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

May 26, 2023

CALIFORNIA ENVIRONMENTAL QUALITY ACT
ENVIRONMENTAL CHECKLIST FORM
INITIAL STUDY (UP 20-31, IS 20-38)

1. Project Title:	Flying O Ranch Commercial Cannabis
2. Permit Numbers:	Major Use Permit UP 20-31 Initial Study IS 20-38
3. Lead Agency Name and Address:	County of Lake Community Development Department Courthouse, 3rd Floor, 255 North Forbes Street Lakeport, CA 95453
4. Contact Person:	Eric Porter, Associate Planner (707) 263-2221
5. Project Location(s):	11540 Bachelor Valley Road Upper Lake, CA 95485 APN: 002-024-22
6. Project Sponsor's Name & Address:	Alexander Rashed 241 Edith Road Petaluma, CA 94952 707-774-1234
7. General Plan Designation:	Rural Lands, Resource Conservation
8. Zoning:	**"**APZ-SC-WW-FF". Agricultural Preserve-Scenic Combining District-Waterway Combining District-Floodway Fringe Combining District
9. Supervisor District:	District Three
10. Flood Zone:	"X", low risk of flooding; a portion of site is in "A", flood zone
11. Slope:	Varied, from flat to over 30%
12. Fire Hazard Severity Zone:	California State Responsibility Area (CALFIRE and Northshore Fire Protection District); High Fire Risk area
13. Earthquake Fault Zone:	None mapped
14. Dam Failure Inundation Area:	Not located within Dam Failure Inundation Area
15. Parcel Size:	±238 Acres

16. Description of Project:

- One (1) Type 13: Distributor Transport Only, Self-distribution License: The transport of medicinal cannabis goods between entities licensed pursuant to California Code.

- One (1) A – Type 3: “Medium Outdoor” License: Outdoor cultivation consisting of 43,560 square feet (sf) of canopy. The cultivation would occur in approximately 54 raised planted beds that are four feet wide and 200 feet deep.

- One (1) - A - Type 3B: "Medium Mixed-Light": Greenhouse canopy consists of 21,960 sf inside five (5) greenhouses (each greenhouse is 30’ x 244’).

Operational Information

- Hours of Operation would be 8:00am to 6:00pm (Monday through Sunday)
- 4-6 employees per shift (will vary depending on season/time of year). The facility will be closed to public visitors.

Two phases of Development

- Phase 1: Two greenhouses (30’ x 50’) with six (6) raised planter boxes in each greenhouse (each raised planter box is approximately 6 ft. by 244 ft.). The cultivation area would be approximately 15,000 sf with a canopy area of approximately 8,784 sf.

- Phases 2*:* Would consist of 3 greenhouses (30’ x 50’) and nine (9) raised planter boxes (each raised planter box is approximately 6 ft. by 244 ft.). The cultivation area would be approximately 22,500 sf with a canopy area of approximately 13,176 sf.

Construction

According to the applicant, the following is in regards to site preparation and construction:

- *Construction would take place over an estimated one month period of time.*
- *The cultivator will use above-ground pots and will use a combination of on-site and imported soil for the pots.*
- *Minimal grading is needed.*
- *No removal of healthy trees greater than 5” diameter measured 4.5’ above grade is proposed.*
- *Equipment staging will occur on the previously disturbed portion of the site that is used as roadway / vehicle parking.*

Post Construction Operations.

- *Fertilizer will be packed in five-gallon, resealable containers. The containers are then stored in a secondary storage container located in a locked storage shed adjacent to the canopy site.*

- *When containers are emptied, they are returned to the seller and refilled. Product is entirely organic, and only enough product will be kept on site for ongoing cultivation purposes.*
- *The remaining containers are returned to the supplier. There are no other "chemicals" stored on site. There will be no use of chemical pesticides, rodenticides, or herbicides.*
- *Vegetative waste will be chipped and spread within the cultivation areas. Other waste material will be bagged and sold to Biomass Engineers.*
- *Solid waste will be transported to the solid waste landfill in Clearlake, CA.*
- *The facility is open for delivery and pick-ups Monday through Saturday, 7:00 a.m. to 7:00 p.m., and Sunday 12:00 p.m. to 5:00 p.m.*
- *Visitors to the site will be met by an employee of the site and have the date, time, identification, and purpose of the visit will be logged.*

FIGURE 1 – AERIAL PHOTO OF SITE AND SURROUNDING AREA

Water Analysis

A Technical Memorandum (Report) was prepared for this project by North Bay Civil Consulting dated April 22, 2022. The Report evaluates annual water demand for the project; aquifer rate; and provides well data for the on-site well.

Well Test
There is one existing permitted on-site groundwater well that was tested on April 11, 2022 by Pollock and Sons Pump. The well produced about 15 gallons of water per minute (GPM) during the two hour well test, and the water level dropped 35 feet and recovered 100% the following day.

Water Storage
According to the site plans submitted for this project, the applicants are proposing four (4) 2,500 gallon water tanks for irrigation purposes with no additional tanks for fire suppression purposes. The County however will require a minimum of 5,000 gallons of water for fire suppression purposes to be placed on site with connectors that can easily be used by emergency service providers if needed for fire suppression.

Projected Water Demand
The Report projects the annual water usage as being about 3.15 gallons per minute, or about 14% of the well's productivity. The Report states that average water demand for the project will be 2.48 acre-feet over a 180 day cultivation period, however more realistically is a 270 day cultivation period. Using the 2.48 acre-feet over 180 days (about 806,000 gallons) as the baseline, the project will use an average of 4,478 gallons of water per day, or about 1,209,000 gallons per year (about 3.72 acre-feet). The project will likely use a drip irrigation system to disperse water to the plants, which is the most water-efficient means of irrigation. The plants will be in fabric pots or raised beds; the drip irrigation systems are typically used for this type of cultivation.

Aquifer Storage
The Report states that the project site will use the Upper Lake Water Basin. The Report states that water in this basin is typically found near the surface, about 10 feet down in many instances. The Report states that the County's Water Resources Department estimates that this aquifer has an overall storage capacity of 9000 acre-feet (about 2,925,000,000 gallons), of which about 5000 acre-feet are 'usable'. The average year water demand on this aquifer is about 4000 acre-feet according to the Report, leaving about 1000 acre-feet available. The California Department of Water Resources has not identified this aquifer as being 'critically overdrafted', and there are no prohibitions to using this aquifer for irrigating cannabis.

Aquifer Recharge. The project area has average rainfall of 38.82 inches during a non-drought year, and 10.38 inches during a drought year. The Report assumes a recharge percentage of 50% infiltration with the remainder either being evaporated or migrating into a surface water storage area (lake). The Report estimates that the total recharge area is 807 acres in size. Taking soil characteristics into account, the Report states that a total of 159 acre-feet will recharge during a drought year, and 185 acre-feet will recharge during a non-drought year. The Report states that this project will demand between 1.3 and 1.6% of the total recharge rate annually to meet its water demand.

Competing Water Demand. The report states that there are 243 domestic wells, 99 irrigation wells, 6 municipal wells, 22 monitoring wells, and 68 'other wells' using this aquifer. The

Report states that the existing water demand on the aquifer is 8,257 acre-feet per year. The Report states that the proposed water use will have little to no cumulative impact on the agricultural water demand from this aquifer, however the total water demand appears to exceed the total estimated storage capacity in this aquifer.

