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

March 9, 2021

CALIFORNIA ENVIRONMENTAL QUALITY ACT
ENVIRONMENTAL CHECKLIST FORM
INITIAL STUDY, IS 19-49

1. Project Title:	Highway 53 Cannabis Cultivation Project
2. Permit(s):	Use Permit, UP 19-49 Initial Study, IS 19-71
3. Lead Agency Name and Address:	County of Lake Community Development Department Courthouse – 255 North Forbes Street Lakeport CA 95453
4. Contact Person:	Sateur Ham, Assistant Planner (707) 263-2221
5. Project Location(s) and APN(s):	1000 State Highway 53, Clearlake, CA (010-055-27) 1270 State Highway 53, Clearlake, CA (010-055-26)
6. Parcel Size:	105.59 acres total
7. Project Sponsor's Name/Address:	Laythen Martines-Lake County Investment Group, LLC 827 Twin View Boulevard Redding, CA 96003
8. General Plan Designation:	Rural Residential
9. Zoning:	Rural Residential-Waterway Combining-Scenic Combining
10. Flood Zone:	Areas in which flood hazards are undetermined, but possible
11. Slope:	The parcel average cross slope is 17.18-25.42%
12. Natural Hazards:	Project area is within the State Responsibility Area "moderate" severity fire zone
13. Fire District:	Lake County FPD/CalFire

14. Description of Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary).

The proposed cultivation project will take place on two contiguous parcels totaling 105.5 acres of land area, located at 1000 and 1270 State Highway 53, Clearlake, California, and is further described as Assessor's Parcel Numbers: 010-055-26 and 010-055-27. The total proposed project premise includes approximately 20 acres of area space with 635,540.40 square feet cultivation area and a total of five (5) acres of cannabis canopy between two sites (see table 1 for breakdown).

The project area is located northeast of the City of Clearlake on State Highway 53 and Ogulin Canyon Road. The access to the property is from Highway 53, east to Junction Plaza, and then 1.34 miles south (through a gated entry) on Ogulin Canyon Road to a gated driveway on the right. Passing through the side entry gate, there is an existing road system of well-maintained site driveways that lead to the two cultivation areas (north and south project parcel).

The cultivation areas have been selected because of good sun exposure, stable soils, level to gently sloping topography, good existing access, ease of meeting the setback requirements, minimal tree cover, and readily available irrigation water. There is an existing cover of scattered Blue Oak trees, however, the site is not heavily wooded. Many of the trees on the northern cultivation site have been professionally limbed and trimmed, opening the site up to abundant sun exposure to the south. The southerly cultivation site is open with a sloping southern exposure and only a few scattered oak trees around the perimeter.

The cannabis plants will be grown on the existing natural contours of the ground surface in individual grow bags filled with imported soil. The proposed improvements within the cultivation areas include equipment and soil staging areas, parking areas, water tanks, storage areas for equipment, topsoil, pesticides, and fertilizers.

The existing agricultural water system will be pumped and used for irrigation for each fabric smart pots using a drip-line irrigation method for conservation. The proposed project will have a separate water supply to accommodate each parcel; in the northern parcel, there are two wells, one propane-powered pumphouse, and an 8,000-gallon cement cistern and in the southern parcel, there is one well and an 11,000-gallon cement cistern. Water tanks and mixing tanks, ranging from 500 to 5,000 gallons in size, will be used to store water and mix nutrients.

There is a mobile office trailer on the northern parcel which is used as a security officer and for chemical storage. Security cameras will be installed per the county's requirements. Electrical power will be provided via an onsite solar voltaic system.

Facilities and structures for the restroom, security equipment, and material storage will be developed as shown on the site plan. Also proposed at each cultivation site are vegetative waste storage, chemical storage, and waste enclosures.

Figure 1. The 56,000 square feet canopy area on the northern parcel upon early activation.

Early Activation Conditions

The northerly grow area on APN 010-055-27 was Early Activated in 2020 and a cannabis crop was successfully cultivated under a state provisional license. A 6' tall deer fence has been built around the northern growing area to County standards. The northern grow area is clearly defined by its level to gently sloping topography.

Storm drainage mitigation improvements including the installation of fiber rolls around the perimeter of the cultivation sites will be implemented per the Site Management Plan.

Table 1. The complete list of the description entails each cultivation site of the applicant's proposed project. Some are existing and some are proposed, please see attachment and site maps for additional information.

North Parcel Cultivation Area: 010-055-27	**South Parcel Cultivation Area: 010-055-26**
247,856.40 square feet cultivation area	387,684 square feet cultivation area
3,071 Smart Pots =49,136 square feet canopy area	28 above-ground beds =164,800 square feet canopy area
6-foot tall animal fencing	6-foot tall animal fencing

128 square feet security trailer for the grow area with 90-days of storage using solar panels as an energy source.	8’ x 10’ secured storage container used for stored cannabis good when necessary.
400 square feet (20’ x 20’) composting area	400 square feet (20’ x 20’) composting area
(12) 5,000-gallon polyethylene water tank; 56 square feet each of surface area.	(4) 4,500-gallon water tanks; 50 square feet each of surface area.
(3) 500-gallon polyethylene water tank; 16 square feet each of surface area.	11,000-gallon concrete water tank; 350 square feet.
8,000-gallon concrete tank; 250 square feet	
Existing two wells powered by a generator in a 5’ x 5’ well-house.	

- Northern Most Cultivation area
    - Each smart pot is equal to 16 sq. ft. of plant
    - There are no plans to change the current canopy area in the next 10 years. The only change that will be made to the current grow area is the upkeep of the facilities:
        - fencing will need to be replaced periodically as it degrades.
        - pots will need to be replaced as they degrade.
        - water tanks will need to be replaced as they degrade. It is expected that irrigation will need to be replaced as it degrades.
        - trees, grass, and other plants on the property will need to be up-kept to decrease fire danger near the property.

- Southern Most Cultivation Area (Figure 1, Figure 2):
    - This cultivation area is proposed and has not yet been built out.
    - Native trees will be planted along the Hwy 53 side of the cultivation area. These trees will act as a natural buffer between the cultivation area and Hwy 53.
    - The 10-year plan for the proposed area will consist of the above changes. It is currently not built out so all of these changes will be made. The area currently has no trees on it so no trees will be removed. The cultivation area will be above ground so no grading will be necessary, however, there will be approximately less than 10 acres of vegetation clearing.

