

May 9, 2023

CALIFORNIA ENVIRONMENTAL QUALITY ACT ENVIRONMENTAL CHECKLIST FORM INITIAL STUDY (UP 20-94, IS 20-119)

1. Project Title: Kelsey Creek Farms

2. Permit Numbers: Major Use Permit UP 20-94

Initial Study IS 20-119

3. Lead Agency Name and Address: County of Lake

Community Development Department

Courthouse, 3rd Floor, 255 North Forbes Street

Lakeport, CA 95453

4. Contact Person: Eric Porter, Associate Planner

(707) 263-2221

5. Project Location(s): 9255 and 8985 Kelsey Creek Drive, Kelseyville

APN: 007-038-08 and 011-004-52

6. Project Sponsor's Name & Address: Kelsey Creek Farms / McCarty and Schueler

8650 Uva Drive

Redwood Valley, CA 95470

7. General Plan Designation: Rural Lands

8. Zoning: "RL-B5", Rural Lands – Special Lot Density (APN: 007-

038-08, clustering lot)

"RL-B5-WW-FF-SC"; Rural Land – Special Lot Density – Waterway – Floodway Fringe – Scenic Combining (APN:

011-004-52, cultivation lot)

9. Supervisor District: District 5

10. Flood Zone: "X", Low Risk of Flooding (there is a flood plain located

immediately east of APN: 011-004-52)

11. Slope: Varied; generally flat on APN: 011-004-52, Cultivation Lot

12. Fire Hazard Severity Zone: SRA – High Fire Risk

13. Earthquake Fault Zone: None mapped

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

15. Parcel Sizes: 82.79 Acres (APN: 007-038-08) 37.05 Acres (APN: 011-004-52)

119.84 Acres Combined

16. Description of Project:

Major Use Permit for four A-Type 3B Medium Outdoor Cultivation Licenses consisting of two 2-acre cultivation areas with each being 87,240 sq. ft. of canopy. Also proposed is one 200 sq. ft. shed for pesticide and fertilizer storage. The ±120 acre lots contain four existing permitted groundwater wells that range from 18 gallons per minute (GPM) to 128 GPM. The applicant is proposing six 5,000 to 6,500 gallon water tanks on site for irrigation, which will occur through a drip irrigation system.

The applicant indicates that there will be up to five full-time employees during peak harvest season. The nearest populated area, where the employees who don't live on site will likely reside, is Kelseyville located about 4 miles to the northeast. The site is accessed by Kelsey Creek Drive, a paved County road at this location.

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FIGURE 1 – AERIAL PHOTO OF SITE

Source: Lake County GIS Mapping, 2023

Power demand for the outdoor cultivation will be minimal; power for a well pump and security cameras primarily. Power would come from an existing Pacific Gas and Electric (PG&E) service located along Kelsey Creek Drive. There are no grid capacity issues in this location.

Existing Conditions

The site contains four permitted groundwater wells and is otherwise vacant land. The site has an existing dirt unimproved internal driveway that would need to be upgraded to accommodate the cannabis operation in order to meet Public Resource Code (PRC) 4290 and 4291

commercial driveway standards. The site is not located within a mapped Farmland Protection Zone; the land under the cultivation area is mapped as 'grazing land', which is a lower priority soil, so greenhouse cultivation with carbon air filtration systems is not required.

Site Preparation

Site preparation is not expected to take more than several weeks; the cultivation activities will take place outdoors on land that is already flat and generally devoid of vegetation. is expected to take between two and three months to build the greenhouses. The processing building is existing. An estimated four workers would be on site during construction working Monday through Saturday, 8 a.m. to 5 p.m.

Included in the construction will be five parking spaces located adjacent to the cultivation site, including one ADA-compliant parking space, security fencing including a security system, an ADA-compliant portable toilet and handwashing station, and a trash enclosure. A total of 10 to 20 daily vehicle trips is expected during site preparation and peak harvest season, with a total of 4 to 8 daily trips during regular operations excluding deliveries, which will occur infrequently (1 or 2 weekly deliveries are anticipated).

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

The applicant has not stated how much grading will occur on site, nor have any engineered Grading and Erosion Control Plans been submitted. The Property Management Plan, prepared by Natural Investigations, Inc., has a written section on Erosion Prevention Measures (section 1.2.1) that describes straw wattles being placed (around the cultivation areas?) prior to each rainy season, and being replaced annually. The applicant will need to provide an estimate of the amount of earth that will be moved; based on the flat terrain, the outdoor cultivation and the clearing area that is virtually devoid of vegetation, staff estimates that under 50 cubic yards of earth will be moved on the site, and that an estimated 200 to 300 yards of imported soil will be brought on site (note: the applicant states that on-site soil will be used, however the soil quality at this location is probably not adequate for cultivation purposes).

Post - Construction

- Hours of operation will be 8:00 a.m. to 6:00 p.m. Monday through Sunday
- Two employees per day would occupy the site during regular operations, and up to five employees would occupy the site during peak harvest season
- Trips per day estimated at 4 and 8 Average Daily Trips (ADT) during regular operations, and 10 to 20 ADT during peak harvest season and during site preparation
- Chemicals, fuel and fertilizer to be stored in the lockable shipping containers
- On-grid power is proposed
- One or two existing wells will be used for irrigation in combination with four 5,000 gallon water storage tanks.
- Vegetative waste will be composted on site

Kelsey Creek Farms is enrolled with the State Water Resources Control Board (SWRCB) prior to October 31, 2020. The General Order requires the preparation of a Site Management Plan

(SMP) and a Nitrogen Management Plan (NMP). The purpose of the SMP is to identify Best Practicable Treatment or Control (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.



Source: Material Submitted by Applicant

Water Analysis. A Technical Memorandum ("Memo") was submitted by Northpoint Consulting Group, Inc., and is dated April 1, 2023. The Memo identifies the intended water sources, the aquifer details including storage capacity and recharge rates, and summarizes the ability of this project to meet its water demands without depleting other competing area wells. The assumptions used in this Memo are 6 gallons of water per plant per day (an accepted Industry standard) and a 180 day growing season.

Well Data

There are two existing permitted groundwater wells located on the cultivation lot. One well, identified in the Memo as Well #1, is the primary well to be used for cultivation, and was drilled to a depth of 280'. The 2005 test showed a yield of 110 gallons per minute (GPM), and an 80' drawdown during a two-hour well test done in 2005 by Larry Herman Drilling. The well had a rapid recovery following shut down of the test, although the actual recovery time was not stated in the 2005 well test.

A second well test was done by West Coast Pump according to a well test report dated April 30, 2021. The second test was taken during a drought year and showed a total of 100 GPM over a four-hour testing period. No recovery rate was stated in the 2021 pump test.

Water Demand

The Memo indicates that the projected water demand for this project is 20,626 gallons of water per day over a 180 day cultivation season, or about 3,712,680 gallons per year (about 11 acrefeet per year). Included in this projected use is water use by employees and for irrigation. Total on-site water storage proposed is 20,000 gallons excluding a 5,000 gallon water tank that will be required for fire suppression purposes if needed. The Memo indicates that the nearest wells are located about 825 and 725 feet of the well proposed to be used by this project, and that the neighboring wells would likely not be impacted by the project well. The total water demand of this project is equal to about 0.02% of the usable aquifer storage as below.