Concerns about the Hydrological Assessment. In 2022, Lake County entered into a contract with LACO, a local Land Use Consulting Firm, to assist with cannabis projects. On March 10, 2023, LACO's HydroGeologist Christine Manhart sent a letter to the applicant stating that the Hydrology Report had deficiencies and needed revision. The eleven deficiencies named in the letter included:

1. Location map showing the well and other area wells / surface water bodies was not provided
2. EnviroStar data base was used to track contaminated water in the vicinity. The State's GeoTracker has a more comprehensive data base on contaminated water sites.
3. Discrepancy between proposed water use in "Proposed Conditions", "Water Demand" and Cumulative Impacts to Surrounding Areas". Needs to be revised.
4. Well completion report was not submitted for the Site well.
5. Study does not state whether aquifer is confined or unconfined; no qualitative or quantitative assessment of the aquifer's properties was provided.
6. Study does not clearly identify project water use or the timing of the use over the course of a year. The GPMs listed in the Well Report were the result of a 2 hour well test rather than taking a larger test sample. There is no evidence that the well will be sustainable.
7. Redundant comment to #6.
8. Study does not identify pumping test methodology for the Site well. No report on monitoring equipment or results was provided.
9. The Study states that there is insufficient data available for the Middle Creek Groundwater Basin and uses the Upper Lake Basin as a proxy. However a comparison of the geology and/or hydrogeology of the two basins supporting the appropriateness of the proxy was not provided.
10. The calculation for the recharge rate uses a value for evapotranspiration that is significantly lower than in published sources, such as the Groundwater Sustainability Plan for the nearby Big Valley Basin. Study needs a cited source.
11. In the "Cumulative Impacts to Surrounding Areas" section, the Study compares the project's water usage to the recharge over the entire Upper Lake Basin (over 800 acres in total land area). This comparison is unrealistically broad and needs revision.

Conclusion

The Report suggests that the aquifer has a usable amount of 5,000 acre-feet of water, and that the current annual demand is over 4,000 acre-feet of water. The annual recharge of the aquifer is estimated to be 159 acre-feet during a drought year and 185 acre-feet during a non-drought year. The Study concludes that it appears that this project currently has enough water available, but that the recharge rate of the aquifer may be much less than the annual demand being placed on it. Staff is accepting the Hydrology Technical Memorandum prepared by North Bay Civil Consulting, Matthew Klein, P.E., for purposes of this Initial Study.

Energy Usage
According to the applicant's application material, the proposed use would rely on grid power and would consist of one acre of outdoor cultivation area with little power demand from the project, and five 30' x 244' greenhouses containing lights and air filtration systems that would have a presumed total demand of up to 400 amps. The security system, the well pump and any lighting on site would also require power. There is an existing dwelling on site that uses a 200 amp service; another 400 amps would appear to be sufficient to provide all the power that this cultivation project will need.

There are no grid capacity issues at this location. PG&E was notified of this project, and sent a initial response acknowledging receipt of the Request for Review, but did not submit any project-related comments.

Solid Waste Management
Annual non-hazardous solid waste generated by project operations is estimated to be about 500 pounds per year. All non-hazardous waste will be hauled to the nearest waste disposal transfer station located in Lakeport. There are no capacity issues at the South Lake Waste Facility in Clear Lake.

Wastewater Management
The site will rely on portable ADA-compliant restroom and wash station, which will be serviced at regular intervals by the applicant's septic company.

Stormwater Management
A Stormwater Management Plan (SMP) has been prepared and submitted to Lake County Planning Department; the Plan identifies the method of stormwater containment in the cultivation area (straw wattles), which are typical for this type of cultivation activity. The cultivation area is set back more than 100 feet from all water courses on site. Setbacks from any surface water channel or above-ground water storage facility is 100 feet or more as is required by Article 27.11(at) of the Lake County Code.

17. *Surrounding Land Uses and Setting:* The overall area contains a number of lots that are traditional crop producers. The following lots are adjacent to the subject site:

- North: "APZ-WW", Agriculture Preserve - Waterway; parcel is 534.84 acres in size and is undeveloped.

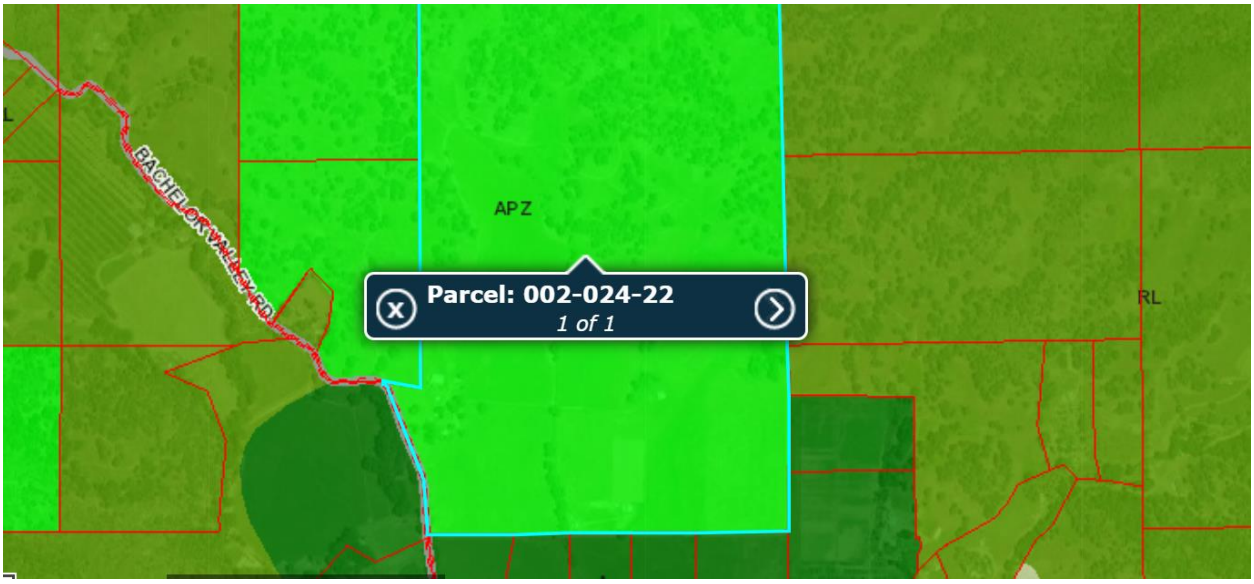
- Northeast: "RL-WW", Rural Lands – Waterway; two lots with each being about 80 acres in size and undeveloped.

- Southeast: "A-WW", Agriculture – Waterway. Two parcels of 10.87 and 18.08 acres in size and are developed with dwellings and crop production.

- South: "A-SC-WW-FF", Agriculture – Scenic Combining – Waterway – Floodway Fringe. Parcels range from 10 to 13 acres in size; two contain dwellings, and all five are crop-producing lots.

- West: "APZ-WW", Agriculture Preserve - Waterway. Parcel is 38.63 acres in size and is undeveloped.

FIGURE 2 – ZONING OF SITE AND ADJACENT LOTS



Source: Lake County Parcel Viewer

- West: "APZ-SC", Agriculture Preserve – Scenic Combining. Parcel is 37.54 acres in size and is developed with a dwelling and accessory buildings.

- West: Split-zoned; "A-SC-FF", Agriculture – Scenic Combining – Floodway Fringe; and "RL-SC-FF-WW", Rural Lands – Scenic Combining – Floodway Fringe – Waterway. Property is 138.35 acre in size and contains a dwelling, accessory buildings and traditional crop production. There is an above-ground pond on the property.

