

County of Yuba

Community Development & Services Agency

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Planning Department

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PLANNING COMMISSION STAFF REPORT

Hearing Date:

June 19, 2019

Case Number:

Conditional Use Permit CUP 2019-0002 (The Forest Biomass Facility –

Gellerman Site)

Request:

A request to permit a community-scale 5.5-megawatt biomass power

generation facility.

Location:

The project is located at 11639 Marysville Road (APNs: 048-210-121;

048-260-032) located 11 miles southwest of the community of

Camptonville in northeastern Yuba County.

Applicant:

Camptonville Community Partnership

Recommendation:

Adopt the attached resolution approving Conditional Use Permit

2019-0002 (The Forest Biomass Facility – Gellerman Site)

Background: The Camptonville Community Partnership (CCP) is proposing to develop a community-scale 5.5 megawatt (MW) gross, 5 MW net, biomass power generation facility in Yuba County. The Fire Safe Council of Nevada County (FSCNC), a community-based organization concerned about fire in Nevada County, and the Yuba County Water Agency are the fiscal sponsors of work to determine siting and environmental considerations for the bioenergy project. The CCP has initiated the site planning and environmental documentation for Conditional Use Permitting from Yuba County.

Previously, a 3 MW biomass power generation facility was proposed by the CCP in Celestial Valley, south of the community of Camptonville in Yuba County. A Conditional Use Permit (CUP) application was prepared and submitted to the Yuba County Planning Department for the Celestial Site and the CUP was approved by the Yuba County Planning Commission on February 21, 2018. However, it was decided to move the biomass power generation facility to the Gellerman site, as the cost to interconnect to the Pacific Gas and Electric near the Celestial Valley was not economical for the overall project.

The Forest Biomass Business Center Bioenergy Facility (or Bioenergy Facility) is intended to create electricity through combustion of sustainably harvested, forest-sourced biomass. The facility will be sited within the two parcels named above and will include a small office building, a building to house the biomass power generation systems, outdoor and indoor storage of woody biomass chips and non-merchantable logs, truck tipper(s) and scale(s), wood screening and sizing equipment, steam-cycle cooling equipment to recycle steam condensate, biochar co-product post processing and bagging, evaporation pond for excess water, wells and tankage for water supply, and the needed access roads.

The Gellerman site property consists of two parcels. The northern parcel (APN 064-260-032) where the truck and vehicle access road is to upgraded is currently zoned TP, Timber Preservation District within an area designated Natural Resources in the Yuba County General Plan. The power plant, biomass storage and processing, and ancillary equipment and facilities will primarily be in the southern parcel (APN 048-210-021) is currently zoned Exclusive Agricultural with the same area as the northern parcel designated Natural Resources in the General Plan, which seeks to enhance the economic viability of the agriculture and forestry sector and encourage new support industries and operations. Both zones allow for the development and operation of a biomass utility power plant if a Conditional Use Permit is approved by Yuba County.

The CCP will enter into a long-term lease on the property mentioned above as owner/operator at the site, and may or may not assign such lease to potential business entities in the future.

Small-scale biomass power plants combust woody biomass and use it to transform water into steam in a boiler; the steam is the used to drive a turbine to produce electricity. Heat exchanges recover waste heat into hot water. The electricity generated will be sold to the Pacific Gas & Electric (PG&E) power grid on their distribution-level circuit.

When completed, the biomass power plant will support local wildfire protection plans through the utilization of by-products from forest fuel-load reduction, forest restoration, removal of forest trees killed by the ongoing bark beetle infestation in the Sierra Nevada Mountains and foothill, and sustainable thinning and timber harvesting operations. These by-products are referred to as forest residuals. Forest residuals are currently piled and either abandoned, a practice that increases wildfire danger, or burned at landing sites in the forest, a practice that increases black carbon pollution and other air pollutants. The majority of biomass used for the bioenergy project will be chipped in-forest by forestry equipment designed to reduce the size of branches, treetops and small stems, and loaded into chip vans for delivery to the bioenergy facility. In addition, non-merchantable logs will also be brought to the facility biomass storage and processing area, where they will be chipped on-site and used as fuel. Utilization of sustainably sourced forest residuals for renewable energy is a goal of California state government which has created the Bioenergy Market Adjusting Tariff (BioMAT) program to meet the objectives of California Senate Bill 32 and California Senate Bill 1122. The proposed Gellerman biomass power plant will focus on a minimum of 80% forest-sourced biomass in order to adhere to the requirements of the BioMAT.

The Bioenergy Facility will require approximately 182 bone dry tons (BDT) per day of forest residuals per day for operation. Annually, the project is projected to consume up to 62,222 BDT. Of this total 47,863 BDT will be combusted in a steam cycle power plant for electricity generation, and the remaining 14,359 BDT will be converted into biochar during the electricity generation process. Some of the biomass materials brought to the site will be in whole log form, and will be chipped on site by diesel-fuel chipper or grinder, which be brought on site from time to time under the Portable Equipment Registration Program rules. The facility is expected to be in operation 24 hours a day 7 days a week and is estimated to create up to 23 full time jobs onsite. The facility is expected to operate up to 8,200 hours per year, approximately 342 days per year.

Location and Project Background

The proposed Forest Biomass Business Center Bioenergy Facility is located at 11639 Marysville Road, adjacent to Marysville Road, just south of the intersection of Oregon Hill Road. The site is managed by Soper Wheeler Company, LLC and owned by Soper Company a tree farming company founded in 1904. The project site has been actively logged over many years. Logging activities are currently underway on selected areas within the project site properties and have been environmentally cleared through CalFIRE's Timber Harvest Plan (THP) process.

The facility is to be located about 11 miles southwest of Camptonville, and 35 miles northwest of Marysville, on Marysville Road just south of the intersection of Oregon Hill Road. The primary all-weather access road will be located from Marysville Road to the bioenergy facility in the southern area of the Gellerman site. There will be a secondary access road for smaller vehicles (no chip trucks) and emergency vehicles near the power plant facility.

Site, Buildings, and Equipment

The project facility will consist of the following components:

- Biomass fuel yard (wood chip and log storage areas).
- Fuel receiving and processing.
 - Truck scale and chip offloading areas.
 - Wood chip screening/grinder (enclosed).
 - Small electric grinder or hog for oversized wood chips and occasional non-merchantable logwood (enclosed).
 - Low temperature dryer
 - Wood chip fuel storage indoor or covered and outdoor.
 - Fuel log storage.
- Biochar co-product processing (in fuel yard area).
- Roadways for truck and vehicle access.
- Office building in the power plant building area, or in the same building but sufficiently separated for worker safety i.e. noise, hazards, etc.
- Power plant building with ancillary equipment and control station (including electrostatic precipitator or baghouse facility).
- Steam-cycle cooling system dry or dry/adiabatic cooling.

- Storm water receiving pond.
- Storage tanks for potable water and fire suppression water.

There are currently no buildings or structures on the Gellerman site, nor were any known to be on site in the past. A new warehouse style building of approximately 30,000 square feet will be constructed to house the office and equipment for the bioenergy power facility (see layout in Figures 4 and 5). The building and its immediate area, including employee parking and an office, will use approximately 1 acre of land. Combined with the fuel storage and processing area, the cooling system equipment area, and the storm water pond area, there will be approximately 11 acres of land utilized for the bioenergy facility project.

The new building structure will sit on a concrete pad and will be an enclosed structure to protect the woody biomass fired boiler and steam cycle electrical generation equipment from the elements and to reduce noise.

The power plant will manage on-site storage of woody biomass as wood chips used for direct fired combustion. Biomass feedstock receiving and near-term-use storage areas will occupy approximately 3 acres. Wood chips are weighed, received and processed upon arrival in the biomass storage and processing area (Figures 4 and 5). Biomass feedstock is stored on site in fire-safe piles and/or windrows to provide a buffer for delivery delays and for extended times. Sufficient fuel storage for the winter months when forest activities are often halted due to winter weather conditions - typically November through March – is planned with on-site storage in log form near the processing equipment and in log decks along the private logging road that traverses the property. In addition, the facility can utilize up to 20% non-forest woody biomass (such as agricultural woody biomass or clean construction wood waste).

As of March 2019 the project developer has not finalized the power plant design and the specific equipment vendors have not been selected. However, biomass direct combustion power plants follow general equipment types that can be given as typical examples.

Major pieces of equipment to support this operation are: wood chip stacking and conveyance equipment, direct fire combustion and boiler system, steam cycle electrical generator, emissions control systems, and a dry/adiabatic cooling system to avoid the generation of wastewater. Moving feedstock and materials requires roadways for the large delivery trucks, a truck scale, a forklift, and at least one front-end loader. Storage is required for the wood chips upon arrival, and for the woody biomass awaiting conveyance to the combustion system. As mentioned above, whole logs, from hazardous tree removal operations, will also be brought to the biomass storage and processing area and be chipped on site.

One of the environmentally advantageous systems being employed by the proposed facility is a dry/adiabatic cooling system. Dry/adiabatic cooling systems use significantly less water than traditional wet cooling systems, and are becoming more common in thermal power plants. While dry/adiabatic cooling systems do typically require higher capital costs and somewhat higher auxiliary operating power than traditional wet cooling towers, its use here will avoid the

installation, operation, and groundwater monitoring of a large (3-plus) acre surface evaporation impoundment to store wastewater generated by traditional wet cooling towers.

Flue gas particulate matter emissions are typically controlled by an electrostatic precipitator or a baghouse, both filtration devices that removes fine particles such as dust and smoke. Electrostatic precipitators and baghouses have been found to be excellent devices for control of industrial particulate emissions in the energy industry, including smoke from electricity-generating utilities (whether biomass, coal or oil fired). Control of particulate matter by these devices usually exceeds 99%. Nitrogen oxide (NOx) emissions are handled by a selective non-catalytic reduction (SNCR) method that reduces NOx emissions in power plants that burn woody biomass. The process involves injecting ammonia into the firebox, or downstream, of the boiler to react with the nitrogen oxides formed in the combustion process. The result is a redox reaction that has molecular nitrogen, carbon dioxide and water as end products.

There are other small direct combustion biomass power plant using similar technology and forest biomass in the United States. Figure 6 is a 2.5 MW direct combustion biomass power plant built in 2013 and located at the F.H. Stoltze lumber mill in Columbia Falls, MT. Although this facility is smaller in terms of electricity generation than the Forest Biomass Business Center Bioenergy Facility, it would be the approximate size of proposed Forest Biomass Business Center Bioenergy Facility. Although there are differences, the Stoltze facility photos can help visualize the proposed bioenergy facility in at the Gellerman site.

Roadways and Trucks

Roadways to be constructed on the site are shown in the site plan (Figure 4). The access for wood chip delivery trucks would be from Marysville Road, onto an existing logging road that will be upgraded to handle chip and log truck vehicles on an all-weather road surface. Access roads on the power plant site allow chip vans to arrive at the truck scale for weighing on their approach and their exit. All-weather access roads on the site circumnavigate the feedstock storage areas where wood chips would be unloaded and where feedstock-handling equipment will move feedstock to the power plant building. An auxiliary road will be constructed from the power plant facility down the hill on the south side of the plant to access the dry cooling equipment and the storm water pond.

A truck scale will facilitate efficient delivery of the biomass feedstock. Trucks will weigh in and again going out. The truck scale is located to the north of the biomass storage and process area.

Delivery vehicles come in various configurations, but walking floor, 53 foot, chip vans are common. The walking floor specification means that the trailer is equipped to self-unload with a hydraulic system along the floor that is able to pull wood chips to the back of the trailer. However, a truck dump is proposed for the Gellerman site, which will allow both walking floor and non-walking floor chip vans to unload at the site. In addition logging trucks will make deliveries of whole logs that will be chipped on site.

Up to 23 truckloads per day (Monday through Friday) may occur. As mentioned previously, the proposed facility will require approximately 182 BDT per operating day for operation and

production of electricity and biochar (see discussion below). The project is projected to consume up to a maximum of 62,222 BDT. Forest management activities can be restricted during the late fall, winter, and early spring months due to snow and rain that leaves the ground too wet for heavy equipment. Deliveries are normally, but not exclusively, done on weekdays. There could also be deliveries of non-forest woody biomass, which can be up to 20% of the total (as allowed by the BioMAT protocol), or 12,444 BDT per year.

Biomass Power Plant Products

The Forest Biomass Business Center Bioenergy Facility is a community-scale biomass combined heat and power facility currently proposed to generate up to 5.5 MW of electricity (total gross generation). The facility will run 24 hours a day, 7 days a week. It will produce electricity and heat. At least 3 MW of the electricity generated is intended to be sold to Pacific Gas & Electric (PG&E) on their transmission-level circuit per the BioMAT program. There is a possibility that the BioMAT limit of 3 MW transmitted to the grid could be raised to 5 MW in the future, but would require special legislation. When operational, the facility will utilize some electricity for internal operations of the project (approximately 0.5 MW). Thermal energy, available as waste heat from the boiler will be available for neighboring enterprises, along with some of the generated electricity. There are currently no neighboring enterprises that are planning to utilize the on-site heat. However, if the site grows into a small business forest products center, it is anticipated that the waste heat or steam could possibly be used for wood product production and other purposes requiring heat.

The power plant facility also intends on producing biochar from the combustion process. The biochar is considered a significant value-added byproduct of the bioenergy facility. Revenue from the sale of the biochar to a variety of uses (soil amendment, air and water filtering agents, etc.) will enhance the economic viability of the bioenergy facility.

General Plan/Zoning: The proposed bioenergy facility The northern parcel (APN 064-260-032) where the truck and vehicle access road is to upgraded, and an auxiliary log storage yard is to be located, is currently zoned TP, Timber Preservation District within an area designated Natural Resources in the Yuba County General Plan. The power plant, biomass storage and processing, and ancillary equipment and facilities will primarily be in the southern parcel (APN 048-210-021) is currently zoned AE, Exclusive Agricultural with the same area as the northern parcel designated Natural Resources in the General Plan, which seeks to enhance the economic viability of the agriculture and forestry sector and encourage new support industries and operations.

Neighboring land is zoned Resource Preservation and Recreation to the north, west, and east. To the south is additional AE-40 zoned land. To the north of the project site and within APN 064-260-032, are some private land holdings that are zoned Residential Estate (RE).

Development regulations for Exclusive Agricultural zone (Section 11.05.030) where the nearly all of the bioenergy facility will be located, will be adhered to by the facility, including a minimum lot size of 5 acres and lot width of 120 feet, maximum building height of 50 feet or approved exemption, and any other county regulations considering the future site development.

The proposed facility will include an exhaust stack for the power plant boiler system that could exceed the 50-foot limit. A waiver or variance will need to be obtained from Yuba County if this limit is exceeded.

The Forest Biomass Business Center Bioenergy Facility site is zoned both AE and TP, and no rezoning to accommodate the project is required. Biomass facilities accepting offsite biomass and greater than 3 MW are an allowed land use as a Major Utility, if a CUP is obtained. All specific development regulations will be adhered to. The project is consistent with the current General Plan policies and zoning designations.

Surrounding Uses:

	GENERAL PLAN	ZONING	EXISTING
	LAND USE DESIGNATION		LAND USE
North	Natural Resources	RE, RPR,	Rural Residence,
		AE-40, TP	Timber Production
East	Natural Resources	RPR	Timber Production
South	Natural Resources	RPR, AE-40	Timber Production
West	Natural Resources	RPR, AE-40	Timber Production

Discussion: Section <u>11.57.060</u> of the Yuba County Development Code requires that eight findings are made in order to approve or conditionally approve a Conditional Use Permit. The eight findings are listed below in *italics* and are followed by an evaluation of the request in relation to each finding.

1. The proposed use is allowed within the applicable zoning district or overlay district and complies with all other applicable provisions of this Code and all other titles of the Yuba County Code.

Both project site zones allow for the development and operation of a biomass utility power plant by Yuba County. Specifically, the 2015 Yuba County Development Code Table 11.11.020 (Land Use Regulations for Natural Resource Districts), allows for major utilities to be constructed and operated in the TP and EX, if a CUP is approved by Yuba County. Similarly, Table 11.05.020 (Land Use Regulations for Agricultural Districts) also allow major utilities to be constructed and operated in the EA zoning districts if a CUP is approved by Yuba County. The Yuba County Development Code further defines major utilities in Section 11.72.060 as, "Biomass facilities that bring is waste from multiple or off-site locations, generate from than 3 MW of energy, or utilize more than three acres of land are classified as a major utility". The proposed bioenergy facility meets all three of these conditions.

2. The proposed use is consistent with the General Plan, and any applicable adopted community plan or specific plan.

Both zones are within an area designated Natural Resources in the 2030 General Plan land use designation. The proposed bioenergy facility is closely aligned with the Yuba

County Planning and Development goals for both zoning designations, which supports renewable energy development such as bioenergy which is a discussed land use in the intent and allowable uses section of the Community Development element of the 2030 General Plan (CD Table 1). No rezoning to accommodate the project is required. The project is consistent with the current General Plan policies and zoning designations.

3. The proposed use at the particular location is necessary or desirable to provide a service or facility which will contribute to the general well-being of the surrounding area.

The biomass power plant will support local wildfire protection plans through the utilization of by-products from forest fuel-load reduction, forest restoration, and sustainable thinning operations. These by-products are referred to as forest residuals. Forest residuals are currently piled and either abandoned a practice that increases wildfire danger, or burned at landing sites in the forest, a practice that increases black carbon pollution and creates greenhouse gases. Additionally, the project will bring a new source of employment to the Camptonville area.

4. The proposed use will not be adverse to the public health, safety, or general welfare of the community, nor detrimental to surrounding properties or improvements.

The project has been conditioned to meet all applicable fire codes, Development Codes and CEQA related environmental mitigation measures. The project has been designed in a manner to reduce project related impacts to a less than significant level. As previously mentioned, the project will provide a location for fire reduction projects to dispose of material and the project will require the cleanup of a site that consists of a dilapidated former sawmill.

5. The proposed use complies with any design or development standards applicable to the zoning district or the use in question unless waived or modified pursuant to the provisions of this Code.

The proposed project is conditioned to meet all standards of the Yuba County Development Code and as required by the California Building Code and the Federal Communications Commission.

6. The design, location, size, and operating characteristics of the proposed activity would be compatible with the existing and reasonably foreseeable future land uses in the vicinity.

The project design, location, size, and operating characteristics, as conditioned with the project conditions of approval, will be compatible with all existing and future rural development in the vicinity of the project. The project is located in an agricultural and timber preservation zoned area that has existing industrial and timber related operations on and offsite. The proposed biomass facility, and any other related industrial uses, would be consistent with the existing nature that currently exists on and the project site.

7. The site is physically suitable for the type, density, and intensity of use being proposed, including access, utilities, and the absence of physical constraints.

The proposed project site consists of two parcels and is 412.3 acres in size. It is located on and adjacent to existing timber and logging operations. As shown in the proposed project site plans, the site is physically large enough to accommodate all project related components. Access to the project site is proposed off of a primary all-weather access road from Marysville Road to the bioenergy facility in the southern area of the Gellerman site. There will be a secondary access road for smaller vehicles (no chip trucks) and emergency vehicles near the power plant facility. There are no physical restraints and the proposed project is suitable based on the density of future development in the area.

8. An environmental determination has been prepared in accordance with the California Environmental Quality Act.

A Mitigated Negative Declaration was prepared and noticed pursuant to all CEQA guidelines as part of the project processing. Notice of availability of the Mitigated Negative Declaration was sent to all neighbors within 1,000 feet of the project site and to all local and State agencies that might have interest in commenting on the project's environmental document.

Departmental and Agency Review: The project was circulated to various agencies and County departments for review and comment during the early consultation phase and the environmental review stages of the project. The following is a summary of comments:

- <u>County Staff</u> The Public Works Department, Environmental Health Department, and Building Department have reviewed the project and provided comments and/or conditions of approval that are incorporated into the attached Conditions of Approval.
- United Auburn Indian Community (UAIC) AB 52 Consultation.
- FRAQMD Permit to operate required for project power generation facility.
- Department of Transportation (North Branch) No comments.
- <u>PG&E</u> Requests site specific plans for the project to ensure this new development does not conflict with PG&E's existing land rights.

Environmental Review & Determination: Staff has prepared a Mitigated Negative Declaration and Mitigation Monitoring Plan (Attachments 5 and 6) pursuant to the California Environmental Quality Act (CEQA) Section 15070 (b) (1).

During the initial study of the project, no potential impacts to the environment were identified that could not be reduced through mitigation measures to a level that is less than significant. The initial study discusses the following project impacts: Aesthetics (no light spillage), Air Quality (dust emissions reductions), Biological (best management practices, migratory birds,

project fencing requirements) Cultural and Tribal Cultural Resources (undiscovered cultural remains), and Hazards and Hazardous Materials (vegetation clearance). Therefore, a Mitigated Negative Declaration has been prepared for the proposed project. It was circulated for the required 30 day review period and comments received to date are discussed in the Department and Agency Review section of this staff report.

Attachments:

- 1. Resolution
- 2. Project Site Exhibits
- 3. Conditions of Approval
- 4. Initial Study/Mitigated Negative Declaration
- 5. Mitigation Monitoring Plan
- 6. Comment Letters

Report Prepared By:

Planner II

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BEFORE THE COUNTY OF YUBA PLANNING COMMISSION

RESOLUTION ADOPTING THE)		
MITIGATED NEGATIVE DECLARATION)		
AND MITIGATION MONITORING PLAN)		
AND APPROVING CONDITIONAL USE)		
PERMIT 2019-0009 (CCP Biomass Facility –)		
Gellerman Site))	RESOLUTION NO.:	
SUBJECT TO THE INCORPORATED)		
CONDITIONS OF APPROVAL)		

WHEREAS, Camptonville Community Partnership filed an application for a Conditional Use Permit 2019-0009; a request to construct a 5.5-megawatt biomass power generation facility that will include a small office building, a building to house the biomass power generation systems, outdoor storage for woody biomass chips, and an evaporation pond. The project is located at 11639 Marysville Road (APNs: 048-210-121; 048-260-032), just south of the intersection of Oregon Hill Road and south of the community of Camptonville (the "Gellerman Site").

