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

July 26, 2023

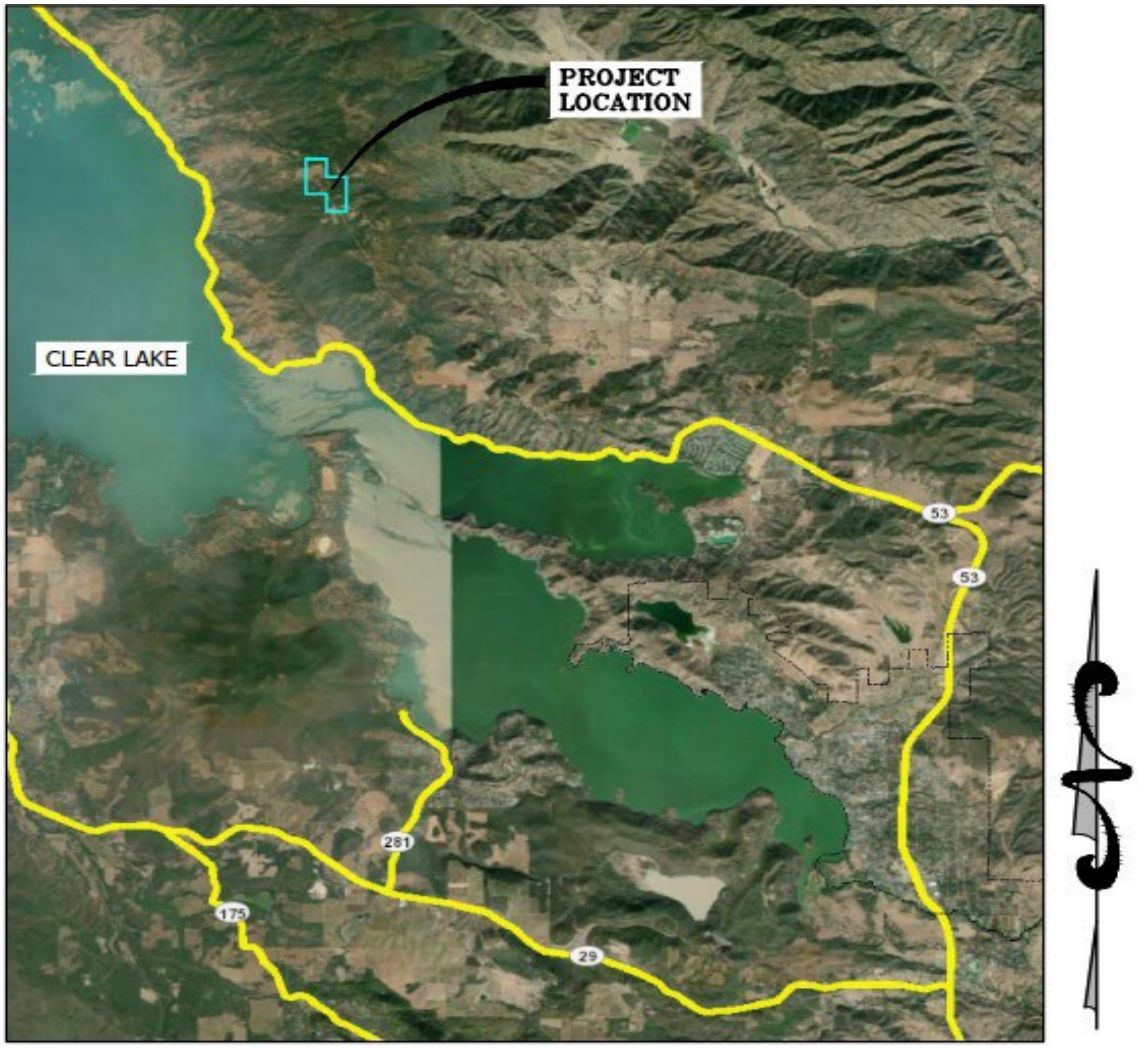
Revised April 19, 2024

CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY (IS 20-39)
ENVIRONMENTAL CHECKLIST FORM

1. Project Title:	Liu Farm Cannabis Cultivation Project
2. Permits:	Initial Study, IS 20-39 for the following: Major Use Permit (UP) 20-33
3. Lead Agency Name and Address:	County of Lake Community Development Department Courthouse, 3rd Floor, 255 North Forbes Street Lakeport, CA 95453
4. Supervisor District	District Three (3)
5. Contact Person:	Trish Turner, Assistant Planner (707) 263-2221
6. Parcel Numbers and Size:	Cultivation Area: APN: 006-003-34; 158.22 Acres 8531 High Valley Road Clearlake Oaks, CA 95423
7. Project Sponsor's Name & Address:	Liu Farm 2014 Central Avenue Alameda, CA 94501
8. General Plan Designation:	RL - Rural Lands
9. Zoning:	RL-WW-SC – Rural Lands; Waterway Combining; Scenic Combining
10. Flood Zone:	"X" Areas of minimal flooding – not in a special flood hazard area
11. Slope:	The proposed cultivation site is relatively flat with some moderately sloped areas, overall ranging from 0 to 10 percent. The parcel itself has slopes greater than 20 and 30%, located outside of the proposed cultivation site area.
12. Natural Hazards:	Wildland Fire Hazard Area
13. Waterways:	Class II and Class III Watercourses

14. Fire Hazard Severity Zone:	California State Responsibility Area (CAL FIRE): High Risk & Very High
15. Fire District:	Northshore Fire Authority Fire Protection District
16. School District:	Lucerne Elementary
17. Earthquake Fault Zone:	None
18. Dam Failure Inundation Area:	Not located within Dam Failure Inundation Area

Figure 1. Vicinity Map



Source: Liu Farm Site Plans

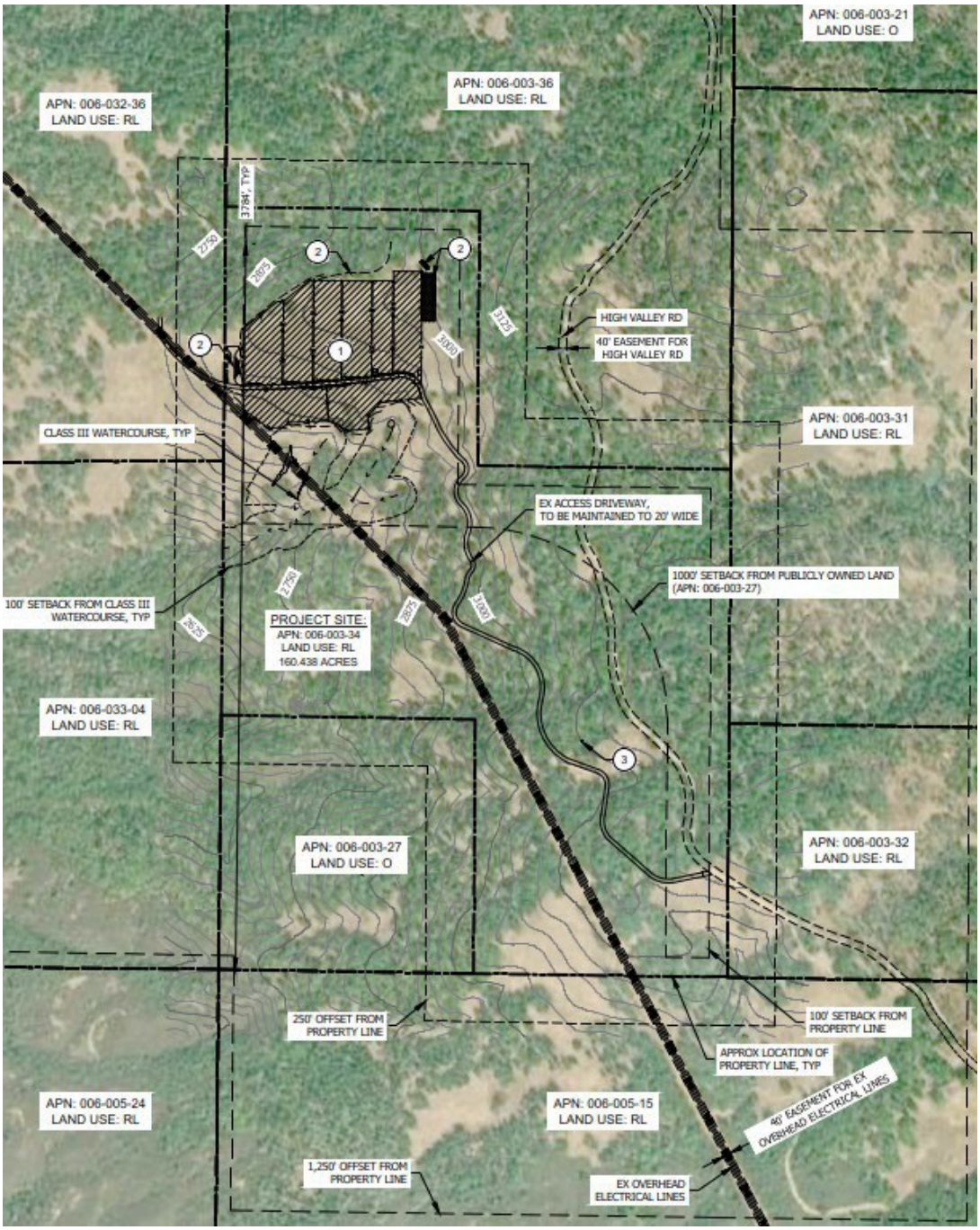
19. Description of Project:

The applicant, Liu Farm, is requesting a Major Use Permit, UP 20-23, for commercial cannabis cultivation at 8531 High Valley Road, Clearlake Oaks (APN: 006-003-34). Seven (7) distinct cultivation areas are proposed for a total canopy area of 304,710 sq. ft. within an approximately 546,644 sq. ft. disturbed area.

The Project is for up to seven (7) acres of outdoor cultivation. Current plans display 304,710 sq. ft. of commercial cannabis canopy area within an approximately 546,644 sq. ft. cultivation area, as described below:

> *Seven (7) A-Type 3: "Outdoor" licenses:* Outdoor cultivation for adult-use cannabis under direct sunlight, up to an acre per each license. The applicant currently proposes just under seven (7) acres (304,710 square feet [sq. ft.]) of full-sun outdoor cannabis canopy area.

Figure 2. Property Overview



Source: Liu Farm Site Plans

Additionally, the Project proposes the following:

- A 70' x 250' area for proposed solar panels.
- One (1) 100 sq. ft. stormproof shed for chemical, pesticide, hazardous material storage (10' x 10) located near each Cultivation Area, for a total of seven (7) sheds and a total of 700 sq. ft.
- An existing groundwater well with a maximum yield of approximately 51 gallons per minute, per the Hydrology Study.
- An irrigation system using water pumps, polyvinyl chloride (PVC) piping, black poly tubing and drip tape.
- Twelve (12) 2,500-gallon capacity plastic water storage tanks for a total of 30,000 gallons of water storage for irrigation.
- One (1) 2,500-gallon capacity plastic water storage tank for fire protection.
- Sixteen (16) parking spaces, including two (2) ADA-compliant parking spaces.
- A portable gas-powered generator for backup power for emergency use only.
- Four (4) proposed 10' x 10' lockable sheds for drying, harvest storage, and administrative hold areas (400 sq. ft.) located near each Cultivation Area for a total of 28 lockable sheds and 2,800 sq. ft.
- Site surveillance and security, including video surveillance system within a 10' x 10' shed, locked gates, and a security fence around the cultivation areas.

Construction. No grading is proposed. All cultivation is proposed as full-sun outdoor. Scraping will be required for the preparation of the outdoor beds; but no greenhouses or large buildings are proposed. Site preparation is anticipated to last approximately two (2) to four (4) weeks to prepare the site for outdoor cultivation. No construction or grading is proposed. An estimated five employees per day will be present. Estimated daily trips during construction will be up to 10 for employees, four deliveries per week.

Operations. The proposed cultivation canopy areas would be located within eight (8) total fenced-in cultivation areas, as described below and as shown in Figure 3. Minimal site scraping would be required to prepare the site for outdoor cultivation. Vegetation and trees are not expected to be impacted; in no event would living trees with a diameter of six (6) inches or greater at breast height (6-inch DBA) would not be removed.

Cannabis would be cultivated using full-sun outdoor methods, which would produce two to three (2-3) flowering harvests per year. Cultivation would occur for approximately 270 days annually. Drying and harvest storage would occur within the four (4) sheds located near each Cultivation area. Further processing would occur offsite. No manufacturing is proposed.