Aquifer Data
The project site is located on the Big Valley Groundwater Basin, which includes the watersheds of Manning Creek/ Rumsey Slough, Adobe Creek, Hill Creek, Kelsey Creek, Cole Creek, Highland Creek. The well is located just west of Kelsev Creek in the Kelsev Creek watershed. The estimated Big Valley Water Basin storage capacity is 105,000 acre-feet, with a usable amount of 60,000 acre-feet. According to the 2006 Lake County Groundwater Management Plan, the agricultural demand for water within the Big Valley Groundwater Basin is 11,454 acrefeet during an average year. The Big Valley Groundwater Basin is not a listed 'critically overdrafted' basin, and the recharge rates of the Basin during drought years exceeds the demand by the known wells using the basin.

Conclusion

Per the calculations and assumptions in the Hydrology report, the project has adequate water supply for the proposed irrigation use. The report also concludes that even in a drought year, estimates show that the well has the capacity to handle the proposed water irrigation needs of the project, without impacting the neighboring wells or the aquifer.

17. Surrounding Land Uses and Setting:

The following neighboring lot characteristics are present. See Figure 2, next page for map.

- North: Cluster lot 007-038-08; zoned "RL" Rural Lands; 82.79 acres in size and is undeveloped.
- North beyond the Cluster lot: "RL" Rural Lands-zoned lot; 79.41 acres in size; developed with a dwelling. Contains a small above-ground pond.
- South: "RL" Rural Lands-zoned property, about 39.75 acres in size and developed with a dwelling. The lot contains Kelsey Creek.
- East: "RR" Rural Residentially-zoned properties, ranging in size from 1.21 acres to over 3.3 acres in size. Most are developed with dwellings.
- West: "RL" Rural Lands-zoned property, about 38.65 acres in size; contains a dwelling and several barns and shop buildings.



FIGURE 2 – ZONING OF SUBJECT SITE AND SURROUNDING AREA

Source: Lake County GIS Mapping

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

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

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

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

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

Lake County sent an AB52 notice to 11 Lake County-based Tribes on January 22, 2021, informing tribes of the proposed project and offering consultation under AB-52. The Upper Lake Habematolel Tribe deferred to the Big Valley Tribe, who did not respond to the notice.

In November 2020, Natural Investigations submitted a Cultural Resources Assessment that included the area where the cultivation activities would occur. The survey yielded positive results; a total of seven items were recovered that date back to Tribal use eras. There are several mapped historic sites within one mile of the project site.

Staff reached out to the applicant by email on May 8, 2023, and phoned the Tribal Historic Preservation Officer, Ron Montez, also on May 8, 2023 to alert him to the project. Staff's email to the applicant advised the applicant to coordinate with the tribe to that no historic sites are damaged during site preparation.

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.

\boxtimes	Aesthetics	Ш	Greenhouse Gas Emissions	Ш	Public Services		
	Agriculture & Forestry Resources		Hazards & Hazardous Materials		Recreation		
\boxtimes	Air Quality		Hydrology / Water Quality		Transportation		
	Biological Resources		Land Use / Planning	\boxtimes	Tribal Cultural Resources		
\boxtimes	Cultural Resources		Mineral Resources		Utilities / Service Systems		
	Energy	\boxtimes	Noise	\boxtimes	Wildfire		
\boxtimes	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 of there will not be a significant effect in this case because revisions made by or agreed to by the Project proponent. A MITIGATED NE will be prepared.	in the Project have been
	I find that the proposed Project MAY have a significant effect on ENVIRONMENTAL IMPACT REPORT is required.	the environment, and an
	I find that the proposed Project MAY have a "potentially significated significant unless mitigated" impact on the environment, but at least adequately analyzed in an earlier document pursuant to applicable has been addressed by mitigation measures based on the earlier attached sheets. An ENVIRONMENTAL IMPACT REPORT is reconly the effects that remain to be addressed.	ast one effect 1) has been le legal standards, and 2) analysis as described on
	I find that although the proposed Project could have a significant of because all potentially significant effects (a) have been analyzed act or NEGATIVE DECLARATION pursuant to applicable standards a or mitigated pursuant to that earlier EIR or NEGATIVE DECLARAT mitigation measures that are imposed upon the proposed Project, in	dequately in an earlier EIR nd (b) have been avoided ION, including revisions or
Initial S	Study Prepared By: Eric J. Porter, Associate Planner	
8	SPA	
Signat		Date: <u>5-9-2023</u>
Mireva	G. Turner. Director	

SECTION 1

EVALUATION OF ENVIRONMENTAL IMPACTS:

Lake County Community Development Department

- 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 onsite, 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:
 - 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 sitespecific 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

l.	AESTHETICS	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
	cept as provided in Public Resource Code Section 099, would the project:					
a)	Have a substantial adverse effect on a scenic vista?		\boxtimes			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?			\boxtimes		2, 3, 4, 9

C)	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?	\boxtimes		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?		\boxtimes	1, 2, 3, 4, 5, 6, 9

Discussion:

a) Kelsey Creek Farms is proposing a total of four acres of outdoor cultivation that will occur in above-ground pots. The only proposed building is a 200 sq. ft. shed that is small in stature. The site is accessed from Kelsey Creek Drive, and is open to view from the public road at this location. The applicant is proposing a 6' tall screening fence, which will help obscure the cultivation area.



The following mitigation measure will help reduce the potential Aesthetic impacts to 'less than significant' levels:

- AES-1: Prior to cultivation, a minimum 6' tall screening fence shall be installed around the perimeter of the cultivation. The screening material shall not be fabric due to poor durability, and the fence may be chain link with slats, or solid wood or metal.
- AES-2: All exterior lighting shall be downcast and shall not be directly visible from public roads or neighboring lots. All lighting shall comply with fixture recommendations found in darksky.org.

Less than Significant Impact with Mitigation Measure AES-1 and AES-2 added

b) The project site parcels are served by a private driveway that connects to Kelsey Creek Drive, a paved, non-scenic County maintained road. The five acre cultivation site has been cleared of significant vegetation; there are no trees that would need to be removed, and no rock outcroppings or historic buildings exist on the site.

Less than Significant Impact

c) The site is located in a rural area to the west of Kelseyville and is highly visible from Kelsey Creek Drive. Screening requirements and light mitigation are added to minimize potential impacts to the neighboring properties.

Less than Significant Impact with mitigation measures added

d) The project has minimal potential to create additional light or glare based on the outdoor cultivation proposed.

Less than Significant Impact

II.	AGRICULTURE AND FORESTRY RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Wo	uld 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?			\boxtimes		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))?				\boxtimes	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?			\boxtimes		1, 2, 3, 4, 5, 7, 8, 11, 13

Discussion:

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

a) The project parcel is zoned "RL", Rural Lands, and has not been used as a traditional agriculturally-productive lot. There are no agriculturally-productive lots in close proximity to the subject site, and the project will not impact the ability of neighboring lots from crop growing if they choose to do so.

Less Than Significant Impact

b) The lot and the adjacent lots are not under a Williamson Act contract.

No Impact

c) The project will not result in rezoning forest land as defined by Public Resource Code section 4526, or of timberland as defined by Government Code section 51104(g).

No Impact

d) The project would not result in the loss or conversion of forest land to a non-forest use since no timber production is occurring on the land.

No Impact

e) As proposed, this project would not induce changes to existing farmland that would result in its conversion to non-agricultural use.

