



PLACER COUNTY
Community Development Resource Agency
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<http://www.placer.ca.gov/planning>

NOTICE OF PREPARATION

To: California State Clearinghouse
California Responsible Agencies
California Trustee Agencies
Other Interested Public Agencies
Interested Parties and Organizations
Affected Property Owners within 1,000 feet of the Project Site

Subject: **Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the Cabin Creek Biomass Facility Project (Placer County, California)**

Lead Agency: **Placer County**
Community Development Resource Agency, Environmental Coordination Services
3091 County Center Drive, Suite 190, Auburn, CA 95603
Contact: Maywan Krach, Community Development Technician
Phone: (530) 745-3132/Fax: (530) 745-3080 Email: cdraecs@placer.ca.gov

Project Title: Cabin Creek Biomass Facility Project (PCPJ 20110376)

Project Applicant: Placer County

Project Location: Eastern Regional Materials Recovery Facility and Transfer Station: 900 Cabin Creek Road, Truckee, Placer County, California 96161. Assessor's Parcel Number (APN): 080-070-016

Project Description: Placer County is proposing to construct a two-megawatt (MW) wood-to-energy biomass facility at the Eastern Regional Materials Recovery Facility (MRF) and Transfer Station that would use a gasification technology. The entire Eastern Regional MRF and Transfer Station site is approximately 290 acres and includes four County-owned parcels (APNs: 080-010-031, 080-010-033, 080-070-017, and 080-070-016). The proposed project would be located on a two-acre site in the southernmost area of property and entirely within APN 080-070-016. The site is located within the unincorporated portion of Placer County, California, approximately two miles south of Interstate 80 (I-80) at 900 Cabin Creek Road, 0.30 miles west of State Route (SR) 89. The site is in Section 28, Township 17 North, Range 16 East, Mount Diablo Baseline and Meridian. Site access is via Cabin Creek Road, off of SR 89.

The proposed project would include construction of an approximately 11,000 square-foot, two-story structure that would house the power generating and emissions control equipment, two 400 square-foot pads to accommodate transformer and phase-shifting equipment, and an approximately one acre material storage area. The storage area would include a 7,000 square-foot open air pole canopy structure to allow materials drying before use in the energy generation process. Additional on-site improvements would include six to eight parking spaces, a paved vehicle circulation area that includes new driveways on Cabin Creek Road and the access road to Tahoe Area Regional Transit (TART) and County Department of Public Works facilities located on the site, an aggregate base haul road south of the material storage area, storm water treatment facilities (including an infiltration trench and detention basin), retaining walls, and utility improvements/extensions.

Biomass materials (processed woody chips utilized as fuel for the plant) would be processed (ground and screened) at the locations from which they are removed (such as U.S. Forest Service fuels reduction sites) and delivered via haul truck to the project site. No additional wood material processing would occur at the site beyond that which is already occurring in association with current Eastern Regional MRF and Transfer Station wood waste handling activities. As needed, additional fuel for the plant (potentially during winter months) could include wood waste materials (forest waste biomass) already being processed at the Eastern Regional MRF and Transfer Station. Under

current MRF operating conditions, processed wood waste materials are hauled from the site to more distant biomass facilities (such as Sierra Pacific Industries biomass facility in Lincoln, California) and other sites for reuse (such as ski slope stabilization). Thus, the proposed project could enable biomass materials to be used on site, thereby reducing the facility's current hauling requirements.

Placer County Planning Services Division is initiating the preparation of an environmental impact report (EIR) prepared in accordance with the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and Placer County's Environmental Review Ordinance. The U.S. Department of Energy (DOE) is contributing federal grant funding for the proposed project. It is anticipated that the EIR will be prepared to satisfy the substantive environmental review requirements of an environmental assessment (EA) pursuant to the National Environmental Policy Act (NEPA). If DOE determines that an environmental impact statement (EIS) is required for NEPA purposes, separate and subsequent noticing and scoping will be conducted pursuant to NEPA. If DOE determines that the project, as mitigated, will not have significant effects on the environment, DOE may adopt a finding of no significant impact (FONSI) for the project. Notwithstanding DOE's involvement, the environmental document will be referred to as an EIR.

Placer County needs to know your views as to the scope and content of the environmental information which is germane to your interests or statutory responsibilities in connection with the proposed project. If you represent an agency, and you will be relying on the EIR when considering a permit action or other approval for the project, it is requested that you notify Placer County of those permit actions and provide the name of a contact person at your agency so that the County can coordinate accordingly throughout the environmental review process.

