



COUNTY OF LAKE
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Item #6b
9:20 AM
December 12, 2024

STAFF REPORT

TO: Planning Commission

FROM: Mireya G. Turner, Director
Prepared by: Laura Hall, Senior Planner

DATE: December 12, 2024 (Continued from October 24, 2024)

SUBJECT: Consideration of proposed Major Use Permit (UP 23-05) and Initial Study (IS 23-10) to permit an AG Forest Wood Processing Bioenergy Project, located at 755 E State Highway 20 in Upper Lake (APN 004-010-04)

ATTACHMENTS:

1. Project Plans
2. Initial Study, IS 23-10
3. Conditions of Approval
4. Biological Resource Assessment with Botanical Survey
5. Land Evaluation & Site Assessment (LESA)
6. Agency Comments
7. Public Comments (as of December 5, 2024)
8. Presentation to the WRTH (November 20, 2024)
9. Current and Previous FEMA Flood Maps

EXECUTIVE SUMMARY

Using grant funding from the U.S. Department of Commerce's Economic Development Administration (EDA), the Scotts Valley Band of Pomo Indians (SVBPI) is proposing Major Use Per (UP 23-05) for development of a woody biomass facility (facility) to process and manage forest wood from in and around Lake County. The proposed woody biomass project would generate renewable energy to power the facility which may be available to downstream users in the future. The 42.6-acre parcel is owned by the Lake County Watershed Protection District (LCWPD) who has provided a long-term lease for the five acres to SVBPI.

Forest materials that are pre-processed into large wood chips at 8605 Bottle Rock Road, Kelseyville, (21.2 miles south of the site) would be hauled to the project site at 755 E State Highway 20 in Upper Lake (APN 004-010-04) for additional processing to create "biochar". The biochar would be transferred back to Red Hills Bioenergy, located at 7130 Red Hills Road, Kelseyville, for use. Please refer to Attachment 1 and the Project Description section of this Staff Report for more details.

Staff recommends approval of the Major Use Permit (UP 23-05) and Initial Study and Mitigated Negative Declaration (IS 23-10) (Attachment 2 with supporting documents included in Attachments 1, 4, 5, and 6) prepared for the project, based on the analysis and findings contained within this Staff Report, and subject to the Conditions of Approval for the project (Attachment 3).

Background and Summary of Continued Item

On October 24, 2024, the Planning Commission reviewed the project and moved to continue the item to the December 12, 2024, Agenda due to not having a full Commission and to give the Community Development Department (CDD) staff and the applicant further time to address community concerns at the next Western Region Town Hall (WRTH) meeting. The October 24, 2024, Planning Commission meeting may be viewed online at: https://lakecounty.granicus.com/player/clip/748?view_id=1&redirect=true. All written public comments received as of December 5, 2024, are included in Attachment 7.

The applicant and CDD Staff attended the November 20, 2024, WRTH meeting. Attachment 8 includes the power point presentation that Thomas Jordan provided to community members at the WRTH meeting. Below is a summary of the meeting:

- For community members not familiar with the project and those needing further explanation, the power point included the project plans and further description of the equipment and project was provided.
- To address concerns about how the canopy structure would look when viewed from State Highway 20, a photo was taken from the highway of the applicant's representative Thomas Jordan who will hold a 24' pole in the approximate location of the canopy structure. To show perspective of the size and height of the canopy structure relative to the site and existing bramble, a small 3D representation of the site will be prepared and shared with community residents.
- To demonstrate the size of the equipment, Mr. Jordan brought 4 - 8' long poles and had volunteers from the audience stand at what was the corners of the Artis 100 each holding a pole and then wrapped a line of caution tape encircling the 4 corners. Then repeated the process for the linear accelerator which is slightly longer.
- Five copies of an abstract on Biochar and Soil Properties was made available to anyone interested, and bags of biochar were passed around so the public could visibility see the product.
- A series of questions and answers discussed the following: air quality; truck trips; FEMA flood zones (Attachment 9); Williamson Act contract; cultural and tribal cultural resources; processing of biochar; next steps, etc.

PROJECT DESCRIPTION

<u>Applicant:</u>	Scotts Valley Energy Corporation
<u>Owner:</u>	Lake County Watershed Protection District
<u>Location:</u>	755 E State Highway 20, Upper Lake, CA
<u>Parcel Number:</u>	004-010-04
<u>Parcel Size:</u>	5-acres of a 42.6-acre parcel
<u>General Plan Designation:</u>	Agriculture A and Resource Conservation RC
<u>Zoning Designation:</u>	"APZ" Agricultural Preserve Zone-"SC" Scenic Combining- "WW" Waterway-"FF" Floodway Fringe
<u>Flood Zone:</u>	X-Areas determined to be outside the 0.2% annual chance floodplain, 0.2 Pct Annual Change Flood Hazard, and AE-Area inundated by the Base Flood with Base Flood Elevations
<u>Fire Zone:</u>	Not in SRA
<u>Earthquake Zone:</u>	Yes

Dam Failure Inundation Zone: N/A

Proposed Project

The 42.6-acre project parcel is located at 755 E State Hwy 20, Upper Lake in northwest Lake County (Figure 1). The area to be used is five acres, located approximately 1,000 ft. to the southwest of the northern property line. The northern property line parallels State Highway 20 with the eastern property corner located across from Old Lucerne Road. Lake County Watershed Protection District ("LCWPD") owns the parcel and has provided a long-term lease for the 5 acres (where project activities would occur) to SVBPI. The LCWPD also owns the 75-acre parcel to the south. Figure 2 includes the site plan and Attachment 1 includes the project plans.

The project will construct the following non-permanent structures and equipment: 40' wide x 60' long (2,400 sf) X 24' high membrane canopy structure; surface-mounted drainage system; driveway improvements with TrueGrid Permeable Pavers; a parking area; 27,625-gallon National Fire Protection Association (NFPA) 1142 rated water storage tank for fire suppression; and a 2,500-gallon onsite water storage tank for dust control and domestic water. Operations would occur Monday through Friday between 7:30 a.m. and 7:00 p.m.