Less Than Significant Impact

Ш	I. AIR QUALITY	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Wo	ould the project:					
a)	Conflict with or obstruct implementation of the applicable air quality plan?			\boxtimes		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?			\boxtimes		1, 2, 3, 4, 5, 21, 24, 31, 36
c)	Expose sensitive receptors to substantial pollutant concentrations?		\boxtimes			1, 2, 3, 4, 5, 10, 21, 24, 31, 36

,	nissions (such as those leading to rsely affecting a substantial number		\boxtimes	1, 2, 3, 4, 5, 21, 24, 31, 36
Discussion:				

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

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

Because the Lake County Air Basin is in attainment of both state and federal air quality standards, LCAQMD has not adopted an Air Quality Management Plan, but rather uses Bay Area Air Quality Management District's 'significance thresholds' address air quality standards that are associated with a project.

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

Less than Significant Impact

b) The Project area is in the Lake County Air Basin, which is designated as in attainment for state and federal air quality standards for criteria pollutants (CO, SO₂, NO_x, O₃, PM₁₀, 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	2,000 to 3,500	No threshold	Less than significant
(CO ₂ e)		established	

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	1 to 20	No threshold	Less than significant
(CO ₂ e)		established	

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
NOx	0 to 1	10	Less than significant
CO	0 to 1	100	Less than significant
SO _X	0 to 1	40	Less than significant
PM ₁₀	0 to 1	15	Less than significant
PM _{2.5}	0 to 1	10	Less than significant
Greenhouse gasses (as CO ₂ or methane)	1 to 100	10,000	Less than significant

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

Less than Significant Impact

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

There are no schools, parks, childcare centers, convalescent homes, or retirement homes located in proximity to the Project site. The nearest off-site residence is located about 450 feet west of the cultivation site, well over the 200-foot setback for offsite residences from commercial cannabis cultivation as described in Article 27.11 of the Lake County Zoning.

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

Construction impacts will be minimal; the cultivation areas are outdoors in fabric pots. The applicant would build a 200 sq. ft. shed and install fencing and a security system for the facility. Construction is expected to take place over a two to three week period.

Operational impacts would include dust and fumes from site preparation of the cultivation area and vehicular traffic, including small delivery vehicles that would be contributors during and after site preparation and construction. The EPA has indicated that a vehicle produces 404 grams of CO₂ on average for each vehicle mile traveled. The proposed project will operate from 8 a.m. to 6 p.m., Monday through Sunday, and will have two employees during normal operations, and two employees during peak harvest season. Vehicle trips per day during operations are estimated up to 8 daily employee trips during regular operations and up to 8 daily trips during peak harvest season with an overall average of 6 daily trips. It is realistic that up to 2 deliveries per week on average would occur. A total average of 44 weekly trips are projected. The applicant has stated that cultivation activities would occur 180 days per year; therefore a total of about 1,130 annual trips is possible.

The nearest populated area is Kelseyville, which is located about four miles northeast of the cultivation site, and for purposes of estimating total vehicle impacts is considered to be the living area for employees. Assuming 1,130 annual vehicle trips from four miles away, a total of 4,525 vehicle miles per year can be anticipated. Each car produces an average of 404 grams of CO₂ per vehicle mile traveled (source: EPA). Total anticipated CO₂ emissions is 1,828,100 grams of CO₂ per year, or about 1.8 tons of CO₂ per year.

Lake County has no thresholds for air emissions and uses Bay Area Air Quality Management District's (BAAQMD) standards for thresholds of significance. The BAAQMD's threshold is 1,100 tons of CO₂ per project. Based on this threshold amount, it would take this project about 611 years to meet the BAAQMD threshold for CO₂ levels to reach a 'significant impact' to air quality.

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

Implementation of mitigation measures would reduce air quality impacts to less than significant. Dust during site preparation would be limited during periods of high winds (over 15 mph). All visibly dry, disturbed soil and road surfaces would be watered to minimize fugitive dust emissions.

Cannabis cultivation activities involve certain disturbance of soil; whether its related to grading for building pad preparation or importing soil for outdoor cultivation (usually fabric pots). Lake County routinely puts mitigation measures in place to prevent dust from the project from migrating to other sites, and to protect the site and area from air quality-related impacts. This includes carbon filtration systems inside of greenhouses containing mature plants, and the processing building.

The following mitigation measures are added:

- AQ-1: Prior to obtaining the necessary permits and/or approvals for any phase, applicant shall contact the Lake County Air Quality Management District (LCAQMD) and obtain an Authority to Construct (A/C) permit for all operations and for any diesel-powered equipment and/or other equipment with potential for air emissions.
- AQ-2: All mobile diesel equipment used must be in compliance with state registration requirements. Portable and stationary diesel-powered equipment must meet all federal, state, and local requirements, including the requirements of the State Air Toxic Control Measures for compression ignition engines. Additionally, all engines must notify LCAQMD prior to beginning construction activities and prior to any diesel engine use.
- AQ-3: The applicant shall maintain records of all hazardous or toxic materials used, including a Material Safety Data Sheet (MSDS) for all volatile organic compounds utilized, including cleaning materials. Said information shall be made available upon request and/or the ability to provide the LCAQMD such information in order to complete an updated Air Toxic emission Inventory.
- AQ-4: All vegetation removed during site development shall be chipped and spread for ground cover and/or erosion control. The burning of vegetation, construction debris, including waste material is prohibited.
- AQ-5: The applicant shall have the primary access and parking areas surfaced with chip seal, asphalt, or an equivalent all weather surfacing to reduce fugitive dust generation. The use of white rock as a road base or surface material for travel routes and/or parking areas is prohibited.
- AQ-6: All areas subject to infrequent use of driveways, overflow parking, etc., shall be surfaced with gravel, chip seal, asphalt, or an equivalent all weather surfacing. Applicant shall regularly use and/or maintain graveled area to reduce fugitive dust generations.
- AQ-7: Prior to cultivation, the applicant shall plant fragrant plants around the southern and eastern edge of the cultivation area. Plants used shall produce a fragrance; shall bloom at approximately the same time as the cannabis plants; shall be planted at 2' intervals; shall be irrigated, and shall be maintained in a healthy state for the life of the project.

Less than Significant Impact with mitigation measures added

d) The Project Property is located in an agricultural area of Lake County, where the majority of development is single family residential dwellings with agricultural uses in the vicinity. The potential impacts to air quality are dust and odor both of which have been addressed in the preceding mitigation measures.

Less than Significant Impact

I۱	7. BIOLOGICAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Wo	ould the project:					
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?					2, 5, 11, 12, 13, 16, 24, 29, 30, 31, 32, 33, 34, 45
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?					1, 2, 3, 4, 5, 11, 12, 13, 16, 17, 29, 30, 31, 32, 33, 34, 45
c)	Have a substantial adverse effect on state or federally protected wetlands (including, not limited to, marsh, vernal pool, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?					1, 2, 3, 4, 5, 11, 12, 13, 16, 17, 21, 24, 29, 30, 31, 32, 33, 34, 45
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?					13
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			\boxtimes		1, 2, 3, 4, 5, 11, 12, 13
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?					1, 2, 3, 5, 6

Discussion:

a) A Biological Resources Assessment (BA) was prepared by Natural Investigations and is dated October 22, 2020. The BA included a review of current California Natural Diversity Database (CNDDB) mapping of known sensitive plants and wildlife, an analysis of the suitability of the site for sensitive plants and wildlife, and a protocol-level floristic field survey of the project site. The purpose of the BA was to provide information as to whether the proposed cultivation and cannabis operation areas contain sensitive plants or potentially contain sensitive wildlife requiring mitigation under CEQA. The BA refers to the "Project Area" which is the immediate boundaries of the proposed cannabis project. This BA also analyzes the potential for jurisdictional wetlands and other waters of the U.S. to exist onsite, and classifies landforms that may potentially convey sediment to waters of the U.S. including dry creeks, washes, swales, gullies, and other erosional features. Also included in Appendix F is a set of recommended Best Management Practices (BMPs) that are adapted from a variety of sources, some of which are enforceable conditions under State Water Resources Control Board *Cannabis* General Order No. WQ 2019-0001-DWQ.