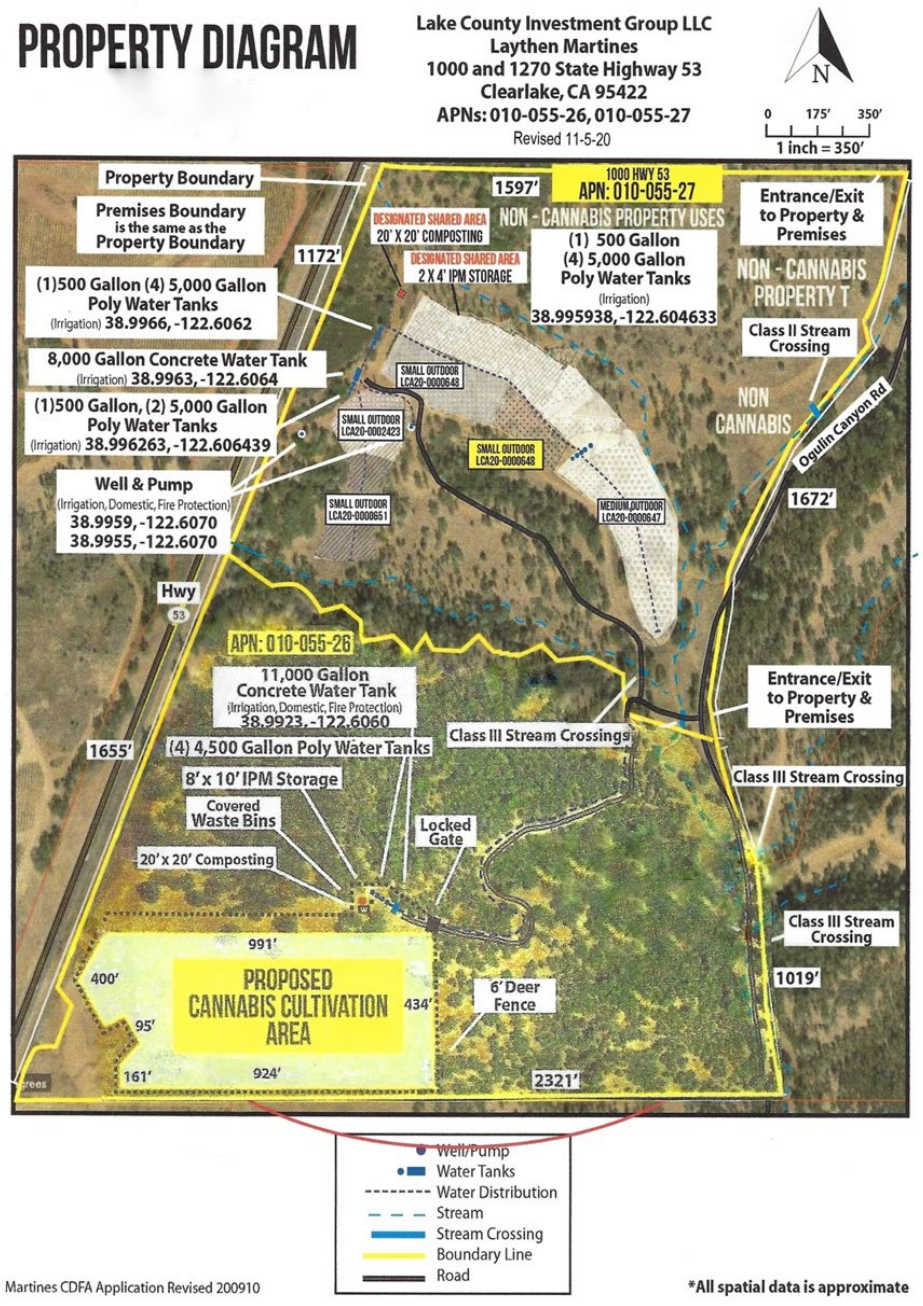


Figure 2. Existing/Proposed Cultivation Area

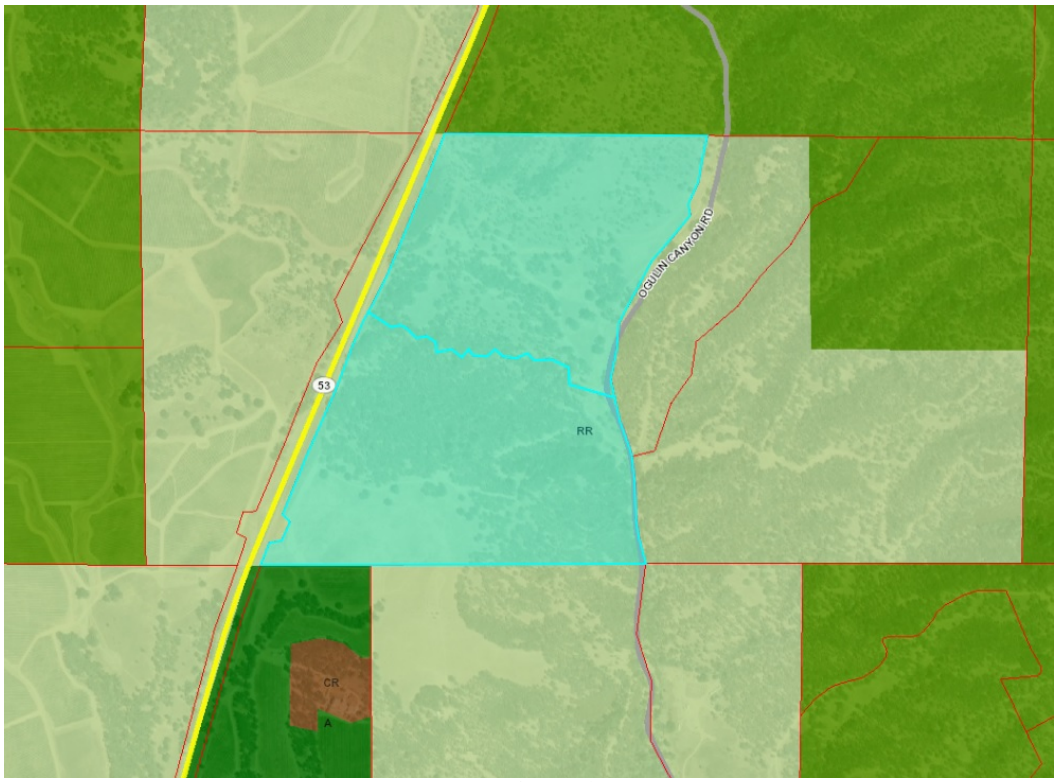


Figure 3. Zoning of site and vicinity

16. Surrounding Land Uses and Setting: Briefly describe the project's surroundings:

North: "RL" Rural Lands- Approximately 100 acres in size. Vacant

South: "RR, A, CR" Rural Residential, Agriculture, Commercial Resort. Parcel sizes range from approximately 64 to greater than 100 acres in size. Consists of a residential home and vineyard with a special event venue.

East: "RL" Rural Lands. Parcel sizes range from approximately 27 to greater than 108 acres in size. Vacant.

West: "RR" Rural Residential. Parcel sizes approximately 65 acres in size. Agriculture use.

17. Attachments:

Attachment A: Project Management Plan
Attachment B: Site Plans
Attachment C: Biological Resources Assessment
Attachment D: Forest Fire Prevention Plan
Attachment E: Botanical Survey Report
Attachment F: Oak Woodland Management and Mitigation Plan
Attachment G: Site Visit Photographs
Attachment H: Mitigation Monitoring and Reporting Program

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

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

18. **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 the significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?** Note: 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. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3 (c) contains provisions specific to confidentiality.

Notification of the project was sent to local tribes on December 19, 2019, Koi Nation representative wants to be a part of the project and requests monitors on-site, however, after several attempted phone calls, the communication was lost. On March 4, 2021, I re-traced back with a phone call to the tribal representative and requested any feedback on the project—an e-mail was sent to the tribal representative detailing the project scope. Middletown Rancheria Tribe confirmed receipt of notification. No other responses were received. The California Historical Resources Information System stated that the proposed project area was conducted (Flaherty 2001) and covered approximately 100% of the proposed project site. Koi Nation representative and the developer are expected to conduct a site visit to go over the project area and the mitigation measures agreement will be amended accordingly.

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

DETERMINATION: (To be completed by the Lead Agency)
Based on 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.

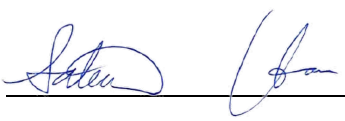
☒ **I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.**

☐ 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:
Sateur Ham, Assistant Planner



Date: March 9, 2021

SIGNATURE

Scott DeLeon, Director
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," maybe cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA processes, 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

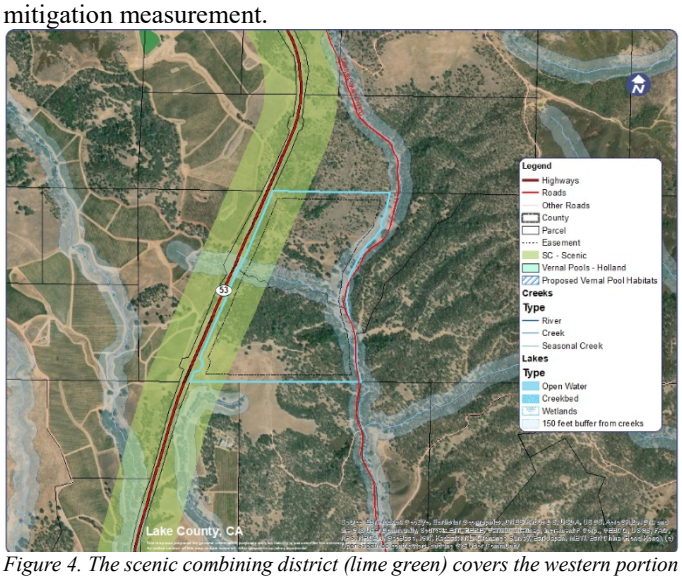
or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

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

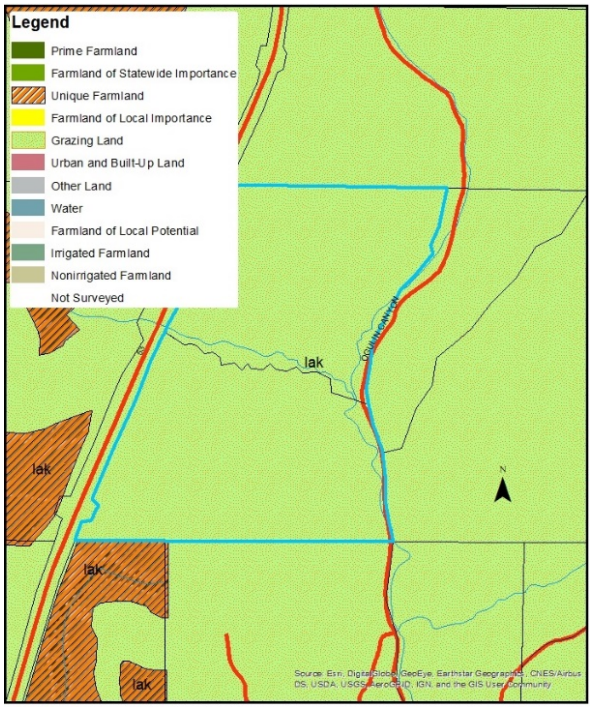
8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

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 the significance

KEY: 1 = POTENTIALLY SIGNIFICANT IMPACT
2 = LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATION
3 = LESS THAN SIGNIFICANT IMPACT
4 = NO IMPACT

IMPACT CATEGORIES*	1	2	3	4	All determinations need explanation. Reference to documentation, sources, notes, and correspondence.	Source Number**
I. AESTHETICS *Would the project:*						
a) Have a substantial adverse effect on a scenic vista?			X		The project site is located within a scenic combining district per the local zoning designation. The southern parcel cultivation area will be encroaching within the scenic vista along State Highway 29, however, the project scope will incorporate transplanting native Blue Oak trees for vegetative screening along the highway route to mask the cultivation site as a mitigation measurement.  *Figure 4. The scenic combining district (lime green) covers the western portion of the project parcel boundary*	1, 2, 3, 4, 6, 9

					AES-1: Prior to construction, the applicant shall provide a conservation and management plan of the oak woodland community. **Less than significant impact.**	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X	The proposed project is not expected to substantially damage scenic resources including historic buildings, rock outcroppings, or trees located within a state scenic highway. To alleviate the potential aesthetic impact along the scenic highway, the developer will screen the proposed cultivation area with native oak trees. See response I(a). **No impact.**	1, 2, 3, 4, 6, 9
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X		A portion of the project site will be located within the area zoned for scenic vistas, however, the proposed use is not expected to substantially degrade the existing visual character of the site and its surroundings. The developer will mitigate the aesthetic impact by transplanting native oak trees along the scenic route. See response I(a) **Less than significant impact.**	1, 2, 3, 4, 6, 9
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		X			The project has the potential to create additional light through exterior security lighting. A lighting plan showing fixture types and location is required and shall meet the County's recommended darkskies.org lighting. According to the project management plan, the exterior lighting will illuminate the proposed area such as loading areas and security will be fully shielded and directed downward. The proposed new light source from the proposed facilities is not expected to create substantial adverse effects to neighboring parcels and will be mitigated to less than significant impact with the following measures. **AES-2: An Outdoor Lighting Plan that meets the darkskies.org lighting recommendations shall be submitted for review and acceptance, or review and revision before cultivation.** **AES-3: All structures incorporating artificial lighting shall be equipped with blackout film/material to be used at night for the maximum light blockage to lessen the impact on the surrounding parcels and the dark skies. The applicant shall submit a Blackout Film/Materials Plan to the Community Development Department for review and approval before the issuance of any permits.** **AES-4: Security lighting shall be motion-activated and all outdoor lighting shall be shielded and downcast or otherwise positioned in a manner that will not shine a light or allow light glare to exceed the boundaries of a lot of records upon which they are placed.** **Less than significant with mitigation measures AES-1 through AES-4 added.**	1, 2, 3, 4, 5, 6, 9

