



## COUNTY OF LAKE

### COMMUNITY DEVELOPMENT DEPARTMENT

Planning Division

Courthouse - 255 N. Forbes Street

Lakeport, California 95453

Telephone 707/263-2221 FAX 707/263-2225

January 21, 2020

## CALIFORNIA ENVIRONMENTAL QUALITY ACT ENVIRONMENTAL CHECKLIST INITIAL STUDY (IS 19-09)

1. **Project Title:** Red Hills BioEnergy Project
2. **Permit Numbers:** Major Use Permit UP 19-05  
Initial Study IS 19-09
3. **Lead Agency Name and Address:** County of Lake  
Community Development Department  
Courthouse – 255 North Forbes Street  
Lakeport CA 95453
4. **Contact Person:** Mark Roberts, Principal Planner  
(707) 263-2221
5. **Project Location(s):** 7130 Red Hills Rd, Kelseyville, CA  
The Project Site is located approximately 6 miles east of Kelseyville, on the southeast corner of the intersection of State Highway 29 and Red Hills Rd, approximately 900 feet south of the intersection; APN: 009-021-07.
6. **Project Sponsor's Name/Address:** Thomas Jordan, Tribal Administrator  
Scotts Valley Band of Pomo Indians  
1005 Parallel Drive  
Lakeport, California 95453
7. **General Plan Designation:** Rural Residential and Community Commercial
8. **Zoning:** Split Zoned: Rural Residential (24.5± ac.); Highway Commercial (10.5± ac.), Scenic Combining District, Design Review Combining District
9. **Environmental Setting/Existing Conditions:** The Project Site is relatively flat to gently sloping, generally following the contours of the grades established by State Route 29 (SR 29) and Red Hills Road. The Site is accessed from Red Hills Road via a private, 18-foot wide gravel driveway, located 900± feet south of the intersection of Red Hills Road and SR 29. The majority of the 34.58±-acre property is occupied by a fallow walnut orchard, comprising approximately 86.18 percent of the land area. Approximately 1.55 acres (4.5 percent) is occupied by Interior Live Oak Woodland and 1.48± acres (4.28 percent) is occupied by Mixed Chaparral, comprised primarily of manzanita, madrone, scrub oak, and buck brush. The remaining 1.75 acres± (5.06 percent) is developed. Existing development on the property includes two single-family residences; one travel trailer; a 40-stall, 14,000-square foot (sf), ADA-compliant chip-sealed parking lot; 180-ft long, 18-ft wide gravel roadway through the property; three low-profile street lights adjacent to the internal roadway; a well and pumps; (2) 2,000-gallon water storage tanks; an accessible public restroom; two septic disposal systems; and two small solar collection grids serving the two residences. In the northeast portion of the property is a fire pit surrounded by a dance circle with dressing rooms and outdoor furniture used for tribal gatherings. The property is surrounded on all sides by three-foot high chain link fencing. The

residential units are rented to tribal members; the parking lot and public restrooms are used by tribal members visiting the property.

#### **10. Description of Project:**

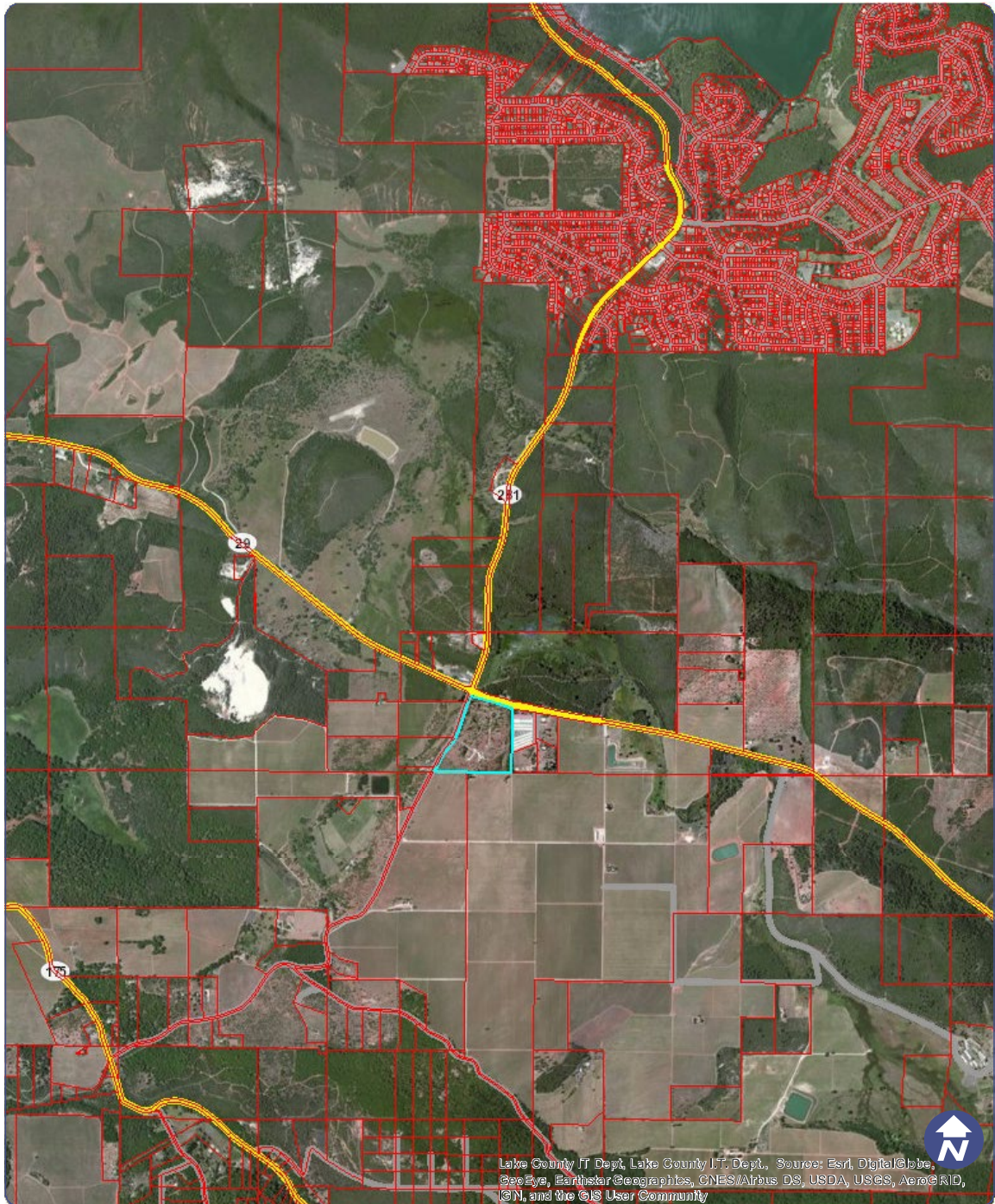
Supervisor District:	District 5; Brown
Flood Zone:	Not within a designated flood zone
Slope:	Flat to gently sloping
Fire Hazard Severity Zone:	Moderate (Project Site) and Very High
Earthquake Fault Zone:	Not within a fault zone
Dam Failure Inundation Area:	Not within dam failure zone
Parcel Size:	Approximately 34.58 acres
Area Plan:	Riviera Area Plan

The applicant is requesting approval of a Major Use Permit to allow for the development of a small-scale bioenergy production facility using woody biomass to produce syngas and biochar. The syngas will power the generators that run the system. Biochar is a by-product of the bioenergy process that functions as an agricultural or forestry soil amendment. The total footprint of the Project is 43,350 sf, which includes:

- Removal of 25 walnut trees (including 5 dead trees or stumps), grass and brush; and minor grading of 45± cubic yards for site preparation; no import/export of soils;
- 2,000-sf (40 ft x 50 ft), six-inch deep concrete pad to house the bioenergy equipment (production plant pad), offset 140 ft from the edge of Red Hills Road (County road);
- Production Plant: two (2) fully-automated Omni BioEnergy Artis 100kW gasifiers and two (2) electrical generators fueled by the syngas generated by the plant that will operate 24 hours per day/7days per week except for maintenance;
- 16-ft high, 2,000-sf metal building enclosing the production plant, with gutters and downspouts draining to a French drain system around the pad that will discharge into a rock energy dissipator in the field;
- 20-ft wide gravel road around the perimeter of the pad;
- 8-ft high chain link fence around the gravel perimeter of the pad with lockable gates on the east and south sides;
- 28,000-sf permeable outdoor storage area on the east side of the production plant to receive, process and store woody feedstock into ¼-inch wood chips, including a front-end loader, chipper, hammermill, and an enclosed-bed truck; surfaced with wood chips;
- (2) 20-ft wide lanes on two sides of the storage area with a hammerhead “T” to allow delivery trucks to turn around;
- Connection to 240v/three-phase/100-amp overhead electrical service from PG&E at utility pole located on Red Hills Road;
- Downcast, exterior LED lighting for the building; up to four (4) new light posts consistent with existing light posts on the property; and
- 2-5 deliveries of feedstock daily, Monday – Friday; less frequent outgoing deliveries of biochar.

A detailed project description and Artis gasification specification sheets are provided as Attachment A.

## VICINITY MAP



Lake County, CA

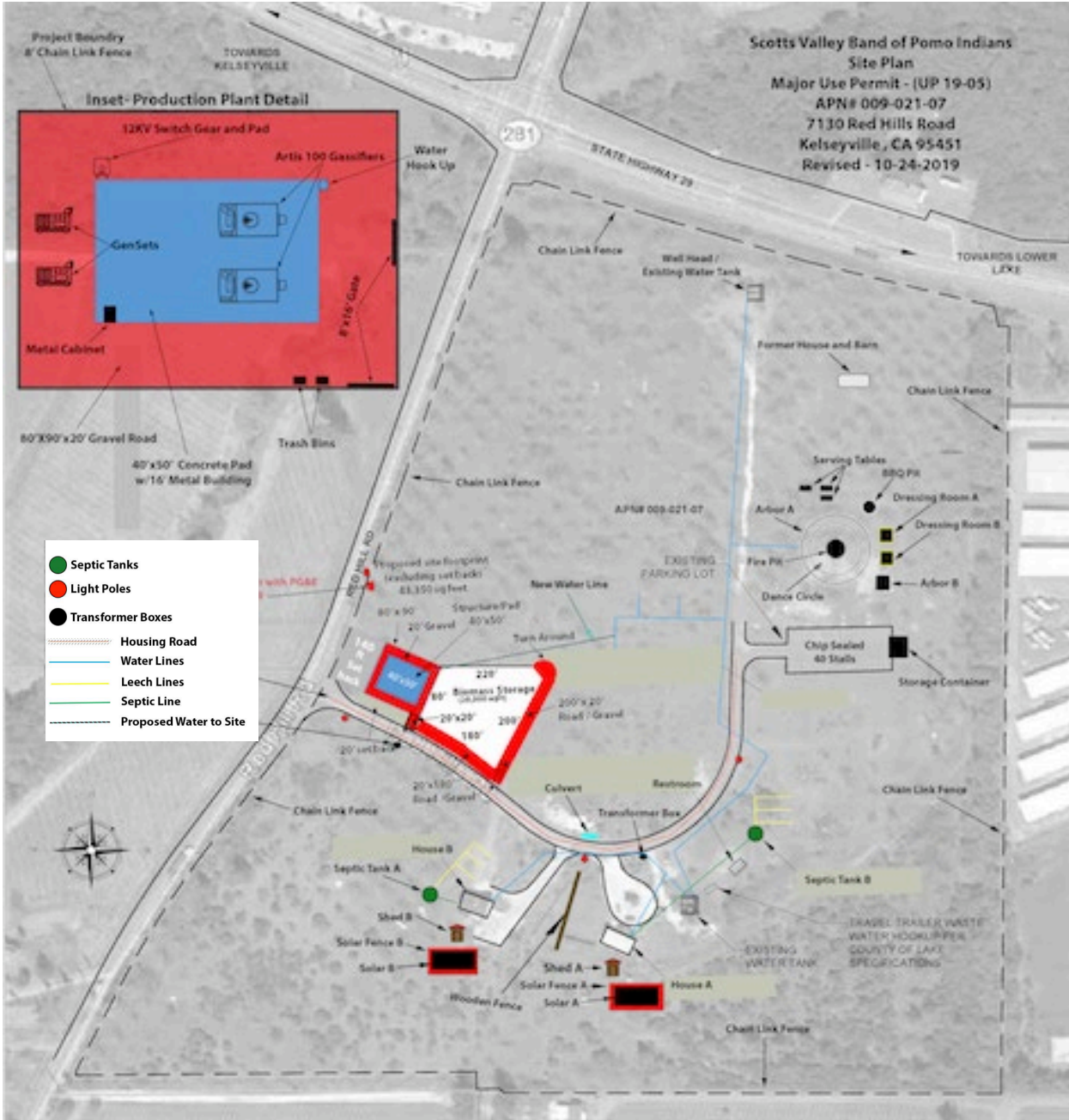
UP 19-05 Jordan Vicinity Map  
built with Web AppBuilder for ArcGIS

of description.