Access to the parcel is taken from Kelsey Creek Drive via on-site driveway. Proposed onsite structures will be limited to portable ADA-compliant restrooms and a 200 sq. ft. shed. No trees will be removed by this project proposal according to the applicant.

The BA concluded that there are no observed special status species on the site, and made no recommendations for mitigation to occur related to Biological Resources. The BA also stated that there are watercourses located immediately off-site, which are shown on Lake County GIS mapping programs. The primary off-site adjacent water course is Kelsey Creek, a year-round stream that flows through Kelseyville into Clear Lake.

The Project Area is not located within any adopted Habitat Conservation Plan or Natural Community Conservation Plan.

Less Than Significant Impact

b) The BA submitted for the project did not detect any wetlands or riparian areas on site. The site is adjacent to Kelsey Creek, a year-round stream, however no portions of the creek cross into the subject lots, and there is over 100' of setback between the cultivation area and the creek, thereby meeting the County's setback requirements. The edge of the cultivation area is located approximately 125-feet west of Kelsey Creek and its habitat, providing a sufficient buffer from the proposed cultivation activities to sensitive riparian habitat

Erosion control measures to control erosion and sedimentation during construction and operation have been identified in the Property Management Plan and include straw wattles for on-site stormwater retention.

Kelsey Creek Farms is enrolled with the State Water Resources Control Board (SWRCB) for Tier 1, 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 site was assigned WDID No. 5S17CC423911. 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 Best Practicable Treatment or Control (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.

Impacts would be Less than Significant

c) There are no federally-protected wetlands located in or within 100 feet of the cultivation sites; therefore the project will not impact any wetlands. Less Than Significant Impact d) The BA conducted by Natural Investigations was done in October, 2020, slightly past the date regarded as being 'in season'. The surveying Biologist did not see any listed species according to the study. The Study Area was also informally assessed for the presence of potentiallyjurisdictional water features, including riparian areas, isolated wetlands and vernal pools, and other biologically-sensitive aquatic habitats. The Study concluded that "no critical habitat for any Federally-protected species occurs in the Project Area or surrounding Study Area during the field survey. Less than Significant Impact e) The proposed project would be consistent with all Lake County ordinances related to the protection of biological resources, because there are no protected biological resources present on the project site. The proposed project would not affect any wetlands, ephemeral drainages, or other sensitive habitats protected by the Lake County Zoning Ordinance. According to the material submitted, no tree removal will occur, so no County tree removal policies or ordinances would apply. Less than Significant Impact f) No adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other local, regional, or state habitat conservation plans have been adopted for the Project area and no impacts are anticipated. No Impact Potentially Less Than Less Than No Source V. CULTURAL RESOURCES Significant Significant Significant Impact Number Impact with Impact Mitigation Measures Would the project: a) Cause a substantial adverse change in the significance 1, 3, 4, 5, \boxtimes П of a historical resource pursuant to §15064.5? 11, 14c,

Discussion:

b) Cause a substantial adverse change in the significance

of an archeological resource pursuant to §15064.5?

Disturb any human remains, including those interred

outside of formal cemeteries?

 \boxtimes

 \boxtimes

1, 3, 4, 5,

11, 14, 15

1, 3, 4, 5,

11, 14, 15

a) Lake County sent an AB52 notice to 11 Lake County-based Tribes on January 22, 2021, informing tribes of the proposed project and offering consultation under AB-52. The Upper Lake Habematolel Tribe deferred to the Big Valley Tribe who did not respond to the notice.

In November 2020, Natural Investigations submitted a Cultural Resources Assessment that included the area where the cultivation activities would occur. <u>The survey yielded positive results</u>; a total of seven items were recovered that date back to Tribal use eras. There are several mapped historic sites within 1/4 mile of the project site.

Staff reached out to the applicant by email on May 8, 2023, and phoned the Big Valley Tribal Historic Preservation Officer on May 8, 2023 to alert him to the project and that significant artifacts were found during the site survey. Staff's email to the applicant advised the applicant to coordinate with the tribe to that no historic sites are damaged during site preparation. On May 9, 2023, the applicant emailed staff indicating that he had called the Big Valley Tribe's THPO in an attempt to do outreach with the Tribe.

The following mitigation measures are added as precautionary measures:

- CUL-1: Should any archaeological, paleontological, or cultural materials be discovered during site development, all activity shall be halted in the vicinity of the find(s), the applicant shall notify the culturally affiliated Tribe, and a qualified archaeologist to evaluate the find(s) and recommend mitigation procedures, if necessary, subject to the approval of the Community Development Director. Should any human remains be encountered, the applicant shall notify the Sheriff's Department, the culturally affiliated Tribe, and a qualified archaeologist for proper internment and Tribal rituals per Public Resources Code Section 5097.98 and Health and Safety Code 7050.5.
- CUL-2: All employees shall be trained in recognizing potentially significant artifacts that may be discovered during ground disturbance. If any artifacts or remains are found, the culturally affiliated Tribe shall immediately be notified; a licensed archaeologist shall be notified, and the Lake County Community Development Director shall be notified of such finds.
- CUL-3: Prior to cultivation, the applicant shall conduct a site visit with an archaeologist
 and/or tribal monitor to observe any earth disturbance that occurs on site. If any
 culturally-sensitive area is discovered within or next to the project boundary, the
 applicant shall amend the site plan to show a 50' buffer of non-disturbable area
 between the sensitive site(s) and the cultivation site. This amendment to the site plan
 may occur without further County review at the discretion of the Community
 Development Director.

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

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

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

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

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

VI	. ENERGY	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Wo	uld 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?			\boxtimes		1, 3, 4, 5

Discussion:

- a) The project is proposing the use of on-grid power supplied by PG&E as the energy source for this project. The cultivation areas are outdoors, and the project would have minimal power demand which would be limited to having enough power to serve the well pump and security system, including security lighting.
 - No detailed energy calculations were provided with the application, however none appear to be necessary given the relatively low power demands associated with this project.
 - Less than Significant Impact
- b) According to the California Department of Cannabis Control's Title 4 Division 19 §15010 on compliance with the CEQA, all cannabis applications must describe their project's anticipated operational energy needs, identify the source of energy supplied for the project and the anticipated amount of energy per day, and explain whether the project will require an increase in energy demand and the need for additional energy resources. The proposed Project consists of outdoor cultivation with minimal security lighting, and power for the well pump. Electricity will be provided by 'on-grid' power; the project can likely use a new 100 amp service, which is typically required for well pumps.

