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

October 31, 2023
Revised February 7, 2025

CALIFORNIA ENVIRONMENTAL QUALITY ACT ENVIRONMENTAL CHECKLIST FORM INITIAL STUDY (UP 21-15, IS 21-16)

1. Project Title:	Rancho Lake
2. Permit Numbers:	Major Use Permit UP 21-15 Initial Study IS 21-16
3. Lead Agency Name and Address:	County of Lake Community Development Department Courthouse, 3rd Floor, 255 North Forbes Street Lakeport, CA 95453
4. Contact Person:	Mary Claybon, Senior Planner ~~Andrew Amelung, Program Manager~~ (707) 263-2221
5. Project Location(s):	19955 Grange Road, Middletown, CA 95461 Cultivation APN: 014-290-08 Clustering APNs: 014-300-02, 03, and 04
6. Project Sponsor's Name & Address:	Rancho Lake, LLC 2349 Circadian Way, Santa Rosa, CA 95407
7. General Plan Designation:	RL-RC-A-RR; Rural Lands, Resource Conservation, Agriculture, Rural Residential
8. Zoning:	RL-A-RR-FF-FW-WW; Rural Lands-Agriculture-Rural Residential-Floodway Fringe-Floodway-Waterway
9. Supervisor District:	District 1
10. Flood Zone:	"X", "A" and "AE"; All areas to be developed are located within Flood Zone "X" (Minimal to Moderate Risk of Flood)
11. Slope:	Varied; Project site is on less than 10 percent slopes
12. Fire Hazard Severity Zone:	California State Responsibility Area (CALFIRE): Moderate Risk

13. Earthquake Fault Zone: Not located near an known Earthquake Fault Zone

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

15. Parcel Sizes:

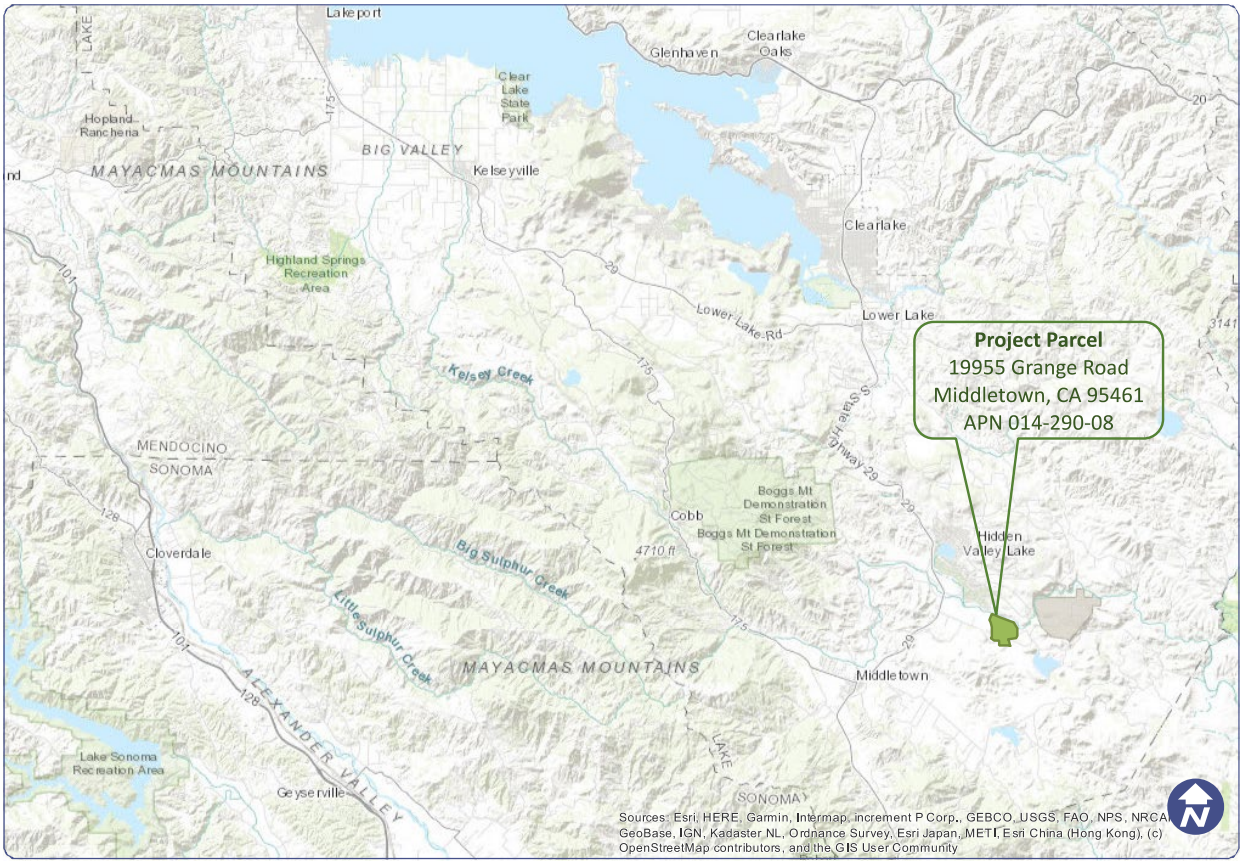
357.4 Acres (014-290-08)
506 Acres (014-300-02)
506 Acres (014-300-03)
257.6 Acres (014-300-04)
1,627 Acres Combined

16. Description of Project:

The applicant, Rancho Lake, LLC, is requesting discretionary approval from the County of Lake for a Major Use Permit, UP 21-15, for commercial cannabis cultivation at 19955 Grange Road, Middletown, CA (Lake County APNs 014-290-08), as described below:

Twenty (20) A-Type 3 "Medium Outdoor" licenses; outdoor cultivation for adult-use cannabis under direct sunlight. The applicant proposes up to ~~854,940~~ 854,840 sq. ft. (19.6 acres) of outdoor canopy area.

Figure 1. Vicinity Map



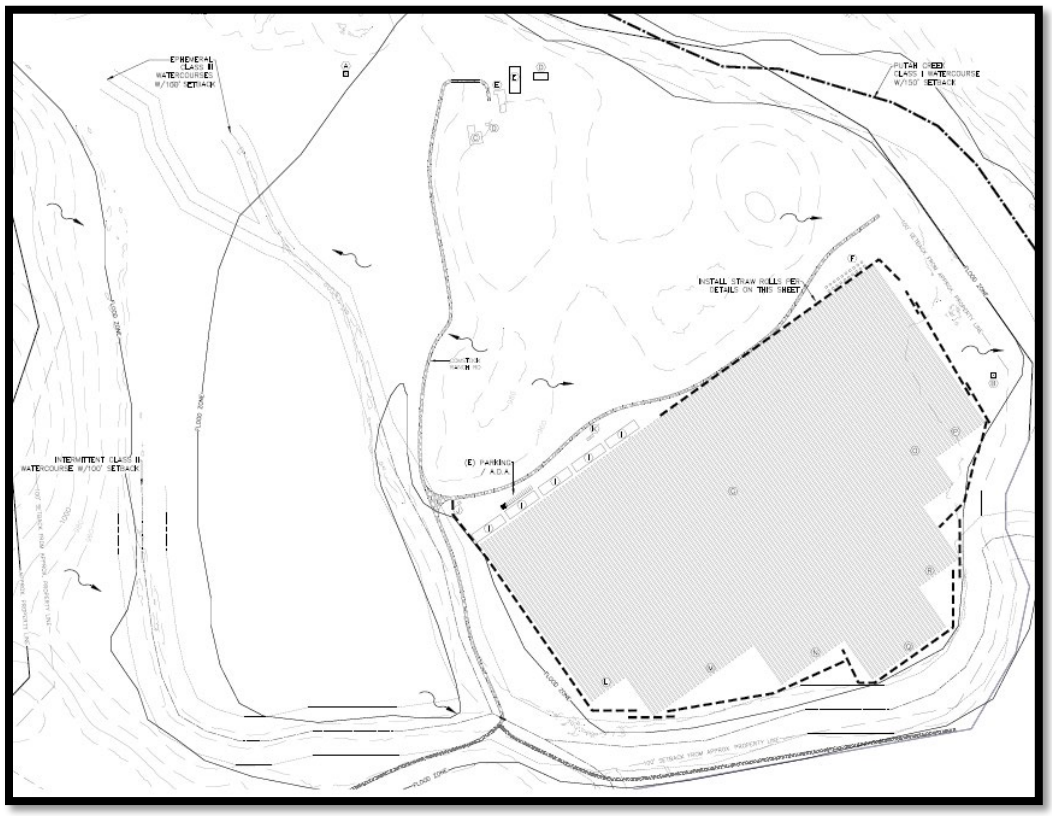
Source: Lake County Parcel Viewer, Topographic Basemap

The proposed Project will occur on Assessor Parcel Number (APN) 014-290-08 (Project Parcel) and APNs 014-300-02, 03, and 04 will be used for clustering. The proposed cultivation operation will be established in areas of the Project parcel that have been used to farm oats and hay, as well as for cattle grazing, since at least the early 1900s. The proposed cannabis cultivation operation includes five (5) 6,000 sq. ft. Harvest Storage and Staging Areas, two (2) 120 sq. ft. Pesticides & Agricultural Chemicals Storage Areas, a 120 sq. ft. Security Center/Shed, and twenty (20) 5,000-gallon water storage tanks.

The growing medium of the proposed outdoor canopy areas will be an amended native soil mixture, with drip irrigation systems covered in white plastic mulch (to conserve water resources). The proposed ~~6~~7-foot wide canopy areas will be spaced ~~8~~ 7-feet apart, to allow for the use of mechanized agricultural equipment. 6-foot tall wire fences will be erected around the proposed outdoor cultivation area, with privacy mesh where necessary to screen the cultivation/canopy area(s) from public view.

All water for the proposed cultivation operation will come from an existing onsite groundwater well located at Latitude 38.77697° and Longitude -122.52711°. Water from the groundwater well will be stored within twenty (20) proposed 5,000-gallon water storage tanks located directly adjacent to the proposed cultivation/canopy areas. A new PG&E electrical utility service connection would be needed to provide power to the pump in the existing onsite groundwater well. Cannabis cultivated on the Project Parcel would be dried within the proposed Harvest Storage and Staging Areas, then transported to State of California-licensed processing and manufacturing facilities for processing and/or extraction.

Figure 2. Cultivation Site Plan



Source: Materials Submitted by the Applicant

The Project proposes to use the following:

- One existing onsite groundwater well capable of producing 355 gpm
- Up to ~~854,940~~ 854,840 sq. ft. (19.6 Acres) of outdoor canopy area
- Five 40'x150' (6,000 sq. ft.) Harvest Storage & Staging Areas (engineered fabric structures)
- Two proposed 10'x12' (120 sq. ft.) stormproof sheds for chemical, pesticide, hazardous material storage
- A proposed 10'x12' (120 sq. ft.) stormproof shed for office and security use
- Twenty 5,000-gallon water storage tanks for irrigation
- An employee parking area with fourteen (14) spaces and one ADA compliant space

Construction
Construction would include building fences, soil preparation, installing irrigation systems, developing the employee parking areas, and erecting the Harvest Storage & Staging Areas (engineered fabric structures). Construction is expected to take 3 to 4 weeks and utilize 8 to 16 workers. The proposed Security Center and Pesticide & Agricultural Chemicals Storage Area (wooden sheds) would be delivered to the site and assembled in a day. Truck deliveries would be expected to occur, on average, every 1 to 2 days throughout the construction season. Construction staging would occur in the proposed parking and work areas.

Each spring, the native soil of the proposed outdoor cultivation/canopy areas will be plowed/disced and harrowed to create planting beds for the cultivation of cannabis. The proposed Harvest Storage & Staging Areas will be erected in July of each year and deconstructed each December. The intent is for there to be little to no evidence during the winter and spring seasons, of the cultivation activities that occurred during the summer and fall of the previous year.

Chemical Storage
According to the applicant's Property Management Plan, fertilizers and pesticides will be stored within two (2) 120 sq. ft. stormproof sheds. All solid waste will be kept in a secured area and regularly removed to be disposed of at waste disposal facility. All plant waste will be chipped/mulched and composted on site, then reused as soil amendment.

Power
A new PG&E electrical utility service connection would be needed to provide power to the pump in the existing onsite groundwater well. Electricity for the security cameras and security lights in and around the proposed outdoor cultivation area will be produced via individual photovoltaic solar panels with battery storage/backup systems.

Operations
Operations will occur up to seven days per week from April 15th to November 15th of each year. The operation hours will be Monday through Sunday during daylight hours from approximately 7:00 a.m. to 7:00 p.m. The Lake County Zoning Ordinance restricts deliveries and pickups to 9:00 a.m. to 7 p.m., Monday through Saturday, and Sunday from 12 noon to 5:00 p.m. Once operational, the proposed Project would staff approximately twelve (12) full-time employees, and approximately twenty (20) seasonal employees for the peak planting and harvest periods.