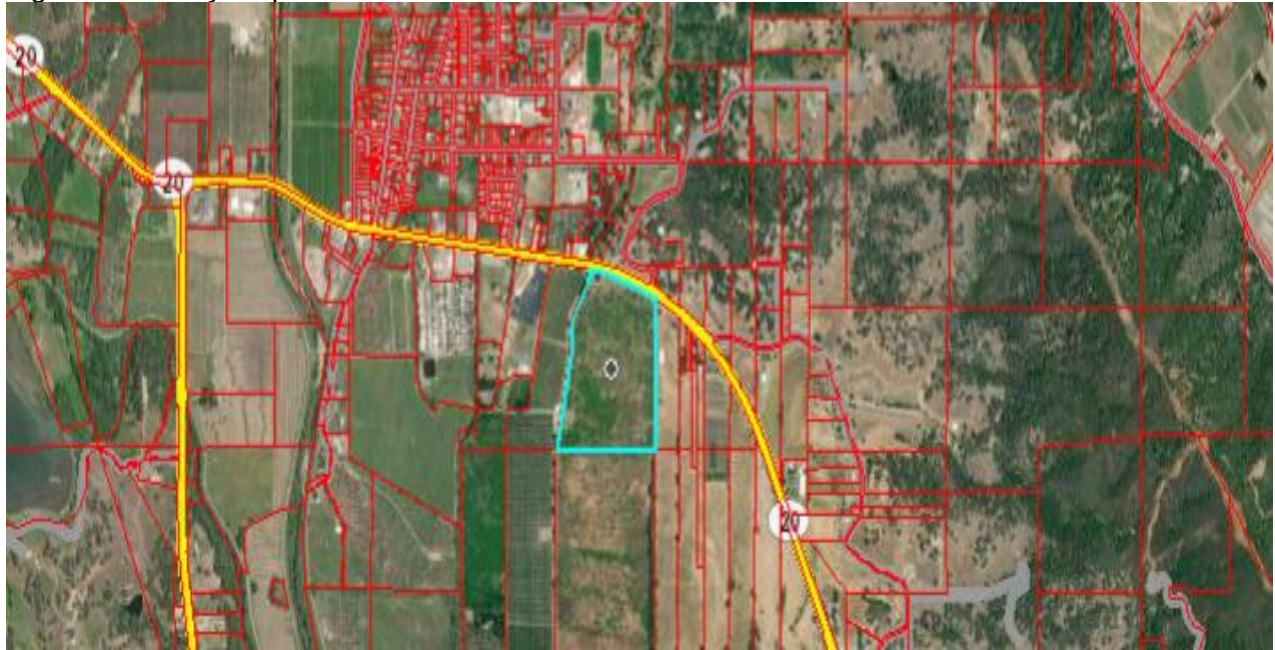
Within the membrane canopy structure, the biomass (woody debris) would move through mechanical conveyors as it is processed into smaller pieces to achieve an optimal size in turning the woody material into renewable syngas. The Synthetic Gas or "syngas" would then be used to power the generator, producing onsite microgrid power. As part of the syngas process, wood biomass is dropped into an airlock chamber through a solid slide gate. On the bottom of the chamber is another slide gate that is opened once the first chamber is full. The wood then enters into an electrically heated, sealed and insulated chamber, to release the gas embedded in the biomass. No smoke or combustion of the wood occurs, rather the wood biomass is thermally decomposed into combustible gases (syngas) and residual carbon mass, termed "biochar". The syngas is filtered and cooled to make it ready for use in power generation and the biochar is then sent to a holding container. The finished biochar would then be loaded onto trucks and transferred back to Kelseyville to the main customer Red Hills Bioenergy at 7130 Red Hills Road, Kelseyville, about once every two weeks.

The facility will support the development of markets for locally derived forest biomass to support forest fuel reduction, improved ecological function, and other positive-impact forest management activities. Concurrently, the project will support new jobs and economic development activities/support revenue generation for the SVBPI. To this end, the facility will be designed to process, manage, and convert incoming forest biomass into usable materials for downstream products (renewable power generation and biochar carbon sequestering for soil amendment, and water and air filtration), while also enabling the conversion of biomass to 100% renewable electricity on-site.

Currently, forest biomass is allowed to be burned in an open controlled manner. In comparison, the proposed project's operation would take that same material and process it via an indoor, smokeless method to generate usable materials in renewable power generation. Public Resources Code 4201-4204 directs the California Department of Forestry and Fire Protection (CAL FIRE) to map fire hazard within State Responsibility Areas (SRA). These zones, referred to as Fire Hazard Severity Zones (FHSZ), classify a wildland zone as Moderate, High, or Very High fire hazard based on the average hazard across the zone. According to CAL FIRE's SRA FHSZ Map released on June 15, 2023, the majority of Lake County in the SRA area is classified as Very

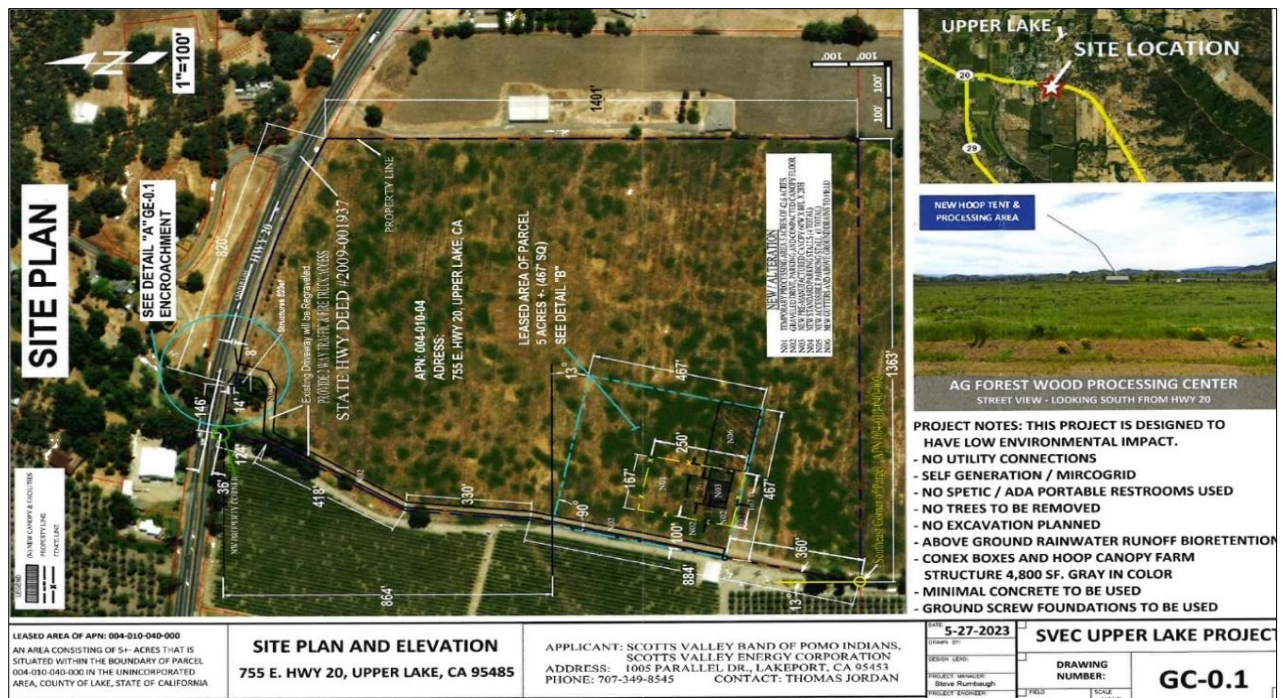
High¹. The proposed facility will operate as a central forest wood management and processing system for forest thinning biomass collected throughout these zones around Lake County.