A brief description of the project and alternatives likely to be evaluated in the EIR, and a summary of the probable environmental effects of the proposed project are attached hereto, and/or are available for review on the Placer County website at: <http://www.placer.ca.gov/Departments/CommunityDevelopment/EnvCoordSvcs/EIR.aspx>.

This NOP is being circulated for a period of 45 days, which exceeds the minimum circulation period specified in the State CEQA Guidelines Section 15082(b). Therefore, your response is requested at the earliest possible date, but no later than Monday, January 23, 2012. Please send your comments to **Maywan Krach** at **Placer County** by mail, fax, or email to the address shown above under "Lead Agency."

The Placer County Planning Services Division will hold one public scoping meeting in connection with the proposed project. The scoping meeting will be held to receive comments from the public and other interested parties and agencies regarding the issues that should be addressed in the EIR. The scoping meeting will be held on Wednesday, January 11, 2012, at 1:00 PM in the Community Room at Squaw Valley Public Service District, 305 Squaw Valley Road, Olympic Valley, California 96146.

If you have further questions or require additional information, please contact **Maywan Krach** at **Placer County** by mail, fax, or email at the address shown above under "Lead Agency."

CABIN CREEK BIOMASS FACILITY PROJECT PLACER COUNTY, CALIFORNIA PROJECT INFORMATION

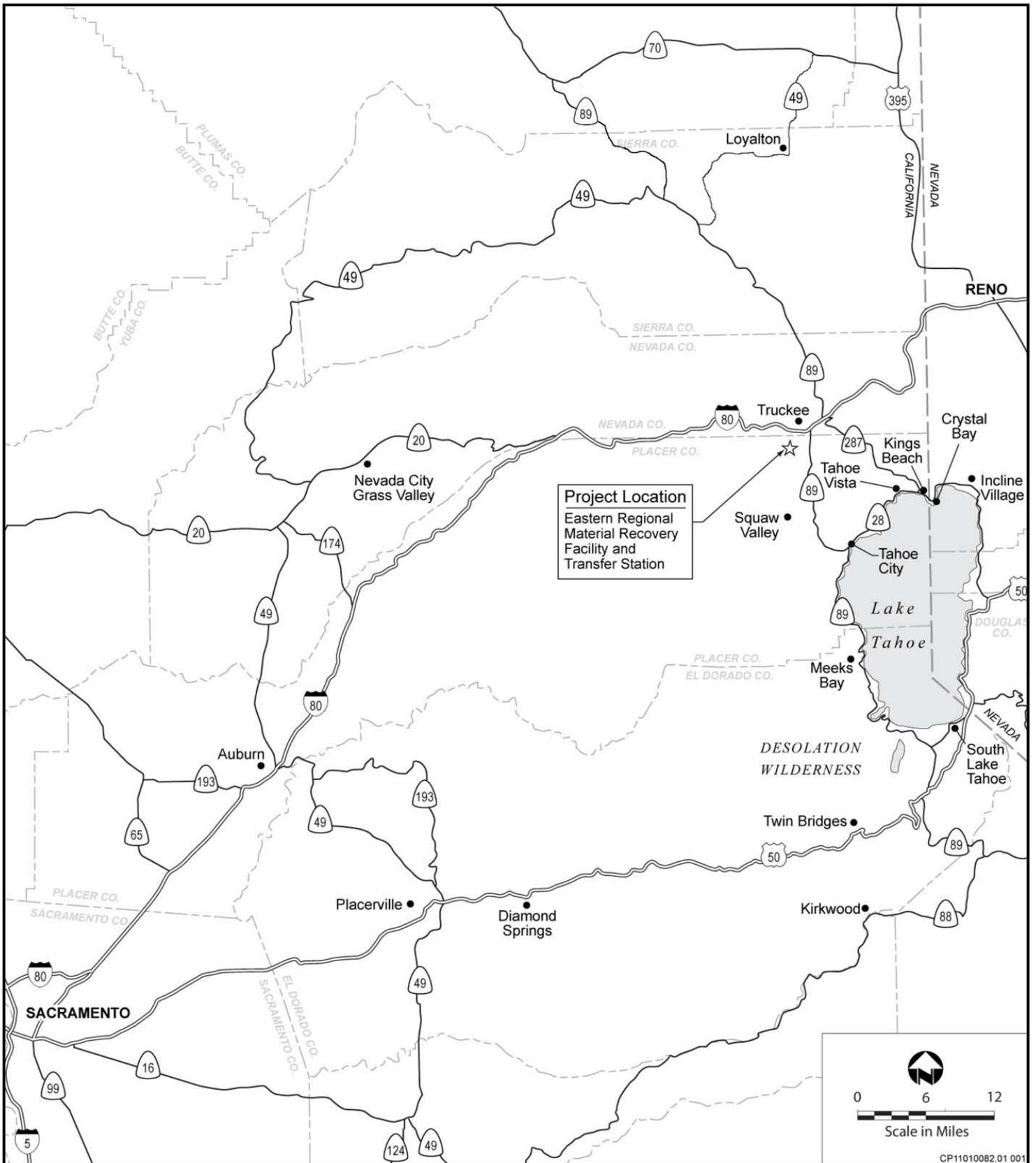
PROJECT OVERVIEW AND LOCATION

Placer County is requesting approval of a Conditional Use Permit to construct a two-megawatt (MW) wood-to-energy biomass facility at the Eastern Regional Materials Recovery Facility (MRF) and Transfer Station (formerly Eastern Regional Landfill). The entire Eastern Regional MRF and Transfer Station site is approximately 290 acres and includes four County-owned parcels (APNs: 080-010-031, 080-010-033, 080-070-017, and 080-070-016). The proposed project would be located on a two-acre site in the southernmost area of property and entirely within APN 080-070-016. The site is located within the unincorporated portion of Placer County, California, approximately two miles south of Interstate 80 (I-80) at 900 Cabin Creek Road, off of State Route (SR) 89 (Exhibits 1 and 2). The site is in Section 28, Township 17 North, Range 16 East, Mount Diablo Baseline and Meridian. The site is zoned Forestry-Special Purpose (FOR-SP). Exhibit 3 illustrates a preliminary layout of project buildings, parking areas, driveways, and other proposed improvements. The Eastern Regional MRF and Transfer Station site is not listed on the California Department of Toxic Substances Control's Hazardous Waste and Substances Site List prepared pursuant to California Government Code Section 65692.5.

