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

November 8, 2023

CALIFORNIA ENVIRONMENTAL QUALITY ACT ENVIRONMENTAL CHECKLIST FORM INITIAL STUDY (UP 20-23, IS 20-26)

1. Project Title:	Vann Ranch / Omar Malfavon
2. Permit Numbers:	Major Use Permit UP 20-23 Initial Study IS 20-26
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:	Mary Claybon, Assistant Planner II (707) 263-2221
5. Project Location(s):	15095, 15187,15263, 15365 & 15525 Elk Mountain Road, Upper Lake, CA 002-021-04, 15, 16, 17 Cultivation parcels 002-021-23 Cluster parcel
6. Project Name & Address:	Vann Ranch PO Box 361 Ukiah, CA 95423
7. General Plan Designation:	Rural Lands, Resource Conservation
8. Zoning:	"APZ-SC-WW-FF", Agriculture Preserve, Scenic Combining**,** Waterway, Floodway Fringe
9. Supervisor District:	District 3
10. Flood Zone:	"A, D & X"; the cultivation sites are in the "X" (areas of minimal flooding) designated portion of the property
11. Slope:	Varied; cultivation sites are on less than 20% slopes
12. Fire Hazard Severity Zone:	California State Responsibility Area (CALFIRE); Moderate and Very High Fire Risk

13. Earthquake Fault Zone: None

14. Dam Failure Inundation Area: Not located within Dam Failure Inundation Area

15. Parcel Size: 39.04 Acres (002-021-04)
75.33 Acres (002-021-15)
37.76 Acres (002-021-16)
76.48 Acres (002-021-17)
123.17 Acres (002-021-23)
351.78 Acres Combined

16. Description of Project:

The applicant, Omar Malfavon, is requesting discretionary approval from the County of Lake for a Major Use Permit, UP 20-23, for a proposed commercial cannabis cultivation operation inclusive of five (5) A-Type 3 "Medium Outdoor" licenses, one (1) A-Type 4 "Nursery" license, and one (1) A-Type 13 Self-Distribution license. Cultivation activities would only occur on Lake County APN's 002-021-04, 15, 16, and 17 (Project Parcels). Water for the proposed cultivation operation would come from three (3) onsite groundwater wells. The proposed cultivation operation would be composed of the following:

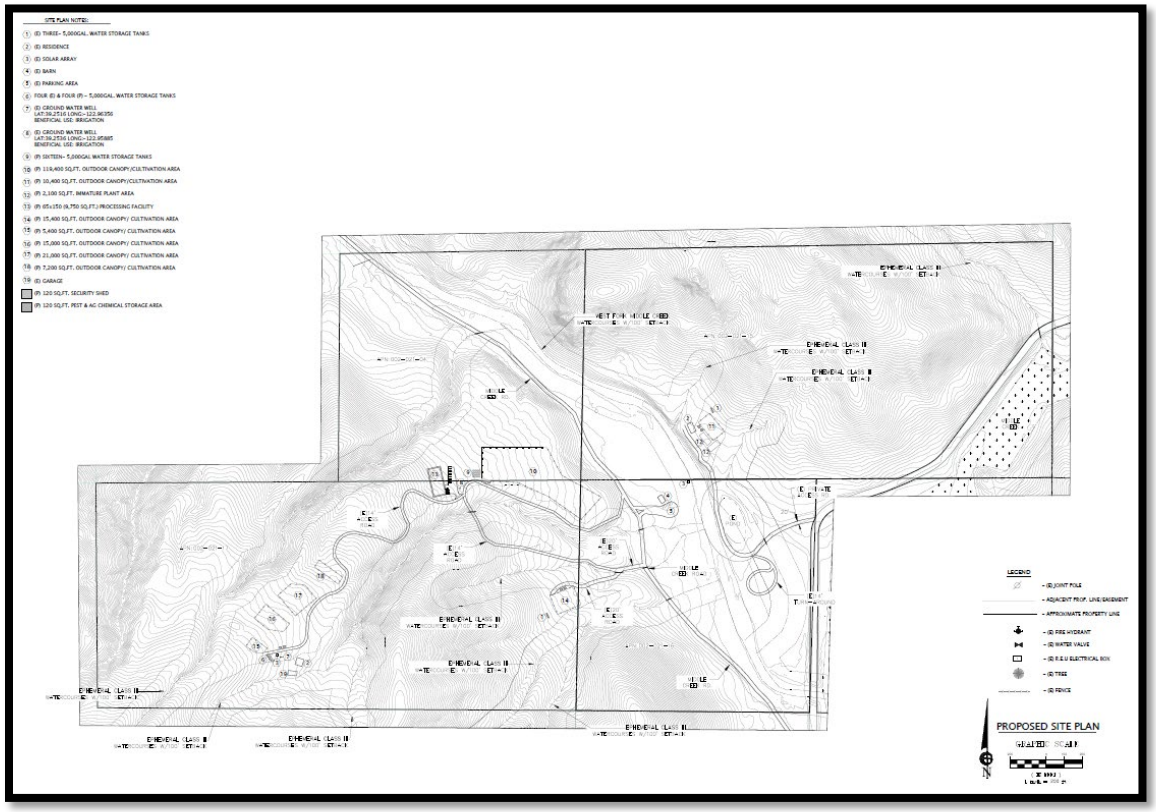
- Up to 193,800 sq. ft. (4.45 acres) of cannabis canopy within seven fenced outdoor cultivation areas
- Thirty 5,000-gallon water storage tanks (proposed)
- Eight 120 sq. ft. wooden storage sheds (proposed)
- Three existing onsite permitted groundwater wells (existing)
- Two 2,100 sq. ft. immature plant greenhouses (proposed)
- A 4,760 sq. ft. Harvest Storage Area (existing barn)
- A 9,750 sq. ft. Processing Facility/Building with ADA-compliant restroom (proposed) with roof-mounted solar array
- 15 employee parking spaces, including 1 ADA space (existing and proposed)

The proposed outdoor cultivation/canopy areas would be enclosed with 6-foot tall galvanized woven wire fencing, covered with privacy screen/mesh where necessary to screen the cultivation/canopy areas from public view. Locking metal gates would be used to control access to the proposed outdoor cultivation/canopy areas. The growing medium of the proposed outdoor cultivation areas would be an imported organic soil mixture in above ground garden beds and nursery pots. Drip irrigation systems would be used deliver water to the proposed garden beds and nursery pots.

Cannabis waste generated from the proposed cultivation operation would be chipped and composted onsite. Composted cannabis waste would be stored in a designated composting area, until it is incorporated into the growing medium of the cultivation areas, as an organic soil amendment. Solid waste will be stored in bins with secure fitting lids until being disposed of at a Lake County Integrated Waste Management facility, at least once a week during the cultivation season. Agricultural chemicals (fertilizers, amendments, pesticides, and petroleum products) will be stored within the proposed Pesticide & Agricultural Chemicals Storage Areas (proposed wooden sheds).

Figure 1 – Vicinity Map

Figure 2 –Proposed Conditions Site Plan



Construction

Site preparation and construction of the proposed Project:

- Ground disturbance and construction activities would occur over a 2-to-3 month period.
- The proposed cultivation areas are relatively flat, but would require some minor grading. Additional grading would be needed for the proposed Processing Facility/Building.
- Roadway gravel applications and widening for emergency vehicle access would be required in some spots.
- Materials and equipment will only be staged on previously disturbed areas (the site had been previously used for crop production). No areas will be disturbed for the purpose of staging materials or equipment.
- Water from the existing onsite wells will be used to mitigate the generation of dust during construction.
- All construction activities, including engine warm-up, will be limited to Monday through Saturday, between the hours of 9:00 AM to 6:00 PM.

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

Equipment to be used:

- One (1) bulldozer (tracks)
- One (1) dump truck (tires)
- Pickup trucks (tires)
- One (1) skid loader (tires)
- One (1) auger (tires, for fence posts)
- One (1) trencher (tires)

Operations

Operations would occur up to seven days per week from March through December. Hours of operation would be Monday through Sunday during daylight hours from approximately 8:00 a.m. to 6:00 p.m. The Lake County Zoning Ordinance restricts deliveries and pickups to 9:00 a.m. to 7 p.m., Monday through Saturday, and Sunday from 12 noon to 5:00 p.m. Once operational, the proposed Project would staff approximately fifteen (15) full-time employees throughout the cultivation season, and up to fifteen (15) additional seasonal employees during planting and harvesting periods.

Trip Generation

Daily traffic commutes during regular operations would be up to thirty (30) trips during regular operations, and up to sixty (60) daily commutes during the peak planting and harvesting periods. Weekly truck deliveries of various project-related materials would occur throughout the year. Fifteen parking spots, including an ADA-compliant parking spot, are proposed in addition to an open loading zone located directly adjacent to the proposed Processing Facility.

Power

Power for the proposed cultivation activities would come from two existing onsite Pacific Gas and Electric (PG&E) electrical service connections, a proposed roof-mounted solar array, and individual photovoltaic solar panels with battery storage/backup systems. A backup generator would be kept onsite for use during power outages. Individual photovoltaic solar panels with battery storage/backup systems would be used to power security cameras, security lights,

and water/well pumps throughout the Project Property. The existing onsite PG&E service connections would be used to power lights, fans, security cameras, and equipment used in and around the cultivation areas on APNs 002-021-15 & 16 in the eastern half of Project Property. The proposed roof-mounted solar array would be installed on the proposed Processing Facility, to power equipment and lights in and around the proposed building.

Chemical Storage & Solid Waste
According to the applicant's Property Management Plan, fertilizers and pesticides will be stored within four 120 sf. stormproof wooden storage sheds. All solid waste will be kept within enclosed bins in secured areas, and regularly removed from the Project Property to be disposed of at a waste disposal facility. All plant waste will be chipped/mulched and composted on site, then reused as soil amendment.

Access and Security
The Project Parcels are accessed via Middle Creek Road, which connects to Elk Mountain Road in the southeast corner of the Project Property. The Project Sites are accessed via gravel and native soil surfaced access roads off of Middle Creek Road. Locking metal gates control access to the gravel and native soil surfaced access roads of the Project Property. Knox Boxes will be installed at each of the metal gates controlling access to the Project Sites, to allow emergency services access in the event of an emergency. The cultivation areas will be surrounded with 6-foot galvanized woven wire fencing, with access using metal gates secured by padlocks. Security cameras will be installed around the perimeters of the cultivation areas and at other points of access in compliance with the Lake County Zoning Ordinance.