WHEREAS, the Community Development and Services Agency of the County of Yuba has conducted an Initial Study for the proposed project and concluded that the project would not result in any significant adverse environmental impacts provided the mitigation measures that are incorporated into the Mitigation Monitoring Plan and Conditions of Approval (attached hereto as "Exhibit A") are implemented; and

WHEREAS, the Community Development and Services Agency of the County of Yuba has provided due notice of a public hearing before the Planning Commission of the County of Yuba and the intent to recommend adoption of the Mitigated Negative Declaration and Mitigation Monitoring Plan for the proposed project in accordance with the California Environmental Quality Act; and

WHEREAS, a public hearing was held before the Yuba County Planning Commission on June 19, 2019, to allow the public and interested parties to testify and submit evidence in favor of, or against, the adoption of the mitigated negative declaration and mitigation monitoring plan and the approval of the conditional use permit.

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

- 1. The foregoing recitals are true and correct.
- 2. The Planning Commission finds that the proposed project is consistent with the Land Use Element and other applicable elements of the Yuba County General Plan, as well as with the Yuba County Development Code and Zoning Map.

ATTACHMENT 1

- 3. The Planning Commission finds that the project site is physically suitable for the proposed type of development and the proposed density of development.
- 4. The Planning Commission adopts the following <u>8</u> findings of fact as stated in the staff report for the Conditional Use Permit (File# CUP 2019-0009):
 - A. The proposed use is allowed within the applicable zoning district or overlay district and complies with all other applicable provisions of this Code and all other titles of the Yuba County Code;
 - B. The proposed use is consistent with the General Plan, and any applicable adopted community or specific plan;
 - C. The proposed use at the particular location is necessary or desirable to provide a service or facility which will contribute to the general well-being of the surrounding area;
 - D. The proposed use will not be adverse to the public health, safety, or general welfare of the community, nor detrimental to surrounding properties or improvements;
 - E. The proposed use complies with any design or development standards applicable to the zoning district or the use in question unless waived or modified pursuant to the provisions of this Code;
 - F. The design, location, size, and operating characteristics of the proposed activity would be compatible with the existing and reasonably foreseeable future land uses in the vicinity;
 - G. The site is physically suitable for the type, density, and intensity of use being proposed, including access, utilities, and the absence of physical constraints; and
 - H. An environmental determination has been prepared in accordance with the California Environmental Quality Act.
- 5. The Planning Commission finds that the project, as conditioned, meets the County design and improvement standards set forth in the Yuba County Development Code.
- 6. The Planning Commission finds on the basis of the whole record no substantial evidence that the project will have a significant effect on the environment and that the Mitigated Negative Declaration reflects the lead agency's independent judgment and analysis.
- 7. The project will not cause substantial environmental damage to fish and/or wildlife and their habitats, nor have the potential for adverse effect(s) on wildlife resources or the habitat upon which wildlife depends. A Notice of Determination will be recorded with the County Recorder and Fish and Game Filing Fees will be paid to the County Recorder.

ATTACHMENT 1

8. The Planning Commission hereby adopts the Mitigated Negative Declaration and Mitigation Monitoring Plan, incorporated herein by reference and attached as Exhibit A, and approves Conditional Use Permit 2019-0002, subject to the Mitigation Measures contained within the Mitigation Monitoring Plan and Conditions of Approval.

PASSED AND ADOPTED at a regular n	neeting of the Planning Commission of the County of
Yuba, State of California, on the	, by the following vote.
AYES:	
NOES:	
ABSENT:	
ABSTAIN:	
	Yuba County Planning Commission
	Chairman
ATTEST:	APPROVED AS TO FORM:
Planning Commission Secretary	County Counsel
	100
BY:	BY:

SITE DEVELOPMENT PLAN

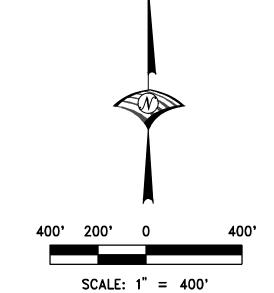
THE FOREST BIOMASS BUSINESS CENTER BIOENERGY FACILITY

CAMPTONVILLE COMMUNITY PARTNERSHIP

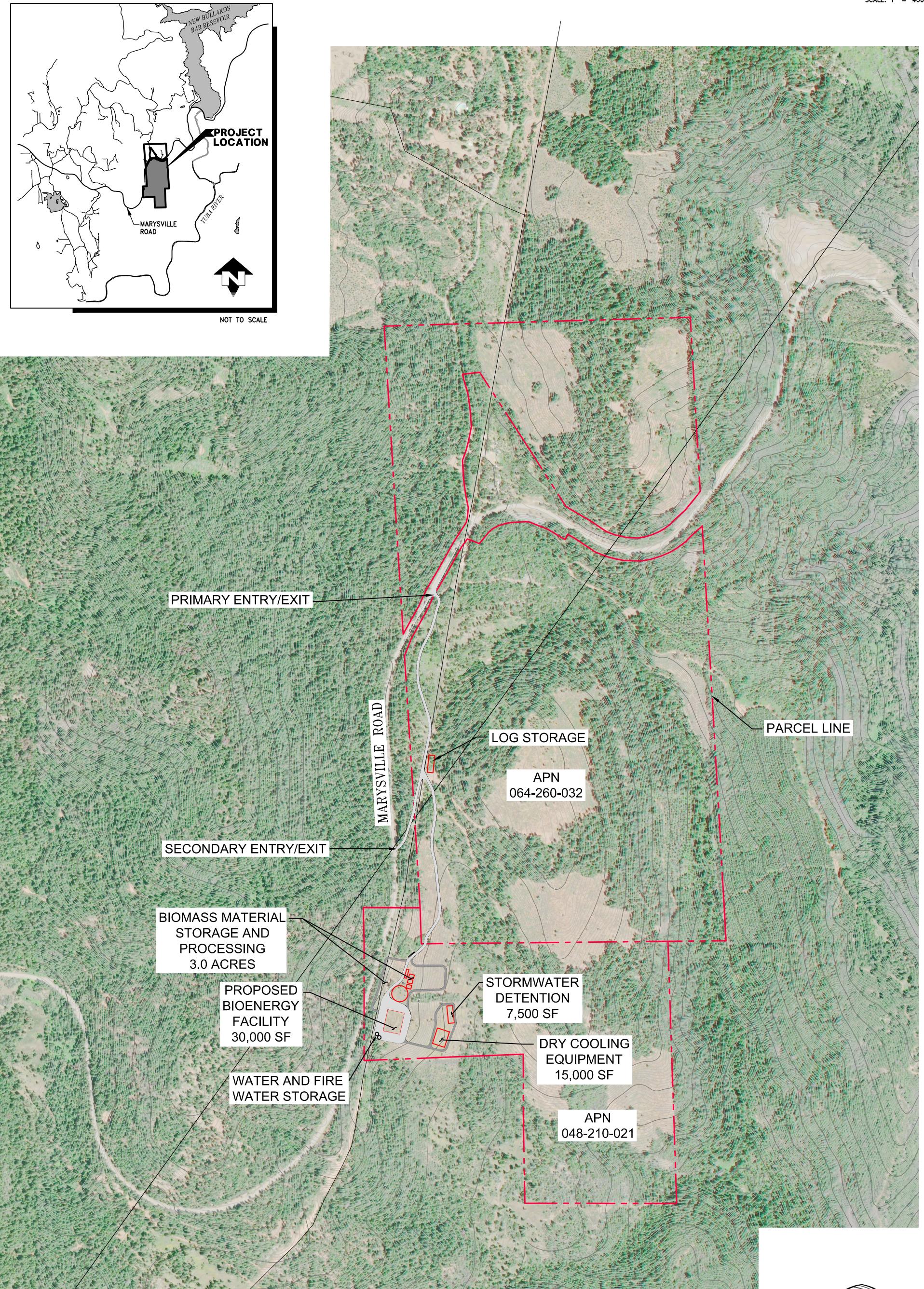
YUBA COUNTY

CALIFORNIA

MARCH 2019



VICINITY MAP

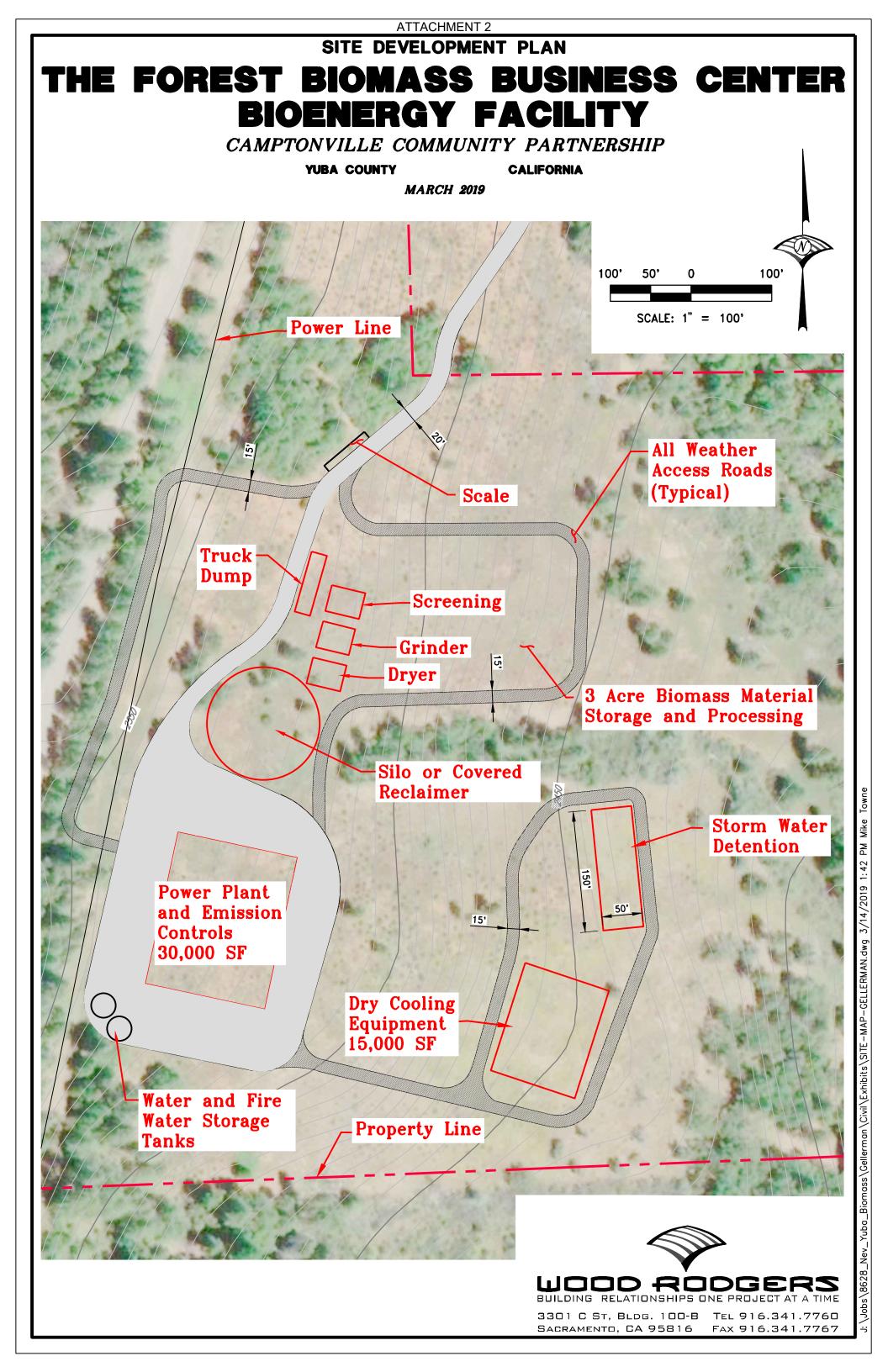


BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

3301 C ST, BLDG. 100-B TEL 916.341.7760

SACRAMENTO, CA 95816 FAX 916.341.7767

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Applicant: Camptonville Community Partnership
Owner: Soper Wheeler Company

Case Number: CUP 2019-0002
Public Hearing Date: June 19, 2019

APN: 048-210-121 & 064-260-032

GENERAL CONDITIONS:

1) Unless specifically provided otherwise herein or by law, each condition of these Conditions of Approval shall be completed to the satisfaction of the County. Failure to comply with this provision may be used as grounds for revocation of this permit.

- As a condition for project approval, Owner or an agent of Owner acceptable to County shall defend, indemnify, and hold harmless the County and its agents, officers, and employees from any claim, action, or proceeding, against the County or its agents, officers, and employees; including all costs, attorneys' fees, expenses, and liabilities incurred in the defense of such claim, action, or proceeding to attack, set aside, void or annul an approval by the County, Planning Commission, Development Review Committee, or other County advisory agency, appeal board, or legislative body concerning the conditional use permit. County shall promptly notify owner of any such claim, action, or proceeding and shall cooperate fully in the defense of said claim, action, or proceeding.
- Owner(s), Owner's agent(s) or Applicant shall comply with all applicable federal, state, and local laws, ordinances, and regulations, and the Yuba County Ordinance Code.
- 4) The Conditional Use Permit may be effectuated at the end of the ten (10) day appeal period which is July 1, 2019. Conditional Use Permit CUP 2019-0002 shall be designed and operated in substantial conformance with the approved conditional use permit as outlined in the approved site plan filed with the Community Development & Services Agency and as conditioned or modified below. No other expansion of uses are authorized or permitted by this use permit.
- This conditional use permit approval shall be effectuated within a period of twenty-four (24) months from this approval date and if not effectuated shall expire on June 19, 2021. Prior to said expiration date, the applicant may apply for an extension of time, provided, however, this approval shall be extended for no more than ninety (90) days from June 19, 2021.
- Minor modifications to final configuration of the conditional use permit may be approved by the Community Development and Services Agency Director.

BUILDING DEPARTMENT:

- 7) All buildings must have permits.
- All development on this site must meet all current codes including accessibility and must meet any and all fire code as well as local fire authority requirements.

PUBLIC WORKS DEPARTMENT:

9) The Public Works Director may reasonably modify any of the Public Works conditions contained herein.

Applicant: Camptonville Community Partnership
Owner: Soper Wheeler Company

Case Number: CUP 2019-0002
Public Hearing Date: June 19, 2019

APN: 048-210-121 & 064-260-032

Owner shall dedicate to the County of Yuba sufficient right-of-way in easement to provide a 42 foot strip of land adjoining the centerline of Marysville Road, classed as a Rural Arterial, lying within the bounds of this property.

- Applicant shall construct a Rural Roadway Connection at the intersection of Marysville Road and the primary entrance in compliance with Drawing 125 of the Yuba County Standards or as approved by the Public Works Director.
- 12) If large trucks are anticipated to use the secondary access, then Applicant shall construct a Rural Roadway Connection at this access point. Otherwise the secondary access point shall conform to the current Yuba County Standards for a Rural Driveway (Drawing No. 127 and 128) under permit issued by the Department of Public Works
- All road and drainage construction required by these conditions of approval shall be inspected in compliance with Section 4 of the Yuba County Standards and approved by the Yuba County Department of Public Works. Owner's contractor shall meet on-site with the Public Works Department representative prior to the commencement of work to discuss the various aspects of the project.
- Any improvement work within the County right-of-ways for roadway connections and/or road widening or other improvements shall be accomplished under an encroachment permit issued by the Public Works Department. Improvement plans and associated checking and inspection fees shall be submitted to the Public Works Department for review and approval before any construction will be permitted within the County right-of-way.
- Owner, heirs or assigns of this property, or portions thereof, shall remove and/or relocate any fence(s) located within dedication(s) or offer(s) of dedication or within existing County easement(s) or right(s)-of-way which lies within or are adjoining this property. Such fence removal or relocation is deferred until such time as the then owner is directed by the Public Works Department of Yuba County to remove or relocate the fence(s). Any new fences installed shall be constructed outside the limits of dedications or offer(s) of dedication or existing County easements or right-of-ways.
- Prior to the approval of any grading permit or improvement plans, owner must submit documentation demonstrating that all necessary permits and approvals have been obtained, which may include: a 404 permit from Army Corps of Engineers; including Section 7 consultation with the U.S. Fish and Wildlife Service, 401 certification from the Regional Water Quality Control Board, 2081/1602 permit, as necessary, from the California Department of Fish and Game, and pre-construction surveys for special status species.
- Whenever construction or grading activities will disrupt an area of 1 acre or more of soil or is less than 1 acre but is associated with a larger common plan of development, the applicant is required

Applicant: Camptonville Community Partnership
Owner: Soper Wheeler Company

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to obtain a Yuba County grading permit issued by the Public Works Department and a National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activities, NPDES No. CAS000004, Order No. 2013-0001-DWQ. Coverage under the General Permit must be obtained prior to any construction. More information may be found at http://www.swrcb.ca.gov/stormwtr/construction.html. Owner must obtain an approved and signed Notice of Intent (NOI) from the Regional Water Quality Control Board (RWQCB), a Waste Discharge Identification (WDID) number and a Storm Water Pollution Prevention Plan (SWPPP), as described by either the RWQCB or the State Water Regional Control Board (SWRCB). The SWPPP shall describe and identify the use of Storm Water Best Management Practices (BMP's) and must be reviewed by the Yuba County Public Works Department prior to the Department's approval of Improvement Plans or issuance of a Grading Permit for the project. See Yuba County's Stormwater Regulations for Construction Activities Procedures for details. According to state law it is the responsibility of the property owner that the SWPPP is kept up to date to reflect changes in site conditions and is available on the project site at all times for review by local and state inspectors. Erosion and sediment control measures, non-stormwater and material management measures, and post-construction stormwater management measures for this project shall be in substantial compliance with the SWPPP.

- Owner shall submit a stormwater quality plan, including all temporary erosion and sediment control measures, site-design measures, source control measures, treatment measures, and baseline hydromodification management measures for the project, designed by a registered civil engineer, in accordance with Sections 7.50 and 11.23 of the Yuba County Ordinance Code and Section 11 of the Yuba County Improvement Standards to the Department of Public Works for review and approval prior to construction and/or grading permit. Owner shall construct such management measures as per the approved plan prior to construction.
- 19) Erosion control shall conform to section 11 of the Yuba County Improvement Standards.
- 20) Strict control over dust problems created during construction shall be adhered to with regard to surrounding properties and public facilities. The construction specifications and/or improvement plans shall have items reflecting dust control measures in detail and shall be approved by the Public Works Department.
- Owner shall provide public service easements as necessary for any existing overhead or underground utilities, sewer lines, waterlines, etc. which may provide service to this property. Such easements shall have a minimum width of 10 feet or larger as may be required by the service provider and shall be clearly identified by metes and bounds. Any relocation or rearrangement of the public service provider's facilities to accommodate this project shall be at the Owner's expense.
- Prior to commencing performance of any public improvement or facility to be dedicated to County, and subject to approval by the Public Works Department, Owner shall acquire and present proof of general and automobile liability and Workers Compensation and Employers

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Liability insurance. Such general and automobile liability insurance shall name the County and its agents as additional insured.

ENVIRONMENTAL HEALTH DEPARTMENT:

- Owner shall submit a file map to the Environmental Health Department showing the contour, slope, all bodies of water (seasonal and year-round), water wells, all existing structures and septic systems.
- At the time of building permit application, an application and design for a new septic system may be required.
- The design and location of wells and sewage disposal systems shall be in conformance with standards established by the Yuba County Environmental Health Department.
- All abandoned or inactive wells on the subject site shall be destroyed or maintained in accordance with the "Water Well Standards: State of California, Bulletin 74-81".
- All abandoned septic tanks on the subject site shall be destroyed in accordance with the requirements of the Yuba County Environmental Health Department.
- Facility will be required to submit a hazardous materials business plan to the CUPA department, if storage of hazardous materials exceed the threshold set by the state. Contact Gary Cantwell at (530) 749-7526 for more information.

PLANNING DEPARTMENT

- The proposed biomass facility shall be designed and operated in substantial conformance with the approved conditional use permit as described in the project description and the proposed site plan filed with the Community Development and Services Agency. No other expansion of uses are authorized or permitted by this use permit.
- 28) Major modifications shall require an amendment to the Conditional Use Permit.
- Any relocation or rearrangement of any existing PG&E facilities to accommodate this project will be at the developers/applicants expense or as agreed by PG&E. There shall be no building of structures under or over any PG&E facilities or inside any PG&E easements that exist within the subject area. When there are site specific plans for this project, please forward them to PGEPlanReview@pge.com for review to ensure this new development does not conflict with PG&E's existing land rights.
- Any and all physical improvements associated with this Conditional Use Permit shall be maintained to the standards specified in these Conditions of Approval set forth for this use permit.

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Failure to maintain said physical improvement(s) in said manner may be used as grounds for revocation of this use permit.

- 31) Operator shall meet all requirements of the Feather River Air Quality Management District.
- The project owner shall conduct semi-annual water quality monitoring of the evaporation pond to measure the selenium levels and other chemicals, minerals, elements or other constituents present in the pond that may be hazardous to wildlife.
- The project owner shall visually monitor the evaporation pond weekly to detect any signs of wildlife illness or death. If signs of illness or death are detected, the Project Owner shall notify the County and the CDFW, determine the cause of the illness or death, and develop appropriate remedial actions.
- Any fencing constructed on the Project site, including, but not limited to, perimeter fencing and evaporation pond fencing, shall be barbless and shall have at least 12 inches between the top two wires.
- Prior to Project construction, the Project Owner shall conduct a Phase I/Phase II Environmental Site Assessment ("ESA") under the oversight of the Regional Water Quality Control Board and/or the U.S. Environmental Protection Agency ("EPA").
- The Project Owner shall implement, or require its construction contractor to implement, the following measures to reduce the Project's diesel particulate matter emissions:
 - a) All on-road heavy-duty diesel vehicles used for Project construction or operation must have either (1) 2010 model year engines or equivalent, or (2) emission control technology verified by the EPA or the California Air Resources Board ("CARB") to reduce emissions by a minimum of 85 percent;
 - All diesel generators used for Project construction or operation must be equipped with emission control technology verified by EPA or CARB to reduce emissions by a minimum of 85 percent;
 - c) All diesel off-road equipment used for Project construction must have either (1) engines meeting EPA Tier 4 nonroad emission standards, or (2) emission control technology verified by EPA or CARB for use with off-road engines to reduce emissions by a minimum of 85 percent for engines 50 horse power and greater and by a minimum of 20 percent for engines less than 50 horse power; and
 - d) Electric and hybrid construction equipment shall be used to the extent feasible.