Biomass materials (fuel for the plant) would be processed (ground and screened) at the locations from which they are removed (such as U.S. Forest Service fuels reduction sites) and delivered via haul truck to the project site. No additional wood material processing would occur at the site beyond that which is already occurring in association with current Eastern Regional MRF and Transfer Station wood waste handling activities. These current activities include: As needed, additional fuel for the plant (potentially during winter months) could include wood waste materials (forest waste biomass) already being processed at the Eastern Regional MRF and Transfer Station. Under current MRF operating conditions, processed wood waste materials are hauled from the site to more distant biomass facilities (such as Sierra Pacific Industries biomass facility in Lincoln, California) and other sites for reuse (such as ski slope stabilization). Thus, the proposed project could enable biomass materials to be used on site, thereby reducing the facility's current hauling requirements.

PROJECT OBJECTIVES

The proposed project is an element of the broader Placer County Biomass Program. The Placer County Biomass Program identifies the need to reduce fire danger, reduce air pollution from opening burning, create green energy, and create future economic growth. The Placer County Board of Supervisors created a Biomass Policy Team and adopted a Strategic Plan in 2007 for Wildfire Protection and Biomass Utilization. Specifically, the Biomass Program was created to coordinate Placer County's efforts to: (1) determine the feasibility of removing woody biomass from forest lands in the county; and (2) examine the options for using excess biomass to generate economically-sustainable forms of energy or other beneficial products. Elements of the Biomass Program are being implemented through federal funding and grants administered by the U.S. Forest Service (USFS), Placer County Air Pollution Control District (PCAPCD), the Sierra Nevada Conservancy, and the U.S. Department of Energy (DOE). The overall Placer County Biomass Program involves coordination with the California Department of Forestry and Fire Protection, the U.S. Environmental Protection Agency, the California Tahoe Conservancy, California State Parks, the North Tahoe Fire Protection District, the California Energy Commission, the University of California at Davis, and Liberty Energy (which purchased Sierra Pacific Power Company's electrical assets in California in 2010). As part of the Biomass Program, material managed by Placer County is already being processed and transported to biomass facilities and for use in ski slope stabilization.