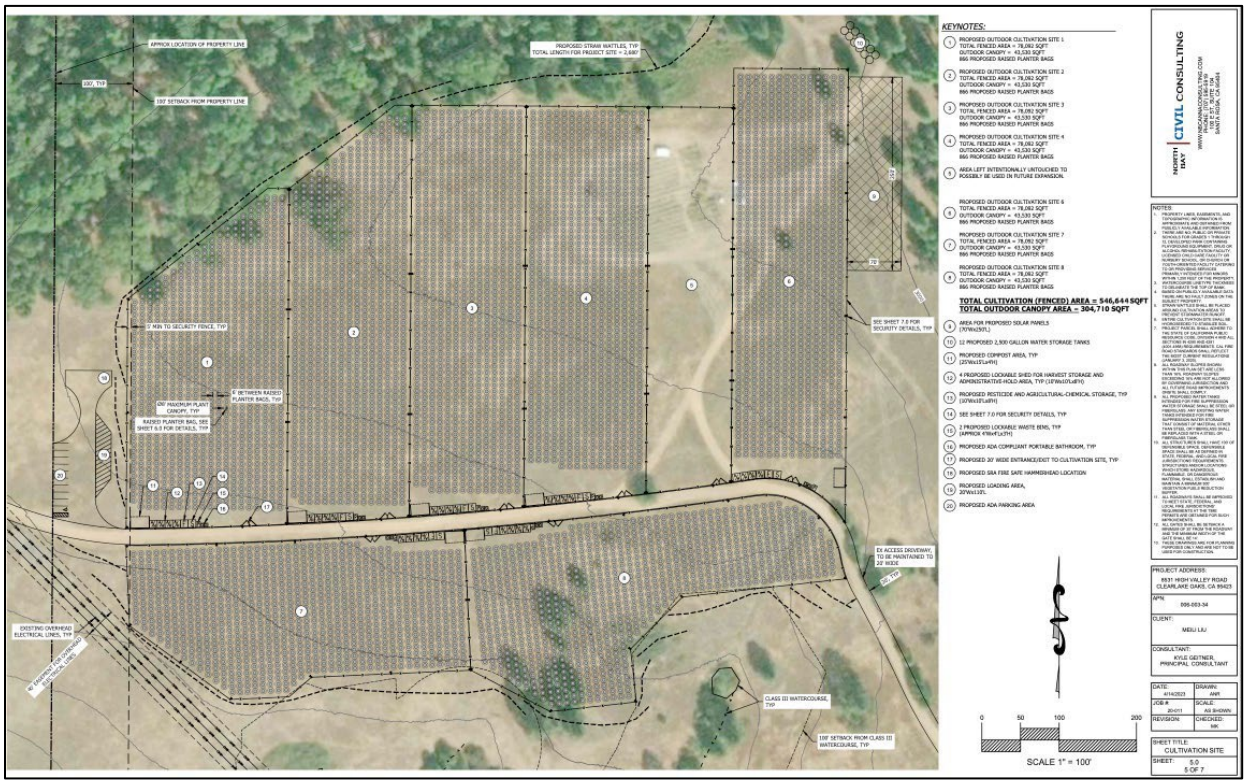
Operations would occur up to six days per week from May through November for outdoor cultivation. Nursery operations would occur year-round. The operation hours would be Monday through Saturday during daylight hours from approximately 5:00 a.m. to 4 p.m. The Lake County Zoning Ordinance restricts deliveries and pickups to 9:00 a.m. to 7 p.m., Monday - Saturday, and Sunday from 12 noon to 5:00 p.m.

According to the applicant's Property Management Plan, fertilizers and pesticides would be stored within a 100 sq. ft. stormproof storage shed adjacent to each cultivation area (seven sheds in total). All solid waste would be kept in a secured area and regularly removed to be disposed of at waste

disposal facility. Any plant waste would be chipped/mulched and reintegrated onsite or composted on site within the approximately 375 sq. ft. compost area located near each Cultivation Area.

Employees and Daily Trips: Once operational, the proposed Project would staff approximately sixteen (16) employees, March through November, with peak employee usage during peak seasonal events, such as planting and harvesting. According to the Operations Manual (Section 6) of the Property Management Plan, Liu Farm expects sixteen (16) work trucks from employees coming to and from the project, for as many as 32 trips per day from employees. Weekly truck deliveries of various project-related material would occur throughout the season. For the purposes of this document, a conservative estimate of one (1) delivery trip per day is used. Therefore, during peak seasonal events, as many as 33 trips per day could occur as a result of the Project.

Figure 3. Liu Farm Cultivation Layout



Source: Liu Farm Site Plan

Water Source and Use: Water for the cultivation activities will be supplied from an existing permitted groundwater well, located at 39.074626, -122.753929). Water is pumped from the well to water storage at the cultivation areas. The well was drilled in April of 2020 and is approximately 305 feet in depth. The initial drilling record estimated a yield of 80 gallons per minute (GPM). A subsequent 4-hour well drawdown test was conducted on May 26th, 2021. The static water level was 120 feet. Water was initially pumped from 127 feet and had a total drawdown of 38 feet. Water levels stabilized at 165 feet after two hours of pumping. The well recovered back to the original depth within less than five minutes. Water was consistently pumped at between 48 and 51 GPM. No surface diversion is proposed.

The irrigation system for the cultivation operations would use water supplied by the existing well and a 1HP jet pump pressure tank system. Water would be pumped to the 30,000 gallons of water

storage, located northeast of the cultivation areas. 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, the daily water consumption would be approximately 3,000 gallons per day per acre of canopy. Daily demand for the approximately 7.5 acres of canopy would total approximately 22,500 gallons. During the peak months of July, August, and September, water use would total approximately 675,000 gallons per month. In total, approximately 2,563,500 gallons would be used annually (7.86 acre-feet). See Table 1 for further details on calculations and monthly water usage during a typical cultivation year.

Table 1. Water Usage Calculations and Volumes for Liu Farm

Water Usage Calculation

Description	Use	Amount of Water Needed
Well Production	40 GPM Continuous	9.375 hours of pumping per day
Existing Usage (AG/Live Stock)	Vacant	No current use
Proposed (Cannabis Cultivation)	7 acres of outdoor	3,000 gallons per day per acre 22,500 gallons per day total 675,000 gallons per month (30 days) @ peak use (July, August, September)

Water Usage Per Month

January	0
February	0
March	0
April	0
May	106,500 gallons (Early Outdoor)
June	211,500 gallons (Early Outdoor)
July	675,000 gallons (Mature Outdoor)
August	675,000 gallons (Mature Outdoor)
September	675,000 gallons (Mature Outdoor)
October	211,500 gallons (Harvest Outdoor)
November	0
December	0
Total Annual Usage	**2,554,500 gallons**

Source: Property Management Plan, Water Usage Section

Energy: Power for the Project will be produced through an array of photovoltaic solar panels located in a 70' x 250' area located northeast of the cultivation areas, which would power the fans, dehumidifiers, security cameras, security lights, and water pumps. Approximately 1,500 x 300-watt solar panels will be ground-mounted and wired to a battery backup and inverter system. According to the Property Management Plan, the maximum energy demand in ten days of the proposed project at peak season would be 9,970 KWh. This system has the potential to produce approximately 2,700 KWh per day, or approximately 10,800 KWh in four (4) days, which is greater than the proposed

demand. Exact production would vary seasonally with available sunlight. See Section 3 Energy Usage and Appendix F of the Property Management Plan for details.

Waste: Waste generated by the proposed project would include solid waste, wastewater, and organic waste. Employees would utilize an ADA-compliant portable restroom serviced by a licensed septic company. Solid waste generation would include packaging from cultivation materials (e.g., pesticide/fertilizer containers, soil bags, general recyclables, etc.) and domestic materials (e.g., food wrappers from employees and other typical employee waste). Per the Property Management Plan, the applicant estimates the following maximum amount of potential annual waste generated from the project at full build-out: 183 lbs. of paper, 183 lbs. of glass, 40 lbs. of metal, 37 lbs. of electronics, and 365 lbs. of plastic. Trash and Recyclables would be separated out from garbage, and each would be stored in a wildlife-proof bin and taken to a licensed refuse facility every other week or as needed. Organic waste, including soil, stems, leaves, root balls, etc., would be composted onsite and reintegrated into onsite soils.

Property Access: The cultivation site is accessed from High Valley Road, a gravel road maintained by the County of Lake. Onsite gravel roads averaging 15 feet in width provide access to the cultivation site from High Valley Road.

Security and Safety: The cultivation sites would each be surrounded with 6-foot dear fencing, with access using 14-foot-wide gates at each cultivation area, secured by padlocks. The fencing would include 90% sunblock mesh in areas visible to the public. 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.

Erosion and Sediment Control: According to the applicant's Property Management Plan, the following erosion control measures at a minimum will be followed:

- Locate all disturbance outside of riparian setbacks and stream buffers
- Install erosion control straw wattles around the cultivation areas to protect disturbed areas on steep slopes
- Apply native grass seed to disturbed areas
- Install a silt fence as a secondary measure along wattle contours during construction to keep sediment on-site and clearly delineate the boundary of construction and are proposed for disturbance
- Preserve existing vegetation where required and when feasible
- Cover stockpiles and landscape materials prior to rainy season.
- Apply 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
- Divert run-on and stormwater generated from within the facility away from all erodible materials

Required Permits: Implementation of the Proposed Project would require approvals from the County of Lake Planning Commission, including building permits, as well as a Use Permit. No grading is proposed. The County's issuance of the required permits triggers the need for compliance with the California Environmental Quality Act (CEQA).

Liu Farm is enrolled in the State Water Board's Order No. WQ 2019-001-DWQ as a Tier 2, low risk discharger (WDID No. 5S17CC423622). As required in the Cannabis Order's Policy for coming into

compliance with Best Practicable Treatment or Control (BPTC) measures, the applicant will prepare a Site Management Plan (SMP) and a Nitrogen Management Plan (NMP) prior to commencing site cultivation or ground-disturbing activities. “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) to notify the agency of proposed cannabis cultivation activities on the parcel. No stream crossings, points of diversion, lakes, or ponds exist onsite, and no alterations or impacts to resources under CDFW jurisdiction were proposed. Development would be set back from all onsite aquatic resources. The CDFW determined that a CDFW Agreement was not required, and issued a letter on 6/22/2020 titled, “General Agreement Notification Not Required” (EPIMS-LAK-10879-R2) for cultivation activities on APN 006-003-34.

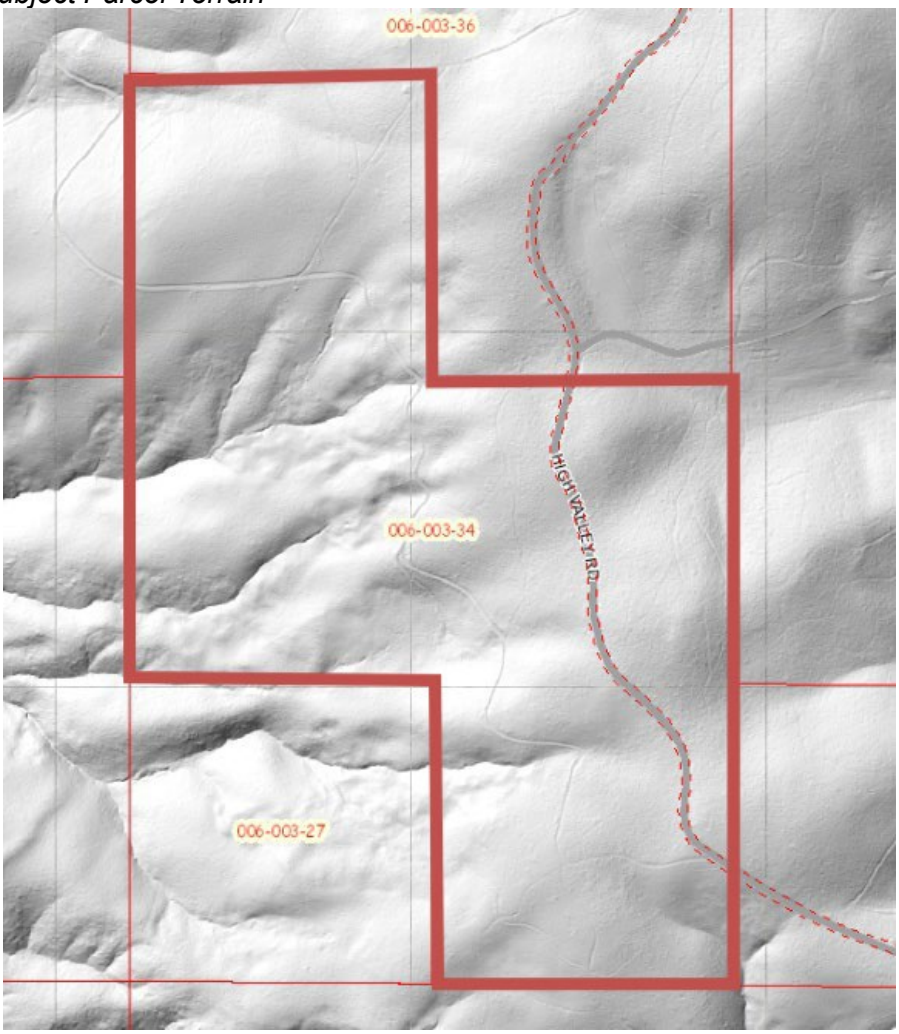
20. Environmental Setting and Existing Conditions:

The proposed Liu Farm cannabis Project is located at 8531 High Valley Road (APN 006-003-34) near Clearlake Oaks, California (Section 9, Township 14N, Range 8W, Mount Diablo Base and Meridian, in the Clearlake Oaks USGS 7.5-minute quadrangle). The proposed Project is located in the Shoreline Communities Planning Area. The property is approximately 158.22 acres.