Water Usage & Analysis
A Hydrological Analysis was prepared by Vanderwall Engineering and is dated September 29, 2021. The following information was found in the Analysis:

Well #1: (DWR Well Completion Report 2020-011955) is located at latitude 39.257511 and longitude -122.962569 and was completed at a depth of 300 feet. Well #1 has an estimated yield of 50 gallons per minute. Drilled in year 2020. One (1) hour test done in year 2020.

Well #2: (DWR Well Completion Report 2020-003720) is located at latitude 39.2536 and longitude -122.95885 and was completed at a depth of 260 feet. Well #2 has an estimated yield of 10 gallons per minute. Drilled in year 2020. Two (2) hour test done in year 2020.

Well #3: (DWR Well Completion Report 2020-003719) is located at latitude 39.251603 and longitude -122.963556 and was completed at a depth of 200 feet. Well #3 has an estimated yield of 15 gallons per minute. Year drilled was 2020. Three (3) hour test done in year 2020.

The estimated total water usage for the proposed Project is 2,478,717 gallons / year, including employee usage. Twenty-eight (28) 5,000-gallon water storage tanks would be used to store irrigation water from the three onsite groundwater wells for the proposed cultivation operation. Water from the tanks will be gravity-fed to the cultivation areas via polyvinyl chloride (PVC) piping, and then distributed throughout the canopy areas using black poly tubing and drip tape.

The total recharge area is 9,199,249 square feet and identified as Area A, Area B and Area C within the Hydrological Study. Average annual precipitation is 40 inches. Average annual precipitation during a drought year is about 20% of the annual average precipitation or about 8 inches per year. The Analysis projected the average annual recharge during a drought year to be about twice the amount as would be needed for the proposed Project.

Erosion Control

The Project Property 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: 5S17CC414604). 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.

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.
- A native grass seed mixture and certified weed-free straw mulch will be applied to all areas of exposed soil prior to November 15th of each year, until permanent stabilization has been achieved.
- 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 Applicant had an Erosion & Sediment Control Plan prepared by Realm Engineering for the proposed cultivation areas, and a Commercial Building Site Grading and Drainage Improvement Plan prepared by Tall Tree Engineering, Inc. for the proposed Processing Facility. The Erosion & Sediment Control Plan and Commercial Building Site Grading and Drainage Improvement Plan shall be implemented during and after site development.

17. Environmental Setting and Existing Conditions:

The Project Property is located within the West Fork Middle Creek Watershed (HUC12) approximately 6 miles north of the community of Upper Lake, CA. West Fork Middle Creek, an intermittent Class II watercourse, flows through the Project Property from northwest to southeast. The proposed cultivation areas and ancillary facilities west of West Fork Middle Creek are located on soils identified as the Sanhedrin-Kekawaka-Speaker complex, which is characterized as gravelly loam. The proposed cultivation areas and ancillary facilities east of West Fork Middle Creek are located on soils identified as the Yorktree-Hopland- Squawrock complex, which is characterized as gravelly clay loam. Multiple ephemeral and intermittent watercourses flow through the Project Property into West Fork Middle Creek. Historical land uses of the Project Property include extensive agriculture (animal grazing), collective cannabis

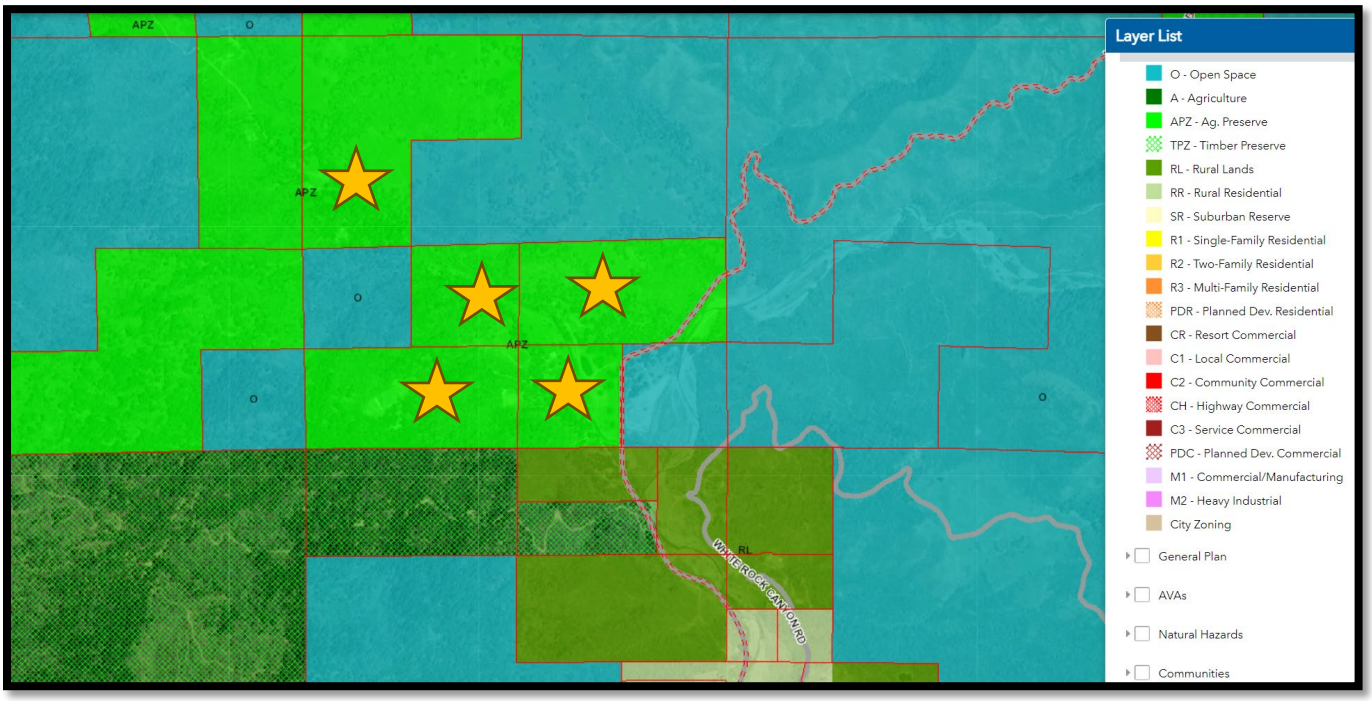
cultivation, and rural residences. Most of the Project Property burned in the Mendocino Complex Fire of 2018.

18. Surrounding Land Uses and Setting:

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

- North: Parcel Numbers 002-020-10 and 002-021-07 ; “O” Open Space; parcels greater than acres in size, undeveloped
- North: Parcel Number 002-021-22; “APZ” Agricultural Preserve; +40-acre parcel, undeveloped
- Northeast: Parcel Numbers 002-021-10 & 12; “O” Open Space; parcels greater than 200 acres in size, undeveloped
- East: Parcel Numbers 002-021-03 & 14; “O” Open Space; parcels greater than 40 acres in size, undeveloped
- Southeast: Parcel Numbers 002-023-11 & 30; “RL” Rural Land; parcels greater than 20 acres in size, developed with a dwelling
- South: Parcel Numbers 002-022-02, 002-023-01 & 29; “TPZ” Timber Preserve; parcels greater than 20 acres in size, undeveloped
- West: Parcel Numbers 002-020-13 and 002-021-11; “O” Open Space; parcels 40 acres in size, undeveloped
- West: Parcel Numbers 002-020-06 & 15; “APZ” Agricultural Preserve; parcels greater than 40 acres in size; undeveloped

Figure 3 – Lake County Base Zoning Districts



Source: Lake County Parcel Viewer, Topographic Basemap and Zoning Layer

19. 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 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
    California Water Resources Control Board
    California Department of Food and Agricultural
    California Department of Pesticides Regulations
    California Department of Public Health
    California Department of Cannabis Control
    California Department of Consumer Affairs
    California Department of Fish & Wildlife (CDFW)
    California Department of Forestry & Fire Protection (CALFIRE)
    California Department of Transportation (CALTRANS)

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

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

    Notification of the Project was sent to local tribes on March 16, 2020. The Upper Lake Habematolel Tribe requested consultation on March 17, 2020. Consultation concluded on February 10, 2023. No further comments or concerns were received from local tribes regarding this Project to date.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

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

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

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

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

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

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

Initial Study Prepared By: Roy Sherrell, Environmental and Regulatory Compliance Consultant
Reviewed By: Mary Claybon, Assistant Planner II

Signature: Mary Claybon Date: 11/8/2023

Mary Claybon, Assistant Planner II
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 Property's Zoning District designation is Agricultural Preserve ("APZ") – Scenic Combining ("SC") – Waterway ("WW") – Floodway Fringe ("FF"). The Lake County Zoning Ordinance allows for commercial outdoor cannabis cultivation in the "APZ" zoning district with a major use permit.

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

   The Upper Lake – Nice Area Plan identifies Elk Mountain Road a potential scenic corridor. According to the Upper Lake – Nice Area Plan, Elk Mountain Road provides views of surrounding agricultural lands and mountains, and is the gateway to the National Forest from Lake County.

   The uses not allowed within a Scenic Combining District described in Article 34.3 do not apply to the proposed Project, due to the fact that Elk Mountain Road is not a State Highway. The applicant proposes two 2,100 sq. ft. greenhouses, for a total use area of 4,200 sq. ft.

The requirement of a major use permit as described in Article 34.4 is satisfied through the current use permit application. Therefore the proposed project meets the performance standards as described in Article 34.11.

The proposed outdoor canopy areas are located uphill and over 600 feet west of the Elk Mountain Road, and are not subject to the restrictions of Article 34. Additionally, they are not visible from the road due to the terrain and tree coverage of the Project Property, and they do not obstruct views of dominant hills or mountains.

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

AES-1: The cultivation areas shall be screened through the installation of a 6' tall solid (opaque) fence. Fabric fencing screening is not permitted as it lacks durability. Acceptable fencing materials are chain link with slats, or solid wood or metal fencing.

b) The Project Property is accessed via Elk Mountain Road, which is not identified as "Officially Designated" or an "Eligible State Scenic Highway-Not Officially Designated", however the Upper Lake/Nice Area Plan has designated Elk Mountain Road as a "Scenic Route" between Upper Lake and the Mendocino National Forest. The Project sites are not visible from Elk Mountain Road due to topographic and vegetative features that provide natural screening. Therefore, there will be no significant impact.