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e) If any of these requirements are inconsistent with CARB or EPA regulations, the latest regulations shall supersede these requirements, and shall apply.

Ciara Fisher Planner II

ATTACHMENT 4 INITIAL STUDY/MITIGATED NEGATIVE DECLARATION



INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION CUP2019-0002 (The Forest Biomass Business Center Bioenergy Facility – Gellerman Site)

Project Title: Conditional Use Permit 2019-0002 (The Forest Biomass

Facility – Gellerman Site)

Lead Agency Name and County of Yuba

Address: Planning Department

915 8th Street, Suite 123 Marysville, CA 95901

Project Location: 11639 Marysville Road

Dobbins, CA 95935

Assessor's Parcel Numbers: 048-210-021 & 064-260-032

Applicant(s): Camptonville Community Partnership

P.O. Box 218

Camptonville, CA 95922

General Plan Designation(s): Natural Resources

Zoning: "TP" Timber Production

Contact Person: Ciara Fisher, Planner II

Phone Number: (530) 749-5470

Date Prepared April 2019

PROJECT DESCRIPTION

Overview

The Camptonville Community Partnership (CCP) is proposing to develop a community-scale 5.5 megawatt (MW) gross, 5 MW net, biomass power generation facility in Yuba County. The Fire Safe Council of Nevada County (FSCNC), a community-based organization concerned about fire in Nevada County, and the Yuba County Water Agency are the fiscal sponsors of work to determine siting and environmental considerations for the bioenergy project. The CCP has initiated the site planning and environmental documentation for Conditional Use Permitting from Yuba County.

Previously, a 3 MW biomass power generation facility was proposed by the CCP in Celestial Valley, south of the community of Camptonville in Yuba County. A Conditional Use Permit (CUP) application was prepared and submitted to the Yuba County Planning Department for the

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ATTACHMENT 4 INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Celestial Site and the CUP was approved by the Yuba County Planning Commission on February 21, 2018. However, it was decided to move the biomass power generation facility to the Gellerman site, as the cost to interconnect to the Pacific Gas and Electric near the Celestial Valley was not economical for the overall project.

The Forest Biomass Business Center Bioenergy Facility (or Bioenergy Facility) is intended to create electricity through combustion of sustainably harvested, forest-sourced biomass. The facility will be sited within the two parcels named above and will include a small office building, a building to house the biomass power generation systems, outdoor and indoor storage of woody biomass chips and non-merchantable logs, truck tipper(s) and scale(s), wood screening and sizing equipment, steam-cycle cooling equipment to recycle steam condensate, biochar co-product post processing and bagging, evaporation pond for excess water, wells and tankage for water supply, and the needed access roads.

The Gellerman site property consists of two parcels. The northern parcel (APN 064-260-032) where the truck and vehicle access road is to upgraded is currently zoned TP, Timber Preservation District¹ within an area designated Natural Resources in the Yuba County General Plan². The power plant, biomass storage and processing, and ancillary equipment and facilities will primarily be in the southern parcel (APN 048-210-021) is currently zoned Exclusive Agricultural³ with the same area as the northern parcel designated Natural Resources in the General Plan, which seeks to enhance the economic viability of the agriculture and forestry sector and encourage new support industries and operations. Both zones allow for the development and operation of a biomass utility power plant if a Conditional Use Permit is approved by Yuba County.

The CCP will enter into a long-term lease on the property mentioned above as owner/operator at the site, and may or may not assign such lease to potential business entities in the future.

Small-scale biomass power plants combust woody biomass and use it to transform water into steam in a boiler; the steam is the used to drive a turbine to produce electricity. Heat exchangers recover spent steam into hot water. The electricity generated will be sold to the PG&E power grid.

A simple process schematic for the use of forest wood waste to generate electricity is shown in Figure 1.

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¹ Yuba County Development Code, 2015

² Yuba County 2030 General Plan, adopted June, 2011

³ Yuba County Development Code, 2015

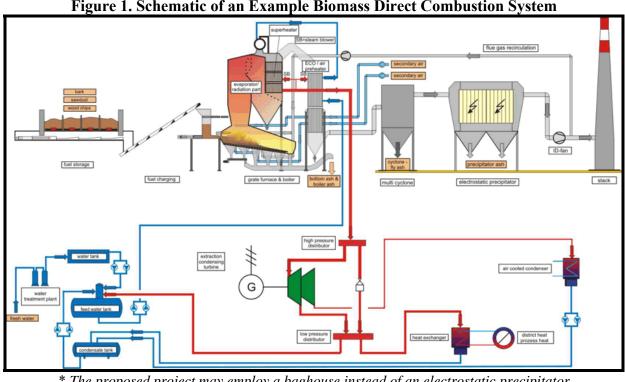


Figure 1. Schematic of an Example Biomass Direct Combustion System

When completed, the biomass power plant will support local wildfire protection plans through the utilization of by-products from forest fuel-load reduction, forest restoration, removal of forest trees killed by the ongoing bark beetle infestation in the Sierra Nevada Mountains and foothill, and sustainable thinning and timber harvesting operations. These by-products are referred to as forest residuals. Forest residuals are currently piled and either abandoned, a practice that increases wildfire danger, or burned at landing sites in the forest, a practice that increases black carbon pollution and other air pollutants. The majority of biomass used for the bioenergy project will be chipped in-forest by forestry equipment designed to reduce the size of branches, treetops and small stems, and loaded into chip vans for delivery to the bioenergy facility. In addition, non-merchantable logs will also be brought to the facility biomass storage and processing area, where they will be chipped on-site and used as fuel.

Utilization of sustainably sourced forest residuals for renewable energy is a goal of California state government which has created the Bioenergy Market Adjusting Tariff (BioMAT) program to meet the objectives of California Senate Bill 32 and California Senate Bill 1122. The proposed Gellerman biomass power plant will focus on a minimum of 80% forest-sourced biomass in order to adhere to the requirements of the BioMAT.

The Bioenergy Facility will require approximately 182 bone dry tons (BDT) per day of forest residuals per day for operation⁴. Annually, the project is projected to consume up to 62,222

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^{*} The proposed project may employ a baghouse instead of an electrostatic precipitator

⁴ Up to 20% of the total amount of woody biomass can be non-forest woody biomass, such as agricultural woody biomass waste.

BDT. Of this total 47,863 BDT will be combusted in a steam cycle power plant for electricity generation, and the remaining 14,359 BDT will be converted into biochar during the electricity generation process. Some of the biomass materials brought to the site will be in whole log form, and will be chipped on site by diesel-fuel chipper or grinder, which be brought on site from time to time under the Portable Equipment Registration Program rules.

The facility is expected to be in operation 24 hours a day 7 days a week and is estimated to create up to 23 full time jobs onsite. The facility is expected to operate up to 8,200 hours per year, approximately 342 days per year.

Location and Project Background

The proposed Forest Biomass Business Center Bioenergy Facility will be located adjacent to Marysville Road, just south of the intersection of Oregon Hill Road. The site is managed by Soper Wheeler Company, LLC and owned by Soper Company a tree farming company founded in 1904. The project site has been actively logged over many years. Logging activities are currently underway on selected areas within the project site properties and have been environmentally cleared through CalFIRE's Timber Harvest Plan (THP) process.

The facility is to be located about 11 miles southwest of Camptonville, and 35 miles northwest of Marysville, on Marysville Road just south of the intersection of Oregon Hill Road. Nearby roads and the approximate location of the facility are shown in **Error! Not a valid bookmark self-reference.**

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Figure 2. General Location of the Forest Biomass Business Center Bioenergy Facility

Yuba County Planning Department May 2019

CUP2019-0002 APNs: 048-210-021 & 064-260-032 Figure 3 shows the overall project layout, with the primary all-weather access road from Marysville Road to the bioenergy facility in the southern area of the Gellerman site. There will be a secondary access road for smaller vehicles (no chip trucks) and emergency vehicles near the power plant facility.

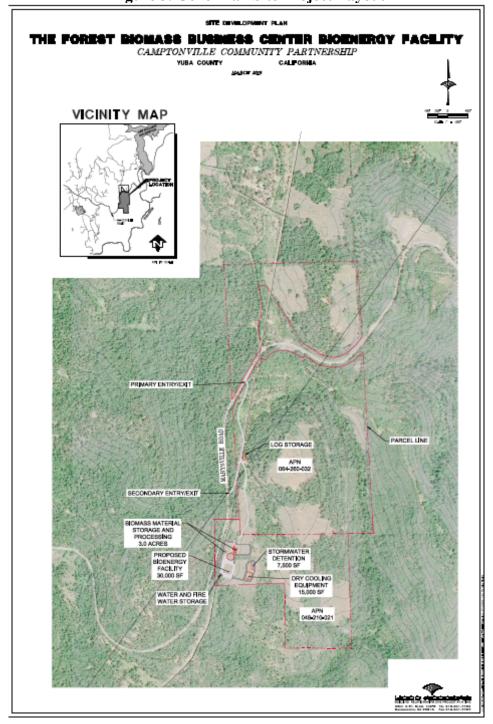


Figure 3. Gellerman Site Project Layout

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ATTACHMENT 4 INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

The Colgate Tunnel traverses the Gellerman site. This tunnel transmits water from the New Bullards Bar Reservoir to the Colgate Powerhouse on the Yuba River where 315 megawatts of hydroelectricity are generated. The tunnel is reported to be 1000 feet below the surface and does not run under the proposed biomass power plant facility.

Site, Buildings, and Equipment

Site components in Figure 4 include:

- Biomass fuel yard (wood chip and log storage areas).
- Fuel receiving and processing.
 - Truck scale and chip offloading areas.
 - Wood chip screening/grinder (enclosed).
 - Small electric grinder or hog for oversized wood chips and occasional non-merchantable logwood (enclosed).
 - Low temperature dryer
 - Wood chip fuel storage indoor or covered and outdoor.
 - Fuel log storage.
- Biochar co-product processing (in fuel yard area).
- Roadways for truck and vehicle access.
- Office building in the power plant building area, or in the same building but sufficiently separated for worker safety i.e. noise, hazards, etc.
- Power plant building with ancillary equipment and control station (including electrostatic precipitator or baghouse facility).
- Steam-cycle cooling system dry or dry/adiabatic cooling.
- Storm water receiving pond.
- Storage tanks for potable water and fire suppression water.

There are currently no buildings or structures on the Gellerman site, nor were any known to be on site in the past. A new warehouse style building of approximately 30,000 square feet will be constructed to house the office and equipment for the bioenergy power facility (see layout in Figures 4 and 5). The building and its immediate area, including employee parking and an office, will use approximately 1 acre of land. Combined with the fuel storage and processing area, the cooling system equipment area, and the storm water pond area, there will be approximately 11 acres of land utilized for the bioenergy facility project.

SITE DEVELOPMENT PLAN THE FOREST BIOMASS BUSINESS CENTER BIOENERGY FACILITY CAMPTONVILLE COMMUNITY PARTNERSHIP YUBA COUNTY CALFORNIA MARCH 2019 Power Line All Weather Access Roads (Typical) Scale Truck Dump Screening Dryer 3 Acre Biomass Material Storage and Processing Silo or Covered Reclaimer Storm Water Detention Power Plant and Emission Controls 30,000 SF Dry Cooling Equipment 15,000 SF Water and Fire Water Storage Property Line Tanks WOOD RODGERS 2301 C ST, BLD3. 100-B TEL 916.341.7760 SACRAMENTO, CA 95016 FAX 916.341.7767

Figure 4. Site Plan

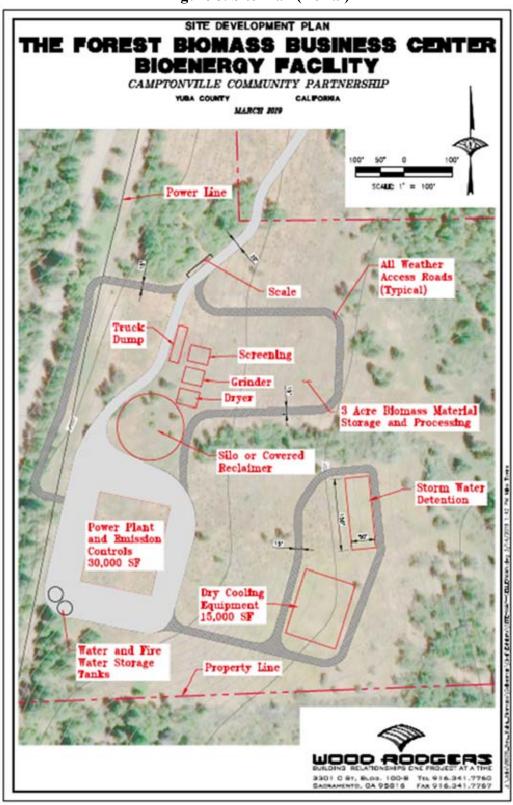


Figure 5. Site Plan (Aerial)

ATTACHMENT 4 INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

The new building structure will sit on a concrete pad and will be an enclosed structure to protect the woody biomass fired boiler and steam cycle electrical generation equipment from the elements and to reduce noise.

The power plant will manage on-site storage of woody biomass as wood chips used for direct fired combustion. Biomass feedstock receiving and near-term-use storage areas will occupy approximately 3 acres. Wood chips are weighed, received and processed upon arrival in the biomass storage and processing area (Figures 4 and 5). Biomass feedstock is stored on site in fire-safe piles and/or windrows to provide a buffer for delivery delays and for extended times. Sufficient fuel storage for the winter months when forest activities are often halted due to winter weather conditions - typically November through March – is planned with on-site storage in log form near the processing equipment and in log decks along the private logging road that traverses the property. In addition, the facility can utilize up to 20% non-forest woody biomass (such as agricultural woody biomass or clean construction wood waste).

As of March 2019 the project developer⁵ has not finalized the power plant design and the specific equipment vendors have not been selected. However, biomass direct combustion power plants follow general equipment types that can be given as typical examples.

Major pieces of equipment to support this operation are: wood chip stacking and conveyance equipment, direct fire combustion and boiler system, steam cycle electrical generator, emissions control systems, and a dry/adiabatic cooling system to avoid the generation of wastewater. Moving feedstock and materials requires roadways for the large delivery trucks, a truck scale, a forklift, and at least one front-end loader. Storage is required for the wood chips upon arrival, and for the woody biomass awaiting conveyance to the combustion system. As mentioned above, whole logs, from hazardous tree removal operations, will also be brought to the biomass storage and processing area and be chipped on site.

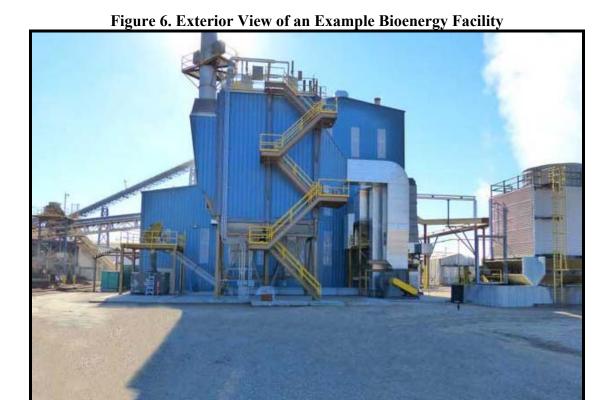
One of the environmentally advantageous systems being employed by the proposed facility is a dry/adiabatic cooling system. Dry/adiabatic cooling systems use significantly less water than traditional wet cooling systems, and are becoming more common in thermal power plants. While dry/adiabatic cooling systems do typically require higher capital costs and somewhat higher auxiliary operating power than traditional wet cooling towers, its use here will avoid the installation, operation, and groundwater monitoring of a large (3-plus) acre surface evaporation impoundment to store wastewater generated by traditional wet cooling towers.

Flue gas particulate matter emissions are typically controlled by an electrostatic precipitator or a baghouse, both filtration devices that removes fine particles such as dust and smoke. Electrostatic precipitators and baghouses have been found to be excellent devices for control of industrial particulate emissions in the energy industry, including smoke from electricity-generating utilities (whether biomass, coal or oil fired). Control of particulate matter by these devices usually exceeds 99%. Nitrogen oxide (NOx) emissions are handled by a selective non-

⁵ Phoenix Energy, San Francisco, CA Yuba County Planning Department May 2019

CUP2019-0002 APNs: 048-210-021 & 064-260-032 catalytic reduction (SNCR) method that reduces NOx emissions in power plants that burn woody biomass. The process involves injecting ammonia into the firebox, or downstream, of the boiler to react with the nitrogen oxides formed in the combustion process. The result is a redox reaction that has molecular nitrogen, carbon dioxide and water as end products.

There are other small direct combustion biomass power plant using similar technology and forest biomass in the United States. Figure 6 is a 2.5 MW direct combustion biomass power plant built in 2013 and located at the F.H. Stoltze lumber mill in Columbia Falls, MT. Although this facility is smaller in terms of electricity generation than the Forest Biomass Business Center Bioenergy Facility, it would be the approximate size of proposed Forest Biomass Business Center Bioenergy Facility. The Stoltze facility photo below can help visualize the proposed bioenergy facility in at the Gellerman site.



Roadways and Trucks

Roadways to be constructed on the site are shown in the site plan (Figure 4). The access for wood chip delivery trucks would be from Marysville Road, onto an existing logging road that will be upgraded to handle chip and log truck vehicles on an all-weather road surface. Access roads on the power plant site allow chip vans to arrive at the truck scale for weighing on their approach and their exit. All-weather access roads on the site circumnavigate the feedstock storage areas where wood chips would be unloaded and where feedstock-handling equipment will move feedstock to the power plant building. An auxiliary road will be constructed from the power plant facility down the hill on the south side of the plant to access the dry cooling equipment and the storm water pond.

A truck scale will facilitate efficient delivery of the biomass feedstock. Trucks will weigh in and again going out. The truck scale is located to the north of the biomass storage and process area. An example is shown in Figure 7.



Figure 7. Truck Scale Example

Delivery vehicles come in various configurations, but walking floor, 53 foot, chip vans are common as shown in Figure 8. The walking floor specification means that the trailer is equipped to self-unload with a hydraulic system along the floor that is able to pull wood chips to the back of the trailer. However, a truck dump is proposed for the Gellerman site, which will allow both walking floor and non-walking floor chip vans to unload at the site. Figure 9 shows a hydraulic truck dump. In addition logging trucks will make deliveries of whole logs that will be chipped on site.



Figure 8. 53-foot Woody Biomass Fuel Delivery Truck (Chip Truck)

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Figure 9. Hydraulic Truck Dumper/Tipper

Up to 23 truckloads per day (Monday through Friday) may occur. As mentioned previously, the proposed facility will require approximately 182 BDT per operating day for operation and production of electricity and biochar (see discussion below). The project is projected to consume up to a maximum of 62,222 BDT. Forest management activities can be restricted during the late fall, winter, and early spring months due to snow and rain that leaves the ground too wet for heavy equipment. Deliveries are normally, but not exclusively, done on weekdays. There could also be deliveries of non-forest woody biomass, which can be up to 20% of the total (as allowed by the BioMAT protocol), or 12,444 BDT per year.

Biomass Power Plant Products

The Forest Biomass Business Center Bioenergy Facility is a community-scale biomass combined heat and power facility currently proposed to generate up to 5.5 MW of electricity (total gross generation). The facility will run 24 hours a day, 7 days a week. It will produce electricity and heat. At least 3 MW of the electricity generated is intended to be sold to Pacific Gas & Electric (PG&E) on their transmission-level circuit per the BioMAT program. There is a possibility that the BioMAT limit of 3 MW transmitted to the grid could be raised to 5 MW in the future, but would require special legislation. When operational, the facility will utilize some electricity for internal operations of the project (approximately 0.5 MW). Thermal energy, available as waste heat from the boiler will be available for neighboring enterprises, along with some of the generated electricity. There are currently no neighboring enterprises that are planning to utilize the on-site heat. However, if the site grows into a small business forest products center, it is anticipated that the waste heat or steam could possibly be used for wood product production and other purposes requiring heat.

The power plant facility also intends on producing biochar from the combustion process. The biochar is considered a significant value-added byproduct of the bioenergy facility. Revenue from the sale of the biochar to a variety of uses (soil amendment, air and water filtering agents, etc.) will enhance the economic viability of the bioenergy facility.

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ATTACHMENT 4 INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Environmental Factors Potentially Affected:

	•						
The environmental factors checked below would be potentially affected by this project, as indicated by the checklist and corresponding discussion on the following pages:							
Aesthetics	Agriculture & Forestry Resources						
⊠ Biological Resources	Cultural Resources	☐ Energy					
Geology/Soils	Greenhouse Gas Emissions	Hazards & Hazardous Materials					
Hydrology / Water Quality	Land Use / Planning	☐ Mineral Resources					
☐ Noise	Population / Housing	☐ Public Services					
Recreation	☐ Transportation / Traffic	☐ Tribal Cultural					
Utilities / Service Systems	☐ Wildfire	Resources Mandatory Findings of Significance					

ATTACHMENT 4 INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

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. \boxtimes 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. Planner's Signature Ciara Fisher

DETERMINATION: (To be completed by the Lead Agency)

Planner II

PURPOSE OF THIS INITIAL STUDY

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063, to determine if the Conditional Use Permit CUP 2019-0002 (The Forest Biomass Facility – Gellerman Site), as proposed, may have a significant effect upon the environment. Based upon the findings contained within this report, the Initial Study will be used in support of the preparation of a Mitigated Negative Declaration.