Print Date: 2/15/2019



## SITE PLAN



### Surrounding Land Uses and Setting:

- North: Property to the north is zoned Rural Residential (RR), Highway Commercial (CH) and Community Commercial (C2). Parcel sizes are approximately 134 acres and 19 acres. Land uses to the north are commercial, and are located on the north side of SR 29. The primary development is Kit's Corner grocery and gasoline station.
- West: Property to the west is zoned C2 and RR. Parcels are approximately eleven to 18 acres in size. Land uses to the west are predominantly agriculture (vineyards and orchards).
- South: Property to the south consists of parcels 173 and 466 acres in size, zoned Agriculture (A).
- East: Property to the east includes mini storage units on 7.66 acres zoned Planned Development Commercial (PDC), and a 5.43-acre parcel zoned RR.

The nearest off-site residence is situated approximately 800 feet southwest of the Project Site.

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

Lake County Air Quality Management District  
 Lake County Environmental Health  
 Lake County Community Development Department – Building Division  
 Lake County Agricultural Commissioner  
 Kelseyville Fire Protection District  
 California Department of Forestry and Fire Protection (CalFire)  
 Central Valley Regional Water Quality Control Board  
 State Water Resources Control Board  
 California Department of Transportation (Caltrans)  
 California Department of Fish and Wildlife  
 California Air Resource Control Board

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

The property is owned by the Scotts Valley Band of Pomo Indians. The Tribe does not request consultation and will employ a cultural monitor during site preparation and construction activities. However, Notification of the project was sent to local tribes, Big Valley Rancheria, Elem Colony, Koi Nation, Middletown Rancheria, and Robinson Rancheria, Scotts Valley Band of Pomo, Upper Lake Habematolel, Cortina Rancheria, and Yocha Dehe.

### ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

- |                                                               |                                                                              |                                                                               |
|---------------------------------------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> <b>Aesthetics</b>         | <input type="checkbox"/> Greenhouse Gas Emissions                            | <input type="checkbox"/> Public Services                                      |
| <input type="checkbox"/> Agriculture & Forestry Resources     | <input checked="" type="checkbox"/> <b>Hazards &amp; Hazardous Materials</b> | <input type="checkbox"/> Recreation                                           |
| <input checked="" type="checkbox"/> <b>Air Quality</b>        | <input checked="" type="checkbox"/> <b>Hydrology / Water Quality</b>         | <input type="checkbox"/> Transportation                                       |
| <input type="checkbox"/> Biological Resources                 | <input type="checkbox"/> <b>Land Use / Planning</b>                          | <input checked="" type="checkbox"/> <b>Tribal Cultural Resources</b>          |
| <input checked="" type="checkbox"/> <b>Cultural Resources</b> | <input type="checkbox"/> Mineral Resources                                   | <input type="checkbox"/> Utilities / Service Systems                          |
| <input type="checkbox"/> Energy                               | <input checked="" type="checkbox"/> <b>Noise</b>                             | <input checked="" type="checkbox"/> Wildfire                                  |
| <input checked="" type="checkbox"/> <b>Geology / Soils</b>    | <input type="checkbox"/> Population / Housing                                | <input checked="" type="checkbox"/> <b>Mandatory Findings of Significance</b> |

### DETERMINATION: (To be completed by the lead Agency)

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Initial Study Prepared By:

Julie Price, Planner/Environmental Specialist

Crawford & Associates, Inc.

Initial Study Reviewed By: Mark Roberts – Principal Planner



Date: 1/24/2020\_

SIGNATURE

Michalyn DelValle, 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," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - a) the significance criteria or threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significance.



**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**
<b>I. AESTHETICS</b>						
<b>Significance Criteria:</b> Aesthetic impacts would be significant if the Project resulted in the obstruction of any scenic vista open to the public, damage to significant scenic resources within a designated State scenic highway of County designated scenic area, substantial degradation to the existing visual character or quality of the site and its surroundings from public views, or generate new sources of light or glare that would adversely affect day or nighttime views in the area, including that which would directly illuminate or reflect upon adjacent property or could be directly seen by motorists or persons residing, working or otherwise situated within sight of the Project.						
<b>Environmental Setting:</b> The 34.58-acre subject parcel is located on the southeast corner of the intersection of SR 29 and Red Hills Road. The CH-zoned portion of the subject parcel is located within a "Scenic" (SC) Combining Overlay District (SC District). The SC District is located along the SR 29 corridor, including a 400±-ft deep section of the subject property adjacent to SR 29; along Soda Bay Road north of its intersection with SR 29; on lands abutting the subject parcel to the south; and on Red Hills Road directly south of the subject parcel (refer to Attachment B-1). The southerly portion of the subject parcel where the Project would be situated is <u>not</u> located within the SC District boundary. SR 29 is a designated state scenic highway. Scenic resources in the general region include Clear Lake, approximately 2.5 miles north of the Site; Mt. Konocti, 3.25± miles northwest of the Site; and Mount Hanna, 2.7± miles south of the Site.						
<i>Except as provided in Public Resources Code Section 21099, would the project:</i>						
a) Have a substantial adverse effect on a scenic vista?			X		The Project Site is located in a rural area surrounded by orchards and vineyards. The Site has long-distance views to Mt Konocti (over five miles). Clear Lake is not visible from the Project Site due to distance and topography. The proposed development will include a 2,000-square foot building on the north side of the existing driveway offset 140 feet from the edge of Red Hills Road. The building will have a sloped roof of heights between 10½ -16½ feet above finished grade. An outdoor processing and storage area will be located on the east side of the building, partially obscuring it from public view. The applicant provided a Visual Impact Assessment/Windshield Survey with photographs of the Project Site from various vantage points (refer to Attachment B-2). Due to distance and vegetation, the proposed Project would not be visible from SR 29, a designated state scenic highway. The proposed Project would not impede views of Mt. Konocti or other scenic vistas. The Project Site is visible from a limited segment of Red Hills Road; however, it is situated in a manner that would not significantly impact the view shed, and is consistent with County and Area Plan policies for preserving scenic resources. <b>Less Than Significant Impact.</b>	1, 2, 3, 4, 5, 6, 7, 8
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X	The Project Site does not contain any scenic resources. The area of the subject property that is located within a Scenic Combining District will not be impacted by the Project. <b>No Impact.</b>	1, 2, 3, 4, 5, 6, 7, 8

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?		X		<p>The subject property is elevated above surrounding roadways. Red Hills Road in this location is a two-lane, rural road without paved shoulders that does not accommodate pedestrians; motorists are its primary users. Views into the property from Red Hills Road are partially obscured by woody vegetation, including walnut, oak and pine trees. Gaps in vegetation exist near the property entrance where the Project would be the most visible to motorists. The structure housing the production plant would be located approximately 140 feet from the west edge of the roadway. The chipping and grinding area would be located on the east side of the building, partially shielded from public view. Beginning at the south property line, a row of mostly pine trees grows along the edge of Beckstoffer Vineyards on the east side of Red Hills Road, providing total screening of the Project Site from views south. Existing vegetation north and south of the Project Site limit public visibility of the Site to a few seconds while driving past the Site entrance. Although the portion of the property where the Project will be situated is not located within a Scenic Combining District, neighboring roads and properties are. Policy 3.5.2b of the Riviera Area Plan states, <i>"The siting of structures must not only reflect appropriate setbacks, but also consider the rural vista. Building should complement and not block views."</i> Due to the 140-ft setback between the Project development and Red Hills Road, the small scale of the building and relatively low height of the roof, the lack of recreational use of the road, and the brief period that the plant would be visible to motorists, the Project is not expected to visually degrade the area. The following mitigation measures are recommended to ensure that the brief sighting of the Project by motorists on Red Hills Road would have a less than significant impact on the quality of public views of the Site, and will further ensure that the Project conforms to scenic resource policies in the General Plan and Riviera Area Plan. <b>Less Than Significant Impact with Mitigation Incorporated.</b></p> <p><b><u>Mitigation Measures:</u></b></p> <p><b><u>AES-1:</u></b> All structures associated with the Project, including the building and any new fencing, shall use neutral, earth-tone colors in order to blend into the surrounding environment. Low glare building materials shall be used for new building construction.</p> <p><b><u>AES-2:</u></b> Existing healthy, non-hazardous vegetation that provides screening to the Project Site along the western boundary shall be maintained.</p>	1, 2, 3, 4, 5, 6, 7, 8
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		X		<p>Exterior lighting for the Project would consist of downcast LED lighting under the roof eaves to illuminate the building perimeter and up to four (4) additional downcast light posts to illuminate the storage area. The light posts would be the same style as those currently illuminating the driveway through the property. To ensure that light or glare is not broadcast beyond the property boundaries, Mitigation Measures AES-3 is recommended. <b>Less Than Significant with Mitigation Incorporated.</b></p> <p><b><u>Mitigation Measure:</u></b></p> <p><b><u>AES-3:</u></b> All outdoor lighting shall be shielded and downcast or otherwise positioned in a manner that will not broadcast light or glare beyond the boundaries of the subject property. All lighting equipment shall comply with the recommendations of the International Dark-Sky Association (<a href="http://www.darksky.org">www.darksky.org</a>) and provisions of Section 21.48 of the Zoning Ordinance. Security lighting shall be motion activated.</p>	1, 2, 3, 4, 5, 7

## II. AGRICULTURE AND FORESTRY RESOURCES

**Significance Criteria:** The proposed Project would have a potentially significant impact on agricultural resources if it would convert prime farmland to a non-agricultural use, conflict with a Williamson Act contract, or disrupt a viable and locally important agricultural use. The Project would have a potentially significant impact on forestry resources if it would result in the loss, rezoning or conversion of forestland to a non-forest use. *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.*

**Environmental Setting:** The Project Site is assigned two base zoning designations, Rural Residential and Highway Commercial. Approximately 86 percent of the Project Site contains a fallow, dry-farmed walnut orchard. The remainder contains Interior Live Oak Woodland and Mixed Chaparral, residential development and internal roadways serving residential and tribal community uses. According to the Farmland Mapping and Monitoring Program (FMMP) the project site is designated as “Unique Farmland,” defined as “Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.” According to the USDA Soil Survey, the subject property is designated as “Not Prime Farmland.”