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

    The extent of this environmental review falls within the scope of the Lead Agency, the Lake County Community Development Department, and its review for compliance with the Lake County General Plan, the Northshore 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:

    - Lake County Community Development Department
    - Lake County Department of Environmental Health
    - Lake County Air Quality Management District
    - Lake County Department of Public Works
    - Lake County Department of Public Services
    - Lake County Agricultural Commissioner
    - Lake County Sheriff Department
    - Northshore Fire Protection District,
    - Central Valley Regional Water Quality Control Board
    - State Water Resources Control Board
    - California Department of Forestry & Fire Protection (Calfire)
    - California Department of Fish & Wildlife (CDFW)
    - California Department of Food and Agriculture (CalCannabis)
    - California Department of Pesticides Regulations

- California Department of Public Health
- California Bureau of Cannabis Control
- California Department of Consumer Affairs
- California Department of Transportation (CalTrans)

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

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

    Lake County sent letters to 11 tribes on October 11, 2022, informing tribes of the proposed project and offering consultation under AB-52. Of the 11 notified Tribes, the Yocha Dehe Tribe responded and deferred to the Upper Lake Habematolel Tribe. The Upper Lake Habematolel Tribe sent a letter to the County indicating that there might be some potential for discovery of significant items, and that they sought a site visit. Staff reached out to the Tribe on March 30, 2023 to provide them with the Cultural Study, site plans, and to set up a consultation on this project, which took place on April 18, 2023. Further, comments from Sonoma State and the Archaeological Assessment were sent to the Upper Lake Tribe on December 20, 2022 via email by Associate Planner Eric Porter.

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.

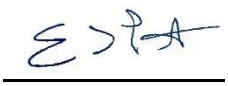
☒ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ 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: Eric J. Porter, Associate Planner



Signature: Date: 4-27-2023

Mireya G. Turner, Director
Lake County Community Development Department

SECTION 1

EVALUATION OF ENVIRONMENTAL IMPACTS:

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

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

3) Once the lead agency has determined that a particular physical impact may occur, and then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is

appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

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

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

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

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

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

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

I. AESTHETICS	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Except as provided in Public Resource Code Section 21099, would the project:					
a) Have a substantial adverse effect on a scenic vista?	☐	☒	☐	☐	1, 2, 3, 4, 5, 6, 9
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 project site is located on a relatively flat portion of a very steep property that is visible from Hunter Point Road, which is a shared access roadway in this location. The project will need to have screening fencing around the perimeter of the cultivation area because of its visibility and for security reasons. A mitigation measure requiring this is added as follows:

AES-1: the applicant shall install a minimum 6' tall screening fence around the cultivation area. Fabric shall not be used; the screening material shall be chain link with slats, or a solid wood or metal fence. This shall occur prior to any cultivation occurring on site.

Less than Significant Impact with Mitigation Measure AES-1 incorporated

b) The proposed project will be visible from Hunter Point Road, which passes very close to the cultivation area. The applicant has stated that no trees will be removed by this proposal. There are no rock outcroppings on site, and there are no historic buildings that might otherwise be impacted by this project. The terrain is steep and heavily treed at this location, so the visual impact of the project for other nearby dwellings in the area will be minimal, and the requirement for a 6' tall screening fence will help to screen the cultivation site from view.

Less than Significant Impact

c) The site is located within a rural area that has large lots and sparse development. The 1.5 acre cultivation site will not adversely impact the scenic quality of this area if it is screened as is required by mitigation measure AES-1.

Less than Significant Impact

d) The project has some potential to create additional light or glare because of the five proposed greenhouses. The following mitigation measure is added to inhibit light from being seen outside of the greenhouses:

AES-2: Prior to greenhouse cultivation, the applicant shall install blackout screening so that light will not be visible outside any greenhouse.

Less than Significant Impact with mitigation measure added

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) The cultivation sites are mapped as 'farmland of local importance'. The site has historically been used for hay production. The soil on the cultivation site is mapped as being Type 233, "Still loam stratified substratum", which is generally used in crop production such as vineyards, orchards and hay production. The site is not located in a Farmland Protection Zone, so outdoor cultivation is permissible with a use permit.

   Less Than Significant Impact

b) The site and several neighboring lots to the north and west are under Williamson Act contracts. This project will not have the effect of inhibiting crop production on the subject lot

or the neighboring lots that are under Williamson Act contracts – the cultivation footprint is under two acre in total size, and the lot is ±238 acres in total area. The pesticides and fertilizers used are organic and pose little risk to other traditional crops in the vicinity.

Less Than Significant Impact

c) The project site is zoned "APZ" Agricultural Preserve, and is not zoned for forestland or timberland, nor has it been used historically for timber production.

No Impact

d) The project is limited to one acre of outdoor commercial cannabis cultivation and would not result in the loss or conversion of forest land to a non-forest use since no timber production is occurring on the land.

No Impact

e) As proposed, this project would not induce changes to existing farmland that would result in its conversion to non-agricultural use. Cannabis cultivation is generally viewed by the County as being an agricultural use, although there are no formal agricultural designations for cannabis cultivation largely due to the Schedule 1 Federal designation, and the State's non-agricultural position of cannabis cultivation. The use will not prevent the ongoing use of the site for hay production, nor will it prevent neighboring lots from growing traditional crops.

Less Than Significant 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.

Because 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 Bay Area Air Quality Management District's 'significance thresholds' address air quality standards that are associated with a project.

According to the USDA Soil Survey and the ultramafic, ultrabasic, serpentine rock and soils map of Lake County, serpentine soils have not been found on the Project Property, and would pose no threat of asbestos exposure during either the construction phase or the operational phase. Air impacts from vehicle use is addressed in section c) below.

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

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.

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.

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 1,000 feet from the cultivation 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.

The proposed Project has some potential to result in short- and long-term air quality impacts from construction and operation of the proposed Project.

Construction impacts, which include the construction of five greenhouses, fencing, security system installation, interior driveway improvements and preparation of soils for planting, would be temporary in nature and would occur over an estimated six to eight week period.

Operational impacts would include dust and fumes from site preparation of the cultivation area and vehicular traffic, including small delivery vehicles that would be contributors during and after site preparation and construction. The EPA has indicated that a vehicle produces 404 grams of CO_2 on average for each vehicle mile traveled. The project would have up to an estimated four full-time employees during construction and peak harvest-time operations, with each employee driving an estimated 5 miles each way to and from the job site from Upper Lake, the presumed location of employee housing for the project. Assuming each employee drives 24 miles daily; that the project is operational six days per week over a 39 week growing period, a total of 9,360 vehicle miles would result by employees per year. Assuming each vehicle mile produces 404 grams of CO_2, the total annual CO_2 output would be 3,781,440 grams of CO_2, or 3.7 tons of CO_2 per year.

As previously stated, Lake County uses Bay Area Air Quality Standards, which have an upper limit of 1,100 metric tons of CO_2 ***per project*** as the threshold of significance. Using this figure, it would take this project about 297 years to reach the 'threshold of significance' for CO_2 gas emissions.

Pesticide application will be used during the growing season and only within the cultivation area. The cultivation area will be surrounded by a fence which will help to prevent off-site drift of pesticides. Additionally, no demolition or renovation will be performed which would cause asbestos exposure, and there are no mapped serpentine soils on the subject site.

~~I~~mplementation of mitigation measures would reduce air quality impacts to less than significant. 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.

Cannabis cultivation activities involve certain disturbance of soil; whether its related to grading to upgrade interior driveways to meet PRC 4290 and 4291 commercial driveway standards; preparing areas as parking lots, or importing soil for outdoor cultivation (usually fabric pots). Lake County routinely puts mitigation measures in place to prevent dust from the project to migrate, and to protect the site and area from air quality-related impacts. Therefore the following mitigation measures are added:

- 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.
- 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 any diesel 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 removed 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.