Trip Generation
Daily traffic commutes during regular operations would be approximately twenty-four (24) trips during regular operations, and up to forty (40) daily commutes during the peak planting and

harvest periods. Weekly truck deliveries of various project-related materials would occur throughout the cultivation season.

Access
The Project Property is accessed via Grange Road, a paved and County Maintained roadway. Grange Road connects to Highway 29 approximately 1 ½ miles west of the Project Property. The Project Site is accessed via Comstock Ranch Road, a graveled road off of Grange Road. Locking metal gates across Grange and Comstock Ranch roads control access to the Project Parcel. The Project Site will be surrounded with 6-foot galvanized woven wire fencing, with access using metal gates secured by padlocks. Security cameras will be installed around the perimeters of the proposed cultivation area and at other points of access in compliance with the Lake County Zoning Ordinance.

Erosion Control and Water Quality Protection
Soils in the area of the proposed cultivation operation are characterized as moderately well-drained alluvium composed of sandy, silt, and clay loams. The proposed cultivation operation will increase the impervious surface area of the Project Property by approximately 30,360 ft^2, or less than 0.2% of the Project Parcel, through the installation of five 6,000 ft^2 engineered fabric structures (proposed Harvest Storage & Staging Areas) and three 120 ft^2 wooden sheds (proposed Security Center and Pesticide & Agricultural Chemicals Storage Area). The proposed outdoor cultivation/canopy areas will not increase the impervious surface area of the Project Parcel nor the volume of runoff from the Project Site. The proposed parking areas will have permeable gravel surfaces, and the proposed ADA parking spaces will be constructed of permeable pavers.

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

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

- Established and re-established vegetation within and around the proposed cultivation operation will be maintained/protected as a permanent erosion and sediment control measure.
- A native grass seed mixture and certified weed-free straw mulch will be applied to all areas of exposed soil prior to November 15th of each year, until permanent stabilization has been achieved.
- Gravel will be applied to the surfaces of access roads, pathways, and the aisles between the garden beds/pots of the proposed cultivation areas, to allow for infiltration while mitigating the generation of sediment laden stormwater runoff.

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

Water Usage

All water for the proposed cultivation operation will come from an existing onsite groundwater well located at Latitude 38.77697° and Longitude -122.52711°. The Well Completion Report for this groundwater indicates that it was drilled in February of 2021 to a depth of 160 feet and completed at 140 feet below ground surface. In July of 2021, a licensed well driller conducted a 6-hour pump test of this well and concluded that it can yield more than 355 gallons per minute. Water from the groundwater well will be pumped to and stored within twenty (20) proposed 5,000-gallon water storage tanks located directly adjacent to the proposed cultivation/canopy areas. Irrigation water will be pumped from the 5,000-gallon water storage tanks to the above ground drip-irrigation systems of the proposed outdoor cultivation/canopy areas.

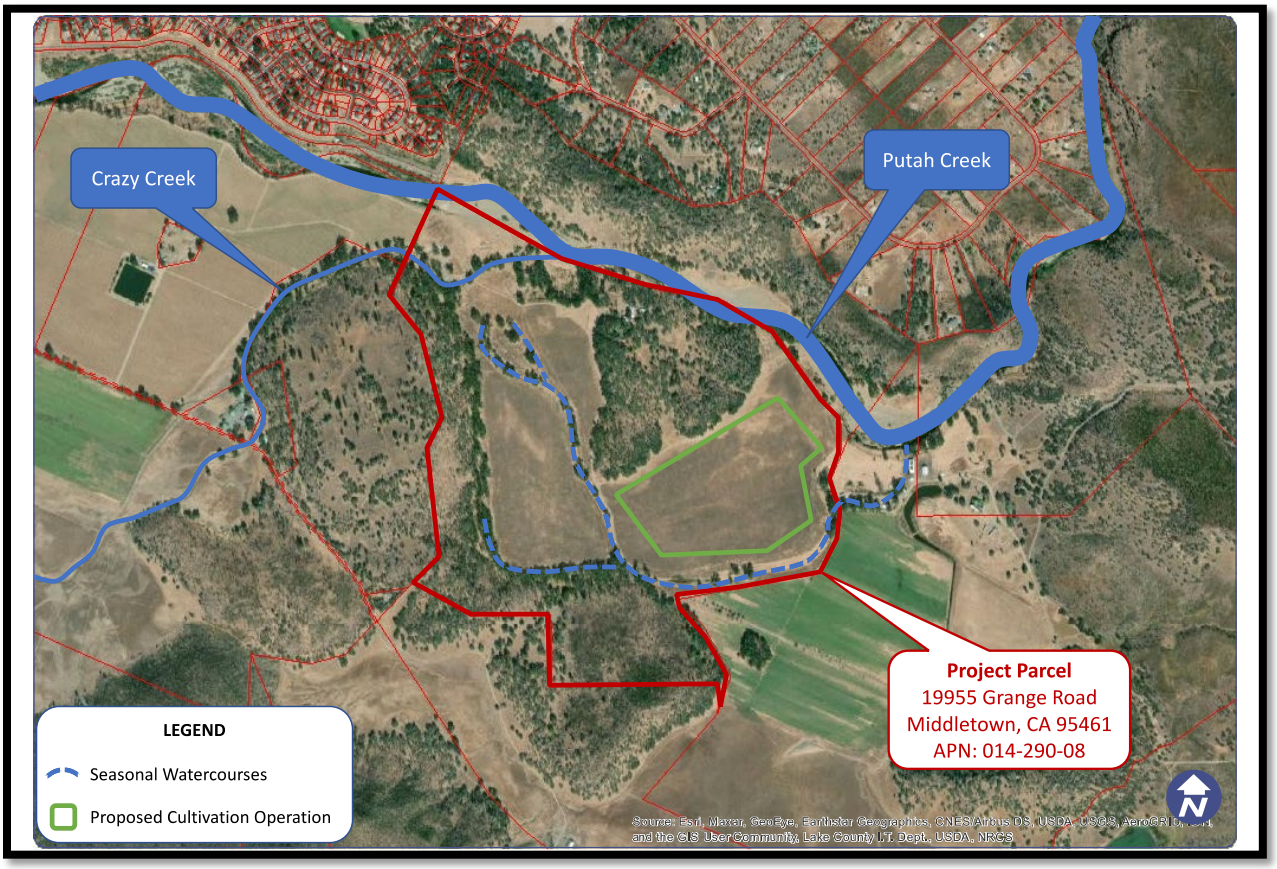
According to the applicant's Property Management Plan, the proposed cultivation operation is expected to have an annual water use requirement of approximately 49.1 acre-feet (~16,000,000 gallons). The applicant provided a Hydrogeologic Assessment Report prepared by a Certified Hydrogeologist for the proposed Project. The Hydrogeologic Assessment Report indicated that the aquifer storage and recharge area of the Project Property are sufficient to provide for sustainable annual water use at the site and within the area. Additionally, the Hydrogeologic Assessment Report concluded that the proposed Project is unlikely to result in significant declines in groundwater elevation or depletion of groundwater resources over time, and that the horizontal and vertical separation between the irrigation well and the nearest domestic well should not result in significant well interference.

17. Environmental Setting and Existing Conditions:

The Project Parcel (Lake County APN 014-290-08) is located at 19955 Grange Road, approximately 4.5 miles northeast of Middletown, CA (Township 11N, Range 6W, Unsectioned Guenoc, in the Middletown 1993 USGS quadrangle). The Project Parcel is accessed via Comstock Ranch Road, a graveled road off of Grange Road, a paved and County Maintained roadway. Grange Road connects to Highway 29 approximately 1 ½ miles west of the Project Property. The Project Parcel has been improved with internal compacted dirt and gravel access roads, a residence, five (5) accessory agricultural structures, and two (2) groundwater wells. The proposed Project is located in the Middletown Planning Area.

Current and past land uses of the Project Property are/were rural residential with intensive and extensive agriculture. The proposed cultivation operation would be established in areas of the Project Parcel that have been used to farm oats and hay, as well as for cattle grazing, since at least the early 1900s. The surrounding land uses are rural land, residential, agriculture, and open space, with existing ranches and vineyards.

Figure 3. Aerial Image of Project Property



Source: Materials Submitted by the Applicant

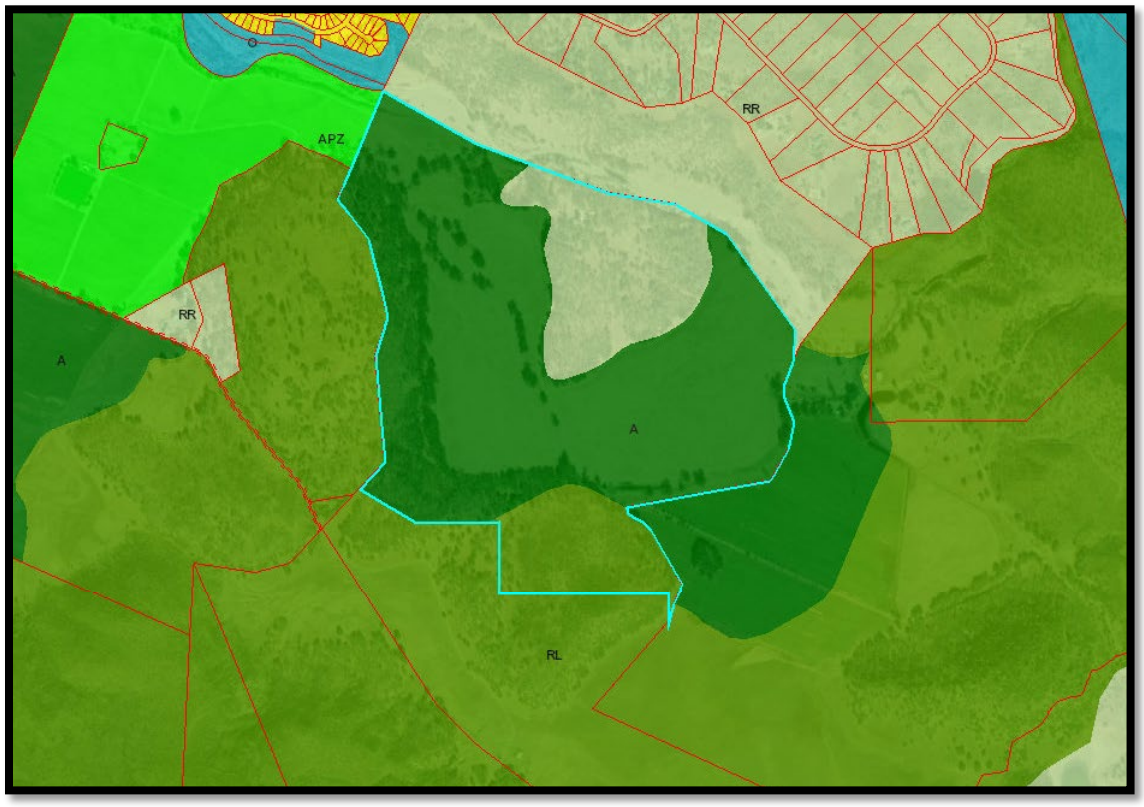
The Project Parcel is located in the eastern half of the Coyote Valley, within the Crazy Creek - Upper Putah Creek watershed (HUC 12). Putah Creek, a perennial Class I watercourse, flows from west to east through the northernmost portion of the Project Parcel. Crazy Creek, an intermittent Class II watercourse, flows from west to east through the northwest portion of the Project Parcel and into Putah Creek. Multiple unnamed seasonal watercourses flow generally from west to east, through the Project Parcel then into Putah Creek.