*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 Project Site is designated as “Unique Farmland” by the FMMP, having lower quality soils than Prime Farmland and Farmland of Statewide Importance, and as “Not Prime Farmland” by the USDA. SVBPI purchased the land 23 years ago, at which time it contained a commercial walnut orchard. SVBPI maintained the walnut grove in its early ownership years, but abandoned that effort due to the age and condition of the trees. The orchard is observed to be in poor condition, as evidenced by the condition of the trees, many of which have died, have broken limbs or are overgrown; and surface soils, which are pocked with gopher holes. Uses immediately surrounding the site to the west and south include vineyards. The proposed Project would convert just under one (1) acre to a non-agricultural use. <b>Less Than Significant Impact.</b>	1, 2, 3, 4, 5, 8, 9, 10
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			X	The Project Site is zoned “RR” Rural Residential and “CH” Highway Commercial. The Site is not zoned for agriculture, is not actively farmed, and is not encumbered by a Williamson Act contract. Parcels to the south of the Project Site are zoned “AG” Agriculture; however the proposed small-scale bioenergy plant is not expected to conflict with the existing agricultural zoning or use. <b>Less Than Significant Impact.</b>	1, 2, 3, 4, 5, 8, 9, 10
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?			X	The proposed Project is not located within or adjacent to forest lands or lands zoned Timberland Production. The Project will therefore not conflict with existing timberland zoning or result in the rezoning of forest lands and/or Timberland Production. <b>No Impact.</b>	1, 2, 3, 5, 8
d) Result in the loss of forest land or conversion of forest land to non-forest use?			X	The proposed Project is not located within or adjacent to forest lands, and will therefore not result in the loss or conversion of forest land to a non-forest use. <b>No Impact.</b>	1, 2, 3, 5, 8
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			X	Except as discussed in (a) above, the Project as proposed does not involve changes to the existing environment that would result in the site's conversion to non-agricultural or non-forest use. <b>Less Than Significant Impact.</b>	1, 2, 3, 4, 5, 8, 9, 10

### III. AIR QUALITY

**Significance Criteria:** Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. The proposed Project would have a significant impact to air quality if it would conflict with an air quality plan, result in a cumulatively considerable net increase of a criteria pollutants for which the Lake County Air Quality Management District (LCAQMD) has non-attainment, expose sensitive receptors to substantial concentrations of air pollutants, or result in emissions that create objectionable odors or otherwise adversely affect a substantial number of people.

**Environmental Setting:** The Project Site is situated at the foot of the northern slope of Mount Hanna, approximately 2.5 miles south of Clear Lake at an elevation of approximately 1,925 feet above MSL. The Project Site is located within the Lake County Air Basin, which is under the jurisdiction of the LCAQMD. The LCAQMD applies air pollution regulations to all major stationary pollution sources and monitors air quality. The Lake County Air Basin is in attainment with both state and federal air quality standards, and the air is relatively low in pollutants in comparison with much of the state. Automobile emissions are the main contributor to air pollution in Lake County. Other contributors include serpentine soils, residential development (wood burning stoves and the burning of cleared vegetation for subdivision development) and agricultural operations. The Lake County Air Basin lies entirely within the Coast Range Mountains and constitutes one of the major inter-mountain basins of the region. Inversions occur in isolated valleys when warm air prevents the cooler air from rising and dispersing any trapped pollutants. Serpentine soils have not been found within the Riviera Community Planning Area.

#### Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?		X		<p>The Project would result in temporary emissions during the 8-12 week construction period. Site preparation will include the clearing and chipping of 25 trees, and earth moving of 2,000± square feet to achieve final grades for the production pad. These activities have the potential to generate fugitive dust for a short period of time until the site is stabilized. If trees are burned, smoke can also contribute particulate emissions. The applicant plans on chipping the cleared trees and using them as the storage area base for dust and erosion control and/or as feedstock for the plant; the trees are not proposed to be open-burned. The applicant plans to use water dispersal as the primary method of dust control during construction, using either on-site water and/or application by water truck. Internal roadways are currently paved; the proposed new travel lanes will be surfaced with 1/2-inch gravel or with a new composite material consisting of dirt and cement. Stabilized road surfaces will minimize dust over the long term.</p> <p>Once operational, the Project would result in up to eight additional trips (16 round-trips) to the site per day including employee vehicles and delivery trucks, considered an insignificant increase in daily vehicle trips and resulting emissions. The bioenergy plant will use generators that will operate on syngas. The operation of internal combustion engines is subject to requirements administered by LCAQMD. Prior to the commencement of site preparation and plant operations, the applicant will be required to secure all necessary permits from LCAQMD. Implementation of mitigation measures below would further reduce air quality impacts to less than significant.</p> <p>Due to the potential generation of fugitive dust associated with construction activities, construction of the Project could have a significant impact on air quality. In their letter dated March 8, 2019, the LCAQMD provided recommendations to address fugitive dust and other potential air pollutants generated by the Project. These are incorporated as Mitigation Measures AIR-1 through AIR-4. <b>Less Than Significant with Mitigation Incorporated.</b></p> <p><b><u>Mitigation Measures:</u></b></p> <p><b><u>AIR-1:</u></b> Prior to the commencement of construction, applicant shall submit to the Lake County Air Quality Management District a complete list of all equipment to be used at the site with the potential to emit air contaminants, including diesel powered generators, pumps, off-road equipment, etc. and secure all necessary permits for all eligible operations and equipment as required by the District. Diesel powered equipment must meet the requirements of the State Air Toxic Control Measures for CI engines (stationary and portable). All mobile diesel equipment used must be in</p>	1, 2, 3, 4, 5, 8, 11, 12, 13
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				<p>compliance with State registration requirements. Portable and stationary diesel powered equipment must meet the requirements of the for CI engines.</p> <p><b>AIR-2:</b> Prior to operation, the primary access roads and parking area shall be constructed, surfaced and maintained with an all-weather surface of asphaltic concrete or concrete unless another all-weather surface is approved by the review authority to minimize dust impacts to the public, visitors and road traffic. All areas subject to semi-truck/trailer traffic shall require asphaltic concrete paving or equivalent to prevent fugitive dust generation. Gravel surfacing may be adequate for low use/overflow driveways and parking areas if it receives regular palliative treatment. The use of white rock for surfacing is prohibited.</p> <p><b>AIR-3:</b> All vegetation removed during site development shall be chipped and spread for ground cover, erosion control and/or biomass feedstock. The burning of vegetation, construction debris, or waste material is prohibited.</p> <p><b>AIR-4:</b> Dust control measures shall be implemented to minimize fugitive dust emissions from the Project Site. Dust control measures may consist of approved chemical, structural, or mechanical methods and shall be reapplied at the necessary intervals to prevent wind erosion.</p>	
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 County of Lake is in attainment of state and federal ambient air quality standards. <b>No Impact.</b>	1, 3, 11
c) Expose sensitive receptors to substantial pollutant concentrations?		X		See response to Section III (a). Construction activities have the potential to generate short-term fugitive dust if not properly controlled. There are two on-site residences and a travel trailer located approximately 200 to 300 feet from the Project Site. The nearest off-site residence is 800± feet to the southwest. There are no schools, hospitals, or other sensitive receptors in the vicinity of the proposed Project. <b>Less Than Significant with Mitigation Measures AIR-1 through AIR-4 Incorporated.</b>	1, 2, 3, 4, 5, 8, 11, 12, 13
d) Result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people?			X	Refer to response to Section III (a) relating to dust. The Project Site is not located within a mapped area of Naturally Occurring Asbestos (NOA) and is therefore not expected to generate NOA emissions. The bioenergy plant has zero emissions and will therefore generate no odors. Conditions that could result in odors from processed feedstock include a combination of high heat, high moisture content, and storage for long periods, which can lead to anaerobic conditions. Due to the small size of the bioenergy system, wood waste would be processed in small batches using minimal water, which would avoid the creation of the conditions that could generate odor. <b>Less Than Significant Impact.</b>	1, 2, 3, 4, 5, 8, 11, 12, 13

#### IV. BIOLOGICAL RESOURCES

**Significance Criteria:** Project impacts upon biological resources would be significant if any of the following resulted: substantial direct or indirect effect on any species identified as a candidate, sensitive, or special status species in local/regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS) or any species protected under provisions of the Migratory Bird treaty Act (e.g. burrowing owls); substantial effect upon riparian habitat or other sensitive natural communities identified in local/regional plans, policies, or regulations or by the agencies listed above; substantial effect (e.g., fill, removal, hydrologic interruption) upon state or federally protected wetlands; substantially interfere with movement of native resident or migratory wildlife species or with established native resident or migratory wildlife corridors; conflict with any local policies/ordinances that protect biological resources or conflict with a habitat conservation plan.

**Environmental Setting:** The site is located along the Highway 29 corridor in narrow valley terrain between the northeastern toe of the Mayacamas Mountains and the southern slope of Mount Konocti. This corridor consists of a series of isolated flats and small basins either drained internally or connected to Thurston Creek, which drains to the isolated basin of Thurston Lake. This property is drained along its eastern edge by an excavated ditch which flows north to SR 29 and then east to an unnamed tributary to Thurston Creek. The property drops approximately 80 feet in elevation from north to south into Hess Flat at an elevation of 1,880 feet msl. Site soils are weathered from obsidian (volcanic) formations, and are deep and well-drained. The majority of the 34.58±-acre property is occupied by a fallow walnut orchard, comprising approximately 86.18 percent of the land area. Approximately 1.55 acres (4.5 percent) is occupied by Interior Live Oak Woodland located along an ephemeral drainage swale on the eastern edge of the property. The community along



the east property line is heavily dominated by interior live oak trees to a height of 50 feet and contains a dense shrub layer. Mixed Chaparral occupies 1.48± acres (4.28 percent) in the southeastern corner of the property, comprised primarily of common manzanita, ceanothus, interior live oak shrub, poison oak, coyote brush and knobcone pine. The remaining 1.75 acres± (5.06 percent) is developed. The footprint of the proposed Project is located within the walnut orchard.

*Would the project:*

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X	<p><i>A Biological Resource Assessment with Botanical Survey and Delineation of Waters of the U.S. (BRA)</i>, dated July 1, 2019, was prepared by Northwest Biosurvey for the Project Site. The purpose of the Assessment was to determine whether the property contains sensitive plants or potentially contains sensitive wildlife requiring mitigation under CEQA. The terms sensitive plant or wildlife includes all state or federal rare, threatened, or endangered species and all species listed in the California Natural Diversity Database (CNDDDB) list of “Special Status Plants, Animals, and Natural Communities.”</p> <p><b>Plants.</b> Each of the sensitive plant taxa potentially occurring at the site was specifically searched for during the survey. The survey identified a total of 60 plant taxa on the property, including native and introduced plants. The relatively small number of species identified is a result of the small survey area, the lack of diversity within the ruderal areas and orchard, and the small palette size of the natural plant communities. No plants with sensitive status were discovered during the in-season floristic-level botanical surveys.</p> <p><b>Wildlife.</b> A total of 17 sensitive wildlife species were assessed for potential occurrence at the site because of inclusion in the CNDDDB database for the Clearlake Highlands quadrangle and the WHR database. The species listed include insects, isopods, aquatic reptiles and amphibians, raptors, and small mammals. The site does not contain perennial streams or ponded water of any type, making it unsuitable for any of the listed aquatic species. The lack of roosting structures makes it poor habitat for nesting raptors and roosting bats. <b>No Impact.</b></p>	3, 6, 7, 15
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	<p>According to the BRA, the Project Site does not contain perennial streams or ponded water of any type. Delineated aquatic resources consisted of 0.136 acres (5,924 sf) of intermittent stream channel located in the southeast corner and continuing north along the east boundary of the subject parcel. The proposed Project Site is located over 350 feet downslope of this drainage channel. No riparian or other sensitive natural community was identified in the project area. <b>No Impact.</b></p>	3, 6, 7, 15
c) Have a substantial adverse effect on state or federally protected wetlands (including, not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X	<p>According to the BRA, a delineation was conducted in accordance with the U.S. Army Corps of Engineers Wetlands Delineation Manual: Arid West Region (2008) to determine the extent of possible waters of the U.S. Delineation fieldwork was completed on April 10, 2019. Waters of the U.S. within the subject property were determined to consist of intermittent stream channels and ephemeral drainages. No potential wetland resources were found. <b>No Impact.</b></p>	3, 6, 7, 15
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X	<p>According to the BRA, there is no habitat on the Project Site that would support resident or migratory fish. New construction does not include impediments to wildlife corridors. There are no native wildlife nursery sites on the subject property. <b>No Impact.</b></p>	3, 6, 7, 15
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X	<p>The proposed Project would not conflict with local policies, such as those identified in Section 3.3 of the Riviera Area Plan [Vegetation and Wildlife] or Chapter 9.1 of the General Plan [Biological Resources]. <b>No Impact.</b></p>	1, 2, 3
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community				X	<p>There are no adopted habitat conservation plans in the Project area. No special conservation plans have been adopted for the subject parcel. <b>No Impact.</b></p>	1, 2, 3