Less than Significant Impact with mitigation measures added

d) The Project Property is located in a rural area of the County of Lake, where the majority of development is scattered single family residential dwellings on large lots with a few agricultural uses in the vicinity. The potential impacts to air quality are dust and odor; the dust has been addressed in mitigation measures. The odor is seasonal around harvest time, and given the sparse population, the terrain and large lot sizes in this area, the impact associated with cannabis odor should be minimal.

Less than Significant Impact

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, 45
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, 45

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, 45
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
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐	1, 2, 3, 4, 5, 11, 12, 13
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒	1, 2, 3, 5, 6

Discussion:

a) A Biological Assessment (BA) of the Project Property was prepared by Jacobzoon and Associates and is dated January 21, 2020. The Assessment, which was done out of season, concluded that there are six potentially listed plant and animal species located in or near the cultivation site. These species include the tri-colored blackbird, golden eagle, yellow-breasted chat, western bumble bee, pallid bat and American badger. None of these species were observed during the site survey. Likewise, no listed amphibian species were observed on the site. There is a Class II watercourse on the site, however it is shown on the plans submitted, and will be avoided (setbacks) by more than 100 feet. The Study concludes that the site does not have suitable nesting habitats for birds other than the area in or near the Class II watercourse, which will be avoided.

   The Study recommends that if any vegetation is to be removed within the riparian corridor during nesting season (March 1 through August 31), that a pre-development nesting bird survey is conducted prior to vegetation removal. The following mitigation measure is therefore added:

   - BIO-1: If any vegetation is to be removed within 100 feet of the riparian corridor, a nesting survey shall be conducted by a professional biologist. If any nests are discovered, the area shall be avoided, and a 50' buffer area shall be established to protect the nesting birds.

   Less Than Significant Impact with mitigation measure added

b) No removal of riparian vegetation appears to be necessary for this project, however mitigation measure BIO-1 has been added in the event that some vegetation clearing within 100 feet of a riparian area is needed for driveway improvements or defensible space clearing. The applicant will be required to remove some shrubs and grasses in order to meet CALFIRE's Public Resource Code requirements for commercial driveways (primarily widening the existing driveway).

Less Than Significant Impact with mitigation measure added

c) There are no federally-protected wetlands located in or within 100 feet of the cultivation sites; therefore the project will not impact any wetlands.

Less Than Significant Impact

d) The site survey that preceded the Biological Assessment took place out-of-season on February 3, 2021. The locations of any special-status species sighted were marked on aerial photographs and/or georeferenced with a geographic positioning system (GPS) receiver. Habitat types occurring in the Study Area were mapped on aerial photographs, and information on habitat conditions and the suitability of the habitats to support special-status species was also recorded. The Study Area was also informally assessed for the presence of potentially-jurisdictional water features, including riparian zones, isolated wetlands and vernal pools, and other biologically-sensitive aquatic habitats.

The Study concluded that "no critical habitat for any Federally-protected species occurs in the Project Area or surrounding Study Area during the field survey other than ephemeral watercourses.

Less than Significant Impact

e) The proposed project would be consistent with all Lake County ordinances related to the protection of biological resources, because there are no protected biological resources present on the project site. The proposed project would not affect any wetlands, ephemeral drainages, or other sensitive habitats protected by the Lake County Zoning Ordinance. According to the material submitted, no tree removal will be required, so no County tree removal policies or ordinances would apply.

Less than Significant Impact

f) No adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other local, regional, or state habitat conservation plans have been adopted for the Project area 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) A Cultural Resource Evaluation was prepared for this project by Wolf Creek Archaeology and is dated January 17, 2020.

The summary indicated that there no cultural resources were discovered within the project boundaries, however a significant historic building (the 1868 John Boone Howard Ranch House) is located on the site. The Study states that the historic ranch house meets the State Requirements to be considered a "significant" historic resource and therefore must be avoided during the cultivation activities. The Study recommends a 50' setback from the building be established. The building must be shown and labeled on a revised site plan, along with the 50' buffer that is being recommended.

The Evaluation also stated that it is possible that some significant relics or artifacts may exist on the site that were not seen during the site survey. The Evaluation also stated that it was unlikely that human remains exist on the site, but stated that if inadvertent discovery were to occur, that the Tribe and a qualified Archaeologist be made aware of the discovery. The County also requires the Sheriff's Department to be notified in the event of such inadvertent discoveries; mitigation measures are added to address this occurrence if it were to happen.

The Upper Lake Habematolel Tribe submitted a letter dated October 11, 2022 expressing interest in this project, including a site visit to observe the ground that the cultivation activity would occur.

The County set up a consultation meeting with the Tribe that took place on April 18, 2023. The applicant agreed to having the tribe visit the site, and that a tribal monitor would be on site during the planting activity (the time of ground disturbance). The tribe offers training for employees immediately prior to site disturbance, which is scheduled to occur. Although no further follow-up appears to be necessary to mitigate potential site disturbance, Lake County is rich in tribal culture. Because of this, the County routinely requires specific mitigation measures be put in place whenever a discretionary land use project involves any earth movement.

The following mitigation measures are therefore added as a precautionary measure:

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

- CUL-2: All employees shall be trained in recognizing potentially significant artifacts that may be discovered during ground disturbance. If any artifacts or remains are found, the culturally affiliated Tribe shall immediately be notified; a licensed archaeologist shall be notified, and the Lake County Community Development Director shall be notified of such finds.

- CUL-3: The applicant shall show the historic Boone Ranch House structure on a revised site plan along with the recommended 50' buffer of 'non disturbance' prior to any site disturbance. In the event that any buried historic features (buried trash pits, outhouse vaults, filled in wells, etc.) are encountered elsewhere on the project site, work shall be immediately suspended, and an archaeologist called in to evaluate the significance of the feature. Work can resume after a mitigation plan has been developed and approved by the Community Development Director for Lake County.

Less than Significant Impacts with Mitigation Measures CUL-1 through CUL-3 incorporated.

b) Site disturbance will take place as part of project and site preparation, so there is a potential for inadvertent discovery of as-of-yet undiscovered resources during project construction. Therefore, this impact is considered to be potentially significant. Mitigation measures CUL-1 through CUL-3 will reduce potential effects of inadvertent discovery to 'less than significant levels'.

Less than Significant Impact with Mitigation Measures CUL-1 through CUL-3 incorporated.

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 Impact with Mitigation Measures CUL-1 through CUL-3 incorporated.

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) The proposed Project consists of outdoor cultivation with limited supplemental lighting for security purposes. The overall power usage of this operation would be about 200 to 400 additional amps of power (there is already a 200-amp service on site serving the existing structure on site).

The cultivation project will require some power for security systems, water pumps, minor outdoor lighting and cannabis filtration equipment. The applicant is proposing to use on-grid power; no alternative energy sources are proposed.

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. The proposed Project consists of outdoor cultivation with minimal security lighting. The cultivation site will require power for security systems, water pumps, greenhouse lighting, minor outdoor lighting and cannabis filtration equipment. Electricity will be provided by 'on-grid' power.

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
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 waste water?	☐	☐	☒	☐	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 life of the Project. That risk is not considered substantially different than that of other similar properties and projects in Northern California.

Earthquake Faults (i)

According to the USGS Earthquake Faults map available on the Lake County GIS Portal, there are no mapped earthquake faults within two miles of the Project Property. 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 construction is required to be built under Current Seismic Safety Construction Standards, and no large structures are proposed on this project site.