II. AGRICULTURE AND FORESTRY RESOURCES ***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.*** *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?			X		The proposed cultivation site is in an area designated as 'Grazing Land" by the Farmland Mapping and Monitoring program. The proposed project will not convert farmland to non-agricultural use nor impact important farmland. Grazing Land is defined as the land on which the existing vegetation is suited to the grazing of livestock.  *Figure 5. Farmland Mapping and Monitoring Program designation for "grazing lands" (lime green with polka dots).* **No impact.**	1, 2, 3, 4, 5, 7, 8
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X	See Section II (a). The project does not conflict with zoning and the project property is not in a Williamson Act Contract. **No impact.**	1, 2, 3, 4, 5, 7, 8
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				X	The project site is zoned "RR" Rural Residential and is not zoned for forestland or timberland.	1, 2, 3, 4, 5, 7, 8

Government Code section 51104(g))?					**No impact.**	
d) Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			X		See response to Section II (c). The project would not result in the loss or conversion of forest land to non-forest use. The site location is not within an area designated as agriculture or timberland preserve. The project does consist of tree removal, however, tree removal will be taken into account and guidance of a forester to retain healthy trees and will remove dead/dying trees (see Attachment D). **Less than significant impact.**	1, 2, 3, 4, 5, 7, 8
III. AIR QUALITY *Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.* *Would the project:*						
a) Conflict with or obstruct implementation of the applicable air quality plan?		X			The project has some potential to result in short and long-term air quality impacts. Dust and fumes may be released as a result of site preparation of the cultivation area; and vehicular traffic, including delivery vehicles that would be contributors during and after site preparation/construction. Short-term construction emissions could include fugitive dust and other particulate matter, as well as exhaust emissions generated by earthmoving activities from the operation of tractors, tillers, etc., during site preparation. Construction emissions are caused by on-site or off-site activities. Onsite emissions principally consist of exhaust emissions (NOX, CO, ROG, PM10, and PM2.5) from heavy-duty construction equipment, motor vehicle operation, and fugitive dust from disturbed soil. Offsite emissions are caused by motor vehicle exhaust from delivery vehicles as well as worker commuter traffic, but they also include road dust (PM10). A few people using heavy equipment over approximately two weeks will be required for site preparation. Such low numbers of man-hour efforts would not generate significant vehicle emissions. Potential odors generated by the plants, particularly during harvest season, will be mitigated through passive means (separation distance), and other measures could be used to minimize impacts such as planting native flowering vegetation around the cultivation area. Implementation of mitigation measures would reduce air quality impacts to less than significant. There would be minimal soil disturbance from farming practices, given that the cultivation operation will involve imported soil in raised beds within wooden planters in the southern parcel and smart pots in the northern parcel (see Table 1). The soil will not be tilled for the above-ground cultivation of cannabis plants. **AQ-1: Prior to cultivation, the applicant shall submit an Odor Control Plan to the Community Development Department for review and approval, or review and revision.**	1, 2, 3, 4, 5, 10, 21, 24, 31, 36

					AQ-2: 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. **AQ-3: Construction and/or work practices that involve masonry, gravel, grading activities, vehicular and fugitive dust shall be managed by the use of water or other acceptable dust palliatives to mitigate dust generation during and after site development.** **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. The applicant shall regularly use and/or maintain the graveled area to reduce fugitive dust generations.** **Less than significant with mitigation measures AQ-1 through AQ-6 added.**	
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?			X		The cultivation activities will take place outdoors. Activities in outdoor cultivation areas are not anticipated to generate significant dust or other substances that will violate air quality regulations in this vicinity. The outdoor cultivation area is not anticipated to generate pollutants or other substances that will violate air quality in this vicinity. The County of Lake is an air attainment county. **Less than significant impact.**	1, 2, 3, 4, 5, 10, 21, 24, 31, 36
c) Expose sensitive receptors to substantial pollutant concentrations?		X			The operation as proposed is not expected to release a significant amount of pollutants. Sensitive receptors in the area include a very limited number of scattered houses and/or nearby residents. The nearest dwellings are located to the south with the nearest house about 800 feet south of the cultivation area. **Less than significant impact with mitigation measures AQ-1 through AQ-4 incorporated.**	1, 2, 3, 4, 5, 10, 21, 24, 31, 36
d) Result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people?		X			The cultivation area is a setback above what is required by the local ordinance standards in terms of the distances to dwellings and property lines. As a result, passive odor control (separation distance) is adequate for the outdoor cultivation area. The	1, 2, 3, 4, 5, 10, 21, 24, 31, 36

applicant is subject to manage dust and odor through surfacing the access road.

The applicant will provide contact information that will be distributed to neighbors within 100 feet of the property as is required by the Lake County Air Quality Management District.

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 5	82	Less than significant
Exhaust $PM_{2.5}$	1 to 5	54	Less than significant
Greenhouse Gasses (CO_2e)	2,000 to 3,000	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 2	82	Less than significant
$PM_{2.5}$ (total)	1 to 2	54	Less than significant
Greenhouse Gasses (CO_2e)	1 to 10	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

Figure 6. An air quality impact assessment was performed for this project by Natural Investigation Co (2019). Construction emissions and operational emissions were calculated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2 (California Air Pollution Control Officers Association, 2017). Model output and reports from CalEEMod are provided. To magnify any air quality impacts, the model was run using the worst-case scenarios, and emissions estimates are reported shown using the unmitigated emissions values.

Less than significant impact with mitigation measures AQ-1 through AQ-6 incorporated.

IV. BIOLOGICAL RESOURCES

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		X			The applicant provided a Biological Site Assessment, prepared by Natural Investigations Company, Inc. dated November 13, 2019, and updated/revised on October 3, 2020. The study area contains the following terrestrial vegetation community: Urban, Blue Oak-Foothill Pine, Blue Oak Woodland, Annual Grassland, and Mixed-Chaparral as designated wildlife habitat types by CDFW's Wildlife Habitat Relationship System (WHR).	1, 2, 3, 4, 5, 11, 12, 13, 16, 24, 29, 31, 32, 33

and Game or U.S. Fish and Wildlife Service?					**<u>Blue oak woodland.</u>** The blue oak woodland consists of an open canopy of blue oak (Quercus *douglasii*) with scattered gray pine (Pinus *sabiniana*) with an understory of annual grasses (Bromus spp., Avena, et al) and herbs and occasional common manzanita (Arctostaphylos *manzanita*). The blue oak woodland is found on ridges and slopes in the central and eastern portion of the study area. This vegetation can be classified as "71.020.00 Quercus *douglasii* woodland alliance (Allen et al. 1991)" or as the Holland Type "Blue oak - foothill pine". **<u>Chaparral</u>**. The slopes and ridges of the study area are vegetated with a dense cover of shrubs. The warm south-facing slopes are vegetated with chamise (Adenostoma *fasciculatum*) as the dominant shrub with infrequent buckbrush (Ceanothus *cuneatus*), Konocti manzanita (Arctostaphylos manzanita *elegans* CNPS List 1B.3), and common manzanita. This type of chaparral can be classified as "37.101.00 Adenostoma fasciculatum shrubland alliance" or as the Holland Type "Chamise chaparral". Wildlife Habitat Types. The habitat types found within the study area are classified as "Blue Oak-Foothill Pine" and "Chamise Redshank Chaparral" wildlife habitat types by CDFW's Wildlife Habitat Relationship System (WHR). Critical Habitat and Special-status Habitat. One special status plant, bent-flowered fiddleneck was identified as having the potential to occur within the study area, and possibly in the project area (see attachment E). This species utilizes annual grasslands, and other special-status plant species could occur. Project implementation will require the removal of natural habitats, including annual grassland. This is considered a potentially significant impact under CEQA. However, with the implementation of avoidance measures, impacts can be avoided. The study area contains suitable nesting habitat for various bird species because of the presence of trees. However, no nests or nesting activity was observed in the project area during the field survey. "Take" of an active migratory bird's nest would be considered a significant impact under CEQA. Avoidance measures of nesting birds are provided below to reduce the potential impact to a less than significant level. **BIO-1: All waste and by-products shall be kept in plastic drums with tight-fitting lids so that water is not able to make contact with the contents and potentially leach into the environment.** **BIO-2: Due to the presence of suitable habitat for bent-flowered fiddleneck and because the biological survey was performed outside of the appropriate blooming period, a botanical survey shall be performed by a qualified biologist during the appropriate blooming period (March-June) to determine the presence or absence of the species before any**	