18. Surrounding Land Uses and Setting:

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

- West: 18963, 19755 & 19892 Grange Road; Parcel Numbers 014-280-15, 014-370-05, and 014-450-02; Zoned Rural Lands and Agricultural Protection; Vacant Land, Rural Residence, and Vineyard
- South and East: 21333 & 22222 Grange Road; Parcel Numbers 014-300-04 and 014-400-04; Zoned Rural Lands and Agriculture; Rural Residence and Agriculture
- North: 18765 Horseshoe Road, 19100 Hartmann Road, and 19243 Grange Road; Parcel Numbers 014-290-12, 141-611-04 & 07; Zoned Rural Residential and Open Space, Vacant Land

Figure 4. Lake County Base Zoning Districts



Source: Lake County Parcel Viewer, World Imagery Basemap and Zoning Layer

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

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

    Lake County Department of Environmental Health
    Lake County Air Quality Management District
    Lake County Department of Public Works
    Lake County Department of Public Services
    Lake County Agricultural Commissioner
    Lake County Sheriff Department
    South Lake County Fire Protection District
    Department of Motor Vehicles
    Central Valley Regional Water Quality Control Board
    California Water Resources Control Board
    California Department of Food and Agricultural
    California Department of Pesticides Regulations
    California Department of Public Health

California ~~Bureau~~ Department of Cannabis Control
California Department of Consumer Affairs
California Department of Fish & Wildlife (CDFW)
California Department of Forestry & Fire Protection (CALFIRE)
California Department of Transportation (CALTRANS)

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

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

    A Cultural Resources Assessment was prepared for the proposed Project in March of 2021, with intensive pedestrian surveys of the Project site occurring on February 9 and 10, 2021, and is discussed in the Tribal/Cultural Resources Sections of this Initial Study. A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed on February 1, 2021 for the Project Property. Results of the SLF search were negative, but the NAHC recommended the lead agency contact local Native American tribes who may have knowledge of cultural resources in the Project area. Notification of the Project was sent to local tribes on May 28, 2021. The Community Development Department has not receive an AB 52 Tribal Consultation request for this Project. Additionally, Rancho Lake, LLC has entered into a Cultural Resources Monitoring and Treatment Agreement with the Tribe that is the Most Likely Descendant of Native American human remains and associated cultural resources found on the Project Property (as designated by the Native American Heritage Commission).

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

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

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

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

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

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

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

Initial Study Prepared By: Roy Sherrell, Environmental and Regulatory Compliance Consultant
Reviewed By: Laco Associates; County of Lake CDD Planning Division

Signature:_____ Date:_____
Mary Claybon, Senior Planner
~~Andrew Amelung, Cannabis Program Manager~~
Lake County Community Development Department

SECTION 1

EVALUATION OF ENVIRONMENTAL IMPACTS:

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

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

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

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

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

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

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

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

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

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

Discussion:

a) The Project Parcel's General Plan Land Use and Zoning District designation is Agriculture (A), Rural Lands (RL), and Rural Residential (RR). The Project Site is located within the "A" Agriculture-zoned portion of the Project Parcel. The Lake County Zoning Ordinance allows for commercial cannabis cultivation in the "A" land use zone with a major use permit.

The Middletown Area Plan identifies the following as scenic: forested ridges, grasslands and rolling hills, agricultural landscapes, impressive views of Mt. St. Helena, the Callayomi and Coyote Valleys and the riparian vegetation associated with St. Helena Creek. The Lake County General Plan identifies Highway 29 as a potential scenic highway from the intersection of Highway 20 at Upper Lake south to the Napa County line. The portion traversing the Planning Area offers views of the surrounding mountains and rolling hills. This scenic viewshed encompasses the ridge lines east and west of the route including Mt. St. Helena, the Callayomi and Coyote Valleys and the riparian vegetation associated with St. Helena Creek. In addition to natural features, the cultural landscape includes agricultural activities such as grazing lands, walnut orchards and vineyards which provide scenic vistas for the traveling public.

The Project Parcel is located in a rural unincorporated area of Lake County, approximately 1.5 miles east of Highway 29. The Project Site is not visible from Highway 29 or the community of Hidden Valley Lake, located northwest of the Project Parcel, due to broad hill located immediately west of the Project Site. There are no scenic vistas on or adjacent to the Project Site that can be seen from public viewpoints, such as public roads. The proposed Project is agricultural in nature, and therefore compatible with the ranching and agricultural uses of surrounding properties. The Project is not anticipated to impact views of mountains, open views of undeveloped land or other scenic vistas.

Less than Significant Impact

b) There are no scenic resources, rock outcroppings, or historic buildings on or in the immediate vicinity of the Project Site, and the Project does not include/propose tree removal. Additionally, the project site is located over 1.5 miles from the nearest state highway (Highway 29).

Less than Significant Impact

c) The Project Parcel is located in a rural unincorporated area of Lake County, approximately 1.5 miles east of Highway 29. There are no scenic vistas on or adjacent to the Project Site, and the Project Site is not visible from Highway 29 or the community of Hidden Valley Lake, located northwest of the Project Parcel, due to broad hill located immediately west of the Project Site.

The proposed Project is agricultural in nature, and therefore compatible with the ranching and agricultural uses of surrounding properties. Therefore, the Project would not substantially degrade the existing visual character or quality of public views.

The site is not within an urbanized area and is not highly visible from any public property.

Less than Significant Impact

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

AES-1: All outdoor lighting shall be shielded and downcast or otherwise positioned in a manner that would not broadcast light or glare beyond the boundaries of the subject property. All lighting equipment shall comply with the recommendations of www.darksky.org and provisions of Section 21.48 of the Zoning Ordinance.

AES-2: The cultivation area shall be screened from public view. Methods of screening may include, but are not limited to, topographic barriers, vegetation, or 6' tall solid (opaque) fences.

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

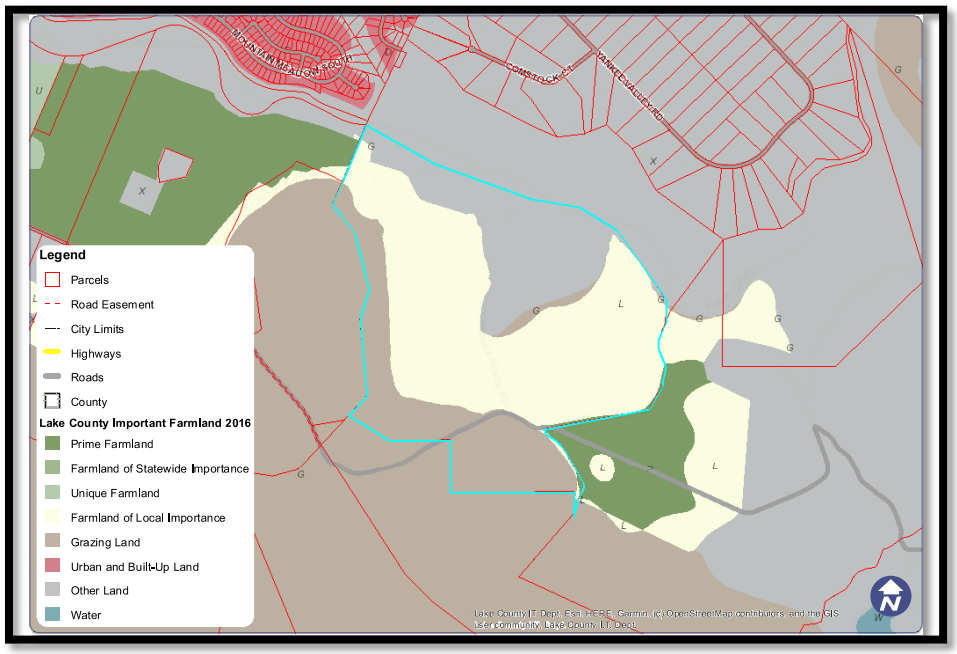
II. AGRICULTURE AND FORESTRY RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
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))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion:

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

a) According to the California Department of Conversation Farmland Mapping and Monitoring Program no portion of the Project Property is mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. However, the Project Site is located on land identified as Farmland of Local Importance, which is defined by the DOC as, "Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee." The parcel has been used to farm oats and hay, as well as for cattle grazing since the 1900s.

Figure 5. Farmland Mapping and Monitoring Program designation of the Project Parcel



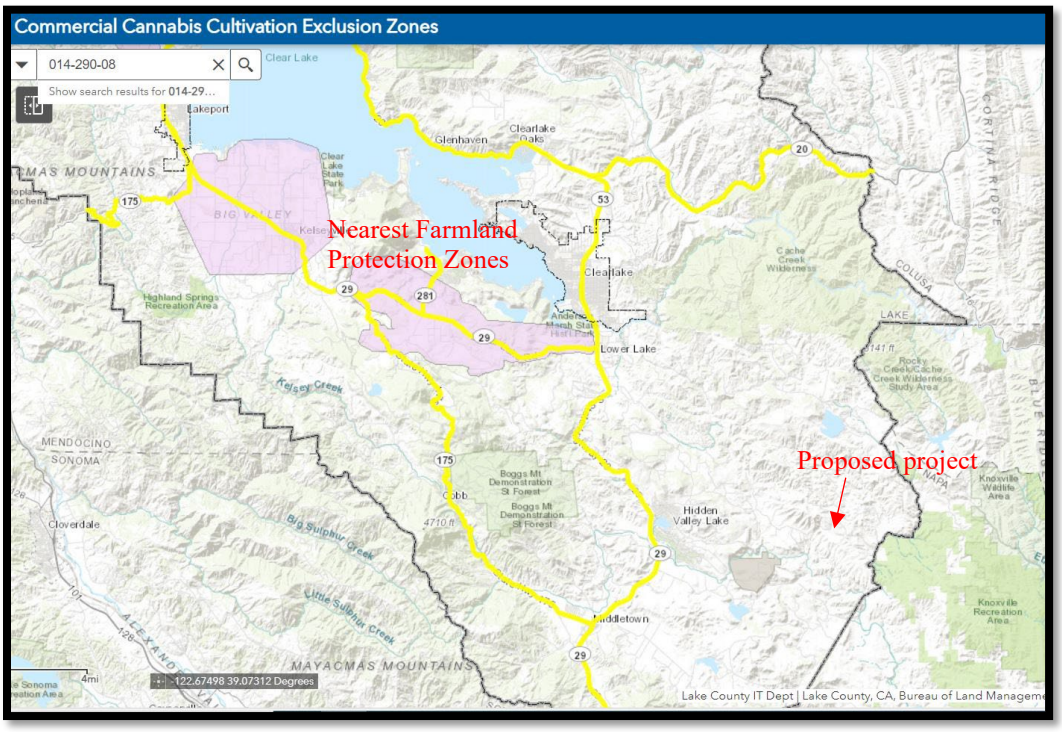
Source: Lake County GIS Portal, State FMMP Mapping

The Project will utilize approximately 40 acres (2.5%) of the 1,627-acre Project Property. The remainder of the property would continue to exist as it has in the past. The proposed activities are agricultural in nature and are consistent with the current and past use of the property, the surrounding existing uses, and existing zoning. There is Prime Farmland located on the adjacent parcel southeast of the site. The Project would not be converting farmland that is of high quality or significant farmland to a non-agricultural use.

It is not uncommon for conventional and organic farmed properties to exist side by side. However, pesticide applicators have a responsibility when making applications to not allow products to drift or to continue making an application when the weather conditions would favor potential drift. The operator (and all employees who are applying pesticides) are required to obtain a pesticide permit and recommends a private applicator certificate (PAC). The Pest Management Plan originally prepared for the Project included some pesticides that are not approved for cannabis use; however, the list of pesticides has been updated to remove unpermitted pesticides. In the event of a drift occurrence, a complaint could be submitted to the Agriculture department, and they would follow up with an investigation.

Lake County Ordinance 3101 and 3103 provide additional protection to lands within Farmland Protection Zones (FPZ) from cannabis cultivation through development standards and setbacks. Specifically, outdoor cannabis cultivation is not allowed within any FPZ or within 1,000 ft of any FPZ land. As depicted in Figure 6 below, the proposed cultivation area is not located within a FPZ, and is consistent with the 1,000 ft buffer for FPZ lands; the nearest FPZ land is located in the Lower Lake area along Highway 29, approximately 10 miles (as the crow flies) away from the project parcel.

Figure 6- Farmland Protection Zones



Source: Lake County GIS, Commercial Cannabis Exclusion Zones

Less Than Significant Impact

b) No portion of the Project Property is under a Williamson Act contract. Agricultural uses as described in California Government Code §51201(c) are generally allowed in Agriculture-zoned areas. Under Article 27.11 of the Lake County Zoning Ordinance, Outdoor Cannabis Cultivation is permitted on parcels with a Base Zoning District of "A" Agriculture with a minimum of 20 acres. The Project Property consists of 1,627 acres.

Agricultural uses as described in California Government Code §51201(c) are generally allowed in Agriculture-zoned areas, and no portion of the Project Property is under a Williamson Act contract. The Project would not interfere with the ability of the owner or neighbors to use the remaining land for more traditional crop production and/or grazing land.

No Impact

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

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

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

The Project Parcel's General Plan Land Use and Zoning District designation is Agriculture (A), Rural Lands (RL), and Rural Residential (RR). The Project Site is located within the "A" Agriculture-zoned portion of the Project Parcel. The Project Parcel does not contain any timberland, or timberland zoned Timberland Production lands, nor are any timberlands located on or nearby the Project Site. The Project does not propose a zone change that would rezone forest land, timberland, or timberland zoned for Timberland Production, and the Project does not include/propose tree removal.

No Impact

d) The Project will not result in the loss of forest land or convert forest land to non-forest uses, as the operations will be developed in a previously disturbed area that has been continuously used for agricultural purposes. Therefore, the Project would not result in the loss or conversion of forest land to a non-forest.