Conservation Plan, or other approved local, regional, or state habitat conservation plan?						
<b>V. CULTURAL RESOURCES</b>						
<b>Significance Criteria:</b> The proposed Project would significantly impact cultural resources if the significance of a historical or archaeological resource were substantially changed, or if human remains were disturbed.						
<b>Environmental Setting:</b> The Project Site lies at the foot of Mount Hanna, approximately 2.5 miles south of Clear Lake. Approximately 86 percent of the subject property is comprised of a fallow walnut orchard. The proposed Project Site is located within the existing orchard. There are no perennial watercourses or springs on the subject property. A blanket of shattered obsidian is prevalent on the property.						
<i>Would the project:</i>						
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				X	<p>Comments received from the Northwest Information Center (NWIC) indicate that archaeological resources surveys were conducted of the entire property in 2003 and 2006 and no archaeological resources were identified. Cultural resources surveys were conducted in 1996 and 2001, which identified one non-archaeological resource, a single-family home, of potential historical value due to its age of 45 years or older. According to the results of the studies, NWIC recommended no further study for potential unrecorded cultural resources; however recommended that the status of the recorded non-archaeological resource be reassessed.</p> <p>An Archaeological Reassessment of the subject property, dated September 9, 2004, was provided by NWIC. Included in the NWIC documents is a letter written by the State Office of Historic Preservation, which states, "A record search conducted by the Northwest Information Center at Sonoma State University identified no archeological properties located within the project APE [Area of Potential Effects]. A pedestrian survey of the project area conducted by qualified archeologists in January 2001 also provided no evidence of historical or prehistoric archeological properties." The letter further states, "Our review of the submitted HPSR [Historic Property Survey Report] leads us to concur with FHWA's [Federal Highway Administration] determination that the property at 7130 Red Hills Road is not eligible for inclusion on the NRHP [National Register of Historic Places] under any of the criteria established by 36 CFR 60.4." The residence was therefore not considered to be a significant historical resource and has since been demolished and removed from the site due to its state of disrepair.</p> <p><b>No Impact.</b></p>	1, 2, 3, 4, 5, 15, 16

b) Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?		X		<p>According to the applicant, “SVBPI is not aware of any flatland or lowland sites in Lake County that could not be a possible archaeological site given the existence of Native Americans in the area since 12,000 B.CE. A blanket of shattered obsidian is prevalent on the property, which is a minor indication that obsidian may have been mined as some point in time. However, during its years of ownership, SVBPI’s certified cultural monitors have surveyed the property for archaeological evidence. To date no such evidence has been found. Nevertheless, SVBPI will retain one or more of its cultural monitors, as needed, during the project’s site preparation and construction phases.”</p> <p>No impacts to known archaeological resources are anticipated as a result of the Project. However, to ensure that undiscovered resources are not impacted during Project construction, CUL-1 and CUL-2 are recommended. <b>Less Than Significant with Mitigation Incorporated.</b></p> <p><b><u>Mitigation Measures:</u></b></p> <p><b><u>CUL-1:</u></b> Should any archaeological, paleontological, or cultural materials be discovered during site development, all activity shall be halted in the vicinity of the find(s), 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. The applicant shall halt all work and immediately contact the Lake County Sheriff’s Department and the Community Development Department if any human remains are encountered.</p> <p><b><u>CUL-2:</u></b> A cultural resource monitor shall be present during ground disturbance activities.</p>	1, 2, 3, 5, 6, 16, 17
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		<p>Disturbance of human remains is not anticipated. However, to ensure that human remains are not disturbed during Project construction, CUL-1 and CUL-2 are recommended. <b>Less Than Significant with Mitigation Measures CUL-1 and CUL-2 Incorporated.</b></p>	1, 2, 3, 5, 6, 16, 17
<b>VI. ENERGY</b>					
<b>Significance Criteria:</b> The proposed Project would significantly impact energy if construction of the Project would result in wasteful, inefficient or unnecessary consumption of energy resources or if the Project would conflict with a state or local plan for renewable energy or energy efficiency.					
<b>Environmental Setting:</b> The proposed Project Site is located on less than one-acre within a 35.58-acre parcel at the foot of Mount Hanna. The subject property consists of a fallow walnut orchard and single-family residential development surrounded predominantly by agricultural uses.					
<i>Would the project:</i>					
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?		X		<p>The Project consists of a small-scale, modular waste-to-energy plant that utilizes high-carbon woody biomass and electric heaters to generate syngas and biochar. The syngas generated by the system is a fuel gas mixture consisting primarily of hydrogen, carbon monoxide, methane and carbon dioxide. Biochar is a by-product of the process used as a soil amendment. The plant will operate two 100kW bioenergy units. According to the applicant, using a hybrid of pyrolysis and gasification, the oxygen and moisture in the biomass feedstock help produce a higher energy syngas, allowing for efficient energy generation. The syngas is delivered via a closed system to a modified internal combustion engine and generator to create electricity, which is used to fuel the plant. The two 100-kW systems (200 kW total) will consume approximately 60 kW of electricity to operate, and will require a 240v, three-phase, 100-amp electrical connection. By design, the ARTIS Gasification System is intended to reduce wasteful, inefficient consumption of energy resources by transforming a waste product into renewable, clean energy that, in turn, would fuel the plant. As such, the Project is expected to have a positive impact on energy resources. <b>Less Than Significant Impact.</b></p>	1, 2, 3, 5, 6

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	The proposed Project would not conflict with or obstruct a state or local renewable energy plan, nor would it conflict with goals and policies of the General Plan [Section 9.5, Energy Resources]. <b>No Impact.</b>	1, 2, 3, 5, 6
<b>VII. GEOLOGY AND SOILS</b>					
<b>Significance Criteria:</b> The proposed Project would result in a significant impact to geological or soil resources if it exposed people or structures to seismic risk; ruptured a known fault; produced strong seismic ground shaking, ground failure, liquefaction, landslides or substantial soil erosion; is located on expansive soil or unstable ground, or would create unstable ground; or destroyed a unique paleontological resource or geologic feature.					
<b>Environmental Setting:</b> The subject parcel is located within the Clear Lake volcanic field, and characterized by gentle slopes. The majority of the soils underlying the area are comprised of young pyroclastic deposits from the Holocene (8,000 years ago to present) and Pleistocene (1.8 million to 8,000 years ago) epochs. These are described as well-bedded ash and tuff, with abundant blocks and bombs that weather to a dark orange color. The subject property contains a single soil type, Glenview-Arrowhead complex, 5-15% slopes, weathered from obsidian formations. This unit is on volcanic hills. Native vegetation is mainly brush with scattered conifers. The unit contains about 60% Glenview very gravelly loam and 20% Arrowhead extremely gravelly sandy loam. The Glenview soil is very deep and well drained. It formed in material weathered from obsidian. Permeability is moderately slow and runoff is medium. The Arrowhead soil is moderately deep and well drained, and formed in material weathered from obsidian. Permeability is slow and runoff is medium. The hazard of erosion is moderate for both soils.					
<i>Would the project:</i>					
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	<p><u>(a)(i)</u> The Project Site is not located within an Earthquake Fault Zone as established by the California Geological Survey in accordance with the Alquist-Priolo Earthquake Fault Zoning Act. The nearest fault zones are approximately 0.8 miles east and one mile south of the Project Site. The proposed project would not expose people or structures to substantial adverse effects due to earthquakes.</p> <p><u>(a)(ii) and (a)(iii)</u> Lake County contains numerous known active faults. Future seismic events in the Northern California region can be expected to produce seismic ground shaking at the site. All proposed construction is required to be built consistent with Current Seismic Safety construction standards.</p> <p><u>(a)(iv)</u> According to the U.S. Landslide Inventory provided by the USGS Landslide Hazard Program, there are no mapped landslides on or in the vicinity of the Project Site.</p> <p>The Project is not expected to cause potential substantial adverse effects due to seismic activity or landslides. <b>Less Than Significant Impact.</b></p>	4, 8, 16, 17, 18, 19
b) Result in substantial soil erosion or the loss of topsoil?		X		<p>Project grading will involve approximately 45 cubic yards (cy) to create a 2,000-sf building pad and to level the 28,000-sf outdoor storage area. The applicant estimates that the volume of cut will be equivalent to the volume of fill, resulting in no need to import or export soil. The building will be equipped with gutters and downspouts that will connect to underground drainage pipe that will outlet into the adjacent field where water will percolate into site soils. A rock energy dissipator will be installed at the pipe outlet to protect against scour. According to the applicant, site soils experience a high infiltration rate and stormwater discharge from the facility is not anticipated. Due to the scope of the grading activity, the moderate erosion hazard rating of site soils, and the lack of sensitive environmental resources on the Project Site, grading associated with the Project is exempt from a grading permit. Grading is, however, subject to the grading design standards outlined in the County Grading Ordinance. Compliance with the following mitigation measures will reduce impacts associated with soil erosion to a less than significant level. <b>Less Than Significant Impact with Mitigation Incorporated.</b></p> <p><b>Mitigation Measures:</b></p> <p><b>GEO-1:</b> The permit holder shall protect the local watershed with the implementation of Best Management Practices (BMPs) in accordance with the Chapter 30 (Grading Ordinance) of the Lake County Code and the Project</p>	1, 2, 3, 4, 5, 8, 18, 20

				<p>Description dated October 24, 2019 to prevent or reduce discharge of all pollutants and hazardous materials offsite. No silt, sediment or other materials exceeding natural background levels shall be allowed to discharge from the project area. The natural background level is the level of erosion that currently occurs from the area in a natural, undisturbed state. Typical BMPs include the placement of straw, mulch, seeding, straw wattles, silt fencing and the planting of native vegetation on all disturbed areas. Following construction, all exposed soil shall be protected by covering with vegetation, mulch, gravel or other surface treatment as appropriate for permanent erosion control. Erosion and sediment control measures shall be in place by the end of the grading project and shall be maintained until such time that permanent control has been established.</p> <p><b>GEO-2:</b> 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 Director. The actual dates of the allowable grading period may be adjusted according to weather and soil conditions at the discretion of the Community Development Director.</p> <p><b>GEO-3:</b> The permit holder shall monitor the site during the rainy season (October 15 – April 15), including post-installation, implementation of BMPs, erosion control maintenance, and other improvements as needed.</p> <p><b>GEO-4:</b> Native vegetation shall be retained and protected where its removal is not necessary to implement the grading project or to meet fire safety regulations.</p>	
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	<p>The Project Site is not identified as containing landslides or other unstable geologic conditions other than a moderate erosion hazard. There is a less than significant chance of landslide, subsidence, liquefaction or collapse as a result of the Project. <b>Less Than Significant Impact.</b></p>	4, 8, 16, 17, 18, 19
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	<p>According to the USDA Soil Survey, the shrink-swell potential for the Project soil type is moderate, and is not considered to be expansive. The proposed Project would therefore not increase risks to life or property as a result of expansive soil. <b>Less Than Significant Impact.</b></p>	1, 2, 3, 4, 5, 8, 18, 20
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?			X	<p>The Project Site is served by an existing onsite waste disposal system. The proposed Project does not require or include expansion of this system. <b>No Impact.</b></p>	4
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	<p>The Project Site does not contain any known unique geologic feature or paleontological resources. Disturbance of these resources is not anticipated. <b>No Impact.</b></p>	1, 3, 4, 5, 8, 12, 16, 18, 19

#### VIII. GREENHOUSE GAS EMISSIONS

**Significance Criteria:** The proposed Project would significantly impact greenhouse gas (GHG) emissions if it were to generate substantial GHG emissions exceeding the CEQA thresholds of significance adopted by the Lake County Air Quality Management District (LCAQMD) or conflict with an adopted plan, policy or regulation intended to reduce greenhouse gas emissions.