Figure 1: Vicinity Map



Source: Lake County GIS Database, 2024. Note: The project site is outlined in blue

Figure 2: Site Plan



Source: Scotts Valley Energy Corporation

¹ California Department of Forestry and Fire Protection, 2023. State Responsibility Area Fire Herard Severity Zones. June 15, 2023.

Additional information on the sections that follow is provided in the project description section of the Mitigation Negative Declaration (Attachment 2).

Construction Details

Construction is tentatively planned for 2024 and is estimated to take approximately 3-4 months and 3-4 local employees. The access road on the west side of the parcel would be improved from State Highway 20 to a 5-acre area where the fencing and the biomass processing facility will be constructed. Some ground disturbance would be required for leveling the ground to pour a pad for the 27,625-gallon water storage tank. Semi-trucks would deliver the steel building structure and large fire water storage tank and other equipment. Construction activities would adhere to the Lake County Municipal Code.

Driveway Access & Improvements

Project development will include improvements to the existing driveway along the western edge of the parcel. This driveway has historically provided access for farming and is lightly graveled. Addition gravel will be added to improved fire truck access. A Knox Box (emergency key box) will be provided for rapid fire access at the gate, along with a fire apparatus turnaround. The existing encroachment from the parcel to State Highway 20 will be improved to conform with Caltrans requirements. An additional road base of 8 inches, with 2-1/2 inches of asphalt, will be added to create a more level ingress and egress for vehicle traffic. The driveway will be paved from the existing edge of State Highway 20 to a new gate. Drainage and erosion control will be provided in areas of concern. TrueGrid Permeable Pavers will be used. The pavers are made totally from post-consumer recycled plastic containers. The total material for the driveway (which includes the widening) and the fenced processing area is estimated to be 1,740 cubic yards. The one acre fenced main processing area will be covered by filter fabric, 6" of washed base rock. Rock will be delivered from State Hwy 179 via State Hwy 29 to State Hwy 20 (32 trips for the driveway and 55 trips for the fenced work area). Expected total rock delivery miles driven by truck is 2,610 miles.

Operations

Project operations would include unloading biomass, sorting, trimming, crumbling, orbital shear, screening, biomass conversion processing to renewable fuel, and on-site bioenergy/biochar equipment. The site would provide its own power, utilizing the forest material to generate renewable energy as a microgrid. Microgrids are localized electric grids that can disconnect from the main grid to operate autonomously, even when the larger grid is down. It is planned that most of the material delivered to the site will be in the form of chipped wood, brush and branches that can be processed at the site. The providers of the forest wood will be required to supply the appropriate material with sizing and content.

Forest materials will be trucked to the site from contractors completing forest fuel reduction and powerline hazardous wood removal around the County and surrounding forest land. Forest materials are pre-processed into large wood chips offsite, mostly at the Donahoo facility at 8605 Bottle Rock Road, Kelseyville CA 95451, 21.2 miles away. It is anticipated that between 2 and up to 5 trucks during the weekday will deliver forest materials of approximately 15,000 to 50,000 - tons per year. The applicant predicts approximately 4 employee vehicles will be used on weekdays. One ADA conforming parking space will be provided.

Once the forest material is onsite, the trucks or trailers will be unloaded by dumping or by tractor outside of the fenced area. The materials are then sorted, placed and prepared for processing.

Tree branches and brush can be placed directly into the shredder that will cut material into chunks appropriate in size for processing. If material is too wet to process, it will be sun-dried outside the fenced area and placed in rows no higher than 8 feet. Additional drying can be used during winter months with excess heat from the generating equipment. No combustion is used for direct drying of the material. Dried processed material will be placed within the fenced area, ready to trailer off or use at site. No materials that are not within the facility's ability to process will be approved for delivery.

Within the membrane canopy structure, the processing system will consist of mechanical conveyors and systems to interconnect the biomass material as it moves through the system. As part of the syngas process, wood biomass is dropped into an airlock chamber through a solid slide gate. On the bottom of the chamber is another slide gate that is opened once the first chamber is full. The wood then enters into an electrically heated, sealed and insulated chamber to release the gas embedded in the biomass. No combustion of the wood occurs, rather the biomass is thermally decomposed into syngas and biochar. The syngas is filtered and cooled to make it ready for use in power generation, and the biochar is then sent to a holding container.

Biochar will leave the facility about once every two weeks in a covered truck trailer. The amount of biochar produced will be about 1-1.5 tons a day, 5 days a week. A 15-ton capacity trailer would be leaving every two to three weeks. The main customer would be the Donahoo site mentioned above and located along Bottle Rock Rd in Kelseyville.

The steel building structure (membrane canopy structure) is designed in accordance with California Building Code Volume II Chapter 31 (Special Construction) Section 3102, which details regulations on membrane canopy structures in place for over 180 days. Sections 3102.1, 3102.3, 3102.6, and 3102.6.1 also apply to membrane structures. The proposed structure is 2,400 sq. ft. so therefore will not require fire protection sprinklers.

Photo 1: Artis Field Test Lab Site Picture (Walnut Grove, CA)



Source: Scotts Valley Energy Corporation, 2024.