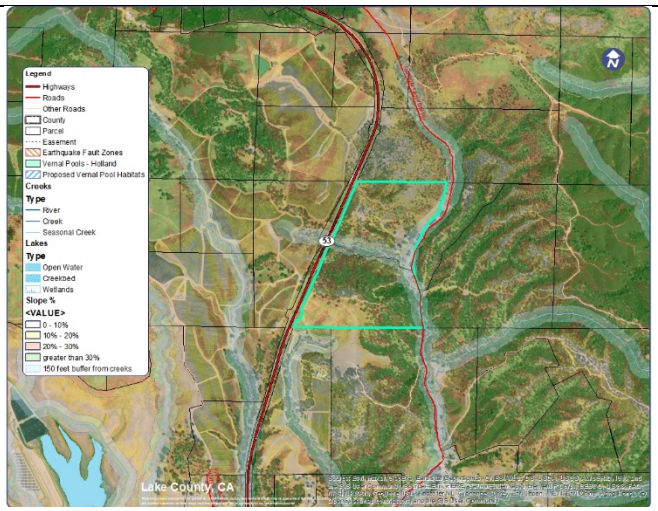
					project related ground disturbance occurs. If the plant is not detected during the survey, then no further measures are required. If the plant is detected within the area, the applicant shall notify the county, and shall submit a CNDDB record. The project area shall be adjusted to avoid impacts to individual plants and a buffer of at least 25 feet in coordination with the qualified biologist, or CDFW should be consulted to develop appropriate mitigation measures. **BIO-3: If construction activities would occur during the nesting season (typically February through August), 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 one week of the commencement of ground disturbance in a survey area that extends 500 feet from proposed construction areas. If active nests are identified in these areas, a professionally qualified biologist experienced with the monitoring and avoidance of bird nesting territories, CDFW, and/or USFWS should be consulted to develop measures to avoid "take" of active nests before the initiation of any construction activities. Avoidance measures may include the establishment of a buffer zone using construction fencing, nest monitoring by a qualified biologist, the postponement of vegetation removal until after the nesting season, postponement until after a qualified biologist has determined that the young have fledged and are independent of the nest site, or a combination thereof.** **BIO-4: If there are the presence of special-status bird species, the establishment of a buffer zone using construction fence, postponement of vegetation removal until after the nesting season, postponement until after a qualified biologist has determined that the young have fledged and are independent of the nest site, or a combination thereof may be implemented.** **BIO-5: Impacts to the unidentified species of fiddleneck shall be avoided by the creation of a 25-foot buffer around the population and moving the proposed boundary of the phase 2 cultivation compound as shown in the Botanical Survey Report.** **Less than significant impact with mitigation measures BIO-1 through BIO-5 incorporated.**	
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?		X			According to Biological Resources Assessment (BRA), the study area is not within any designated listed species' critical habitat. The study area contains one terrestrial special-status habitat: riparian corridors along the watercourses. Undisturbed woodland and chaparral habitat may support a variety of special-status species. The project areas were designed to avoid all watercourses and establish adequate buffers. **BIO-6: Pesticides and fertilizer storage facilities shall be located outside of the Riparian Corridor setbacks for**	1, 2, 3, 4, 5, 11, 12, 13, 16, 17, 29, 31, 32, 33, 34

					structures. Pesticide and fertilizer storage facilities shall not be located within 100 feet of a wellhead or 50 feet of identified wetlands. **BIO-7: The use of water provided by a public water supply, unlawful water diversions, transported by a water hauler, bottled water, a water vending machine, or a retail water facility is prohibited. The utilization of water that has been or is illegally diverted from any lake, springs, wetland, stream, creek, vernal pool, and/or river is prohibited. The applicant shall not engage in any unlawful or unpermitted drawing of surface water.** **BIO-8: The applicant shall maintain all necessary permits from the Central Valley Regional Water Quality Control Board and submit written verification to the Community Development Department. A copy of all permits shall be included in the Annual Performance Report.** **Less than significant with mitigation measures BIO-1 through BIO-8 incorporated.**	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X		There are three Class III watercourses and one Class II watercourse within the study area. <u>There are no wetlands within the study area.</u> Project implementation would not directly impact any aquatic habitats. However, potential adverse indirect impacts to water resources could occur during construction by increased erosion and sedimentation in receiving water bodies due to soil disturbance. As the total area of ground disturbance from the installation of the cultivation operation is greater than 1 acre, the cultivator may need to enroll for coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 2009-0009-DWQ). The proposed project is compliant with the setback requirements of Cannabis Cultivation Order WQ 2019-0001-DWQ. Ongoing compliance with this Order will ensure that cultivation operations will not significantly impact water resources by using a combination of Best Management Practices (BMPs), buffer zones, sediment and erosion controls, inspections and reporting, and regulatory oversight. Therefore, no mitigation is required. It is recommended that a formal delineation of jurisdictional waters be performed before construction work, or ground disturbance is performed within 50 feet of any wetland or channel. The study area does not have a significant erosion potential, because slopes are not steep, areas of ground disturbance are small, and vegetated buffers are present. **Less than significant impact.**	1, 2, 3, 4, 5, 11, 12, 13, 16, 17, 21, 24, 29, 31, 32, 33, 34
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with an established native resident or migratory wildlife corridors, or			X		Although no mapped wildlife corridors (such as the California Essential Habitat Connectivity Area layer in CNDDB) exist within or near the study area, the open space and the stream corridors in the study area facilitate animal movement and migrations. Additionally, the cattle under crossing on the western border of the study area under	1, 2, 3, 4, 5, 11, 12, 13, 16, 17, 21, 24, 29, 31,

impede the use of native wildlife nursery sites?					Highway 53 is likely used by several species, including deer. Although the study area may be used by wildlife for movement or migration, the project would not have a significant impact on this movement because it would not block it and the majority of the property boundary would still be available. Implementation of the project will not substantially interfere with the movement of any native resident or migratory fish, wildlife species, established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. **Less than significant impact.**	32, 33, 34
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X	Implementation of the project does not conflict with any county or municipal policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No known commercial tree species are being removed for this project. If tree felling is performed in the future, a pre-construction nesting bird survey is recommended. The local ordinances require a conservative buffer to minimize impact to biological resources such as watercourses. The project also consists of best management practices, as well as, incorporating biologist recommendations to protect biological resources. Also, tree removal will be minimal and will consist of the removal of a few old, unhealthy non-native trees, small trees, and limbing. **No impact.**	1, 2, 3, 4, 5, 11, 12, 13, 16, 17, 21, 24, 29, 31, 32, 33, 34
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or another approved local, regional, or state habitat conservation plan?				X	The project does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or another approved governmental habitat conservation plan. The study area is not within the coverage area of any adopted Habitat Conservation Plan or Natural Community Conservation Plan. **No impact.**	1, 2, 3, 4, 5, 11, 12, 13, 16, 24, 29, 31, 32
V. CULTURAL RESOURCES *Would the project:*						
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				X	Since the Office of Historic Preservation has determined that any building or structure 45 years or older may be of historical value, if the project area contains such properties, it is recommended that before the commencement of project activities, a qualified professional familiar with the architecture and history of Lake County conduct a formal CEQA evaluation. The project site does not have any structures that may be of historical value. Therefore, there is no potential for substantial adverse change in historical resources. **No impact.**	1, 3, 4, 14, 15, 38
b) Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?		X			According to the California Historical Resources Information System (CHRIS), a study #S-25036 (Flaherty 2001), covering approximately 100% of the proposed project area, identified cultural resources within the project parcels. The proposed project parcel may contain or is adjacent to an archaeological site, referred to as JR1, identified by Flaherty in 2001; but it was not formally recorded. A Cultural Resources Assessment	1, 3, 4, 14, 15, 38

					for the Cannabis Cultivation Operation at 1000 and 1270 Highway 53, Clearlake, CA was conducted by Tim Spillane and Phil Hanes (2019, 2020). Based on negative findings of the CHRIS and SLF searches, as well as the results of the field survey at the proposed project site location, there is no indication that the project will impact any unique archeological resources as defined under CEQA Section 15064.5, unique archeological resources as defined under CEQA Section 21083.2(g) or known Native American resources. Therefore, no further cultural resources work is recommended at this time. **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 local overseeing Tribe(s) shall be notified, and a qualified archaeologist retained 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, they shall be treated in accordance with Public Resources Code Section 5097.98 and with California Health and Safety Code section 7050.5.** **CUL-2: All employees shall be trained in recognizing potentially significant artifacts that may be discovered during the ground disturbance. If any artifacts or remains are found, the local tribe shall immediately be notified; a licensed archaeologist shall be notified, and the Lake County Community Development Director shall be notified of such finds.** **CUL-3: In the event of an unanticipated discovery of cultural resources during the implementation of the project, all work must be halted within 100 feet (30 meters) of the find and a qualified archaeologist (36 CFR Part 61) notified so that its potential significance can be assessed.** **Less than significant impact with mitigation measures CUL-1 through CUL-3 added.**	
c) Disturb any human remains, including those interred outside of formal cemeteries?		X			See response section V(b). Although unlikely, the discovery of human remains is always a possibility. 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 decided of origin and disposition of the remains pursuant to PRC Section 5097.98. **CUL-4: The County Coroner shall be notified of the find immediately upon discovery of any human remains. 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 Descendant (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.**	1, 3, 4, 14, 15, 38

					Less than significant impact with mitigation measures CUL-1 through CUL-4 added.	
VI. ENERGY *Would the project:*						
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?			X		The proposed project will consist of outdoor cultivation areas. However, electric power, to be used for lighting, electrical equipment, and surveillance will be generated from the photovoltaic array with batteries. PG&E electrical service may also be extended to the site. Any new buildings, alterations, additions, and commercial buildings in California must comply with the Building Energy Efficiency Standards according to Title 24, Part 6 of the California Code of Regulation. **Less than significant impact.**	1, 3, 4, 5
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X		The proposed project will consist mostly of outdoor cannabis cultivation. The project scope will utilize minimal energy use. The proposal will not conflict with or obstruct, a state or local plan for renewable energy or energy efficiency. See response VI (a). **Less than significant impact.**	1, 3, 4, 5
VII. GEOLOGY AND SOILS *Would the project:*						
a) Directly or indirectly cause potential 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?			X		<u>Earthquake Faults</u> There are no mapped earthquake faults on or adjacent to the subject site. <u>Seismic Ground Shaking and Seismic–Related Ground Failure, including liquefaction.</u> The project property does not contain any mapped unstable soils. It appears unlikely that ground shaking, ground failure, or liquefaction will occur on this property in the future. <u>Landslides</u> There is little to no risk of landslides based on the parcel's slope, which is fairly sloped surrounding the project area. However, the project is not expected to elevate the risk of landslides on the property as there is no extensive grading proposed.	1, 2, 3, 4, 5, 6, 7, 10, 17, 18, 19, 20, 21, 24, 25, 30

