with the implementation of hydrological mitigation measures, the Project is expected to have a less than significant cumulative impact.

Implementation of and compliance with mitigation measures identified in each section as project conditions of approval would avoid or reduce potential impacts to less than significant levels and would not result in any cumulatively considerable environmental impacts.

Less than significant with AES-1 through AES-4; AQ-1 through AQ-7; BIO-1 through BIO-~~32~~; CUL-1 through CUL-2; GEO-1 through ~~GEO-7~~ GEO-8; HAZ-1 through HAZ-7; HYD-1 through HYD-2; NOI-1 through NOI-2; TCR-1 through TCR-2; WDF-1 through WDF-2

c) The proposed project has the potential to result in adverse indirect or direct effects on human beings. In particular, Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazardous Material, Hydrology, Noise, Tribal Cultural Resources, and Wildfire have the potential to impact human beings. Implementation of and compliance with mitigation measures identified in each section as conditions of approval would not result in substantial adverse indirect or direct effects on human beings and impacts would be considered less than significant.

Less than significant with AES-1 through AES-4; AQ-1 through AQ-7; BIO-1 through BIO-~~32~~; CUL-1 through CUL-2; GEO-1 through ~~GEO-7~~ GEO-8; HAZ-1 through HAZ-7; HYD-1 through HYD-2; NOI-1 through NOI-2; TCR-1 and TCR-2; WDF-1 through WDF-2

Impact Categories defined by CEQA

Source List

1. Lake County General Plan
2. Lake County GIS Database / Lake County Parcel Viewer
3. Lake County Zoning Ordinance
4. Lower Lake Area Plan
5. Canna Factory Cannabis Cultivation Application – Major Use Permit.
6. U.S.G.S. Topographic Maps
7. U.S.D.A. Lake County Soil Survey
8. Lake County Important Farmland Map, California Department of Conservation Farmland Mapping and Monitoring Program
9. Department of Transportation's Scenic Highway Mapping Program, *(*https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways)
10. Lake County Serpentine Soil Mapping
11. California Natural Diversity Database (https://wildlife.ca.gov/Data/CNDDB)
12. U.S. Fish and Wildlife Service National Wetlands Inventory
13. Biological Resources Assessment, RHYZL, March 27, 2021
14. Cultural Resources Assessment for a portion of APN 049-290-01, prepared by Dr. John Parker of Wolf Creek Archeology, May 6th, 2021.
15. California Historical Resource Information Systems (CHRIS); Northwest Information Center, Sonoma State University; Rohnert Park, CA.

16. Water Resources Division, Lake County Department of Public Works Wetlands Mapping.
17. U.S.G.S. Geologic Map and Structure Sections of the Clear Lake Volcanic, Northern California, Miscellaneous Investigation Series, 1995
18. Official Alquist-Priolo Earthquake Fault Zone maps for Lake County
19. Landslide Hazards in the Eastern Clear Lake Area, Lake County, California, Landslide Hazard Identification Map No. 16, California Department of Conservation, Division of Mines and Geology, DMG Open –File Report 89-27, 1990
20. Lake County Emergency Management Plan
21. Lake County Hazardous Waste Management Plan, adopted 1989
22. Lake County Airport Land Use Compatibility Plan, adopted 1992
23. California Department of Forestry and Fire Protection - Fire Hazard Mapping
24. National Pollution Discharge Elimination System (NPDES)
25. FEMA Flood Hazard Maps
26. Lake County Aggregate Resource Management Plan
27. Lake County Bicycle Plan
28. Lake County Transit for Bus Routes
29. Lake County Environmental Health Division
30. Lake County Grading Ordinance
31. Lake County Natural Hazard database
32. Lake County Countywide Integrated Waste Management Plan and Siting Element, 1996
33. Lake County Water Resources
34. Lake County Waste Management Department
35. California Department of Transportation (Caltrans)
36. Lake County Air Quality Management District website
37. Lake County Volunteer Fire Protection District
38. Lake County Evacuation Mapping – Office of Emergency Services
39. United States Department of Agriculture – Natural Resources Conservation Service Web Soil Survey
40. Hazardous Waste and Substances Sites List,
41. State Water Resources Control Board (SWRCB) Cannabis Policy and General Order
42. Lake County Groundwater Management Plan, March 31st, 2006.
43. Lake County Rules and Regulations (LCF) for On-Site Sewage Disposal
44. Lake County Municipal Code: Sanitary Disposal of Sewage (Chapter 9: Health and Sanitation, Article III)
45. Google Earth, 2023
46. Department of Cannabis Control Regulations
47. Assembly Bill 32 Climate Change Scoping Plan – California Air Resources Board
48. Assembly Bill 1346 – Small Off-Road Engines and Equipment
49. Hydrology Report – NorthPoint Consulting Group, Inc. 2023
50. Drought Management Plan – NorthPoint Consulting Group, Inc. 2022