Employment

Work would consist of arranging forest wood materials delivered into processing sections. Sun drying may occur on static forest materials during summer months, but wood biomass drying will occur when necessary, using waste heat from the power generation process. Moving materials and loading them into processing equipment will be accomplished with a front loader. Employees will work in and around the woodyard throughout the site. One of the 5 acres is designated for material handling and processing, with most of the equipment located within this fenced restricted area. The employees will also be working in and around the processing building when materials are in process. The total onsite personnel, as proposed, would be between 3-5 employees. Shredding and crumbing operations would require 2 to 3 employees. Employees would be permanently onsite during normal weekday business hours, engaged in the processing and moving of material, moving of equipment around the yard, loading and unloading of trucks/trailers, and performing repairs and maintenance. The forest material delivery contractor would be responsible for delivering the correct specification of wood chips equal to or under 6" in size. A covered trash container is provided in areas where employees generate litter. Onsite litter is collected routinely and disposed of properly.

Water Usage

Estimated domestic water use is approximately 100 – 500 gallons a day and 100,000 gallons annually, which would be applied to dust control, maintenance of moisture content, and suppression of fugitive dust emissions. Water is currently available at two existing wells, one near the entrance of the property, and the other 300' south of the operations location, one of which will be refurbished.

A 27,625-gallon water storage tank for fire suppression will be located within its own fenced-in area. Although no fire pump will be provided, a fire hydrant connection, acceptable to the North Shore Fire District, will be supplied for connection to a pumper truck. A 2" water line and UG electrical line to power pump, approximately 300' long will be installed from an existing farm well that fills the water storage tank. The well is located on the parcel to the south at APN: 004-013-15.

No septic system will be installed. Instead, an ADA-approved restroom facility will be used, and a servicing company will be hired to maintain the facility with cleaning and disposal at minimum of once a week. In addition to the 27,625-gallon water storage tank, the project includes a 2,500-gallon onsite water storage tank used for dust control and domestic water when needed.

Hours of Operation

The facility would operate Monday through Friday, and close on all national holidays. Hours of operations would occur between 7:30 a.m. and 7:00 p.m., with the site not open to the public. No weekend processing will be allowed outside the hours permitted herein. Some of the power facilities will be running on already processed materials to keep the water pump, security and lights operating. The lights will be directed toward the ground to prevent significant nighttime light pollution. Remote monitoring and control will be used for operations and security.

Petroleum Based Products

Petroleum-based products will be located onsite from time-to-time, along with proposed temporary storage petroleum-based products.

Noise

Sound levels have been estimated and fall under the county's acceptable levels for agriculture operations. Attachment 1 provides specifications for the ARTIS 200 R2 Pyrolysis Biomass System for the Renewable Energy Generation. According to the specifications the sound pressure at 1 meter (3.2 feet) is <75 dba. Additionally, Attachment 1 also provides specifications for the Mainspring Linear Generator. According to the performance specifications, noise would be < 70 dBA at 6 feet. The closest residence is approximately 850 feet to the north across State Highway 20. The sound level of the power generation facility will be under the decibels A levels for non-business hours to the property line.

Surrounding Land Uses and Setting

Surrounding land uses include row crops and agricultural buildings to the west, undeveloped land to the south, a single-family home to the east, and State Highway 20 to the north. These parcel sizes range in from 9.9 acres to 74.8 acres. Public rights-of-way in the vicinity of the project site include State Highway 20 and a Caltrans maintained roadway, on the north. Access to the subject property is limited to State Highway 20. The nearest residences to the five-acre site are located approximately 850 feet to the north, with State Highway 20 in between, and 1,000 feet to the east. The residences are located above any drainage planned for the site. The Lake County Municipal Code zoning designations for surrounding properties include:

- North: Beyond State Highway 20. APN 004-010-23, "RR" Rural Residential-"WW" Waterway Combining.
- South: APN 004-013-18, "APZ" Agricultural Preserve Zone-"WW" Waterway-"FF" Floodway Fringe Combining.
- West: APN 004-010-29, "A" Agriculture-"SC" Scenic Combining-"WW" Waterway-"FF" Floodway Fringe Combining.
- East: APN 004-010-05, "A" Agriculture-"SC" Scenic Combining-"WW" Waterway-"FF" Floodway Fringe Combining.

Figures 1 and 2 show the project in relation to surrounding zoning and general plan designations.

Figure 3: Zoning Map



Source: Lake County, 2024. Note: The project site is outlined in blue.

Figure 4: General Plan Map



Source: Lake County, 2024. The project site is outlined in blue.

PROJECT ANALYSIS

The project applicant has expressed that the project would align with SVBPI's commitment to environmental stewardship while supporting local and regional efforts to improve forest health, reduce the threat of catastrophic wildfires, and support in- region and sustainable economic job development. These effects are analyzed under conformance to the General Plan and the Upper

Lake-Nice Community Area Plan below.

General Plan Conformance

The general plan land use designation on this site is Agriculture (A) and Resource Conservation (RC). According to the County of Lake General Plan (2008), Chapter 12, the purpose of these land use designations are listed below, followed by the goals and policies that support the proposed project:

Chapter 12 Agricultural Resources

Goal AR-5: To maintain a viable and renewable timber production within the County.

Policy AR-5.2 Coordinate with Federal and State Agencies: The County shall coordinate closely with federal and state agencies exercising responsibilities for timber management in the County to ensure their policies and regulations are consistent with the County's General Plan and promote management that balances timber production with the protection of recreational resources and viewsheds.

Response: The proposed project would help to meet the State's goals included in the California's Wildfire and Forest Resilience Action Plan, January 2021 (Forest Management Task Force, 2021). Dangerous fuels would be cleared from around Lake County forests, which would result in maintaining a viable and renewable timber production. Bioenergy produced from the forest waste would power the facility which is allowed under the TPZ zoning designation (see Zoning Ordinance Conformance a below).

Goal LU -5: To designate adequate land for and promote development of industrial uses to meet the present and future needs of the Lake County residents for jobs and able to maintain economic viability.

Policy LU-5.1 (Industrial Development): The County shall encourage a wide range of industrial development activities in appropriate locations to promote economic development, employment opportunities and provide a sound tax base.

Response: The proposed use is in an appropriately zoned area of the County as the surrounding parcels range in size from approximately 3.43 acres to greater than 74.86 acres and are developed with agricultural uses and ranchette style single family dwellings. The proposed use would create employment opportunities for up to five full-time positions to operate the business and help improve the tax base through commercial improvements on the project parcel.