					 *Figure 7. The percentage slope of the parcel showing various slope: 0-10% (shown in white), 10-20% (shown in yellow), 20-30% (shown in orange), and greater than 30% (shown in green)* **Less than significant impact.**	
b) Result in substantial soil erosion or the loss of topsoil?		X			**Konocti-Hambright Complex (153)**, 15 to 30 percent slopes. The Konocti soil is moderately deep and well-drained. It formed in material weathered from basalt. Typically, 10 percent of the surface is covered with cobbles and stones. The surface layer is brown gravelly loam 4 inches thick. The subsoil is yellowish red very stony clay loam 19 inches thick. Hard basalt is at a depth of 29 inches. Permeability of the Konocti soil is moderately slow. Available water capacity is 2 to 5 inches. Effective rooting depth is 20 to 40 inches. Surface runoff is rapid, and the hazard of erosion is severe. The Hambright soil is shallow and well-drained. It formed in material weathered from basalt. Typically the surface layer is reddish-brown very gravelly loam 4 inches thick. The subsoil is reddish-brown very gravelly loam 12 inches thick. Fractured basalt is at a depth of 16 inches. The permeability of the Hambright soil is moderate. Surface runoff is rapid, and the hazard of erosion is moderate. **Phipps Complex (195)**, 5 to 15 percent slopes. The Phipps clay loam is very deep and well-drained. It formed in alluvium derived from mixed rock sources. Typically, the surface layer is pale brown clay loam about 7 inches thick. The upper 11 inches of the subsoil is pale brown and light yellowish-brown clay loam, and the lower 24 inches is light yellowish-brown clay. The substratum to a depth of 60 inches or more is light yellowish-brown clay loam. The permeability of the Phipps clay loam is slow. Available water capacity is 8 to 12 inches. Effective rooting depth is 60 inches or more. Surface runoff is rapid, and the hazard of erosion is moderate. The shrink-swell potential is high. **Phipps Complex (196)**, 15 to 30 percent slopes. The Phipps loam is very deep and well-drained. It formed in alluvium derived from mixed rock sources. Typically, the surface layer is brown loam about 6 inches thick. The subsoil is brown	1, 2, 3, 4, 5, 6, 7, 10, 17, 18, 19, 20, 21, 24, 25, 30

gravelly clay loam about 15 inches thick. The substratum to a depth of 73 inches is brown and yellowish-brown gravelly and very gravelly sandy clay loam. In some areas, the surface layer is sandy clay loam. Permeability of this Phipps soil is slow. Available water capacity is 6.o to 7.5 inches. Effective rooting depth is 60 inches or more. Surface runoff is rapid, and the hazard of erosion is severe. The shrink-swell is potential is high.

Sobrante-Guenoc-Hambright Complex (218), 2 to 15 percent slopes. The Sobrante soil is moderately deep and well-drained. It formed in material weathered from basalt. Typically, about 10 percent of the surface is covered with stones and boulders as much as 3 feet in diameter. The permeability of the Sobrante soil is moderate. Surface runoff is medium, and the hazard of erosion is moderate. The Guenoc soil is moderately deep and well-drained. Permeability of the Guenoc soil is moderately slow. Surface runoff is medium, and the hazard erosion is moderate. The Hambright soil is shallow and well-drained. The permeability of the Hambright soil is moderate. Surface runoff is medium, and the hazard of erosion is slight.

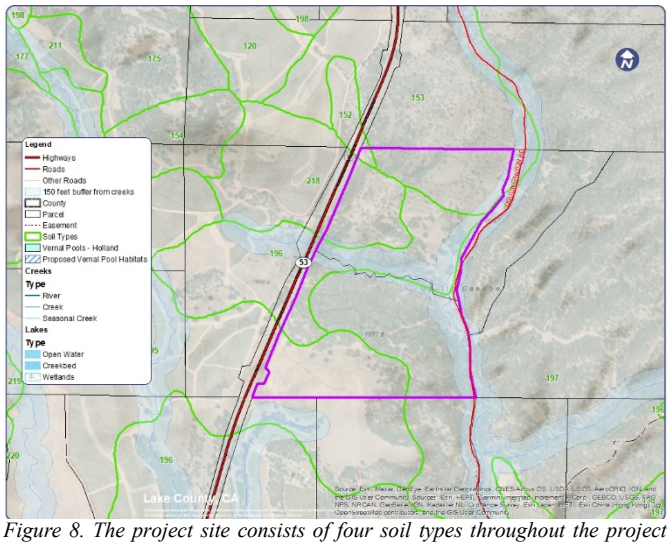


Figure 8. The project site consists of four soil types throughout the project property, however, the cultivation site will take place on three soil types: 195 (southern cultivation site); and 218 and 196 (northern cultivation area)

GEO-1: Prior to any ground disturbance, the permittee shall submit erosion control and sediment plans to the Water Resource Department and the Community Development Department for review and approval. Said erosion control and sediment plans shall protect the local watershed from runoff pollution through the implementation of appropriate Best Management Practices (BMPs) in accordance with the Grading Ordinance. Typical BMPs include the placement of straw, mulch, seeding, straw wattles, silt fencing, and the planting of native vegetation on all disturbed areas. No silt, sediment, or other materials exceeding natural background levels shall be allowed to flow from the project

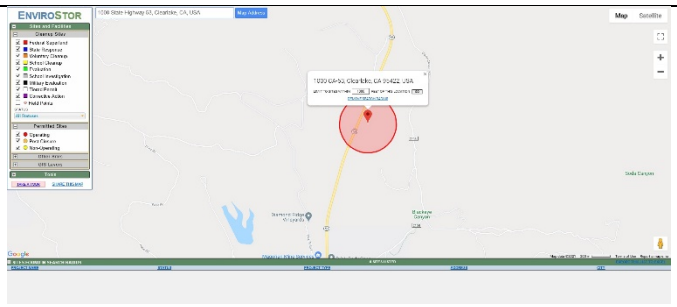
					area. The natural background level is the level of erosion that currently occurs from the area in a natural, undisturbed state. Vegetative cover and water bars shall be used as permanent erosion control after project installation. **GEO-2: Excavation, filling, vegetation clearing, or other disturbance of the soil shall not occur between October 15 and April 15 unless authorized by the Community Development Department Director. The actual dates of this defined grading period may be adjusted according to weather and soil conditions at the discretion of the Community Development Director.** **GEO-3: The permit holder shall monitor the site during the rainy season (October 15 – May 15), including post-installation, application of BMPs, erosion control maintenance, and other improvements as needed.** **GEO-4: If greater than fifty (50) cubic yards of soils are moved, a Grading Permit shall be required as part of this project. The project design shall incorporate Best Management Practices (BMPs) to the maximum extent practicable to prevent or reduce the discharge of all construction or post-construction pollutants into the County storm drainage system. BMPs typically include scheduling of activities, erosion and sediment control, operation and maintenance procedures, and other measures in accordance with Chapters 29 and 30 of the Lake County Code.** **Less than significant impact with mitigation measures GEO-1 through GEO-4 incorporated.**	
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?				X	The cultivation site is mapped as "generally stable" soil. The project is not expected to result in on- or off-site landslide, spreading, subsidence, liquefaction, or collapse. The proposed site is located within undisturbed land use and the cultivation sites are in areas with less than 20 percent slope and will take place in above-ground pots and planting beds. **No impact.**	1, 2, 3, 4, 5, 6, 7, 10, 17, 18, 19, 20, 21, 24, 25, 30
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?		X			The soil within the cultivation area is designated as **Konocti-Hambright Complex (153)**, **Phipps Complex (195)**, **Phipps Complex (196)**, and **Sobrante-Guenoc-Hambright Complex (218)**. Most soil is used mainly for livestock grazing, firewood production, wildlife habitat, and watershed. Some soil units within the property are used for homesite development with some limitations such as slow permeability, high shrink-swell potential, and low load-bearing capacity. However, no structures that require a building permit has been proposed. **GEO-5: Prior to operation, all accessible compliant parking areas, routes of travel, building access, and/or bathrooms shall meet all California Building Code Requirements.**	1, 2, 3, 4, 5, 6, 7, 10, 17, 18, 19, 20, 21, 24, 25, 30