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 project-specific screening analysis).
- 2) All answers must take into account the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, 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, development code). 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) The explanation of each issue should identify:
 - a) The significance criteria or threshold, if any, used to evaluate each question; and
 - b) The mitigation measure identified, if any, to reduce the impact to less than significance.

I.	AESTHETICS ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect on a scenic vista?				\boxtimes
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?				
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		\boxtimes		

DISCUSSION/CONCLUSION/MITIGATION:

- a) b) and c) The Forest Biomass Business Center Bioenergy Facility should have no substantial effect on scenic views from Marysville Road due to treed landscapes between the project site and roadway. Marysville Road is not a designated scenic route, nor is it proposed to be one. The proposed project generally will not be seen from Marysville Road except in breaks in the forest canopy along Marysville Road. There are no significant vista views from Marysville Road that would be impaired by the project's location. The project would result in *no impact* to a scenic vista or state scenic highway.
- d) The proposed is not proposing to have lighting of any kind at the proposed biomass facility and will not create a new source of substantial light or glare. However, if in the future any lighting should be required to be designed to minimize light and glare spillage onto neighboring properties through application of several measures, including careful siting of illumination on the parcel, screening or shielding of light at the source, use of vegetative screening, use of low intensity lighting, lighting controlled by timing devices or motion activated lighting. The below mitigation measures would reduce the lighting impacts of the project to *less than significant with mitigation incorporated*.

MITIGATION MEASURE

MM 1.1 Lighting

If lighting is required for any of the proposed project's development, all exterior lighting shall be directed downwards and away from adjacent properties and rights of way. Lighting shall be shielded such that the element is not directly visible (no drop down lenses) and lighting shall not spill across property lines. Prior to final occupancy of the project's building permits, documentation shall be submitted to the Planning Department showing that no light spillage is affecting any neighboring properties.

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II. AGRICULTURAL RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

Woi	uld the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				\boxtimes
c)	Conflict with existing zoning for, or cause of rezoning, of forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				

DISCUSSION/CONCLUSION/MITIGATION:

a) The Forest Biomass Business Center Bioenergy Facility site is zoned for Timber Production (TP) use or Exclusive Agriculture (AE-40) depending on the parcel. Neighboring land is zoned Resource Preservation and Recreation to the north, west, and east. To the south is additional AE-40 zoned land. To the north of the project site and within APN 064-260-032, are some private land holdings that are zoned Residential Estate (RE). There is also U.S. Forest Service land adjacent to the west as well.

No non-timber agricultural operations are currently taking place on the site nor in the properties immediately adjacent to the project area (see Forest Resources below).

The project site is identified by the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency as 'Other Lands', which is defined as land that is not included in any other mapping category (such as grazing or farmland categories). The FMMP produces maps and statistical data used for analyzing impacts on California's agricultural resources. No portion of the site is designated as Prime Farmland, Farmland of State Importance, Farmland of Local

Importance, Unique Farmland or Grazing Land. Therefore, *no impact* to agricultural lands is anticipated.

- b) The proposed project is consistent with the General Plan and zoning. The project site does not support any agricultural activities and would not be relevant for preservation of farmland. The Williamson Act (California Land Conservation Act of 1965) is a mechanism for protecting agricultural and open space land from premature and unnecessary urban development. None of the project area and none of the adjacent properties are subject to a Williamson Act contract. The project would result in *no impact* to Williamson Act contracts or existing agricultural uses.
- c) d) and e) Yuba County ranges from the Sacramento Valley floor to the lower western edge of the Sierra Nevada mountain range. The proposed bioenergy facility sits in these upper elevations of Yuba County in a zone of Ponderosa Pine forest transitioning to Sierran Mixed Conifer forest.

The project area is rolling, forested landscape ringed with low and medium high wooded hills of ponderosa pine or mixed conifer woodlands. The facility site would be considered forest land using the standard definition of greater than 10% forest canopy cover; and is considered productive timberland by the property owner and evidenced by the historic and current logging activity that can be seen on the property. The site has been the subject of various Timber Harvest Plans (THP), most recently with on prepared in 2018 and logging activities occurring onsite in Fall of 2018. Past logged areas can be seen in Figures 3 and 5. Figure 10 below illustrates logging that will occur in the northern parcel per the latest approved Timber Harvest Plan.

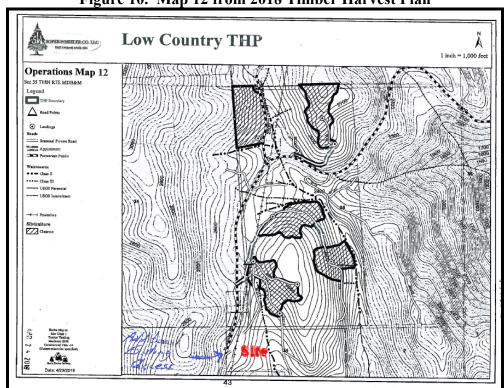


Figure 10. Map 12 from 2018 Timber Harvest Plan

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Forest Sourced Feedstocks for Bioenergy

Feedstock consumption at the proposed bioenergy facility will be a minimum of 80% byproducts of sustainable forest management projects as per the requirements of Category 3 (forest-sourced biomass) of the BioMAT. The facility is anticipated to consume up to 62,222 BDT of wood annually. Feedstock is derived from sustainable forest management projects focused on the reduction of material otherwise slated for pile and burn disposal. Feedstock may not be from 'clear-cut' timber harvest. Feedstock is sourced from both federal and private lands within an approximately 50 mile drive radius. Sustainable feedstock is a forest management byproduct, and is most often the result of timber harvest, collection of the remaining tree branches and tops, or forest fire reduction management, removal of small diameter trees and pruning of low branches, as well as bark beetle killed trees. Records will be maintained by the biomass power plant documenting that the forest wood feedstock has been sustainably sourced and is required by the facility's BioMAT power purchase agreement to be certified and submitted annually to PG&E.

The project will not result in conversion of farmland to non-agricultural use. The project will result in conversion of a relatively small area of productive timberland to non-timber use. The operation of the biomass power plant facility and the activities associated with feedstock acquisition are expected to benefit forestlands in the region by offering a site to convert forest waste products to renewable energy and therefore the project will have a *less than significant impact*.

III. AIR QUALITY

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

Wo	ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?		\boxtimes		
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		\boxtimes		
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
d)	Result in significant construction-related air quality impacts?		\boxtimes		
e)	Expose sensitive receptors to substantial pollutant concentrations?				
f)	Create objectionable odors affecting a substantial number of people?				\boxtimes

DISCUSSION/CONCLUSION/MITIGATION:

a)-d) The thresholds of significance presented in the tables below are taken from the FRAQMD Indirect Source Review Guidelines, Chapter 3, Table 3.1

Projected Emissions – Stationary Sources

The proposed bioenergy facility will combust approximately 47,863 bone dry tons (BDT) of wood chips per year to produce 5.5 MW (gross) of electricity. The facility process description and process schematic are presented above in the Project Description section.

The facility is planned to operate 24/7, however given there will be scheduled and unscheduled maintenance requirements for the equipment it is anticipated that the bioenergy facility will operate 8,200 hours per year or 342 days per year⁶.

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⁶ Personal Communication, Thomas Del Monte, Phoenix Energy, February 22, 2019 *Yuba County Planning Department*

The direct combustion facility is currently configured to be equipped with Selective Non-Catalytic Reduction (SNCR) emissions control equipment to control nitrogen oxides (NOx) and Best Available Control Technology (BACT) for particulate matter (PM emissions, such as a baghouse or electrostatic precipitator in conjunction with a multi-clone).

A summary table of stationary emissions is presented below in Table 1. The emissions are based on 100% operation time, i.e., 24 hours per day, 7 days, 365 days a year.

Amount of **Boiler Heat** Estimated **Emission** combusted Input in controlled **Factors in Pollutant** fuel per **BACT** emissions in **MMBtu** lbs/MMBtu^{7,8} vear in **TPY** per hour **BDT** Selective Non-Catalytic NOx 0.09 47,863 95.1 37.49 Reduction (SNCR) Multi-clone w/ PM 0.02 47,863 95.1 8.33 Baghouse or ESP Multi-clone w/ PM10 0.02 47,863 95.1 8.33 Baghouse or ESP Good combustion VOC 47,863 95.1 0.028.33 practices Good combustion CO 0.09 47,863 95.1 37.49 practices 0.025 47,863 95.1 10.41 SOx

Table 1. Stationary Source Emission Estimates

It is noted that the NOx emissions exceed the FRAQMD threshold of 25 TPY for needing emission offsets. The FRAQMD maintains an Emission Reduction Credits and could be available for this project.

Project Emissions - Construction

The construction of the bioenergy facility will include the erection of an enclosed warehousetype building, road construction, and site grading for the bioenergy facility, biomass storage and processing area, a log storage area, and the area where the dry cooling and storm water pond will

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⁷NOx, with SNCR equipment, and PM, with multi-clone and baghouse, and VOC and CO emission factors taken from the ATC/PTO for the Buena Vista Biomass Power Plant in Amador County, CA, issued by the Amador County Air Pollution Control District

⁸ SOx taken from Chapter 1.6, Wood Residue Combustion in Boilers, AP-42, U.S. Environmental Protection Agency

be located (see Figures 4 and 5). As the project appears to exceed the screening thresholds in Chapter 5 of the FRQAMD's CEQA guidelines, construction emissions were estimated using the most current version of the computer program California Emissions Estimator Model® (CalEEMod).⁹

Project construction is assumed to take 12 months with approximately 11 acres of disturbed ground area. Table 2 presents the maximum daily and annual construction emissions.

Exceeds Maximum Daily Maximum Annual Pollutant FRAMOD Emissions (lb/day) Emissions (TPY) Threshold? VOC 24.1 0.7 No NOx 39.4 1.6 No CO 48.1 1.3 N/A SOx 0.13 0.003 N/A PM_{10} 8.4 0.13 No 0.07 PM_{2.5} 3.06 No

Table 2. Construction Emission Estimates

The results of the CalEEMod modeling are found in Appendix B.

Project Emissions – Mobile Sources

Mobile emission sources for the proposed bioenergy facility operation include truck activity (for chip delivery), loader activity (to move onsite biomass), employee commute trips, biomass hauling, and biochar hauling. Although there will be a reclaimer and conveyor system to move the biomass feedstock to the facility boiler system, a front loader will operate onsite moving biomass in the storage yard to maintain windrows and moving biomass feedstock from the storage areas to the reclaim area. Truck activity will follow the all-weather access roads onsite to reach the biomass storage and processing area and truck dump. A truck weigh scale will be sited near the biomass storage and process area.

The following CalEEMod inputs were used to estimate the operational mobile source emissions.

- 23 employees with 23 round trips for the commute at an average 30 miles round trip totaling 390 vehicle miles traveled (VMT) daily. With a 5 day work week, equals 172,500 VMT annually;
- 20 additional jobs for recovering biomass for delivery to plant with 20 round trips per day at an average 30 miles round trip totaling 600 VMT daily. With a 5 day work week, equals 150,000 VMT annually;
- Woody biomass fuel vehicles (i.e. chip vans) with a haul capacity of 12.5 BDT per load with 4,978 loads annually for 62,222 BDT of delivered biomass. Assume average 30 mile each way (60 mile round trip) for fuel acquisition: 298,666 VMT annually;

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⁹ <u>http://www.caleemod.com/</u> Version CalEEMod.2016.3.1 *Yuba County Planning Department*

• Biochar product deliveries, 5,600 tons per year, assume 50 miles delivery (to Marysville) with 12.5 BDT per truck load: 44,800 VMT

The results of the operational mobile and temporary source emissions are presented in Table 3 and the modeling results can be found in Appendix B.

Maximum **Maximum Controlled** Exceeds **Pollutant Controlled Daily Annual Emissions FRAMOD Emissions (lb/day)** Threshold? (TPY) VOC 5.7 1.0 No NOx 4.9 0.7 No 10.9 CO 1.3 N/A SOx 0.03 0.004 N/A 2.3 PM_{10} 0.3 No

0.1

No

Table 3. Operational Mobile Emission Estimates

FRAQMD Significance Thresholds and Potential to Emit

0.76

The FRAQMD has identified thresholds of significant impact in Chapter 3 of the Indirect Source Review Guidelines to assist in the CEQA Initial Study review process. They are listed in Table 4 below.

Project Phase	NOx	VOC (ROG)	PM10	PM2.5	Greenhouse Gases
Operational	25 lbs/day	25 lbs/day	80 lbs/day	Not Yet	Not Yet
Operational	(4.5 TPY)	(4.5 TPY)	(14.6 TPY)	Established	Established
Construction	25 lbs/day multiplied by project length, not to exceed 4.5 TPY	25 lbs/day multiplied by project length, not to exceed 4.5 TPY	80 lbs/day (14.6 TPY)	Not Yet Established	Not Yet Established

Table 4. FRAQMD Significance Thresholds

Pre-Project Potential to Emit

 $PM_{2.5}$

The potential to emit before the implementation of the proposed project is from the disposal method of the sustainably sourced forest woody biomass feedstock. Emissions factors for biomass feedstock fated to the pile and burn scenario are based on a study by the National Renewable Energy Laboratory (NREL)¹⁰. These emission factors are verified in a technical

Adapted from Table 3 - Emissions from Biomass Power Plants in "The Value of the Benefits of U.S. Biomass Power" National Renewable Energy Lab, November 1999 (http://www.nrel.gov/docs/fy00osti/27541.pdf)
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paper by the Placer County Air Pollution Control District in 2011¹¹. The results of these studies are shown in Table 5 include the emissions from processing and transportation of the woody biomass feedstock.

Table 5. Pile and Burn Emission Factors

Pollutant	EF (lb/thousand BDT)
VOC	24,000
NO_X	7,000
CO	150,000
SO_X	150
PM10	15,000

Net Potential to Emit

The factors in Table 5 are then utilized in Table 6 below to determine the emissions from the standard practice of pile and burn of the woody biomass waste in the forest, which release very significant uncontrolled air pollutant emissions. The amount of forest-sourced woody biomass to be used (no less than 80% of the annual 47,863 BDT as required by BioMAT) and assuming 66.7% (or two-thirds) of that material would have been piled and burned is then calculated and compared to the operational and construction emissions in Tables 1 and 2. The difference between the pile and burn and the operational/construction emissions can then be compared to the FRAQMD thresholds of significance (Table 4).

The net emissions based on the project represent the difference between the pre-project potential to emit and the project's potential to emit, as shown in Table 6. This net emissions approach for determining CEQA impact significance of small-scale biomass facility has been used for several other similar projects and has been accepted by both the planning departments and air districts including Madera County and San Joaquin Valley APCD, Calaveras County and Calaveras APCD, Shasta County and Shasta County AQMD, Mariposa County and Mariposa APCD, Placer County and Placer County APCD.

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 $^{^{11}}$ "Emissions Reductions from Woody Biomass Waste for Energy as an Alternative to Open Burning" Journal of Air & Waste Management 61:63-68. January 2011

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Table 6. Net Operational Emissions from Proposed Project

Pollutant	Amount of fuel per year in BDT	Percentage forest sourced fuel	Percentage of fuel diverted from pile and burn	Amount of fuel diverted from pile and burning in BDT	Emission factor for pile and burn in lb/BDT	TPY for pile and burn	Estimated controlled emission in TPY (from Table 1)	Operational emissions in TPY (from Table 3)	Amount of net emissions produced in TPY	FRAQMD Thresholds of Significance in TPY**
NOx	47,863	80%	66.7 %	24,540	7	89.4	37.5	0.7	-51.2	4.56
PM10	47,863	80%	66.7%	25,540	15	191.6	8.3	0.3	-182.9	14.6
VOC	47,863	80%	66.7%	25,540	24	306.5	8.3	1.0	-297.2	4.56
СО	47,863	80%	66.7%	25,540	150	1915.5	37.5	1.3	-1,876.7	N/A
SOx	47,863	80%	66.7%	25,540	0.15	1.9	10.4	0.004	8.5	N/A

^{**} The annual NOx and ROG thresholds is from daily threshold: 25 lbs/day x 365 days/yr / 2000 lbs/ton = 4.56 tons/yr (TPY) The annual PM10 thresholds is from daily threshold: 80 lbs/day x 365 days/yr / 2000 lbs/ton = 14.6 tons/yr (TPY)

As can be seen in Table 6 above, the differentials between pile and burn emissions and the emissions from operations and construction are considerable, and place all the net emissions well below the FRAQMD significance thresholds. This exceedance is due in large part to the feedstock delivery trucks. The stationary source, i.e., the boiler, employs BACT for NOx control. Additional mitigation measures for the stationary source NOx, and for the operational mobile sources, may be possible to lower the net emissions below the FRAQMD significant impact level.

It must be noted that this does not exempt the facility from acquiring an Authority to Construct permit in which the diversion of the emissions from pile and burn will not be considered.

Toxic Air Contaminants

The project construction is expected to emit toxic air contaminant (TAC), primarily in the form of diesel particulate matter (DPM) from diesel-fired engines. The diesel engines typically have relatively low exhaust stacks, which tend to limit the spatial extent of the ambient impacts of the construction emissions. The combined effect of the limited spatial impact of the construction air emissions and the relatively remote nature of the project site means that the TAC impacts are expected to be less than significant.

The operating project's TAC emissions are not expected to result significant health risk impacts for the same reasons provided for construction and the relatively remote nature of the project site.

Long Term and Cumulative Impacts

With the project emissions below the FRAQMD thresholds of significant impacts, potential long-term impacts are also insignificant.

Regarding potential cumulative air quality impacts, one of the principal air quality impacts in the region is the pile and burning of woody biomass waste from forest management operations. Per the calculations in Table 8, the proposed bioenergy project actually reduces cumulative impacts, with the exception of a small increase in NOx emissions.

The proposed bioenergy facility is well below the FRAQMD significant thresholds. However, FRAQMD and the Yuba County General Plan Policy HS 6.1 both recommend the following construction phase Standard Mitigation Measures for projects that do not exceed district operational standards and FRAQMD requires an Air Quality Permit for the operation of all propane powered generators:

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MITIGATION MEASEURE

MM 3.1. Dust Emission Reductions

a) b) c) d)

- Implement FRAQMD Fugitive Dust Plan
- Implement FRAQMD standard construction phase mitigation measures. (www.fraqmd.org/)
- Any generators will require a FRAQMD Air Quality Permit prior to commencement of use.

These mitigation measures are to be incorporated as part of the project to reduce dust emissions associated with construction of the project and implementation of these mitigation measures would reduce project impacts on air quality standards would be *less than significant with mitigation incorporated*.

- e) The proposed bioenergy facility is located in a pocket of Timberland Preserve zoned properties that are surrounded by properties zoned Resource Preservation/ Recreation and a few Exclusive Agricultural the north and south of the project site. The nearest school site is located lover 2.5 miles away in the community of Dobbins to the west. The project is not expected to generate pollutant concentrations at a sufficient level to be noticed by any nearby rural residential residences nor affect any nearby schools. Therefore, the impact to sensitive receptors would be *less than significant*.
- f) Development proposed by the project is not expected to create objectionable odors. Therefore, there would be *no impact* related to odors.

IV. B Would the	IOLOGICAL RESOURCES e project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
through as a callocal of the Ca	a substantial adverse effect, either directly or h habitat modifications, on any species identified andidate, sensitive, or special status species in or regional plans, policies, or regulations, or by diffornia Department of Fish and Game or U.S. and Wildlife Service?				
habitat in loca the Ca	a substantial adverse effect on any riparian or other sensitive natural community identified all or regional plans, policies, or regulations or by alifornia Department of Fish and Game or US and Wildlife Service?				
wetland Act (in coastal	a substantial adverse effect on federally protected ds as defined by Section 404 of the Clean Water acluding, but not limited to, marsh, vernal pool, l, etc.) through direct removal, filling, ogical interruption, or other means?				
residen establis	re substantially with the movement of any native nt or migratory fish or wildlife species or with shed native resident or migratory wildlife ors, or impede the use of native wildlife nursery				
protect	ct with any local policies or ordinances ting biological resources, such as a tree vation policy or ordinance?				
Conser Plan, o	et with the provisions of an adopted Habitat vation Plan, Natural Community Conservation or other approved local, regional, or state habitat vation plan?				

DISCUSSION/CONCLUSION/MITIGATION:

A biological inventory and assessment was performed February 2019 by Beedy Environmental Consulting (Nevada City, CA). It is attached as Reference 8. A synopsis is presented below; tables and maps are included in the complete report. A separate botanical investigation was conducted for project site in 2018 and covered the areas where the bioenergy facility and access roads are to be constructed for the project (see complete report in Reference 8).

The Yuba County General Plan, Natural Resources, Action NR5.3 Wetlands and Riparian Buffers, requires buffers of 33 to 150 feet from project activities near protected areas. The 150-

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feet maximum can be adjusted to a lesser setback if a qualified biologist assesses that the proposed project will not impact the watercourse/riparian habitats.

The purpose of the Biological Inventory is to provide background information regarding the Biological Study Area (BSA) and to review the proposed project in sufficient detail to determine to what extent the construction and operation of the proposed Bioenergy Facility may affect state- or federally-threatened, endangered, or proposed and plant and animal species, as well as other special-status species that inhabit the BSA. While the report presents technical information upon which decisions regarding project impacts may be developed, it also provides observations from the field survey performed by Beedy Environmental Consulting on February 12, 2019. Best Management Practices are recommended as mitigation for wetland/riparian habitats and will afford protection for these areas by buffers or by adequate setbacks.

METHODS

Special-status plant and animal species with a potential to occur in the project area were identified through searches of the U.S. Fish and Wildlife Service's IPaC website (USFWS 2019), and California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB 2019) for the French Corral and surrounding 7.5-minute USGS quadrangles. A botanical survey was performed for this site as part of the THP application, and it is incorporated by reference in this Biological Inventory (Sierra Timber Services 2018). Other sources that were consulted include the CDFW Species of Special Concern documents: Shuford and Gardali 2008 (birds), Thomson et al. 2016 (reptiles and amphibians), and Williams 1986 (mammals). The Nevada County Natural Resources Report (Beedy and Brussard 2002) was also be consulted for information on the distribution and extent of habitats, and the relationships between habitats and special-status species in a regional context.