There are no highways within 5 miles of the Project site. There are no scenic resources, rock outcroppings, or historic buildings on or in the immediate vicinity of the Project sites that could be visible from a state highway. Furthermore, the County of Lake has not applied to the California Department of Transportation for official Scenic Highway status nor does the County's General Plan (or other policies or directives) require the County to do so.

Less than Significant Impact

c) Given that the primary scenic views from the stretch of Elk Mountain Road along the Project Property are to the east, and the project site is located to the west and almost entirely out of view from the public, no significant impacts are expected. The proposed use will not substantially degrade the existing visual character of the site or the quality of public views of the surrounding area as there are no additional major structures being proposed.

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

Less than Significant Impact

d) The Project has some potential to create additional light and/or glare through greenhouse lighting and exterior security lighting. The proposed use is an outdoor cultivation operation. The following mitigation measures will be implemented which would reduce the impacts related to lighting to less than significant:

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

AES-3: All indoor lighting shall be fully contained within structures or otherwise shielded to fully contain any light or glare. Artificial light shall be completely shielded between sunset and sunrise.

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

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

II. AGRICULTURE AND FORESTRY RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒	1, 2, 3, 4, 7, 8, 11, 13, 39
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐	1, 2, 3, 4, 5, 7, 8, 11, 13
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☒	☐	1, 2, 3, 4, 5, 7, 8, 11, 13
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐	1, 2, 3, 4, 5, 6, 9
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐	1, 2, 3, 4, 5, 7, 8, 11, 13

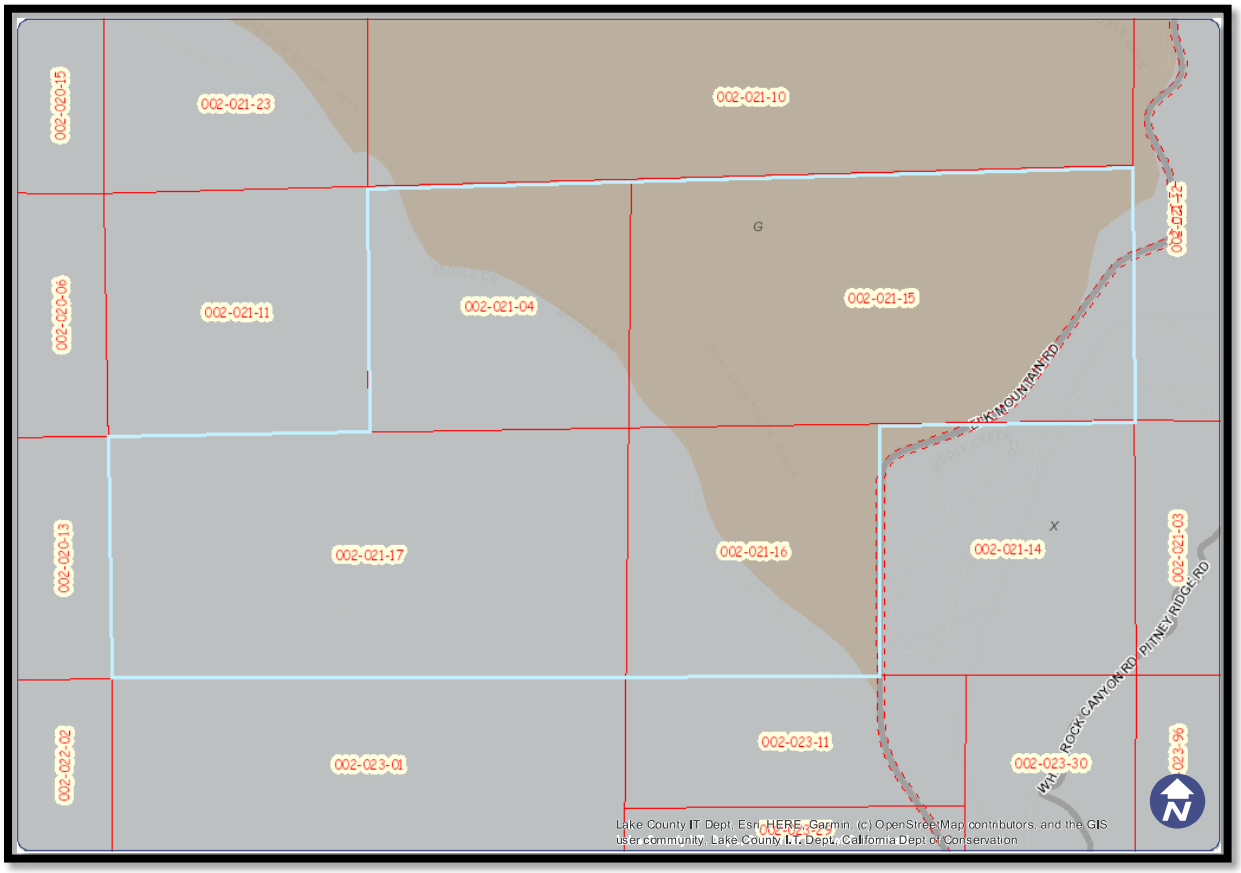
Discussion:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources,

including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest protocols adopted by the California Air Resources Board.

a) According to the California Department of Conversation Farmland Mapping and Monitoring Program the Project site is not mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, and falls within the classification of Grazing Land, an agricultural use that can be considered farmland per California Government Code §51201(c) described as "(3) Land which supports livestock used for the production of food and fiber", and "Other Land", which is not regarded as agriculturally productive soil.

Figure 4: Farmland Mapping and Monitoring Program Designation for Project Parcels



Source: Lake County, CA GIS Portal, California FMMP Data for Lake County

The Project Parcels are classified as Grazing Land and Other Land. Therefore, the proposed Project would not be converting high quality or significant farmland to a non-agricultural use.

No Impact

b) The Project Parcels have a base zoning district designation of "APZ" Agricultural Preserve Zone. Under Article 27.11 of the Lake County Zoning Ordinance, Outdoor Cannabis Cultivation is allowed on parcels with a Base Zoning District of "APZ" that are a minimum of

20 acres with a Major Use Permit. The Project Property consists of 351 acres and the Project Parcels total 228 acres.

According to the County of Lake Zoning Ordinance, the APZ district is to provide zoning for the conservation and protection of land capable of producing agricultural products. Specifically, agricultural uses, single family dwellings, agricultural and residential accessory uses and accessory structures (including greenhouses/hothouses and incidental structures not exceeding a use area of 10,000 square feet) are permitted within an APZ district. Scenic Combining districts are used to protect scenic views (and) prohibits offsite advertising, sanitary landfills, outdoor storage, singlewide and commercial mobile homes.

The Project Parcels are under a Williamson Act contract. However, the proposed use will not conflict with the existing zoning for agricultural use or a Williamson Act Contract, as the proposed activities are agricultural in nature and are consistent with the current and past use of the property, surrounding uses, and existing zoning.

The proposed Project would not interfere with the ability of the owner or neighbors to use the remaining land for more traditional crop production and/or grazing land.

Less than Significant Impact

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

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

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

The Project Parcels are zoned APZ-SC-WW-FF (Agricultural Preserve – Scenic Combining – Waterway – Floodway Fringe). The Project Property does not contain any Timberland Production-zoned (TPZ) lands, although portions of the property qualify as forest lands and/or timberland. The Project does not propose a zone change that would rezone forest land, timberland, or timberland zoned for timberland production. Portions of the Project Property, including some of the proposed cultivation areas, were logged in 2020 under Notice of Emergency Timber Operations No: 1-19EM-00235-LAK, following the Mendocino Complex Fire, which burned nearly the entire Project Property. Additionally, a Less than 3 Acre Conversion (No: 1-20EX-01332-LAK) has been obtained for the proposed Project.

Less than Significant Impact

d) The proposed Project would result in the loss of approximately 3 acres of forest land / the conversion of forest land to non-forest use. Portions of the Project Property, including some of the proposed cultivation areas, were logged in 2020 under Notice of Emergency Timber Operations No: 1-19EM-00235-LAK, following the Mendocino Complex Fire, which burned most of Project Property in 2018. A less than 3 acre conversion exemption (No: 1-20EX-01332-LAK) has been obtained for the proposed Project, for the forest land that would be converted to a non-forest use. Over 100 acres of forest land on the Project Property will not be converted to a non-forest use, and would not be affected by the proposed Project.

Less than Significant Impact

e) The proposed activities are agricultural in nature and are consistent with the current and past use of the property, surrounding uses, and existing zoning. As such, the proposed Project would not result in the conversion of farmland to a non-agricultural use.

The proposed Project would result in the loss of approximately 3 acres of forest land / the conversion of forest land to non-forest use. Portions of the Project Property, including some of the proposed cultivation areas, were logged in 2020 under Notice of Emergency Timber Operations No: 1-19EM-00235-LAK, following the Mendocino Complex Fire, which burned nearly the entire Project Property. Additionally, a less than 3 acre conversion exemption (No: 1-20EX-01332-LAK) has been obtained for the proposed Project, for the forest land that would be converted to a non-forest use. Over 100 acres of forest land on the Project Property will not be converted to a non-forest use, and would not be affected by the proposed Project.

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 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 air quality. The Lake County Air Basin is in attainment with both state and federal air quality standards.

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

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

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

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

   Construction impacts, which include site preparation for and construction of the proposed greenhouses, fence installation around the proposed cultivation areas, and trenching to provide utilities to the proposed greenhouses, would be temporary in nature and would occur over an estimated two (2) to three (3) month period.

   Operational impacts would include dust and fumes from site preparation of the cultivation areas and vehicular traffic, including small delivery vehicles that would be contributors during and after site preparation and construction.

   Implementation of conditions of approval 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.

   Moderate grading is proposed, and a grading permit application has been submitted, although there is no grading permit number assigned to this Project yet. Additionally, implementation of certain mitigation measures and conditions of approval would further reduce air quality impacts to less than significant.

Less than Significant Impact with Mitigation Measures AQ-1 through AQ-6 incorporated:

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

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

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

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

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

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

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

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

does not exceed the Project-level thresholds. Construction and operational emissions are summarized in the following tables:

Comparison of Daily Construction Emissions Impacts with Thresholds of Significance

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

Comparison of Daily Operational Emissions Impacts with Thresholds of Significance

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

Comparison of Annual Operational Emissions Impacts with Thresholds of Significance

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

Less than Significant Impact

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

There are no schools, parks, childcare centers, convalescent homes, or retirement homes located in proximity to the Project site. The nearest off-site residence is located over 1,000 feet south of the proposed Project, well over the 200-foot setback for offsite residences from commercial cannabis cultivation as described in Article 27.11 of the Lake County Zoning.