No Impact

e) The proposed activities are agricultural in nature and are consistent with the current and past use of the property, the surrounding existing uses, and existing zoning. The Project would not be converting farmland that is of high quality or significant farmland to a non-agricultural use.

The Project Parcel does not contain any timberland, or timberland zoned Timberland Production lands, nor are any timberlands located on or nearby the Project Site, and the Project does not include/propose tree removal.

The Project will not involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural uses or forest land to non-forest uses.

No Impact

III. AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
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?	☐	☐	☒	☐

c)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d)	Result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people?	☐	☐	☒	☐

Discussion:

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

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

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

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

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

   Construction impacts would be temporary in nature and would occur over an estimated three (3) to four (4) week period. Ongoing field management is considered an operational, not construction, activity.

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

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

Dust and fumes may be released as a result of vehicular traffic, including small delivery vehicles. Implementation of certain mitigation measures and conditions of approval would further reduce air quality impacts to less than significant.

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

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

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

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

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

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

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

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

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

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

Comparison of Daily Construction Emissions Impacts with Thresholds of Significance

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

Comparison of Daily Operational Emissions Impacts with Thresholds of Significance

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

Comparison of Annual Operational Emissions Impacts with Thresholds of Significance

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

Less than Significant Impact

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

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

Pesticide application will be used during the growing season and only within the cultivation areas. The cultivation areas will be surrounded by a fencing, which will help to prevent off-site drift of pesticides. Additionally, no demolition or renovation will be performed which would cause asbestos exposure, and no serpentine soils have not been detected and are not mapped onsite.

Less than Significant Impact

d) The Project Property is located in a rural area of the County of Lake, where the majority of development is agricultural uses and limited single family residential dwellings. The nearest off-site residence is over 1,000 feet away. The operation will not result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people.

Less than Significant Impact

IV. BIOLOGICAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
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?	☐	☒	☐	☐
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?	☐	☒	☐	☐
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?				
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion:

a) A Biological Resources Assessment (BRA) was prepared by G.O Graening, Ph.D and Tim Nosal, M.S of Natural Investigations Company on March 3, 2021. A Botanical Survey Report (BSR) was prepared by G.O Graening, Ph.D, Tim Nosal, M.S, and Kevin Downing, B.S. of Natural Investigations Company on June 7, 2021. The 'Project Area' identified in the BRA and BSR includes 63 acres containing the cultivation area plus the ancillary facilities, while the entire 1,847-acre property was defined as the 'Study Area. The entire Project Property was the Study Area for the BRA, while the BSR focused on areas of the proposed cultivation operation plus a buffer of several hundred feet. Field surveys were conducted on February 8 and 9, 2021, April 21, 2021, and June 3, 2021. The BRA and the BSR were prepared to assist in compliance with the California Environmental Quality Act and the Federal and State Endangered Species Acts. Available biological records including the following were reviewed prior to conducting the field surveys: previous biological resource studies pertaining to the Study Area or vicinity; Aerial photography of the Study Area (current and historical); United States Geologic Service 7.5 degree-minute topographic quadrangles of the Study Area and vicinity; USFWS National Wetland Inventory; USDA Natural Resources Conservation Service soil survey maps; California Natural Diversity Database (CNDDB); and USFWS species list (IPaC Trust Resources Report).The BRA and BSR provide information about the biological resources within the study area, the regulatory environment affecting such resources, any potential project-related impacts upon these resources, and finally, to identify mitigation measures and other recommendations to reduce the significance of these impacts.

The information below is based on the survey results documented in the BRA and BSR prepared for the proposed Project.

<u>Environmental Setting</u>

The Project Property is located within the Inner North Coast Range Geographic Subregion, which is contained within the Northwestern California Geographic Subdivision of the larger California Floristic Province. This region has a Mediterranean-type climate, characterized by distinct seasons of hot, dry summers and wet, moderately-cold winters. The study area and vicinity is in Climate Zone 7 - California's Gray Pine Belt, defined by hot summers and mild but pronounced winters without severe winter cold or high humidity.

The Project Parcel is located in the eastern half of the Coyote Valley, within the Crazy Creek - Putah Creek Watershed. Putah Creek, a Perennial Class I Watercourse, flows from west to east through the northernmost portion of the Project Parcel. Crazy Creek, an intermittent Class II Watercourse, flows from west to east through the northwest portion of the Project Parcel and into Putah Creek. Multiple unnamed intermittent Class III Watercourses flow generally from west to east, through the Project Parcel, and into Putah Creek. A large complex wetland occupies floor of a valley in the southern half of the Project Property (over 1,000 feet from the proposed cultivation operation). No cannabis cultivation activities nor agricultural chemicals storage is proposed within 150 feet of any surface waterbody, and no ground disturbance is proposed within 100 feet of any wetland or channel. The proposed Project has been designed to adhere to the minimum setback from surface water bodies, per Article 27 of the Lake County Zoning Ordinance

Current and past land uses of the Project Parcel include rural residential with intensive and extensive agriculture. The Project Parcel has been improved with two groundwater wells, a residence, and five accessory agricultural structures/buildings (used to store hay, tools, and equipment, and to house livestock). The proposed cultivation operation would be established in areas of the Project Parcel that have been used for hay farming and cattle grazing, since at least the early 1900s. The surrounding land uses are private estates, vineyards, open space, and grazing land.

Summary and Findings Studies

Special Status Animals. According to the CNDDB, the following special-status species occurrences within the Study Area: Foothill yellow-legged frog *(Rana boylii)*; Western pond turtle *(Emys marmorata)*; Prairie falcon *(Falco mexicanus)*; and American peregrine falcon *(Falco peregrinus anatum)*. Occurrences for foothill yellow-legged frog and western pond turtle are documented for segments of Putah Creek within the Study Area. Occurrences of prairie falcon and American peregrine falcon are artifacts of the mapping process at CNDDB. The location of the nesting sites is deliberately obscured by the CNDDB in order to protect the occurrences. Suitable nesting habitat for these species is not found within the Study Area. The precise location of the Mt. Saint Helena morning glory is not known, however suitable serpentine soils are found in the southern portion of the Study Area. Special-status animals have a low potential to occur in the grassland, chaparral and oak woodland habitats. However, special-status animals have a moderate to high potential to occur in Putah Creek (Class I watercourse). The CNDDB has mapped an occurrence of western pond turtle (*Emys marmorata*) and foothill yellow-legged frog (*Rana boylii*) in sections of Putah Creek along the northern edge of the Study Area. Streams, riparian corridors, and riverine wetlands within the Study Area can sustain aquatic special-status species and diverse wildlife species.

During the field surveys, no special status animals were identified within the Project Area or the Study Area. However, ground disturbing activities and activities near the riparian habitat and water resources on-site could result in potential impacts to special status animal species. Implementation of Mitigation Measures BIO-1 though BIO-4, requiring erosion control measures, setbacks to water features (as shown below), pre-construction surveys, and adherence to SWRCB and CDFW permit requirements would ensure that impacts are reduced to a less than significant level.

Minimum Riparian Setbacks

Common Name	Watercourse Class	Distance
Perennial watercourses, waterbodies (e.g. lakes, ponds), or springs	I	150 ft.
Intermittent watercourses or wetlands	II	100 ft.
Ephemeral watercourses	III	50 ft.
Man-made irrigation canals, water supply reservoirs, or hydroelectric canals that support native aquatic species	IV	Established riparian zone vegetation

The Project property contains suitable nesting habitat for various bird species because of the presence of trees, poles, and dense brush. Ground disturbance and vegetation removal would have the potential to impact nesting bird species. Taking of an active migratory bird nest would be considered a significant impact under CEQA and wildlife laws. Mitigation Measure BIO-5 related to nesting birds would reduce the potential impact to less than significant levels.

Special Status Plants. No special status plants were observed within or near the Project Areas, nor within the Study Area. The CNDDB has reported an occurrence of Mt. Saint Helena morning glory (Calystegia collina ssp. oxyphylla), a serpentine endemic, within the Study Area. Volcanic and serpentine soils are present within the oak woodland and chaparral habitats of the Study Area. Special status plants reported by CNDDB to occur in the region, including Mt. Saint Helena morning glory, are known to occur on these substrates and therefore have a moderate to high potential for occurrence within the Study Area. Wetlands are also present within the Study Area.

Special status plants may occur in wetlands. No wetlands, volcanic soils or serpentine soils are found within the Project Area. The Project Area is located within annual grasslands found on upland alluvial soils. Due to the dominance of aggressive non-native grasses and forbs, the Project Area has a low probability for special status plant occurrence.

Wetlands and Water Features. The USFWS National Wetland Inventory reported no water features within the Project Area, but the Inventory did report the following water features on the Project Property: nine (9) Riverine Features, one (1) Freshwater Forested/Shrub Wetland, and one (1) Freshwater Pond. Based on the field surveys, the Study Area contains one (1) class I watercourse (Putah Creek); thirty-two (32) Class III watercourses; two (2) wetlands; one (1) freshwater pond; and two (2) spring. However, none of these water resources are located within the Project Area. Sufficient setbacks are provided from the cultivation areas and Project facilities to these resources, in accordance with the Lake County Zoning Code and state requirements. Additionally, implementation of Mitigation Measures BIO-1 through BIO-4 would ensure potential impacts are reduced to less than significant levels.

No critical habitat for any federally-listed species occurs within the Project area or the surrounding Study Area identified in the BRA. The CNDDB also reported no special-status habitats within the Project area or surrounding Study Area.

~~No special status plants or animals were observed within or near the Project Areas. The USFWS National Wetland Inventory reported no water features within the Project Area, but the Inventory did report the following water features on the Project Property: nine (9) Riverine Features, one (1) Freshwater Forested/Shrub Wetland, and one (1) Freshwater Pond. The field survey determined that the Project Area does not contain any channels or wetlands. No special-status animal species have a moderate or high potential to occur in Project Area.~~

~~The Project Property contains suitable nesting habitat for various bird species because of the presence of trees, poles, and dense brush. Ground disturbance and tree removal would have the potential to impact nesting bird species. Taking of an active migratory bird nest would be considered a significant impact under CEQA and wildlife laws. Avoidance measures for nesting birds are provided below to reduce the potential impact to less than significant levels.~~

BIO-1: All work should incorporate erosion control measures consistent with the engineered Erosion and Sediment Control Plans submitted, Lake County Grading Regulations, and the State Water Resources Control Board's Cannabis General Order (Order No. WQ 2019-001-DWQ).

BIO-2: The applicant shall maintain a minimum of a 100-foot setback/buffer from the top of bank of any watercourse, wetland, and/or vernal pool. Pesticides and fertilizer storage facilities shall be located outside of riparian setbacks and not within 100 feet of a well head.

BIO-3: Prior to commencement of activities within the bed or bank of a creek, a Streambed Alteration Agreement shall be obtained from the California Department of Fish and Wildlife. All the conditions of such permit shall be adhered to throughout the course of the project to reduce the impacts to a less than significant level.

BIO-4: Prior to any ground disturbance and/or vegetation removal, the applicant shall have a pre-construction survey conducted by a qualified biologist for special-status plant and animal species to ensure that special-status species are not present. If any listed species are detected, construction shall be delayed, and the appropriate resource agency (CDFW and/or USFWS) shall be consulted with and project impacts and mitigation reassessed.

BIO-5: If construction activities (including vegetation removal and all ground disturbing activities) occur during the nesting season (usually March through September), a pre-construction survey for the presence of special-status bird species or any nesting bird species should be conducted by a qualified biologist within 500 feet of proposed construction areas, within seven days prior to the commencement of ground disturbing activities. If active nests are identified in these areas, CDFW and/or USFWS should be consulted to develop measures to avoid "take" of active nests prior to the initiation of any construction activities. Avoidance measures may include establishment of a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged and are independent of the nest site.

Less Than Significant Impact with Mitigation Measures BIO-1 through BIO-5 incorporated.

b) The Project Parcel is located in the eastern half of the Coyote Valley, within the Crazy Creek - Putah Creek Watershed. Putah Creek, a Perennial Class I Watercourse, flows from west to east through the northernmost portion of the Project Parcel. Crazy Creek, an intermittent Class II Watercourse, flows from west to east through the northwest portion of the Project Parcel and into Putah Creek. Multiple unnamed intermittent Class III Watercourses flow generally from west to east, through the Project Parcel, and into Putah Creek. A large complex wetland occupies floor of a valley in the southern half of the Project Property (over 1,000 feet from the proposed cultivation operation). No cannabis cultivation activities nor agricultural chemicals storage is proposed within 150 feet of any surface waterbody, and no ground disturbance is proposed within 100 feet of any wetland or channel. If upgrades to the existing culverts are required as apart of 4290 requirements, a Lake and Streambed Alteration Agreement is required from CDFW (see Mitigation Measures BIO-3).