Landslides (iv)

The Project cultivation site has slopes under 10% and is not regarded as being at a high risk for landslides. According to the Landslide Hazard Identification Map prepared by the California Department of Conservation's Division of Mines and Geology, the area is considered generally stable. As such, the Project site is considered minimally 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) Some grading is proposed to prepare the Project site for cultivation, particularly for greenhouse pads, the pad for the 48' x 100' processing building, fence-post holes and road improvements to meet PRC 4290 and 4291 commercial driveway standards.

The applicant has provided an Erosion and Sediment Control Plan that addresses potential erosion through the application of gravel/rock to access roads, weed-free straw mulch to disturbed areas, and the installation of straw wattles around the proposed outdoor cultivation area. Additionally, the applicant shall comply with the State Water Resources Control Board's Cannabis General Order (Order No. WQ-2019-001-DWQ) and Chapters 29 and 30 of the Lake County Code, to protect water quality through the implementation of Best Management Practices (BMPs) / Best Practicable Treatment or Control (BPTC) measures, which include erosion and sediment control BMPs/BPTC measures.

Further, a Grading permit is required for the site preparation, which is a condition of approval for this project.

Less Than Significant Impact

c) The Project Property mostly contains slopes that are less than 10%. According to the Landslide Hazard Identification Map, prepared by the California Department of Conservation, Division of Mines and Geology, the project parcel is not located within and/or adjacent to an existing known "landslide area".

According to Lake County GIS data and the soil survey of Lake County, prepared by the U.S.D.A., the entire site consists of Type 233, which is not characterized as having a severe erosion potential.

The applicant is required to follow the Stormwater Mitigation Measures that they are proposing on the site plans submitted; this includes placing straw wattles around the cultivation area to channel drainage in a manner that it will not adversely affect the site or surrounding area. The following mitigation measure is required for this project:

- GEO-1: Prior to ground disturbance, the applicant shall install straw wattles around the cultivation area. No on-site drainage that originates from the cultivation area shall migrate into the seasonal or year-round water courses, or onto neighboring lots.

Less Than Significant with mitigation measure added

d) Type 233 soil is the soil type mapped on this site. This soil type is not overly expansive or prone to 'shrink-swell' that might otherwise put structures in danger. The greenhouses and the processing building will require building permits, and the structural integrity of the buildings will be assessed during the building permit review.

Less Than Significant Impact

e) The proposed project will be served by portable restroom facilities. No new septic/wastewater disposal systems are proposed or appear to be needed.

Less Than Significant Impact

f) According to the Cultural Study, the project site does not contain any known unique geologic feature or paleontological resources that might otherwise require protection or avoidance. There is a historic structure on the property located more than 100 feet from the cultivation site.

Less than Significant Impact

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 Property 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. Climate change is caused by greenhouse gases (GHGs) emitted into the atmosphere around the world from a variety of sources, including the combustion

of fuel for energy and transportation, cement manufacturing, and refrigerant emissions. GHGs are those gases that have the ability to trap heat in the atmosphere, a process that is analogous to the way a greenhouse traps heat. GHGs may be emitted as a result of human activities, as well as through natural processes. Increasing GHG concentrations in the atmosphere are leading to global climate change. The Lake County Air Basin is in attainment for all air pollutants and has therefore not adopted thresholds of significance for GHG emissions.

The proposed Project consists of outdoor cultivation with no supplemental lighting. In general, greenhouse gas emissions associated with outdoor cannabis cultivation come from construction activities and vehicle trips. The outdoor cultivation areas will not have specific greenhouse gas-producing elements, and the cannabis plants will capture some carbon dioxide. Construction activities are limited to widening the interior driveway and gates, and bringing fabric pots onto the cultivation area. Construction activities are expected to occur over six to eight week period, generating between 4 to 8 vehicle trips per day. The operation is expected to generate about the same number of daily trips during operations.

Lake County uses the Bay Area Air Quality Management District (BAAQMD) thresholds of significance as a basis for determining the significance of air quality and GHG impacts. The BAAQMD threshold of significance for a project is 1,100 metric tons of CO_2 emissions per project. As stated in the Air Quality section of this document, the projected amount of CO_2 emissions is about 3.7 tons per year, well below the threshold of significance for CO_2 emissions.

Construction emissions and operational emissions were calculated using the California Emissions Estimator Model (CalEEMod®), Version 2016.3.2. Construction and operational CO_2 emissions are summarized above and in the tables of the Air Quality Section of this Initial Study. The results are expressed as a range of potential emissions. To magnify any air quality impacts, the model was run using the worst-case scenarios, and emissions estimates are reported here using the unmitigated emissions values. Air emissions modeling performed for this project demonstrates that the project, in both the construction phase and the operational phase, would not generate significant quantities of greenhouse gases and does not exceed the project-level thresholds established by BAAQMD.

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 proposed

Project was sent out for review from the LCAQMD and the only concern was restricting the use of an onsite generator to emergency situations only.

The Lake County Air Basin is in attainment for all air pollutants with a high air quality level, and therefore the LCAQMD has not adopted an Air Quality Management Plan, but rather uses its rules and regulations for the purpose of reducing the emissions of greenhouse gases. The proposed Project does not conflict with any existing LCAQMD or BAAQMD rules or regulations and would therefore have a less than significant impact.

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 will have up to three (3) individuals working on site (owners/operators) during normal operational hours, and with an expected 6.875 metric tons of overall operational CO_2e per year, the per capita figure of 2.29 metric tons of operational CO_2e per year meets the 2017 Climate Change Scoping Plan's 2030 target, and nearly meets the 2050 target.

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

Less than Significant Impact

IX. HAZARDS AND HAZARDOUS MATERIALS	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐	1, 3, 5, 13, 21, 24, 29, 31, 32, 33, 34
b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐	1, 3, 5, 13, 21, 24, 29, 31, 32, 33, 34
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒	1, 2, 5

d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒	2, 40
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒	1, 3, 4, 5, 20, 22
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐	1, 3, 4, 5, 20, 22, 35, 37
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

Discussion:

a) Chemicals Storage. According to the applicant, chemicals stored and used at/by the proposed cultivation operation include fertilizers/nutrients, pesticides, and some petroleum products (Agricultural Chemicals). All fertilizers/nutrients and pesticides, when not in use, will be stored in their manufacturer's original containers/packaging, undercover, and at least 100 feet from surface water bodies, inside the secure Pesticides & Agricultural Chemicals Storage Area (proposed metal shipping/storage container). Petroleum products will be stored under cover, in State of California-approved containers with secondary containment, and separate from pesticides and fertilizers within the proposed Pesticides & Agricultural Chemicals Storage Area.

Spill containment and cleanup equipment will be maintained within the proposed Pesticides and Agricultural Chemicals Storage Area, as well as Materials Safety Data Sheets (MSDS/SDS) for all potentially hazardous materials used onsite. No effluent is expected to be produced by the proposed cultivation operation.

Solid Waste Management

According to the applicant, the types of solid waste that will be generated from the proposed cultivation operation include gardening materials and wastes (such as plastic mulch and plastic/fertilizer/pesticide bags and bottles) and general litter from staff/personnel. All solid waste will be stored in bins with secure fitting lids, located directly adjacent to the proposed cultivation areas. At no time will the bins be filled to a point that their lids cannot fit securely. Solid waste from the bins will be deposited into a dump trailer and hauled to a Lake County Integrated Waste Management facility, at least every seven (7) days/weekly. The Eastlake Landfill is the closest Lake County Integrated Waste Management facility to the project site.

Site Maintenance

According to the applicant, all equipment will be stored in its proper designated area upon completion of the task for which the equipment was needed. Any refuse created during the work day will be placed in the proper waste disposal receptacle at the end of each shift, or at a minimum upon completion of the task assigned. Any refuse which poses a risk for contamination or personal injury will be disposed of immediately. 100 feet of defensible space will be established and maintained around the proposed buildings.