In addition, the proposed project site has not been in agricultural production since 2019. If agricultural production were to resume, only five acres would be taken out of production for, in a worst-case scenario, up to 15 years. A Land Evaluation & Site Assessment (LESA) Model was prepared to evaluate impacts on agricultural land which resulted in a less than significant impact.

Upper Lake-Nice Area Plan Conformance

The purpose of the Upper Lake - Nice Area Plan is to provide guidance regarding the long term (20 years) growth and development of the communities of Upper Lake and Nice, as well the Blue Lakes and Lake Pillsbury areas and the surrounding rural areas.

Objective 4.3.1: To apply measures which protect life and property from fires and reduce the potential for wildland fires within the planning area.

Policy 4.3.1b: Recommendations of the CDF, U.S. Forest Service and the local Fire Protection Districts shall be carefully considered and implemented where feasible and appropriate during evaluation of development proposals in the Upper Lake - Nice Planning Area.

Response: The CDD had several meetings with the Lake County Northshore Fire Protection District, Lake County Fire Marshal, and the applicant. As a result, a 27,625-gallon NFPA 1142 rated water storage tank will be installed at the site for fire protection. A condition of approval has also been added for combustible materials. The driveway and site will be improved to meet Fire Code regulations. Lastly, as mentioned previously, by reducing forest fuels the project would reduce the risk of fires throughout Lake County.

Zoning Ordinance Conformance

The proposal must meet the applicable requirements found within Lake County Zoning Ordinance for the following Articles:

Article 4, Agricultural Preserve Zone “APZ”: The purpose of this zone is to provide zoning for lands in agriculture preserve and for the conservation and protection of land capable of producing agricultural products.

Response: Pursuant to Article 4, Section 21-4, subsection 4.5 (e), those uses permitted in the “APZ” district with a major use permit in Table B, Article 27. According to Article 27, Section 27.11 Table B (x) power generation facilities are allowed in the APZ zoning district. Bioenergy would be produced from the woody biomass. The bioenergy would be used to power the facility and could be made available to downstream users.

Article 34, Scenic “SC” Combining: To protect and enhance views of scenic areas from the County’s scenic highways and roadways for the benefit of local residential and resort development, the motoring public, and the recreation based economy of the County.

Response: The site includes both pastoral features and convenient visual access from State Highway 20. These two characteristics must be considered when applying the “SC” district. The project meets all the performance standards under Section 21-34.10 (b) v., which requires consideration of the following: setbacks, yard areas, parking and loading, outdoor storage, operations, and landscaping to be part of the development review.

Article 37 Waterway “WW”: To preserve, protect and restore significant riparian systems, streams and their riparian, aquatic and woodland habitats; protect water quality; control erosion, sedimentation, and runoff; and protect the public health and safety by minimizing dangers due to floods and earth slides.

Response: The southern portion of the parcel which includes the 5-acre site is within flood hazard zones. However, mitigation has been added to the project for the membrane canopy structure, and any foundations to be constructed on Lupoyoma silt loam (map unit 158), which would require a geotechnical report or approval from the Lake County Public Works Department prior to construction. Also, if building on the flood hazard areas, the applicant would need to meet Lake County Building Department standards.

Article 36, Floodway Fringe “FF”: To provide land use regulations for properties and their improvements situated in the floodplain to ensure protection from hazards and damage which may result from flood waters.

Response: The proposed project is allowed under Section 21-36, Subsection 36.5 (f) Those uses permitted in the base zoning district with a zoning permit in Table B, Article 27.

California’s Wildfire and Forest Resilience Action Plan, January 2021

Goal 1: Increase the Pace and Scale of Forest Health Projects

Accelerate Restoration Across All Lands

- 1.4 Expand Agreements: The USFS will seek to expand its use of Good Neighbor Authority and Shared Stewardship Agreements and other mechanisms to partner with state, local and tribal governments to accomplish fuels reduction projects on federal land more efficiently.

Response: Although not on federal lands, the tribal government would be overseeing the operation that proposes clearing fuels around Lake County. Land throughout Lake County is connected to federal lands.

Goal 2: Strengthen Protection of Communities

Improve Utility-Related Wildfire Risk

- 2.23 Expand USFS Master Special Use Permits: In 2019, the USFS signed a 30-year Master Special Use Permits with Pacific Gas and Electric (PG&E) and Southern California Edison (SCE) to streamline permitting of hazard tree removals and other routine maintenance activities along powerline corridors and will seek to expand the use of these permits to other utilities throughout the state.

Response: This project proposes to process woody biomass that has been cleared around utility lines throughout Lake County.

Goal 3: Manage Forests to Achieve the State’s Economic and Environmental Goals

Create a Sustainable Wood Products Market in California

- 3.8 Launch Catalyst Fund Forest Investments: In 2021, the state’s iBank will partner with CAL FIRE and other agencies to advance forest-related applications to the Catalyst Fund, building on work to date, which will accelerate with the passage of the state budget. The fund will (1) provide loans, loan guarantees and other credit support to encourage the development of businesses that utilize wood and forest biomass; (2) encourage private-sector innovations in technology, business models, infrastructure, and supply chains in the woody biomass markets; and (3) promote optimization of state grant funds in the sector by leveraging the maximum amount of private capital possible for each public dollar provided.

Response: This project would utilize forest biomass that would produce bioenergy and biochar.

California's 2022 Scoping Plan for Achieving Carbon Neutrality

Strategies for Achieving Success:

- Accelerate the pace and scale of climate smart forest management to at least 2.3 million acres annually by 2025, in line with the climate smart management strategies identified in this Scoping Plan, the NWL Climate Smart Strategy, and the Wildfire and Forest Resilience Action Plan.
- In collaboration with state and local agencies, accelerate the deployment of long-term carbon storage from waste woody biomass residues resulting from climate smart management, including storage in durable wood products, underground reservoirs, soil amendments, and other medium.
- Expand infrastructure to facilitate processing of biomass resulting from climate smart management.
-

Response: Of the five strategies for achieving success in the California's 2022 Scoping Plan for Achieving Carbon Neutrality, the project would meet three. The proposed project would help to meet the 2025 strategy of climate smart forest management in California, by producing both bioenergy and biochar.

AGENCY COMMENTS

The County received comments from the following departments and agencies (Attachment 6). All requirements noted by the agencies have been included in the proposed Conditions of Approval (Attachment 3).