Erosion and sediment control measures for construction and operation have been identified in the Storm Water Management Plan section of the applicant's Property Management Plan. Measures that shall be implemented include large well-vegetated buffers, straw wattles/fiber rolls, and silt fences. No cultivation activities are proposed within 100-feet of the identified watercourses, which is consistent with Article 27 of the Lake County Zoning Ordinance, which regulates commercial cannabis cultivation. The applicant has provided a Property Management Plan with engineered erosion and sediment control plans, which address controlled water runoff in a manner that reduces impacts to surface water bodies.

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

Less Than Significant Impact with Mitigation Measures BIO-1 through BIO-5 incorporated.

c) The USFWS National Wetland Inventory reported no water features within the Project Area, but the Inventory did report the following water features on the Project Property: nine (9) Riverine Features, one (1) Freshwater Forested/Shrub Wetland, and one (1) Freshwater Pond. The field surveys determined that the Project Area does not contain any channels or wetlands. Additionally, the BRA indicates that the operation will not have a substantial adverse effect on state or federally protected wetlands (including, not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

The applicant has provided a Property Management Plan with engineered erosion and sediment control plans, which address controlled water runoff in a manner that reduces impacts to surface water bodies. No cultivation activities are proposed within 100-feet of the identified watercourses, which is consistent with Article 27 of the Lake County Zoning Ordinance that regulates commercial cannabis cultivation.

Less Than Significant Impact with Mitigation Measures BIO-1 through BIO-5 incorporated.

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

Wildlife movement corridors link remaining areas of functional wildlife habitat that are separated primarily by human disturbance, but natural barriers such as rugged terrain and abrupt changes in vegetation cover are also possible. Wilderness and open lands have been fragmented by urbanization, which can disrupt migratory species and separate interbreeding populations. Corridors allow migratory movements and act as links between these separated populations. Although no mapped wildlife corridors (such as the California Essential Habitat Connectivity Area layer in CNDDB) exist on the Project Property, the open space and the stream corridors of the Project Property facilitate animal movement and migrations.

Although the Project area may be used by wildlife for movement or migration, the proposed Project would not have a significant impact on this movement because it would not create any unpassable barriers and the majority of the Project Property will still be available for corridor and migration routes. More than 1,550 acres of the 1,627-acre Project Property will not be affected by the proposed Project, and would remain available for natural habitat and wildlife corridors. Therefore, implementation of the Project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Less than Significant Impact

e) The proposed Project does not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No vegetation will be removed as the Project will be developed within a previously disturbed area.

No Impact

f) No Habitat Conservation Plans, Natural Community Conservation Plans, or other local, regional, or state habitat conservation plans have been adopted for the Project area and no impacts are anticipated.

No Impact

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

Discussion:

a) A Cultural Resources Assessment (CRA) was conducted/prepared by Tim Spillance, MA, RPA and Phil Hanes, MA, RPA of Natural Investigations Company for the proposed Project in March of 2021. The services provided included a cultural resources literature search, Sacred Lands File (SLF) search, and an intensive pedestrian survey of the Project Parcel. This study was completed in compliance with the California Environmental Quality Act (CEQA) Section 21083.2 of the statute and Section 15064.5 of the CEQA Guidelines.

According to the CRA, A California Historical Resources Information System (CHRIS) records search was conducted by the Northwest Information Center (NWIC) on the campus of Sonoma State University to determine whether prehistoric or historic cultural resources have been previously recorded within the Project Area, the extent to which the Project Area has been previously surveyed, and the number and type of cultural resources within a 0.25-mile radius of the Project limits. The results of the CHRIS search were returned on February 3, 2021.

Natural Investigations Archaeologist, Phil Hanes, MA, RPA, conducted a pedestrian survey of the Project Area on February 9 and 10, 2021. Of the 1,627-acre Project Property, 116 acres were surveyed intensively using transects spaced no greater than 15 meters apart. This includes all proposed cultivation areas, access roads, and other facilities which may be used for cultivation-related purposes. The remaining 1,511 acres of the property were not surveyed as they are not currently involved in the cultivation operation and will not be impacted by the Project in any way.

During the survey, all visible ground surfaces were carefully examined for cultural material (e.g., flaked stone tools, tool-making debris, stone milling tools, or fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions and features indicative of the former presence of structures or buildings (e.g., postholes, foundations), and historic-era debris (e.g., metal, glass, ceramics).

Ground disturbances (e.g., animal burrows, dirt roads, etc.) were also visually inspected. A digital camera was used to take photographs of the Project Area, a Munsell® Soil Color

Chart used to record soil color, and a handheld BE-3300-GPS global positioning system (GPS) unit with sub-meter accuracy was used to record locational data.

Report Findings & Conclusion

The CHRIS records search results indicate that there are no previously recorded resources within the Project Area, although three resources of cultural and tribal cultural significance have been recorded on the larger 1,847-acre Project property. During the field survey, no additional cultural resources of any kind were identified within the Project Area (area to be developed). According to the CRA, the property owner is aware of these resources and the Project has been design ed to avoid them; as proposed the Project will not impact the previously recorded cultural resources on the Project Property due to the Project's location and distance from the sites. Additionally, as further discussed in Section XVIII, Tribal Cultural Resources, of this Initial Study, no formal response for consultation was received during the AB 52 notification process, however, Rancho Lake, LLC has entered into a Cultural Resources Monitoring and Treatment Agreement with the Tribe that is the Most Likely Descendant of Native American human remains and associated cultural resources found on the Project Property (as designated by the Native American Heritage Commission).

~~No previously unrecorded cultural resources of any kind were identified within the Project Area (area to be developed) during the field survey. The CHRIS records search results indicate that there are no previously recorded resources within the Project Area, although three have been recorded on the Project Property. According to the CRA, as proposed the Project will not impact the previously recorded cultural resources on the Project Property, and no further cultural resources work is recommended at this time.~~

It is possible, however unlikely, due to the new site disturbance that is needed to develop the proposed Project, that significant artifacts or human remains could be discovered during Project construction. If, however, significant artifacts or human remains of any type are encountered it is recommended that the Project sponsor shall contact the culturally affiliated tribe and a qualified archaeologist to assess the situation. ~~The Sheriff's Department must also be contacted if any human remains are encountered.~~ The State of California Health and Safety Code Section 7050.5 covers these discoveries, except on federal lands. This code section states that no further disturbance may occur until the County Coroner has made a determination of origin and disposition of the remains pursuant to PRC Section 5097.98. The County Coroner must be notified of the find immediately upon discovery. If the human remains are determined to be of Native American origin, the Coroner will notify the NAHC, which will determine and notify a Most Likely Descendent (MLD). The MLD must complete an inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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

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

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

b) A Cultural Resources Assessment (CRA) was conducted/prepared by Tim Spillance, MA, RPA and Phil Hanes, MA, RPA of Natural Investigations Company for the proposed Project in March of 2021. The services provided included a cultural resources literature search, Sacred Lands File (SLF) search, and an intensive pedestrian survey of the Project Parcel. This study was completed in compliance with the California Environmental Quality Act (CEQA) Section 21083.2 of the statute and Section 15064.5 of the CEQA Guidelines.

The CHRIS records search indicated that four prior cultural resource studies have been completed which included all or portions of the Project Area, and eleven additional studies have been completed outside the Project Area but within the 0.25-mile record search radius. The CHRIS records search also indicated that no cultural resources have been previously recorded within the Project Area, though ten resources have been recorded within the 0.25-mile search radius. The SLF search returned negative results for Native American resources in the vicinity of the Project. No previously unrecorded cultural resources of any kind were identified within the Project Area during the field survey.

There is no indication that the Project will impact any historical resources as defined under CEQA Section 15064.5, unique archaeological resources as defined under CEQA Section 21083.2(g), or significant Native American resources. However, Mitigation Measures CUL-1 and CUL-2 will ensure that resources are protected in the event of an unanticipated discovery. Additionally, the applicant has entered into a Cultural Resources Monitoring and Treatment Agreement with the Tribe that is the Most Likely Descendant of Native American human remains and associated cultural resources found on the Project Property (as designated by the Native American Heritage Commission). See Section XVIII, Tribal Cultural Resources (and Mitigation Measure TCR-1), of this Initial Study for more information. ~~For these reasons, no further cultural resources work is recommended at this time.~~

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

c) The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate site vicinity. In the event that human remains are discovered on the

Project site, the Project would be required to comply with the applicable provisions of Health and Safety Code §7050.5, Public Resources Code §5097 et. seq. and CEQA Guidelines §15064.5(e). California Health and Safety Code §7050.5 states that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Pursuant to California Public Resources Code §5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner.

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

Additionally, the applicant has entered into a Cultural Resources Monitoring and Treatment Agreement with the Tribe that is the Most Likely Descendant of Native American human remains and associated cultural resources found on the Project Property (as designated by the Native American Heritage Commission).

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

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

Discussion:

a) The proposed Project consists of outdoor cannabis cultivation. The overall power usage of this facility would be minimal. The cultivation site will require power for security systems, water pumps, minor outdoor lighting and cannabis processing equipment. Electricity will be provided by the PG&E electrical grid and photovoltaic solar panels with battery back-ups.

A new PG&E electrical utility service connection would be needed to provide power to well/water pumps of the proposed operation. Electricity for the security cameras and

security lights in and around the proposed outdoor cultivation area will be produced via individual photovoltaic solar panels with battery storage/backup systems.

The proposed use would not result in potentially significant environmental impacts due to wasteful, inefficient or unnecessary consumption of energy resources during Project development or operation. All energy usage shall adhere to all Federal, State and local agency requirements regarding energy use.

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 California Department of Cannabis Control cultivation and microbusiness licensees authorized to engage in Indoor, Tier 2 Mixed-Light cultivation, or Nursery using Indoor or Tier 2 Mixed-light techniques, are required to report total electricity for each power source used to the DCC upon license renewal and comply with the renewable energy requirements. Specifically, such licensees must have an average weighted greenhouse gas emission intensity (AWGGEI) that is less than or equal to the AWGGEI of their local utility provider. Such licensees are required to obtain carbon offset credits if the AWGGEI is greater than their utility provider's.

The proposed Project consists of outdoor cannabis cultivation, without the use of artificial light. The proposed use will not conflict or obstruct a State or local plan for renewable energy or energy efficiency.

Less than Significant Impact

VII. GEOLOGY AND SOILS

Potentially Significant Impact	Less Than Significant With Mitigation Measures	Less Than Significant Impact	No Impact

Would the project:

a) Directly or indirectly cause potentially substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special. Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?				
iii) Seismic-related ground failure, including liquefaction?				
iv) Landslides?				

b)	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

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 Project Site is relatively flat (less than 5% slopes). According to the Landslide Hazard Identification Map prepared by the California Department of Conservation's Division of Mines and Geology, the area is considered generally stable. The relatively flat Project Site is not considered 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) Soils of the Project Site are identified as 158 Lupoyoma silt loam by the NRCS Web Soil Survey and characterized as moderately well-drained alluvium composed of sandy, silt,

and clay loams. The proposed cultivation operation will be established in areas of the Project Parcel that have been used to farm oats and hay, as well as for cattle grazing, since at least the early 1900s. No trees or vegetation will be removed to establish the proposed cultivation operation. The growing medium of the proposed outdoor cultivation/canopy areas will be native soil amended with compost, worm castings, and composted organic dairy manure, with drip irrigation systems covered in white plastic mulch (to conserve water resources). Each spring, the native soil of the proposed outdoor cultivation/canopy areas will be plowed/disced and harrowed to create planting beds for the cultivation of cannabis. Each fall, the native soil of the proposed outdoor cultivation/canopy areas will be plowed/disced and planted with a nitrogen-fixing cover crop, to stabilize the site(s) for the winter wet weather period.

The proposed cultivation operation will increase the impervious surface area of the Project Property by approximately 30,360 ft^2, or less than 0.2% of the Project Parcel, through the installation of five 6,000 ft^2 engineered fabric structures (proposed Harvest Storage & Staging Areas) and three 120 ft^2 wooden sheds (proposed Security Center and Pesticide & Agricultural Chemicals Storage Area). The proposed outdoor cultivation/canopy areas will not increase the impervious surface area of the Project Parcel nor the volume of runoff from the Project Parcel. The proposed parking areas will have permeable gravel surfaces, and the proposed ADA parking spaces will be constructed of permeable pavers. The proposed Harvest Storage & Staging Areas (engineered fabric structures) will be erected in July of each year, and deconstructed/demolished in December of each year. The intent is for there to be little to no evidence during the winter and spring seasons, of the cultivation activities that occurred during the summer and fall of the previous year.

The applicant has provided an engineered Erosion & Sediment Control Plans that address potential erosion through the application of gravel/rock to access roads, weed-free straw mulch to disturbed areas, and the installation of straw wattles and silt fences around the proposed cultivation areas and structures. 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.