FIELD SURVEYS

A field survey was performed at the BSA by the project biologist, Dr. Edward C. "Ted" Beedy on February 12, 2019.

EXISTING SITE CONDITIONS

The BSA includes approximately 95 acres of mixed-conifer, oak woodland, and foothill grassland. While most of the larger trees have been removed in a series of patch clear-cuts, the remaining forested areas on this site have an overstory of Douglas-fir (Pseudotsuga menziesii), ponderosa pine (Pinus ponderosa), sugar pine (P. lambertiana), incense cedar (Calocedrus decurrens), madrone (Arbutus menziesii), black oak (Quercus kelloggii), with some big leaf maple (Acer macrophyllum) and Pacific dogwood (Cornus nuttallii) in riparian areas. The understory consists of tanoak (Notholithocarpus densiflorus), Himalayan blackberry (Rubus armeniacus), poison oak (Toxicodendron diversilobum), and wild rose (Rosa spp.) (Sierra Timber Services 2018).

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Non-native grasses occur throughout the project site, and the typical grasses and forbs observed were wild oats (Avena fatua), soft chess (Bromus hordeaceus), ripgut brome (B.diandrus), broadleaf filaree (Erodium botrys), and other common ruderal weeds found in disturbed sites. A dominant forb is yellow star thistle (Centaurea solstitalis), an invasive weed found especially in disturbed areas such as this.

Bird species detected by sight and/or sound during the February 12, 2019 field survey included: Turkey Vulture (Cathartes aura), Hairy Woodpecker (Picoides villosus), Red-breasted Sapsucker (Sphyrapicus ruber), Northern Flicker (Colaptes auratus), Steller's jay (Cyanocitta stelleri), Red-breasted Nuthatch (Sitta canadensis), American Robin (Turdus migratorius), Hermit Thrush (Catharus guttatus), Yellow-rumped Warbler (Setophaga coronata), Ruby- crowned Kinglet (Regulus calendula), Dark-eyed Junco (Junco hyemalis), and Spotted Towhee (Pipilo maculatus). All of these species are regular residents or winter visitors to mixed-conifer forests, meadows, wetlands, riparian habitats of the western Sierra Nevada (Grinnell and Miller 1944, Beedy and Pandolfino 2013).

Mule Deer (Odocoileus hemionus) were observed during the field survey, and Black Bear (Ursus americanus) sign (i.e., scat) was observed at a few locations in the meadow and surrounding forests. Mountain Lion (Felis concolor) are also likely to occur in the BSA based on their known range in the Sierra Nevada (Grinnell et al., 1937, Verner and Boss 1980, Zeiner et al. 1990).

Representative amphibians and reptiles that may occur in the BSA include: Pacific Chorus Frog (Pseudacris regilla), Western Fence Lizard (Sceloporus occidentalis), Sagebrush Lizard (S. graciosis), Sierra Alligator Lizard (Elgaria coerulea palmeri), Pacific Gopher Snake (Pituophis catenifer) and Northern Pacific Rattlesnake (Crotalus oreganus) based on their known elevational and distributional ranges in the Sierra Nevada (Verner and Boss 1980, Zeiner et al. 1990).

SPECIAL STATUS SPECIES

The Gellerman project area has potential to support a number of special-status species that are of concern to the California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS). Special-status species were considered for this analysis based on field survey results, a review of the California Natural Diversity Database (CNDDB), CNPS literature, and database information provided by the IPac - U. S. Fish and Wildlife Service (Camptonville 7 ½ Minute Quad databases June 2016). No special status species were observed during the surveys.

A wildlife habitat assessment was performed in coordination with the plant surveys. Surveys were conducted to determine if habitats supported special-status animal species, and raptor nest searches were performed during these surveys. Protocol level surveys for potentially occurring special-status animals were not conducted. The determination of presence for animal species that could possibly occur was based on habitat assessments, literature review, and queries through USFWS and CNDDB.

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Plants

No special-status (California Rare Plant Rank 1-3) plants were observed within the BSA. Sierra Foothills Brodiaea (4.3) (Brodiaea sierra), was observed in three locations within the BSA. The California Native Plant Society recommends that California Rare Plant Rank 4 plants be evaluated for impact significance during preparation of environmental documents relating to CEQA. Best management practices would suggest avoiding the southernmost portion of the project area, leaving B. sierrae species intact. However, since there will not be impact significance if local extirpation should occur, these are suggestions but are not required (Sierra Timber Services 2018).

Animals

California Red-legged Frog (Rana aurora draytonii) is listed as a threatened Federal Species by USFWS. This species is found in lowlands and foothills in or near permanent sources of deep water with dense shrubby or emergent riparian vegetation. The Sierra populations are highly restricted and consist of small numbers of individuals (Barry and Fellers 2013). No potentially suitable habitat exists in or near the Gellerman project area for this highly aquatic species.

Foothill Yellow-legged Frog (Rana boylii) is listed as a species of concern by USFWS and CDFW. This species is found in streams at low elevations in the Sierra Nevada and coastal mountains. Typical habitat is fast-moving waterways that decline substantially in midsummer, which may enable their tadpoles to develop in the absence of most predatory fish. While there are documented occurrences within the Middle Yuba River (CNDDB 2019), no potentially suitable habitat exists in or near the Gellerman project area for this highly aquatic species.

California Spotted Owl (Strix occidentalis occidentalis) is considered a California Bird Species of Special Concern (Shuford and Gardalli 2008). This species requires larger old trees and snags, high basal area of trees and snags, dense canopies (>70) multiple canopy layers, and downed woody debris (Verner et al. 1992, Blakesley et al. 2010). The BSA generally lacks suitable breeding habitat since it has experienced patch clear-cuts in the past decade and few large stature trees remain onsite, and there are no documented occurrences near the BSA in CNDDB (2019).

SIGNIFICANCE CRITERIA

The determination of significance of impacts to biological resources involves an evaluation of the context in which the impact may occur and the intensity and extent of the impact's effect.

Potential direct and indirect impacts to the biological resources were evaluated with respect to mandatory findings of significance as set forth in Section 15065 of CEQA and Appendix G of the State CEQA Guidelines. In accordance with these Guidelines, a project's effect on biological resources would be considered significant if the project results in:

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- Alteration of unique characteristics of the area, such as sensitive plant communities and habitats (i.e. wetlands, riparian habitats).
- Adverse impacts to special-status species, including species identified as candidate and/or sensitive species.
- Adverse impacts to important or vulnerable resources as determined by scientific opinion or resource agency concerns (i.e. special status habitats, e.g. wetlands).
- Interference with migratory routes.

MITIGATION MEASURES

Sediment transport from harvesting activities to the tributaries and downstream aquatic habitats can have deleterious effects on aquatic organisms in the aquatic habitats and result in violation of State and Federal water quality regulations. In order to preserve the integrity of the site for wildlife, the following mitigation is recommended.

MM 4.1 Best Management Practices During Construction

a) c) The following habitat management recommendations should be implemented to minimize any potential impacts resulting from construction of the new road crossing on this property:

Implement Best Management Practices during construction.

To protect water quality and aquatic life in the Class II seasonal drainages, and to avoid introduction of invasive weeds, the following Best Management Practices should be implemented during and after construction. These measures include, but are not limited to:

- All construction within and near (i.e., within 100 feet) should occur when the stream is dry or at low-flow conditions (i.e., after August 1).
- The contractor shall exercise every reasonable precaution to protect the streamside at the project site from pollution with sediments, fuels, oils, bitumen, calcium chloride, and other harmful materials. Construction byproducts and pollutants such as oil, cement, and washwater shall be prevented from discharging into the creek bed and shall instead be collected and removed from the site.
- No invasive, non-native grasses such as orchard grass, canary reed grass, or velvet grass shall be used for erosion control, as these species are known to invade wetlands.

Therefore, any substantial adverse effects on any riparian habitats from construction would be *less than significant with mitigation incorporated*.

MM 4.2 Migratory Birds Protection

b) The potential exists for impacts to special-status raptors, possibly including California Spotted Owls, as well as other migratory birds protected under the Migratory Bird Treaty Act in the

vicinity of the BSA and could be adversely affected by project activities if they occur during the breeding season (March 1 - September 1). Prior to any grading or tree removal activities, a focused survey for raptor nests shall be conducted by a qualified biologist during the raptornesting season. No additional mitigation measures are required.

Therefore, any substantial adverse effects on any raptor habitats would be *less than significant* with mitigation incorporated

MM 4.1 Wildlife Safety Fencing

d) Fences are a danger to wildlife when they are too high to jump; when the bottom is too low to crawl under; when spacing of rails or wires are too close to get through; when wire become loose and can entangle hooves; when the fence is not marked and is invisible; when the top rail is unforgiving and won't release when hit by a jumping animal; and when the fence doesn't have frequent openings, crossings, or dropped rails, especially when not in use. A fence is a structural element that can create an impediment for wildlife movement, resulting in death and injuries to wildlife, fragmentation of wildlife herds, separation of mother and dependent young, and damage to fences.

If fencing is constructed as a perimeter barrier around the project site, then it should adhere to the following design requirements:

- Height: Fencing height shall be no greater than 38 inches above the ground to the top of the top wire or rail. Spacing between the top two wires shall be at least 12 inches, and this is not applicable when the top is a rail or pole. Rails and poles are visually and spatially preferable for wildlife.
- Materials and Design: Wood (or similar material) top rails, and either wood rails or wire strands are permitted as horizontal elements in fence. The wire strands shall be smooth or barbless. The required fencing design includes a top level of a wood pole, or similar material, rather than wire. The bottom rail or wire strand shall be at least 18 inches above the ground. The spacing of fence posts is recommended to be on 12-foot centers unless topography prohibits this spacing. Spacing of the second and third wire shall be evenly spaced. Spacing distances may vary from 6-8 inches.
- e) f) The proposed project site is not located in the Yuba-Sutter Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) boundary. The Yuba-Sutter NCCP/HCP plans are in the process of being prepared, however, no conservation strategies have been proposed to date which would be in conflict with the project. Therefore, the project would have *no impact* to conservation plans.

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V. CULTURAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?				
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				
d) Disturb any human remains, including those interred outside of formal cemeteries?		\boxtimes		

DISCUSSION/CONCLUSION/MITIGATION:

The proposed Forest Biomass Facility project area is situated on an approximately 18- acre parcel located adjacent to Marysville Road near the community of Dobbins in Yuba County, California. The approximately 18-acre project area is currently used for a tree plantation.

Peak and Associates intensive records search and results of the in-field cultural resources investigation produced the following results:

Prehistory

This region is known as the ethnographic-period territory of the Nisenan, also called the Southern Maidu. The Nisenan maintained permanent settlements along major rivers in the Sacramento Valley and foothills; they also periodically traveled to higher elevations to hunt or gather plants (Wilson and Towne 1978:387-389). The primary domain of the Valley Nisenan was between modern Sacramento and Marysville. The principal Nisenan ethnographers list settlements along the Yuba, Bear and American Rivers.

As numerous cultural resources investigations have occurred in the proposed project area, with the latest one in 2018 for the current Soper Wheeler THP, Yuba County Planning suggested a peer review of those investigation was in order as opposed to an entirely new field investigation. As such, Peak & Associates Consulting Archeology (El Dorado Hills, CA) was retained to review previous inspections. The entire review letter can be found in Reference 7. Presented below are excerpts from that review.

"The entire proposed project area has been previously inspected for cultural resources during four archeological studies prior to 2018. In 2018 a Registered Professional Forester (RPF) in conjunction with CalFire Timber Harvest Plans (THPs) conducted a complete resurvey of the entire proposed project area. During the most recent inspection in 2018 a record search was conducted through the North Central Information Center (NCIC) of the California

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Historical Resources Information System (CHRIS) that indicated that no cultural resources had been identified with the proposed project area. A Sacred Lands File Search was completed through the Native American Heritage Commission (NAHC) and letters were sent by the RFP to three groups identified by the NAHC with two verbal replies received."

"No cultural resources were identified within the proposed project area during the two previous inspections by RFPs."

"According to the NCIC files, portions of the proposed project area had been investigated for cultural resources one four occasions prior to 2018 (NCIC File Numbers: 7852; 7859; 8558; and, 10789. No cultural resources were identified within the proposed project area during these survey efforts."

Historical

Yuba County was one of the original counties of California, formed in 1850 at the time of statehood. It was an early gold mining communities founded during the California gold rush of 1849. The county is bisected by State Route 49 (SR 49) a north-south state highway that passes through many historic gold rush mining communities.

The project site region is also characterized in part by the diversion, flood control, and hydroelectric power generation facilities associated with nearby New Bullards Bar Reservoir (2 miles to the northeast). Four dams have been constructed at the current site of the New Bullards Bar Reservoir as far back as 1899, with the current operative one being constructed by the Yuba Water Agency and put into operation in 1969.

The proposed site of the biomass power plant is located within forested lands owned by the Soper Wheeler Timber Company with no known historical structures occurring at the location of the proposed power plant, storage and processing area, and area set aside for the dry cooling equipment and storm water pond. All of those areas have been historically been logged. Some historic period resources related to mining have been noted in the project area, but not at the biomass energy facility itself¹².

There are no structures listed on the California Register of Historical Resources. 13

CONCLUSIONS

a) and b) There are no known archeological or historically significant sites located on the proposed project site.

No prehistoric period resources were found during the current inspection. However, there is always a remote possibility that previous activities (both natural and cultural) have obscured prehistoric or historic period artifacts or habitation areas, leaving no surface evidence that would

¹² Peer Review of 2018 Archaeological Survey Report for the Low Country Timber Harvest Plan, prepared by Peak and Associates Consulting Archeology, January 29, 2019

¹³ http://ohp.parks.ca.gov/ListedResources/?view=county&criteria=58 *Yuba County Planning Department*Mar. 2010

permit discovery of these cultural resources. With the possibility of historical or archeological resources being unearthed during construction, Cultural Resources would be *less than significant with mitigation incorporated*

c) A search of the University of California Museum of Paleontology collections database does not have any (0) previously recorded paleontological resources in Yuba County. No paleontological resources have been identified on the project site and the area contains no unique geological features. *No impact* to paleontological resources is expected.

MITIGATION MEASURES

MM5.1 Historic Period Artifacts

If, during construction activities, unusual amounts of non-native stone (obsidian, fine-grained silicates, basalt), bone, shell, or prehistoric or historic period artifacts (purple glass, etc.) are observed, or if areas that contain dark-colored sediment that do not appear to have been created through natural processes are discovered, then work should cease in the immediate area of discovery and a professionally qualified archeologist should be contacted immediately for an on-site inspection of the discovery.

MM5.2 Discovery Of Human Remains

d) In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area suspected to overlie adjacent remains until the Yuba County Coroner has determined that the remains are not subject to any provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.

If the Yuba County Coroner determines that the remains are not subject to his or her authority and if the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC).

There are no known burial sites within the project area. If human remains are unearthed during future development, the provisions of California Health and Safety Code Section 7050.5 and MM 5.1 and MM5.2 shall apply. Under this section, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition, pursuant to California Public Resources Code Section 5097.98. The impact would be *less than significant with mitigation incorporated*.

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

DISCUSSION/CONCLUSION/MITIGATION:

a) b) The proposed project is an electricity generation project that will convert energy resources (woody biomass) that would otherwise be disposed of, or burned in open piles with no energy recovery. The proposed project is also consistent with the Yuba County General Plan, Natural Resources Element, which promote renewable energy development and use within the county, and more specifically as it related to forest management (Yuba County General Plan Policy NR4.7). The proposed project would not impact energy resources and conflict with local plans for energy and therefore would create a *less than significant impact*.

VI	I. GEOLOGY AND SOILS	Potentially	Less Than Significant	Less Than	
W	ould the project:	Significant Impact	With Mitigation Incorporated	Significant Impact	No Impact
a)	Expose people or structures to 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?			\boxtimes	
b)	Result in substantial soil erosion or the loss of topsoil?			\boxtimes	
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- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			\boxtimes	
d)	Be located on expansive soil, as defined in Section 1803.5.3 to 1808.6 of the 2010 California Building Code, creating substantial risks to life or property?				
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				

DISCUSSION/CONCLUSION/MITIGATION:

a) (i) Yuba County 2030 General Plan describes the potential for seismic activity potential within Yuba County as being relatively low and it is not located within a highly active fault zone. No Alquist-Priolo Earthquake Fault Zones are located within the County. The faults that are located within Yuba County are primarily inactive and consist of the Foothills Fault System, running south southeastward near Loma Rica, Browns Valley and Smartsville. Landslides are most likely to form when the ground is sloped. The proposed bioenergy facility is proposed to be located on some rolling topography that will be graded, with some cut and fill that will prepare a relatively flat surface for the facility. A *less than significant impact* from earthquakes is anticipated.

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- (ii) Within Yuba County, the Swain Ravine Lineament of the Foothills Fault system is considered a continuation of the Cleveland Hill Fault, the source of the 1975 Oroville earthquake. The Foothill Fault System has not yet been classified as active, and special seismic zoning was determined not to be necessary by the California Division of Mines and Geology. While special seismic zoning was not determined to be necessary, the Foothill Fault system is considered capable of seismic activity. In addition, the County may experience ground shaking from faults outside the County. Therefore, strong seismic ground shaking would result in a *less than significant impact*.
- (iii) Ground failures, such as differential compaction, seismic settlement and liquefaction, occur mainly in areas that have fine-grained soils and clay. The project site subsurface materials do not consist of fine-grained soils and that the project site has a very low liquefaction probability. Furthermore, consistent with Yuba County 2030 General Plan Public Health & Safety policy HS 8.1 the proposed project would be constructed to meet all applicable State of California seismic building codes. Therefore, seismic related ground failure including liquefaction is not anticipated resulting in a *less than significant impact*.
- (iv). The Yuba County General Plan identifies the area as one that has a slight risk for landslides, and states that grading ordinances, adopted by Yuba County and based on Appendix J of the 2016 California Building Code, serve as effective measures for dealing with landslide exposure. Landslides are most likely to form when the ground is sloped. The proposed bioenergy facility is located on flat topography, which is not prone to landslides. Hazards associated with potential seismic and landslide result in a *less than significant impact*.
- b) Soils information was obtained from the U.S. Department of Agriculture/Natural Resources Conservation Services (USDA/NRCS) soils survey mapping system. Soils on the Gellerman site parcels where potential soil disturbance may occur are the Sites (9 to 15% slopes) soil. This soil type occurs at the 2,130 to 3,530 foot elevation in the mountains, generally as mountain flank or back slope of 9 to 15% slopes, but at the project site there are slopes of less than 9%, even down to 0% slope. The typical profile of this soil type is: Slightly decomposed plant materials, 0 to 4 inches; Silt loam, 4 to 10 inches; Silty clay loam, 10 to 31 inches; Clay loam, 31 to 65 inches; and Bedrock, 65 to 75 inches. The soil drainage class under dominant condition and under wettest condition is well drained; water is removed from the soil readily.

Other soil types adjacent to the Sites (9 to 15% slopes) soils are the Sites on the steeper slopes (15 to 30% slopes) which have nearly identical characteristics to the Sites (9 to 15% slopes), and the Argovar soil type, which runs along the watercourse to the east of the bioenergy facility. That silt loam soil at 0 to 5% slopes is generally associated with watercourse or wetland

http://www.nrcs.usda.gov/Internet/FSE MANUSCRIPTS/california/yubaCA1998/yubaCA1998 1.pdf

¹⁴ SoilWeb: an online tool for USDA/NRCS soil survey data in California:

https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

¹⁵ Soil Survey of Yuba County, 1988.

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locations. Therefore, substantial soil erosion and loss of topsoil would be a *less than significant impact*.

- c) The proposed project would not be subject to significant hazards associated with landslides, lateral spreading, liquefaction, or collapse. Activities that would cause subsidence include groundwater pumping and natural gas extraction. There are a limited number of wells in the project vicinity that are used to supply water for agricultural and residential uses. These wells will continue to be used in the future. Therefore, the project would have *less than significant* to unstable soil, landslides, subsidence, liquefaction, or collapse.
- d) Soil erosion hazards on the project site are designated as slight in the Yuba County General Plan, Public Health and Safety Element (Exhibit 7 Erosion potential). As part of the construction process, the project will meet requirements to submit plans for the disposition of surface runoff and erosion control to the Yuba County Public Works Department. The Building Official may require additional soils testing, if necessary, and will result in a *less than significant impact*.
- e) The project would require the use of septic systems for wastewater disposal for employees of the project. The project site is over 412.3 acres in size and contains sandy loam soil that would support the use of septic systems. Therefore, the project would result in a *less than significant* to wastewater.

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

DISCUSSION/CONCLUSION/MITIGATION:

a) Global Warming is a public health and environmental concern around the world. As global concentrations of atmospheric greenhouse gases increase, global temperatures increase, weather extremes increase, and air pollution concentrations increase. The predominant opinion within the scientific community is that global warming is currently occurring, and that it is being caused and/or accelerated by human activities, primarily the generation of "greenhouse gases" (GHG).

In 2006, the California State Legislature adopted AB32, the California Global Warming Solutions Act of 2006, which aims to reduce greenhouse gas emissions in California. Greenhouse gases, as defined under AB 32, include carbon dioxide, methane, nitrous oxide, hydro-fluorocarbons, perfluorocarbons, and sulfur hexafluoride. AB 32 requires the California Air Resources Board (ARB), the State agency charged with regulating statewide air quality, to adopt rules and regulations that would achieve greenhouse gas emissions equivalent to statewide levels in 1990 by 2020.