- Community Development Department, Building Division
- Lake County Air Quality Management District
- Northshore Fire Protection District
- Lake County Sheriff's Department
- Lake County Health Services Department
- Lake County Special Districts
- Lake County Public Services Department
- Central Valley Regional Water Quality Control Board
- State Water Resources Control Board
- California Department of Fish and Wildlife
- Pacific Gas & Electric (PG&E)

It should be noted that several meetings occurred with the Lake County Fire Marshall and with the Northshore Fire Protection District's Chief following the pre-application meeting for this project. As a result, the project was modified from two structures to one, and a 27,000-gallon water storage tank was added to the project for fire protection.

During these meetings, it was also determined by the Building Department that the structure was classified as a permanent structure. Please note that although the structure is classified by the Building Department as permanent, most of the development would not be permanently affixed to the land and could be returned to its natural state when the lease agreement ends (10 to 15 years). Therefore, the project is considered temporary in nature.

TRIBAL COMMENTS

Tribal comments were received, and consultation was requested from the Habematolel Pomo of Upper Lake. Consultation was held and concluded on June 11, 2024. Tribal comments are on file at the County offices but remain confidential under the National Historic Preservation Act of 1966, Section 304; the Archaeological Resource Protection Act of 1979, Section 9(a); and California Government Code 6254.10.

PUBLIC COMMENTS

Public comments received are included in Attachment 7.

ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) requires agencies to evaluate the environmental implications of land use actions. An Initial Study and Mitigated Negative Declaration (Attachment 2) was prepared and circulated for public review in compliance with CEQA from April 23, 2024, to May 24, 2024, and revised with an extended review period from May 28, 2024, to June 27, 2024. Public comments received are included in Attachment 7. The Initial Study found that the project could cause potentially significant impacts on the following environmental topics:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards & Hazardous Materials
- Hydrology and Water Quality
- Public Services
- Transportation
- Tribal Cultural Resources
- Wildfire

Aesthetics (AES)

Due to the type of land and its location along State Highway 20, impacts could occur related to aesthetics. The following mitigation measures were recommended:

AES-1: Prior to construction activities, a landscaping plan shall be submitted to the Community Development Department that includes the appropriate visual screening using drought resistant or indigenous vegetation. Water conservation shall be applied with the use of drip irrigation.

AES-2 Outdoor lighting shall be restricted to the processing facility and shall be directed downward so as not to illuminate adjacent areas. All lighting being proposed shall conform with IDA Dark Sky approved fixtures.

Air Quality (AQ)

Due to construction and operation activities the project was routed to the Lake County Air Quality Management District for comments. The following mitigation measures were recommended:

AQ-1: Commercial burning shall not be allowed during construction or during the life of the project. All vegetative waste from land development must be disposed of by chipping or other appropriate methods.

AQ-2: Mobile diesel equipment used for construction and/or maintenance shall comply with State registration requirements. Portable and stationary diesel-powered equipment shall meet the requirements of the State Air Toxic Control Measures for Compression Ignition engines.

AQ-3: A complete list of all equipment which will be utilized at the site with the potential to emit air contaminants shall be submitted to the LCAQMD including, but not limited to: conveyors, chippers, grinders, generator, pumps, off-road equipment, etc. An Authority to Construct permit may be required for equipment with the potential for emissions to air. The pyrolysis facility will likely require a LCAQMD Authority to Construct permit. The applicant shall contact the LCAQMD as soon as possible to reduce the potential for delays in obtaining any necessary LCAQMD permits.

AQ-4: The applicant shall chip seal primary access roads and parking. Paving with asphaltic concrete is preferred. All areas subject to semi-truck I trailer traffic should require asphaltic concrete paving or equivalent to prevent fugitive dust generation. Gravel surfacing may be adequate for low use/overflow driveways and parking areas; however, gravel surfaces require more maintenance to achieve dust control, and permit conditions should require regular palliative treatment if gravel is utilized. White rock is not suitable for surfacing (and should be prohibited in the permit) because of its tendency to break down and create excessive dust. Adequate dust mitigation measures must be put in place such that a nuisance is not created.

AQ-5: Other methods to accomplish AQ-4 shall be allowed through approval from the Lake County Air Quality Management District. Proof of approval from the Lake County Air Quality Management District shall be submitted to the Lake County Community Development Department prior to any ground moving activities.

Biological Resources (BIO)

Due to earthmoving activities, a biological resource assessment was completed for the project. This report was revised to identify any potential waterways more clearly on the site. In addition, this project was routed to the California Department of Fish and Wildlife (CDFW) for comments. All recommendations have been applied to the project as listed below:

BIO-1: All work in or near waterways and wetlands shall incorporate extensive erosion control measures consistent with Lake County Grading Regulations in order to avoid erosion and the potential for transport of sediments to the existing drainage ditch. Coverage under the National Pollutant Discharge Elimination System (NPDES), General Permit for Storm Water Discharges associated with a Construction Activity (General Permit) and a Storm Water Pollution Prevention Plan (SWPPP) may be required.

BIO-2: Pre-construction surveys for the presence of Western pond turtle, Foothill yellow-legged frog and other sensitive animal species shall be completed by a qualified biologist prior to ground disturbing activities within 100 feet of the drainage ditch along the western boundary of the site.

If sensitive species are found, all work shall halt and appropriate buffer zones and handling protocols shall be established by a qualified biologist, in accordance with CDFW and USFWS protocols.

BIO-3: If the project includes vegetation removal (including grasses) or earthwork of any kind during the bird nesting season (February 1 through August 31), a qualified biologist shall conduct a pre-construction nesting bird survey to identify the absence or presence of active (i.e. with eggs or young) nests. The survey area shall include the project site and a minimum 300-foot buffer around the project site. To minimize the chance of nests becoming established between the time the survey is conducted and when construction begins, the pre-construction survey shall be conducted no more than three (3) days before the start of vegetation removal and/or ground disturbing activities. If active nests are observed during the pre-construction survey, a species-appropriate no-disturbance buffer shall be established by a qualified biologist to protect the active nest.

BIO-4: State and Federal regulations on pesticide selection, use, storage and transportation shall be strictly followed. Pesticide use shall not occur during periods when winds may transport spray to adjacent areas.

BIO-5: The use of deer fencing shall be restricted to the perimeters of the proposed facility. No deer fencing or other obstacles to wildlife passage shall be installed that will restrict wildlife movement.