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



Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	<p>Greenhouse gas emissions from Project-related construction activities occurring over an 8-12 week period would include the use of diesel- and gasoline-powered construction equipment, delivery vehicles and worker vehicles. GHG emissions resulting from construction activities would be negligible and temporary, and would not result in a significant impact to the environment.</p> <p>During the operating phase, the bioenergy plant would operate 24 hours per day, seven days per week except when shut down for maintenance. According to the Project Description, the Artis gasifier “<i>delivers a clean syngas to a modified internal combustion engine and generator to create electricity.</i>” The syngas generated by the Artis gasifier is a fuel gas mixture consisting primarily of hydrogen, and carbon monoxide, with less than ten percent by volume being methane and carbon dioxide. The syngas is processed through a series of heat exchangers, hydrocarbon crackers and particulate filters before being delivered to the generator to fuel the system. Trace level emissions to below detectable levels from the sealed-system Artis gasifier result in a carbon neutral system. The applicant states, “<i>Emissions testing will be done as part of project startup and commissioning activities. The Artis 100 systems have zero emissions and the generators we are proposing to use will all meet EPA and air quality board emission requirements.</i>”</p> <p>Approximately 2-5 trucks to the site per day are estimated to deliver feedstock. One employee per shift (two per day) will operate the facility. A diesel-powered front-end loader is estimated to operate 6-8 hours per day, five days per week. The diesel-powered chipper is anticipated to operate a maximum of three hours per day, five days per week. This is based on the assumption that all material will arrive unchipped; however, material will be delivered to the site in both chipped and unchipped form. The hammermill will operate on electricity and would therefore not contribute GHG emissions. Based on the temporary nature of construction activities, the relatively light use of diesel equipment, and zero emissions generated by the gasifiers, the construction and operation of the proposed bioenergy plant is not expected to contribute significant amounts of greenhouse gases. That the Lake County Air Basin is in attainment for greenhouse gases supports the finding that significant or cumulative impacts to the environment due to GHG emissions is not likely. <b>Less Than Significant Impact.</b></p>	1, 2, 3, 5, 6, 12
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	<p>The proposed Project will not conflict with any adopted plans or policies for the reduction of greenhouse gas emissions. <b>No Impact.</b></p>	1, 2, 3, 5, 6, 12
IX. HAZARDS AND HAZARDOUS MATERIALS					
<p><b>Significance Criteria:</b> The Project would result in significant hazards or hazardous materials impacts if it exposed people to hazardous materials or placed them into hazardous situations; if it released hazardous materials or emissions into the environment or within 0.25 miles of a school; if it is located on a listed hazardous materials site; if it would create a hazard due to its proximity to a public airport or private airstrip; if it would create excessive noise for people in the area; if it would interfere with an emergency response or evacuation plan; or if it would expose people or structures to significant risks due to wildland fire.</p>					

**Environmental Setting:** The Project Site is located approximately five miles southeast of Kelseyville town center, on a 34.58-acre property occupied predominantly by a fallow walnut orchard. The subject property is also occupied by two single-family residences and a travel trailer. The fire hazard rating for the majority of the subject parcel, including the Project Site, is moderate. The very north portion of the parcel adjacent to SR 29 has a fire hazard rating of very high. The nearest receptors are the two on-site residences and travel trailer, located 200 to 300 feet south-southeast of the Project Site.

*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		<p>Hazardous materials associated with the Project include the use of diesel fuel and the use and storage of cleaning solvents. The loader and chipper will be fueled by a mobile fueling service. Solvents in containers of two gallons or less will be stored in a locked fireproof cabinet. The Project does not involve the routine disposal of hazardous materials. The use and storage of hazardous materials creates the opportunity for accidental releases to occur, requiring measures to prevent potential releases and to take proper action to contain, clean up and notify authorities should a release occur.</p> <p>Lake County Division of Environmental Health (LCEH) provided written comments on March 13, 2019. These included, in part, <i>"If the applicant stores hazardous materials (defined as either virgin or waste materials) equal to or greater than 55 gallons of a liquid, 500 pounds of a solid or 200 cubic feet of compressed gas, the applicant will be required to submit a Hazardous Materials Business Plan to the Environmental Health Division via the California Electronic Reporting system (CERS) and it shall be renewed and updated annually or if quantities increase. If the amount of hazardous materials is less than the above quantities, the applicant will need to complete and submit a Hazardous Materials/Waste Declaration stating the name of the material and the quantity to be stored on site. Hazardous materials shall not be allowed to leak onto the ground or contaminate surface waters. Any release of a hazardous material must be immediately reported to LCEH."</i> Other pertinent comments from LCEH include the protection of wells from hazardous materials.</p> <p>Section 41.7 of the Lake County Zoning Ordinance specifies that all uses involving the use or storage of combustible, explosive, caustic or otherwise hazardous materials shall comply with all applicable local, state and federal safety standards and shall be provided with adequate safety devices against the hazard of fire and explosion, and adequate firefighting and fire suppression equipment.</p> <p>Implementation of the following mitigation measures will reduce the impact from potential releases of hazardous materials to a less than significant level. <b>Less Than Significant Impact with Mitigation Measures HAZ-1 and HAZ-2 Incorporated.</b></p> <p><b><u>Mitigation Measures:</u></b></p> <p><b><u>HAZ-1:</u></b> The storage of potentially-hazardous materials shall be located at least 100 feet from any existing water well. These materials shall not be allowed to leak onto the ground or contaminate surface waters. Collected hazardous or toxic materials shall be recycled or disposed of through a registered waste hauler to an approved site legally authorized to accept such materials.</p> <p><b><u>HAZ-2:</u></b> If operation includes 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.</p>	1, 2, 3, 5, 6, 23, 24, 25
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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 Project does not involve the storage of a significant volume of hazardous materials that could be released into the environment. The storage of small volumes of cleaning solvents will be stored in a locked cabinet inside the building. Should the storage of fuel be desired in the future, the operator must comply with all applicable local, state and federal regulations. <b>Less Than Significant Impact with Mitigation Measures HAZ-1 and HAZ-2 Incorporated.</b>	1, 2, 3, 5, 6, 23, 24, 25
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 nearest school is located over two miles from the Project Site. <b>No Impact.</b>	1, 2, 3, 5, 6, 7
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X	The California Environmental Protection Agency (CALEPA) has the responsibility for compiling information about sites that may contain hazardous materials, such as hazardous waste facilities, solid waste facilities where hazardous materials have been reported, leaking underground storage tanks and other sites where hazardous materials have been detected. Hazardous materials include all flammable, reactive, corrosive, or toxic substances that pose potential harm to the public or environment. The following databases compiled pursuant to Government Code §65962.5 were checked for known hazardous materials contamination within ¼-mile of the Project Site: <ul style="list-style-type: none"> <li>State Water Resources Control Board (SWRCB) GeoTracker database</li> <li>Department of Toxic Substances Control EnviroStor database</li> <li>SWRCB list of solid waste disposal sites with waste constituents above hazardous waste levels outside the waste management unit.</li> </ul> The Project Site is not listed in any of these databases as a site containing hazardous materials as described above. <b>No Impact.</b>	1, 2, 3, 4, 5, 6, 23, 24, 25, 26
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 two (2) miles of an airport and/or within an Airport Land Use Plan. The nearest airport is Lampson Field approximately 9.5 miles northwest of the Project Site. <b>No Impact.</b>	1, 2, 3, 4, 5, 6, 27
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X		Development of a small-scale bioenergy plant at this location would not impair or interfere with an adopted emergency response or evacuation plan. <b>Less Than Significant Impact.</b>	1, 2, 3, 4, 5, 6, 23
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?		X			The Project Site is situated in a moderate fire hazard severity zone and is within the Local Responsibility Area of the Kelseyville Fire Protection District. The Project Site is surrounded by orchards, vineyards, and residential and commercial development. The Project includes both potential ignition sources (equipment) and fuel (wood chips), which, under certain conditions, could result in fire that could spread to adjacent vegetation. Proper operation and maintenance of equipment would minimize these impacts. <b>Less Than Significant Impact with Mitigation Measures HAZ-3 and HAZ-4 Incorporated.</b>  <b><u>Mitigation Measures:</u></b>  <b>HAZ-3: The permit holder shall operate in full compliance with fire safety rules and regulations and instruct all project workers that the project involves working adjacent to flammable vegetation. All activities shall be performed in a safe and prudent manner with regards to fire prevention. Vehicles and equipment shall be maintained and operated in a manner to prevent hot surfaces, sparks or any other heat sources from igniting grasses, brush or other highly combustible material.</b>	1, 2, 3, 4, 5, 6, 23, 28, 29

					<b>HAZ-4: Vehicles and equipment shall be maintained and operated in a manner to prevent hot surfaces, sparks or any other heat sources from igniting grasses, brush or other highly combustible material.</b>	
<b>X. HYDROLOGY AND WATER QUALITY</b>						
<b>Significance Criteria:</b> The Project would significantly impact hydrology and water quality if it violated water quality standards or waste discharge requirements or substantially degraded surface or groundwater quality; substantially decreased groundwater supplies or impeded sustainable groundwater management; altered drainage patterns in a manner that would cause substantial on- or off-site erosion, polluted runoff or excessive runoff that caused flooding; impeded or redirected flood flows; risked a release of pollutants due to inundation if in a flood hazard, tsunami or seiche zone; or conflicted with a water quality plan or sustainable groundwater management plan.						
<b>Environmental Setting:</b> The Project Site is located along the Highway 29 corridor in narrow valley terrain between the northeastern toe of the Mayacamas Mountains and the southern slope of Mount Konocti. This corridor consists of a series of isolated flats and small basins either drained internally or connected to Thurston Creek, which drains to the isolated basin of Thurston Lake. The property is drained along its eastern edge by an excavated ditch which flows north to SR 29 and then east to an unnamed tributary to Thurston Creek. The property drops approximately 80 feet in elevation from north to south into Hess Flat at an elevation of 1,880 feet msl. The Project Site does not contain perennial streams or ponded water of any type. Delineated aquatic resources consist of 0.136 acres of intermittent stream channel located in the southeast corner and continuing north along the east boundary of the subject parcel. The Project Site would be located over 350 feet from this drainage channel. A small drainage swale is located over 100 feet from the eastern edge of the proposed storage area.						
<i>Would the Project:</i>						
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		X			<p>Construction of the proposed Project will not generate any wastewater; therefore, there are no waste discharge requirements associated with the Project. Grading activities in preparation for the building pad have the potential to cause erosion; however, Project drainage is designed to flow as sheet flow into well-drained soils downslope of the site. Gutters and downspouts installed on the building will be connected to an underground drainage pipe that will extend downgradient 20 feet beyond the lane that will encircle the building. The pipe will release roof drainage into a rock energy dissipator to prevent surface erosion. Due to the significant acreage of land downslope of the Project Site and the well-drained soils designated by the USDA and confirmed by the applicant, sediment generated from the Project is expected to settle out on the property and not be discharged off site.</p> <p>Project grading of one or more acres requires compliance with the State Water Resources Control Board (SWRCB) General Permit for Discharges Associated with Construction Activities (Construction Stormwater Permit). The area proposed for grading is 2,000 square feet for the plant production pad and some leveling in the 28,000-sf storage area; therefore, the Project does not qualify for the Construction Stormwater Permit. However, the chipping activity may require coverage under the SWRCB General Permit for Discharges Associated with Industrial Activities (Industrial Stormwater Permit). Coverage under the Industrial Stormwater Permit would require development of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of a comprehensive stormwater monitoring program for the facility. HYD-1 requires the applicant to obtain any necessary permits, which would include a permit from the SWRCB if so required, in order to protect water quality from project-related impacts.</p> <p>Refer to Section VII(b) [Geology/Soils] for a discussion of impacts to water quality resulting from soil erosion. Compliance with GEO-1 through GEO-4 will mitigate impacts to water quality as a result of project-related erosion. Compliance with HAZ-1 and HAZ-2 will mitigate impacts to water quality as a result of hazardous material use and storage. <b>Less Than Significant with Mitigation Incorporated.</b></p> <p><b>HYD-1: Prior to operation, the applicant shall obtain all necessary Federal, State and local agency permits and shall submit a copy of said permit(s) to the Community Development Department within 30 days of obtaining the permit(s).</b></p>	1, 2, 3, 5, 6, 29, 30