Less Than Significant Impact

V	II. GEOLOGY AND SOILS	Potentially Significant Impact	Less Than Significant With Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Wo	uld the project:					
a)	Directly or indirectly cause potentially substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special. Publication 42. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides?					1, 2, 3, 4, 5, 18, 19
b)	Result in substantial soil erosion or the loss of topsoil?		\boxtimes			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?			\boxtimes		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?			\boxtimes		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?		\boxtimes			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 mapped earthquake faults within two miles of the Project Property. Thus, no rupture of a known earthquake fault is anticipated and the proposed Project would not expose

people or structures to an adverse effects related rupture of a known earthquake fault as no structures for human occupancy are being proposed.

Seismic Ground Shaking (ii) and Seismic–Related Ground Failure, including liquefaction (iii) Lake County contains numerous known active faults. Future seismic events in the Northern California region can be expected to produce seismic ground shaking at the site. All proposed construction is required to be built under Current Seismic Safety Construction Standards.

Landslides (iv)

The 23 acre lot is flat. According to the Landslide Hazard Identification Map prepared by the California Department of Conservation's Division of Mines and Geology, the area is considered generally stable. As such, the Project site is considered unlikely to be 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 will occur on land that is flat; the area that the pots will be placed will require very little earth movement. However, the applicant has stated that on-site soil will be used for the cannabis plants, which would be planted in fabric pots. Each pot can hold about ½ a cubic yard of soil. Assuming 500 plants per acre (the industry standard), and four acres of outdoor cultivation, the total amount of soil needed is 1000 cubic yards (2000 plants with each plant requiring ½ cubic yard of soil). Because this amount exceeds the 50 cubic yard threshold for a grading permit, the applicant shall be required to apply for a grading permit prior to cultivation.

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

The following mitigation measure is required for this project:

GEO-1: Prior to cultivation, the applicant shall apply for a simple grading permit. This permit shall be issued prior to on-site earth movement and/or importation of soil.

Less Than Significant Impact with mitigation measure GEO-1 added.

c) The Project Property is flat, and landslides on site are extremely unlikely. According to the Landslide Hazard Identification Map, prepared by the California Department of Conservation, Division of Mines and Geology, the project parcel is not located within and/or adjacent to an existing known "landslide area", and the Type 242 soil at the cultivation site is relatively stable in terms of landslide potential.

Less Than Significant Impact

d) The soil type on the cultivation site is Type 242, "Wappo loam, 2 to 8 percent slope". Soil characteristics are moderately well-drained with a high shrink-swell potential. This soil type is typically used for grazing land and homestead development.

The project is proposing one small (200 sq. ft.) shed, so the shrink-swell action would have minimal impact on the shed structure.

Less Than Significant Impact

e) The project is proposing to use portable ADA-compliant bathrooms with hand-wash stations. The portable restrooms would be serviced on a weekly basis according to the applicant. No new on-site septic systems are proposed, and it appears that none are needed.

Less Than Significant Impact

f) According to the Natural Investigations survey and CHRIS records, the project site contains items that are indicative of historic tribal use. Staff has reached out to the applicant and the Big Valley Tribe to coordinate for a Tribal Monitor to conduct a site visit, and presumably come to an agreement that would allow either a trained Tribal member or an archaeologist to be present on site if / when any site disturbance occurs. If any sensitive sites are discovered, the applicant shall amend the site plans to avoid the area, including having a 50' wide 'no disturb' area. This is required by CUL-3.

Less than Significant Impact with mitigation measure CUL-3 added.

V	III. GREENHOUSE GAS EMISSIONS	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Wo	ould the project:					
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			\boxtimes		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?			\boxtimes		1, 3, 4, 5, 36

Discussion:

a) Lake County has no maximum thresholds for greenhouse gas emissions. With cannabis cultivation projects, greenhouse gasses are created during construction and during peak harvest season.

The construction of this project will take place over an estimated two to three weeks, and would primarily involve building one small shed, putting gravel down on the interior driveway to make the driveway Public Resource Code (PRC) 4290 and 4291 compliant; drilling fence post-holes, installing a fence, filling an estimated 2000 fabric pots with ½ cu. yd. of soil, and installing security cameras. Estimated vehicle trips during and after construction are between two and four daily trips assuming two employees during and after construction. No vehicles will be idling on site during construction.

Levels of greenhouse gasses emanating from the four acre outdoor cannabis cultivation are not yet well studied. The County obtained the following regarding potential greenhouse gasses:

"The potential for carbon payments has special interest for farmers growing hemp, which reportedly (consumes) carbon (dioxide) at a rate of 6 tons per acre, according to the European Industrial Hemp Association, and can play a key role in regenerative farming and soil remediation.

"For biomass carbon inventories of 750 t/ha and typical yields (5000 kg/ha) (UNODC, 2009), associated biomass-related CO₂ emissions would be on the order of 150 kg CO₂/kg Cannabis (for only one harvest per location), or 3% of that associated with indoor production. These sites typically host on the order of 10,000 plants, although the number can go much higher (Mallery, 2011)."

Based on a total canopy area of 174,240 sq. ft. of plants, and based on an estimate of 500 plants per acre, it is probable that a total of about 2000 cannabis plants could be planted. The total estimated CO₂ output for 2000 plants grown outdoors is about 75 kg/year of CO₂. Source: University of California, Berkeley; 2018 Cannabis Study.

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

Less than Significant Impact

- b) For purposes of this analysis, the Project was evaluated against the following applicable plans, policies, and regulations:
 - The Lake County General Plan
 - The Lake County Air Quality Management District
 - AB 32 Climate Change Scoping Plan
 - AB 1346 Air Pollution: Small Off-Road Equipment

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

The Lake County Air Basin is in attainment for all air pollutants with a high air quality level, and therefore the LCAQMD has not adopted an Air Quality Management Plan, but rather uses its rules and regulations for the purpose of reducing the emissions of greenhouse gases. The

proposed Project does not conflict with any existing LCAQMD or BAAQMD rules or regulations and would therefore have a less than significant impact.

The 2017 AB Climate Change Scoping Plan recognizes that local government efforts to reduce emissions within their jurisdiction are critical to achieving the State's long term GHG goals, which includes a primary target of no more than six (6) metric tons CO₂e per capita by 2030 and no more than two (2) metric tons CO₂e per capita by 2050. The Project will have up to three (3) individuals working on site (owners/operators) during normal operational hours, and with an expected 6.875 metric tons of overall operational CO₂e per year, the per capita figure of 2.29 metric tons of operational CO₂e 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

I	K. HAZARDS AND HAZARDOUS MATERIALS	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Wo	ould the project:					
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			\boxtimes		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?			\boxtimes		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?				\boxtimes	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?				\boxtimes	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?		\boxtimes		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?			\boxtimes	1, 3, 4, 5, 20, 35, 37

Discussion:

a) Materials associated with the proposed cannabis project are anticipated to include gasoline, pesticides, fertilizers, alcohol, and hydrogen peroxide. Equipment emissions during and after construction may be considered hazardous if released into the environment. The applicant has stated that all potentially harmful chemicals will be stored and locked in the secured shed on site. Storing petroleum products and fertilizers together is prohibited due to risk of explosion.

This proposal will use organic pest control and fertilizers. This will significantly limit potential environmental hazards that would otherwise result. All pesticides and fertilizers are required to be stored in a locked and secure facility and kept in accordance with manufacturer's recommendations as is being proposed by the applicant.

The project would 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.