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

Less than Significant Impact

d) The proposed Project has the potential to cause objectionable odors, particularly during the harvest season. However, the applicant is installing carbon filtration systems inside the proposed Processing Facility, and the closest neighboring residence is more than 1/4 mile away. Therefore, a substantial number of people will not be adversely affected.

The proposed cultivation operation would generate minimal amounts of carbon dioxide from the operation of small gasoline engines (tillers, weed eaters, lawn mowers, etc.) and from vehicular traffic associated with staff commuting, deliveries and pickups. These activities would occur is a rural area of the County and would not adversely affect a substantial number of people.

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
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

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
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) Biological Resources Assessment (BRA) report was prepared for the proposed Project by Jacobzoon & Associates and is dated June 29, 2020. Three biological assessments were conducted to assess biotic resources of the Project Parcels on June 3, 2019, July 24, 2019, and April 14, 2020.

Special-status Plant Species

The BRA concluded that there are seven (7) special-status plant species with potential to occur on the Project Parcels: bent-flowered fiddleneck (*Amsinckia lunaris*), bare monkeyflower (*Erythranthe nudata*), Mendocino tarplant (*Hemizonia congesta ssp. calyculata*), Bolander's horkelia (*Horkelia bolanderi*), Bristly leptosiphon (*Leptosiphon acicularis*), Broad-lobed leptosiphon (*Leptosiphon latisectus*), and Mayacamas popcornflower (*Plagiobothrys lithocaryus*). While these species have the potential to occur on the Project Parcels based on available habitat, none were observed during the biological site assessments. The biological assessments were conducted within the blooming period for all species.

Special-status Wildlife Species

The BRA concluded that there are eighteen (18) special-status wildlife species with potential to occur on the Project Parcels: northern goshawk (*Accipiter gentilis*), golden eagle (*Aquila chrysaetos*), great blue heron (*Ardea herodias*), American peregrine falcon (*Falco peregrinus anatum*), osprey (*Pandion haliaetus*), purple martin (*Progne subis*), yellow warbler (*Setophaga petechia*), Clear Lake hitch (*Lavinia exilicauda chi*), obscure bumble bee (*Bombus caliginosus*), western bumble bee (*Bombus occidentalis*), pallid bat (*Antrozous pallidus*), western red bat (*Ladiurus blossevillii*), Humboldt marten (*Martes caurina humboldtensis*), fringed myotis (*Myotis thysanodes*), Yuma myotis (*Myotis yumanensis*), fisher (*Pekania pennanti*), American badger (*Taxidea taxus*), and western pond turtle (*Emys marmorata*). While these species have the potential to occur on the Project Parcels, only western pond turtles were observed within the pond during the biological site assessments.

The BRA concluded that the proposed Project has the potential to significantly impact avian and mammalian wildlife species.

Avifauna

The existing vegetation of the Project Parcels provides potential nesting and foraging habitat for birds, however there are no known occurrences of special-status avian species that overlap with the Project Parcels. Groundbreaking activities (including vegetation/tree removal) during avian breeding periods could significantly impact nesting bird species. Additionally, these activities may result in the indirect visual and acoustic disturbance to avian species and has the potential to result in nest abandonment. Any development activities which occur between March 1st and August 31st of any year, require predevelopment nesting bird surveys prior to the commencement of any groundbreaking activities.

Mammals

Development of the proposed Project has the potential to significantly impact mammalian wildlife species, if present. If trees are not proposed for removal, then immediate impact to any of the above listed mammal species would be reduced. As mentioned for avifauna, an impact could also be indirect via the form of visual or acoustic disturbance. Prior to any groundbreaking activities within the Study Areas or if trees are to be removed, it is recommended that surveys be conducted prior to construction following CDFW survey protocol.

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

BIO-1: If construction activities occur during the nesting season (usually March through September), a pre-construction survey for the presence of special-status bird species or any nesting bird species should be conducted by a qualified biologist within 500 feet of proposed construction areas, within seven days prior to the commencement of ground disturbing activities. If active nests are identified in these areas, CDFW and/or USFWS should be consulted to develop measures to avoid "take" of active nests prior to the initiation of any construction activities. Avoidance measures may include establishment of a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged and are independent of the nest site.

BIO-2: Prior to any ground disturbance and/or vegetation removal, the applicant shall have a pre-construction survey conducted by a qualified biologist for special-status plant and animal species to ensure that special-status species are not present. If any listed species are detected, construction shall be delayed, and the appropriate resource agency (CDFW and/or USFWS) shall be consulted with and project impacts and mitigation reassessed.

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

Sensitive Natural Communities

Water is a limited resource in Lake County, due to the Mediterranean climate and prolific usage, particularly in the summer months. As a result, creeks and streams which flow for

more than a few months due to seasonal rains support riparian vegetation, and thereby contribute a unique habitat on the landscape. The West Fork Middle Creek flows through the Project Property along the valley floor and provides unique/rare aquatic and riparian habitat in the region. During the biological assessments conducted for the BRA, water was flowing in the West Fork Middle Creek, providing suitable fish passage and aquatic habitat for amphibian or avian species to utilize. One (1) pond was observed on the Project Parcels providing aquatic habitat for amphibian and reptile species, including several western pond turtles (E. marmorata) observed basking within the pond and along the banks. The pond and watercourses are considered sensitive biological communities which provide rare/unique habitat within the landscape and shall be protected from development.

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

The Applicant had an Erosion & Sediment Control Plan prepared by Realm Engineering for the proposed cultivation areas, and a Commercial Building Site Grading and Drainage Improvement Plan prepared by Tall Tree Engineering, Inc. for the proposed Processing Facility. Proposed BMPs include the installation of straw wattles and vegetated swales, and establishment of large vegetated buffers surrounding the proposed cultivation areas. The buffers and swales aim to allow stormwater that is discharged from operation areas to be slowed, filtered, and percolate into the soils. The Erosion & Sediment Control Plan and Commercial Building Site Grading and Drainage Improvement Plan shall be implemented during and after site development.

Finally, the BRA concludes that no change to critical habitat should occur as a result of the propose Project.

Less than Significant Impact with Mitigation Measures BIO-3 through BIO-6 incorporated:

BIO-3: All work should incorporate erosion control measures consistent with the engineered Erosion and Sediment Control Plans submitted, Lake County Grading Regulations, and the State Water Resources Control Board's Cannabis General Order (Order No. WQ 2019-001-DWQ).

BIO-4: Pesticides and fertilizer storage facilities shall be located outside of riparian setbacks and not located within 100 feet of a well head and all watercourses.

BIO-5: The applicant shall maintain a minimum of a one-hundred-foot setback/buffer from the top of bank of any watercourse, wetland, and/or vernal pool.

BIO-6: Prior to commencement of activities within the bed or bank of a creek, a Streambed Alteration Agreement shall be obtained from the California Department of Fish and Wildlife. All the conditions of such permit shall be adhered to throughout the course of the project to reduce the impacts to a less than significant level.

c) According to the Biological Resources Assessment (BRA), there are no wetlands, vernal pools or other isolated wetlands in or near the proposed cultivation areas, however there are two perennial water bodies located on the Project Parcels. Because there are no wetlands or vernal pools located within 150 feet of the proposed cultivation areas, Project implementation would not directly impact any wetlands.

Less Than Significant Impact

d) No wildlife corridors were identified on the Project Property in the Biological Resources Assessment (BA). Although no mapped wildlife corridors (such as the California Essential Habitat Connectivity Area layer in the CNDDB) exist within or near the Project site, the open space and the stream corridors of the Project Property facilitate animal movement and migrations, primarily those of the black-tailed deer. Although the Project Property is most likely used by wildlife for movement or migration, the proposed Project would not have a significant impact on this movement because it would not create any unpassable barriers, and the majority of the Project Property will still be available for corridor and migration routes. Over 300 acres of the Project Property would remain available for natural habitat and wildlife corridors.

Implementation of the Project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Less than Significant Impact

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

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

As such, the Property Management Plan for the Project has incorporated conservation and mitigation measures similar to those that have been included in other county oak woodlands conservation plans used in the State of California, which follow Assembly Bill 242, referred to as the Oak Woodlands Conservation Act. The Project does not propose to remove any trees greater than 6-inches DBH, and trees must be inspected for the presence of active bird nests before tree felling or ground / brush clearing. If active nests are present in the project area during construction of the project, the California Department of Fish and Wildlife will be consulted to develop measures to avoid “take” of active nests prior to the initiation of any construction activities.

Portions of the Project Property, including some of the proposed cultivation areas, were logged in 2020 under Notice of Emergency Timber Operations No: 1-19EM-00235-LAK, following the Mendocino Complex Fire, which burned most of the Project Property. While no additional logging is needed, the proposed Project would result in the loss of approximately 3 acres of forest land / the conversion of forest land to non-forest use. A less than 3 acre conversion exemption (No: 1-20EX-01332-LAK) has been obtained for the proposed Project, for the forest land that would be converted to a non-forest use. Over 100 acres of forest land on the Project Property will not be converted to a non-forest use, and would not be affected by the proposed Project.

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

Less than Significant Impact

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

No Impact

V. CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☒	☐	☐	1, 3, 4, 5, 11, 14c, 15
b) Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?	☐	☐	☒	☐	1, 3, 4, 5, 11, 14, 15
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐	1, 3, 4, 5, 11, 14, 15

Discussion:

a) A Cultural Resources Reconnaissance Report (CRR) was prepared by Flaherty Cultural Resource Services for the proposed cultivation project, and dated November 19, 2019. The Report was amended on April 30, 2020 by the original author. Approximately two person days were spent on surface inspections of the proposed cultivation areas for the CRR and CRR amendment. No cultural resources sites were discovered as a result of the surface inspections.

Prior to the surface inspections, a California Historical Resources Information System (CHRIS) records search was completed by the Northwest Information Center (NWIC). As a result of the records search, it was determined that no archaeological or ethnographic sites have been recorded within the boundaries of the Project Parcels.

As part of the record search for the proposed Project The Directory of Properties in the Historic Property File for Lake County maintained by the Office of Historic Preservation (OHP) was reviewed to determine if any historic structures had been listed in the vicinity of the proposed cultivation areas. No historic structures have been listed in the immediate project area. Also reviewed were historic maps including General Land Office maps (1874, 1914, 1915) and United States Geological Survey maps (Lake Pillsbury 15' 1951; Elk MT 7.5' 1967 and 1973). No features were noted on the General Land Office maps or United States Geological Survey maps within the project boundaries.