The surrounding land uses are largely rural residential land and open space. The property consists of rugged, mountainous topography, consisting of west-facing slopes of a ridge crest, with elevations ranging from 2,600 feet to 3,050 feet above mean sea level. 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 property is situated on a ridge within the Rodman Slough-Frontal Clear Lake HUC 12 watershed and the Long Valley Creek HUC 12 watershed. Water that falls on the east side of the parcel, east of High Valley Road, drains toward Sulphur Creek watershed, a tributary to Long Valley Creek, which flows east and then south, eventually reaching the Cache Creek and the Sacramento River. Water draining west of the ridge, which is the majority of the property and all of the area proposed for cannabis development, flows west toward Clear Lake. See **Error! Reference source not found.** for subject parcel topography.

Figure 4. Subject Parcel Terrain



Source: Lake County Parcel Viewer, 2023

Three Class III streams and two palustrine emergent wetland areas, totaling 0.11-acres, were identified onsite (**Error! Reference source not found.**). No other aquatic resources, including vernal pools, lakes, or wetlands, are located within the proximity of the proposed cultivation area. The proposed cultivation area and all associated infrastructure is set back at least a 100-foot setback requirement from intermittent streams, wetlands, and ephemeral streams (Figure 2).

The subject site and surrounding area contain rural residential land and open space areas that consist of ranches, grazing land, open space, and other cannabis cultivation farm operations. Vegetation onsite includes grassland, ponderosa pine forest, chaparral, and manzanita vegetation types. The area proposed for cultivation development consists primarily of grassland and non-native species. No trees are proposed to be removed as part of the proposed development.

In 2018, some of the vegetation and trees east of High Valley Road on the subject parcel were burned as a result of the Mendocino Complex Fire. The fire did not reach the area proposed for cultivation development.

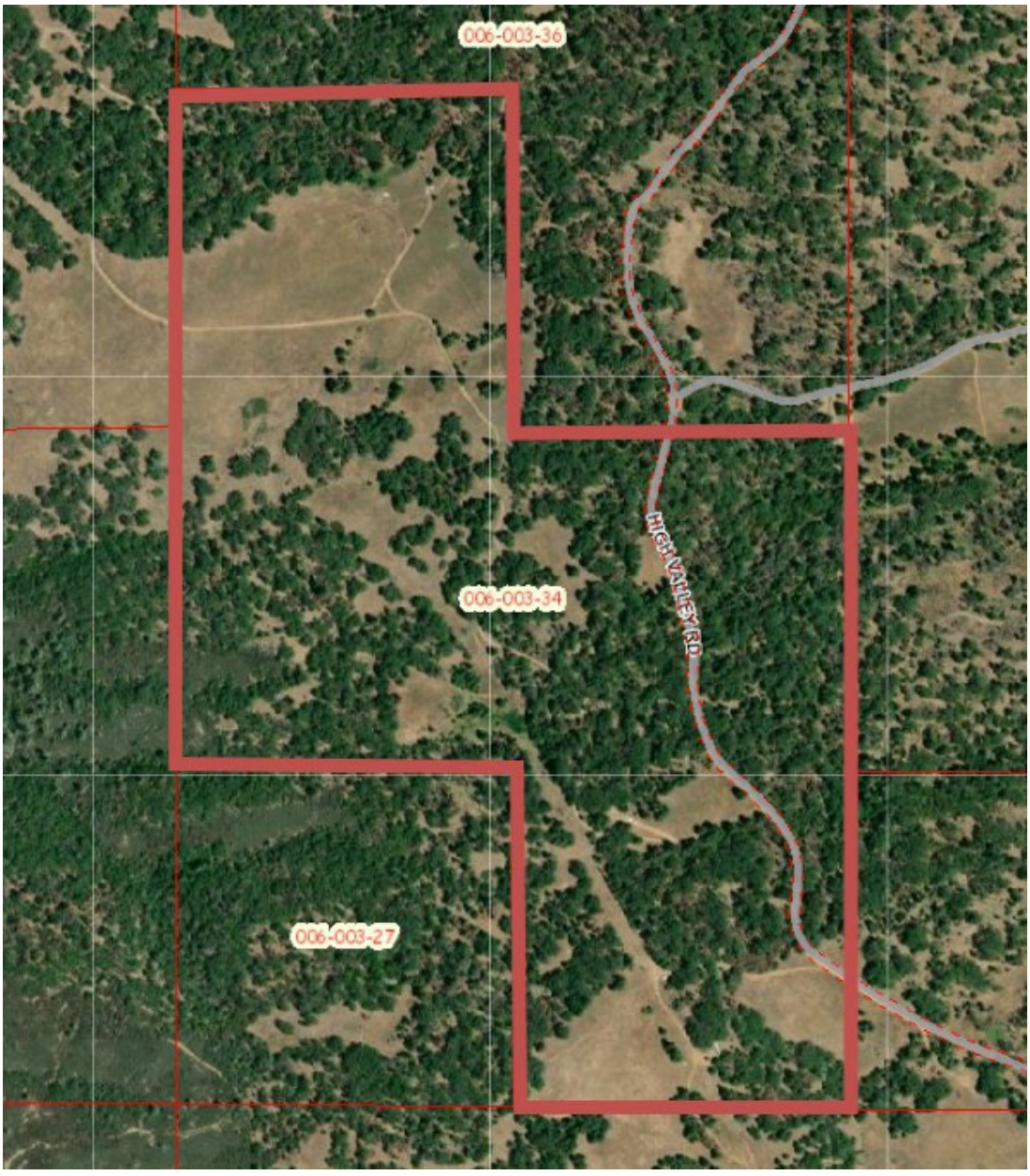
Figure 5. Aquatic Resources Delineated on the Subject Parcel

Source: Wetland Site Assessment, Huffman-Broadway Group, Inc. April 2021

The area proposed for cultivation development consists of Millsholm-Squawrock-Pomo complex soils, which are well-drained soils found on 30 to 50 percent slopes. The rest of the parcel, which is not proposed for cannabis cultivation activities, consists of Speaker-Marpa-Sanhedrin gravelly loams soils, which are also well-drained soils found on 30 to 50 percent slopes. The property does not contain serpentine soils or prime farmland, per Lake County Parcel Viewer.

The site is accessed from a gravel interior driveway which is accessed from High Valley Road, and the Project parcel is currently used for livestock ranging and is developed with an existing well and a driveway (See Liu Farm Site Plans, Existing Conditions, Sheet 3). The property has not been developed with cannabis activities.

Figure 5. Subject Property Aerial Image



Source: Lake County Parcel Viewer, 2023

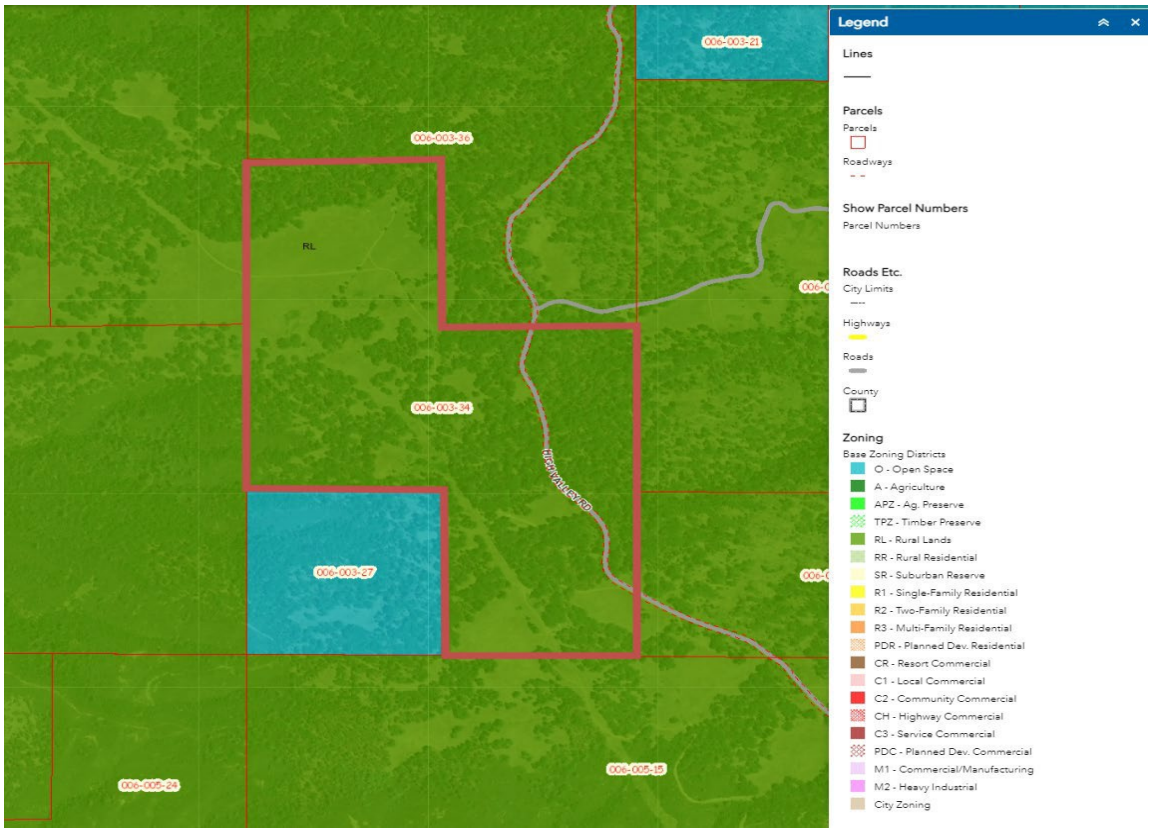
21. Surrounding Land Uses and Setting:

As the parcel for the proposed Project is over five (5) acres in size, neighboring parcels that fall within a 725-foot buffer will be notified of the Project. Parcels were deemed to be developed or undeveloped per Lake County Web GIS aerial imagery. These parcels include:

- North: 8297 High Valley Rd; Parcel Number 006-003-36; Zoned Rural Land; Undeveloped
- East: 8422 High Valley Rd; Parcel Number 006-003-31; Zoned Rural Land; Developed with a residence
- East: 8732 High Valley Rd; Parcel Number 006-003-32; Zoned Rural Land; Undeveloped
- South: 8845 High Valley Rd; Parcel Number 006-005-15; Zoned Rural Land; Undeveloped
- South: 8677 High Valley Rd; Parcel Number 006-003-27; Zoned Open Space; Undeveloped
- West: 7989 High Valley Rd; Parcel Number 006-033-04; Zoned Rural Land; Undeveloped
- West: 7901 High Valley Rd; Parcel Number 006-032-36; Zoned Rural Land; Undeveloped