Access roads and parking areas will be graveled to prevent the generation of fugitive dust, and vegetative ground cover will be preserved throughout the entire site to filter and infiltrate storm water runoff from access roads, parking areas, and the proposed cultivation operation. Portable restroom facilities will be made available for use whenever staff are onsite and regularly serviced to ensure a safe and sanitary working environment.

The Project shall 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 waste generated by the facility.

Less Than Significant Impact

b) The Project involves the use of fertilizers and pesticides which will be stored in a secure stormproof structure.

Flood risk on the Project site is minimal; the entire property is located in the “X” flood zone, which has a low risk of flooding. According to Lake County GIS Portal data and the Project is not located in or near an identified earthquake fault zone.

The Project site is mapped as being within a high fire hazard severity area. Wildfire mitigation measures are added and found within the Wildfire section of this document.

The Project Property does not contain any identified areas of serpentine soils or ultramafic rock, and risk of asbestos exposure during site disturbance is minimal.

Less than Significant Impact

c) There are no schools located within one-quarter mile of the proposed Project site. The nearest school is Upper Lake Elementary School, which is located over five (5) miles south of the Project Property.

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 about 12 miles from the nearest public airport or public use airport (Lampson Field). Lampson Field is administered by the Lake County Airport Land Use Commission, which has not adopted an Airport Land Use Compatibility Plan. There will be no hazard for people working in the Project area from a public airport or public use airport.

No Impact

f) The Project would not impair or interfere with an adopted emergency response or evacuation plan. Bachelor Valley Road would be used to evacuate the site if an evacuation were needed. During evacuations, all persons at the Project site would be required to follow emergency response instructions for evacuations. Because the Project would not interfere with an adopted emergency response or evacuation plan, impacts are less than significant with the mitigation measures required in the Wildfire section of this document.

Less than Significant Impact

g) The Project site is within a mapped very high fire hazard severity zone. The applicant shall adhere to all federal, state, and local fire requirements and regulations for setbacks and defensible space.

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

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
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
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
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐	1, 2, 3, 5, 6, 29

Discussion:

a) The Project Parcel is enrolled in the State Water Resources Control Board's Cannabis General Order (Order No. WQ 2019-001-DWQ) as a Tier 2, Low Risk site (WDID: 5S17CC428007). As required in the Cannabis Order's Policy for coming into compliance with Best Practicable Treatment or Control (BPTC) measures, the applicant had to prepare a Site Management Plan (SMP) and a Nitrogen Management Plan (NMP) within 90 days of enrollment. "The purpose of the Cannabis Policy is to ensure that the diversion of water and discharge of waste associated with cannabis cultivation does not have a negative impact on water quality, aquatic habitat, riparian habitat, wetlands, and springs" (State Water Board, 2019). BPTC measures have been implemented at the site for erosion control and stormwater pollution. The purpose of the NMP is to identify how nitrogen is stored, used, and applied to crops in a way that is protective to water quality. The applicant is required to complete online Annual Monitoring and Reporting to assess compliance with the Cannabis General Order and Notice of Applicability. This includes BPTC measures for winterization.

   The applicant provided a Hydrology Report and an Erosion and Sediment Control Site Plan (Sheet 6) for the proposed Project. According to the applicant's Property Management Plan, the following erosion control measures will be followed:

   - Established and re-established vegetation within and around the proposed cultivation operation will be maintained/protected as a permanent erosion and sediment control measure.
   - Gravel will be applied to the surfaces of access roads, pathways, and the aisles between the garden beds/pots of the proposed cultivation areas, to allow for infiltration while mitigating the generation of sediment laden stormwater runoff.

- Straw rolls/wattles will be installed before November 15th of each year throughout the proposed cultivation operation per the Project's engineered Erosion and Sediment Control Site Plan, to filter pollutants and promote stormwater retention and infiltration.
- If areas of concentrated stormwater runoff begin to develop, additional erosion and sediment control measures will be implemented to protect those areas and their outfalls

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

The proposed Project has been designed to meet the required riparian setbacks on the flattest portion of the property to reduce the potential for water pollution and erosion.

Less Than Significant Impact

b) Due to exceptional drought conditions, the Lake County Board of Supervisors passed an Urgency Ordinance (Ordinance 3106) on July 27, 2021, 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 Analysis

A Technical Memorandum (Report) was prepared for this project by North Bay Civil Consulting dated April 22, 2022. The Report evaluates annual water demand for the project; aquifer rate; and provides well data for the on-site well.

Well Test
There is one existing permitted on-site groundwater well that was tested on April 11, 2022 by Pollock and Sons Pump. The well produced about 15 gallons of water per minute (GPM) during the two hour well test, and the water level dropped 35 feet and recovered 100% the following day.

Water Storage
According to the site plans submitted for this project, the applicants are proposing four (4) 2,500 gallon water tanks for irrigation purposes with no additional tanks for fire suppression purposes. The County however will require a minimum of 5,000 gallons of water for fire suppression purposes to be placed on site with connectors that can easily be used by emergency service providers if needed for fire suppression.

Projected Water Demand
The Report projects the annual water usage as being about 3.15 gallons per minute, or about 14% of the well's productivity. The Report states that average water demand for the project will be 2.48 acre-feet over a 180 day cultivation period, however more realistically is a 270 day cultivation period. Using the 2.48 acre-feet over 180 days (about 806,000 gallons) as the baseline, the project will use an average of 4,478 gallons of water per day, or about 1,209,000 gallons per year (about 3.72 acre-feet). The project will likely use a drip irrigation system to disperse water to the plants, which is the most water-efficient means of irrigation. The plants will be in fabric pots or raised beds; the drip irrigation systems are typically used for this type of cultivation.

Aquifer Storage
The Report states that the project site will use the Upper Lake Water Basin. The Report states that water in this basin is typically found near the surface, about 10 feet down in many instances. The Report states that the County's Water Resources Department estimates that this aquifer has an overall storage capacity of 9000 acre-feet (about 2,925,000,000 gallons), of which about 5000 acre-feet are 'usable'. The average year water demand on this aquifer is about 4000 acre-feet according to the Report, leaving about 1000 acre-feet available. The California Department of Water Resources has not identified this aquifer as being 'critically overdrafted', and there are no prohibitions to using this aquifer for irrigating cannabis.

Aquifer Recharge. The project area has average rainfall of 38.82 inches during a non-drought year, and 10.38 inches during a drought year. The Report assumes a recharge percentage of 50% infiltration with the remainder either being evaporated or migrating into a surface water storage area (lake). The Report estimates that the total recharge area is 807 acres in size. Taking soil characteristics into account, the Report states that a total of 159 acre-feet will recharge during a drought year, and 185 acre-feet will recharge during a non-drought year. The Report states that this project will demand between 1.3 and 1.6% of the total recharge rate annually to meet its water demand.

Competing Water Demand. The report states that there are 243 domestic wells, 99 irrigation wells, 6 municipal wells, 22 monitoring wells, and 68 'other wells' using this aquifer. The Report states that the existing water demand on the aquifer is 8,257 acre-feet per year. The Report states that the proposed water use will have little to no cumulative impact on the agricultural water demand from this aquifer, however the total water demand appears to exceed the total estimated storage capacity in this aquifer.