In May 2019 the Native American Heritage Commission (NAHC)was contacted to request a search of the Native American Heritage Commission Sacred Lands File (SLF). The Native American Heritage Commission responded with negative results. Additionally, the applicant has provided evidence that they have entered into a Monitoring Agreement with the Habematolel Pomo of Upper Lake, whose aboriginal territories include the Project Property.

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

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

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

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

b) A Cultural Resources Reconnaissance Report (CRR) was prepared by Flaherty Cultural Resource Services for the proposed cultivation project, and dated November 19, 2019. The Report was amended on April 30, 2020 by the original author. Approximately two person days were spent on surface inspections of the proposed cultivation areas for the CRR and CRR amendment. No cultural resources sites were discovered as a result of the surface inspections.

Prior to the surface inspections, a California Historical Resources Information System (CHRIS) records search was completed by the Northwest Information Center (NWIC). As a result of the records search, it was determined that no archaeological or ethnographic sites have been recorded within the boundaries of the Project Parcels.

As part of the record search for the proposed Project The Directory of Properties in the Historic Property File for Lake County maintained by the Office of Historic Preservation (OHP) was reviewed to determine if any historic structures had been listed in the vicinity of the proposed cultivation areas. No historic structures have been listed in the immediate project area. Also reviewed were historic maps including General Land Office maps (1874, 1914, 1915) and United States Geological Survey maps (Lake Pillsbury 15' 1951; Elk MT 7.5' 1967 and 1973). No features were noted on the General Land Office maps or United States Geological Survey maps within the project boundaries.

In May 2019 the Native American Heritage Commission (NAHC)was contacted to request a search of the Native American Heritage Commission Sacred Lands File (SLF). The Native American Heritage Commission responded with negative results. Additionally, the applicant has provided evidence that they have entered into a Monitoring Agreement with the Habematolel Pomo of Upper Lake, whose aboriginal territories include the Project Property.

There are no known cultural resources within the proposed cultivation areas. Therefore, the proposed Project should not cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5.

Less than Significant Impact

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

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

Less than Significant Impacts with Mitigation Measures CUL-1 and CUL-2.

VI. ENERGY	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resource, during construction or operation?	☐	☐	☒	☐	5
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒	1, 3, 4, 5

Discussion:

a) Power for the proposed cultivation activities would come from two existing onsite Pacific Gas and Electric (PG&E) electrical service connections, a proposed roof-mounted solar array, and individual photovoltaic solar panels with battery storage/backup systems. A backup generator would be kept onsite for use during power outages. Individual photovoltaic solar panels with battery storage/backup systems would be used to power security cameras, security lights, and water/well pumps throughout the Project Property. The existing onsite PG&E service connections would be used to power lights, fans, security cameras, and equipment used in and around the cultivation areas on APNs 002-021-15 & 16 in the eastern half of Project Property. The proposed roof-mounted solar array would be installed on the proposed Processing Facility, to power equipment and lights in and around the proposed building.

The proposed Project would no result in impacts due to wasteful, inefficient, or unnecessary consumption of energy during construction or operation.

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 no supplemental lighting. The cultivation site will require power for security systems, water pumps, minor outdoor lighting and cannabis processing equipment. Electricity will be provided by an existing onsite PG&E electrical service connection, a proposed roof-mounted solar array, and individual photovoltaic solar panels with battery storage/backup systems. The project would meet the standards of Title 4 Division 19 §16305 Renewable Energy Requirements.

No 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.	☐	☐	☒	☐	1, 2, 3, 4, 5, 18, 19
ii) Strong seismic ground shaking?					
iii) Seismic-related ground failure, including liquefaction?					
iv) Landslides?					
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐	1, 3, 4, 5, 19, 21, 24, 25, 30
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 lifetime of the project. That risk is not considered substantially different than that of other similar properties and projects in California.

Earthquake Faults (i)

According to the USGS Earthquake Faults map available on the Lake County GIS Portal, there are no earthquake faults in the vicinity of the subject site. Because there are no known faults located on the project site, there is little potential for the Project site to rupture during a seismic event. Thus, no rupture of a known earthquake fault is anticipated and the proposed project would not expose people or structures to an adverse effects related rupture of a known earthquake fault as no structures for human occupancy are being proposed.

Seismic Ground Shaking (ii) and Seismic–Related Ground Failure, including liquefaction (iii)

Lake County contains numerous known active faults. Future seismic events in the Northern California region can be expected to produce seismic ground shaking at the site. All proposed 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 proposed cultivation areas are minimally sloped (less than 20% slopes), although the remaining portions of land are significantly sloped. There are some risks of landslides on the Project Property, but minimal risk within the proposed Project's cultivation areas. 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 proposed cultivation areas are considered moderately susceptible to landslides and will not likely expose people or structures to substantial adverse effects involving landslides, including losses, injuries or death.

Less Than Significant Impact

b) The Project involves moderate grading for pad preparation for the proposed Processing Facility and some minor grading/shaping to develop the proposed cultivation areas. The proposed cultivation areas and ancillary facilities west of West Fork Middle Creek are located on soils identified as the Sanhedrin-Kekawaka-Speaker complex, which is characterized as gravelly loam. The proposed cultivation areas and ancillary facilities east of West Fork Middle Creek are located on soils identified as the Yorktree-Hopland-Squawrock complex, which is characterized as gravelly clay loam. The proposed cultivation operation would increase the impervious surface area of the Project Property by approximately 20,000 ft^2 through the construction/installation of eight 120 ft^2 wooden buildings, two 2,100 ft^2 greenhouses, a 9,750 ft^2 metal building, and thirty 5,000-gallon water storage tanks. The proposed outdoor cultivation/canopy areas would not increase the impervious surface area of the Project Parcel and should not increase the volume of runoff from the Project Site. The proposed parking lot will have a permeable gravel surface, and the proposed ADA parking space will be constructed of permeable pavers

A grading permit has been submitted for the proposed Project, and the applicant shall obtain a grading permit from the Lake County Community Development Department prior to ground disturbance. The Applicant had an Erosion & Sediment Control Plan prepared by Realm Engineering for the proposed cultivation areas, and a Commercial Building Site Grading and Drainage Improvement Plan prepared by Tall Tree Engineering, Inc. for the proposed Processing Facility. Proposed BMPs include the installation of straw wattles and vegetated swales, and establishment of large vegetated buffers surrounding the proposed cultivation areas. The buffers and swales aim to allow stormwater that is discharged from operation areas to be slowed, filtered, and percolate into the soils. The Erosion & Sediment Control Plan and Commercial Building Site Grading and Drainage Improvement Plan shall be implemented during and after site development.

Furthermore, the project is enrolled with the SWRCB for Tier 2, Low Risk coverage under Order No. WQ 2019-001-DWQ (Cannabis Cultivation General Order). The Cannabis Cultivation General Order implements Cannabis Policy requirements with the purpose of ensuring that the diversion of water and discharge of waste associated with cannabis cultivation does not have a negative impact on water quality, aquatic habitat, riparian habitat, wetlands, or springs. The Cannabis Cultivation General Order requires the preparation of a Site Management Plan (SMP), a Nitrogen Management Plan (NMP), and

the submittal of annual technical and monitoring reports demonstrating compliance. The purpose of the SMP is to identify BPTC measures that the site intends to follow for erosion control purposes and to prevent stormwater pollution. The purpose of the NMP is to identify how nitrogen is stored, used, and applied to crops in a way that is protective to water quality. The SMP and NMP are required prior to commencing cultivation activities and were submitted with the application materials. As part of the Applicant's enrollment, they are required to complete Annual Monitoring and Reporting to the State Water Board, which requires that winterization BPTC measures for erosion and sediment control are in place prior to the winter period.

Less Than Significant Impacts with Mitigation Measures BIO-3 and GEO-1 through GEO-2 incorporated:

GEO-1: Excavation, filling, vegetation clearing, or other disturbance of the soil shall not occur between October 15 and April 15 unless authorized by the Community Development Department Director. The actual dates of this defined grading period may be adjusted according to weather and soil conditions at the discretion of the Community Development Director.

GEO-2: The permit holder shall monitor the site during the rainy season (October 15 – May 15), including post-installation, application of BMPs, erosion control maintenance, and other improvements as needed.

c) According to the United States Department of Agriculture, Natural Resources Conservation Service's Web Soil Survey, the Project Property is underlain by four (4) soil mapping units: Maymen- Hopland-Mayacama association, Sanhedrin-Kekawaka-Speaker complex, Xerofluvents-Riverwash complex, and Yorktree-Hopland- Squawrock complex. The proposed cultivation areas and ancillary facilities west of West Fork Middle Creek are located on soils identified as the Sanhedrin-Kekawaka-Speaker complex, and the proposed cultivation areas and ancillary facilities east of West Fork Middle Creek are located on soils identified as the Yorktree-Hopland- Squawrock complex. Descriptions of those soil series are as follows:

Sanhedrin-Kekawaka-Speaker complex (Map Unit Symbol: 202): This series is comprised of a combination of Sanhedrin, Kekawaka, and Speaker soils series. The unit is 35 percent Sanhedrin gravelly loam, 30 percent Kekawaka loam, and 15 percent Speaker gravelly loam. Included are small areas of Bamtush, Marpa, and Maymen soils. Included areas make up about 20 percent of the total acreage. The native vegetation is mainly mixed conifers and hardwoods. Elevation is 2,200 to 4,800 feet.

Yorktree-Hopland-Squawrock complex (Map Unit Symbol: 252): This unit is approximately 30 percent Yorktree clay loam, 30 percent Hopland loam, and 15 percent Squawrock gravelly loam. Included with this mapping unit are small areas of Etsel, Mayacama, Maymen, Pomo, and Yorkville soils and Rock outcrop. Included areas make up about 25 percent of the total acreage of the unit. The native vegetation is mainly oaks and annual grasses and forbs on the Yorktree and Hopland soils and annual grasses and forbs with a few scattered oaks on the Squawrock soil. Elevation is 1,800 to 3,000 feet.

The proposed cultivation areas are located in some of the least sloped areas of the Project Property. The Applicant had an Erosion & Sediment Control Plan prepared by Realm Engineering for the proposed cultivation areas, and a Commercial Building Site Grading and Drainage Improvement Plan prepared by Tall Tree Engineering, Inc. for the proposed Processing Facility. Proposed BMPs include the installation of straw wattles and vegetated swales, and establishment of large vegetated buffers surrounding the proposed cultivation areas. The buffers and swales aim to allow stormwater that is discharged from operation areas to be slowed, filtered, and percolate into the soils. The Erosion & Sediment Control Plan and Commercial Building Site Grading and Drainage Improvement Plan shall be implemented during and after site development.