In 2008, the California Air Resources Board (CARB) adopted the Scoping Plan for AB32. The Scoping Plan identifies specific measures to reduce GHG emissions to 1990 levels by 2020, and requires ARB and other state agencies to develop and enforce regulations and other initiatives for reducing GHGs. The Scoping Plan also recommends, but does not require, an emissions reduction goal for local governments of 15% below "current" emissions to be achieved by 2020 (per Scoping Plan current is a point in time between 2005 and 2008). The Scoping Plan also recognized that Senate Bill 375 Sustainable Communities and Climate Protection Act of 2008 (SB 375) is the main action required to obtain the necessary reductions from the land use and transportation sectors in order to achieve the 2020 emissions reduction goals of AB 32.

SB 375 complements AB 32 by reducing GHG emission reductions from the State's transportation sector through land use planning strategies with the goal of more economic and environmentally sustainable (i.e., fewer vehicle miles travelled) communities. SB 375 requires that the ARB establish GHG emission reduction targets for 2020 and 2035 for each of the state's 18 metropolitan planning organizations (MPO). Each MPO must then prepare a plan called a Sustainable Communities Strategy (SCS) that demonstrates how the region will meet its SB 375 GHG reduction target through integrated land use, housing, and transportation planning.

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The Sacramento Area Council of Governments (SACOG), the MPO for Yuba County, adopted an SCS for the entire SACOG region as part of the 2035 Metropolitan Transportation Plan (MTP) on April 19, 2012. The GHG reduction target for the SACOG area is 7 percent per capita by 2020 and 16 percent per capita by 2035 using 2055 levels as the baseline. Further information regarding SACOG's MTP/SCS and climate change can be found at http://www.sacog.org/2035/.

While AB32 and SB375 target specific types of emissions from specific sectors, and ARBs Scoping Plan outlines a set of actions designed to reduce overall GHG emissions it does not provide a GHG significance threshold for individual projects. Air districts around the state have begun articulating region-specific emissions reduction targets to identify the level at which a project may have the potential to conflict with statewide efforts to reduce GHG emissions (establish thresholds). To date, the Feather River Air Quality Management District (FRAQMD) has not adopted a significance threshold for analyzing project generated emissions from plans or development projects or a methodology for analyzing impacts. Rather FRAQMD recommends that local agencies utilize information from the California Air Pollution Control Officers Association (CAPCOA), Attorney General's Office, Cool California, or the California Natural Resource Agency websites when developing GHG evaluations through CEQA.

GHGs are emitted as a result of activities in residential buildings when electricity and natural gas are used as energy sources. New California buildings must be designed to meet the building energy efficiency standards of Title 24, also known as the California Building Standards Code. Title 24 Part 6 regulates energy uses including space heating and cooling, hot water heating, ventilation, and hard-wired lighting that are intended to help reduce energy consumption and therefore GHG emissions.

CalEEMod was also used to assess the project construction greenhouse gas (GHG) emissions. Table 7 presents the results of the construction GHG assessment.

Table 7. Construction GHG

Pollutant	Maximum Controlled Annual Emissions (metric tons)
Carbon Dioxide- Equivalent	296

CalEEMod was also used to assess the project operational mobile and temporary source greenhouse gas (GHG) emissions. Table 8 presents the results of the operational mobile GHG assessment.

Table 8. Mobile GHG Emissions

Pollutant	Maximum Controlled Annual Emissions (metric tons)
Carbon Dioxide-Equivalent	310

Using the above CalEEMOD data and calculated GHG emissions from the potential combustion of 62,222 BDT annually by the proposed facility and from the 66.7% (or two-thirds) reduction of open burning of the woody biomass waste, the following table results in the total GHG burden of the bioenergy facility.

Table 9. Total Facility GHG Burden

Emission Source	Projected GHG Emissions (CO2e in metric tons per year)		
Construction Emissions	296 9.8 MT/year ¹⁶		
Project Emissions	77,153.4 MT/year ¹⁷		
Mobile Operations	310 MT/year		
Natural Gas Electricity Displaced (8,200 hours)	(-18,040) MT/year ¹⁸		
Reduced Open Burning	(-38,079) MT/year ¹⁹		
TOTAL	21,034 MT/year		

It must be noted that Table 9 calculates the GHG emissions without considering the carbon neutrality of woody biomass. Woody biomass combustion for the production of electricity is considered to be carbon neutral by state, federal and international agencies. CO₂e emissions related to the burning of woody biomass has been exempted from the California Cap and Trade program for this reason and, as such, it is reasonable to consider the calculation of total emissions as potentially carbon neutral when determining the project's environmental impacts. If the project emissions in Table 9, i.e., the GHG emissions from the combustion of woody biomass, is considered zero, then the GHG burden of the proposed project is 319.8 MT/year.

The development of project would not generate significant GHG emissions that would result in cumulative considerable contributions to climate change impacts. Therefore, the project will not directly generate greenhouse gases and will have a *less than significant impact* above existing pollution levels.

b) Yuba County has prepared but not adopted a Resource Efficiency Plan that will address Greenhouse Gas emissions; however there is not a plan in place at this time. The project is

¹⁷ Uses a CO2e emission factor of 1.8 tons CO2 per dry ton of biomass combusted in biomass power plant. From "Biomass Waste for Energy Project Reporting Protocol" January 2013. Prepared by the Placer County Air Pollution Control District. https://www.placer.ca.gov/DocumentCenter/View/2115/Biomass-Waste-For-Energy-Project-Protocol-PDF?bidId=

¹⁶ Amortized over 30 years

¹⁸ Uses a CO2e emission factor of 800 lbs. of CO2 per megawatt hour of electricity generated in a combined cycle natural gas power plant. From "Biomass Waste for Energy Project Reporting Protocol" January 2013. Prepared by the Placer County Air Pollution Control District. https://www.placer.ca.gov/DocumentCenter/View/2115/Biomass-Waste-For-Energy-Project-Protocol-PDF?bidId=

¹⁹ Uses a CO2e emission factor of 1.73 tons CO2 per dry ton of biomass. From "Biomass Waste for Energy Project Reporting Protocol" January 2013. Prepared by the Placer County Air Pollution Control District. https://www.placer.ca.gov/DocumentCenter/View/2115/Biomass-Waste-For-Energy-Project-Protocol-PDF?bidId=

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consistent with the Air Quality & Climate Change policies within the Public Health & Safety Section of the 2030 General Plan therefore, the project does not conflict with any applicable plan, policy or regulation and will result in *no impact*.

IX.	HAZARDS AND HAZARDOUS MATERIALS	Potentially	Less Than Significant	Less Than	No
Wo	uld the project:	Significant Impact	With Mitigation Incorporated	Significant Impact	Impact
ĺ	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
ŕ	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
ŕ	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			\boxtimes	
,	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			\boxtimes	
ŕ	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 for people residing or working in the project area?				
	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				\boxtimes
	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
ŕ	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?		\boxtimes		

DISCUSSION/CONCLUSION/MITIGATION:

a) b) and c) During future construction and operational phases of the proposed project, common hazardous materials, including gasoline and other motor vehicle fuels, propane, solvents, lubricating oils, welding gases, and acids and bases may be present on site. The proposed facility, once operating, would complete and submit the Hazardous Material Business Plan to the Yuba County Environmental Health/CUPA if handling or storing a hazardous material equal to

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or greater than the minimum reportable quantities. The minimum hazardous materials quantities are: 55 gallons of liquid; 500 pounds of a solid; and 200 cubic feet of compressed gas.

It should be noted that the bioenergy facility will also be configured and operated to produce biochar instead of bottom ash. Biochar is considered a byproduct with significant revenue potential, and as such will not be treated as waste, but a marketable commodity.

Ash will be hauled away to an appropriate disposal location, or can be used as an ingredient in cement production. In order for the ash to be used as a byproduct, a testing protocol will be required to be developed and implemented so that the ash is deemed a non-hazardous waste per California and federal hazardous waste regulations. Since the woody biomass waste to be used is forest-sourced, it is expected that the ash will not contain any hazardous constituents to render it a hazardous waste. The nearest landfill that can accept ash from the proposed facility in the Forward Landfill in Manteca, CA. That landfill facility is approximately 133 miles south of the proposed facility. Disposal at that site will require the facility to pay a disposal fee. Based off the baghouse system design, that the ash will be trucked to the site to an appropriate disposal location and the project site is not located near any schools, there would be *than significant impact* to surrounding land uses concerning hazardous materials and this project.

- d) The project site is not located on a site included on a list of hazardous materials sites compiled pursuant to <u>Government Code Section 65962.5</u>. The closest site on the list is Beale Air Force Base to the southwest of the project site. Therefore, the project would not create a significant hazard to the public or the environment and there would be *less than significant* to the environment from hazardous materials.
- e) The project site is not located in any of the Beale Air Force Base Land Use Compatibility Plan safety zones (1-6). A request for consultation was sent to Beale Air Force Base and no comments were received regarding the proposed project, therefore, the project would have *less than significant impact* on public or private airstrips.
- f) There are no private airstrips within the project vicinity. Therefore there would be *no impact* to private airstrips.
- g) A review of the Yuba County Multi-Jurisdictional Multi-Hazard Mitigation Plan shows the site to not be located in an avalanche, volcano, seismic activity or flood zone area. Although the bioenergy facility site would not block any public or private rights of way which could be necessary for emergency access, it does have access to Marysville Road, which is named in the plan as major transportation route through Yuba County and is also designated a primary evacuation route in the Yuba County General Plan Public Health and Safety Element (Exhibit 11 Primary Evacuation Routes). There is no existing or proposed school within one-quarter mile of the project site, nor is any public building closer than a mile. Since there would be no major physical interference to the existing road system, there would be *a less than significant impact* with an emergency response or evacuation plan.

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h) The project is located in a very high fire hazard severity zone, as reported by the Cal Fire 2007 Fire Hazard Severity Zones map.

The project is located within a CAL FIRE High Hazard Fire Severity Zone within a SRA (State Responsibility Area). The facility will comply with the California Public Resources Code Section 4291(b), which requires all brush, flammable vegetation and/or combustible growth to be cleared within 100 feet of all structures. In addition firebreak maintenance will conform to Yuba County Code Chapter 7.45.²⁰ Wood chip storage areas will be separated more than 30 feet from the property boundary. The facility will conform to section 10.301(c) Uniform Fire Code for hydrant spacing and fire-flow. The development will provide access to fire hydrants within 400 feet of any point on the proposed bioenergy facility structure as required by the 2013 California Fire Code Section 507.5.1.²¹ Wood chip storage piles will meet California Fire Code specifications. Wood chip piles will not exceed 25 feet in height, 150 feet in width, and 250 feet in length per 2013 California Fire Code Section 2808.3.²² (Also see Public Services). The impact would be *less than significant with mitigation incorporated*.

MITIGATION MEASURES

MM.8.1: Hazardous Materials Business Plan

The power plant sits within a CAL FIRE High Hazard Fire Severity Zone within a SRA. The project will comply with all state and federal fire safety codes. The facility will need to prepare a Hazardous Materials Business Plan for submittal to Yuba County Environmental Health to deal with storage, handling, and disposal/recycling of hazardous materials used at the facility. The project has the potential to increase the risk of wildfire on-site because it will generate traffic and hence introduce fuel products onto the site in greater degrees than previously experienced.

MM.8.2: Vegetation Clearance

Prior to any final for any new construction on this project, vegetation clearance around structures shall meet the minimum requirements of Public Resources Code Section 4291. Structures shall maintain a fire break by removing and clearing away all brush, flammable vegetation or combustible growth up to 100 feet from structures or to the property line, whichever is closer. Clearing does not apply to individual isolated trees, ornamental shrubbery or similar plants which are used for ground cover unless such vegetation forms a means of rapidly transmitting fire from ground vegetation to canopy trees. Additional clearing may be required by the Fire inspector if extra hazardous conditions exist.

²⁰ Yuba County Code, Chapter 7.45 firebreak:

http://co.yuba.ca.us/departments/BOS/documents/agendas/2008/MG59533/AS59596/AI60382/DO60525/DO_60525.PDF

²¹ 2013 California Fire Code, section 507 Fire Protection Water Supplies, 507.5 Fire Hydrant Systems.

X.	HYDROLOGY AND WATER QUALITY		Less Than		
	uld the project:	Potentially Significant Impact	Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements?				
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			\boxtimes	
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				
e)	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?			\boxtimes	
f)	Otherwise substantially degrade water quality?				
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? (Source:				
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				\boxtimes
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				\boxtimes
j)	Inundation by seiche, tsunami, or mudflow?				\boxtimes

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DISCUSSION/CONCLUSION/MITIGATION:

a - f) The proposed project site lies within the drainage area for the Yuba River. New Bullards Bar Reservoir Dam, which impounds the lower stretch of the North Fork of the Yuba River is 2.2 miles to the north-northeast of the site.

The primary hydrologic features of the proposed project site are the mostly Class II watercourses in the project area, as shown in Figure 11 below (blue square is approximate location of proposed facility). A Class II watercourse that runs along the east side of where the power plant and biomass storage and processing area and drains into the Chute Ravine creek, which ultimately drains into the Yuba River.

The project site is designated as an "Area of Minimal Flood Hazard" by the Federal Emergency Management Agency.

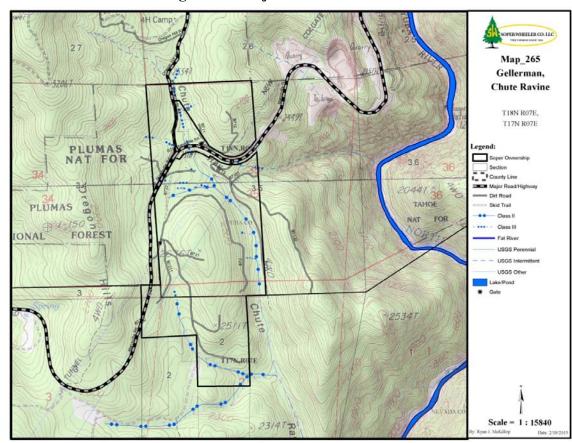


Figure 11. Project Area Watercourses

The Yuba County General Plan, Natural Resources, Action NR5.3 Wetlands and Riparian Buffers, requires buffers of 33 to 150 feet from project activities near protected areas. The 150feet maximum can be adjusted to a lesser setback if a qualified biologist assesses that the proposed project will not impact the watercourse/riparian habitats. However, preliminary project layout plans were developed to maintain a greater than 150 foot buffer from the watercourse near

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the power plant and biomass storage and processing area. No access roads are to be constructed. Thus, based on existing project detail, the proposed facility will not impact a stream bank or cause a loss of stream waters. Operation of the power plant would not degrade water quality in the stream. There will be no discharge of dredged or fill material into the creek waters. The power plant will neither use water from any watercourse for its operation, nor deposit water or wastewater into any watercourse.

As part of the construction process, the project will meet requirements to submit plans for the disposition of surface runoff and erosion control to the Yuba County Public Works Department. Construction of the bioenergy facility and layout of the biomass storage and processing area will result in ground disturbance equal to or greater than one acre in size and would then be within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB), which develops and enforces water quality objectives and implementation plans that safeguard the quality of water resources in its region. Dischargers whose projects disturb one (1) or more acres of soil are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-009-DWQ. The General Permit process requirements would be followed and the mitigation would be incorporated into the project's construction activities regarding storm water runoff. The Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer (QSD).

As the proposed power plant facility is a steam cycle electric power generating facility, an operations storm water permit is also required. The proposed facility, once operating, will require coverage under the Statewide General Permit for Storm Water Discharges Associated with Industrial Activities, Order 2014-0057-DWQ (Industrial General Permit or IGP). The IGP implements the federally required storm water regulations in California for storm water associated with industrial activities potential discharging to the waters of the United States. The IGP requires the implementation of best management practices, a site-specific SWPPP, and monitoring plan.

Groundwater will supply the water necessary for the facility operations, drinking, and fire suppression. Depending on the season, the facility may need up to 75 gallons per minute (gpm). Local water well drilling experience indicates that sufficient groundwater resources would exist at the site. The expected production rates are between 10 to 40 gpm per well, and therefore three wells would likely be needed.

The primary hydrologic feature of the bioenergy facility site is the unnamed Class II watercourse which southward, east of the proposed access, biomass storage and processing area, and the storm water pond site (see Figures 4, 5, and 11. The proposed facility will be designed so as not to impact a stream bank or cause a loss of stream waters. The power plant will neither use surface waters for its operation, nor deposit water or wastewater into any watercourse.

As part of the construction process, the project will meet requirements to submit plans for the disposition of surface runoff and erosion control to the Yuba County Public Works Department. A construction storm water and an operations storm water permit will be required under the

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Statewide General Permits for Storm Water Discharges Associated with Construction and Industrial Activities. Therefore, it is anticipated that impacts to water quality, drainage patterns, subsurface water and soil erosion are anticipated to be a *less than significant impact*.

- g) h) and i) The project is not located within a 100-year flood plain, therefore there would be *no impact* from flooding.
- j) Yuba County is an inland area not subject to seiche or tsunami. Mudflow is not an identified issue at this location; therefore, there would be *no impact* from mudflow, seiche, or tsunami.

X. LAND USE AND PLANNING Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				\boxtimes
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				\boxtimes

DISCUSSION/CONCLUSION/MITIGATION

a) and b) The proposed bioenergy facility The northern parcel (APN 064-260-032) where the truck and vehicle access road is to upgraded, and a auxiliary log storage yard is to be located, is currently zoned TP, Timber Preservation District²³ within an area designated Natural Resources in the Yuba County General Plan²⁴. The power plant, biomass storage and processing, and ancillary equipment and facilities will primarily be in the southern parcel (APN 048-210-021) is currently zoned AE, Exclusive Agricultural²⁵ with the same area as the northern parcel designated Natural Resources in the General Plan, which seeks to enhance the economic viability of the agriculture and forestry sector and encourage new support industries and operations. Therefore, the project would result in *no impact* or division of an established community.

Neighboring land is zoned Resource Preservation and Recreation to the north, west²⁶, and east. To the south is additional AE-40 zoned land. To the north of the project site and within APN 064-260-032, are some private land holdings that are zoned Residential Estate (RE).

Both project site zones allow for the development and operation of a biomass utility power plant by Yuba County. Specifically, the 2015 Yuba County Development Code Table 11.11.020 (Land Use Regulations for Natural Resource Districts), allows for major utilities to be constructed and operated in the TP and EX, if a CUP is approved by Yuba County. Similarly, Table 11.05.020 (Land Use Regulations for Agricultural Districts) also allow major utilities to be constructed and operated in the EA zoning districts if a CUP is approved by Yuba County. The Yuba County Development Code further defines major utilities in Section 11.72.060 as, "Biomass facilities that bring is waste from multiple or off-site locations, generate from than 3 MW of energy, or

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²³ Yuba County Development Code, 2015

²⁴ Yuba County 2030 General Plan, adopted June, 2011

²⁵ Yuba County Development Code, 2015

²⁶ Land to the west of the project site is managed by the U.S. Forest Service *Yuba County Planning Department*

utilize more than three acres of land are classified as a major utility". The proposed bioenergy facility meets all three of these conditions.

Both zones are within an area designated Natural Resources in the General Plan²⁷. The proposed bioenergy facility is closely aligned with the Yuba County Planning and Development goals for both zoning designations, which supports renewable energy development such as bioenergy. No rezoning to accommodate the project is required. The project is consistent with the current General Plan policies and zoning designations.

Development regulations for Exclusive Agricultural zone (Section 11.05.030²⁸) where the nearly all of the bioenergy facility will be located, will be adhered to by the facility, including a minimum lot size of 5 acres and lot width of 120 feet, maximum building height of 50 feet or approved exemption, and any other county regulations considering the future site development. The proposed facility will include an exhaust stack for the power plant boiler system that could exceed the 50-foot limit. A waiver or variance will need to be obtained from Yuba County if this limit is exceeded.

The Forest Biomass Business Center Bioenergy Facility site is zoned both AE and TP, and no rezoning to accommodate the project is required. Biomass facilities accepting offsite biomass and greater than 3 MW are an allowed land use as a Major Utility, if a CUP is obtained. All specific development regulations will be adhered to. The project is consistent with the current General Plan policies and zoning designations. Therefore, the project would result in *no impact* and is consistent with the applicable land use plan, policy, or regulation of Yuba County.

c) There are no conservation strategies that have been proposed to date that would be in conflict with the project. Therefore, the project would have *no impact* to conservation plans.

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²⁷ Yuba County 2030 General Plan, adopted June, 2011

²⁸ Yuba County Development Code, Adopted July, 2015 Yuba County Planning Department May 2019

XII. MINERAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				

DISCUSSION/CONCLUSION/MITIGATION:

a) and b) There are no currently known mineral resources on the proposed site. However, the cultural resources study conducted in 2018 for the Soper Wheeler THP on the project property did indicate there may have been some potential historical gold mining in other portions of the THP area, there appears to no such indicator of mining on the project site itself (See Cultural Resources section above and Reference 7). The project is expected to have *no impact* on mineral resources.

XIII. NOISE Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			\boxtimes	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				
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 expose people residing or working in the project area to excessive noise levels?				\boxtimes
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				\boxtimes

DISCUSSION/CONCLUSION/MITIGATION:

a) b) c) and d) According to the noise section of the Yuba County Public Health and Safety Element, noise sensitive land uses, include schools, hospitals, nursing homes, churches, libraries, and residences within proximity to the proposed facility. The exterior noise limits for non-transportation noise sources are established in the Yuba County General Plan Update, Section 9, Public Health and Safety Element, Table Public Health and Safety -2. The maximum exterior noise levels for non-transportation noises and noise-sensitive land uses (residences are included in this category) are 75 decibels (dB) 7:00 am to 10:00 pm, and 65 dB 10:00 pm to 7: 00 am.²⁹

Noise from the biomass power plant is generated primarily by the biomass boiler system, steam turbine generator, fans, and pumps. Based on the 2012 Placer County Environmental Impact Report³⁰ for a 2MW bioenergy project, the noise level was measured at 74 dB at a distance of 50 feet from the center of the plant.

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²⁹ Yuba County General Plan, Element 9 Public Health and Safety, Table Public Health and Safety- 3, P. 52.