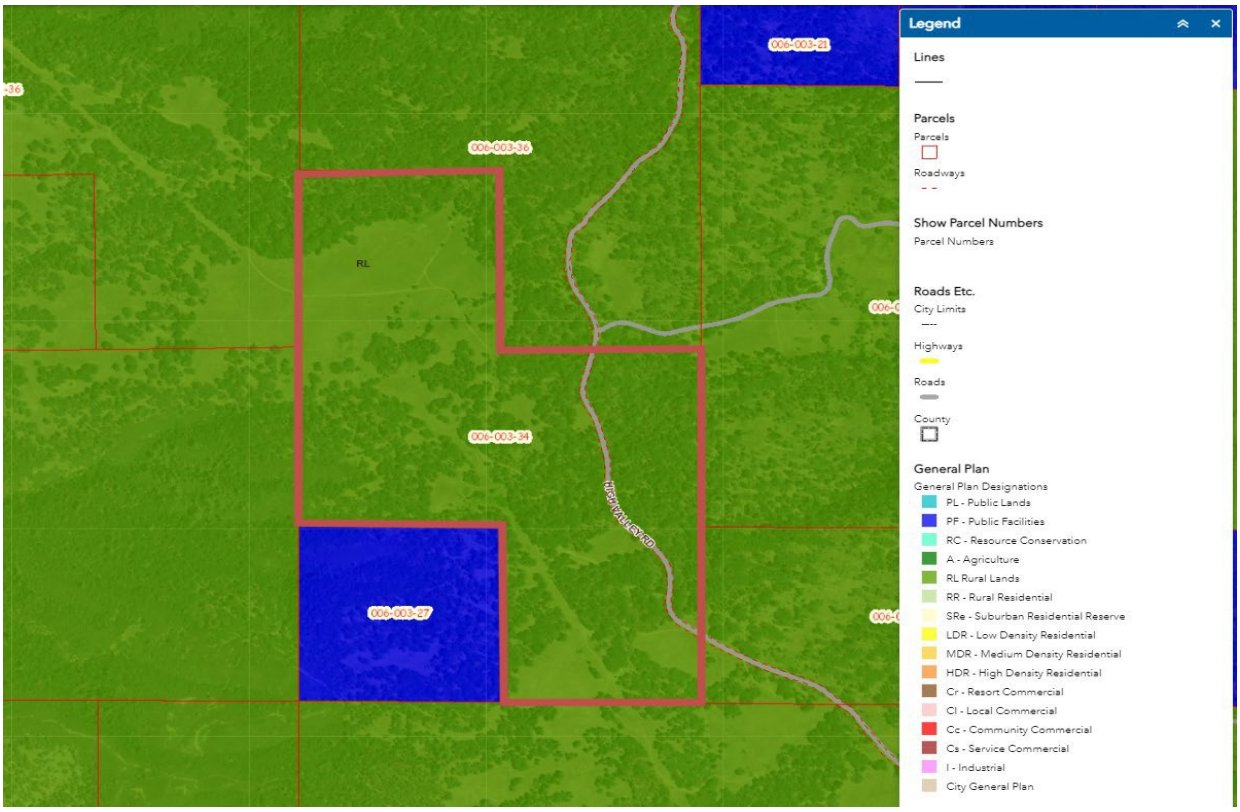
As the parcel to the south of the proposed Project is publicly owned land managed by the Bureau of Land Management (BLM), it is considered an exclusion zone. The County of Lake applies a 1,000-foot setback for Project areas from publicly owned lands that are actively used and/or accessible by the public. The current proposed Project is not within this setback and is located approximately 1,400 feet from the publicly owned land (See Site Plan for cultivation area proximity to setback).

Figure 6. Subject Parcel and Surrounding Property Base Zoning Districts



Source: Lake County Parcel Viewer, 2023

Figure 7. Subject Parcel and Surrounding Property General Plan Designations



Source: Lake County Parcel Viewer, 2023

22. 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 Shoreline Community Area Plan, 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:

    - County of Lake
        - Lake County Community Development Department
        - Lake County Department of Public Works
        - Lake County Air Quality Management District
        - Lake County Agricultural Commissioner
        - Lake County Sheriff Department
        - Lake County Water Resources Department
        - Lake County Public Services
        - Lake County Department of Environmental Health
    - Northshore Fire Authority Fire Protection District

- Central Valley Regional Water Quality Control Board
- California State Water Resources Control Board (SWRCB)
- California Department of Fish and Wildlife (CDFW)
- California Department of Forestry & Fire Protection (CALFIRE)
- California Department of Pesticides Regulations
- California Department of Public Health
- California Department of Cannabis Control (DCC)
- California Department of Consumer Affairs

23. 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.

    Lake County sent out an AB 52 Tribal notice to all eleven area tribes on April 9, 2020. No tribe responded to the invitation to hold consultation regarding this project.

ATTACHMENTS

Attachment 1 – Property Management Plan and Site Plans
Attachment 2 – Biological Resources Assessment
Attachment 3 – Plant Survey
Attachment 4 – Letter from CDFW
Attachment 5 – SWRCB Notice of Applicability, Water Quality Order WQ-2019-0001-DWQ
Attachment 6 – Water Well Documentation and Pump Test Report
Attachment 7 – Hydrologic Report
Attachment 8 – Wetland Delineation

All Attachments are available upon request at CannabisCEQA@lakecountyca.gov.

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 Prepared By: Northpoint Consulting
Initial Study Reviewed By: Trish Turner, Assistant Planner

Trish Turner _____ Date: 07/26/2023

SIGNATURE

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
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 Rural Land (RL) – Waterway Combining (WW) - Scenic Combining (SC). The Lake County Zoning Ordinance allows for commercial cannabis cultivation in the RL land use zone with a major use permit.

   The SC Zoning District, as described in the Lake County Zoning Ordinance Article 34.1, sets forth to "protect and enhance views of scenic areas from the County's scenic highways and roadways for the benefit of local residential and resort development, the motoring public, and the recreation-based economy of the County." According to Article 34.2, scenic criteria that applies to the Project parcel include 1) varied topographic features including dominant hills and mountains; 2) vegetative features including significant stands of trees and plants; and 3) pastoral features such as pastures and vineyards, all visible from High Valley Road at the location of the Project site.

The uses permitted described in Article 34.3 do not apply to the proposed Project, and the requirement of a major use permit as described in Article 34.4 is satisfied through the current use permit application. The proposed project meets the performance standards as described in Article 34.11.

The canopy and cultivation area are behind a ridge and to the west of High Valley Road, they are not generally visible from the Road, and they do not obstruct views of vineyards, dominant hills, and mountains to the south. There is significant tree coverage along High Valley Road when looking toward the cultivation sites. See Figure 9 below. Additionally, as described in the Property Management Plan, the entirety of the cultivation areas would be fenced.

The Scenic Combining distance from High Valley Road extends for 500 feet according to Lake County APN maps and GIS Mapping.

Figure 8. View in the Direction of the Cultivation Site from High Valley Road

Source: Google Earth Pro, 2023

A section of the security fence may be visible from some portions of High Valley Road and may be mitigated through the requirement of screening fencing as set forth in the performance standards set forth in Article 34.11 and described in Mitigation Measure AES-1. Living trees with a diameter of six (6) inches or greater at breast height (6-inch DBA) are not proposed to be removed.

Less than Significant Impact with Mitigation Measure AES-1 incorporated:

AES-1: The cultivation area shall be screened from the public view by a 6’ tall fence. Methods of screening shall be solid (opaque) fencing. Fabric screening is not permitted due to poor durability.

b) The Project site is located off of High Valley Road, which is not identified as "Officially Designated" or an "Eligible State Scenic Highway-Not Officially Designated", however the Shoreline Communities Area Plan has designated High Valley Road as a "Scenic Route" between Clearlake Oaks and Bartlett Springs Road near Lucerne. Despite this, the Project site is generally not visible from High Valley Road due to terrain and vegetative features that provide natural screening, and solid screening fencing is required around the cultivation areas to further screen these areas from public view. Therefore, there will be no significant impact.

Although State Highway 20 is on the State's Eligible State Scenic Highways, it has not been officially designated. State Highway 20 is located approximately 1.09 miles west of the Project parcel. The parcel is not visible from State Highway 20 due to the existing topography, primarily a major ridgeline on the south side of High Valley Road that blocks any views of the property, which is on a ridgeline north of High Valley Road.

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. The Project parcel has a Scenic Corridor (SC) combining zone designation, with scenic resources described as "vegetative features including significant stands of trees" which are currently providing screening from the proposed Project site.

Less than Significant Impact

c) Given that the project site is located on the other side of the ridge from High Valley Road and almost entirely out of view from the public, 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 exterior security lighting. The following mitigation measures will be implemented which would reduce the impacts to less than significant:

Less than Significant Impact with Mitigation Measures AES-2 through AES-4 incorporated:

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. Artificial light shall be completely shielded between sunset and sunrise.

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, 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, and 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". However, the Project site does not contain suitable soils for agricultural use based on the Natural Resources Conservation Service Web Soil Survey (refer to VII. GEOLOGY AND SOILS).

As the proposed Project is a commercial project located on soils classified as Grazing Land, as mentioned above, the Project would not be converting farmland that is high quality or significant farmland to a non-agricultural use.

No Impact

b) Under Article 27.11 of the Lake County Zoning Ordinance, Outdoor Cannabis Cultivation is permitted on parcels with a Base Zoning District of Rural Lands (RL) with a minimum of 20 acres. The Project parcel consists of 158.22 acres.

The Project site is currently zoned RL-WW-SC, which is consistent with its land use designation as Rural Land as described in the County of Lake General Plan Chapter 3 – Land Use. According to the County of Lake, Rural Lands "(allow) agricultural uses and single-family dwellings. Allowable density of one dwelling per 20-65 acres. Steep slopes, fire hazard and remoteness often restrict development." Agricultural uses as described in California Government Code §51201(c) are generally allowed on RL, and the site is not under a Williamson Act contract. Parcels immediately adjacent to the north, west, and east to the Site are also zoned as RL and one (1) parcel to the south of the Site is zoned Open Space.

The cannabis cultivation area would not interfere with the ability of the owner to use the remaining land nor the adjacent parcels for traditional crop production and/or grazing land.

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 RL-WW-SC. 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, south, and west, all of which are zoned Rural Lands, and a publicly owned undeveloped parcel to the south zoned Open Space. The Open Space parcel 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. Additionally, per the Lake County Parcel Viewer, the parcel does not contain Serpentine Soils.

   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 April 9th, 2020. A response was received on April 21, 2020. All requests in the referral comment have been incorporated into the project design or Mitigation Measures. 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 applicant has addressed Air Quality in the Property Management Plan. Additionally, the applicant has developed an Odor Compliant response in the event that an odor complaint is received. Per the Property Management Plan, if an odor complaint is received, a response would be provided within 12 hours of receipt of the complaint, and the activities causing the odor would immediately cease. See the Property Management Plan for further details.

   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 16 employees per day during peak harvest season. The nearest populated areas to the site are Lucerne (located about 2 miles to the north of the site), and Clearlake Oaks (located about 6 miles to the south of the site).

Employees are most likely to originate from these two populated areas. Sixteen employees per day driving 6 miles each way, 12 miles per day in total, would yield 32 trips per day excluding deliveries during peak harvest season. Total daily employee miles traveled would be 384 miles per day, or 2,304 miles per week. Assumed cultivation time would last up to 270 days, or 39 weeks per year. Total annual miles traveled for employees would be 89,856 miles. Assuming two delivery trips per week, travelling 20 miles (10 miles each way) would yield an additional 780 miles per year. Total miles traveled per year during non-construction times would be **90,636 miles per year.**

Assuming 404 grams of CO_2 emissions per vehicle mile traveled, anticipated CO_2 emissions will be 36.62 tons of CO2 per year. 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 will produce 36.62 tons per year. Given the 'significance level' of 1,100 tons per project, it would take this project about 30 years to meet the BAAQMD threshold of 'significance' regarding CO_2 emissions.

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 2,350-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 not been detected and are not mapped onsite.

Impacts would be Less than Significant with Mitigation Measures AQ-1 through 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 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.

d) The proposed Project includes 304,710 square feet of commercial cannabis cultivation which has the potential to cause short- and long-term air quality impacts, particularly during the construction and operation of the proposed Project . However, due to the fact that the closest neighboring residence is over 2,350 feet away, a substantial number of people will not be adversely affected. Mitigation measures to address any objectionable odors include the planting of native flowering vegetation that will surround the cultivation area.

Construction impacts, which are limited to scraping, and building construction, would be temporary in nature and would occur over about a three (2) to eight (4) week period. Ongoing field management is considered an operational, not construction, activity.