					GEO-6: Prior to operation, all structure(s) used for commercial cultivation shall meet accessibility standards. Please contact the Lake County Community Development Department's Building Division for more information. **Less than significant impact with mitigation GEO-1 through GEO-6 incorporated.**	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?			X		**Konocti-Hambright Complex (153)** slope limits installation of septic tank absorption fields. Absorption lines should be installed on the contour. Shallow depth to bedrock in Hambright soil is a major limitation for septic tank absorption fields. The limitations of moderate depth and moderately slow permeability of the Konocti soil can be minimized by increasing the size of the absorption fields. The limitations of moderate depth and moderately slow permeability of the Konocti soil can be minimized by increasing the size of the absorption field or by using a specially designed sewage disposal system. **Phipps Complex (195)** the limitation of slow permeability can be minimized by increasing the size of the absorption field or by using a specially designed septic system. The shrink-swell potential and low load-bearing capacity of the Phipps clay loam should be considered when designing and constructing foundations, concrete structures, and paved areas. **Sobrante-Guenoc-Hambright Complex (218)** shallow depth to bedrock in the Hambright soil is a major limitation for septic tank absorption fields. The limitations of moderate depth to bedrock and moderately slow permeability of the Guenoc soil can be minimized by increasing the size of the absorption field or by using a specially designed sewage disposal system. The applicant proposes portable toilets for the project. However, if the applicant plans to propose a permanent restroom, the applicant should consider the following to incorporate in the proposed permanent structures for the restroom. **Less than significant impact.**	1, 2, 3, 4, 5, 6, 7, 10, 17, 18, 19, 20, 21, 24, 25, 30
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X		The proposed project will not directly or indirectly destroy unique paleontological resources or unique geologic features, and there are currently mapped or known on the sites to avoid the area. **Less than significant impact.**	1, 2, 3, 4, 5, 6, 7, 10, 17, 18, 19, 24, 30
VIII. GREENHOUSE GAS EMISSIONS *Would the project:*						
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X		In general, greenhouse gas emissions can be generated by construction activities and post-construction activities. No significant construction activities will occur on the site (site prep and small storage structures) and there are minimal greenhouse gasses that could result from outdoor and indoor cultivation activities. The outdoor cultivation area will not have specific greenhouse gas-producing elements; no ozone will result, and the cannabis plants will, to a small degree, help	1, 3, 4, 5, 24, 29, 30, 31, 32, 34, 36

					capture carbon dioxide. **Less than significant impact.**	
b) Conflict with an applicable plan, policy, or regulation adopted to reduce the emissions of greenhouse gases?				X	This project will not conflict with any adopted plans or policies for the reduction of greenhouse gas emissions**.** The County of Lake is an 'air attainment' County and does not have any established thresholds of significant greenhouse gases. **No impact.**	1, 3, 4, 5, 21, 24, 29, 30, 31, 32, 34, 36
IX. HAZARDS AND HAZARDOUS MATERIALS *Would the project:*						
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X			The proposed project will use organic pest control and fertilizers which will be used according to the instructions on the label or Material Safety Data Sheet. Chemicals will be stored in a stormproof shed or Conex container so that stormwater is not contaminated. Chemicals will be properly labeled and open containers sealed when stored. Liquid or granular fertilizers will be mixed with water in mixing tanks; plastic tubing and driplines will then be used to gravity-feed the to the planting stations or delivered via portable containers. Fertilizers and soil amendments may also be applied directly to the plants by shovel or by using a spray tank mounted to a backpack, all-terrain vehicle, or a garden cart. Fertilizers will be stored in a stormproof shed or Conex container so that stormwater is not contaminated. The following fertilizer application and storage protocols will be implemented: • Comply with all label directions. • Store chemicals in a secure building or shed to prevent access by wildlife. • Contain any chemical leaks and immediately clean up any spills. • Apply the minimum amount of product necessary. • Prevent offsite drift. • Do not apply chemicals when pollinators are present. Materials associated with the proposed cultivation of commercial cannabis, such as gasoline, pesticides, fertilizers, alcohol, hydrogen peroxide, and equipment emissions may be considered hazardous if released into the environment. The applicant has stated that all potentially harmful chemicals will be stored and locked in a secured building on site. The project must comply with Section 41.7 of the Lake County Zoning Ordinance that specifies that 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 the reduce the hazard of fire and explosion and provide adequate firefighting and fire suppression equipment. **HAZ-1: All equipment shall be maintained and operated in**	1, 3, 4, 5, 10, 13, 21, 24, 25, 29, 31, 32, 33, 34, 36

					a manner that minimizes any spill or leak of hazardous materials. Hazardous materials and contaminated soil shall be stored, transported, and disposed of in a manner that is consistent with applicable local, state, and federal regulations. **Less than significant impact with mitigation measures HAZ-1 incorporated**	
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?		X			The hazard analysis in the project management plan (attachment A) analyzes only the cultivation, harvesting, and processing of cannabis and will address the following biological, chemical, and physical hazards: **<u>Biological Hazards</u>** For unprocessed cannabis, the primary biological hazard is microbiological, and specifically, fungal growth. In rare instances, some cannabis crops can be contaminated with fecal coliforms that derive from soils or improper hygiene. For cultivation staff, the biological hazards are primarily snake bites, insect and arachnid strings bites, and weather exposure. Areas inside cultivation compounds can be graveled or pave to suppress dust and mud. Live traps may be deployed to remove rodents from operational areas. **<u>Chemical Hazards</u>** The primary hazards are chemical residues: fertilizers; insecticides; and fungicides. Petroleum product usage could also lead to contamination of cannabis products or soil. For cultivation staff, the chemical hazards are exposure to hazardous or toxic chemicals or irritants. Chemical contamination can be reduced by the implementation of Best Management Practices, which are identified in other subsections of this plan. The use of organic certified chemicals will also reduce this hazard significantly. **<u>Physical Hazards</u>** Physical hazards can include material fragments such as stone, glass, metal, or hair. Such contamination could occur from a variety of sources, such as fugitive dust, dirty containers during transport, etc. For cultivation staff, hazards are cuts or punctures by sharp objects, crushing by falling objects weather exposure, and structures fires or wildfire. The hazards can be reduced by keeping the facility being kept as clean as possible. Disposable coveralls can be used to increase sanitation levels. Plastic sheeting can be used when a raw product must be handled or stored. Equipment, such as scissors and saws, will be sanitized with ethanol. Additional hazards can be reduced using personal protective equipment. In general, additional mitigations measures listed will be required to less than significant: **HAZ-2: Prior to operation, the applicant shall schedule an inspection with the Lake County Code Enforcement Division within the Community Development Department to verify adherence to all requirements of Chapter 13 of the Lake County Code, including but not**	1, 3, 4, 5, 10, 13, 21, 24, 25, 29, 31, 32, 33, 34, 36

					limited to adherence with the Hazardous Vegetation requirements. **HAZ-3: 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-4: 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-5: 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-6: 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-7: 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, then a Hazardous Materials Inventory Disclosure Statement/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.** **Less than significant impact with incorporated mitigation measures HAZ-1 through HAZ-7.**	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X	The proposed project is not located within one-quarter mile of an existing or proposed school. **No impact.**	1, 3, 4, 5, 10, 13, 21, 24, 25, 29, 31
d) Be located on a site that 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				X	The project site is not listed as a site containing hazardous materials in the databases maintained by the Environmental Protection Agency (EPA), the California Department of Toxic Substance, and the State Water Resources Control Board on the EnviroStor Database. There are no hazardous material sites within 1,000 feet radius from the project site.	1, 3, 4, 5, 10, 13, 21, 24, 25, 29, 31, 32, 33, 34, 36

or the environment?					 **No impact.**	
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?				X	The project is not located within an airport land use plan nor is it within two miles from a public airport. The proposed project will not result in an increased safety hazard or excessive noise for people residing or working in the project area. **No impact.**	1, 3, 4, 5, 20, 22
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X	The project would not impair or interfere with the adopted emergency response or evacuation plan. **No impact.**	1, 3, 4, 5, 20, 22
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?			X		The site is mapped as having a moderate to high fire hazard. The applicant will adhere to all Federal, State, and local fire requirements/regulations for setbacks and defensible space; these setbacks are applied at the time of building permit review. **Less than significant impact.**	1, 3, 4, 5, 20, 22
X. HYDROLOGY AND WATER QUALITY *Would the project:*						
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?		X			The site is not served by an existing onsite septic system If a new septic system is proposed it must adhere to all federal, state, and local regulations regarding wastewater treatment and water usage requirements. Portable toilets are to be provided for facility staff. The toilet will be maintained for facility staff and the frequency of service will be weekly or as needed. **HYD-1: The applicant shall adhere to all Federal, State, and Local regulations regarding wastewater treatment and water usage requirements.** **HYD-2: Before this permit having any force or effect, the permittee(s) shall adhere to the Lake County Division of Environmental Health requirements regarding on-site wastewater treatment and/or potable water requirements. The permittee shall contact the Lake County Division of Environmental Health for details.** **Less than significant impact with mitigation measures HYD-1 and HYD-2 incorporated.**	1, 3, 4, 5, 13, 21, 24, 25, 29, 31, 32, 33, 34

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?		X			The property in the subwatershed "Burns Valley / Frontal Clear Lake" (12-digit HUC code is 180201160310). This subwatershed is part of the upper Cache Creek Watershed. The watershed of the surrounding area is relatively pristine, with south-facing slopes supporting chaparral, grasslands, and oak savannas, while the north-facing slopes are dense with mixed oak and conifer forests and woodlands. The cannabis cultivation operations will use water from existing permitted wells. The two existing wells in the northern parcel have a combined yield of over 30 GPM. The water will be pumped and stored in existing cisterns and new water tanks located near the cultivation sites. Water will be delivered to a drip irrigation system via a pressure tank. Daily water consumption estimates were used from the CalCannabis Environmental Impact Report (CDFA 2017): • 500 Cannabis plants per acre, each requiring 6 gallons per day = 3,000 gallons per day for an acre of cannabis canopy. This is equivalent to 2.1 gallons per minute for an acre of Cannabis canopy. The County will currently allow up to 5 acres of Cannabis canopy for this 106-acre property. Thus, the daily requirement is 10.5 gallons per minute for 5 acres of Cannabis canopy. The yield of the onsite wells is more than 100 gallons per minute. Using the value of 3,000 gallons per day for 1 acre of Cannabis canopy, and 120 growing days, the estimated annual water demand is estimated at 1,800,000 gallons per year for the proposed cultivation operation. Water conservation practices will be implemented, including some combination of the following strategies and actions: • the use of driplines and drip emitters (instead of spray irrigation) • mulching to reduce evaporation • water application rates modified from data from soil moisture meters and weather monitoring • shut off valves on hoses and water pipes • daily visual inspections of irrigation systems • immediate repair of leaking or malfunctioning equipment • water metering and budgeting Water conservation practices will be implemented to prevent discharges from water supply equipment. Water application rates will be minimized as necessary to prevent runoff and ponding and water equipment leaks will be repaired immediately: potable water/irrigation to manage the potential pollutants generate during discharges from irrigation lines and unplanned discharges from water sources. Irrigation system groundwater from the well will be delivered to the cultivation compound via an electric pump, holding	1, 3, 4, 5, 13, 21, 24, 25, 29, 31, 32, 33, 34