Less Than Significant Impact

c) The Project Property contains mixed topography, with some slopes that are greater than 30%, but the Project Site is minimally sloped (less than 5% slopes). 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".

Soils of the Project Site are identified as 158 Lupoyoma silt loam by the NRCS Web Soil Survey, and characterized as moderately well-drained alluvium composed of sandy, silt, and clay loams. 158 Lupoyoma silt loam considered generally stable and not in danger of lateral spreading, subsidence, liquefaction or collapse.

Less Than Significant Impact

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

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

Soils of the Project Site are identified as 158 Lupoyoma silt loam by the NRCS Web Soil Survey, and characterized as moderately well-drained alluvium composed of sandy, silt, and clay loams. These soils would have a moderate shrink-swell potential due to its clay composition. Any new construction requiring a building permit would be subject to the Uniform Building Code and California Building Code for foundation design to meet the requirements associated with expansive soils, if they are found to exist within a site specific study.

Less Than Significant Impact

e) The proposed Project would be served by portable restroom facilities located at the cultivation site. There are no new onsite wastewater disposal systems proposed.

Less than Significant Impact

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

Less than Significant Impact

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

Discussion:

a) The Project Property is located within the Lake County Air Basin, which is under the jurisdiction of the Lake County Air Quality Management District (LCAQMD). The LCAQMD applies air pollution regulations to all major stationary pollution sources and monitors

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

The proposed Project consists of outdoor cannabis cultivation. In general, greenhouse gas emissions associated with outdoor cannabis cultivation come from construction activities and vehicle trips. The outdoor cultivation areas will not have specific greenhouse gas-producing elements, and the cannabis plants will capture some carbon dioxide. Construction impacts would be temporary in nature and would occur over an estimated three (3) to four (4) week period, generating up to forty (40) vehicle trips per day. Ongoing field management is considered an operational, not construction, activity.

Daily traffic commutes during regular operations would be approximately twenty-four (24) trips during regular operations, and up to forty (40) daily commutes during the peak planting and harvest periods. Weekly truck deliveries of various project-related materials would occur throughout the cultivation season.

Lake County uses the Bay Area Air Quality Management District (BAAQMD) thresholds of significance as a basis for determining the significance of air quality and GHG impacts. The BAAQMD threshold of significance for a project is 1,100 metric tons of CO_2 emissions per project.

CO_2 emissions are quantifiable. According to the EPA, a vehicle produces on average 404 grams of CO_2 emissions per vehicle mile traveled. The cultivation site is located approximately five (5) miles from Middletown and approximately 7 miles from Lower Lake, the nearest population bases and the likely residency of employees. Up to twenty (20) employees are likely during peak harvest times, with an average of twelve (12) employees working during construction (site preparation), and during non-peak harvest times. Assuming each employee drives and average of 6 miles to and from work, a total of 144 vehicle miles per day would result during normal operations, and a total of 240 miles would result during peak planting and harvest periods. A total of two weekly deliveries would result from non-employees, adding an additional 24 miles per week.

The total miles traveled during normal operations is assumed to be 6 months (26 weeks). Approximately 1,008 vehicle miles per week will be generated which equates to 26,208 vehicle miles per year during normal operations. With each car generating 404 grams of CO_2 emissions per mile, a total of 10,588,032 grams (10.6 metric tons) of CO_2 emissions per year during normal operations will be generated. Staff estimates that an additional 5.4 metric tons of emissions would result from peak harvest time this project per year.

Using the BAAQMD ‘significance thresholds’ of 1,100 metric tons of CO_2 emissions per project, this project would take about 69 years to meet the significance threshold levels established by the BAAQMD.

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

Less than Significant Impact

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

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

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

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

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

Less than Significant Impact

IX. HAZARDS AND HAZARDOUS MATERIALS	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
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?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Discussion:

a) Chemicals Storage and Effluent

According to the applicant, chemicals stored and used at/by the proposed cultivation operation include fertilizers/nutrients, pesticides, and petroleum products (Agricultural Chemicals). All fertilizers/nutrients and pesticides, when not in use, will be stored in their manufacturer's original containers/packaging, undercover, and at least 100 feet from surface water bodies, inside the secure Pesticides & Agricultural Chemicals Storage Area (proposed stormproof sheds). Petroleum products will be stored under cover, in State of California-approved containers with secondary containment and separate from pesticides and fertilizers within the proposed Pesticides & Agricultural Chemicals Storage Area. Spill containment and cleanup equipment will be maintained within the proposed Pesticides and Agricultural Chemicals Storage Area, as well as Materials Safety Data Sheets (MSDS/SDS) for all potentially hazardous materials used onsite. No effluent is expected to be produced by the proposed cultivation operation.

Solid Waste Management

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

Site Maintenance

According to the applicant, all equipment will be stored in its proper designated area upon completion of the task for which the equipment was needed. Any refuse created during the workday will be placed in the proper waste disposal receptacle at the end of each shift, or at a minimum upon completion of the task assigned. Any refuse which poses a risk for contamination or personal injury will be disposed of immediately. 100 feet of defensible space will be established and maintained around the proposed cultivation operation for fire protection and to ensure safe and sanitary working conditions. Areas of defensible space will be mowed and trimmed regularly around the cultivation operation to provide for visibility and security monitoring. Access roads and parking areas will be graveled to prevent the generation of fugitive dust, and vegetative ground cover will be preserved throughout the entire site to filter and infiltrate storm water runoff from access roads, parking areas, and the proposed cultivation operation. Staff will have access to portable restroom facilities whenever they are onsite. The portable restroom facilities will be serviced regularly to ensure a safe and sanitary working environment.

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

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

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

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

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

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

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

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

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

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

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

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

The Project Site has a moderate flood risk and 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 with a moderate fire hazard severity zone. The Project will provide water for fire suppression and is required to be in compliance with 4290 standards. See Wildfire Section of this Initial Study for more information.

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

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

c) There are no schools located within one-quarter mile of the proposed Project site. The nearest schools are located over two (2) miles from the Project Property, in the community of Hidden Valley Lake.

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 over 15 miles from the nearest public airport or public use airport (Lampson Field). Lampson Field is administered by the Lake County Airport Land Use Commission, which has not adopted an Airport Land Use Compatibility Plan. There will be no hazard for people working in the Project area from a public airport or public use airport.

No Impact

f) The Project would not impair or interfere with an adopted emergency response or evacuation plan. Grange Road and Highway 29 would be used to evacuate the area of the Project site. During evacuations, all persons at the Project site would be required to follow emergency responses instructions for evacuations. Because the Project would not interfere with an adopted emergency response or evacuation plan, impacts are less than significant and no mitigation measures are required.

Less than Significant Impact

g) The Project site is with a moderate fire hazard severity zone. The applicant shall adhere to all federal, state, and local fire requirements and regulations for setbacks and defensible space. Please refer to Section XX. Wildfire for additional information pertaining to risks associated with wildland fire.

Less than Significant Impact

X. HYDROLOGY AND WATER QUALITY	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☒	☐	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: i) Result in substantial erosion or siltation on-site or off-site; ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) Impede or redirect flood flows?	☐	☒	☐	☐
d) In any flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☒	☐	☐

Discussion:

a) The Project Parcel is enrolled in the State Water Resources Control Board's Cannabis General Order (Order No. WQ 2019-001-DWQ) as a Tier 2, Low Risk site (WDID: 5S17CC429401). As required in the Cannabis Order's Policy for coming into compliance with Best Practicable Treatment or Control (BPTC) measures, the applicant had to prepare a Site Management Plan (SMP) and a Nitrogen Management Plan (NMP) within 90 days of enrollment. "The purpose of the Cannabis Policy is to ensure that the diversion of water and discharge of waste associated with cannabis cultivation does not have a negative impact on water quality, aquatic habitat, riparian habitat, wetlands, and springs" (State Water Board, 2019). BPTC measures have been implemented at the site for erosion control and stormwater pollution. The purpose of the NMP is to identify how nitrogen is stored, used, and applied to crops in a way that is protective to water quality. The applicant is required to complete online Annual Monitoring and Reporting to assess compliance with the Cannabis General Order and Notice of Applicability. This includes BPTC measures for winterization.

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

- Established and re-established vegetation within and around the proposed cultivation operation will be maintained/protected as a permanent erosion and sediment control measure.
- A native grass seed mixture and certified weed-free straw mulch will be applied to all areas of exposed soil prior to November 15th of each year, until permanent stabilization has been achieved.
- Gravel will be applied to the surfaces of access roads, pathways, and the aisles between the garden beds/pots of the proposed cultivation areas, to allow for infiltration while mitigating the generation of sediment laden stormwater runoff.
- Straw rolls/wattles will be installed before November 15th of each year throughout the proposed cultivation operation per the Project's engineered Erosion and Sediment Control Site Plan, to filter pollutants and promote stormwater retention and infiltration.
- If areas of concentrated stormwater runoff begin to develop, additional erosion and sediment control measures will be implemented to protect those areas and their outfalls.

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

The proposed Project has been designed to meet the required riparian setbacks, in the flattest practical area of the Project Property to reduce the potential for water pollution and erosion.

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

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 Hydrogeologic Assessment 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

    <u>Water Demand</u>

    According to the Applicant's Property Management Plan – Water Usage section, the proposed cultivation operation has an estimated annual water use requirement of approximately 16,000,000 gallons (49.1 acre-feet), with a maximum daily water demand of approximately 90,000 gallons during the peak outdoor cultivation season, and an

average daily demand of approximately 75,000 gallons over the 7-month cultivation season.

Water Availability

All water for the proposed cultivation operation will come from an existing onsite groundwater well located adjacent to the proposed cultivation operation. A six-hour well yield test was conducted of the onsite groundwater well on July 6th, 2021. Results of the well yield test indicate that the irrigation well has the capability of producing 355 gpm for at least 6-hours without overdrawing the aquifer. The average daily water demand at the site over the cultivation season is expected to be approximately 75,000 gallons/day. 212 minutes (approximately 3 hours and 32 minutes) of pumping a day at 355 gpm would be needed to produce the average daily water demand for the proposed Project. The peak daily water demand of the proposed Project would require 254 minutes (approximately 4 hours and 14 minutes) of pumping at 355 gpm. The Hydrogeologic Assessment Report prepared for the proposed Project concluded, that based on well yield test results and the anticipated water demand for the Project, it is evident that the aquifer beneath the site can sustainably produce the water needed to meet the Project demands.

Aquifer/Groundwater Recharge

According to the Project's Hydrogeologic Assessment Report – *Groundwater Recharge* section, the estimated average annual groundwater recharge of the Project Property is approximately 793 acre-feet. The estimated average annual groundwater recharge (~793 acre-feet) is more than fifteen times the proposed Project's estimated annual water use requirement (~49.1 acre-feet). The estimated annual groundwater recharge of the Project Property during drought conditions is 396.6 acre-feet. More than eight times the proposed Project's estimated annual water use requirement. The Hydrogeologic Assessment Report concluded that it appears that the Applicant will have enough water to meet their demands without causing overdraft conditions.

Potential Impacts to Neighboring Groundwater Wells

According to the Project's Hydrogeologic Assessment Report, the calculated zone of pumping influence for the proposed cultivation operation extends approximately 220 feet from the Project well. There are no neighboring wells within 220 feet of onsite groundwater well. Therefore, impacts to neighboring groundwater wells as a result of pumping for the proposed cultivation operation are not anticipated. Additionally, the radius of pumping influence graphs suggest that pumping would have a negligible effect on stream flow within Putah Creek.

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

Drought Management Plan. The Drought Management Plan prepared for the Project identifies the following Best Management Practices per the Water Conservation and Use requirements outlined in the State Water Resources Control Board's Cannabis General Order to conserve water resources:

- Regularly inspect the entire water delivery system for leaks and immediately repair any leaky faucets, pipes, connectors, or other leaks;
- Apply weed-free mulch in cultivation areas that do not have ground cover to conserve soil moisture and minimize evaporative loss;

- Implement water conserving irrigation methods (drip or trickle and micro-spray irrigation);
- Maintain daily records of all water used for irrigation of cannabis. Daily records will be calculated by using a measuring device (inline water meter) installed on the main irrigation supply line between the water storage area and cultivation area(s);
- Install float valves on all water storage tanks to keep them from overflowing onto the ground.

When a drought emergency has been declared for the area of the proposed cultivation operation, the operator may implement the following additional measures, as needed or appropriate to the site, to reduce water use and ensure both success of the cultivation operation and decreased impacts to surrounding areas:

- Install moisture meters to monitor how much water is in the soil at the root level and reduce watering to only what is needed to avoid excess;
- Cover the soil and drip lines with removable plastic mulch to reduce evaporation;
- Irrigate only in the early morning hours or before sunset;
- Cover plants with shaded meshes during peak summer heat to reduce plant stress and water needs;
- Add a soil amendments/ingredients to growing medium that retains water in a way to conserve water and aid plant growth/health. Soil amendments/ingredients such as peat moss, coco coir, compost, perlite, and vermiculite retain water and provide a good environment for cannabis to grow.