Operational impacts would include dust and fumes from site preparation of the cultivation area, cultivation equipment, and vehicular traffic, including employee traffic and small delivery vehicles that would be contributors during and after site preparation and construction. Equipment proposed for regular cultivation use includes a gas-powered backup generator and a gas-powered brush cutter, per the Property Management Plan.

Dust during site preparation would be limited during periods of high winds (over 15 mph). All visibly dry, disturbed soil and road surfaces would be watered to minimize fugitive dust emissions. Dust and fumes may be released as a result of vehicular traffic, including small delivery vehicles.

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 through 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, 31, 32, 33, 34, 38, 47, 48
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, 32, 33, 34, 38, 47, 48, 50
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, 32, 33, 34, 38, 47, 50

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?	☐	☐	☒	☐	13, 38
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, 38, 47
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, 38, 47

Discussion:

a) Three (3) reports were prepared for the property: a Biological Resources Assessment (BA) (Natural Investigations Company, 2020), a Plant Survey (Huffman-Broadway Group, 2021), and a Wetland Site Assessment (Huffman-Broadway Group, 2021), described in further detail below.

The BA was prepared by Natural Investigations Company on March 28, 2020. The field survey for the BA was conducted on March 20, 2020; this is generally considered 'out of season', however with the other two biologically and botanically related studies done, there is sufficient data to reasonably assess this project's potential biological impacts and associated mitigation measures to protect sensitive areas.

The purpose of the BA was to provide information as to whether the proposed cultivation area contains sensitive plants or potentially contains sensitive wildlife requiring mitigation under CEQA. The BA refers to the Project parcel as the Study Area. A U.S. Fish and Wildlife Service (USFWS) species list was generated online using the USFWS' IPaC Trust Resource Report System. This list included one (1) plant species and four (4) animal species: Fisher (West Coast DPS) *(Pekania pennanti),* Northern Spotted Owl *(Strix occidentalis caurina),* California Red-legged Frog *(Rana draytonii),* Delta Smelt *(Hypomesus transpacificus),* and Burke's Goldfields *(Lasthenia burkei).*

The BA noted that the list was generated on a watershed-level and did not necessarily indicate that the Study Area provides suitable habitat. The BA noted that migratory birds should also be considered in the impact assessment. These species are discussed in further detail, below.

<u>Plant Species and Vegetative Communities</u>

In addition to the BA, a Plant Survey was conducted for the property by Huffman-Broadway Group, Inc., in July 2021. The Plant Survey included a background search for special-status plants with potential to occur on the property, per CNDDB, and field surveys on the property. Field surveys took place on April 23rd, May 19th, and June 18th of 2021, in accordance with floristic survey protocols per USFWS and CDFW. A list of plants that were found onsite were included in the Plant Survey.

No special-status plant species were found during the 2021 plant surveys. Per the Plant Survey, “no state or federal listed special status plants were found within the Project Area”, and therefore effects would be less than significant.

Per the BA, the USFWS species list that was generated included one (1) special-status plant species with the potential to occur onsite: Burke’s Goldfields *(Lasthenia burkei).* This plant is a small annual herb that is native to California. It is federally and state endangered, and has a California Rare Plant Rank of 1B1, for rare, threatened, or endangered plants in California. This plant typically occurs in wetlands, meadows, or vernal pools. No special-status plant species, including the Burke’s Goldfields plant, were detected within the direct area of cultivation development or within the Study Area during the time of the site visit.

Additionally, the BA identified four (4) general vegetative communities onsite: Pine Forest, Chaparral (Chamise), Non-Native Annual Grassland, and Freshwater Marsh. The cultivation development would occur on Non-Native Annual Grassland, which includes largely non-native grasses and non-native herbs. According to the BA, the non-native grasslands have low potential for harboring special-status plant species and the proposed development would therefore likely not impact sensitive plant species onsite.

No special-status plant species were found during the 2020 field survey, or the three (3) botanical floristic surveys conducted in 2021, per the BA and the Plant Survey.

The impact would be less than significant with Mitigation Measure BIO-1 and BIO-2 incorporated as stated below.

<u>Animal Species</u>

The USFWS species list that was generated included four (4) special-status animal species with the potential to occur onsite:
- Fisher (West Coast DPS) *(Pekania pennanti)*
- Northern Spotted Owl *(Strix occidentalis caurina)*
- California Red-legged Frog *(Rana draytonii)*
- Delta Smelt *(Hypomesus transpacificus).*

The site investigation conducted during preparation of the BA did not identify these species, or suitable habitat for these species onsite. No fishery resources or fish-bearing streams are located onsite. The project would be set back from all riparian habitat, wetland areas, and aquatic resources. No trees are proposed to be removed. The project would be required to adhere to International Dark Sky Standards and County noise requirements, preventing indirect impacts of light and noise pollution from impacting sensitive species such as the Northern Spotted Owl.

The Study Area contains suitable nesting habitat for various bird species because of the presence of trees. No nests or nesting activity were observed during the field survey conducted for the BA, however removal of trees could impact nesting birds. No tree removal greater than 6-inches in diameter at breast height (DBH) would be removed as part of the proposed Project. If establishment of the cultivation areas requires tree removal of trees less than 6-inches DBH or impacts to woody vegetation, there may be an impact to nesting birds. Mitigation Measure BIO-2 has been incorporated to address this.

A Notification was submitted to the North Central Region of the California Department of Fish and Wildlife (CDFW), to notify the agency of proposed activities on the parcel. No stream crossings, points of diversion, lakes, or ponds exist onsite, and no alterations or impacts to resources under CDFW jurisdiction were proposed. The CDFW determined that a CDFW Agreement was not required, and issued a letter on 6/22/2020 titled, "General Agreement Notification Not Required (EPIMS-LAK-10879-R2) for cultivation activities on APN 006-003-34.

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.

Mitigation Measures BIO-1 and BIO-2 has been incorporated to ensure there are no negative impacts to sensitive species, including migratory birds.

Aquatic Resources:

A Wetland Site Assessment was conducted by Huffman-Broadway Group on April 15th, 2021. A site visit occurred in conjunction with the development of this Assessment on April 9th, 2021. The Wetland Site Assessment was conducted after the BA to determine the presence or absence of aquatic resources under the jurisdiction of the State Water Resources Control Board, the California Department of Fish and Wildlife, and the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency. The Wetland Site Assessment identified approximately 0.11 acres of palustrine emergent wetlands in two areas within the parcel, and approximately 0.10 acres of riverine/intermittent creeks.

The cultivation development would be set back greater than 100 feet from any identified aquatic resource, including intermittent creeks and wetlands.

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

BIO-1: If the establishment of cultivation operations requires the removal of pine forest or the destruction of chapparal habitat, a pre-construction survey for special-status species should be performed by a qualified biologist prior to vegetation clearing or grading to ensure that special-status species are not present. If any listed species or special-status species are detected, construction should be delayed, and the appropriate wildlife agency, either the California Department of Fish and Wildlife or the US Fish and Wildlife Service, should be consulted, and Project impacts and mitigation should be reassessed.

BIO-2: Prior to any removal of trees or shrubs, or disturbance to riparian habitat, and if these activities occur during the nesting season (usually March to September), a pre-construction survey for the presence of special-status bird species or any nesting bird species should be conducted by a qualified biologist within 500 feet of proposed construction areas. If active nests are identified in these areas, the California Department of Fish and Wildlife or the US Fish and Wildlife Service should be consulted to develop measures to avoid a "take" of active nests prior to the initiation of any construction activities. Avoidance measures may include establishment of a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged and are independent of the nest site.

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 BA and subsequent Wetland Site Assessment identified approximately 0.11 acres of palustrine emergent wetlands in two areas within the parcel, and approximately 0.10 acres of riverine/intermittent creeks. No vernal pools, ponds, or other wet areas were identified on the 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 BA did not identify special-status habitats or sensitive natural communities within the Study Area. The Study Area consisted of four general vegetation communities: Pine Forest, Chaparral (Chamise), Annual Grassland, and Freshwater Marsh. The cultivation development would occur on Annual Grassland, which includes largely non-native grasses and non-native herbs. According to the BA, the non-native grasslands have low potential for harboring special-status plant species.

Erosion control measures to control erosion and sedimentation during construction and operation have been identified in the Property Management Plan. Erosion control measures include installation of straw wattles, stockpile management, and sedimentation management. To ensure that sensitive habitats are not impacted from ground-disturbing activities, Mitigation Measure BIO-3 has been incorporated.

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 will be developed prior to the start of cultivation activities.

The applicant submitted a Notification to CDFW, and it was determined that an Agreement was not required. No stream crossings, points of diversion, lakes, ponds, or other items proposed to be impacted under CDFW jurisdiction exist onsite.

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.

Less Than Significant Impacts with Mitigation Measure BIO-3 incorporated:

BIO-3: All work shall incorporate erosion control measures consistent with the Lake County Grading Regulations and the State Water Resources Control Board Order No. WQ 2019-001-DWQ.

c) The BA identified potential wetlands onsite during the 2020 site investigation. Subsequently, a Wetland Site Assessment was conducted in April 2021 and a field site visit occurred on April 9th, 2021. The Wetland Site Assessment was conducted after the BA to determine the presence or absence of aquatic resources under the jurisdiction of the State Water Resources Control Board, the California Department of Fish and Wildlife, and the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency.

The Wetland Site Assessment reviewed aerial imagery, USGS topographic survey data, the previous BA by Natural Investigation Company, Inc. (2020), ground-truthed field observations onsite, and collection of soil, vegetation, and hydrology field data. Specifically, the Wetland Site Assessment examined three (3) parameters (hydric soils, wetland hydrology, and wetland vegetation) to determine the presence or absence of onsite wetlands. Using these parameters and methods, approximately 0.11 acres palustrine emergent wetlands in two areas within the parcel were identified (see **Error! Reference source not found.**). No vernal pools, marshes, or ponds were identified on the parcel.

All proposed disturbance would be located over 100 feet from the mapped wetlands. No development would occur within the mapped wetlands or within 100 feet from the wetlands. Therefore, project implementation would not directly impact any channels or wetlands. Soil disturbance from project implementation could increase erosion and sedimentation. Regulations at both the County and State levels require creation and implementation of an erosion control plan / stormwater management plan.

Potential adverse impacts to water resources could occur during operation of cultivation activities resources by discharge of sediment or other pollutants (fertilizers, pesticides, human waste, etc.) into receiving waterbodies. However, Liu Farm is enrolled with the SWRCB for Tier 2, Low Risk coverage under Order No. WQ 2019-001-DWQ (Cannabis Cultivation General Order). Continued compliance with this Order would ensure that cultivation operations would not significantly impact water resources by using a combination of Best Practicable Treatment and Control (BPTC) Measures, Best Management Practices (BMPs), buffer zones, sediment and erosion controls, inspections and reporting, and regulatory oversight.

Implementation of these plans, BPTCs, BMPs, compliance with Water Board, and Mitigation Measure BIO-3 would ensure that the impacts are less than significant. Refer also to Section IV(a) and (b).

Less Than Significant Impact with Mitigation Measure BIO-3 incorporated.

d) The 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, primarily those of the black-tailed deer. 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 it would not create any unpassable barriers and the majority of the Study Area will still be available for corridor and migration routes. Of the 158-acre parcel, over 145 acres would remain available for natural habitat and wildlife corridors.

   Implementation of the Project will 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.

   As such, the Property Management Plan states that the applicant does not intend to remove any trees. Therefore, 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.

   Less than Significant 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, 11, 14c, 15
b) Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?	☐	☒	☐	☐	1, 3, 4, 5, 11, 14, 15
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐	1, 3, 4, 5, 11, 14, 15

Discussion:

a) The Project was referred to the Northwest Information Center (NWIC) during the referral process on April 9th, 2020. A response was received on April 22nd, 2020, indicating that one (1) previous study had overlapped with the proposed project area. This study did not identify any cultural resources within the project area.

A Cultural Resource Evaluation for the proposed cultivation Project was completed by Dr. John Parker of Wolf Creek Archaeology in March of 2020 to identify potentially significant cultural resources. A California Historical Resources Information System (CHRIS) records search was completed by the Northwest Information Center (NWIC) prior to the field survey. This record search indicated that no cultural sites had been recorded within 1 mile of the project area. On February 26th, 2020, a request for information was sent to the California Native American Heritage Commission (NACH) for review of their Sacred lands file. Their response indicated that other sacred sites had been recorded in the general area, but not on the subject parcel.

No materials identified as a “significant” cultural resource pursuant to the California Public Resources Code were found as a result of the field investigation and no additional recommendations were identified in the report.