Any petroleum products brought to the site, such as gasoline or diesel to fuel construction equipment, would be stored under cover and in State of California-approved containers and in a manner that is consistent with State Fire Codes regarding the storage of flammable fuels. All pesticides, fertilizers, or petroleum products would be stored a minimum of 100 feet from all potential sensitive areas and watercourses as well as from fertilizers.

Cannabis waste, as appropriate, will be composted or chipped and spread on site; burning cannabis waste is prohibited in Lake County.

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

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

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.

Less Than Significant Impact

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

Flood risk on the Project site is significant; the entire property is located in the "AO" flood zone, which has a relatively high risk of flooding. Because of the presence of the flood zone, any buildings that are to be occupied will require building permits and will likely need to have engineered footings per the Building Code.

According to Lake County GIS Portal data and the Project is not located in or near an identified earthquake fault zone.

The Project site is mapped as being within a mapped Moderate Fire Risk area. Proposed on-site water storage can allow for one 5,000 gallon water tank to be reserved for fire suppression. This is required by mitigation measure WILD-1 further in this report.

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

Less than Significant Impact

c) There are no schools located within one mile of the proposed Project site.

No Impact

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

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

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

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

No Impact

e) The Project site is located about 3 miles from the nearest public airport or public use airport (Lampson Field). Lampson Field is administered by the Lake County Airport Land Use Commission, which has not adopted an Airport Land Use Compatibility Plan. There will be no hazard for people working in the Project area from a public airport or public use airport.

Less Than Significant Impact

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

Less than Significant Impact

g) The Project site is not located within a mapped fire hazard severity zone.

No Impact

X.	HYDROLOGY AND WATER QUALITY	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Wo	ould 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?			\boxtimes		1, 2, 3, 5, 6, 29, 30, 45
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: i) Result in substantial erosion or siltation on-site or off-site; ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;					1, 2, 3, 5, 6, 7, 15, 18, 29, 32, 45

- 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?		\boxtimes	1, 2, 3, 5, 6, 29

Discussion:

a) The applicant has provided an engineered Grading Plan that shows the treatment of the cultivation areas in terms of runoff mitigation and erosion control. The project will use straw wattles around the cultivation areas to help retain the stormwater that might otherwise migrate onto other areas on the property and/or onto neighboring lots.

The chemicals used as fertilizers and pesticides are organic; cannabis has some of the strictest testing standards of any production crop grown and has to meet very stringent requirements for chemicals.

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

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

Less Than Significant Impact

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

Water Analysis. A Technical Memorandum ("Memo") was submitted by Northpoint Consulting Group, Inc., and is dated April 1, 2023. The Memo identifies the intended water

sources, the aquifer details including storage capacity and recharge rates, and summarizes the ability of this project to meet its water demands without depleting other competing area wells. The assumptions used in this Memo are 6 gallons of water per plant per day (an accepted Industry standard) and a 180 day growing season.

Well Data

There are two existing permitted groundwater wells located on the cultivation lot. One well, identified in the Memo as Well #1, is the primary well to be used for cultivation, and was drilled to a depth of 280'. The 2005 test showed a yield of 110 gallons per minute (GPM), and an 80' drawdown during a two-hour well test done in 2005 by Larry Herman Drilling. The well had a rapid recovery following shut down of the test, although the actual recovery time was not stated in the 2005 well test.

A second well test was done by West Coast Pump according to a well test report dated April 30, 2021. The second test was taken during a drought year and showed a total of 100 GPM over a four-hour testing period. No recovery rate was stated in the 2021 pump test.

Water Demand

The Memo indicates that the projected water demand for this project is 20,626 gallons of water per day over a 180 day cultivation season, or about 3,712,680 gallons per year (about 11 acre-feet per year). Included in this projected use is water use by employees and for irrigation. Total on-site water storage proposed is 20,000 gallons excluding a 5,000 gallon water tank that will be required for fire suppression purposes if needed. The Memo indicates that the nearest wells are located about 825 and 725 feet of the well proposed to be used by this project, and that the neighboring wells would likely not be impacted by the project well. The total water demand of this project is equal to about 0.02% of the usable aquifer storage as below.

Aguifer Data

The project site is located on the Big Valley Groundwater Basin, which includes the watersheds of Manning Creek/ Rumsey Slough, Adobe Creek, Hill Creek, Kelsey Creek, Cole Creek, Highland Creek. The well is located just west of Kelsey Creek in the Kelsey Creek watershed. The estimated Big Valley Water Basin storage capacity is 105,000 acrefeet, with a usable amount of 60,000 acrefeet. According to the 2006 Lake County Groundwater Management Plan, the agricultural demand for water within the Big Valley Groundwater Basin is 11,454 acrefeet during an average year. The Big Valley Groundwater Basin is not a listed 'critically over-drafted' basin, and the recharge rates of the Basin during drought years exceeds the demand by the known wells using the basin.

Conclusion

Per the calculations and assumptions in the Hydrology report, the project has adequate water supply for the proposed irrigation use. The report also concludes that even in a drought year, estimates show that the well has the capacity to handle the proposed water irrigation needs of the project, without impacting the neighboring wells or the aguifer.

Less Than Significant Impact

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. Additionally, an engineered erosion and sediment control site plan was submitted by the applicant as part of the Property Management Plan.

The applicant has submitted proposed erosion and sediment control plans that have stormwater control measures, thus enabling stormwater to remain in a confined area on site and which will prevent the water from re-entering any nearby surface water courses.

Less than Significant Impact

d) The Project site is not located in an area of potential inundation by seiche or tsunami, and is not within a mapped flood plain.

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.

Less than Significant Impact

X	I. LAND USE PLANNING	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Wc	ould the project:					
a)	Physically divide an established community?				\boxtimes	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?			\boxtimes		1, 3, 4, 5, 20, 21, 22, 27

Discussion:

a) The Project Property is located in a rural area of Lake County, generally characterized by larger parcels containing residential uses to the north, west and south. The proposed Project would place four acres of cannabis cultivation area on a ±120 acres; there are no roads other than the interior driveway that would be affected, and the project would not physically divide an established community.

No Impact

b) The proposed Project is consistent with the Lake County General Plan and Kelseyville Area Plan, and would create future employment opportunities for several local residents.

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

Less than Significant Impact

X	II. MINERAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Wo	ould 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?				\boxtimes	1, 3, 4, 5, 26

Discussion:

a) The Lake County Aggregate Resource Management Plan does not identify the portion of the Project parcel planned for cultivation as having an important source of aggregate resources. The California Department of Conservation describes the generalized rock type for the Project Property as the Lower Cretaceous-Upper Jurassic Great Valley Sequence and the Lower Cretaceous Great Valley Sequence, composed mostly of marine mudstones, siltstones, sandstones, and conglomerate. Additionally, according to the California Department of Conservation, Mineral Land Classification, there are no known mineral resources on the project site.

No Impact

b) According to the California Geological Survey's Aggregate Availability Map, the Project site is not within the vicinity of a site being used for aggregate production. In addition, the site not delineated on the County General Plan, the Kelseyville 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 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 of 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?		\boxtimes			1, 3, 4, 5, 13
b) Result in the generation of excessive ground-borne vibration or ground-borne noise levels?			\boxtimes		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:

 Noise related to outdoor cannabis cultivation typically occurs either during construction, or as the result of machinery related to post construction equipment such as well pumps or emergency backup generators during power outages.

This project will have some noise related to site preparation primarily for dirt movement and fence post-hole digging. The hours of construction are limited through standard conditions of approval.