Cultural & Tribal Resources (CUL)

The following mitigation measures have been incorporated into the project.

CUL-1: All workers shall be trained in recognizing potentially significant archaeological, paleontological, or cultural materials that may be discovered during ground disturbance. Prior to ground disturbing activities, the Permittee shall submit a Cultural Resources Plan, identifying methods of sensitivity training for site workers, procedures in the event of an accidental discovery, and documentation and reporting procedures. Prior to ground disturbing activities, the Permittee shall submit verification that all site workers have reviewed the Cultural Resources Plan and received sensitivity training.

CUL-2: Should any archaeological, paleontological, or cultural materials be discovered during site development, all activity shall be halted within 100 feet of the find(s). A professional archaeologist certified by the Registry of Professional Archeologists (RPA) shall be notified and shall evaluate the find(s) and recommend mitigation procedures, if necessary. The findings and mitigation measures shall be reviewed and approved by the Lake County Community Development Director prior to commencing work.

CUL-3: Should any human remains be encountered, the applicant shall halt all work within 100 feet, notify the Sheriff's Department, the culturally affiliated Tribe(s), and a qualified archaeologist for proper interment and Tribal rituals per Public Resources Code Section 5097.98 and Health and Safety Code 7050.5.

Geology and Soils (GEO)

Due to the soil types at the project site, the following mitigation measure has been implemented.

GEO 1: The proposed membrane canopy structure and any foundations shall be constructed on Lupoyoma silt loam, protected (map unit 158) areas. Any development on the Cole variant clay loam (map unit 124) areas would require a geotechnical report or approval from the Lake County Public Works Department prior to construction.

Hazards and Hazardous Materials (HAZ)

Due to the nearby neighbors and the preschool along State Highway 20, the project was routed to the Lake County Public Health Department for comments. The following mitigation measures shall be applied to the project.

HAZ-1: There are no permits for the referenced water well and septic system on this property. Notation of their existence was noted on material previously submitted in 2010, but the locations have not been validated. Prior to construction, the applicant shall schedule a field clearance inspection. In addition, It is noted in the submitted material that the onsite well will be “refurbished”. A well repair/alteration permit may be required for this process. Prior to construction, the applicant shall contact the appropriate department to determine if a permit is required.

HAZ-2: All wells shall be located and with an adequate horizontal distance from potential sources of contamination and pollution. The storage of hazardous materials shall be located a safe distance from any water well to prevent contamination. The site shall be designed to prevent runoff of hazardous materials into the nearby creek and drainage paths.

HAZ-3: If the applicant stores hazardous 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 Inventory Disclosure Statement/ 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. Note that additional California Unified Program Agency (CUPA) requirements may apply depending on the amounts of hazardous materials stored onsite. This requirement shall be completed prior to construction of the project.

HAZ-4: A 27,625-gallon NFPA 1142 rated water storage tank shall be placed near the entrance to fenced area for emergency water supply for fire suppression. No fire pump will be provided but a fire hydrant connection, acceptable to North Shore Fire District, shall be supplied for connection to a pumper truck. A 2” water line and UG electrical line to power pump, approximately 300’ long shall be installed from an existing farm well that fills the water storage tank.

Hydrology and Water Quality (HYD)

Implement Mitigation Measures BIO-1 and HAZ-1 and HAZ-4.

Public Services (PS)

Implement Mitigation Measure HAZ-4.

Transportation (TRN)

As a result of the project generated trucks entering and existing State Highway 20 Monday through Friday, the following mitigation measures were incorporated into the project.

TRN-1: Before the end of the driveway at State Highway 20, install signage cautioning truck drivers to watch for bicyclists.

TRN-2: Before the end of the driveway at State Highway 20, install signage cautioning truck drivers to watch for farm equipment.

Tribal Cultural Resources

Due to earthmoving activities, the following mitigation measures have been incorporated into the project.

TCR-1: All on-site personnel of the project shall receive tribal cultural resource sensitivity training prior to initiation of ground disturbance activities on the project. The training must be according to the standards of the NAHC or the culturally affiliated tribe(s). Training will address the potential for exposing subsurface resources and procedures if a potential resource is identified. The training will also provide a process for notification of discoveries to culturally affiliated tribes, protection, treatment, care and handling of tribal cultural resources discovered or disturbed during ground disturbance activities of the Project. Tribal monitors will be required to participate in any necessary environmental and/or safety awareness training prior to engaging in any tribal monitoring activities for the project.

TRC-2: If previously unidentified tribal cultural resources are encountered during the project altering the materials and their stratigraphic context shall be avoided and work shall halt immediately. Project personnel shall not collect, move, or disturb cultural resources. A representative from a locally affiliated tribe(s) shall be contacted to evaluate the resource and prepare tribal cultural resources plan to allow for identification and further evaluation in determining the tribal cultural resource significance and appropriate treatment or disposition.

TCR-3: Prior to commencement of ground disturbing activities, the permittee shall submit documentation to the Community Development Department demonstrating that they have engaged with the culturally affiliated tribe(s) to provide cultural monitors and that cultural sensitivity training has been provided to site workers.

TCR 4: The Project applicant must notify all Culturally Affiliated Tribes at least 45 days prior to commencement of any and all ground disturbance activities on the Project Site. All cultural resources unearthed by Project activities shall be evaluated by the Archeologist and monitor(s). The culturally affiliated tribe(s) must be notified and given an opportunity to inspect, determine the nature of the TCR, and determine the best course of action for avoidance, protection, and/or treatment of the resource to the extent permitted by law. If the resource is determined to be a TCR of value to a tribe, that Tribe will coordinate with the Permit Holder, Lake County Watershed Protection District (County Land/Resource Manager), and the Community Development Director to establish measures by which the Tribe may appropriately protect, treat, and dispose of TCR with dignity; which may include preservation and protection in situ or removal from the Project Site. The Permit Holder will allow the Tribes to facilitate treatment and disposition of the TCR to the extent permitted by law. No destructive or intrusive analysis of nor any photographing, video recording, or similar recording of TCRs shall be permitted by the Permit Holder, except as required by law.

Wildfire

Implement Mitigation Measures HAZ-5 and HAZ-6.

FINDINGS FOR APPROVAL

The Review Authority may only approve or conditionally approve a major use permit if all of the following findings are made:

1. That the establishment, maintenance, or operation of the use applied for will not, under the circumstances of the particular case, be detrimental to the health, safety, morals, comfort and general welfare of the persons residing or working in the neighborhood of such proposed use or be detrimental to property and improvements in the neighborhood or the general welfare of the County.