Based on the negative findings of the CHRIS search, field survey, and outreach efforts with local tribes, according to the Cultural Resources Evaluation, 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.

Less than Significant Impacts with Mitigation Measures CUL-1 through~~and~~ CUL-3~~2~~ incorporated:

CUL-1: All employees shall be trained in recognizing potentially significant archaeological, paleontological, or cultural materials that may be discovered during ground disturbance. 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.~~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: Should any archaeological, paleontological, or cultural materials be discovered during site development, all activity shall be halted within 100 feet of the find(s). A professional archaeologist certified by the Registry of Professional Archeologists (RPA) shall be notified and shall evaluate the find(s) and recommend mitigation procedures, if necessary. The findings and mitigation measures shall be reviewed and approved by the Lake County Community Development Director prior to commencing work.~~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-3: Should any human remains be encountered, the applicant shall halt all work within 100 feet, 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.

b) A California Historical Resources Information System (CHRIS) records search was completed by the Northwest Information Center (NWIC) to determine if the Project would affect archaeological resources. The record search found that there are no known or mapped significant archaeological resources on this site. See above analysis.

Less than Significant Impact with Mitigation Measures CUL-1 ~~and~~ through CUL-3~~2~~

c) 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 Measure CUL-~~3~~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?	☐	☐	☒	☐	5
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐	1, 3, 4, 5

Discussion:

a) Onsite electricity will be supplied by a solar panel array and battery storage system consisting of the installation of 1,500 300-watt solar panels. Solar power will be used to power all ancillary electrical equipment which includes fans, dehumidifiers, well pump, security cameras, and security lights. In total, per the Property Management Plan, at peak season approximately 997 KWh would be used per day. No indoor cannabis cultivation is proposed.

The applicant is proposing to use entirely renewable energy, and to not use more energy that required for the proposed project.

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. To address this, the applicant has included their energy usage in the Property Management Plan. Total energy consumption from proposed equipment, per the Property Management Plan, would

be approximately 996,643 watts per day, or 997 kWh per day.

The solar array would produce approximately 2,700 KWh per day, producing approximately 10,800 KWh over the span of four days. During peak season, total energy consumed in 10 days would total approximately 9,970 KWh. Therefore, the solar system and backup battery and storage system would have the capacity to produce and store 10 days of energy consumption in a four-day period. Therefore, the project would meet the standards of Title 4 Division 19 §16305 Renewable Energy Requirements. Gasoline-powered generators will be onsite for emergency backup energy.

Additionally, there are 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: 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?	☐	☐	☒	☐	1, 2, 3, 4, 5, 18, 19
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐	1, 3, 4, 5, 19, 21, 24, 25, 30, 50
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
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?	☐	☒	☐	☐	5, 7, 39

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 wastewater?	☐	☐	☒	☐	2, 4, 5, 7, 13, 39
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐	1, 2, 3, 4, 5, 14, 15

Discussion:

a) The Project site is located 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 1.09 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. 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 shed construction is required to be built under Current Seismic Safety Construction Standards, and no large structures are proposed on this project site.

Landslides (iv)
There are some risks of landslides on the parcel, however the proposed project's cultivation site is located on a flat area along the top of the ridgeline. According to the Landslide Hazard Identification Map prepared by the California Department of Conservation's Division of Mines and Geology, the area is considered as a Classification 3, evidence of land sliding, with a confidence interval of 3. 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) The area proposed for cultivation is an existing open grassy field with slopes of between 0 and 10%. Minor scraping / flattening of the area is proposed to prepare the Project site for outdoor cultivation. The Project also involves the import of soil for cultivation activities. No greenhouses are proposed; and no associated grading is proposed.

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: If grading is proposed in the future for any of the cultivation activities (including shed placement), prior to any ground disturbance, 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.

c) The geologic unit or soil type where the proposed Project site is situated is:

179 – Millsholm-Squawrock-Pomo complex, 30 to 50 percent slopes
This map unit is on hills and mountains. The vegetation is mainly annual grasses with scattered oaks and brush on Millsholm and Squawrock soils and annual grasses on Pomo soils. The Pomo soils are susceptible to slumping. This unit is about 30 percent Millsholm,

30 percent Squawroack gravelly loam, and 20 percent Pomo loam. The component of this unit are so intricately intermingled that it was not practical to map them separately at the scale used. The Millsholm soil is shallow and well drained. Permeability of the Millsholm soil is moderate. Available water capacity is 1.5 to 3.5 inches. Effective rooting depth is 10 to 20 inches. Surface runoff is rapid, and the hazard of erosion is severe. The Squawrock soil is moderately deep and well drained. The permeability of the Squawrock soil is moderate. Available water capacity is 1.5 to 4.5 inches. Effective rooting depth is 20 to 40 inches. Surface runoff is rapid, and the hazard of erosion is severe. The Pomo soil is deep and well drained. Permeability of the Squawrock soil is moderately slow. Available water capacity is 4.0 to 8.5 inches. Effective rooting depth is 40 to 60 inches.

Surface runoff is rapid, and the hazard of erosion is severe. Slopes are unstable if disturbed. This unit is used mainly for livestock grazing, wildlife habitat, and watershed.

According to the soil survey of Lake County, prepared by the United States Department of Agriculture, other soils found on the project parcel are as follows:

224 - Speaker-Marpa-Sanhedrin gravelly loams, 30 to 50 percent slopes.
This map unit is on mountains. The vegetation is mainly mixed conifers and hardwoods. This unit is about 30 percent Speaker gravelly loam, 25 percent Marpa gravelly loam, and 15 percent Sanhedrin gravelly loam. The components of this unit are so intricately intermingled that it was not practical to map them separately at the scale used. The Speaker soil is moderately deep and well drained. Typically, the surface is covered with a mat of partially decomposed needles, leaves, and twigs 1 inch thick. Permeability of the Speaker soil is moderately slow. Available water capacity is 2 to 6 inches. Effective rooting depth is 20 to 40 inches. Surface runoff is rapid, and the hazard of erosion is severe. The Marpa soil is moderately deep and well drained. Typically, the surface is covered with a mat of partially decomposed needles, leaves, and twigs 1 inch thick. Permeability of the Marpa soil is moderate. Available water capacity is 1.5 to 4 inches. Effective rooting depth is 20 to 40 inches. Surface runoff is rapid, and the hazard of erosion is severe. The Sanhedrin soil is moderately deep and well drained. Typically, the surface is covered with a mat of partially decomposed needles, leaves, and twigs 1 inch thick. Permeability of the Sanhedrin soil is moderately slow. Available water capacity is 4 to 6 inches. Effective rooting depth is 40 to 60 inches. Surface runoff is rapid, and the hazard of erosion is severe. This unit is used mainly for timber production, wildlife habitat, and watershed. Ponderosa Pine and Douglas Fir are the main tree species on the Speaker and Sanhedrin soils. California black oak, interior live oak, and scattered ponderosa pine are the main trees species on the Marpa soil.

Despite the severity of risk normally associated with Geologic Unit 179, this unit is typically found at a slope between 30 and 50 percent. This typically steep slope plays a major factor in its rapid runoff and severe erosion hazard. The proposed project site is not located on an area with a 30 to 50 percent slope, but rather it has a slope that is approximately 0 to 10% percent near the top of the ridgeline that runs along High Valley Rd. Furthermore, 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

d) The Uniform Building Code is a set of rules that specify standards for structures. No structures are proposed that would require a building permit.

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 on one type of soil Type 179 – Millsholm-Squawrock-Pomo complex, 30 to 50 percent slopes, according to the Soil Survey of Lake County and the USDA Web Soil Survey website. Soil Type 179 is comprised of loam, clay loam, gravelly loam, very gravelly sandy clay loam, and bedrock, and would have a moderate shrink-swell potential due to the gravel in the composition.

Although no new buildings are proposed, any new construction requiring a building permit 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 incorporated:

GEO-5: 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: Prior to operation, all structure(s) used for commercial cultivation shall meet accessibility and CALFIRE standard.

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.

Less Than Significant Impact

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

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

GEO-7: 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

Discussion:

a) The Project consists of 304,710 square feet cannabis canopy area. 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 Gase (GHG) emissions. In the interim, emissions estimates have been calculated using the California Emissions Estimator Model (CalEEMod) and compared with thresholds defined by the Bay Area Air Quality Management District (BAAQMD).

The BAAQMD threshold for GHGe (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.

Power for the Project would be sourced from renewable energy from a solar array and would not produce greenhouse gas emissions. A backup generator would be used sparingly during emergencies and is not proposed for regular use.

Additional potential sources of pollution 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, 16 employees are proposed to operate at full build-out to run the cultivation operations. The Property Management Plan anticipates up to 32 vehicles from employees coming to and from the project on an average daily basis and estimate of two (2) trips week from delivery trucks on an average basis. Assuming employees do not carpool, the project would generate a maximum of 32 per day during peak seasonal events from employees. Using a conservative estimate of one (1) delivery truck trip per day, a maximum of 33 trips per day could occur as a result of the proposed project during peak seasonal events.

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
- 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 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 Bay Area Air Quality Management District's rules and regulations for the purpose of determining 'levels of significance' and for 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 and no more than two (2) metric tons CO_2e per capita by 2050. The Project would produce greenhouse gas emissions construction of the project and from operation of the project from vehicular traffic and from gas-powered equipment.

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

b) Create a significant hazard to the public or the environment through reasonably 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
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, organic pesticides, organic 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:

Fertilizers and pesticides will be stored within secondary containment within sheds located near the cultivation area. The pesticide, fertilizer, chemical, and petroleum product storage buildings will have impermeable floors. The storage building will be located over 100 feet from any watercourses. Fertilizers and pesticides will be stored separately and will be properly labeled. Employees will be properly trained on fertilizer and pesticide use and will follow manufacturer's suggested application rates.

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. No hazardous waste would be generated onsite.

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 an 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. According to Lake County GIS Portal data, flood risk at the Project site is minimal as the Flood Zone Classification is 'X', (low risk of flooding) and the Project site is not located in or near an identified earthquake fault zone. Fire hazard risks on the Project site range from moderate to high.

The project site does not contain any identified areas of serpentine soils or ultramafic rock, and 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 ADA-accessible 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 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 school is Lucerne Elementary School, which is located approximately three (3) miles west of the Project site. 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 10 air miles east of 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 High Valley Road, a 20' wide dirt road at this location that is relatively well-maintained, and 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 west of the proposed cultivation areas (Figure 2).

During long-term operation, adequate access for emergency vehicles via High Valley 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 area is designated as an area of very high fire risk. The portion of the property is designated as high fire risk on the eastern boundary along High Valley Road. 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, 45, 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, 45
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, 45, 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, 45
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☒	☐	☐	1, 2, 3, 5, 6, 29, 45

Discussion:

a) The Project parcel has no identified stream crossings. Intermittent and ephemeral streams on the project site drain westwardly toward Clear Lake. The Project is set back greater than 100 feet from the tops of banks on all seasonal or year-round streams and watercourses and wetlands.

According to the proposed Project's *Property Management Plan – Waste Management Plan*, 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 BPTC measures, buffer zones, sediment and erosion controls, inspections and reporting, and regulatory oversight. In addition, a sediment and erosion control plan is being implemented as part of the greater Site management Plan.

Potential adverse impacts to water resources could occur during construction by modification or destruction of stream banks or riparian vegetation, the filling of wetlands, or by increased erosion and sedimentation in receiving water bodies due to soil disturbance. Project implementation will not directly impact any channels or wetlands, as all proposed development is set back at least 100 feet from onsite aquatic resources. Soil disturbance from project implementation could increase erosion and sedimentation. Regulations at both the County and State levels require the creation and implementation of an erosion control and stormwater management plan.

The County's Cannabis Ordinance requires that all cultivation operations, including the ADA-compliant portable toilet, 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 project area is set back from streams and wetlands as follows:

- Over 400 feet from the nearest Class I watercourse (in excess of the State-required 150 feet)
- Over 100 feet from the nearest Class II watercourse (in compliance with the required 100 feet)
- 100 feet from the nearest Class III watercourse
- Over 100 feet from the nearest wetland (in compliance with the required 100 feet)

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 with Mitigation Measures HYD-1 incorporated:

HYD-1: Before this permit shall have any force or effect, the permittee(s) shall adhere to the Lake County Division of Environmental Health requirements regarding on-site potable water requirements. The permittee shall contact the Lake County Division of Environmental Health for details.

b) Water for irrigation is proposed from an existing permitted groundwater well located at latitude, longitude 39.074626, -122.753929. 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. Ordinance 3106 requires that all project

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 use to surrounding areas due to the project

Water Demand

A Ground Water (Hydrologic) Technical Memorandum Report (Hydrologic Report) was prepared for the Project by Luhdorff and Scalmanini Consulting Engineers on September 27, 2021. The Report was prepared in compliance with the requirements set in Ordinance 3106, specific to Section One, Part A.