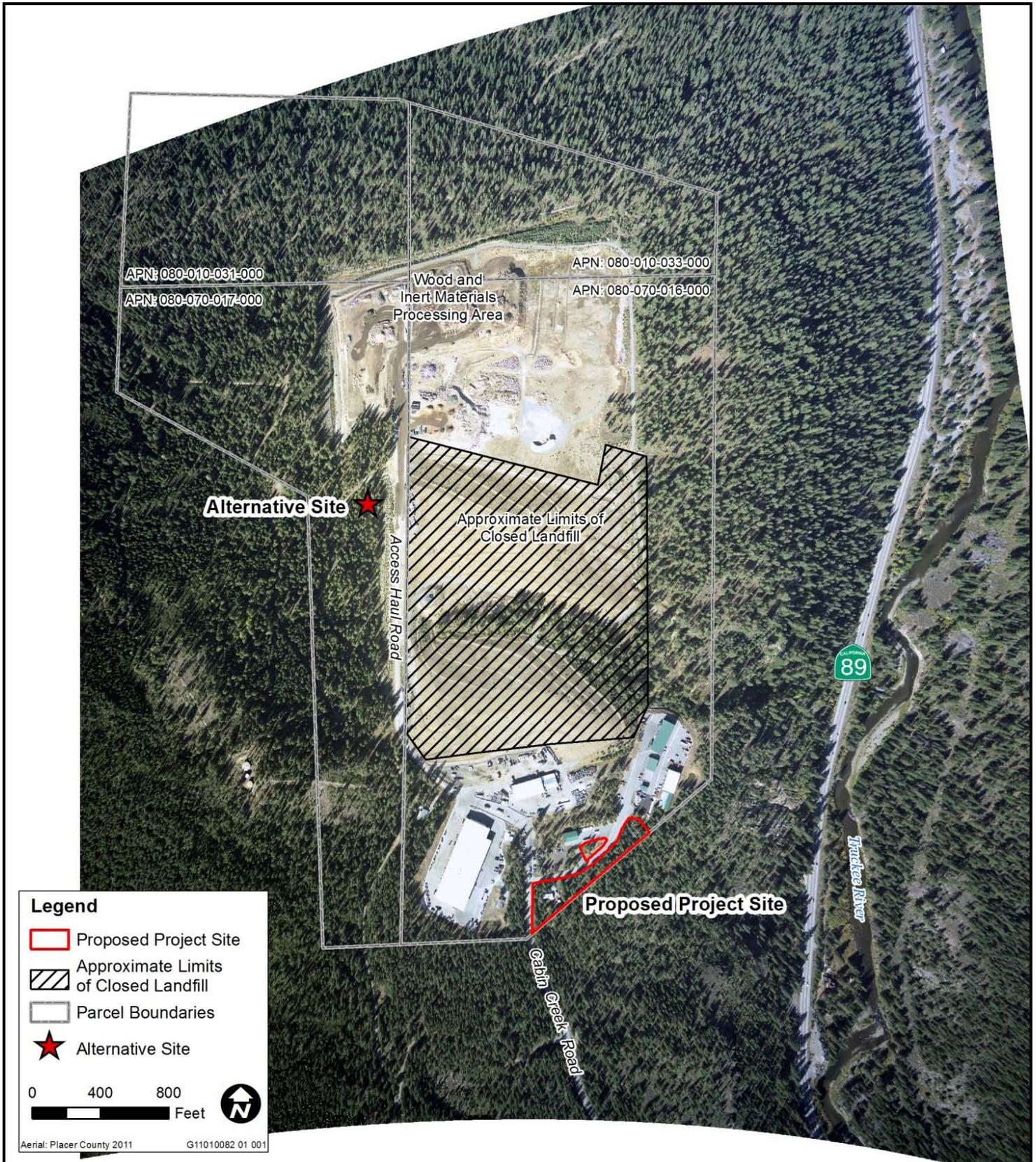


Source: Ascent Environmental, Inc. 2011

Exhibit 1

Regional Location



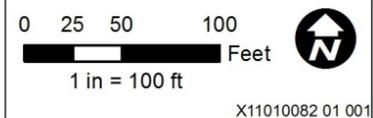
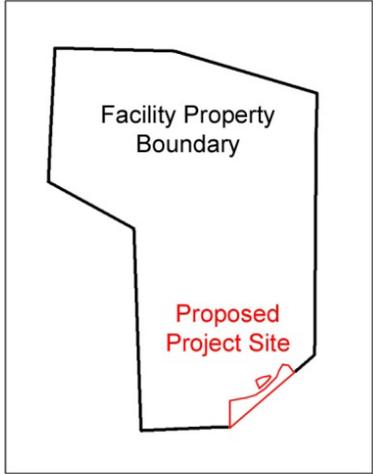
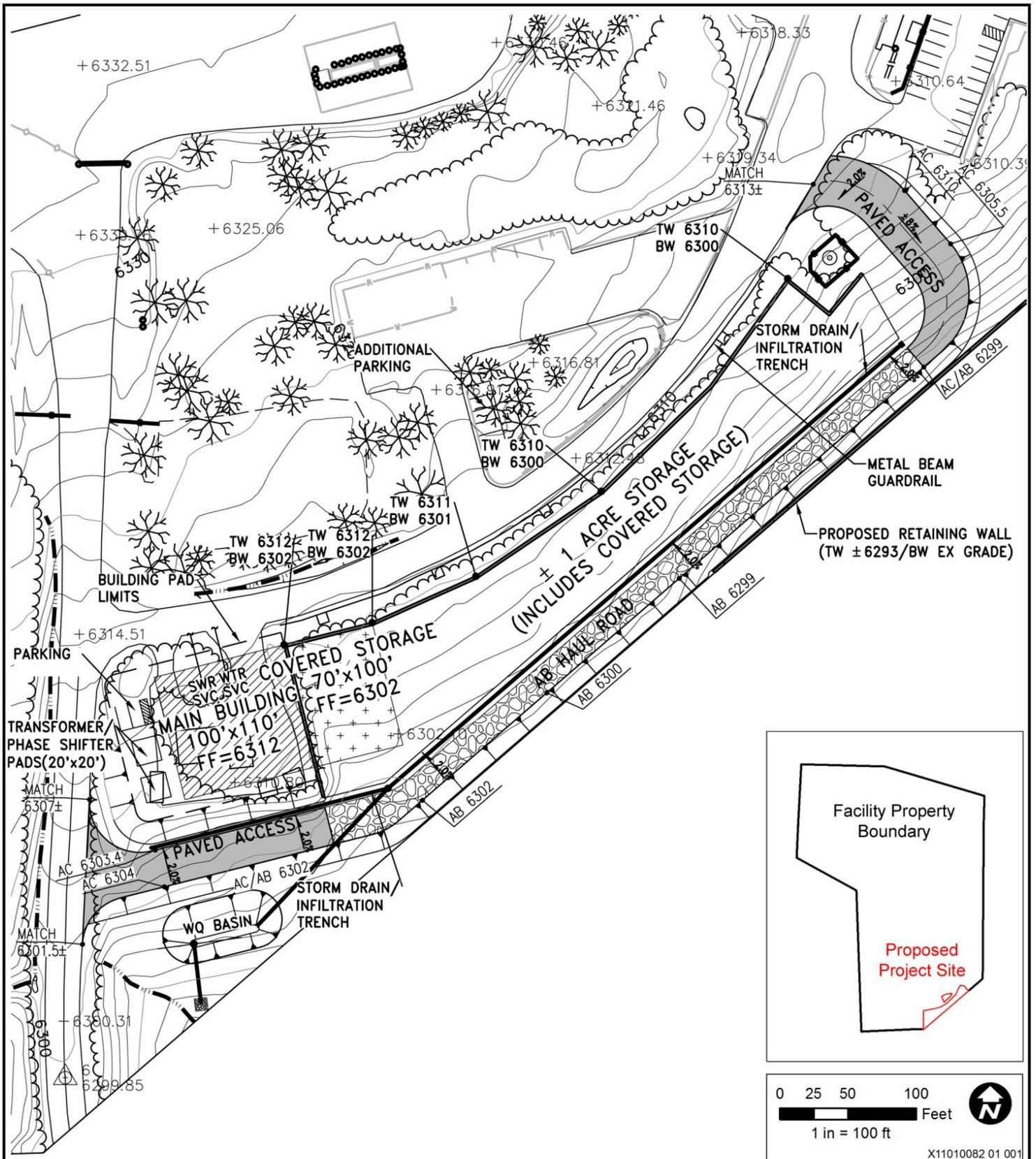


Source: Adapted from Placer County 2011

Exhibit 2

Project Vicinity





Source: Adapted from Wood Rodgers 2011

Exhibit 3

Preliminary Site Plan



Placer County is proposing to construct a biomass energy production facility in eastern Placer County. This facility would provide a new source of renewable electrical energy from waste biomass materials, provide a demonstration model of sustainable forest waste collection and processing, and assist in continued forest treatment activities.