Less Than Significant Impact

d) The Uniform Building Code is a set of rules that specify standards for structures. Greenhouse structures are proposed that would require a building permit, and the soil subtypes are shown to have high shrink-swell potential. The applicant has submitted an Grading and Erosion Control plan in anticipation of the grading permit being a requirement, and the Building Official has the ability to require engineered footings if he believes the soil has characteristics that warrant engineered foundation footings.

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

The proposed Processing Facility would be located on soils of the Sanhedrin-Kekawaka-Speaker complex (Soil Type 202). The Sanhedrin-Kekawaka-Speaker complex is characterized as gravelly clay loams from a parent material of residuum weathered from sedimentary rock.

Soil Type 202 has a moderate shrink-swell potential due to its clay composition. Any new construction requiring a building permit would be subject to the Uniform Building Code and California Building Code for foundation design to meet the requirements associated with expansive soils, if they are found to exist within a site specific study.

Less than Significant Impact

e) The proposed Project would be served by an ADA-compliant restroom within the proposed Processing Building. The restroom would rely on a new onsite wastewater treatment septic system, which would require a permit from the Lake County Department of Environmental Health. Prior to applying for a permit, the Lake County Department of Environmental Health requires a Site Evaluation to determine the suitability of the site for a septic system. A percolation test would be conducted to determine the water absorption rate of the soil, and the septic system would be located, designed, and installed appropriately, following all applicable State and County guidelines and requirements. A proposed septic system would be located in an area of Type 202 soils. According to the USDA Soil Survey, this soil type could support a septic system.

Therefore, the proposed project will not have soils incapable of adequately supporting the use of septic tanks for the disposal of wastewater. In addition, the system will be inspected and approved by the County Division of Environmental Health prior to obtaining a use permit.

Less Than Significant Impact

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

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 consists of four and a half acres of outdoor cannabis cultivation/canopy area. 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.

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 include the installation/construction of thirty (30) 5,000-gallon water storage tanks, eight (8) 120 ft^2 wooden sheds, two 2,100 ft^2 greenhouses, and a 9,750 ft^2 Processing Building. Construction activities are expected to occur over two to three months, generating up to sixty (60) vehicle trips per day. The

operation is expected to generate up to thirty (30) vehicle trips per day during regular operations, and up to sixty (60) vehicle trips per day during the peak harvest season.

The Lake County Air Basin is in attainment for all air pollutants with a high air quality level, and therefore the LCAQMD has not adopted thresholds of significance for Greenhouse Gase (GHG) emissions. In the interim, emissions estimates have been calculated using the California Emissions Estimator Model (CalEEMod) and compared with thresholds defined by the Bay Area Air Quality Management District (BAAQMD).

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.

CO_2 emissions are quantifiable. According to the EPA, a vehicle produces on average 404 grams of CO_2 emissions per vehicle mile traveled. The cultivation site is located about 7 miles from Upper Lake, the nearest population base and the likely residency of employees. A total of 30 employees are likely during peak harvest times, with an average of 15 employees working during construction (site preparation), and during normal cultivation periods. Assuming each employee drives 7 miles to and from work, a total of 210 vehicle miles per day would result during normal operations, and a total of 420 miles would result during the month of peak harvest season. A total of two weekly deliveries would result from non-employees, adding an additional 28 miles per week.

Non peak harvest time total miles traveled is assumed to be 8 months (32 weeks) times 1050 vehicle miles per week = 33,600 non-harvest time vehicle miles per year. With each car generating 404 grams of CO_2 emissions per mile, a total of 13,574,400 grams of CO_2 emissions per year during non-peak harvest season, or approximately 13.6 tons of CO_2 emissions per year for non-peak harvest times. Staff estimates that an additional 3.4 tons of peak harvest time emissions would result from this project per year.

Using the BAAQMD 'significance thresholds' of 1,100 metric tons of CO_2 emissions per project, this project would take about 65 years to meet the significance threshold levels established by the BAAQMD.

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 no impact at this time.

The 2017 AB Climate Change Scoping Plan recognizes that local government efforts to reduce emissions within their jurisdiction are critical to achieving the State's long term GHG goals, which includes a primary target of no more than six (6) metric tons CO_2 per capita by 2030 and no more than two (2) metric tons CO_2 per capita by 2050. As described in the Property Management Plan, the Project will have up to three (3) individuals working on site (owners/operators) during normal operational hours, and with an expected 6.875 metric tons of overall operational CO_2 per year, the per capita figure of 2.29 metric tons of operational CO_2 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

a) Materials associated with the proposed cultivation of commercial cannabis, such as gasoline, pesticides, fertilizers, alcohol, hydrogen peroxide and the equipment emissions may be considered hazardous if unintentionally released and could create a significant hazard to the public or the environment if done so without intent and mitigation.

According to the Property Management Plan (PMP) for the proposed Project, chemicals stored and used at/by the proposed cultivation operation include fertilizers/nutrients, pesticides, and 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 Areas (proposed wooden buildings). 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 Areas. Spill containment and cleanup equipment will be maintained within the proposed Pesticides and Agricultural Chemicals Storage Areas, 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.

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 wastes generated by the facility.

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

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

HAZ-3: Any spills of oils, fluids, fuel, concrete, or other hazardous construction material shall be immediately cleaned up. All equipment and materials shall be stored in the staging areas away from all known waterways.

HAZ-4: All food scraps, wrappers, food containers, cans, bottles, and other trash from the project area should be deposited in trash containers with an adequate lid or cover to contain trash. All food waste should be placed in a securely covered bin and removed from the site weekly to avoid attracting animals.

HAZ-5: The applicant shall maintain records of all hazardous or toxic materials used, including a Material Safety Data Sheet (MSDS) for all volatile organic compounds utilized, including cleaning materials. Said information shall be made available upon request and/or the ability to provide the Lake County Air Quality Management District such information to complete an updated Air Toxic Emission Inventory.

HAZ-6: Prior to operation, all employees shall have access to restrooms and hand-wash stations. The restrooms and hand wash stations shall meet all accessibility requirements.

HAZ-7: The proper storage of equipment, removal of litter and waste, and cutting of weeds or grass shall not constitute an attractant, breeding place, or harborage for pests.

HAZ-8: The applicant shall obtain an Operator Identification Number from the California Department of Pesticide Regulation prior to using pesticides onsite for cannabis cultivation.

Less Than Significant Impact with Mitigation Measures HAZ-1 through HAZ-8 incorporated.

b) The Project involves the use of fertilizers and pesticides which will be stored in secure, stormproof structures. Flood risk is at the Project site is minimal and according to Lake County GIS Portal data and the Project is not located in or near an identified earthquake fault zone. Fire hazard risks on the Project site is very high; the applicant has indicated that two 5,000-gallon steel/fiberglass water storage tanks will be exclusively for fire suppression use.

The Project Property does not contain any identified areas of serpentine soils or ultramafic rock, and risk of asbestos exposure during construction is minimal. Site preparation would require some construction equipment and would occur over a two to three month period. All equipment staging shall occur on previously disturbed areas on the site.

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

Less Than Significant Impact with Mitigation Measures HAZ-1 through HAZ-8 incorporated.

c) There are no schools located within one-quarter mile of the proposed Project site. The nearest school is in Upper Lake, which is located over 5 miles south of the project site. Impacts would be less than significant and no mitigation measures would be required.

No Impact

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

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

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

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

No Impact

e) The Project site is located approximately 10 miles from the nearest airport, Lampson Field, which has not adopted an Airport Land Use Compatibility Plan. In accordance with regional Airport Land Use Compatibility Plans, the site would not be located within an area of influence for the airport. Therefore, there will be no hazard for people working in the Project area from Lampson Field.

No Impact

f) The Project Property is accessed via Elk Mountain Road. The Project Property does not contain any emergency facilities nor does it serve as an emergency evacuation route or is located adjacent to an emergency evacuation route. During long-term operation, access for emergency vehicles via Elk Mountain Road and connecting roadways will be available. The Project is not proposing alteration to the design or capacity of any public road that would impair or interfere with the implementation of evacuation procedures. Because the Project would not interfere with an adopted emergency response or evacuation plan, impacts are less than significant and no mitigation measures are required.

Less than Significant Impact

g) The Project Property is in an area of high fire risk. CalFire's requirement for defensible space in high fire risk areas requires the removal of brush and vegetation that would reduce fire risk. Additionally, the proposed project proposes two 5,000-gallon steel/fiberglass water storage tanks to be exclusively used for fire suppression.

The Applicant shall adhere to all federal, state, and local fire requirements and regulations for setbacks and defensible space required for any new buildings that require a building permit. All proposed construction shall comply with current State of California Building Code construction standards. To construct the proposed greenhouses and Processing Facility, the applicant will be required to obtain a building permit with Lake County to demonstrate conformance with local and state building codes and fire safety requirements.

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, 45
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:	☐	☐	☒	☐	1, 2, 3, 5, 6, 7, 15, 18, 29, 32, 45

	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?					
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, 45

Discussion:

a) The Project Property 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: 5S17CC414604). 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 had an Erosion & Sediment Control Plan prepared by Realm Engineering for the proposed cultivation areas, and a Commercial Building Site Grading and Drainage Improvement Plan prepared by Tall Tree Engineering, Inc. for the proposed Processing Facility. Proposed BMPs include the installation of straw wattles and vegetated swales, and establishment of large vegetated buffers surrounding the proposed cultivation areas. The buffers and swales aim to allow stormwater that is discharged from operation areas to be slowed, filtered, and percolate into the soils. The Erosion & Sediment Control Plan and Commercial Building Site Grading and Drainage Improvement Plan shall be implemented during and after site development.

All solid waste that cannot be composted, will be stored in bins with secure fitting lids until being disposed of at a Lake County Integrated Waste Management facility, at least once a week during the cultivation season. 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, in the flattest practical area of the Project Property, to reduce the potential for water pollution and erosion.

Less Than Significant Impact with Mitigation Measures BIO-3 through BIO-6, GEO-1 through GEO-2, and HAZ-1 through HAZ-8 incorporated.

b) Due to the existing exceptional drought conditions, on July 27, 2021, the Lake County Board of Supervisors passed an Urgency Ordinance (Ordinance 3106) requiring land use applicants to provide enhanced water analysis during a declared drought emergency. 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

A Hydrological Analysis was prepared by Vanderwall Engineering and is dated September 29, 2021. The following information was found in the Analysis:

Well #1: (DWR Well Completion Report 2020-011955) is located at latitude 39.257511 and longitude -122.962569 and was completed at a depth of 300 feet. Well #1 has an estimated yield of 50 gallons per minute. Drilled in year 2020. One (1) hour test done in year 2020.