The applicant included water use estimates in the Property Management Plan (Refer to Table 1 on pg. 6 in the Project Description.) The applicant proposes an estimated 22,500 gallons per day during peak use, and approximately 1,500 gallons per day during non-peak use at full build-out. In general, July – September are peak use months. Refer to Table 1 on pg. 6 in the Project Description for a detailed projection of water use by month. In total, per the applicant and project materials, approximately 2,563,500 gallons, or 7.86 acre-feet, is estimated to be used annually. See Table 1 for further details on calculations and monthly water usage during a typical cultivation year.

The irrigation well was drilled in 2020 and is approximately 305 feet deep. The initial drilling record estimated a yield of 80 gallons per minute (GPM), per the Well Completion Report on file with the Department of Water Resources. A subsequent 4-hour well drawdown test was conducted on May 26th, 2021. The static water level was 120 feet. Water was initially pumped from 127 feet and had a total drawdown of approximately 38 feet to 165.2 feet. Water levels stabilized at 165 feet after two hours of pumping. The well recovered back to the original depth within less than five minutes. Water was consistently pumped at between 48 and 51 gpm.

The Hydrologic Report based calculations and groundwater availability off of a Project water demand of 9.4 acre-feet to 14.58 acre-feet, which is greater than the 7.86 acre-feet use number provided by the applicant (the Hydrologic Report was prepared prior to the final version of the Property Management Plan that described water use in more detail, so the 7.86-acre feet data was not available at the time of preparation of the report). The demand based was on water usage during peak and non-peak months. Although the estimates are larger than the final water demand numbers from the applicant, the Hydrologic Report provides a relevant and more conservative estimate and is an accurate basis for analysis of groundwater availability.

According to the Hydrologic Report, the well could produce a minimum of 9.4 acre-feet per year (assuming pumping on and off for 9 hours at 40 GPM during the three peak use months and 2.9 GPM for the remaining 9 months per year) and a maximum of 25 acre-feet per year (assuming pumping on and off for 9 hours at 40 GPM operating at peak use-year-round). Both of these estimates are larger than the applicant's water use estimation of 7.86 acre-feet, per the Property Management Plan. The Hydrologic Report notes that the 25 acre-feet per year production amount provides a very conservative volume and is not likely warranted based on the usage numbers provided by the applicant. Per the drawdown test and pumping

results, the well consistently pumped at between 48 and 51 GPM, suggesting that an estimate of 40 GPM is feasible.

Irrigation

Irrigation for the cultivation operation will use water supplied by the existing well and 1-HP pump. The irrigation water will be pumped from the well, via PVC piping, to twelve (12) 2,500-gallon water storage tanks, totaling 30,000 gallons of water storage, and then delivered to a drip irrigation system. 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 well is located near High Valley Ridge within an undefined groundwater basin within the Franciscan Formation. The well is located on the west side of High Valley Ridge, and water drains toward Clear Lake. The nearest defined groundwater basins are the High Valley Groundwater Basin (Basin #5-16), located approximately 2-miles to the southeast, and the Long Valley Groundwater Basin (Basin #5-31), located approximately 2.5-miles to the east.

The High Valley Basin is within the Schindler Creek Watershed and includes High Valley, which is a small valley about 3-miles long and 1-mile wide. The contact between the Jurassic-Cretaceous Franciscan Formation bounding the valley alluvium generally defines the basin boundary to the north, west, and south. Quaternary Holocene volcanics border the basin to the east. The valley is drained by Schindler Creek, flowing east and south, and eventually into Clearlake. There are two water bearing formations in the High Valley Basin, an unconfined aquifer within the Quaternary Alluvium, approximately 100-feet deep, and a confined aquifer within the Holocene Volcanics, below the alluvium. According to the Lake County Groundwater Management Plan, the average-year agricultural groundwater demand in the High Valley basin is approximately 36 AF per year. Wells in the valley range in depth between 25 feet and 650 feet. Surface topography in the valley ranges between 1,920 feet and 1,720 feet (CDM 2006 and California DWR 2003, 2021).

The Long Valley Basin is located within a narrow, elongated valley, bounded on most sides by the Franciscan Formation. A small portion of the southern boundary consists of Quaternary volcanic rocks. The valley is drained by Long Valley Creek, flowing southeast, and eventually into Cache Creek. Very little information exists about the hydrogeology of this groundwater basin. Average annual agricultural groundwater demand in the Long Valley Basin is approximately 250 AF per year. Wells in the valley range in depth between 25 feet and 225 feet. Surface topography in the valley ranges between 1,550 feet and 1,150 feet (CDM 2006 and California DWR 2003, 2021).

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. Both the High Valley and the Long Valley Basins were ranked as very low-priority basins by the CASGEM ranking system (DWR, 2021).

Groundwater Availability:

The Hydrologic Report utilized two (2) methods to determine the amount of available groundwater for the Project. The first method used Darcy's Law to calculate the amount of groundwater flowing through porous media beneath the Project site. The second method used precipitation and infiltration rates to calculate groundwater recharge.

Method One: Groundwater Availability based on Flowing Groundwater beneath the Project

The Hydrologic Report calculated water availability using Darcy's Law, which is as follows:

$Q = KiA$

Where:

Q = Discharge, in acre-feet per day (AF/day)
K = Hydraulic conductivity, in feet per day (ft./day)
i = Hydraulic horizontal gradient, in feet per feet (ft./ft.)
A = Cross-sectional area in square feet (sq. ft.)

In order to calculate hydraulic conductivity (K), the Hydrologic Report used the following equation:

$T=Kb$

Where:

T = transmissivity in square feet per day (sq. ft./day)
b= Aquifer thickness (ft.)

Hydraulic conductivity (K) was calculated to be approximately 1.7 ft./day, based on a transmissivity (T) value of 212 sq. ft./day (based on the well drawdown tests) and an aquifer thickness of 125 ft. (based on data from the Well Completion Report).

A range of hydraulic gradient (i) values were used based on October 2019 and April 2020 groundwater elevation data from adjacent area wells in the High Valley Groundwater Basin (specifically wells 14N08W24H001M and 14N07W19M002M), which is the closest basin to the Project area. Cross-sectional area (A) was determined based on utilizing the saturated thickness (125 ft.) across the width of the aquifer that would be available to the well (3,938 ft.).

Using these values, Darcy's Law was applied to calculate a range quantity of groundwater flow / discharge (Q) values. Q-values ranged from 0.35 AF/day to 1.2

AF/day, or 126 to 449 AF/year. The Hydrologic Report estimated water demand from the Project at 9.41-14.58 AF/year, which comprises only 3% to 5% of the estimated average annual quantity of groundwater flow.

The Report concludes that, based on Darcy's Law, there would be sufficient groundwater available to supply the Project.

Method Two: Groundwater Availability based on Precipitation

The Hydrologic Report also used precipitation data spanning 10 water years to calculate groundwater availability. The precipitation data was gathered from two different databases: The Sanel Valley CIMIS station, which is located approximately 5 miles from the project, west of Clear Lake, and the PRISM database, which estimates average annual rainfall at the Project Site location. The Sanel Valley CIMIS station provided a lower-end precipitation rate of 26.4 inches per year, which corresponded to a conservative annual recharge value range of 35 AF/year to 209 AF/year. The PRISM database provided a higher-end precipitation rate of 38.9 inches per year at the Project site, which corresponded to an annual recharge value range of 51 AF/year to 307 AF/year. Based on that data, the projected annual water demand comprised between 9 and 14% of the average annual recharge from precipitation based on a conservative estimate, and approximately 6 to 10% of the average annual recharge based on a maximum estimate. In either scenario, the Hydrologic Report concluded that there is sufficient groundwater available to supply the Project.

Using either method to calculate groundwater availability, the Hydrologic Report concluded that the estimated irrigation demand of the Project was a small percentage of available groundwater in the basin and there would be sufficient water to serve the Project.

Cumulative Impact to Surrounding Areas

The Hydrologic Report estimated annual water demand of the Project to be between 9.41 to 14.58 AF/year, which is higher than the applicant's more recent estimated water demand of 7.86 AF/year. Using the conservative values of between 9.41 and 14.58 acre-feet per year, the Project's irrigation demand would be approximately 3% to 5% of the available groundwater flowing beneath the site, based on Darcy's Law, or between 6% and 14% of average annual recharge, based on minimum and maximum precipitation scenarios. Thus, there is enough recharge on an annual basis to meet the Project's demand.

Furthermore, the Hydrologic Report concluded that impacts to nearby domestic wells would be minimal, as calculated using the Theis analytical solution.

Because the groundwater basin is undefined, the recharge rate was determined using an estimate of the recharge area, and the in-situ characteristics of the water source (e.g., perched aquifer, localized confined aquifer, or confined/unconfined aquifer part of a larger system).

It is recommended that the project applicant monitor water levels in the well. The purpose of the monitoring is to evaluate the functionality of the well to meet the long-term water demand of the proposed project. Water level monitoring is required by the Lake County Zoning Ordinance. Ordinance Article 27 Section 27.11(at) requires the well to have a water

level monitor. With these required measures in place, the impact is expected to be less than significant with Mitigation Measures HYD-2.

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

HYD-2: The production well shall have a meter to measure the amount of water pumped. The production wells shall have continuous water level monitors. The methodology of the monitoring program shall be described. A monitoring well of equal depth within the cone of influence of the production well may be substituted for the water level monitoring of the production well. The monitoring wells shall be constructed, and monitoring began at least three months before the use of the supply well. An 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 some scraping, but they are proposed to be located in existing flat grassland areas. Establishment of the cultivation operations does not require the construction of permanent new buildings or other significantly permanent and impermeable surfaces that would alter runoff significantly.

In addition to significantly exceeding all setback requirements, 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.

Best Practicable Treatment and Control (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 ground-disturbing activities 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 designated to be in Flood Zone X – areas of minimal flooding – not in a special flood hazard area according to the Lake County GIS Portal data. While some soils on the parcel are susceptible to erosion, soils at the project site are relatively stable, 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 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

A water budget will be created every year and water use efficiency from the previous year will be analyzed.

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:

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 in order 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 Measure HYD-3 incorporated:

HYD-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, 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 approximately 158 acres of undeveloped land in the Shoreline Communities Planning Area. The closest community growth boundary accessible by road is Clearlake Oaks, which is approximately 6 miles away, while the Lucerne community growth boundary is approximately 2 air miles away, separated by rugged, mountainous terrain.

The area is characterized by large parcels of rural, undeveloped land within some proximity to limited agricultural uses such as vineyards, orchards, 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 Rural Land (RL) – Waterway Combining (WW), Scenic Combining (SC). The Lake County Zoning Ordinance allows for commercial cannabis cultivation in the RL land use zone with a major use permit.

The SC Zoning District, as described in the Lake County Zoning Ordinance Article 34.1, sets forth to "protect and enhance views of scenic areas from the County's scenic highways and roadways for the benefit of local residential and resort development, the motoring public, and the recreation-based economy of the County." According to Article 34.2, scenic criteria that applies to the Project parcel include 1) varied topographic features including dominant hills and mountains; 2) vegetative features including significant stands of trees and plants; and 3) pastoral features such as pastures and vineyards, all visible from High Valley Road at the location of the Project site.

The Proposed Project is consistent with the existing General Plan and Zoning designation, including Article 27 of the County of Lake Zoning Ordinance, which allows cannabis cultivation in lands Zoned as RL. The Project is consistent with the Lake County Cannabis Cultivation Ordinance (Number 3084). Furthermore, the Project Site is not located in a Commercial Cannabis Cultivation Exclusion Zone, as defined by the County.

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 Shoreline 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 outdoor 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. Energy will be supplied by solar power, and the backup generator would be used infrequently.

The project has potential to generate noise related to site preparation, and during the life of the project. With regard to the Lake County General Plan Chapter 8 - Noise, sensitive receptors are defined as schools, health care facilities, and libraries. 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.The nearest residence is approximately 2,350 feet away. Additionally, Chapter 8 – Noise states that noise-reducing mitigation measures during construction when residential uses or other sensitive receptors are located within 500 feet shall be implemented. As stated previously, the nearest residence to the Project area is located approximately 2,350 feet to the east. However, to ensure excessive noise generation is limited, standards are described in Mitigation Measure NOI-1 and NOI-2 .