Operational noise anticipated will primarily come from vehicles entering and leaving the site, and from carbon filtration systems that are required in the greenhouses and processing building.

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

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

The following mitigation measures will reduce the impacts associated with noise to 'less than significant' levels:

- NOI-1: All construction activities including engine warm-up shall be limited Monday Through Friday, between the hours of 7:00 a.m. and 7:00 p.m., and Saturdays from 12:00 noon to 5:00 p.m. to minimize noise impacts on nearby residents. Back-up beepers shall be adjusted to the lowest allowable levels. This mitigation does not apply to night work.
- NOI-2: Maximum non-construction related sounds levels shall not exceed levels of 55 dBA between the hours of 7:00 a.m. to 10:00 p.m. and 45 dBA between the hours of 10:00 p.m. to 7:00 a.m. within residential areas as specified within Zoning Ordinance Section 21-41.11 (Table 11.1) at the property lines.

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

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

The Project would not generate ground-borne vibration or noise, except potentially during the construction phase from the use of heavy construction equipment. The Project is not expected to employ any pile driving, rock blasting, or rock crushing equipment during construction activities, which are the primary sources of ground-borne noise and vibration during construction. As such, the Project is not expected to create unusual groundborne vibration due to site development or facility operation.

Less Than Significant Impact

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

No Impact

Х	IV. POPULATION AND HOUSING	Potentially Significant Impact	Less Than Significant With Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Wo	ould 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)?				\boxtimes	1, 3, 4, 5
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?					1, 3, 4, 5
Dis	cussion:					

а	 The Project is not anticipated to induce sig will require two fulltime employees. 	nificant po	pulation gro	owth to the	area. Th	ne project
	No Impact					
b) The Project will not displace any existing h	ousing.				
	No Impact					
ΧV	. PUBLIC SERVICES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Wou	ld the project:					
	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
Disc	ussion:					
Ĺ	The Project site is serviced by the Kelseyville Department, and the Lake County Public \Celseyville Unified School District.				•	
а	The Project does not propose any new hous ltered government facilities. No new roads omply with all applicable local and state fire co	are propos	sed. The P	roject woul	ld be re	quired to

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

access. Construction and operation of the proposed project may result in accidents or crime emergency incidents that would require police services. Construction activities would be temporary and limited in scope. Accidents or crime emergency incidents during operation are

Less than Significant Impact

expected to be infrequent and minor in nature.

X	/I. RECREATION	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Wo	ould 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?				\boxtimes	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?				\boxtimes	1, 3, 4, 5
Dis	cussion:					
a)	As the small staff for the proposed Project wi of existing neighborhood and regional parks expected.					
	No Impact					
b)	The proposed Project does not include a construction or expansion of existing recreat No Impact	•				•
Χ/						
	/II. TRANSPORTATION	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Wo	/II. TRANSPORTATION ould the project:	Significant	Significant with Mitigation	Significant		
Wo a)		Significant	Significant with Mitigation	Significant		
	ould the project: Conflict with a program plan, ordinance or policy addressing the circulation system, including transit,	Significant	Significant with Mitigation	Significant Impact	Impact	Number 1, 3, 4, 5, 9, 20, 22,
a)	ould the project: Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? For a land use project, would the project conflict with or be inconsistent with CEQA guidelines section	Significant	Significant with Mitigation	Significant Impact	Impact	Number 1, 3, 4, 5, 9, 20, 22, 27, 28, 35 1, 3, 4, 5, 9, 20, 22,
a) b)	conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? For a land use project, would the project conflict with or be inconsistent with CEQA guidelines section 15064.3, subdivision (b)(1)? For a transportation project, would the project conflict with or be inconsistent with CEQA	Significant	Significant with Mitigation	Significant Impact	Impact	Number 1, 3, 4, 5, 9, 20, 22, 27, 28, 35 1, 3, 4, 5, 9, 20, 22, 27, 28, 35 1, 3, 4, 5, 9, 20, 22, 27, 28, 35

Discussion:

a) The Project Property is accessed via Kelsey Creek Drive, a County-maintained paved road at this location. A minimal increase in traffic is anticipated due to construction, employee use, and weekly and/or monthly incoming and outgoing deliveries through the use of small vehicles.

There are narrow shoulders on Kelsey Creek Drive that could be used for pedestrians or bicycles in the vicinity of the project site.

The applicant will be required to obtain and maintain all the necessary Federal, State and local agency permits for any works that occurs with the right-of-way. The proposed Project does not conflict with any existing program plan, ordinance or policy addressing roadway circulation, including the Lake County General Plan Chapter 6 – Transportation and Circulation, and a less than significant impact on road maintenance is expected.

Less than Significant Impact

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

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

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

The nearest populated area is Kelseyville, which is located about four miles northeast of the cultivation site, and for purposes of estimating total vehicle impacts is considered to be the living area for employees. Assuming 1,130 annual vehicle trips from four miles away, a total of 4,520 vehicle miles per year can be anticipated.

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

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

Less than Significant Impact

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

No Impact

d) The Project does not propose any changes to road alignment or other features, does not result in the introduction of any obstacles, nor does it involve incompatible uses that could increase traffic hazards. No road improvements appear to be necessary for this project.

No Impact

e) The proposed Project would not alter the physical configuration of the existing roadway network serving the area and will have no effect on access to local streets or adjacent uses, including access for emergency vehicles. The site was evaluated for PRC 4290 and 4291 compliance in year 2020 and was found to comply with these regulations for a commercial driveway. The proposed Project would not inhibit the ability of local roadways to continue to accommodate emergency response and evacuation activities. The proposed Project would not interfere with the City's adopted emergency response plan.

Less than Significant Impact

X	VIII. 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)?		\boxtimes			1, 3, 4, 5, 11, 14, 15
b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		\boxtimes			1, 3, 4, 5, 11, 14, 15

Discussion:

b) Lake County sent an AB52 notice to 11 Lake County-based Tribes on January 22, 2021, informing tribes of the proposed project and offering consultation under AB-52. The Upper Lake Habematolel Tribe deferred to the Big Valley Tribe who did not respond to the notice.

In November 2020, Natural Investigations submitted a Cultural Resources Assessment (CRA) that included the area where the cultivation activities would occur. <u>The survey yielded positive results</u>; a total of seven items were recovered that date back to Tribal use eras. There are several mapped historic sites within 1/4 mile of the project site.

Staff reached out to the applicant by email on May 8, 2023, and phoned the Big Valley Tribal Historic Preservation Officer on May 8, 2023 to alert him to the project and that significant artifacts were found during the site survey. Staff's email to the applicant advised the applicant to coordinate with the tribe to that no historic sites are damaged during site preparation. On May 9, 2023, the applicant emailed staff indicating that he had called the Big Valley Tribe's THPO in an attempt to do outreach with the Tribe.

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

a) No prehistoric sites were discovered during the field survey conducted for the CRA. 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 implementation of mitigation measures CUL-1 through CUL-3 added.

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

X	IX. UTILITIES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Wo	ould 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?			\boxtimes		1, 3, 4, 5, 29, 32, 33, 34, 37, 45
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			\boxtimes		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?			\boxtimes		1, 2, 3, 5, 6, 35, 36
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			\boxtimes		1, 2, 3, 5, 6, 35, 36

Discussion:

 a) The proposed Project will be served by an existing onsite irrigation well and on-grid power for all project-related energy and water demands. The Project will use portable restrooms that will be serviced weekly.