Well #2: (DWR Well Completion Report 2020-003720) is located at latitude 39.2536 and longitude -122.95885 and was completed at a depth of 260 feet. Well #2 has an estimated yield of 10 gallons per minute. Drilled in year 2020. Two (2) hour test done in year 2020.

Well #3: (DWR Well Completion Report 2020-003719) is located at latitude 39.251603 and longitude -122.963556 and was completed at a depth of 200 feet. Well #3 has an estimated yield of 15 gallons per minute. Year drilled was 2020. Three (3) hour test done in year 2020.

The estimated total water usage for the proposed Project is 2,478,717 gallons / year, including employee usage. Twenty-eight (28) 5,000-gallon water storage tanks would be used to store irrigation water from the three onsite groundwater wells for the proposed cultivation operation. Water from the tanks will be gravity-fed to the cultivation areas via polyvinyl chloride (PVC) piping, and then distributed throughout the canopy areas using black poly tubing and drip tape.

The total recharge area is 9,199,249 square feet and identified as Area A, Area B and Area C within the Hydrological Study. Average annual precipitation is 40 inches. Average annual precipitation during a drought year is about 20% of the annual average precipitation or about 8 inches per year. The Analysis projected the average annual recharge during a drought year to be about twice the amount as would be needed for the proposed Project.

The Project Property is located near the northern boundary of the Middle Creek Groundwater Basin / Management Plan Area, as identified in the 2006 Lake County Groundwater Management Plan. All of the three of the groundwater wells of the Project

Property are located in the Lower Cretaceous marine geologic formation, northwest of the Middle Creek Groundwater Basin / Management Plan Area. The Project Property is located within the West Fork Middle Creek Watershed (HUC12). No basin in this area has been identified by the California Department of Water Resources (DWR) as a critically over-drafted basin.

Water level monitoring is required by the Lake County Zoning Ordinance. Ordinance Article 27 Section 27.11(at) requires the production well to have a water meter and water level monitor. With this required measure in place, the impact is expected to be less than significant.

HYD-1: The production well shall have a meter to measure the amount of water pumped. The production wells shall have continuous water level monitors. The methodology of the monitoring program shall be described. A monitoring well of equal depth within the cone of influence of the production well may be substituted for the water level monitoring of the production well. The monitoring wells shall be constructed and monitoring began at least three months before the use of the supply well. An applicant shall maintain a record of all data collected and shall provide a report of the data collected to the County annually and/or upon made upon request.

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

Less Than Significant Impact with Mitigation Measures HYD-1 and HYD-2 incorporated.

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

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

The Applicant had an Erosion & Sediment Control Plan prepared by Realm Engineering for the proposed cultivation areas, and a Commercial Building Site Grading and Drainage Improvement Plan prepared by Tall Tree Engineering, Inc. for the proposed Processing Facility. Proposed BMPs include the installation of straw wattles and vegetated swales, and establishment of large vegetated buffers surrounding the proposed cultivation areas. The buffers and swales aim to allow stormwater that is discharged from operation areas to be slowed, filtered, and percolate into the soils. The Erosion & Sediment Control Plan

and Commercial Building Site Grading and Drainage Improvement Plan shall be implemented during and after site development.

The proposed cultivation operation would increase the impervious surface area of the Project Property by approximately 20,000 sq. ft. through the construction/installation of eight 120 sq. ft. wooden buildings, two 2,100 sq. ft. greenhouses, a 9,750 sq. ft. metal building, and thirty 5,000-gallon water storage tanks. The proposed outdoor cultivation/canopy areas would not increase the impervious surface area of the Project Parcel and should not increase the volume of runoff from the Project Site. The proposed parking lot will have a permeable gravel surface, and the proposed ADA parking space will be constructed of permeable pavers.. Generous vegetative buffers will be maintained between the proposed cultivation areas and surface water bodies.

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

Less than Significant Impact

d) The Project Property is not located in an area of potential inundation by seiche or tsunami. The proposed cultivation areas and associated facilities will be located in areas of the Project Property designated to be in Flood Zone X – areas of minimal flooding – not in a special flood hazard area. While the soil types of the Project Property are susceptible to erosion, the proposed cultivation areas are relatively flat and stable, with a minimal potential to induce mudflows.

Less than Significant Impact

e) 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. Groundwater use and monitoring data collected and reported to comply with the Lake County Zoning Ordinance could be used in the development of a sustainable groundwater management plan at some point in the future.

Less than Significant Impact with Mitigation Measures BIO-3 through BIO-6, GEO-1 through GEO-2, HAZ-1 through HAZ-8, and HYD-1 through HYD-2 incorporated.

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 of rural mostly undeveloped land within proximity to undeveloped federally-owned land. The closest community growth boundary is Upper Lake, which is located over 5 miles away.

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

No Impact

b) The proposed Project is consistent with the Lake County General Plan and Upper Lake – Nice Area Plan, and would create diversity within the local economy and future employment opportunities for local residents. The Base Zoning District designation for the parcels of the Project Property is Agricultural Preserve ("APZ"). The Lake County Zoning Ordinance allows for commercial outdoor cannabis cultivation in the "APZ" land use zone with a major use permit.

A maximum of 5,000 square feet of greenhouses is allowed within the SC Combining Overlay Zone. The 'reach' of the combining district is 500 feet; the source of this designation is Elk Mountain Road, a scenic road found in Article 42 of the Lake County Zoning Ordinance. Elk Mountain Road is over 500 feet from the nearest cultivation area, beyond the 500' reach of the overlay district.

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. 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. Power for the proposed cultivation activities would come from two existing onsite Pacific Gas and Electric (PG&E) electrical service connections, a proposed roof-mounted solar array, and individual photovoltaic

solar panels with battery storage/backup systems. A backup generator would be kept onsite for use during power outages. Individual photovoltaic solar panels with battery storage/backup systems would be used to power security cameras, security lights, and water/well pumps throughout the Project Property. The existing onsite PG&E service connections would be used to power lights, fans, security cameras, and equipment used in and around the cultivation areas on APNs 002-021-15 & 16 in the eastern half of Project Property. The proposed roof-mounted solar array would be installed on the proposed Processing Facility, to power equipment and lights in and around the proposed building.

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 on 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 (7am – 10pm) or 45 dBA during night hours (10pm – 7am) when measured at the property line.

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

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

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

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

The Project would not generate ground-borne vibration or noise, except potentially during the construction phase from the use of heavy construction equipment. There will be moderate grading required to develop the proposed cultivation operation, however earth movement is not expected to generate excessive ground-borne vibration or noise levels. According to California Department of Transportation's Transportation and Construction-Induced Vibration Guidance Manual, ground-borne vibration from heavy construction equipment does not create vibration amplitudes that could cause structural damage, when measured at a distance of 10 feet. The nearest existing off-site structures are located one quarter mile from the nearest point of construction activities and would not be exposed to substantial ground-borne vibration due to the operation of heavy construction equipment on the Project site.

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

Less Than Significant Impact

b) The Project site is located approximately 10 miles from Lampson Field, administered by the Lake County Airport Land Use Commission, which has not adopted an Airport Land Use Compatibility Plan. Therefore, no impact is anticipated.

No Impact

c) The Project site is located over 10 miles from the nearest airport or airstrip. 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 would be up to fifteen (15) fulltime employees and up to fifteen (15) seasonal employees to be hired locally.

Less than Significant Impact

b) The project will not displace any existing housing, thus no impact is expected.

No Impact

XV. PUBLIC SERVICES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number

Would the project:					
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: 1) Fire Protection? 2) Police Protection? 3) Schools? 4) Parks? 5) Other Public Facilities?	☐	☐	☒	☐	1, 2, 3, 4, 5, 20, 21, 22, 23, 27, 28, 29, 32, 33, 34, 36, 37

Discussion:

1) Fire Protection

The Northshore Fire Protection District and CalFire provides fire protection services to the proposed Project area. Development of the proposed Project would impact fire protection services by increasing the demand on existing County Fire District resources. To offset the increased demand for fire protection services, the proposed project is conditioned by the County to provide a minimum of fire safety and support fire suppression activities and installations, including compliance with State and local fire codes, as well as minimum private water supply reserves for emergency fire use. With these measures in place, the Project would have a less than significant impact on fire protection.

2) Police Protection

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

3) Schools

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

4) Parks

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

5) Other Public Facilities

As the owners and operators currently reside in Lake County, and most (if not all) of the Project's staff will be hired locally. No impacts are expected.

Less than Significant Impact

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

Discussion:

a) Most, if not all, of the Project's staff will be hired locally. There would be no significant increase in the use of existing neighborhood and regional parks or other recreational facilities that would be the direct result of this project.

Less than Significant Impact

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

No Impact

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

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

Discussion:

a) Roadway Analysis

The Project Property is located off of Elk Mountain Road. Vehicles traveling to the site will use Elk Mountain Road north to the Project Property.

The Project site is situated on the west side of Elk Mountain Road, which is classified as a minor collector road in the Lake County General Plan. Elk Mountain Road is a paved, 2-lane County-maintained road at this location with two 10' wide travel lanes and 2' wide shoulders. The main access roads off of Elk Mountain Road will be 20 feet wide with turnouts at each of the proposed cultivation areas (20' x 60'; for emergency vehicle use if needed). The interior driveways will have 6" of gravel base in order to support a 75,000-pound emergency vehicle, typically a semi-truck hauling a bulldozer. As proposed, the two interior driveways will meet California Public Resource Code (PRC) 4290 and 4291 road standards for fire equipment access. The interior driveway will need to be improved to meet Public Resource Code (PRC) 4290 and 4291 road standards. This is a typical condition of approval for all cannabis projects.

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

Transit Analysis

The Lake County Transit Authority Route 1 – North Shore, Clearlake to Lakeport, runs along California State Highway 20, with a transit stop located at the intersection of Highway 20 and Keyes Blvd, approximately two (2) miles from Elk Mountain Road. This distance would be an aversion to the use of public transit.

Bicycle Lane and Pedestrian Path Analysis

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

Less than Significant Impact

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

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

To date, the County has not yet formally adopted its transportation significance thresholds or its transportation impact analysis procedures. As a result, the project related VMT impacts were assessed based on guidelines described by the California Office of Planning and Research (OPR) in the publication *Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory*, 2018.