³⁰ Cabin Creek Biomass Facility Project DEIR, July 2012, State Clearinghouse #2011122032, Placer County

For a 5.5 MW direct combustion biomass project, the total facility at full operation could generate up to a 75 to 80 dB at a distance of 50 feet from the power plant. It should be noted these noise estimates are based on a much larger biomass power plant facility (18.5 MW, located in Amador County, CA) and where not all operations are housed in an enclosed structure. Some of the Forest Biomass Business Center Bioenergy Facility will be in an enclosed structure that is expected to further lower the dB rating on and off the site.

The formula used to estimate noise levels at distance from the power plant facility is:

$$L_2 = L_1 + 20 * \log(\frac{d_1}{d_2})$$

Where L_2 is the sound intensity level at the new distance from the noise source, L_1 is the sound intensity level at the original distance, d_1 is the original distance, and d_2 is the new distance. ³¹

The closest residence to the bioenergy facility is located approximately 4,300 feet to the north of the facility immediately adjacent northeast of the intersection of Marysville Road and Oregon Hill Road. Based on typical attenuation rates³², and using 80 dB at 50 feet, this results in 41.3 dB.

Calculated noise levels fall below the maximum exterior noise levels for non-transportation noises and noise-sensitive land uses stipulated in the Yuba County General Plan, Element 9 Public Health and Safety (Noise and Vibration Section - Table 2). Residences are included in the noise-sensitive land use category. The closest residence, approximately 4,300 feet, results in sound levels well below the maximum exterior noise levels allowed. Therefore, the project would result in a **less than significant impact**.

e) and f) The project site is not located within two miles of a public airport or private air strip. *No impact* is anticipated to result from surrounding airport uses.

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³¹ For most instances, sound intensity (sound level in decibels) decreases by -6dB with a doubling of the distance.

XIII. POPULATION AND HOUSING Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			\boxtimes	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				\boxtimes

DISCUSSION/CONCLUSION/MITIGATION:

a) The project does not involve the construction of homes or any infrastructure that would be required to foster population growth near the project area and there would not be an increase to the population.

The proposed bioenergy project is estimated to create up to 23 full time jobs onsite. The jobs are expected to be filled both locally and regionally. Additionally, the project will support sustainable forest management programs by creating a local demand for the byproducts of sustainably harvested materials. The facility expects to utilize approximately 62,222 BDT of woody biomass, which may not be substantial enough to create new business; however will help sustain existing businesses, specifically. There will be no significant infrastructure upgrades.

Although Yuba County's unemployment rate has come down from a high of 19.1% in June 2011, to more currently 5.5% (September 2018)³³ it is not anticipated that the bioenergy facility will induce population growth directly or indirectly. Therefore, there would be a *less than significant impact* to population growth.

b) and c) The site is to be built on land that is currently unoccupied and is not anticipated to displace existing residences.

The project does not involve the removal of housing/businesses or the relocation of people who currently utilize the site and would not require the construction of replacement housing. Therefore, the project would have *no impact* to existing housing or the need for replacement.

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³³ Source: U.S. Bureau of Labor Statistics, Yuba County Planning Department May 2019

XV. Would	PUBLIC SERVICES I the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
provisi faciliti faciliti environ service	ntial adverse physical impacts associated with the ion of new or physically altered governmental es, need for new or physically altered governmental es, the construction of which could cause significant nmental impacts, in order to maintain acceptable e ratios, response times or other performance ives for any of the public services:				
a)	Fire protection?			\boxtimes	
b)	Police protection?			\boxtimes	
c)	Schools?				\boxtimes
d)	Parks?				\boxtimes
e)	Other public facilities?				\boxtimes

DISCUSSION/CONCLUSION/MITIGATION:

a) Fire protection and suppression on the project site, being in a CalFire designated State Responsibility Area, is the legal responsibility of CalFire. The CalFire Fire Station #60 is located near Dobbins on Marysville Road, approximately 4 miles, and 6 minutes travel time, from the project site. Due to the proximity to the Tahoe National Forest, the USFS maintains a fire attack crew in Camptonville.

Wildland fire is a danger throughout the region. The proposed bioenergy facility lies within a High Hazard Fire Severity Zone of a CAL FIRE designated State Responsibility Area (SRA).³⁴ Fire protection under wildfire conditions in the surrounding area would be provided by interagency fire agreements between CAL FIRE, the USFS and the CVFD. The CAL FIRE Nevada-Yuba-Placer Unit is located in the Sierra Foothills northeast of Sacramento and protects approximately 880,000 acres. The Unit staffs 26 fire stations, an air attack base, and a conservation camp. These facilities spread from Marysville, in the valley grasslands of Yuba County, through the gold country of Placer and Nevada Counties, eastward to include Yuba County and the Sierras. The Unit provides various levels of fire protection service through cooperative agreements with Yuba County and six fire districts.

The Gellerman site has not been burned by wildfire in the period from 1900 to 2011 according to the Yuba Watershed Protection and Firesafe Council.³⁵

Staff has consulted with Calfire and will incorporate their standard conditions of approval, if any, in the projects staff report. Fire fees would be collected at the time building permits are issued

³⁴ Fire Hazard Severity Zones in SRA, Yuba County, CAL FIRE Fire Resource Assessment Program map, 2007.

³⁵Yuba County Fire History 1900-2011, http://www.dohfd.com/Fire%20History%202012.pdf

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for structures on a square foot basis. With the incorporated conditions of approval, payment of fire fees and adherence to the requirements from the Yuba County Ordinance Code and Fire Codes, impacts to fire protection would be *less than significant*.

- b) The project area is in an unincorporated area of Yuba County and law enforcement services are provided by the Yuba County Sheriff's Department in Marysville (and with a substation in Brownsville, approximately 14 miles to the northwest of the subject site). The proposed facility does not anticipate any additional needs or services from the Yuba County Sheriff law enforcement. The facility is very secure. Staff is onsite 24 hours a day and 7 days a week when the plant is operational (at this time expected to be approximately 50 weeks per year). Access to the bioenergy facility will be secured with perimeter fencing and 24-hour video monitoring. The fence and the building will be locked at any times when staff is not onsite. Increased property tax revenue and annual police protections assessment Countywide would support additional civic services including law enforcement. Impacts related to police protection would be *less than significant*.
- c) The project will not generate additional residential population that would create additional demand for schools or additional park services within Yuba County. Therefore, the project would have *no impact* on schools.
- d) The proposed project does not include construction of housing and would not generate an increased demand for parks. Therefore, the project would have *no impact* on parks.
- e) Other public facilities that are typically affected by development projects include the Yuba County Library and County roads. However, since there is no development proposed by the project there would be no increased demand for these services. Therefore, the project would have *no impact* to other public facilities.

XVI. RECREATION Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				\boxtimes

DISCUSSION/CONCLUSION/MITIGATION:

a) and b) The proposed bioenergy project will benefit the local and regional wooded recreational areas. The utilization of byproducts of sustainable forest management practices could increase revenue to those organizations, like the U.S. Forest Service, that maintain regional forests in accordance to a NEPA and CEQA approved forest management plan. The additional revenue will provide increased funding for the U.S. Forest Service to continue their management of the local forestlands; thereby improving the regional recreational areas.

Since the project is expected to be staffed by local regional workers, the operations and employees are not expected to increase the demand for or use of any existing recreational areas. The most notable nearby recreational area is New Bullards Bar Reservoir, a popular recreation destination spot in Eastern Yuba County. It is reported this recreation location use was 128,191 Recreation Days annually³⁶. The influence on usage of this recreation location from the limited number of new-to-the-area facility employees would be de minimis.

The proposed project does not include the construction of any housing and would not increase the demand for parks or recreational facilities. The project also does not include the construction of any new recreational facilities. Therefore, the project would have *no impact* to parks or recreational facilities.

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Recreation Use and Visitor Survey, 2011, Study 8.1, Yuba County Water Agency, Yuba River Development
 Project, FERC Project No. 2246.
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	VII. TRANSPORTATION/TRAFFIC ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				
b)	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?				
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
e)	Result in inadequate emergency access?			\boxtimes	
f)	Result in inadequate parking capacity?			\boxtimes	
g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				

DISCUSSION/CONCLUSION/MITIGATION:

a) b) c) and d) The sole access to the project site is off of Marysville Road, a Yuba Countymaintained two-lane rural arterial roadway³⁷. Access to the site will be via an all-weather road, which will use a current logging road alignment. This all-weather access roadway will be constructed to allow trucks (chip vans), support vehicles and employees/visitors to enter and navigate the site. Entry to the site access road will approximately 1,000 feet southwest of the intersection of Marysville Road and Oregon Hill Road. Marysville Road will require some reconfiguration to allow large trucks to enter and leave the site as shown in Figure 12.

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³⁷ 2015 Yuba County General Plan, Exhibit 13 – Vehicular Circulation Diagram Yuba County Planning Department May 2019



Figure 12. Primary Access Point from Marysville Road

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Yuba County Public Works Department has some traffic count data for Marysville Road east and west of Oregon Hill Road. Although the data is from several years ago, it is still considered indicative of the traffic levels past the proposed project site and may be under present day traffic volume. The traffic count data from 2001 indicated a daily average of 581 vehicles going both ways past the Oregon Hill Road intersection. In 1995, the traffic count was 700 vehicles west of the Oregon Hill Road intersection.

Anticipated Traffic Generation

The Forest Biomass Business Center Bioenergy Facility is expected to run 7 days a week, 24 hours a day, for approximately 342 days per year. Vehicular traffic associated with the proposed Project include: a) woody biomass fuel supply trucks (called "chip vans" or "chip trucks") that carry approximately 12.5 bone dry tons (BDT) of chipped woody biomass to the power plant from forest management activity sites, and b) employee vehicles. Chip vans are pictured in the project description section of this report.

The proposed facility will require 182 BDT of woody biomass per day for operation (based on 342 operating days). Annually, the project is projected to consume up to a maximum of 62,222 BDT. Forest management activities are generally limited or restricted during the late fall, winter, and early spring months due to snow and rain that leaves the ground too wet for heavy equipment. Therefore, woody biomass is collected and stored on the project site. Deliveries are normally, but not exclusively, done on weekdays. Deliveries of biomass fuel would likely be made at least 10 months of the year (approximately two months of onsite storage in the winter months) and it estimated up to 25 trucks per day would access the project site. Since the trucks leave the site after delivery, there would be up to 50 truck trips per day on Marysville Road.

Employees are on site 7 days a week. For environmental impact review purposes, employee vehicle trips are estimated at 23 employees per day, 7 days a week, each making 1 round trip commute to the power plant. This totals 23 employee vehicle round trips per day on Marysville Road. It should be noted that not all 23 employees would be at the site in one 24 hour period, but the number of work shifts and employees per shift has not yet been determined. It is expected to much fewer than 23 per day.

Truck deliveries and employee vehicle round trips total 96 vehicles per day on the average. Using the lower Yuba County traffic count of 581 vehicles, the project-generated traffic constitutes a potential 16.5% increase in traffic on Marysville Road in the vicinity of the project. If the 700 vehicles per day count is used, the potential increase lowers to 13.7%. Based on the relatively low increase in project related traffic and roadway impacts, it is anticipated that *less than significant* impacts are expected to this section.

 $^{^{38}}$ 342 days per year of operation at ~182 BDT per day

 $^{^{39}}$ 62,222 BDT / 10 months = 6,222 BDT per month/4 weeks = 1,556 BDT per week/12.5 BDT per chip van load = 124 van loads per week/ 5 days = 25 loads per day

- e) The project is providing access by way of a 20-foot wide road. The existing road is larger enough to accommodate all sizes of emergency vehicles. Therefore, impacts related to emergency access are anticipated to be *less than significant*.
- f) The project site is over 400 acres in size and expects to employs up to 23 employees. The project site is large enough to be able to provide the appropriate amount of parking as required by the Yuba County Development Code. Therefore, impacts to parking capacity are anticipated to be *less than significant*.
- g) Yuba County has not adopted alternative transportation plans for the rural area of the County, where this project is located. Therefore, there would be *no impact* on alternative transportation plans or policies.

XVIII. TRIBAL CULTURAL RESOURCES		Less Than		
Would the project:	Potentially Significant Impact	Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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:				
i) 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				
ii) 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

Discussion/Conclusion/Mitigation:

a) (i-ii) The County was contacted by the United Auburn Indian Community (UAIC) on February 26, 2019 requesting formal notification and information on proposed projects for which the County will serve as the lead agency under the California Environmental Quality Act (CEQA) in accordance with Public Resources Code Section 21080.3.1 subd. (b), otherwise known as Assembly Bill 52 (AB 52). Consistent with the UAIC request, on February 26, 2019 formal notification was provided to the UAIC, including all project information documents which included a copy of the Cultural Resources Investigation. Staff has not received a request for Consultation from the UAIC following our Feb 26, 2019 formal AB 52 request. With this in mind, Staff has concluded, that given the Cultural Resource Report did not report any Native American resources, the UAIC does not want to consult on this project. Furthermore, with mitigation measure MM 5.1 and MM 5.2, in the event of the accidental discovery or recognition of tribal cultural resources in an area subject to development activity, there shall be no further excavation or disturbance of the site or any nearby area suspected to overlie similar resources and the Native American Heritage Commission as well as the UAIC shall be contacted within 24 hours. The impact upon tribal cultural resources would be less than significant impact with mitigation incorporated.

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XIX Wo	K. UTILITIES AND SERVICE SYSTEMS uld the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				
	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			\boxtimes	
	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?			\boxtimes	
	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
	Comply with federal, state, and local statutes and regulations related to solid waste?				

DISCUSSION/CONCLUSION/MITIGATION:

Domestic water, wastewater and solid waste

Domestic water and wastewater disposal is needed to serve a small office and basic sanitation for employees. Although there are no habitable structures, potable water is needed for employees. On a daily basis, water demand is expected to be less than 25 gallons per employee per day, primarily used for the sanitary system. The site would be served by groundwater from new wells to be drilled.

Wells will be kept regulatory distances from septic tanks and leach fields or seepage pits (Yuba County Code, Chapter 7.07.207, wells will be 50 feet from septic system and 100 feet from a leach field). The project will complete the Yuba County Well Application Permit Form (signed by the licensed driller) and it is understood that the well will be drilled and tested before the release of building permits. Two to three water wells may be drilled to accommodate the facility.

Yuba County Planning Department May 2019 CUP2019-0002

Domestic wastewater will only be generated by discharge from the sanitary facility for the employees and is estimated at less than 100 gallons per day. Domestic wastewater is anticipated to be disposed of through a newly installed properly engineered and permitted septic system. Domestic wastewater will adhere to and not exceed wastewater treatment requirements of the state Central Valley Regional Water Quality Control Board. The new septic system will adhere to Yuba County Codes (Chapter 7.07.45 location of septic tanks) and be maintained a minimum distance of 25 feet from any seasonal watercourse or from a leach field.

Solid waste generated by employees will be disposed of at the Recology Yuba-Sutter Transfer Station in Marysville. The landfill is not expected to be impacted by the development.

Industrial water, wastewater and solid waste

The Forest Biomass Business Center Bioenergy Facility power plant will use water for creation of steam to drive the electrical generation turbine. In the power plant, steam is run through a condenser, returned to a liquid state, and then recycled for use in the boiler system. This water will be recycled through the use of a dry cooling system, which does not generate wastewater needing on-site disposal. As mentioned above the water supply for the facility will come from groundwater wells to drilled at the site.

The only solid waste generated by the power plant is fly ash, a byproduct of the biomass combustion process. Flue gases flow through an exhaust stack and particulate matter (sometimes referred to as fly ash) is retained by the particulate matter emissions control system (an electrostatic precipitator or baghouse). The direct combustion process to be employed will also produce biochar, a revenue producing by product that will be shipped offsite. Detailed discussion of the disposition of the ash is discussed in the Hazards and Hazardous Materials section above.

Energy use: Electricity and Natural Gas

As detailed in the project description, the biomass power plant is a community-scale biomass combined heat and power facility. The facility is designed to create electricity and heat through direct combustion of woody biomass feedstock primarily collected from sustainably harvested forest biomass. Electricity is intended to be sold to Pacific Gas & Electric (PG&E) under the BioMAT program.

However, the project site is not energy self-sufficient and will require some electricity from an existing PG&E power lines. PG&E power will be used to provide electricity for a small office, on-site lighting, and other small power needs.

There is no natural gas service to the project site and region. Project related impacts to Utilities would be *less than significant*.

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XX. WILDFIRE Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				
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?				
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?			\boxtimes	
d) Expose people or structures to significant risks, including down slope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			\boxtimes	

DISCUSSION/CONCLUSION/MITIGATION:

- a) Although the project site is along a designated evacuation route (Marysville Road), there will be a limited number of people (employees) at the facility when it is operating. This number of people should not create an added traffic burden to the evacuation route. Project related impacts to the adopted emergency response plan and emergency evacuation plan would be *less than significant*.
- b) The project site is located within a CAL FIRE High Hazard Fire Severity Zone within a SRA (State Responsibility Area). The necessary fire suppression requirements for the biomass storage and processing area were previously discussed above (Hazards and Hazardous Materials), therefore the impact would be *less than significant*.
- c) d) The fire suppression requirements for the project will mitigate its potential for contributing to wildfire risk onsite, see Mitigation Measures MM.8.1. and MM.8.2. Plus the power plant and biomass storage and processing area will be graded and covered with an asphalt or all-weather surface. For these reasons, the impact would be *less than significant*.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

NOTE: If there are significant environmental impacts which cannot be mitigated and no feasible project alternatives are available, then complete the mandatory findings of significance and attach to this initial study as an appendix. This is the first step for starting the environmental impact report (EIR) process.

Do	pes the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have the potential to 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b)	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)?		\boxtimes		
c)	Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		\boxtimes		

DISCUSSION/CONCLUSION/MITIGATION:

- a) As discussed in the Air Quality, Biological Resources and Cultural Resources sections, construction associated with the project could potentially have impacts on cultural resources. Proposed mitigation measures would lessen the impact this project would have on cultural resources. Therefore, the projects impact would be less than significant impact with mitigation incorporated.
- b) Construction of the project, in combination with other proposed projects in the adjacent area, may contribute to air quality impacts that are cumulatively considerable. However, when compared with the thresholds in the Air Quality section, the project would not have a cumulatively significant impact on air quality. Therefore, the projects impact would be *less than significant impact with mitigation incorporated*.

The project is consistent with the Yuba County 2030 General Plan land use designation for the project site and the zoning for the project site. With the identified Mitigation Measures

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APNs: 048-210-021 & 064-260-032

- **MM 3.1** in place, cumulative impacts would be less than significant. No other cumulative impacts associated with this project have been identified.
- c) Due to the nature and size of the proposed project, no substantial adverse effects on humans are expected. The project would not emit substantial amounts of air pollutants, including hazardous materials. The one potential human health effects identified as a result of the project implementation were minor construction related impacts, mainly dust that could affect the few scattered residences near the project site. These effects are temporary in nature and are subject to the Feather River Air Quality Management District's Standard Mitigation measures that would reduce these emissions to a level that would not be considered a significant impact. Therefore, the project would have a *less than significant impact with mitigation incorporated*.

REFERENCES

- 1. Yuba County 2030 General Plan Environmental Impact Report, AECOM
- 2. Yuba County 2030 General Plan, AECOM
- 3. Yuba County Development Code 2015.
- 4. Yuba County Important Farmland Map 2012. California Department of Conservation.
- 5. Yuba County Improvement Standards.
- 6. State of California Hazardous Waste and Substance Site "Cortese" List
- 7. Cultural Resource Assessment, Peak and Associates, Inc., January 2019.
- 8. Biological Inventory, Beedy Environmental Consulting, March, 2019.

Mitigation Measure 1.1

If lighting is required for any of the proposed project's development, all exterior lighting shall be directed downwards and away from adjacent properties and rights of way. Lighting shall be shielded such that the element is not directly visible (no drop down lenses) and lighting shall not spill across property lines. Prior to final occupancy of the project's building permits, documentation shall be submitted to the Planning Department showing that no light spillage is affecting any neighboring properties.

Initiation Prior to issuance of building permits		Monitoring Duration Frequency Once to verify compliance			
Mitigation Completion Upon satisfactory compliance		Verification Yuba County Community Development & Services Agency			
Performance Criteria	Verification Cost	Date Complete			

Mitigation Measure 3.1

- Implement FRAQMD Fugitive Dust Plan
- Implement FRAQMD standard construction phase mitigation measures. (<u>www.fraqmd.org/</u>)
- Any generators will require a FRAQMD Air Quality Permit prior to commencement of use.

Initiation Prior to issuance of grading permits, improvement plans, or building permits	Monitoring Duration Frequency Once to verify compliance	
Mitigation Completion Upon satisfactory compliance	Verification Yuba County Community Development & Services Agency	
Performance Criteria	Verification Cost Date Complete	

Mitigation Measure 4.1 Best Management Practices During Construction

To protect water quality and aquatic life in the Class II seasonal drainages, and to avoid introduction of invasive weeds, the following Best Management Practices should be implemented during and after construction of the new road crossing on the property. These measures include, but are not limited to:

- All construction within and near (i.e., within 100 feet) should occur when the stream is dry or at low-flow conditions (i.e., after August 1).
- The contractor shall exercise every reasonable precaution to protect the streamside at the project site from pollution with sediments, fuels, oils, bitumen, calcium chloride, and other harmful materials. Construction byproducts and pollutants such as oil, cement, and washwater shall be prevented from discharging into the creek bed and shall instead be collected and removed from the site.
- No invasive, non-native grasses such as orchard grass, canary reed grass, or velvet grass shall be used for erosion control, as these species are known to invade wetlands.