Additionally, to ensure both success and decreased impacts to the surrounding areas, the applicant plans to reduce their outdoor canopy area and water usage by approximately 10 percent during drought emergencies. To reduce water usage 85,000 ft2 (~2 acres) of the proposed cultivation/canopy area will not be planted when a drought emergency has been declared for Lake County. The canopy areas to be left fallow will depend on when a drought emergency is declared (before or after the proposed canopy areas have been planted), and Rancho Lake will prioritize the preferred canopy areas over less desirable canopy areas (based on cultivation experience). By implementing the Drought Management Plan outlined above, the estimated annual water demand for the proposed cultivation operation would be reduced from approximately 49.1 acre-feet to 44.2 acre-feet during periods of drought.

With implementation of Mitigation Measures HYD-1 and HYD-2 impacts to water resources, including groundwater, would be less than significant.

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

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

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

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

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

The proposed cultivation operation will increase the impervious surface area of the Project Property by approximately 30,360 ft^2, or less than 0.2% of the Project Parcel, through the installation of five 6,000 ft^2 engineered fabric structures (proposed Harvest Storage & Staging Areas) and three 120 ft^2 wooden sheds (proposed Security Center and Pesticide & Agricultural Chemicals Storage Area). The proposed outdoor cultivation/canopy areas will not increase the impervious surface area of the Project Parcel nor the volume of runoff from the Project Parcel. The proposed parking areas will have permeable gravel surfaces, and the proposed ADA parking spaces will be constructed of permeable pavers.

The proposed cultivation operation will be established in areas of the Project Parcel that have been used to farm oats and hay, as well as for cattle grazing, since at least the early 1900s. No trees or vegetation will be removed to establish the proposed cultivation operation. The growing medium of the proposed outdoor cultivation/canopy areas will be native soil amended with compost, worm castings, and composted organic dairy manure, with drip irrigation systems covered in white plastic mulch (to conserve water resources). Each spring, the native soil of the proposed outdoor cultivation/canopy areas will be plowed/disced and harrowed to create planting beds for the cultivation of cannabis. Each fall, the native soil of the proposed outdoor cultivation/canopy areas will be plowed/disced and planted with a nitrogen-fixing cover crop, to stabilize the site(s) for the winter wet weather period. The proposed Harvest Storage & Staging Areas (engineered fabric structures) will be erected in July of each year, and deconstructed/demolished in December of each year. The intent is for there to be little to no evidence during the winter and spring seasons, of the cultivation activities that occurred during the summer and fall of the previous year.

Due to the natural conditions of the Project site, as well as the proposed erosion and sediment control measures, the Project i) will not result in substantial erosion or siltation on-site or off-site; ii) will not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite; iii) will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage

systems or provide substantial additional sources of polluted runoff; and iv) will not impede or redirect flood flows.

Less Than Significant Impact with Mitigation Measures BIO-1 through BIO-3.

d) The Project Site is not located in an area of potential inundation by seiche or tsunami. The Project site is designated to be in Flood Zone X – areas of minimal to moderate flood hazard risk.

Less Than Significant Impact

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

There are no groundwater management plans for the affected groundwater basin(s) at this time. Groundwater use and monitoring data collected and reported to comply with the Lake County Zoning Ordinance could be used in the development of a sustainable groundwater management plan at some point in the future.

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

XI. LAND USE PLANNING	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☒	☐

Discussion:

a) The Project Property is located in a rural area of Lake County, characterized by large parcels of mostly undeveloped land within some agricultural and residential uses. The proposed Project would not physically divide any established community.

No Impact

b) The proposed Project is consistent with the Lake County General Plan and Middletown Area Plan and would create diversity within the local economy and future employment opportunities for local residents. It would also support the goals and policies related to natural resources, water resources, health and safety and compatible land uses contained within the Middletown Area Plan (Objectives 3.4.1; 3.6.1; 5.1.5; 5.4.2; and Policies 3.4.1a; 3.4.1.d; 3.6.1a).

The Project Parcel's General Plan Land Use and Zoning District designation is Agriculture (A), Rural Lands (RL), and Rural Residential (RR). The Project Site is located within the "A" Agriculture-zoned portion of the Project Parcel. The Lake County Zoning Ordinance allows for commercial cannabis cultivation in the "A" land use zone with a major use permit. The Project is consistent with all other development standards within the zoning code for commercial cannabis cultivation.

In reference to the Lake County Zoning Ordinance Article 27, Section 27.11 (at), the County requires a minimum 100-foot setback from all property lines of the subject property, a minimum 100-foot setback from the top of bank of any surface water source, and a minimum of 200-foot setback from any off-site residences. The nearest off-site residence is located over 1,000 feet south of the proposed Project, well over the 200-foot setback for offsite residences from commercial cannabis cultivation operations. Additionally, commercial cannabis cultivation is prohibited within 1,000 feet of Community Growth Boundaries, licensed childcare facilities, churches, or youth-oriented facilities. The nearest Community Growth Boundary is the Hidden Valley Lake Community Growth Boundary. The 1,000 buffer (shown in pink in Figure 7 below) does encroach onto the parcel; however, the cultivation activities would be located outside of it and the Project complies with all other required setbacks.

Less than Significant Impact

XII. MINERAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

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 alluvium. Additionally, according to the California Department of Conservation, Mineral Land Classification, there are no known mineral resources on the project site.

No Impact

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

No Impact

XIII. NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Result in the generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Discussion:

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

This project will have some noise related to site preparation, and hours of construction are limited through mitigation.

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

In regard to the Lake County General Plan Chapter 8 - Noise, there are no sensitive noise receptors within one (1) mile of the project site, and Community Noise Equivalent Levels (CNEL) are not expected to exceed the 55 dBA during daytime hours ~~(7am – 10pm)~~ or (7:00 a.m. to 10:00 p.m.) 45 dBA during night hours ~~(10pm – 7am)~~ (10:00 p.m. to 7:00 a.m.)when measured at the property line.

NOI-1: All construction activities including engine warm-up shall be limited Monday Through Friday, between the hours of 7:00~~am~~a.m. and 7:00~~pm~~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.

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

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

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

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

Less Than Significant Impact

c) The Project site is located over 15 miles from the nearest airport or airstrip. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels from air travel.

No Impact

XIV. POPULATION AND HOUSING

Potentially Significant Impact	Less Than Significant With Mitigation Measures	Less Than Significant Impact	No Impact

Would the project:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion:

a) The Project is not anticipated to induce significant population growth to the area. The increased employment will be approximately twelve (12) full-time and up to twenty (20) seasonal employees to be hired locally.

No Impact

b) The Project will not displace any existing housing.

No Impact

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

Discussion:

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

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

activities would be temporary and limited in scope. Accidents or crime emergency incidents during operation are expected to be infrequent and minor in nature.

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

Less than Significant Impact

XVI. RECREATION	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion:

a) As the small staff for the proposed Project will be hired locally, there will be no increase in the use of existing neighborhood and regional parks or other recreational facilities and no impacts are expected.

No Impact

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

No Impact

XVII. TRANSPORTATION	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) For a land use project, would the project conflict with or be inconsistent with CEQA guidelines section 15064.3, subdivision (b)(1)?	☐	☐	☒	☐

c)	For a transportation project, would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(2)?	☐	☐	☐	☒
d)	Substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e)	Result in inadequate emergency access?	☐	☐	☒	☐

Discussion:

a) The Project Parcel is accessed via Grange Road off of Highway 29. Highway 29 is a paved State Highway, and Grange Road is a paved County-maintained road. A minimal increase in traffic is anticipated due to construction, maintenance and weekly and/or monthly incoming and outgoing deliveries through the use of small vehicles only.

There are no known pedestrian or bicycle facilities on Highway 29 or Grange Road in the vicinity of the proposed Project. Grange Road is a narrow paved road, and Highway 29 is a two-lane highway with wide shoulders suitable for pedestrian or bicycle traffic.

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

Less than Significant Impact

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

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

The cultivation site is located approximately five (5) miles from Middletown and approximately seven (7) miles from Lower Lake, the nearest population bases and the likely residency of employees. Up to twenty (20) employees are likely during peak harvest times, with an average of twelve (12) employees working during construction (site preparation), and during non-peak harvest times. Assuming each employee drives and average of 6 miles to and from work, a total of 144 vehicle miles per day would result during normal operations, and a total of 240 miles would result during peak planting and harvest periods. A total of two weekly deliveries would result from non-employees, adding an additional 24 miles per week.

To date, the County has not yet formally adopted its transportation significance thresholds or its transportation impact analysis procedures. As a result, the project-related VMT impacts were assessed based on guidelines described by the California Office of Planning

and Research (OPR) in the publication *Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory*, 2018. The OPR Technical Advisory identifies several criteria that may be used to identify certain types of projects that are unlikely to have a significant VMT impact and can be "screened" from further analysis. One of these screening criteria pertains to small projects, which OPR defines as those generating fewer than 110 new vehicle trips per day on average. OPR specifies that VMT should be based on a typical weekday and averaged over the course of the year to take into consideration seasonal fluctuations. The estimated trips per day for the proposed Project are between 12 and 24 during normal operation, and up to 40 trips per day during construction, which is expected to occur over a four to six week period.

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

Less than Significant Impact

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

No Impact

d) The Project does not propose any changes to road alignment or other features, does not result in the introduction of any obstacles, nor does it involve incompatible uses that could increase traffic hazards. Equipment used in cultivation will be transported to the Project site as needed and will not need to be operated on Grange Road or Highway 29.

No Impact

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

Less than Significant Impact

XVIII. TRIBAL CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
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)?	☐	☒	☐	☐
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?	☐	☒	☐	☐

Discussion:

a) A Cultural Resources Assessment was conducted/prepared by Tim Spillance, MA, RPA and Phil Hanes, MA, RPA of Natural Investigations Company for the proposed Project in March of 2021. The services provided included a cultural resources literature search, Sacred Lands File (SLF) search, and an intensive pedestrian survey of the Project Parcel. This study was completed in compliance with the California Environmental Quality Act (CEQA) Section 21083.2 of the statute and Section 15064.5 of the CEQA Guidelines.

According to the report, A California Historical Resources Information System (CHRIS) records search was conducted by the Northwest Information Center (NWIC) on the campus of Sonoma State University to determine whether prehistoric or historic cultural resources have been previously recorded within the Project Area, the extent to which the Project Area has been previously surveyed, and the number and type of cultural resources within a 0.25-mile radius of the Project limits. The results of the CHRIS search were returned on February 3, 2021.

Natural Investigations Archaeologist, Phil Hanes, MA, RPA, conducted a pedestrian survey of the Project Area on February 9 and 10, 2021. Of the 1,627-acre Project Property, 116 acres were surveyed intensively using transects spaced no greater than 15 meters apart. This includes all proposed cultivation areas, access roads, and other facilities which may be used for cultivation-related purposes. The remaining 1,511 acres of the property were not surveyed as they are not currently involved in the cultivation operation and will not be impacted by the Project in any way.

During the survey, all visible ground surfaces were carefully examined for cultural material (e.g., flaked stone tools, tool-making debris, stone milling tools, or fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions and features indicative of the former presence of structures or buildings (e.g., postholes, foundations), and historic-era debris (e.g., metal, glass, ceramics).

Ground disturbances (e.g., animal burrows, dirt roads, etc.) were also visually inspected. A digital camera was used to take photographs of the Project Area, a Munsell® Soil Color Chart

used to record soil color, and a handheld BE-3300-GPS global positioning system (GPS) unit with sub-meter accuracy was used to record locational data

Report Findings & Conclusion

No previously unrecorded cultural resources of any kind were identified within the Project Area (area to be developed) during the field survey. The CHRIS records search results indicate that there are no previously recorded resources within the Project Area, although three have been recorded on the Project Property. According to the CRA, as proposed the Project will not impact the previously recorded cultural resources on the Project Property, and no further cultural resources work is recommended at this time.

As no cultural resources documented within the Site appears to meet CRHR eligibility criteria , there is no indication that the Project will impact any historical resources as defined under CEQA Section 15064.5, unique archeological resources defined under CEQA Section 21083.2(g), or significant Native American 56esources. For these reasons, it is not anticipated that the proposed Project will not cause a substantial adverse change in the significant of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)

It is possible, due to the new site disturbance that is needed to develop the proposed Project, that significant artifacts or human remains could be discovered during Project construction. If, however, significant artifacts or human remains of any type are encountered it is recommended that the Project sponsor shall contact the culturally affiliated tribe and a qualified archaeologist to assess the situation. The Sheriff's Department must also be contacted if any human remains are encountered.