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X		The proposed bioenergy plant is expected to use approximately 5 to 10 gallons of water daily supplied by the onsite well. As proposed, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. <b>Less Than Significant Impact.</b>	1, 2, 3, 5, 6, 30, 31
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:  i) result in substantial erosion or siltation on-site or off-site;  ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;  iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or  iv) impede or redirect flood flows?		X			The 34.58-acre Project Site is predominantly fallow orchard, with 5.06± acres occupied by residential development, roads and a parking lot. The disturbed acreage comprises 1.75 percent of the total acreage. The proposed Project will add 2,000± square feet of impervious surface to the parcel.  (i) As discussed in (a) above, construction activities and operation of the Project will not result in substantial erosion or siltation, due to well-drained site soils, extensive acreage for percolation, and proposed drainage improvements that will direct roof runoff onto a rocky substrate in the orchard. Mitigation measures GEO-1 through GEO-4 address Project-related soil erosion.  (ii) The increase of 2,000 square feet of impervious area will have a negligible effect on the rate and amount of surface runoff, and will not result in on- or off-site flooding.  (iii) The increase of 2,000 square feet of impervious area on the 34.58-acre parcel will not cause stormwater to exceed the capacity of the stormwater drainage system or provide substantial additional sources of polluted runoff.  (iv) The Project Site is not within a flood hazard zone, nor does flooding occur on the property. The Project will not impede or redirect flood flows.  <b>Less Than Significant Impact with Mitigation Incorporated.</b>	1, 2, 3, 5, 6, 7, 15, 18, 29, 32
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X	The Project Site is not located in an area of potential inundation by seiche or tsunami. The subject parcel is not located within a flood hazard zone. Therefore, there is no risk of release of pollutants due to inundation. <b>No Impact.</b>	1, 2, 3, 5, 6, 7, 9, 23, 32
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X	The proposed Project would not conflict with or obstruct water quality or management plans. <b>No Impact.</b>	1, 2, 3, 5, 6, 29

## XI. LAND USE AND PLANNING

**Significance Criteria:** The Project would significantly impact land use if it physically divided an established community or conflicted with a land use plan, policy or regulation intended to avoid or mitigate an environmental impact, such as the general plan or zoning code.

**Environmental Setting:** The Project Site is located within the unincorporated County of Lake, within the Riviera Area Plan boundary. The northern 10.5± acres of the subject parcel has a General Plan Land Use Designation of Community Commercial, and is zoned “CH” Commercial Highway, and is within the “DR” - Design Review Combining Overlay District and the “SC” - Scenic Combining District Overlay District. The southern 24.5± acres of the parcel, which includes the Project Site, has a General Plan Land Designation of Rural Residential and is zoned Rural Residential. The parcel is surrounded by commercial uses to the north and east, and agricultural uses to the west, east, and south. The proposed Project Site within the subject acreage is surrounded by agricultural and residential uses.

*Would the project:*

a) Physically divide an established community?				X	The Project Site is located on approximately 34.58-acre parcel in a rural area of Lake County. The proposed Project would not physically divide an established community. <b>No Impact.</b>	1, 2, 3, 5, 6
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X	This proposed Project is consistent with the Lake County General Plan, Riviera Area Plan, and Lake County Zoning Ordinance. Pursuant to Section 27.11 [Table B] of the Lake County Zoning Ordinance (LCZC), a Power Generation Facility is allowed in the Rural Residential zoning district subject to approval of a major use permit. <b>No Impact.</b>	1, 2, 3, 5, 6



## XII. MINERAL RESOURCES

**Significance Criteria:** Impacts to mineral resources would be considered significant if the proposed Project were to result in the loss of a known mineral resource that has value to the region and state or is otherwise locally important as designated on a local land use plan.

**Environmental Setting:** The Project Site is not located within an area identified by the State or County as regionally significant for containing 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	The Aggregate Resource Management Plan (ARMP) does not identify the subject property as being located within a Quarry Resource Area. There are no regionally significant mineral resources identified within the Project area. No loss of a known mineral resource of value to the region or the state would result from the proposed Project. <b>No impact.</b>	1, 3, 31, 32
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?			X	The subject property is not designated as being a locally important mineral resource recovery site in the County of Lake's General Plan, the Riviera Area Plan or the Lake County ARMP. There are no existing quarries on the Project Site. The Project does not involve the extraction of mineral resources; therefore the Project would not result in the loss of availability of valuable or locally important mineral resources. <b>No impact.</b>	1, 3, 31, 32

## XIII. NOISE

**Significance Criteria:** The Project would have a significant impact if it temporarily or permanently exceeded local noise standards in the vicinity of the Project, generated excessive groundborne noise or vibration; or would expose people residing or working in the area to excessive noise levels from public airports or private airstrips.

**Environmental Setting:** The Project Site is located adjacent to a two-lane rural County road, and within an area dominated by agricultural uses. The area is exposed to the typical background noise associated with these activities, such as light vehicle traffic, human voices, and farm vehicles and equipment. Background noise is also provided by SR 29 to the north. The nearest residential receptors are two single-family residences and a travel trailer located on the subject property approximately 200 to 300 feet south-southeast of the proposed Project site. The nearest off-site single-family residence is located approximately 800 feet southwest of the edge of the property boundary. The Noise Element of the Lake County General Plan and Section 41.11 of the Lake County Zoning Ordinance protects residential areas and other noise-sensitive uses from excessive noise by implementing noise standards.

*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		<p>Short-term noise levels would be increased during the construction phase of the Project. Construction-related noise may involve the use of a tractor/grader, compactor, water truck, and trucks delivering rock and concrete. Construction noise would occur over a period of approximately 8-12 weeks. For construction activities, General Plan Policy N-1.7 states, "<i>The County shall require contractors to implement noise-reducing mitigation measures during construction when residential uses or other sensitive receptors are located within 500 feet.</i>" Compliance with NOI-1 and NOI-2 will mitigate temporary construction noise to a less than significant level.</p> <p>Once Project construction is completed, noise associated with the operation would be generated by truck deliveries of feedstock, chipping equipment, and generators operating the bioenergy system on the west side of the building. The operation plan assumes 2 – 5 trucks daily delivering both chipped and unchipped material. To prepare feedstock, unchipped material would be run through a diesel or electric-powered chipper and then through an electric-powered hammermill before transfer to the hopper or stockpiled for later use. It is anticipated that material will be processed for no longer than 2-3 hours per day, five days per week, with the front-end loader operating 6-8 hours per day. The biochar is stored until five tons is accumulated, at which time it would be shipped to a soil amendment wholesaler located in the Central Valley. Out shipments of biochar would therefore be significantly less frequent than deliveries. Generator noise would be attenuated by full aluminum weather protection and superior sound attenuation for specific low noise applications, including a critical grade muffler. The "Level 2" housed gen-set would be located on the west side of the building, over 140 feet from Red Hills Road, over 200 feet from the nearest on-site residence, and 800± feet from the nearest off-site residence.</p>	1, 2, 3, 4, 5
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				<p>County noise standards require noise levels at the property line adjacent to residential and agricultural uses (west, south and east) not to exceed 55dBA between the hours of 7:00 a.m. and 10:00 p.m. and 45 dBA between the hours of 10:00 p.m. and 7:00 a.m. Where adjacent uses are commercial (north and east) noise levels must not exceed 60dBA during daytime hours and 55dBA during nighttime hours. The Project Description states that, <i>“Based on the distance of the operation from property lines and receptors and topography, the operation is capable of complying with County noise standards.”</i> Compliance with NOI-2 and NOI-3 will ensure that permanent Project activities will not exceed County noise standards. <b>Less Than Significant with Mitigation Incorporated.</b></p> <p><b><u>Mitigation Measures:</u></b></p> <p><b><u>NOI-1:</u></b> All construction activities including engine warm-up shall be limited to 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. Contractors shall implement noise-reducing measures during construction when occupied residences or other sensitive receptors are located within 500 feet.</p> <p><b><u>NOI -2:</u></b> The Project shall comply with the noise standards identified in Section 41.11 of the Zoning Ordinance, including, but not limited to: maximum non-construction project-related noise levels shall not exceed: (a) 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. adjacent to residential districts; and (b) 60 dBA between the hours of 7:00 a.m. to 10:00 p.m. and 55 dBA between the hours of 10:00 p.m. to 7:00 a.m. adjacent to commercial districts at the property lines as outlined in Table 11.1. Should the Project exceed these noise standards during construction or operational phases, noise-generating activities shall cease until noise attenuation measures are implemented such that the Project is compliant with noise standards.</p>	
b) Generation of excessive groundborne vibration or groundborne noise levels?		X		<p>Refer to discussion in Section XII (a). Groundborne noise or vibration may occur during site development or operation; however, levels are not expected to be excessive. Implementation of NOI-1 and NOI-2 would mitigate groundborne noise to a less than significant level. <b>Less Than Significant With Mitigation Incorporated.</b></p>	1, 2, 3, 4, 5
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	<p>The proposed Project is not located within an airport land use plan or within two miles of a public airport. <b>No Impact.</b></p>	1, 3
<b>XIV. POPULATION AND HOUSING</b>					
<b>Significance Criteria:</b> The proposed Project would result in significant impacts to the local population or housing stock if it directly or indirectly induced substantial unplanned population growth or displaced a substantial number of people or housing such that the construction of replacement housing would be required.					
<b>Environmental Setting:</b> The subject property is located in an established agricultural area with low residential density.					
<i>Would the project:</i>					
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	<p>The Project does not involve the construction of new homes or businesses, or the extension of roads or other infrastructure that would induce population growth. <b>No Impact.</b></p>	1, 2, 4, 5

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?			X	No people or housing will be displaced as a result of the project. <b>No Impact.</b>	1, 2, 4, 5
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## XV. PUBLIC SERVICES

**Significance Criteria:** The Project would result in a significant impact to public services if it resulted in a requirement for increased or expanded public service facilities or staffing, including fire or police protection, schools and parks.

**Environmental Setting:** The subject property is served by the Lake County Sheriff Department, the Kelseyville Fire Protection District, and is located within the Kelseyville Unified School District.

*Would the project:*

<p>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, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</p> <ul style="list-style-type: none"> <li>- Fire Protection?</li> <li>- Police Protection?</li> <li>- Schools?</li> <li>- Parks?</li> <li>- Other Public Facilities?</li> </ul>			X	<p>The proposed Project during operation and construction will not result in the need for additional police or fire protection, parks or other public facilities. The Project would not affect the number of students served by local schools, nor would it increase the number of new residents to the area, which could require the construction of expanded school facilities. <b>Less Than Significant.</b></p>	1, 2, 3, 4, 5
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## XVI. RECREATION

**Significance Criteria:** Impacts to recreation would be significant if the Project resulted in increased use of existing parks or recreational facilities to the extent that substantial deterioration was accelerated or if the Project involved the development or expansion of recreational facilities that would have an adverse effect on the physical environment.

**Environmental Setting:** The only park within the Riviera planning area is Clear Lake State Park, located nearly seven miles northwest of the Project Site. The nearest public parks are Kelseyville Park and Pioneer Park, located over five miles northwest of the Project Site. Boggs Mountain State Park is located approximately seven miles southeast of the Project Site.

*Would the project:*

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	The proposed Project involves the construction and operation of a bioenergy plant, and as such, will have no impacts on existing parks or other recreational facilities. <b>No Impact.</b>	1, 2, 3, 4, 5
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	The Project does not include or require the construction or expansion of any recreational facilities. <b>No Impact.</b>	1, 2, 3, 4, 5

## XVII. TRANSPORTATION

**Significance Criteria:** Impacts to transportation and traffic would be significant if the Project conflicted with a local plan, ordinance or policy addressing transit, roadway, bicycle and pedestrian facilities; conflicted with CEQA Guidelines Sec. 15064.3(b) which contains criteria for analyzing transportation impacts; substantially increased hazards due to geometric design features; or resulted in inadequate emergency access.