The County's objectives of the Cabin Creek Biomass Facility Project are to:

- ▲ Construct and operate a small scale, sustainable, and low-impact biomass power plant at a location close to the source material;
- ▲ Improve regional air quality and reduce greenhouse gas emissions associated with open burning of biomass waste;
- ▲ Support healthy forest management practices that improve watershed health and wildlife habitat through planned forest thinning operations designed to reduce catastrophic wildfire risks;
- ▲ Contribute to California's renewable energy production goals through the operation of a woody biomass power plant that provides a long-term renewable electrical supply and reduces dependency on fossil fuels used to generate electricity for local consumption;
- ▲ Provide a local source of reliable, consistent power to minimize electricity disruptions;
- ▲ Reduce transportation costs and related air pollution associated with the current practice of trucking woody biomass to distant utilization facilities and/or disposal sites;
- ▲ Demonstrate the Public Private Partnership (PPP) model that includes partnerships between local, state, and federal agencies and local businesses for renewable energy development and forest health initiatives;
- ▲ Provide new employment opportunities in surrounding areas; and
- ▲ Utilize existing appropriately zoned land for enhancement of public utility supply while minimizing impacts to commercial, residential, recreational, and open-space uses.

ENVIRONMENTAL SETTING AND PROJECT DESCRIPTION

LAND USE OVERVIEW

CURRENT LAND USES

The Eastern Regional MRF and Transfer Station site was originally operated as a sanitary landfill. In 1995, the landfill was closed and the current transfer activities began full operation. The facility and closed landfill are located on a portion of the 290-acre area comprised of four parcels owned by the County (see Exhibit 2). Much of the 290-acre area is undeveloped with structures. About one-third of the site is coniferous forest. The transfer facility consists of two separate areas connected by the main on-site haul road. The southern portion of the facility contains the scale house, the MRF/Transfer Station building, the buy-back area, and the household hazardous waste receiving and storage building on approximately 8.7 acres. The northern 24.2 acres of the facility contains the wood and inert materials processing and storage area. The closed landfill occupies approximately 65.6 acres of the parcel. An approximately 32-acre area is currently being reclaimed as a part of the landfill post-closure plan (reclamation area).

Also located on the Eastern Regional MRF and Transfer Station site are three modular residences (occupied by the facility caretakers), Placer County Department of Public Works (DPW) road maintenance facilities, and Tahoe Area Regional Transit (TART) facilities.

The two-acre project site includes one of the three employee residences, which would be removed as part of the project. The site is otherwise undeveloped and includes forested land.

PROPOSED LAND USES

The proposed project would include construction of a ±11,000 square-foot, two-story structure that would house the power generating and emissions control equipment, two 400 square-foot pads to accommodate transformer and phase shifting equipment, and an approximately one acre material storage area (Exhibits 2 and 3). The storage area would include a 7,000 square-foot open air pole barn structure to allow materials drying before use in the energy generation process. Additional on-site improvements would include six to eight parking spaces, a paved vehicle circulation area that includes new driveways on Cabin Creek Road and the access road to the TART/DPW facilities located on the site, an aggregate base haul road south of the material storage area, storm water treatment facilities (including an infiltration trench and detention basin), retaining walls, and utility improvements/extensions.

ADJACENT LAND USES

The project site is bound on its southern and eastern sides by National Forest System (NFS) land, which is managed by the USFS. Land immediately to the north and west of the project site includes existing Eastern Regional MRF and Transfer Station property. SR 89 is located to the east of the project site, and the Truckee River runs parallel to SR 89 on the east side of the highway. The closest off-site residences are approximately 3,400 feet to the east, across SR 89 and on the west side of the Truckee River.