					tanks, and gravity using PVC pipe. Water filtration systems may also be installed. At each planting station, black polyvinyl flexible tubes and drip emitters will be used to irrigate the plants. Liquid fertilizers may be injected into the irrigation system using a mobile system or a 300-gallon. **HYD-3: The applicant shall prepare a groundwater management plan to ensure that the groundwater resources of the County are protected used and managed sustainably. The plan would support the Integrated Regional Water Management Plan and include an inventory of groundwater resources in the County and a management strategy to maintain the resource for the reasonable and beneficial use of the people and agencies of the County.** **HYD-4: 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.** **Less than significant impact with mitigation measures HYD-3 through HYD-4 incorporated.**	
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 which would: i) Result in substantial erosion or siltation on- or off-site; ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site; iii) Create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial		X			The applicant has stated that the total cultivation area is to be up to 20 acres in size, and the canopy areas will total 5 acres in land area between the two parcels. An observation station for visual monitoring of sediment pollution will be established at the cultivation sites (see attachment A). These stations are to be inspected regularly as part of the monitoring plan. If sediment is transported, the erosion control plan should be re-evaluated, and changes made to increase the effectiveness of erosion and sediment BTPC measures. The following are recommended maintenance activities: • For drainage swales, remove any sediment buildup and distribute sediment lightly over vegetated areas to increase soil fertility • Keep vegetation trimmed in drainage swales so that flow is not overly restricted • For sediment traps, remove any sediment buildup and distribute sediment lightly over vegetated areas to increase soil fertility • Remove any litter from drainage swales and sediment traps and dispose of litter properly • Add gravel to unpaved roads, as needed, to armor them • Add seed mix (native grass and wildflower species) to bare areas to armor soil with vegetation	1, 3, 4, 5, 13, 21, 24, 25, 29, 31, 32, 33, 34

additional sources of polluted runoff; iv) Impede or redirect flood flows?					**HYD-5: Prior to construction, the applicant shall provide a new site plan for the property to show all dimensions and setbacks to meet all federal, state, and local regulations and conform to all building codes.** **Less than significant impact with mitigation measure HYD-5 incorporated.**	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X		The location is designated under flood zone "D" for undetermined, but possible flooding on the project parcel. The project parcel is not in any tsunami or seiche zone. Further, all chemicals including pesticides, fertilizers, and other potentially toxic chemicals shall be stored in the secondary container and higher location that will not create potential risks during an event of a flood. **Less than significant impact.**	1, 3, 4, 5, 13, 21, 23, 24, 25, 29, 31, 32, 33, 34
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?		X			The applicant will install straw wattles for sediment control, however, no specific water quality control plan was provided by the applicant (none are required by the county), and there is no threshold in Lake County for groundwater depletion or baseline for sustainable groundwater. The burden of the applicant is to be able to provide adequate water for their cannabis cultivation sites. See response to section X (a)(b). **Less than significant impact with mitigation measures HYD-1 through HYD-4 incorporated.**	1, 3, 4, 5, 10, 13, 21, 23, 24, 25, 29, 31, 32, 33, 34
XI. LAND USE AND PLANNING *Would the project:*						
a) Physically divide an established community?				X	The proposed project site would not physically divide an established community. **No impact.**	1, 3, 4, 5, 6, 35
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?				X	This project is consistent with the Lake County General Plan, the Shoreline Communities Area Plan, and the Lake County Zoning Ordinance. The property is zoned "RR" Rural Residential, which is a land-use zone that Article 27 of the Lake County Zoning Ordinance allows commercial cannabis cultivation in. The project will not conflict with any land-use plan. **No impact.**	1, 3, 4, 5, 20, 21, 22, 27, 28
XII. MINERAL RESOURCES *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?				X	This site contains no mapped mineral resources. **No impact.**	1, 3, 4, 5, 26
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific				X	Neither the County of Lake's General Plan, the Shoreline Communities Area Plan nor the Lake County Aggregate Resource Management Plan designates the project site as being a locally important mineral resource recovery site.	1, 3, 4, 5, 26

plan, or other land-use plan?					**No impact.**	
XIII. NOISE *Would the project result in:*						
a) 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?		X			Short-term increases in ambient noise levels to uncomfortable levels could be expected during project construction. Increased traffic flow can result in a permanent increase in noise levels, however, the increase should not be substantial that it will create a nuisance to the surrounding areas. Mitigation measures will limit and/or decrease these noise levels to an acceptable level. **NOI-1: All construction activities including engine warm-up shall be limited Monday through Friday, between the hours of 7:00 a.m. and 7:00 p.m. 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 7:00 a.m. to 10:00 p.m. and 45 dBA between the hours of 10:00 p.m. to 7:00 a.m. within residential areas as specified within Zoning Ordinance Section 21-41.11 (Table 11.1) at the property lines.** **NOI-3: The operation of the air filtration system shall not exceed levels of 57 dBA between the hours of 7:00 a.m. to 10:00 p.m. and 50 dBA from 10:00 p.m. to 7:00 a.m. within residential areas as specified within Zoning Ordinance Section 21-41.11 (Table 11.2) measured at the property lines.** **Less than significant impact with mitigation measures NOI-1 through NOI-3 incorporated.**	1, 3, 4, 5, 13
b) Generation of excessive ground-borne vibration or ground-borne noise levels?				X	The project is not expected to create unusual ground-borne vibration due to facility operation. The low-level truck traffic during construction and deliveries would create a minimal amount of ground-borne vibration. **No impact.**	1, 3, 4, 5, 13
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			X		The project is not expected to expose an increased number of people working in the project area to excessive noise levels. The project is not located within the vicinity of a private airstrip or an airport land use plan, within two miles of a public airport or public use airport. **Less than significant impact.**	1, 2, 3, 4, 5, 6, 24
XIV. POPULATION AND HOUSING *Would the project:*						
a) Induce substantial unplanned population growth			X		The project is anticipated to induce population growth to the area through employment, however, it is not expected to be	1, 3, 4, 5

in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through the extension of roads or other infrastructure)?					substantial the increased employment will be approximately two additional workers. **Less than significant impact.**	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X	No housing will be displaced as a result of the project. **No impact.**	1, 3, 4, 5
XV. PUBLIC SERVICES *Would the project:*						
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times or other performance objectives for any of the public services: - Fire Protection? - Police Protection? - Schools? - Parks? - Other Public Facilities?				X	The project does not propose housing or other uses that would necessitate the need for new or altered government facilities. 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. **No impact.**	1, 3, 4, 5, 13, 17, 20, 21, 22, 23, 24, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37
XVI. RECREATION *Would the project:*						
a) Would the projected 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?				X	The project will not have any impact on existing parks or other recreational facilities**.** **No impact.**	1, 3, 4, 5
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				X	This project will not necessitate the construction or expansion of any recreational facilities. **No impact.**	1, 3, 4, 5
XVII. TRANSPORTATION *Would the project:*						
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit,				X	The proposed project site is accessed from State Highway 53, connecting to Junction Plaza moving south into Ogulin Canyon Road. A minimal increase in traffic is anticipated due to construction, maintenance, and weekly and/or monthly	1, 3, 4, 5, 9, 20, 22, 27, 28, 35

roadways, bicycle lanes, and pedestrian paths?					incoming and outgoing deliveries through the use of small vehicles only. The project will not conflict with any program, plan, ordinance, or policy addressing the circulation system. **No impact.**	
b) For a land-use project, would the project conflict with or be inconsistent with CEQA guidelines section 15064.3, subdivision (b)?			X		The project may employ 10 employees during the peak growing season annually. Vehicle trips generated by potential employees will unlikely cause any substantial adverse impact on transportation. It is undetermined the distance of travel attributable to the project. However, this project is not primarily used as a transportation-related service. Significant impacts are not anticipated and the project is consistent with 15064.3 (b). See Response to Section XVII (a). **Less than significant impact.**	1, 3, 4, 5, 9, 20, 22, 27, 28, 35
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X		Prior to construction, the applicant will meet all State Responsibility Area road standards (PRC 4290/4291). The applicant will not substantially increase hazards but will improve the road by widening the driveway access as part of the condition to cultivate commercial cannabis when new or existing structures are involved in a new use permit. **Less than significant impact.**	1, 3, 4, 5, 9, 20, 22, 27, 28, 35
d) Result in inadequate emergency access?			X		See response in section XVII (c). **Less than significant impact.**	1, 3, 4, 5, 9, 20, 22, 27, 28, 35
XVIII. **TRIBAL CULTURAL RESOURCES** *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), or		X			According to the California Historical Resources Information System (CHRIS), a study #S-25036 (Flaherty 2001), covering approximately 100% of the proposed project area, identified cultural resources within the project parcels. The proposed project parcel may contain or is adjacent to an archaeological site, referred to as JR1, identified by Flaherty in 2001; but it was not formally recorded. In an updated cultural report completed by Tim Spillane and Phil Hanes (2020), one prehistoric isolate was identified in the northern survey area during a field visit. It was assigned the field designation, NIC-2019-HWY530-ISO-1. It consists of two obsidian flakes as described in the cultural report. The CRHR criterion (Criterion 4) under which archaeological resources are most often found to be significant. As such, the isolated obsidian flakes identified during this assessment are not eligible for listing on the CRHR and no further consideration is required. **TRIB-1: If development is planned within 50 feet of the site areas as plotted on the satellite image (see cultural report), then it is recommended that an archaeologist be retained to flag the actual site boundaries so construction and earth moving activities can avoid the resources.**	1, 3, 4, 5, 11, 14, 15