**Environmental Setting:** The Project Site is located in a low density residential and agricultural region of the Rivas planning area. The Project Site is situated on private land, accessed via a private driveway accessed from Red Hills Road, a two-lane, a rural County-maintained road. The private driveway is shared by two residences and provides access to the Tribe's community gathering areas and parking lot in the northeast portion of the property. Red Hills Road connects SR 29 to the north of the Project Site and SR 175 to the southwest, and has no sidewalks, bicycle or pedestrian lanes. The nearest school is over five miles from the Site. The subject property is located adjacent to the proposed Lake 29 Expressway Project, which would widen eight miles of SR 29 between Kelseyville and Lower Lake to four lanes to improve safety and increase capacity for trucks and commercial traffic. The highway project would be developed by Caltrans in the next few years, beginning with the segment that includes the intersection of SR 29 and Red Hills Road.

*Would the project:*

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	The Project Site is accessible off of Red Hills Road, approximately 1,000 feet from SR 29, the principal east-west commercial route through Lake County. There are no bicycle or pedestrian facilities in the vicinity of the Project Site. A minor temporary increase in construction-related traffic is anticipated during the construction phase. When operational, truck traffic to the site will increase by 2-3 trucks per day (4-6 trips/day) and vehicle traffic will increase by two employees per day (4 trips/day). The Project does not conflict with any local or regional transportation plans or facilities. <b>Less Than Significant Impact.</b>	1-5, 33-38
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	Construction of the Project would temporarily generate additional vehicle trips resulting from work crew members traveling to and from the Site, and the delivery of materials. The construction period is expected to occur over an 8 to 12-week period. The increase in vehicle miles traveled (VMT) during Project construction is considered to be equivalent to those generated by an accessory building construction project, and considered less than significant. Operation of the plant is expected to generate up to 12 vehicle trips per day, five days per week, resulting in a minor increase in VMT after the Project is completed. <b>Less Than Significant Impact.</b>	1-5, 33-38
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	The Project does not propose any changes to road alignment or other features, nor does it involve incompatible uses that could increase traffic hazards. The equipment and vehicles used to construct and operate the plant would be similar to those used for agricultural uses on adjacent farms. <b>Less Than Significant Impact.</b>	4, 5
d) Result in inadequate emergency access?			X	The construction and operation of the plant will not adversely impact existing emergency access. The existing driveway will be widened, improving accessibility for emergency vehicles. <b>Less Than Significant Impact.</b>	4, 5, 24

### XVIII. TRIBAL CULTURAL RESOURCES

**Significance Criteria:** An impact to tribal cultural resources would be significant if the Project were to substantially reduce the significance of a tribal cultural resource, a listed or eligible historic resource, or a resource considered significant by a California Native American tribe. Assembly Bill (AB) 52 was signed into law on September 25, 2014, requiring lead agencies to evaluate a project's potential to impact tribal cultural resources and establishes a consultation process for California Native American Tribes as part of CEQA. Tribal cultural resources include "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are eligible for inclusion in the California Register of Historical Resources (California Register) or included in a local register of historical resources. Lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." The consultation process must be completed before a CEQA document can be certified.

**Environmental Setting:** The Project Site lies at the foot of Mount Hanna, approximately 2.5 miles south of Clear Lake. Approximately 86 percent of the subject property is comprised of a fallow walnut orchard. The proposed Project Site is located within the existing orchard. There are no perennial watercourses or springs on the subject property. A blanket of shattered obsidian is prevalent on the property.

*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	See response to Section V (a). <b>No Impact.</b>	1, 2, 4, 5, 15, 16
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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		<p>A Request for Review was mailed on February 14, 2019 to the following tribes: Big Valley Rancheria, Cortina Rancheria, Elem Colony, Koi Nation, Middletown Rancheria, Mishewal-Wappo of Alexander Valley, Redwood Valley, Robinson Rancheria, Upper Lake Habematolel and Yocha Dehe, in addition to the Scotts Valley Band of Pomo Indians, the applicant for the subject Project.</p> <p>A response was received from Yocha Dehe, stating that the project is not within the aboriginal territories of the Yocha Dehe Wintun Nation, and declining comment.</p> <p>The subject property is owned by the Scotts Valley Band of Pomo Indians. The Tribe's cultural monitors have surveyed the property for archaeological evidence, and to date have found none. Cultural monitors will be employed during site development activities.</p> <p><b>Less Than Significant with Mitigation Measures CUL-1 and CUL-2 Incorporated.</b></p>	1, 2, 3, 5, 6, 15, 16
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## XIX. UTILITIES AND SERVICE SYSTEMS

**Significance Criteria:** Impacts to utility and service systems would be significant if the Project resulted in the construction or expansion of utilities that could cause significant environmental effects; have insufficient water supplies available to the Project during normal to extremely dry years; resulted in inadequate capacity of the wastewater treatment plant; generated solid waste exceeding the capacity of local infrastructure or impairing the achievement of solid waste reduction goals; or failed to comply with any management and reduction statutes or regulations related to solid waste.

**Environmental Setting:** The Project Site consists of a portion of a fallow walnut orchard situated on the east side of Red Hills Road, approximately 1,000 feet south of its intersection with SR 29. The Site contains two single-family residences, a travel trailer and a "public" restroom used by tribal members during ceremonial gatherings. These units are served by an on-site well with (2) 2,000-gallon storage tanks and an on-site septic disposal system. Electricity is provided by PG&E and trash collection is provided by the local waste hauler. The residences are also supplied with telecommunications services. There is no storm drain system; stormwater infiltrates into well-drained site soils.

*Would the project:*

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	<p>The bioenergy system will require approximately 5-10 gallons of water per day. Water for dust control will be used judiciously, as feedstock requires a low moisture content of 20-25 percent. Water for the operation will be supplied by the on-site well by installing a "T" connector to the existing distribution system piping, extending a line and outlet to the Project Site and using a commercial grade hose for water delivery. The Project's primary electrical need is the transmission line between the plant's co-generator and the PG&amp;E pole to the northwest of the plant on Red Hills Road to provide a 240v, 3-phase, 100-amp electrical connection. The transmission line will be installed overhead as required by PG&amp;E. It will connect the co-generator units to a transformer set towards the top of the pole as installed by PG&amp;E's employees. Secondary electrical needs will include power to the operation's interior and exterior LED lighting. According to the applicant, PG&amp;E is prepared to provide these electrical services. <b>Less Than Significant Impact.</b></p>	1, 2, 3, 5, 6
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	<p>As discussed in Section XIX(a), water demand associated with the facility is expected to be low, and can be provided by an existing on-site well, storage and distribution system. Project-related water demands are not dependent on seasonal precipitation. <b>Less Than Significant Impact.</b></p>	4
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	<p>The subject parcel is served by an on-site septic system. <b>No Impact.</b></p>	4, 23



d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	<p>The operation will generate a limited amount of trash; existing curbside trash collection will be expanded to include the bioenergy operation. The existing landfill has sufficient capacity to accommodate the Project's solid waste disposal needs.</p> <p>Eastlake Landfill, South Lake Refuse Center, and Quackenbush Mountain Resource Recovery and Compost Facility are located approximately 12 miles northeast of the subject parcel. Lake County Waste Solutions Transfer Station and Recycling Center is located approximately 12 miles northwest of the subject parcel.</p> <p><b>Less Than Significant Impact.</b></p>	1, 2, 4, 5, 39, 40
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	<p>The facility is designed to reduce waste by converting it into energy. Comments received from CalRecycle indicate that the biomass plant does not require a solid waste permit as long as it complies with PRC 40106 [definition of "biomass conversion"] and Title 14 CCR Section 17855(a)(5)(C), which excludes the handling of compostable materials if, <i>"the activity is located at the site of biomass conversion and is for use in biomass conversion as defined in Public Resources Code section 40106."</i> Another exclusion likely to pertain to the Project is found in Section 17855(a)(5)(I), which states, <i>"The activity is the storage of yard trimmings at a publicly designated site for the collection of lot clearing necessary for fire protection provided that the public agency designating the site has notified the fire protection agency."</i> The primary source of wood waste is from PG&amp;E's line clearing program. As such, the Project does not require a solid waste permit and is understood to be compliant with federal, state and local regulations related to the reduction of solid waste. <b>Less Than Significant Impact.</b></p>	1, 2, 3, 5, 23, 39, 40

## XX. WILDFIRE

**Significance Criteria:** Impacts to wildfire would be less than significant with the incorporated mitigation measures as the project is located within the State Responsibility Area (SRA). Additionally, the applicant shall adhere to all Federal, State and local agency requirements. and may substantially impair an emergency response plan; exposed project occupants to wildfire pollutants or uncontrolled spread of wildfire due to site conditions such as slope and prevailing winds; require the installation or maintenance of infrastructure that could exacerbate fire risk; or expose people or structures to significant risks as a result of post-fire runoff, slope instability or drainage changes.

**Environmental Setting:** The Project Site is located approximately five miles southeast of Kelseyville town center, on a 34.58-acre property occupied predominantly by a fallow walnut orchard. The fire hazard rating for the majority of the subject parcel, including the Project Site, is moderate. The very north portion of the parcel adjacent to SR 29 has a fire hazard rating of very high. The Project Site is located within the State Responsibility Area (SRA) zone. The nearest receptors are the two on-site residences and a travel trailer, located 200 to 300 feet south-southeast of the Project Site.

*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	<p>The Project Site is located within a moderate/high fire hazard severity zone and is within the State Responsibility Area. The Site is located within the response area of the Lake County Emergency Operations Plan, updated in 2018 by the Department of Emergency Services. The proposed Project will not substantially impair the Emergency Operations Plan. <b>Less Than Significant</b></p>	1, 2, 3, 5, 6, 23, 25, 28, 29
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	<p>The Project would not be situated in conditions that would exacerbate wildfire risks. <b>Less Than Significant Impact.</b></p>	1, 2, 3, 5, 6, 23, 25, 28, 29

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?		X		<p>Infrastructure exists on the property, including roads, water storage tanks and electrical service. The proposed operation will require electrical service, which will be delivered from a PG&amp;E utility pole located on Red Hills Road. An overhead line will connect to a utility pole that will be situated on the west side of the parcel. Additionally, the applicant shall adhere to all current <u>California Fire Codes, including 4290 and 4291 of the Public Resource Code</u> regulations and/or requirements..</p> <p><b>Less Than Significant with Mitigation Incorporated.</b></p> <p><b><u>FIRE-1:</u> Prior to occupancy, new electrical service on the subject parcel shall be sited and maintained to avoid impact by falling trees, overgrown vegetation or other potential sources of ignition that could increase fire risk.</b></p>	1, 2, 3, 5, 6
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			X	<p>There are two existing residences and a travel trailer on the property. The risk of flooding, landslides, slope instability, or drainage changes would not be significantly increased due to the Project. <b>Less Than Significant Impact.</b></p>	1, 2, 3, 5, 6, 21, 23, 32
<b>XXI. MANDATORY FINDINGS OF SIGNIFICANCE</b>					
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		<p>The proposed Project proposes to disturb just less than one acre of land within an old, fallow walnut orchard. A biological resources assessment encountered no special status plant species or wildlife habitat within the 34.58-acre parcel. There are no Waters of the U.S. or fish-bearing streams on the property. There are no historic or known cultural resources on the property. Based on the findings and conclusions contained in the Initial Study, the Project has the potential to significantly impact Aesthetics, Air Quality, Geology/Soils, Hazards &amp; Hazardous Materials, Hydrology/Water Quality, Noise, Tribal Cultural Resources and Wildfire. However, the implementation of mitigation measures described herein will reduce all potential impacts to a less than significant level.</p>	ALL
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		X		<p>The proposed Project has the potential to significantly impact Aesthetics, Air Quality Geology/Soils, Hazards &amp; Hazardous Materials, Hydrology/Water Quality, Noise, Tribal Cultural Resources and Wildfire. These impacts, in combination with the impacts of other past, present and reasonably foreseeable future projects could cumulatively contribute to significant effects on the environment. Implementation of mitigation measures identified in each section would avoid or reduce potential impacts to less than significant levels. Based on the findings and conclusions contained in the Initial Study, the proposed Project would have impacts that are individually limited, but are not cumulatively considerable.</p>	ALL
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		<p>The proposed Project has the potential to result in adverse indirect or direct effects on human beings in the areas of Aesthetics, Air Quality, Hazards &amp; Hazardous Materials, Noise, Tribal Cultural Resources and Wildfire. Implementation of mitigation measures identified in each section would avoid or reduce the substantial adverse indirect or direct effects on human beings to a less than significant level.</p>	ALL