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

b) A Cultural Resources Assessment was prepared for the proposed Project in March of 2021, with intensive pedestrian surveys of the Project site occurring on February 9 and 10, 2021 and is discussed in the Tribal/Cultural Resources Sections of this Initial Study. A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed on February 1, 2021 for the Project Property. Results of the SLF search were negative, but the NAHC recommended the lead agency contact local Native American tribes who may have knowledge of cultural resources in the Project area. Notification of the Project was sent to local tribes on May 28, 2021. The Community Development Department has not receive an AB 52 Tribal Consultation request for this Project. Additionally, Rancho Lake, LLC has entered into a Cultural Resources Monitoring and Treatment Agreement with the Tribe that is the Most Likely Descendant of Native American human remains and associated cultural resources (as designated by the Native American Heritage Commission).

After reviewing the information presented in 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.

It is possible, but unlikely due to the lack of new site disturbance that is needed, that significant artifacts or human remains could be discovered during Project construction. If,

however, significant artifacts or human remains of any type are encountered it is recommended that the Project sponsor shall contact the culturally affiliated tribe and a qualified archaeologist to assess the situation. The Sheriff's Department must also be contacted if any human remains are encountered.

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

TCR-1: Prior to commencement of ground disturbing activities, the permittee shall submit documentation to the Community Development Department demonstrating that they have engaged with the culturally affiliated Tribe(s) to provide cultural monitors and that cultural sensitivity training has been provided to site workers. All ground disturbing activities shall be monitored by qualified tribal monitor(s). Qualified tribal monitor(s) are defined as qualified individual(s) who have experience with identification, collection, and treatment of tribal cultural resources of value to the Tribe(s). Such individuals will include those who:

a) Possess the desired knowledge, skills, abilities, and experience established by the Native American Heritage Commission (NAHC) through the NAHC's Guidelines for Native American Monitors/ Consultants (2005); or

b) Members of culturally affiliated Tribe(s) who: (i). Are culturally affiliated with the Project area, as determined by the NAHC; and (i) i. Have been vetted by tribal officials of the culturally affiliated Tribe(s) as having the desired knowledge, skills, abilities, and experience established by the NAHC's Guidelines for Native American Monitors.

XIX. UTILITIES	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	Source Number
Would the project:					
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐	1, 3, 4, 5, 29, 32, 33, 34, 37, 45
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☒	☐	☐	1, 2, 3, 5, 6, 22, 31, 45
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒	1, 2, 3, 5, 6, 22
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐	1, 2, 3, 5, 6, 35, 36

e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐	1, 2, 3, 5, 6, 35, 36

Discussion:

a) According to the Applicant's Property Management Plan, all water for the proposed cultivation operation will come from an existing onsite groundwater well located adjacent to the proposed cultivation operation. The Hydrogeologic Assessment Report prepared for the proposed Project concluded, that based on well yield test data collected at the site, it appears that the aquifer storage and recharge area of the Project Property are sufficient to provide for sustainable annual water use at the site and within the area.

A new PG&E electrical utility service connection would be needed to provide power to well/water pumps of the proposed Project. Electricity for the security cameras and security lights in and around the proposed outdoor cultivation area will be produced via individual photovoltaic solar panels with battery storage/backup systems.

The Project would be served by an ADA-compliant portable restroom and handwashing facilities.

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

Less than Significant Impact

b) According to the Applicant's Property Management Plan – *Water Usage* section, the proposed cultivation operation has an estimated annual water use requirement of approximately 16,000,000 gallons (~49.1 acre-feet), with a maximum daily water demand of approximately 90,000 gallons during the peak outdoor cultivation season, and an average daily demand of approximately 75,000 gallons. All water for the proposed cultivation operation will come from an existing onsite groundwater well. A six-hour well yield test was conducted of the onsite groundwater well on July 6th, 2021. Results of the well yield test indicates that the irrigation well has the capability of producing 355 gpm for at least 6-hours without overdrawing the aquifer. The average daily water demand at the site over the cultivation season is expected to be approximately 75,000 gallons/day. 212 minutes (approximately 3 hours and 32 minutes) of pumping a day at 355 gpm, would be needed to produce the average daily water demand for the proposed Project. The peak daily water demand of the proposed Project would require 254 minutes (approximately 4 hours and 14 minutes) of pumping at 355 gpm. The Hydrogeologic Assessment Report prepared for the proposed Project concluded, that based on well yield test results and the anticipated water demand for the Project, it is evident that the aquifer beneath the site can sustainably produce the water needed to meet the Project demands. The Hydrogeologic Assessment Report concluded, that based on well yield test data collected at the site, it appears that the aquifer storage and recharge area are sufficient to provide for sustainable annual water use at the site and within the area.

According to the Project's Hydrogeologic Assessment Report – *Groundwater Recharge* section, the estimated average annual groundwater recharge of the Project Property is

approximately 793 acre-feet. The estimated average annual groundwater recharge (~793 acre-feet) is more than fifteen times the proposed Project's estimated annual water use requirement (~49.1 acre-feet). The estimated annual groundwater recharge of the Project Property during drought conditions is 396.6 acre-feet. More than eight times the proposed Project's estimated annual water use requirement. The Hydrogeologic Assessment Report concluded that it appears that the Applicant will have enough water to meet their demands without causing overdraft conditions. Additionally, the Applicant has provided a Drought Management Plan reducing water use during periods of drought.

Water level monitoring is required by the Lake County Zoning Ordinance. Ordinance Article 27 Section 27.11(at) requires the production well to have a water meter and water level monitor.

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

c) A wastewater treatment provider does not serve, nor is likely to serve, the Project Property. The Project will be serviced by onsite portable restroom and handwashing facilities.

No Impact

d) It is estimated that approximately 5,000 pounds of waste from the proposed Project will be taken to the Eastlake Landfill each year. The Eastlake Landfill, South Lake Refuse Center, and Quackenbush Mountain Resource Recovery and Compost Facility are located within reasonable proximity of the Project site. As of 2019, the Eastlake Landfill had 659,200 cubic yards available for solid waste, with an additional 481,000 cubic yards approved in 2020.

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

Less than Significant Impact

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

Less than Significant Impact

XX. WILDFIRE	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

b)	Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Discussion:

~~a) The applicant shall adhere to all regulations of California Code Regulations Title 14, Division 1.5, Chapter 7, Subchapter 2, and Article 1 through 5 shall apply to this project; and all regulations of California Building Code, Chapter 7A, Section 701A, 701A.3.2.A.~~

In cooperation with local fire and law enforcement entities, the Lake County Sheriff's Office of Emergency Services (OES) is responsible for managing emergencies and evacuation information to Lake County. Emergency and evacuation alerts are currently transmitted to the public in a number of ways including electronic emergency notation platforms such as Nixle and LakeCo Alerts to those opted in (including text/email/phone call) and landline reverse 911. Information is also posted on the Genasys Protect platform and social media. The Genasys Protect (formally Zonehaven) provides evacuation zone information including status of zone (order/warning/none) and information as the incident evolves such as road closures and shelter locations. If an evacuation is necessary, people working or residing in the area would follow existing evacuation procedures. There are no project components that would result in impairment of existing evacuation practices. The Project will not impair an adopted emergency response plan or evacuation plan.

~~The Project will not impair an adopted emergency response plan or evacuation plan. The applicant shall adhere to all regulation of California Code Regulations Title 14, Division 1.5, Chapter 7, Subchapter 2, and Article 1 through 5 shall apply to this project; and all regulations of California Building Code, Chapter 7A, Section 701A, 701A.3.2.A.~~

Less than Significant Impact

b) The Project site is situated in a moderate fire hazard severity zone and the Project Site is relatively flat. The cultivation areas and associated facilities do not further exacerbate the risk of wildfire, or the overall effect of pollutant concentrations on area residents in the event of a wildfire. The Project would improve fire access and the ability to fight fires at or from the Project Site and other sites accessed from the same roads through the upkeep of the property area and the installation of the proposed water tanks.

Less than Significant Impact

c) The proposed site improvements are minimal, and do not rise to the level of warranting additional roads, fuel breaks, or other utilities. ~~The proposed project would not exacerbate fire risk through the installation of a new PG&E electrical utility service connection.~~ The proposed project does require a new PG&E service to be installed, but PGE requires 15ft easements on either side of the lines to be free and clear. Additionally, water will be provided for fire suppression and the Project will meet 4290 standards. As such, the Project would not exacerbate fire risk.

Less than Significant Impact

d) The proposed Project Site is relatively flat (0 to 10 percent slopes). The proposed Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Less than Significant Impact

XXI. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
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?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion:

a) The project proposes the cultivation of commercial cannabis in a rural area of the County on the "A" Agriculture-zoned portion of the Project 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, Agriculture & Forest Resources, Air Quality, Biological Resources, Cultural/Tribal Resources, Geology and Soils, Hazards & Hazardous Materials, Hydrology/Water Quality, Noise, and Utilities.

Less than significant with AES-1; AQ-1 through AQ-6; BIO-1 through BIO-5; CUL-1 and CUL-2; HAZ-1 through HAZ-8; HYD-1 and HYD-2; and NOI-1 and NOI-2; and TCR-1 incorporated.

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

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

Implementation of and compliance with 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 with AES-1; AQ-1 through AQ-6; BIO-1 through BIO-5; CUL-1 and CUL-2; HAZ-1 through HAZ-8; HYD-1 and HYD-2; and NOI-1 and NOI-2; and TCR-1 incorporated.

c) The proposed Project has the potential to result in adverse indirect or direct effects on human beings. In particular, Aesthetics, Air Quality, Geology/Soils, Cultural and Tribal Resources, Hydrology, 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 AES-1; AQ-1 through AQ-6; BIO-1 through BIO-5; CUL-1 and CUL-2; HAZ-1 through HAZ-8; HYD-1 and HYD-2; and NOI-1 and NOI-2; and TCR-1 incorporated.

Source List

1. Lake County General Plan
2. Lake County GIS Database
3. Lake County Zoning Ordinance
4. Middletown Communities Area Plan
5. Rancho Lake Cannabis Cultivation Application – Major Use Permit.
6. U.S.G.S. Topographic Maps
7. U.S.D.A. Lake County Soil Survey
8. Lake County Important Farmland Map, California Department of Conservation Farmland Mapping and Monitoring Program
9. Department of Transportation's Scenic Highway Mapping Program, (https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways)
10. Lake County Serpentine Soil Mapping
11. California Natural Diversity Database (https://wildlife.ca.gov/Data/CNDDB)
12. U.S. Fish and Wildlife Service National Wetlands Inventory
13. Biological Resources Assessment for the Cannabis Cultivation Operation at 19955 Grange Road, Middletown, California, prepared by Natural Investigations Company, Inc., March 3, 2021.
14. Cultural Resources Assessment for the Cannabis Cultivation Operation at 19955 Grange Road, Middletown, Lake County, California, prepared by Natural Investigations Company, Inc., March 2021.
15. California Historical Resource Information Systems (CHRIS); Northwest Information Center, Sonoma State University; Rohnert Park, CA.
16. Water Resources Division, Lake County Department of Public Works Wetlands Mapping.
17. U.S.G.S. Geologic Map and Structure Sections of the Clear Lake Volcanic, Northern California, Miscellaneous Investigation Series, 1995
18. Official Alquist-Priolo Earthquake Fault Zone maps for Lake County
19. Landslide Hazards in the Eastern Clear Lake Area, Lake County, California, Landslide Hazard Identification Map No. 16, California Department of Conservation, Division of Mines and Geology, DMG Open –File Report 89-27, 1990
20. Lake County Emergency Management Plan
21. Lake County Hazardous Waste Management Plan, adopted 1989
22. Lake County Airport Land Use Compatibility Plan, adopted 1992
23. California Department of Forestry and Fire Protection - Fire Hazard Mapping
24. National Pollution Discharge Elimination System (NPDES)
25. FEMA Flood Hazard Maps
26. Lake County Aggregate Resource Management Plan
27. Lake County Bicycle Plan
28. Lake County Transit for Bus Routes
29. Lake County Environmental Health Division
30. Lake County Grading Ordinance
31. Lake County Natural Hazard database
32. Lake County Countywide Integrated Waste Management Plan and Siting Element, 1996
33. Lake County Water Resources
34. Lake County Waste Management Department
35. California Department of Transportation (Caltrans)
36. Lake County Air Quality Management District website
37. South Lake County Fire Protection District

38. Botanical Surveys Report for the Cannabis Cultivation Operation at 19955 Grange Road, Middletown, California, prepared by Natural Investigations Company, Inc., June 7, 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. Hydrogeologic Assessment Report, 19955 Grange Road, Middletown, CA 95461, APN 014-290-08, prepared by Hurvitz Environmental Services, Inc., July 1, 2021, Revised August 31, 2023