Initiation Prior to issuance of grading permits, improvement plans, or building permits	Monitoring Duration Frequency Once to verify compliance	
Mitigation Completion Upon satisfactory compliance	Verification Yuba County Community Development & Services Agency	
Performance Criteria	Verification Cost	Date Complete

Mitigation Measure 4.2 Migratory Birds Protection

The potential exists for impacts to special-status raptors, possibly including California Spotted Owls, as well as other migratory birds protected under the Migratory Bird Treaty Act in the vicinity of the BSA and could be adversely affected by project activities if they occur during the breeding season (March 1 - September 1). Prior to any grading or tree removal activities, a focused survey for raptor nests shall be conducted by a qualified biologist during the raptor-nesting season.

Initiation Prior to issuance of grading permits, improvement plans, or building permits	Monitoring Duration Frequency Once to verify compliance	
Mitigation Completion Upon satisfactory compliance	Verification Yuba County Community Development & Services Agency	
Performance Criteria	Verification Cost	Date Complete

MM 4.3 Wildlife Safety Fencing

Fences are a danger to wildlife when they are too high to jump; when the bottom is too low to crawl under; when spacing of rails or wires are too close to get through; when wires become loose and can entangle hooves; when the fence is not marked and is invisible; when the top rail is unforgiving and won't release when hit by a jumping animal; and when the fence doesn't have frequent openings, crossings, or dropped rails, especially when not in use. A fence is a structural element that can create an impediment for wildlife movement, resulting in death and injuries to wildlife, fragmentation of wildlife herds, separation of mother and dependent young, and damage to fences.

If fencing is constructed as a perimeter barrier around the project site, then it should adhere to the following design requirements:

- Height: Fencing height shall be no greater than 38 inches above the ground to the top of the top wire or rail. Spacing between the top two wires shall be at least 12 inches, and this is not applicable when the top is a rail or pole. Rails and poles are visually and spatially preferable for wildlife.
- Materials and Design: Wood (or similar material) top rails, and either wood rails or wire strands are permitted as horizontal elements in fence. The wire strands shall be smooth or barbless. The required fencing design includes a top level of a wood pole, or similar material, rather than wire. The bottom rail or wire strand shall be at least 18 inches above the ground. The spacing of fence posts is recommended to be on 12-foot centers unless topography prohibits this spacing. Spacing of the second and third wire shall be evenly spaced. Spacing distances may vary from 6-8 inches.

Initiation Prior to issuance of grading permits, improvement plans, or building permits	Monitoring Duration Frequency Once to verify compliance Verification Yuba County Community Development & Services Agency	
Mitigation Completion Upon satisfactory compliance		
Performance Criteria	Verification Cost	Date Complete

Mitigation Measure 5.1 Historic Period Artifacts

If, during construction activities, unusual amounts of non-native stone (obsidian, fine-grained silicates, basalt), bone, shell, or prehistoric or historic period artifacts (purple glass, etc.) are observed, or if areas that contain dark-colored sediment that do not appear to have been created through natural processes are discovered, then work should cease in the immediate area of discovery and a professionally qualified archeologist should be contacted immediately for an on-site inspection of the discovery.

Initiation During project construction		ration Frequency going
Mitigation Completion Upon satisfactory compliance	Verification Community Development and Services Agency, Planning Depart	
Performance Criteria	Verification Cost	Date Complete

Mitigation Measure 5.2 Discovery of Human Remains

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area suspected to overlie adjacent remains until the Yuba County Coroner has determined that the remains are not subject to any provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.

If the Yuba County Coroner determines that the remains are not subject to his or her authority and if the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC).

Initiation During project construction	Monitoring Duration Frequency Ongoing	
Mitigation Completion Upon satisfactory compliance	Verification Community Development and Services Agency, Planning Department	
Performance Criteria	Verification Cost Date Complete	

Mitigation Measure 8.1 Hazardous Materials Business Plan

The power plant sits within a CAL FIRE High Hazard Fire Severity Zone within a SRA. The project will comply with all state and federal fire safety codes. The facility will need to prepare a Hazardous Materials Business Plan for submittal to Yuba County Environmental Health to deal with storage, handling, and disposal/recycling of hazardous materials used at the facility. The project has the potential to increase the risk of wildfire on-site because it will generate traffic and hence introduce fuel products onto the site in greater degrees than previously experienced.

Initiation grading permits, improvement plans, or building permits	Monitoring Duration Frequency Once to verify compliance	
Mitigation Completion Upon satisfactory compliance	Verification Yuba County Community Development & Services Agency	
Performance Criteria	Verification Cost	Date Complete

Mitigation Measure 8.2 Vegetation Clearance

Prior to any final for any new construction on this project, vegetation clearance around structures shall meet the minimum requirements of Public Resources Code Section 4291. Structures shall maintain a fire break by removing and clearing away all brush, flammable vegetation or combustible growth up to 100 feet from structures or to the property line, whichever is closer. Clearing does not apply to individual isolated trees, ornamental shrubbery or similar plants which are used for ground cover unless such vegetation forms a means of rapidly transmitting fire from ground vegetation to canopy trees. Additional clearing may be required by the Fire inspector if extra hazardous conditions exist.

Initiation Prior to issuance of building permits	Monitoring Duration Frequency Once to verify compliance Verification Yuba County Community Development & Services Agency	
Mitigation Completion Upon satisfactory compliance		
Performance Criteria	Verification Cost	Date Complete

ENVIRONMENTAL HEALTH DEPARTMENT CONDITIONS OF APPROVAL CUP 2019-0002

- 1. Owner shall submit a file map to Environmental Health showing the contour, slope, all bodies of water (seasonal and year-round), water wells, all existing structures and septic systems.
- 2. At time of building permit application: an application and design for a new septic system may be required.
- 3. The design and location of wells and sewage disposal systems shall be in conformance with standards established by Yuba County Environmental Health.
- 4. All abandoned or inactive wells on the subject site shall be destroyed or maintained in accordance with the "Water Well Standards: State of California, Bulletin 74-81".
- 5. All abandoned septic tanks on the subject site shall be destroyed in accordance with the requirements of Yuba County Environmental Health Department.
- 6. Facility will be required to submit a hazardous materials business plan to the CUPA department, if storage of hazardous materials exceed the threshold set by the state. Contact Gary Cantwell at (530) 749-7526 for more information.

Fisher, Ciara

From: Soto, Dianira@DOT < dianira.soto@dot.ca.gov>

Sent: Wednesday, May 1, 2019 10:27 AM

To: planning

Subject: Camptonville Biomass Power Generation Facility (2019-0002)

Thank you for submitting this project to our office for our review. At this time we do not have any additional comments. Please provide our office with copies of any further actions regarding this project. We would appreciate the opportunity to review and comment on any changes related to this project.

Thank you,

Dianira Soto

Associate Transportation Planner Bike Coordinator Planning North Branch Planning, Local Assistance & Sustainability 703 B Street, Marysville, CA 95901 (530) 740-4905

Fisher, Ciara

From: Perkins, Kevin

Sent: Tuesday, April 2, 2019 3:54 PM

To: Fisher, Ciara

Subject: FW: CUP2019-0002 - Application Packet

Here is Building's comments to the biomass CUP. Please include these as project COA in the future.

Kevin Perkins Planning Manager County of Yuba 530-749-5470

From: Burns, Danny <dburns@CO.YUBA.CA.US>

Sent: Tuesday, April 2, 2019 3:41 PM

To: Perkins, Kevin <kperkins@CO.YUBA.CA.US> **Subject:** RE: CUP2019-0002 - Application Packet

Kevin

All building must have permits.

All development on this site must meet all current codes including accessibility and must meet any and all fire code as well as local fire authority requirements.

Dan

From: Perkins, Kevin

Sent: Monday, April 01, 2019 2:31 PM

To: Crouse, Pam; Hochstrasser, Margaret; Burns, Danny

Cc: Boeck, Van; Benedict, Christopher; Fisher, Ciara; Franken, Vanessa

Subject: CUP2019-0002 - Application Packet

All,

Attached you will find CUP2019-0002 (Gellerman Biomass Facility). The applicant, Camptonville Community Partnership, found a new project site for the their proposed biomass facility and needs a new CUP. This project is similar to CUP2017-0003 (Celestial Valley Biomass Facility) so Van, Chris and Dan please look at the former application for any COA guidance.

Also, this project has a really tight funding deadline with the State so Planning has to get the project (including preparing and noticing a CEQA document by June's Planning Commission meeting). Please get draft COA to Planning no later than May 31, 2019. Ciara is assigned to the project so please email or contact her if you have any questions.

Kevin Perkins Planning Manager County of Yuba 530-749-5470

PUBLIC WORKS PRELIMINARY CONDITIONS OF APPROVAL YUBA COUNTY

Applicant: Camptonville Community Partnership Case Number: CUP 2019-0002

Owner: Soper Wheeler Company APN: 048-210-021 & 064-260-032

5. The Public Works Director may reasonably modify any of the Public Works conditions contained herein.

- 6. Owner shall dedicate to the County of Yuba sufficient right-of-way in easement to provide a 42 foot strip of land adjoining the centerline of Marysville Road, classed as a Rural Arterial, lying within the bounds of this property.
- 7. Applicant shall construct a Rural Roadway Connection at the intersection of Marysville Road and the primary entrance in compliance with Drawing 125 of the Yuba County Standards or as approved by the Public Works Director.
- 8. If large trucks are anticipated to use the secondary access, then Applicant shall construct a Rural Roadway Connection at this access point. Otherwise the secondary access point shall conform to the current Yuba County Standards for a Rural Driveway (Drawing No. 127 and 128) under permit issued by the Department of Public Works
- 9. All road and drainage construction required by these conditions of approval shall be inspected in compliance with Section 4 of the Yuba County Standards and approved by the Yuba County Department of Public Works. Owner's contractor shall meet on-site with the Public Works Department representative prior to the commencement of work to discuss the various aspects of the project.
- 10. Any improvement work within the County right-of-ways for roadway connections and/or road widening or other improvements shall be accomplished under an encroachment permit issued by the Public Works Department. Improvement plans and associated checking and inspection fees shall be submitted to the Public Works Department for review and approval before any construction will be permitted within the County right-of-way.
- 11. Owner, heirs or assigns of this property, or portions thereof, shall remove and/or relocate any fence(s) located within dedication(s) or offer(s) of dedication or within existing County easement(s) or right(s)-of-way which lies within or are adjoining this property. Such fence removal or relocation is deferred until such time as the then owner is directed by the Public Works Department of Yuba County to remove or relocate the fence(s). Any new fences installed shall be constructed outside the limits of dedications or offer(s) of dedication or existing County easements or right-of-ways.
- 12. Prior to the approval of any grading permit or improvement plans, owner must submit documentation demonstrating that all necessary permits and approvals have been obtained, which may include: a 404 permit from Army Corps of Engineers; including Section 7 consultation with the U.S. Fish and Wildlife Service, 401 certification from the Regional Water Quality Control Board, 2081/1602 permit, as necessary, from the California Department of Fish and Game, and pre-construction surveys for special status species.
- 13. Whenever construction or grading activities will disrupt an area of 1 acre or more of soil or is less

than 1 acre but is associated with a larger common plan of development, the applicant is required to obtain a Yuba County grading permit issued by the Public Works Department and a National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activities, NPDES No. CAS000004, Order No. 2013-0001-DWQ. Coverage under the General Permit must be obtained prior to any construction. More information may be found at http://www.swrcb.ca.gov/stormwtr/construction.html. Owner must obtain an approved and signed Notice of Intent (NOI) from the Regional Water Quality Control Board (RWQCB), a Waste Discharge Identification (WDID) number and a Storm Water Pollution Prevention Plan (SWPPP), as described by either the RWOCB or the State Water Regional Control Board (SWRCB). The SWPPP shall describe and identify the use of Storm Water Best Management Practices (BMP's) and must be reviewed by the Yuba County Public Works Department prior to the Department's approval of Improvement Plans or issuance of a Grading Permit for the project. See Yuba County's Stormwater Regulations for Construction Activities Procedures for details. According to state law it is the responsibility of the property owner that the SWPPP is kept up to date to reflect changes in site conditions and is available on the project site at all times for review by local and state inspectors. Erosion and sediment control measures, non-stormwater and material management measures, and post-construction stormwater management measures for this project shall be in substantial compliance with the SWPPP.

- 14. Owner shall submit a stormwater quality plan, including all temporary erosion and sediment control measures, site-design measures, source control measures, treatment measures, and baseline hydromodification management measures for the project, designed by a registered civil engineer, in accordance with Sections 7.50 and 11.23 of the Yuba County Ordinance Code and Section 11 of the Yuba County Improvement Standards to the Department of Public Works for review and approval prior to construction and/or grading permit. Owner shall construct such management measures as per the approved plan prior to construction.
- 15. Erosion control shall conform to section 11 of the Yuba County Improvement Standards.
- 16. Strict control over dust problems created during construction shall be adhered to with regard to surrounding properties and public facilities. The construction specifications and/or improvement plans shall have items reflecting dust control measures in detail and shall be approved by the Public Works Department.
- 17. Owner shall provide public service easements as necessary for any existing overhead or underground utilities, sewer lines, waterlines, etc. which may provide service to this property. Such easements shall have a minimum width of 10 feet or larger as may be required by the service provider and shall be clearly identified by metes and bounds. Any relocation or rearrangement of the public service provider's facilities to accommodate this project shall be at the Owner's expense.
- 18. Prior to commencing performance of any public improvement or facility to be dedicated to County, and subject to approval by the Public Works Department, Owner shall acquire and present proof of general and automobile liability and Workers Compensation and Employers Liability insurance. Such general and automobile liability insurance shall name the County and its agents as additional insured.



541 Washington Avenue Yuba City, CA 95991 (530) 634-7659 FAX (530) 634-7660 www.fraqmd.org

Christopher D. Brown, AICP Air Pollution Control Officer

Serving Sutter and Yuba Counties

April 25, 2019

County of Yuba Planning Division 915 8th Street, Suite 123 Marysville, CA 95901

Email: planning@co.yuba.ca.us

Re: CUP 2019-0002 Applicant requests approval of a 5.5-megawatt biomass power generation facility that will include a small office building, a building to house the biomass power generation systems, outdoor storage for woody biomass chips, and an evaporation pond on a 5 acre portion of the larger 412.3 acre project site. The project is located 11 miles southwest of the community of Camptonville in northeastern Yuba County.

Dear Ciara Fisher,

The Feather River Air Quality Management District (District) appreciates the opportunity to review and comment on the project reference above. The biomass power generation facility will likely require a Permit to Operate issued from the District.

A list of rules and regulations applicable to new development is attached. The construction of the new buildings would be subject to these local, state, and federal regulations.

The project should submit a Fugitive Dust Control Plan to the District prior to beginning work.

If you need further information or assistance, please contact me at (530) 634-7659 x210. Air District staff will be available to assist the project proponent or Lead Agency as needed.

Sincerely,

Sondra Spaethe Air Quality Planner

Attachments: Rules and Regulations Statement, Fugitive Dust Control Plan

File: Chron

FRAQMD Rules & Regulations Statement: New Development

The following statement is recommended as standard condition of approval or construction document language for **all** development projects within Feather River Air Quality Management District (FRAQMD). All projects are subject to FRAQMD rules in effect at the time of construction. A complete listing of current rules is available at www.fraqmd.org or by calling 530-634-7659. Specific rules that may relate to construction activities or building design may include, but are not limited to:

Regulation IV: Stationary Emission Sources Permit System and Registration. Any project that includes the use of equipment capable of releasing emissions to the atmosphere may require permit(s) from FRAQMD prior to equipment operation. The applicant, developer, or operator of a project that includes an emergency generator, boiler, or internal combustion engine should contact the FRAQMD early to determine if a permit is required, and to begin the permit application process. Portable construction equipment (e.g. generators, compressors, pile drivers, lighting equipment, etc.) with an internal combustion engine over 50 horsepower are required to have a FRAQMD permit or a California Air Resources Board portable equipment registration. Other general types of uses that require a permit include, but are not limited to fumigation chambers, gasoline tanks and dispensing, spray booths, and operations that generate airborne particulate emissions.

- Rule 3.0: Visible Emissions. A person shall not discharge into the atmosphere from any single source of emissions whatsoever, any air contaminants for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated as No. 2 on the Ringleman Chart.
- Rule 3.15: Architectural Coatings. The developer or contractor is required to use coatings that comply with the volatile organic compound content limits specified in the rule.
- Rule 3.16: Fugitive Dust. The developer or contractor is required to control dust emissions from earth moving activities, storage or any other construction activity to prevent airborne dust from leaving the project site.
- **Rule 3.17: Wood Burning Devices**. This rule requires newly installed wood burning devices meet emission standards. Wood burning fireplaces are prohibited unless they meet emission standards.
- Rule 3.23: Natural Gas-Fired Water Heaters, Small Boilers, and Process Heaters. This rule requires all newly purchased or installed units 75,000 Btu/hr up to 1 million Btu/hr meet emission limits.
- Rule 7.10: Indirect Source Fee. An applicant for a building permit shall pay fees to the FRAQMD based on number of units (residential) or square footage of the building and associated parking (commercial and industrial).

Disposal by Burning: Open burning is yet another source of fugitive gas and particulate emissions and shall be prohibited at the project site. No open burning of vegetative waste (natural plant growth wastes) or other legal or illegal burn materials (trash, demolition debris, et. al.) may be conducted at the project site. Vegetative wastes should be chipped or delivered to waste to energy facilities (permitted biomass facilities), mulched, composted, or used for firewood. It is unlawful to haul waste materials offsite for disposal by open burning.

In addition, other State or Federal rules and regulations may be applicable to construction phases of development projects, including:

California Health and Safety Code (HSC) section 41700. Except as otherwise provided in Section 41705, no person shall discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

HSC section 41701. Except as otherwise provided in Section 41704, or Article 2 (commencing with Section 41800) of this chapter other than Section 41812, or Article 2 (commencing with Section 42350) of Chapter 4, no person shall discharge into the atmosphere from any source whatsoever any air contaminant, other than uncombined water vapor, for a period or periods aggregating more than three minutes in any one hour which is: (a) As dark or darker in shade as that designated as No. 2 on the Ringelmann Chart, as published by the United States Bureau of Mines, or (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subdivision (a).

California Vehicle Code section 23114 regarding transportation of material on roads and highways.

California Code of Regulations Title 13 Chapter 10 section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. Limits idling time to 5 minutes for on-road heavy duty diesel trucks.

California Code of Regulations Title 13 Chapter 9 Article 4.8 section 2449: Regulation for In-Use Off-Road Diesel Vehicles. Limits idling time to 5 minutes.

California Code of Regulations Title 17 Division 3 Chapter 1 Subchapter 7.5 section 93105: Asbestos ATCM for Construction, Grading, Quarrying, and Surface Mining Operations.

California Code of Regulations Title 17 Division 3 Chapter 1 Subchapter 7.5 section 93106: Asbestos ATCM for Surfacing Applications.

Asbestos NESHAP. Prior to demolition of existing structures, an asbestos evaluation must be completed in accordance with the Asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP) regulations. Section 61.145 requires written notification of demolition operations. Asbestos NESHAP Demolition/Renovation Notification Form can be downloaded at http://www.arb.ca.gov/enf/asbestos/asbestosform.pdf. This notification should be typewritten and postmarked or delivered no later than ten (10) days prior to the beginning of the asbestos demolition or removal activity. Please submit the original form to USEPA and a copy each to California Air Resources Board (CARB) and the District at the addresses below:

U.S. EPA Attn: Asbestos NESHAP Program 75 Hawthorne Street San Francisco, CA 94105

CARB, Compliance Division Attn: Asbestos NESHAP Program P.O. Box 2815 Sacramento, CA 95814

FRAQMD Attn: Karla Sanders 541 Washington Avenue Yuba City, CA 95991

Feather River Air Quality Management District Fugitive Dust Control Plan

This plan, upon signature and submittal to the FRAQMD, will serve as an approved Fugitive Dust Control Plan to be implemented at the designated site. This plan must be submitted by the project proponent and received at the air district prior to start of work.

The approved plan serves as an acknowledgment by the project proponent of their duty to address state and local laws governing fugitive dust emissions and the potential for first offense issuance of a Notice of Violation by the air district where violations are substantiated by District staff. This plan (along with standard mitigation measures for all projects and best available mitigation measures where applicable) shall be made available to the contractors and construction superintendent on the project site.

•	Site Location:
•	Project Type (circle all that apply): Residential Commercial Industrial Transportation
•	List of responsible persons:
	Company:
	Office (name, title, address, phone):
	Field (name, title, phone):
•	Projected Start and End Dates:(Day/Month/Year)
Pro	oject Proponent:
	Printed Name Company/Phone
Sta tha are	signing this document I acknowledge that I have read the FRAQMD Rules and Regulations atement: New Development, which includes state and local fugitive dust emission laws. I understand to the it is my responsibility as the project proponent to ensure that appropriate materials and instructions available to site employees to implement fugitive dust mitigation measures appropriate for each velopment phase of this project in order to ensure compliance.
of f	rther acknowledge that it is my responsibility to ensure that site employees are made formally aware ugitive dust control laws, requirements, and available mitigation techniques, and that appropriate asures are to be implemented at the site as necessary to prevent fugitive dust violations.
Sig	nature: Name:
Title	e: Date:
	FRAOMD - Modified 2/23/2016

Please Submit to: FRAQMD, 541 Washington Avenue, Yuba City, CA 95991 Attn: Planning Phone: 530-634-7659 x210 FAX: 530-634-7660 Email: sspaethe@fragmd.org



June 4, 2019

Yuba County 915 8th Street Marysville, CA 95901

Re: CUP 2019-0002

11639 Marysville Road, Dobbins

Thank you for giving us the opportunity to review the subject plans. The proposed biomass generation facility (CUP 2019-0002) is within the same vicinity of PG&E's existing facilities that impact this property. PG&E has electric transmission facilities crossing a portion of the parcels in question that were installed via easement acquired by PG&E. The footprint of this easement is building restricted, meaning at no point in time may any portion of any building or structure be placed within the easement. When there are site specific plans for this project, please forward them to PGEPlanReview@pge.com for review to ensure this new development does not conflict with PG&E's existing land rights.

If you have any questions regarding our response, please contact me at john.spigott@pge.com.

Sincerely,

John Spigott Land Management

925-328-5122