## XXI. MITIGATION MONITORING AND REPORTING PROGRAM

Potential Impact	Mitigation Measure	Implementation Responsibility	Monitoring & Reporting Responsibility	Timing	Date Implemented
<b>AESTHETICS</b>					
Impact public views from Red Hills Road.	AES-1: All structures associated with the Project, including the building and any new fencing, shall use neutral, earth-tone colors in order to blend into the surrounding environment. Low glare building materials shall be used for new building construction.	Applicant	Applicant	Prior to occupancy	
	AES-2: Existing vegetation that provides screening to the Project Site shall be maintained or replaced with plantings as specified in AES-1.	Applicant	Applicant	During site preparation	
Generate a new source of light and glare from exterior lighting.	AES-3: All outdoor lighting shall be shielded and downcast or otherwise positioned in a manner that will not broadcast light or glare beyond the boundaries of the subject property. All lighting equipment shall comply with the recommendations of the International Dark-Sky Association ( <a href="http://www.darksky.org">www.darksky.org</a> ) and provisions of Section 21.48 of the Zoning Ordinance. Security lighting shall be motion activated.	Applicant	Applicant	Prior to occupancy	
<b>AIR QUALITY</b>					
Impact air quality temporarily during construction activities and permanently during wood processing activities.	AIR-1: Prior to the commencement of construction, applicant shall submit to the Lake County Air Quality Management District a complete list of all equipment to be used at the site with the potential to emit air contaminants, including diesel powered generators, pumps, off-road equipment, etc. and secure all necessary permits for all eligible operations and equipment as required by the District. Diesel powered equipment must meet the requirements of the State Air Toxic Control Measures for CI engines (stationary and portable). All mobile diesel equipment used must be in compliance with State registration requirements. Portable and stationary diesel powered equipment must meet the requirements of the for CI engines.	Applicant	Applicant	Prior to commencement of site preparation	
	AIR-2: Prior to operation, primary access roads and parking shall be surfaced to minimize dust impacts to the public, visitors and road traffic. At a minimum, chip seal surfacing is required. Paving with asphaltic concrete is preferred. All areas subject to semi truck/trailer traffic shall require asphaltic concrete paving or equivalent to prevent fugitive dust generation. Gravel surfacing may be adequate for low use/overflow driveways and parking areas if it receives regular palliative treatment. The use of white rock for surfacing is prohibited.	Applicant/ Contractor	Applicant	During site development and construction	
	AIR-3: All vegetation removed during site development shall be chipped and spread for ground cover, erosion control and/or biomass feedstock. The burning of vegetation, construction debris, or waste material is prohibited.	Applicant	Applicant	During site development	

	AIR-4: Dust control measures shall be implemented to minimize fugitive dust emissions from the Project Site. Dust control measures may consist of approved chemical, structural, or mechanical methods and shall be reapplied at the necessary intervals to prevent wind erosion.	Contractor	Applicant	During site development and construction	
CULTURAL RESOURCES/TRIBAL CULTURAL RESOURCES					
Disturb an archaeological resource or human remains during construction activities.	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), 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. The applicant shall halt all work and immediately contact the Lake County Sheriff's Department and the Community Development Department if any human remains are encountered.	Applicant	Applicant	During site development	
	CUL-2: A cultural resource monitor shall be present during ground disturbance activities.	Applicant	Applicant	During site development	
GEOLOGY/SOILS					
Create soil erosion during construction activities and from the alteration of drainage patterns due to new impervious area and roof drainage.	GEO-1: The permit holder shall protect the local watershed with the implementation of Best Management Practices (BMPs) in accordance with the Grading Ordinance and the Project Description dated October 24, 2019 to prevent or reduce discharge of all pollutants and hazardous materials offsite. No silt, sediment or other materials exceeding natural background levels shall be allowed to discharge from the project area. The natural background level is the level of erosion that currently occurs from the area in a natural, undisturbed state. Typical BMPs include the placement of straw, mulch, seeding, straw wattles, silt fencing and the planting of native vegetation on all disturbed areas. Following construction, all exposed soil shall be protected by covering with vegetation, mulch, gravel or other surface treatment as appropriate for permanent erosion control. Erosion and sediment control measures shall be in place by the end of the grading project and shall be maintained until such time that permanent control has been established.	Applicant/ Contractor	Contractor	Prior to and during site development and construction	
	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 Director. The actual dates of the allowable grading period may be adjusted according to weather and soil conditions at the discretion of the Community Development Director.	Applicant/ Contractor	Applicant/ Contractor	Prior to and during site development and construction	
	GEO-3: The permit holder shall monitor the site during the rainy season (October 15 – April 15), including post-installation, implementation of BMPs, erosion control maintenance, and other improvements as needed.	Applicant/ Contractor	Applicant/ Contractor	During site development and construction	
	GEO-4: Native vegetation shall be retained and protected where its removal is not necessary to implement the grading project or to meet fire safety regulations.	Applicant/ Contractor	Applicant/ Contractor	Prior to and during site	

				development and construction	
<b>HAZARDS &amp; HAZARDOUS MATERIALS</b>					
Create a hazard to the public or the environment due to an accidental release of hazardous materials.	<u>HAZ-1:</u> The storage of potentially-hazardous materials shall be located at least 100 feet from any existing water well. These materials shall not be allowed to leak onto the ground or contaminate surface waters. Collected hazardous or toxic materials shall be recycled or disposed of through a registered waste hauler to an approved site legally authorized to accept such materials.	Applicant	Applicant	For duration of the use	
	<u>HAZ-2:</u> If operation includes 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.	Applicant	Applicant	For duration of the use	
Expose people or structures, directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.	<u>HAZ-2:</u> If operation includes 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.	Applicant	Applicant	For duration of the use	
	<u>HAZ-4:</u> Vehicles and equipment shall be maintained and operated in a manner to prevent hot surfaces, sparks or any other heat sources from igniting grasses, brush or other highly combustible material.	Applicant	Applicant	For duration of the use	
<b>HYDROLOGY/WATER QUALITY</b>					
Degrade surface water quality due to industrial activities.	<u>HYD-1:</u> Prior to operation, the applicant shall obtain all necessary Federal, State and local agency permits and shall submit a copy of said permit(s) to the Community Development Department within 30 days of obtaining the permit(s).	Applicant	Applicant	Prior to commencement of the activity requiring the permit.	
<b>NOISE</b>					
Exceed noise standards beyond the property boundaries due to construction activities and	<u>NOI-1:</u> All construction activities including engine warm-up shall be limited to Monday Through Friday, between the hours of 7:00am and 7:00pm to minimize noise impacts on nearby residents. Back-up beepers	Applicant/ Contractor	Applicant/ Contractor	During site development and construction	

operating equipment associated with the new facility.	shall be adjusted to the lowest allowable levels. Contractors shall implement noise-reducing measures during construction when occupied residences or other sensitive receptors are located within 500 feet.				
	NOI -2: The Project shall comply with the noise standards identified in Section 41.11 of the Zoning Ordinance, including, but not limited to: maximum non-construction project-related noise levels shall not exceed: (a) 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. adjacent to residential districts; and (b) 60 dBA between the hours of 7:00 a.m. to 10:00 p.m. and 55 dBA between the hours of 10:00 p.m. to 7:00 a.m. adjacent to commercial districts as outlined in Table 11.1 at the property lines. Should the Project exceed these noise standards during construction or operational phases, noise-generating activities shall cease until noise attenuation measures are implemented such that the Project is compliant with noise standards.	Applicant/ Contractor	Applicant	For the duration of the use permit	
WILDFIRE					
Increase fire risk due to new utility pole and overhead lines to the parcel.	FIRE-1: Prior to occupancy, new electrical service on the subject parcel shall be sited and maintained to avoid being impacted by falling trees, overgrown vegetation or other potential sources of ignition that could increase fire risk.	Applicant/ Contractor	Applicant	Prior to construction and for the duration of the use permit	

\* Impact Categories defined by CEQA

**\*\*Source List (listed in the order in which they appear)**

1. Lake County General Plan
2. Lake County Zoning Ordinance
3. Rivas Area Plan, adopted January 9, 2007
4. County of Lake Major Use Permit Application and Supplemental Materials
5. Site Visit, September 23, 2019.
6. Scenic Combining Overlay District Map
7. California Streets and Highways Code, Section 263.3,  
[http://leginfo.ca.gov/faces/codes\\_displayText.xhtml?lawCode=SHC&division=1.&title=&part=&chapter=2.&article=2.5](http://leginfo.ca.gov/faces/codes_displayText.xhtml?lawCode=SHC&division=1.&title=&part=&chapter=2.&article=2.5).
8. Lake County GIS Portal
9. <https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx>
10. Important Farmland Map, <https://maps.conservation.ca.gov/agriculture/>
11. Lake County Air Quality Management District, [www.lcaqmd.net](http://www.lcaqmd.net)
12. Ultramafic, Ultrabasic, Serpentine Rock and Soils of Lake County Map, undated.
13. Lake County Air Quality Management District Memorandum, dated March 8, 2019.
14. Biological Resource Assessment with Botanical Survey and Delineation of Waters of the U.S., prepared by Northwest Biosurvey, July 1, 2019.
15. Northwest Information Center Letter, File No. 18-1569, February 22, 2019
16. UP 19-05, IS 19-09, Attachment 4, Archaeological Reassessment, provided by Northwest Information Center, Sonoma State University, Rohnert Park, CA, undated.
17. U.S.G.S. Geologic Map and Structure Sections of the Clear Lake Volcanic, Northern California, Miscellaneous Investigation Series, 1995
18. Official Alquist-Priolo Earthquake Fault Zone maps for Lake County,  
<https://www.conservation.ca.gov/cgs/geohazards/eq-zapp>
19. U.S.D.A. Lake County Soil Survey
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 Grading Ordinance, adopted 2007
22. Lake County/City Area Planning Council,  
<https://www.calcog.org/index.php?src=directory&view=members&srctype=detail&back=members&refno=32>
23. Lake County Division of Environmental Health Memorandum, March 13, 2019
24. 2018 Lake County Emergency Operations Plan, Office of Emergency Services, May 1, 2018
25. Lake County Local Hazard Mitigation Plan Update, January 2018
26. Hazardous Waste and Substances Sites List, [www.envirostor.dtsc.ca.gov/public](http://www.envirostor.dtsc.ca.gov/public)
27. Kelseyville Fire Protection District
28. Lake County Airport Land Use Compatibility Plan, adopted 1992
29. California State Water Resources Control Board Storm Water Program,  
[https://www.waterboards.ca.gov/water\\_issues/programs/stormwater/](https://www.waterboards.ca.gov/water_issues/programs/stormwater/)
30. Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region Fifth Edition, May 2019
31. Lake County Aggregate Resource Management Plan
32. California Geologic Survey Information Warehouse: Mineral Land Classification,  
<https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc>
33. 2018 Regional Transportation Improvement Program, Lake County/City Area Planning Council, adopted November 8, 2017
34. 2017 Lake County Regional Transportation Plan Final, Dow & Associates, February 14, 2018
35. Active Transportation Plan for Lake County, Lake County/City Area Planning Council, December 2016
36. 2011 Lake County Regional Transportation Bikeway Plan, Lake County/City Area Planning Council, adopted August 10, 2011
37. Lake County 2030 Regional Blueprint, October 2010.
38. California Department of Transportation (CALTRANS)
39. Lake County Record Bee, “4-Lane Construction on HWY 29 to Begin 2019,” August 23, 2018.
40. CalRecycle Solid Waste Information System  
<https://www2.calrecycle.ca.gov/SWFacilities/Directory/17-AA-0001/Detail/>
41. California Code of Regulations, <https://govt.westlaw.com/>