The Project will not require or result in the relocation or construction of new or expanded water, 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 Hydrology Report prepared for this project demonstrated that there is adequate water available for the cannabis cultivation project without impacting other area wells. The water analysis is within the Hydrology Report and summarized at the beginning of this document.

Less than Significant Impact

c) The Project will be served by portable restrooms that will be serviced weekly. The ±120 acre property is large enough to accommodate a new septic system if one is needed in the future.

Less Than Significant Impact

d) It is estimated that approximately 2000 pounds of waste from the proposed Project will be taken to the Eastlake Landfill each year. The Eastlake Landfill, South Lake Refuse Center, and Quackenbush Mountain Resource Recovery and Compost Facility are located within reasonable proximity of the Project site. As of 2019, the Eastlake Landfill had 659,200 cubic yards available for solid waste, with an additional 481,000 cubic yards approved in 2020.

There is adequate solid waste capacity to accommodate the proposed Project, and the project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure.

Less than Significant Impact

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

Less than Significant Impact

X	X. WILDFIRE	Significant Impact	Significant with Mitigation Measures	Significant Impact	Impact	Number
clas	ocated in or near state responsibility areas or lands ssified as very high fire hazard severity zones, would project:					
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?			\boxtimes		1, 2, 3, 5, 6, 23, 25, 28, 29

b)	oth ex	ould the project, due to slope, prevailing winds, and her factors, exacerbate wildfire risks, and thereby pose project occupants to pollutant concentrations om a wildfire or the uncontrolled spread of a wildfire?					1, 2, 3, 5, 6, 23, 25, 28, 29
c)	inf wa ex	equire the installation or maintenance of associated frastructure (such as roads, fuel breaks, emergency ater sources, power lines or other utilities) that may accerbate fire risk or that may result in temporary or agoing impacts to the environment?					1, 2, 3, 5, 6
d)	ind lar	spose people or structures to significant risks, cluding downslope or downstream flooding or andslides, as a result of runoff, post-fire slope stability, or drainage changes?					1, 2, 3, 5, 6, 21, 23, 32
Dis	cus	ssion:					
	a) The Project will not impair an adopted emergency response plan or evacuation plan. The applicant would use Kelsey Creek Drive, a paved County road serving the site as the evacuation route if needed. The applicant shall adhere to all regulation of California Code Regulations Title 14, Division 1.5, Chapter 7, Subchapter 2, and Article 1 through 5 shall apply to this project; and all regulations of California Building Code, Chapter 7A, Section 701A, 701A.3.2.A.						
		Less than Significant Impact					
	b)	The site is located in a Moderate wildfire risk area. The applicant is proposing to place several 5,000 gallon water tanks on site for irrigation; one of these tanks shall be reserved for fire suppression if needed through the following mitigation measure.					
		WILD-1: The applicant shall place at least one (1) 5,000 gallon water tank on site for fire suppression. This water tank shall be equipped with connectors that will allow emergency service providers to easily connect to the water tank if needed.					
		Less than Significant Impact with mitigation m	neasure WI	LD-1 added	d.		
	c) The interior driveway needs to be made to be compliant with PRC 4290 and 4291 standards for a commercial driveway. The applicant will need to clear brush for defensible space around the cultivation area and the shed. The following mitigation measures are required to further cause the site to be reduced to 'less than significant' levels regarding wildfire:					ce around	
		WILD-2: Prior to cultivation, the applicant st cultivation area and the shed. Trees do not no a height of 8 feet.					
		WILD-3: Prior to cultivation, the applicant scompliant with Public Resource Codes 4290	•			•	
		Less than Significant with mitigation measure	s added				
	d)	There is little chance of increased risks assodrainage impacts based on the flat terrain on				off, inst	tability, or

Less than Significant Impact

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

Discussion:

a) The project proposes the cultivation of commercial cannabis in an agricultural area of the County on an "A" Agriculture-zoned parcel.

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

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

Less than significant impact with mitigation measures added.

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

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

Less than significant impact with mitigation measures added

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

Less than significant with mitigation measures added

Impact Categories defined by CEQA

Source List

- 1. Lake County General Plan
- 2. Lake County GIS Database
- 3. Lake County Zoning Ordinance
- 4. Kelseyville Area Plan
- 5. Kelsey Creek Farms Cannabis Cultivation Application Major Use Permit.
- 6. U.S.G.S. Topographic Maps
- 7. U.S.D.A. Lake County Soil Survey
- 8. Lake County Important Farmland Map, California Department of Conservation Farmland Mapping and Monitoring Program
- 9. Department of Transportation's Scenic Highway Mapping Program, (https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways)
- 10. Lake County Serpentine Soil Mapping
- 11. California Natural Diversity Database (https://wildlife.ca.gov/Data/CNDDB)
- 12. U.S. Fish and Wildlife Service National Wetlands Inventory
- 13. Biological Assessment prepared by Natural Investigations Co., dated October 22, 2020.
- 14. Cultural Resource Evaluation prepared by Natural Investigations Co., and dated November 2020.
- 15. California Historical Resource Information Systems (CHRIS); Northwest Information Center, Sonoma State University; Rohnert Park, CA.
- 16. Water Resources Division, Lake County Department of Public Works Wetlands Mapping.
- 17. U.S.G.S. Geologic Map and Structure Sections of the Clear Lake Volcanic, Northern California, Miscellaneous Investigation Series, 1995
- 18. Official Alquist-Priolo Earthquake Fault Zone maps for Lake County
- 19. Landslide Hazards in the Eastern Clear Lake Area, Lake County, California, Landslide Hazard Identification Map No. 16, California Department of Conservation, Division of Mines and Geology, DMG Open –File Report 89-27, 1990
- 20. Lake County Emergency Management Plan
- 21. Lake County Hazardous Waste Management Plan, adopted 1989
- 22. Lake County Airport Land Use Compatibility Plan, adopted 1992

- 23. California Department of Forestry and Fire Protection Fire Hazard Mapping
- 24. National Pollution Discharge Elimination System (NPDES)
- 25. FEMA Flood Hazard Maps
- 26. Lake County Aggregate Resource Management Plan
- 27. Lake County Bicycle Plan
- 28. Lake County Transit for Bus Routes
- 29. Lake County Environmental Health Division
- 30. Lake County Grading Ordinance
- 31. Lake County Natural Hazard database
- 32. Lake County Countywide Integrated Waste Management Plan and Siting Element, 1996
- 33. Lake County Water Resources
- 34. Lake County Waste Management Department
- 35. California Department of Transportation (Caltrans)
- 36. Lake County Air Quality Management District website
- 37. Lake County Fire Protection District
- 38. Site Visit July 24, 2021
- 39. United States Department of Agriculture Natural Resources Conservation Service Web Soil Survey
- 40. Hazardous Waste and Substances Sites List,
- 41. State Water Resources Control Board (SWRCB) Cannabis Policy and General Order
- 42. Lake County Groundwater Management Plan, March 31st, 2006.
- 43. Lake County Rules and Regulations (LCF) for On-Site Sewage Disposal
- 44. Lake County Municipal Code: Sanitary Disposal of Sewage (Chapter 9: Health and Sanitation, Article III)
- 45. Technical Memorandum / Hydrology Report and Drought Management Plan, prepared by Northpoint Consulting Group, Inc., and is dated April 1, 2023.