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 7:00 a.m. and 7:00 p.m., and Saturdays from 12:00 noon to 5:00 p.m. 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 7:00 a.m. to 10:00 p.m. and 45 dBA between the hours of 10:00 p.m. to 7:00 a.m. within residential areas as specified within Zoning Ordinance Section 21-41.11 (Table 11.1) at the property lines.

b) The Project would not generate ground-borne vibration or noise, except during the construction phase from the use of heavy construction equipment. There will be some scraping required for the outdoor cultivation preparation and earth imported for the outdoor cultivation areas, however earth movement 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 over 2,350 feet from the project site and the Project would therefore not expose the residents 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 pile driving, 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 10 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 16 employees. Employees would likely live in the area already and commute to the site daily. No new housing is proposed as part of the Project.

No Impact

b) No residences exist onsite, and none are proposed. No housing will be displaced as a result of the Project.

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 Northshore Fire Protection District provides fire protection services to the proposed Project area. The proposed Project would be served by the Northshore Fire Protection Station in Lucerne, an existing station located approximately 17 roadway miles from the Project site. Development 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. The project would be required to comply with all applicable local and state fire code requirements related to design and emergency access. The project includes on-site improvements related to public services, including water storage tanks for fire protection, improved road widths for emergency access, and site address posting. With these measures in place, and with the proposed improvements, 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.

Additionally, the Project was referred to the Lake County Sheriff's Office on April 9, 2020. A response was received on April 13, 2020. The referral comment noted that the Project's Security Plan met the minimum requirements as outlined in Lake County Ordinance 3084 /

3073. No additional comments, concerns, or adverse impacts were received from the Sheriff's Office.

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 new housing is proposed. The cultivation area is located over 1,000 feet from the publicly-owned parcel to the south. No impacts are expected.

5) Other Public Facilities
As the owners and operators currently reside in Lake County, and the small 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) 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

Discussion:

a) Roadway Analysis

The project is located approximately six (6) roadway miles north of Clearlake Oaks on High Valley Road. Vehicles traveling to the site will utilize California State Highway 20 either from the east or west, and take High Valley Road north to the Project site.

The Project site is situated on High Valley Road, a 20' wide well-maintained dirt road at this location, which is classified as a County local road in the Lake County General Plan. The access driveway off of High Valley Road is approximately 15-20 feet wide, meeting California Public Resource Code 4290 (PRC 4290) road standards for fire equipment access, including two turn-arounds 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 1 – North Shore, Clearlake to Lakeport, runs along California State Highway 20, with a transit stop located at the intersection of Highway 20 and Keyes Blvd, approximately one half (0.5) miles from High Valley Road. This can allow

employees to utilized public transit for a portion of their commute. The proposed Project does not conflict 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 5 to 12 during construction, and up to 33 trips during operation.

The applicants will be operating under an A-Type 13 Cannabis Distributor Transport Only, Self-distribution License. In the "RL" zoning district 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 Property Management Plan anticipates sixteen (16) work trucks from employees coming to and from the project on an daily basis during peak seasonal events, and estimate of two (2) trips week from delivery trucks on an average basis. The Project would generate a maximum of 32 trips per day during peak seasonal events from employees. Using a conservative estimate of one (1) delivery truck trip per day, a maximum of 33 trips per day could occur as a result of the proposed project during peak seasonal events.

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. Equipment used in cultivation will be transported to the Project site as needed and will not need to be operated on High Valley 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. The proposed Project would not inhibit the ability of local roadways to continue to accommodate emergency response and evacuation activities. The proposed project would not interfere with the City's adopted emergency response plan.

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) The Project was referred to the Northwest Information Center (NWIC) during the referral process on April 9th, 2020. A response was received on April 22nd, 2020, indicating that one (1) previous study had overlapped with the proposed project area. This study did not identify any cultural resources within the project area.

A Cultural Resource Evaluation for the proposed cultivation Project was completed by Dr. John Parker of Wolf Creek Archaeology in March of 2020 to identify potentially significant cultural resources. A California Historical Resources Information System (CHRIS) records search was completed by the Northwest Information Center (NWIC) prior to the field survey. The search also indicated that the property had not been previously surveyed for cultural resources. On February 26th, 2020, a request for information was sent to the California Native American Heritage Commission (NACH) for review of their Sacred lands file. Their response indicated that other sacred sites had been recorded in the general area, but not on the subject parcel.

No materials identified as a "significant" cultural resource pursuant to the California Public Resources Code were identified onsite and no additional recommendations were identified in the report.

Notification of the project was sent to local tribes on April 9, 2021. No responses from notified area tribes were received.

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 TCR-1 and TCR-2 , along with a continued dialogue with the Elem Colony and other tribes in Lake County, the impact will be less than significant.

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.

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

a) 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, and TCR-1 and TCR-2 the impact will be less than significant.

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

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, 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, 36

Discussion:

a) The proposed Project will be served by an existing onsite irrigation well and an onsite solar energy systems for all project-related energy and water demands. An ADA-compliant portable toilet and handwashing station would be brought to the Project site. No onsite wastewater treatment system is proposed.

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 impacts.

Less than Significant Impact

b) The subject parcel is served by an existing well as described in the Hydrologic Report 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-3 implemented.

c) The Project would include installation of a regularly serviced, ADA-compliant portable restroom onsite. This portable toilet would be regularly serviced by a licensed business. The Property Management Plan identifies Perkins Septic, a Lake County business which is licensed to handle wastewater, as the entity to service the portable toilets. The applicant may also choose to hire another licensed business.

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* waste management bins will be located within the fenced-in area of the cultivation areas. Recyclables will be separated from solid waste and stored in bins. At weekly intervals, staff would take waste and recyclables to a licensed facility. Green waste and organic waste would be composted onsite. Waste will be hauled to an appropriate licensed facility by a private waste-hauling contractor, or by cultivation operation staff. See the Property Management Plan for further details.

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 25 miles northwest of the subject parcel. See the Project Description for a description of estimated waste generation volumes at full build-out. 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, 5, 6, 23, 25, 28, 29
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
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
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

Discussion:

a) The project will not further impair an adopted emergency response plan 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.

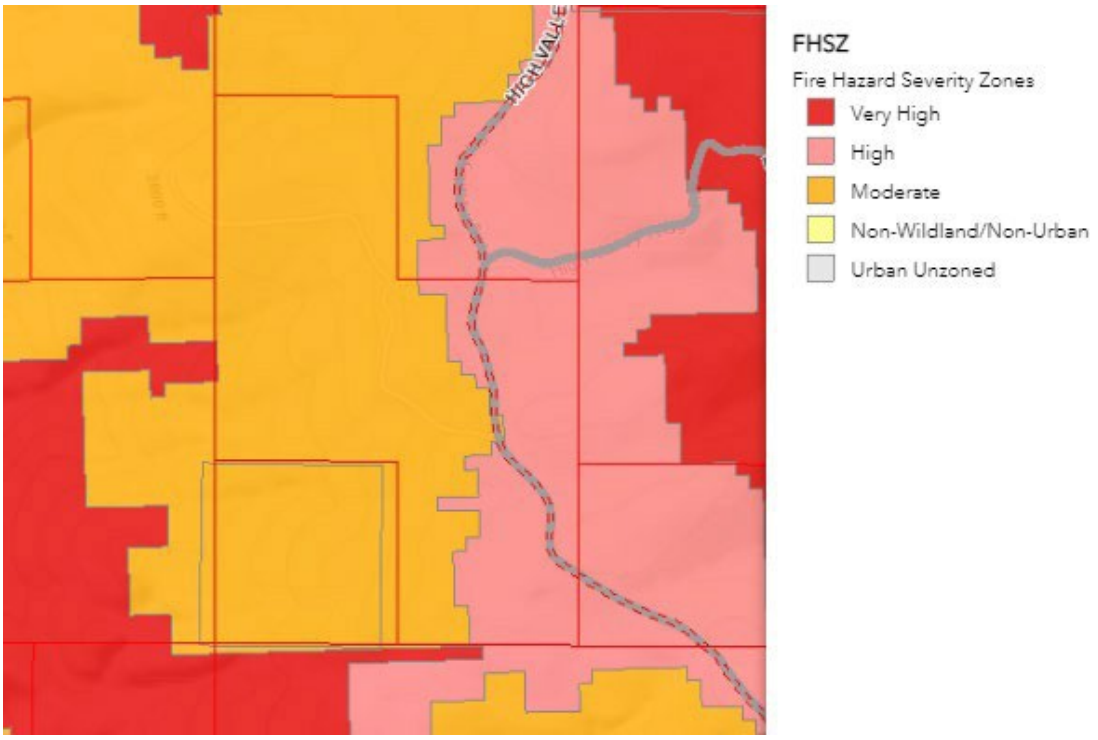
The project would meet PRC §4290 compliance.

Less than Significant

b) The Project site is comprised of a moderate fire hazard zone and a high-risk fire hazard zone according to the Lake County GIS Portal data, and the overall parcel boundary is considerably sloped, despite the Project site and access to the project site being relatively flat. The cultivation area 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

Figure 9. Fire Hazard Severity Zones on the Subject Parcel



Source: Lake County Fire Hazard Severity Zones Map, 2023

c) The proposed Project, as described in the application documents, 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.

In March 2020, the Northshore Fire Protection District provided comments on the proposed project, including the need for Fire Access Roads to meet the requirements of CCR 1273/PRC §4290, the installation of approved address numbers to be placed on all buildings and/or driveways in such a position as to be plainly visible and legible from the street or road fronting the property with numbers that shall contrast with their background will be required, and the installation of a rapid entry lock box, approved by the fire district if any gate is installed will also be required. These components have been incorporated into the Project design and will be included as Conditions of Approval.

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. Grading is not proposed, and will 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 has not burned in recent history. The area proposed for development is relatively flat. 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. The impact will be less than significant impact with mitigation measures WDF-2 and WDF-4 implemented.

Less than Significant Impact with Mitigation Measures WDF-2 and WDF-4:

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

WDF-3: During construction, a Water tender will be present on site during earth work to reduce the risk of wildfire and dust.

WDF-4: Prior to cultivation, a minimum 2,500 gallon water tank shall be made available to Fire Protection services to use in the event of a wildfire. The tank shall be fitted with connectors that will allow emergency service vehicles to connect to the tank using standard fire-fighting equipment.

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-	☐	☒	☐	☐	ALL

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?					
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 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 significantly 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 mitigation measures added.

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 mitigation measures added.

c) The proposed project has the potential to result in adverse indirect or direct effects on human beings. In particular, Aesthetics, Air Quality, Geology/Soils, Cultural and Tribal Resources, Transportation, Wildfire, and Noise 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 Mitigation measures added.

Source List

1. Lake County General Plan
2. Lake County GIS Database
3. Lake County Zoning Ordinance
4. Shoreline Communities Area Plan
5. Liu Farm Cannabis Cultivation Application – Property Management Plan and Site Plan and Supplemental Information
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 for the Cannabis Cultivation Operation at 8531 High Valley Road, Clearlake Oaks, CA, prepared by Natural Investigations Company, March 28, 2020
14. Cultural Resources Assessment for the Cannabis Cultivation Operation at 8531 High Valley Road, Clearlake Oaks, CA, prepared by Wolf Creek Archaeology, March 7, 2020. (Confidential)
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. Northshore Fire Protection District
38. Wetland Site Assessment at 8531 High Valley Road, Clearlake Oaks, Lake County, California. Prepared by Huffman-Broadway Group, Inc., April 15, 2021.
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. Ground Water (Hydrologic) Technical Memorandum Report to Support Lake County Ordinance 3106 (Specific to Section One, Part A), 8531 High Valley Road, Lake County, CA. Luhdorff & Scalmanini Consulting Engineers. September 27, 2021.
46. Well Test. Cramer Enterprises, May 26, 2021.
47. 2021 Plant Survey for the Proposed 8531 High Valley Road. Huffman-Broadway Group, Inc. July 2021.
48. Letter from the California Department of Fish and Wildlife. June 22, 2020. General Agreement Notification Not Required – Notification No. EPIMS-LAK-10879-R2 – Cannabis Cultivation – APN 006-003-34.
49. SWRCB Notice of Applicability, Water Quality Order WQ 2019-0001-DWQ.