					TRIB-2: In the unlikely event that undiscovered cultural material is encountered elsewhere on the project, work near the find should stop and these should be evaluated for significance by a qualified archaeologist and either preserved or mitigated as outlined in CEQA (sec.21083.2 [b] or 15126.4c). **Less than significant impact with mitigation measures CUL-1 and CUL-3; TRIB-1 through TRIB-2 added.**	
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. In applying the criteria set forth in subdivision (c) of Public Resources Code 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X			There are no mapped significant resources that are on or adjacent to the site. See response for section V (a). **Less than significant impact with mitigation measures CUL-1 and CUL-2 added.**	1, 3, 4, 5, 11, 14, 15
XIX. **UTILITIES AND SERVICE SYSTEMS** *Would the project:*						
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X		The proposed cultivation project will not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Because the project is in a rural location, the irrigation and domestic water source is from an existing well. The only water facility construction will involve the installation of new irrigation water storage tanks. The project Property Management Plan, the Site Management Plan, and the engineered site plans all depict and describe the new and expanded storm drainage facilities, which are heavily regulated by the State Water Board and County. The Lake County Zoning Ordinance requires that all cultivation operations be located at least 100 feet away from all water bodies (i.e. spring, top of the bank of any creek or seasonal stream, the edge of the lake, wetland, or vernal pool), and this project complies. The Storm Water Management section of the Hwy 53 Property Management Plan indicates that BMPs will be deployed in a sequence to follow the progress of site preparation / tilling / cultivation. As the locations of soil disturbance change, erosion and sedimentation controls will be adjusted accordingly to control stormwater runoff at the	1, 3, 4, 5, 29, 32, 33, 34, 37

					downgrade perimeter and drain inlets. **Less than significant impact.**	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?		X			The applicant is required to confirm the adequacy of the water source productivity as a condition of approval via well test and water calculations. The applicant proposes minimizing water use through drip irrigation and conservative farming practices. The water use section is demonstrated in the applicant's project management plan and water usage as well as incorporate water storage to accommodate the proposed project. See section X (b) for details. **Less than significant impact with mitigation measures HYD-2 through HYD-3 incorporated.**	1, 3, 4, 5, 29, 32, 33, 34, 36, 37
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?			X		The applicant proposes portable toilets. Comments from the local Environmental Health have no adverse concerns. See section XIX (a). **Less than significant impact.**	1, 3, 4, 5, 29, 32, 33, 34
d) Generate solid waste in excess of State or local standards or excess of the capacity of local infrastructure?			X		The nearest existing landfill is the County operated Clearlake Landfill, which has sufficient capacity to accommodate the project's solid waste disposal needs. The county does require a waste management plan for cannabis cultivation projects. The project is not proposed to generate solid waste in excess. According to the project management plan, vegetative waste is expected to produce approximately 7.5 cubic yards of cannabis vegetative waste per month which will consist of stems, branches, trunks, roots, and other organic materials from the plant rendered useless in the harvesting process. The waste will be shredded, mixed with soil, and inoculated with humus. Compost heaps should be at least one cubic yard in size to generate and sustain the necessary heat for composting. Compost heaps should be segregated into batches as they age, with humus being the resulting product after several weeks of composting. **Less than significant impact.**	1, 3, 4, 5, 28, 29, 32, 33, 34, 36
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X		The proposed use will not negatively impact the provision of solid waste services or impair the attainment of solid waste reduction goals as the applicant will chip and spread the cannabis waste on-site. **Less than significant impact.**	1, 3, 4, 5, 29, 32, 33, 34, 36
XX. **WILDFIRE** ***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?		X			In October of 2020, Lake County Code Enforcement staff conducted a PRC 4290 and 4291 site inspection and determined that the project facilities complied. The project will not further impair an adopted emergency	1, 2, 4, 5, 6, 20, 23, 31, 35, 37, 38

					response plan or evacuation plan. This site is no more prone to excessive fire risk than other sites in Lake County. The applicant will 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 **Less than significant impact with mitigation measures GEO-5 through GEO-6.**	
b) 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?			X		The fire risk on the site is designated as a moderate fire zone and the overall parcel boundary is fairly sloped. The cultivation area does not further exacerbate the risk of wildfire, or the overall effect of pollutant concentrations on area residents in the event of a wildfire. The project would improve fire access and the ability to fight fires at or from the subject site and other sites accessed from the same roads through the upkeep of the property area. See response to section XX (a). **Less than significant impact.**	1, 2, 4, 5, 6, 20, 23, 31, 35, 37, 38
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?				X	The proposed project will require maintenance to meet roadway and driveway standards. A steel or fiberglass fire suppression water tank will be located at the cultivation site. The project does not consist of any installation or maintenance of associated infrastructures that may exacerbate fire risks. **No impact.**	1, 2, 4, 5, 6, 20, 23, 31, 35, 37, 38
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?			X		There is little chance of risks associated with post-fire slope runoff, instability, or drainage changes based on the lack of site changes that would occur by the project parcel, which already contains a residential home, agricultural shop, and an existing agricultural field. Risks are not expected to significantly increase from the project. **Less than significant impact.**	1, 2, 4, 5, 6, 20, 23, 31, 35, 37, 38
XXI. **MANDATORY FINDINGS OF SIGNIFICANCE** *Would the project:*						
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		X			The Hwy 53 cannabis cultivation project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory when mitigation measures are implemented. All watercourses will be a setback as required by the local, state, and federal regulations relating to impacts to water quality. With the incorporation of mitigation measures within the biological assessment coupled with best management practices, the potential impact on important biological resources will be reduced to less than significant.	All

California history or prehistory?					**Less than significant with AES-1 through AES-4; AQ-1 through AQ-6; BIO-1 through BIO-8; GEO-1 through GEO-6; HAZ-1 through HAZ-7; HYD-1 through HYD-5; NOI-1 through NOI-3.**	
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)?		X			Potentially significant impacts have been identified related to Aesthetics, Air Quality, Geology/Soils, Cultural and Tribal Resources, Wildfire, and Noise. These impacts in combination with the impacts of other past, present, and reasonably foreseeable future projects could cumulatively contribute to significant effects on the environment. Implementation of and compliance with mitigation measures identified in each section as project conditions of approval would avoid or reduce potential impacts to less than significant levels and would not result in any cumulatively considerable environmental impacts. **Less than significant with AES-1 through AES-4; AQ-1 through AQ-6; BIO-1 through BIO-8; CUL-1 through CUL-4; GEO-1 through 6; HAZ-1 through HAZ-7; HYD-1 through HYD-5; NOI-1 through NOI-3; TRIB-1 through TRIB-2.**	All
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X			The proposed project has the potential to result in adverse indirect or direct effects on human beings. In particular, Aesthetics, Air Quality, Geology/Soils, Cultural and Tribal Resources, Transportation, Wildfire, and Noise have the potential to impact human beings. Implementation of and compliance with mitigation measures identified in each section as conditions of approval would not result in substantial adverse indirect or direct effects on human beings and impacts would be considered less than significant**.** **Less than significant with AES-1 through AES-4; AQ-1 through AQ-6; BIO-1 through BIO-8; CUL-1 through CUL-4; GEO-1 through 6; HAZ-1 through HAZ-7; HYD-1 through HYD-5; NOI-1 through NOI-3; TRIB-1 through TRIB-2.**	All

* Impact Categories defined by CEQA

**Source List

1. Lake County General Plan
2. Lake County GIS Database
3. Lake County Zoning Ordinance
4. Shoreline Communities Area Plan
5. Highway 53 Cannabis Cultivation Applications – 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, *(http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm)*
10. Lake County Serpentine Soil Mapping
11. California Natural Diversity Database (https://www.wildlife.ca.gov/Data/CNDDB)
12. U.S. Fish and Wildlife Service National Wetlands Inventory
13. Biological Site Assessment for the Cannabis Cultivation Operation at 1000 and 1270 Highway 53; prepared by G.O. Graening, Ph.D. and Ted Hermansen, M.S., dated October 3, 2020.
14. Botanical Survey Report for the Property at 1000 and 1270 Highway 53, Clearlake, CA; Tim Nosal, MS, and G.O. Graening, Ph.D. Dated March 8, 2021
15. Cultural Resources Assessment for the Cannabis Cultivation Operation at 1000 and 1270 Highway 53, Lower Lake, – By Time Spillane, MA and Phil Hanes, MA. Natural Investigation Company. Dated October 2020.
16. California Historical Resource Information Systems (CHRIS); Northwest Information Center, Sonoma State University; Rohnert Park, CA.
17. Water Resources Division, Lake County Department of Public Works Wetlands Mapping.
18. U.S.G.S. Geologic Map and Structure Sections of the Clear Lake Volcanic, Northern California, Miscellaneous Investigation Series, 1995
19. Official Alquist-Priolo Earthquake Fault Zone maps for Lake County
20. 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
21. Lake County Emergency Management Plan
22. Lake County Hazardous Waste Management Plan adopted 1989
23. Lake County Airport Land Use Compatibility Plan adopted 1992
24. California Department of Forestry and Fire Protection - Fire Hazard Mapping
25. National Pollution Discharge Elimination System (NPDES)
26. FEMA Flood Hazard Maps
27. Lake County Aggregate Resource Management Plan
28. Lake County Bicycle Plan
29. Lake County Transit for Bus Routes
30. Lake County Environmental Health Division
31. Lake County Grading Ordinance
32. Lake County Natural Hazard database
33. Lake County Countywide Integrated Waste Management Plan and Siting Element, 1996
34. Lake County Water Resources
35. Lake County Waste Management Department
36. California Department of Transportation (CALTRANS)
37. Lake County Air Quality Management District website
38. Lake County Fire Protection District
39. Site Visit – February 20, 2020
40. EnviroStor Data. https://www.envirostor.dtsc.ca.gov/public/. 2021