Concerns about the Hydrological Assessment. In 2022, Lake County entered into a contract with LACO, a local Land Use Consulting Firm, to assist with cannabis projects. On March 10, 2023, LACO's HydroGeologist Christine Manhart sent a letter to the applicant stating that the Hydrology Report had deficiencies and needed revision. The eleven deficiencies named in the letter included:

1. Location map showing the well and other area wells / surface water bodies was not provided
2. EnviroStar data base was used to track contaminated water in the vicinity. The State's GeoTracker has a more comprehensive data base on contaminated water sites.
3. Discrepancy between proposed water use in "Proposed Conditions", "Water Demand" and Cumulative Impacts to Surrounding Areas". Needs to be revised.

4. Well completion report was not submitted for the Site well.
5. Study does not state whether aquifer is confined or unconfined; no qualitative or quantitative assessment of the aquifer's properties was provided.
6. Study does not clearly identify project water use or the timing of the use over the course of a year. The GPMs listed in the Well Report were the result of a 2 hour well test rather than taking a larger test sample. There is no evidence that the well will be sustainable.
7. Redundant comment to #6.
8. Study does not identify pumping test methodology for the Site well. No report on monitoring equipment or results was provided.
9. The Study states that there is insufficient data available for the Middle Creek Groundwater Basin and uses the Upper Lake Basin as a proxy. However a comparison of the geology and/or hydrogeology of the two basins supporting the appropriateness of the proxy was not provided.
10. The calculation for the recharge rate uses a value for evapotranspiration that is significantly lower than in published sources, such as the Groundwater Sustainability Plan for the nearby Big Valley Basin. Study needs a cited source.
11. In the "Cumulative Impacts to Surrounding Areas" section, the Study compares the project's water usage to the recharge over the entire Upper Lake Basin (over 800 acres in total land area). This comparison is unrealistically broad and needs revision.

Conclusion
The Report suggests that the aquifer has a usable amount of 5,000 acre-feet of water, and that the current annual demand is over 4,000 acre-feet of water. The annual recharge of the aquifer is estimated to be 159 acre-feet during a drought year and 185 acre-feet during a non-drought year. The Study concludes that it appears that this project currently has enough water available, but that the recharge rate of the aquifer may be much less than the annual demand being placed on it. Staff is accepting the Hydrology Technical Memorandum prepared by North Bay Civil Consulting, Matthew Klein, P.E., for purposes of this Initial Study, but notes that further information is necessary before a finding can be made that this project will not adversely impact the surrounding area.

The unknowns associated with the aquifer proposed for use by this permit must be monitored closely. The following mitigation measure will help to assure the ongoing ability of this project to co-exist without harming area wells:

- HYD-1: The applicant shall provide well tests to the County's Community Development Department every other month for the first two years of operation to assure that the well remains stable. The applicant is strongly encouraged to place a monitoring well in the immediate vicinity of the production well to assist with the well monitoring data.

Less than Significant Impact with mitigation measure added

c) 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 low flooding risk.

Less than Significant Impact

d) The Project Property is located within the Sacramento River Basin. The Water Quality Control Plan for the California Regional Water Quality Control Board Central Valley Region (Basin Plan) is applicable to the Sacramento River Basin, as well as the San Joaquin River Basin. The State Water Resource Control Board's Cannabis General Order (2019-001-DWQ) adheres to water quality and management standards identified and outlined within the Basin Plan. Compliance with the Cannabis General Order will ensure that the project does not conflict with or obstruct implementation of a water quality control plan.

There are no groundwater management plans for the affected groundwater basin(s) at this time.

Less than Significant Impact

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 Property is located in a rural area of Lake County, characterized by large parcels containing scattered residential uses. The proposed Project would place on less than two acres of the ±238 acre lot; there are no roads other than the interior driveway that would be affected, and the project would not physically divide an established community.

No Impact

b) The proposed Project is consistent with the Lake County General Plan and Upper Lake - Nice Area Plan.

The General Plan Land Use and Base Zoning District designation currently assigned to the Project Parcel is "APZ" Agriculture Preserve. The Lake County Zoning Ordinance allows for commercial outdoor cannabis cultivation in the "APZ" land use zone with a major use permit. The project is consistent with all other development standards within the zoning code for commercial cannabis cultivation.

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 Property as the Lower Cretaceous-Upper Jurassic Great Valley Sequence and the Lower Cretaceous Great Valley Sequence, composed mostly of marine mudstones, siltstones, sandstones, and conglomerate. Additionally, according to the California Department of Conservation, Mineral Land Classification, there are no known mineral resources on the project site.

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 Upper Lake - Nice 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)	For a project located within the vicinity of a private airstrip or 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 expose people residing or working in the project area to excessive 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.

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

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

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

- 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.

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

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

The Project would not generate ground-borne vibration or noise, except potentially during the construction phase from the use of heavy construction equipment. 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, the Project is not expected to create unusual groundborne vibration due to site development or facility operation.

Less Than Significant Impact

c) The Project site is located over 12 miles from the nearest airport. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels from air travel.

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 is estimated to be up to four employees to be hired locally.

No Impact

b) The Project will not displace any existing housing.

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:

a) The Project site is serviced by the Northshore Fire Protection District, the Lake County Sheriff's Department, and the Lake County Public Works Department, and it is located within the Upper Lake Unified School District.

The Project does not propose any new housing or other uses that would necessitate new or altered government facilities. No new roads are proposed. The Project would be required to comply with all applicable local and state fire code requirements related to design and emergency access. Construction and operation of the proposed project may result in accidents or crime emergency incidents that would require police services. Construction activities would be temporary and limited in scope. Accidents or crime emergency incidents during operation are expected to be infrequent and minor in nature.

There will not be a need to increase fire or police protection, schools, parks or other public facilities as a result of the project's implementation.

Less than Significant Impact

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

Discussion:

a) As the small staff for the proposed Project 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) The Project Property is accessed via private interior driveway that connects with Bachelor Valley Road, a County road that is a paved road at this location. A minimal increase in traffic is anticipated due to construction, employee use, and weekly and/or monthly incoming and outgoing deliveries through the use of small vehicles.

There are no pedestrian or bicycle facilities on Bachelor Valley Road in the vicinity of the project site.

The applicant will be required to obtain and maintain all the necessary Federal, State and local agency permits for any works that occurs with the right-of-way. 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.

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*."

The cultivation site is located about 5 miles from Upper Lake, the nearest population base and the likely residency of employees. A total of four employees are likely during site construction and operations. Assuming each employee drives 5 miles to and from work, a total of 20 vehicle miles per day would result, and a total of 40 miles per day would result

during a 39 week growing year (about 240 miles per week). A total of two weekly deliveries would result from non employees, adding an additional 20 miles per week.

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 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 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. Improvements to the interior driveway will be required to make the driveway PRC 4290 and 4291 compliant; no other road improvements appear to be necessary for this project.

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 are proposed to be 20' wide, however CALFIRE requires emergency access routes that are gated to have gates that are 2 feet wider than the road, and the road is required to be 20' wide to meet PRC 4290 and 4291 road standards for a commercial driveway. 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) A Cultural Resource Evaluation (CRE) for the proposed cultivation Project was prepared by Wolf Creek Archaeology and is dated January 17, 2020. A pedestrian field survey of the affected portion of the site was undertaken during the site survey. A significant building, the Boone Ranch House (1868) exists on the site and requires a 50' buffer of non-disturbance that must be shown on a revised site plan and clearly labeled. Mitigation measure CUL-3 specifically addresses this building and its treatment protocol.