The OPR Technical Advisory identifies several criteria that may be used to identify certain types of projects that are unlikely to have a significant VMT impact and can be "screened" from further analysis. One of these screening criteria pertains to small projects, which OPR defines as those generating fewer than 110 new vehicle trips per day on average. OPR specifies that VMT should be based on a typical weekday and averaged over the course of the year to take into consideration seasonal fluctuations. The estimated trips per day for the proposed project are between 30 and 60 daily trips during operation (15 to 30 employees), and approximately the same number of trips during construction.

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

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

Less than Significant Impact

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

No Impact

d) The Project does not propose any changes to road alignment or other features, does not result in the introduction of any obstacles, nor does it involve incompatible uses that could increase traffic hazards.

Less Than Significant Impact

e) The proposed Project would not alter the physical configuration of the existing roadway network serving the area, and will have no effect on access to local streets or adjacent uses (including access for emergency vehicles). Internal gates and roadways will meet CALFIRE requirements for vehicle access according to PRC §4290 and 4291, including adequate width requirements, overhead clearances, on-site turn-arounds, sufficient base materials use. Furthermore, as noted above under impact discussion (a), increased project-related operational traffic would be minimal. The proposed Project would not inhibit the ability of local roadways to continue to accommodate emergency response and evacuation activities. The proposed project would not interfere with the County'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, 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, 14, 15

Discussion:

a) A Cultural Resources Reconnaissance Report (CRR) was prepared by Flaherty Cultural Resource Services for the proposed cultivation project, and dated November 19, 2019. The Report was amended on April 30, 2020 by the original author. Approximately two person days were spent on surface inspections of the proposed cultivation areas for the CRR and CRR amendment. No cultural resources sites were discovered as a result of the surface inspections.

Prior to the surface inspections, a California Historical Resources Information System (CHRIS) records search was completed by the Northwest Information Center (NWIC). As a result of the records search, it was determined that no archaeological or ethnographic sites have been recorded within the boundaries of the Project Parcels.

In May 2019 the Native American Heritage Commission (NAHC) was contacted to request a search of the Native American Heritage Commission Sacred Lands File (SLF). The Native American Heritage Commission responded with negative results. Additionally, the applicant has

provided evidence that they have entered into a Monitoring Agreement with the Habematolel Pomo of Upper Lake, whose aboriginal territories include the Project Property.

Based on the findings of the CHRIS search, field survey, and outreach efforts with the Upper Lake Habematolel Tribe, there is no indication that the Project will impact any cultural resources 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). It is possible, but unlikely, that significant artifacts or human remains could be discovered during Project construction. If, however, significant artifacts or human remains of any type are encountered it is required that the project sponsor contact the culturally affiliated tribe and a qualified archaeologist to assess the situation. The Sheriff's Department must also be contacted if any human remains are encountered.

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

b) In response to the Cultural Resources Reconnaissance Report, the California Historical Resources Information System records search, and Sacred Lands File search, all of which indicate no presence of tribal cultural resources on the Project site, the lead agency has determined that, in its discretion and supported by substantial evidence, no resources pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1 will be affected by the proposed project. With mitigation measures CUL-1 and CUL-2, along with a continued dialogue with the Upper Lake Habematolel Tribe and other tribes in Lake County, the impact will be less than significant.

Less than Significant Impact with Mitigation Measures CUL-1 and CUL-2 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, 45
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 three (3) existing onsite groundwater wells, and power for the proposed activities would come from an existing onsite PG&E electrical service connections, a proposed roof-mounted solar array, and individual photovoltaic solar panels with battery storage/backup systems.

The Project would be served by an ADA-compliant restroom within the proposed Processing Building. The restroom would rely on a new onsite wastewater treatment septic system, which would require a permit from the Lake County Department of Environmental Health. Prior to applying for a permit, the Lake County Department of Environmental Health requires a Site Evaluation to determine the suitability of the site for a septic system. A percolation test would be conducted to determine the water absorption rate of the soil, and the septic system would be located, designed, and installed appropriately, following all applicable State and County guidelines and requirements. A proposed septic system would be located in an area of Type 202 soils. According to the USDA Soil Survey, this soil type could support a septic system.

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

Less than Significant Impact

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

The estimated total water usage for the proposed Project is 2,478,717 gallons / year, including employee usage. Twenty-eight (28) 5,000-gallon water storage tanks would be used to store irrigation water from the three onsite groundwater wells for the proposed cultivation operation. Water from the tanks will be gravity-fed to the cultivation areas via polyvinyl chloride (PVC) piping, and then distributed throughout the canopy areas using black poly tubing and drip tape.

The total recharge area is 9,199,249 square feet and identified as Area A, Area B and Area C within the Hydrology Study. Average annual precipitation is 40 inches. Average annual precipitation during a drought year is about 20% of the annual average precipitation

or about 8 inches per year. The Analysis projected the average annual recharge during a drought year to be about twice the amount as would be needed for the proposed Project.

Less than Significant Impact

c) The Project will rely on the use of portable toilets and hand washing stations and an ADA-compliant restroom within the proposed Processing Building. A wastewater treatment provider does not serve, nor is likely to serve, the Project Property, due to its remote location.

No Impact

d) The existing landfill has sufficient capacity to accommodate the project's solid waste disposal needs. Estimated annual solid waste will be between 1 and 2 tons.

Eastlake Landfill, South Lake Refuse Center, and Quackenbush Mountain Resource Recovery and Compost Facility are located within reasonable proximity of the Project site. Lake County Waste Solutions Transfer Station and Recycling Center is located approximately 25 miles northwest of the subject parcel. As of 2019, the Eastlake Landfill had 659,200 cubic yards available for solid waste, with an additional 481,000 cubic yards approved in 2020.

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

Less than Significant 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 will adhere to all regulation of California Code Regulations Title 14, Division 1.5, Chapter 7, Subchapter 2, and Article 1 through 5 shall apply to this project; and all regulations of California Building Code, Chapter 7A, Section 701A, 701A.3.2.A.

In April 2021, Lake County Planning and Building Division staff conducted a PRC 4290 and 4291 site inspection and determined that the site could be accessed by emergency vehicles, and that portions of the on-site access roads needed to be upgraded to meet PRC 4290 and 4291 standards.

Less than Significant Impact

b) The Project sites are situated in a high risk fire hazard zone, and the overall Project Property is considerably sloped, despite the proposed cultivation areas being relatively flat. The cultivation areas will 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 be required to improve fire access and the ability to fight fires from the project site and other sites accessed from the same roads through the upkeep of the property area. The applicant is proposing the installation of two PRC §4290-compliant 5,000-gallon water storage tanks for fire suppression uses, in addition to the twenty-eight (28) other proposed water tanks.

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

WDF-2: A water tender shall be present onsite during earth work to reduce risk of wildfire and dust.

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

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

On March 21, 2021, CalFire provided comments on the proposed project, including the need for Fire Access Roads to meet the requirements of CCR 1273/PRC §4290a and 4291, the installation of approved address numbers to be placed on all buildings and/or driveways in such a position as to be plainly visible and legible from the street or road fronting the property with numbers that shall contrast with their background will be required, and the installation of a rapid entry lock box, approved by the fire district if any gate is installed will also be required.

CalFire raised on-grid power at this location as a point of concern, and indicated that all fire suppression measures must be in place before any work can begin on site.

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

WDF-3: The interior driveway shall be improved to meet PRC 4290 and 4291 road standards for private driveways serving commercial uses, including turn-arounds every 400 feet or less for emergency vehicles.

WDF-4: The applicant shall maintain 30' of defensible space around all structures for the life of the project. Clearing these areas shall occur prior to a building permit being finaled.

d) The proposed cultivation areas are relatively flat (0 to 20 percent slopes), but the surrounding areas are relatively steep. The erosion and sediment control measures identified in the applicants' Property Management Plan and Erosion and Sediment Control Plan would likely be destroyed in the event of a wildfire on the Project Parcel. Therefore, the erosion and sediment control measures would need to be re-installed post wildfire to reduce risks of downslope/downstream flooding or landslides as a result of runoff and post-fire slope instability.

WDF-5: The applicant shall re-install the erosion and sediment control measures identified in the engineered Erosion and Sediment Control Plan for the project, as soon as possible following a wildfire emergency affecting the Project Property.

Less than Significant Impact with Mitigation Measure WDF-5 incorporated.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐	ALL

b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐ ALL
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐ ALL

Discussion:

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

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

Less than Significant Impacts with Mitigation Measures BIO-1 through BIO-6, CUL-1 through CUL-2, GEO-1 through GEO-2, HAZ-1 through HAZ-8, HYD-1 through HYD-2, and WDF-1 through WDF-5 incorporated.

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

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

Less than Significant Impacts with Mitigation Measures AES-1 through AES-4, AQ-1 through AQ-6, BIO-1 through BIO-6, CUL-1 through CUL-2, GEO-1 through GEO-2, HAZ-1 through HAZ-8, HYD-1 through HYD-2, NOI-1 through NOI-2, and WDF-1 through WDF-5 incorporated.

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

Less than Significant Impacts with Mitigation Measures AES-1 through AES-4, AQ-1 through AQ-6, BIO-1 through BIO-6, CUL-1 through CUL-2, GEO-1 through GEO-2, HAZ-1 through HAZ-8, HYD-1 through HYD-2, NOI-1 through NOI-2, and WDF-1 through WDF-5 incorporated.

Source List

1. Lake County General Plan
2. Lake County GIS Database
3. Lake County Zoning Ordinance
4. Upper Lake – Nice Area Plan
5. Vann 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 GIS Serpentine Soil Mapping
11. California Natural Diversity Database (https://wildlife.ca.gov/Data/CNDDB)
12. U.S. Fish and Wildlife Service National Wetlands Inventory
13. Biological Resources Assessment for Vann Ranch, prepared by Jacobzoon and Associates, dated June 29, 2020.
14. Cultural Resource Reconnaissance of 15+/- Acres near Upper Lake, Lake County, California, prepared by Flaherty and Associates, dated November 19, 2019, and Cultural Resource Reconnaissance of 12+/- Acres near Upper Lake, Lake County, California (addendum), dated April 30, 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. Northshore Fire Protection District
38. Site Visits – May 18, 2020 and April 2021 (County staff)
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. Hydrology Report to Determine Area of Influence for Cultivation Irrigation Wells, prepared by Vanderwall Engineering, dated September 29, 2021