A "Power Generation Facility" is permitted to use in the Agricultural Preserve Zone "APZ" upon issuance Major Use Permit pursuant to Article 27, Table B (x). Additionally, the applicant shall obtain all necessary federal, State and local agency requirements prior to operation; and the Community Development Department has incorporated Conditions of Approval and mitigation measures to ensure compliance and to help protect the health, safety and overall welfare of the general public.

2. That the site for the project is adequate in size, shape, location, and physical characteristics to accommodate the type of use and level of development proposed.

The project site is adequate in size and shape, as is the facility would be located on approximately 5 acres of the relatively flat, 42.6 acres site, located off of State Highway 20.

3. That the streets, highways, and pedestrian facilities are reasonably adequate to safely accommodate the specific proposed use. (Ord. No. 2128, 1/14/1993)

The streets, highways, and pedestrian facilities are reasonably adequate to safely accommodate the project site as it is accessed from a private driveway which is accessed from State Highway 20. The private access driveway will be improved to meet local and State regulations.

4. That there are adequate public or private services, including but not limited to fire protection, water supply, sewage disposal, and police protection to serve the project. (Ord. No. 1749, 7/7/1988)

The project site has existing onsite groundwater well(s) and will have portable toilets and sinks. The project was routed to the Lake County Environmental Health for comments and the applicant will be required to get a field clearance inspection. Additionally, the project parcel has adequate emergency service protection through the Lake County Sheriff's Office, California Highway Patrol (CHP) and the Northshore Fire Protection District.

5. That the project is in conformance with the applicable provisions and policies of this Code, the General Plan and any approved zoning or land use plan.

This project is consistent with the Lake County General Plan, Upper Lake-Nice Area Plan and the Lake County Municipal Zoning Ordinance as a "Power Generation Facility" is a permitted use in the Agricultural Preserve Zone "APZ" upon issuance Major Use Permit pursuant to Article 27, Table B(x). Additionally, Conditions of Approval are in place to ensure continuous compliance.

6. That no violation of Chapters 5, 17, 21, 23 or 26 of the Lake County Code currently exists on the property, unless the purpose of the permit is to correct the violation, or the permit relates to a portion of the property which is sufficiently separate and apart from the portion of the property in violation so as not to be affected by the violation from a public health, safety or general welfare basis. (Ord. No. 2128, 1/14/1993).

The County's Accela database showed no known violations of Chapters 5, 17, 21, 23 or 26 of the Lake County Code.

RECOMMENDATIONS

Staff recommends the Planning Commission take the following actions:

- A. Adopt Mitigated Negative Declaration (IS 23-10) for Major Use Permit (UP 23-05 with the following findings:
 1. Potential environmental impacts related to Aesthetics can be mitigated to less than significant levels with the inclusion of mitigation measures AES-1 and AES-2.
 2. Potential environmental impacts related to Air Quality can be mitigated to less than significant levels with the inclusion of mitigation measures AQ-1 through AQ-5.
 3. Potential environmental impacts related to Biological Resources can be mitigated to less than significant levels with the inclusion of mitigation measures BIO-1 through BIO-5.
 4. Potential environmental impacts related to Cultural can be mitigated to less than significant with the inclusion of mitigation measures CUL-1 and CUL3.
 5. Potential environmental impacts related to Geology and Soils can be mitigated to less than significant levels with the inclusion of mitigation measures GEO-1.
 6. Potential environmental impacts related to Hazards and Hazardous Materials can be mitigated to less than significant levels with the inclusion of mitigation measures HAZ-1 through HAZ-6.
 7. Potential environmental impacts related to Hydrology can be mitigated to less than significant levels with the inclusion of mitigation measures BIO-1 and HAZ-1 and HAZ-4.
 8. Potential environmental impacts related to Public Services can be mitigated to less than significant levels with the inclusion of mitigation measures HAZ-4.
 9. Potential environmental impacts related to Transportation can be mitigated to less than significant levels with the inclusion of mitigation measures TRN-1 and TRN-2.
 10. Potential environmental impacts related to Tribal Cultural Resources can be mitigated to less than significant levels with the inclusion of mitigation measure TCR-1 through TCR-3
 11. Potential environmental impacts related to Wildfire can be mitigated to less than significant levels with the inclusion of mitigation measures HAZ-5 and HAZ-6.
- B. Approve Major Use Permit (UP 23-05) with the following findings:

1. That the establishment, maintenance, or operation of the use applied for will not under the circumstances, be detrimental to the health, safety, morals, comfort and general welfare of the persons residing or working in the neighborhood of such proposed use or be detrimental to property and improvements in the neighborhood or the general welfare of the County.
2. The site is adequate in size, shape, locations, and physical characteristics to accommodate the type of use and level of development proposed.
3. The streets, highways and pedestrian facilities are reasonably adequate to safely accommodate the proposed use.
4. There are adequate services to serve the project.
5. This project is consistent with the Lake County General Plan, Upper Lake-Nice Area Plan, and Lake County Zoning Ordinance.
6. No violation of Chapter 5, 17, 21, 23 or 26 of the Lake County Code currently exists on this property, with a condition of approval implemented.

Sample Motions:***Mitigated Negative Declaration***

I move that the Planning Commission find based on the Initial Study (IS 23-10), for Major Use Permit (UP 23-05), as applied for by Scotts Valley Band of Pomo Indians, will not have a significant effect on the environment and therefore a mitigated negative declaration shall be adopted with the findings listed in the Staff Report dated December 12, 2024.

Major Use Permit

I move that the Planning Commission find that the Major Use Permit (UP 23-05) applied for by Scotts Valley Band of Pomo Indians, on property located at 755 E State Highway 20, Upper Lake, CA, APN 004-010-04 does meet the requirements of Article 8 of the Lake County Municipal Zoning Ordinance and grant the Major Use Permit subject to the conditions and with the findings listed in the Staff Report dated December 12, 2024.

NOTE: *The applicant or any interested person is reminded that the Zoning Ordinance provides for a seven (7) calendar day appeal period. If there is a disagreement with the Planning Commission, an appeal to the Board of Supervisors may be filed. The appropriate forms and applicable fee must be submitted prior to 5:00 p.m. on or before the seventh calendar day following the Commission's final determination.*