On May 15, 2023, staff received a letter from Sonoma State's historic preservation division, the California Heritage Resource Information System (CHRIS). The letter indicated that there were no previous surveys of the site on record, and recommended that prior to ground disturbance, an archaeologist undertake an on-site survey. It is unclear whether the Wolf Creek Archaeological Services site survey had been received by CHRIS prior to the date of the letter, however the Wolf Creek survey yielded negative results regarding significant artifacts or other evidence of tribal use of the property in the past. The survey did report that there is a historic building on the site that was a farmhouse built in 1868 that needed to have a 50' non-disturbed buffer around it. This will be required in a Condition of Approval.

Less than Significant Impact with Mitigation Measures CUL-1 through CUL-3 incorporated.

b) One historic building was discovered during the field survey conducted for the CRE. The lead agency has determined that, in its discretion and supported by substantial evidence, that the significant building must be shown on a revised site plan with a 50' non-disturbance buffer, and has added mitigation measure CUL-3 specifically to address further inadvertent discoveries elsewhere on the site. The project can be reduced to 'less than significant' levels with the implementation of mitigation measures CUL-1 through CUL-3.

Less than Significant Impact with Mitigation Measures CUL-1 through CUL-3 incorporated.

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
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 on-grid power for all project-related energy and water demands. The Project will use onsite portable restroom and handwashing facilities.

The Project will not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Less than Significant Impact

b) According to the Project's *Hydrology Analysis,* the propose outdoor cultivation operation has an estimated annual water use demand that can be met without harming the aquifer and interfering with other nearby lots' ability to have adequate water supply.

All water for the proposed cultivation operation will come from an existing onsite permitted groundwater well located on the cultivation site.

The Hydrology Report prepared for the proposed Project showed that the aquifer could recharge more than the annual water demand for the project based on the 238 acre recharge area of the site.

Staff has concluded that the aquifer is sufficient to accommodate the project during a drought year based on the information received by the County.

Less than Significant Impact

c) The Project will be serviced by onsite portable restroom and handwashing facilities. No new septic systems are proposed.

Less Than Significant Impact

d) It is estimated that approximately 400 pounds of waste from the proposed Project will be taken to the Eastlake Landfill each year. The Eastlake Landfill, South Lake Refuse Center, and Quackenbush Mountain Resource Recovery and Compost Facility are located within reasonable proximity of the Project site. 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.

There is adequate solid waste capacity to accommodate the proposed Project, and 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 Impact

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 Impact

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 impair an adopted emergency response plan or evacuation plan. The applicant shall 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.

Less than Significant Impact

b) The Project site is situated in a moderate fire hazard severity zone. The northern portion of the site has significant slopes, however the cultivation area is located on a flat portion of the lot that is mostly devoid of vegetation. The cultivation site would 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 on site by being required to improve the interior driveway to meet PRC 4290 and 4291 standards, and by requiring the installation of water tanks, one of which would be reserved for use by Fire Protection agencies if needed.

The following mitigation measures are required for this project due to the moderate severity risk of wildfire associated with this site:

- 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 will not occur on windy days that could increase the risk of wildfire spread should the equipment create a spark.

- WDF-2: Prior to cultivation, the applicant shall provide 100’ of defensible space around all buildings. This does not require tree removal, but it does require removal of grasses and brush, and limbing trees up to a height of 8’.

- WDF-3: Prior to cultivation, the applicant shall schedule a site visit with the Building Official or designee to verify that the roads, gates and site are PRC 4290 and 4291 compliant.

- WDF-4: The applicant shall place at least 5,000 gallons of water on site that is designated specifically as for use of fire suppression. Water tanks shall have connectors that are able to the used by Fire Protection Districts.

- WDF-5: The applicant shall install Knox-Boxes on all locked gates to enable emergency service providers to access the site. The property address shall be clearly posted on the driveway entrance to the site from Bachelor Valley Road.

Less than Significant Impact with Mitigation Measures WDF-1 through WDF-5 incorporated.

c) The proposed site improvements are generally limited to widening the interior driveway to meet PRC 4290 and 4291 standards for a commercial driveway, and for clearing brush for defensible space around structures.

Less than Significant Impact

d) There is some chance of increased risks associated with post-fire slope runoff, instability, or drainage impacts based on the slope of the northern portion of the site. Mitigation measure GEO-1 is intended to reduce runoff-related impacts to 'less than significant' levels.

Less than Significant Impact with mitigation measure added

XXI. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐	ALL
b) Does the project have impacts that are individually limited, but cumulatively considerable? (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) The project proposes the cultivation of commercial cannabis in a rural area of the County on an "APZ" Agriculture Preserve-zoned parcel.

According to the biological and cultural studies conducted, the proposed 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.

Mitigation measures are listed herein to reduce impacts related to Aesthetics, Air Quality, Cultural/Tribal Resources, Geology, Hydrology and Water Quality, Noise, and Wildfire.

Less than significant impact with mitigation measures added.

b) Potentially significant impacts have been identified related to Aesthetics, Air Quality, Cultural and Tribal Resources, Geology, Hydrology and Water Quality, 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.

Implementation of and compliance with the 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 impact 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, Cultural and Tribal Resources, Geology, Hydrology and Water Quality, Noise, and Wildfire have the potential to impact human beings. Implementation of and compliance with the 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

Impact Categories defined by CEQA

Source List

1. Lake County General Plan
2. Lake County GIS Database
3. Lake County Zoning Ordinance
4. Upper Lake - Nice Area Plan
5. Flying O Ranch Cannabis Cultivation Application – Major Use Permit.
6. U.S.G.S. Topographic Maps
7. U.S.D.A. Lake County Soil Survey
8. Lake County Important Farmland Map, California Department of Conservation Farmland Mapping and Monitoring Program
9. Department of Transportation's Scenic Highway Mapping Program, *(*https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways)
10. Lake County Serpentine Soil Mapping
11. California Natural Diversity Database (https://wildlife.ca.gov/Data/CNDDB)
12. U.S. Fish and Wildlife Service National Wetlands Inventory
13. Biological Assessment prepared by Jacobzoon and Associates dated January 21, 2020.

14. Cultural Resource Evaluation prepared by Wolf Creek Archaeology and dated January 17, 2020.
15. California Historical Resource Information Systems (CHRIS); Northwest Information Center, Sonoma State University; Rohnert Park, CA.
16. Water Resources Division, Lake County Department of Public Works Wetlands Mapping.
17. U.S.G.S. Geologic Map and Structure Sections of the Clear Lake Volcanic, Northern California, Miscellaneous Investigation Series, 1995
18. Official Alquist-Priolo Earthquake Fault Zone maps for Lake County
19. Landslide Hazards in the Eastern Clear Lake Area, Lake County, California, Landslide Hazard Identification Map No. 16, California Department of Conservation, Division of Mines and Geology, DMG Open –File Report 89-27, 1990
20. Lake County Emergency Management Plan
21. Lake County Hazardous Waste Management Plan, adopted 1989
22. Lake County Airport Land Use Compatibility Plan, adopted 1992
23. California Department of Forestry and Fire Protection - Fire Hazard Mapping
24. National Pollution Discharge Elimination System (NPDES)
25. FEMA Flood Hazard Maps
26. Lake County Aggregate Resource Management Plan
27. Lake County Bicycle Plan
28. Lake County Transit for Bus Routes
29. Lake County Environmental Health Division
30. Lake County Grading Ordinance
31. Lake County Natural Hazard database
32. Lake County Countywide Integrated Waste Management Plan and Siting Element, 1996
33. Lake County Water Resources
34. Lake County Waste Management Department
35. California Department of Transportation (Caltrans)
36. Lake County Air Quality Management District website
37. Lake County Fire Protection District
38. Site Visit – July 24, 2020
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. Hydrological Study and Drought Management Plan, prepared by North Civil Consulting, dated April 22, 2022.