PROJECT CHARACTERISTICS

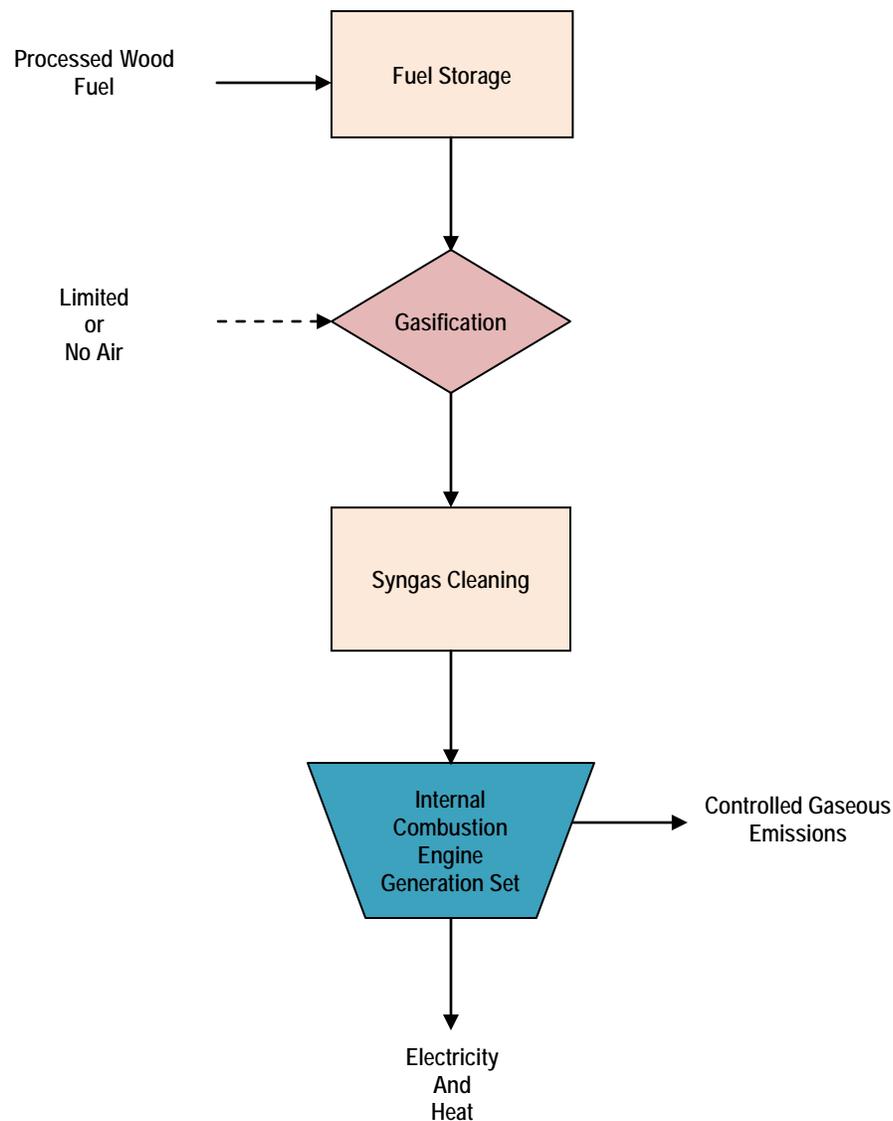
The following provides an overview of the technology, fuel supply, and operational characteristics of the proposed project.

ENERGY COMPONENT: GASIFICATION TECHNOLOGY

Gasification systems generate electricity through combustion of “syngas” in an internal combustion (IC) engine or turbine. Gasification is the thermochemical conversion of organic woody biomass into a synthetic gas (syngas) under controlled conditions of heat and oxygen. The syngas formed by gasification is composed primarily of hydrogen (H₂), methane (CH₄), and carbon monoxide (CO), and is similar to natural gas. Gasification also produces carbon char (also known as biochar). Biochar is charcoal created by pyrolysis (decomposition of organic material by heating in the absence of oxygen and water) of biomass, and differs from charcoal only in that its primary use is not for fuel, but potentially for bio-sequestration or atmospheric carbon capture and storage. There is currently an emerging market for biochar for use as both a soil amendment and for bio-sequestration purposes.

The syngas can be used as a primary fuel in electrical generating units such as a reciprocating internal combustion (IC) engine or in a gas turbine. It can also be used as fuel to produce steam or hot water for heating and/or manufacturing processes. Exhibit 4 illustrates a typical process diagram for a gasification system.

Gasification is a newer technology for electricity generation. The earliest uses of gasification date back to the production of city gas from coal in the late 1800s for use as a heating and/or lighting gas. Gasification has been in commercial use for more than 50 years with the production of syngas (as a substitute for natural gas). More recently, gasification has been applied to power generation at a few large integrated gasification combined cycle plants within and outside of the U.S.



Source: TSS Consultants 2010

Exhibit 4

Gasification System Schematic

Small-scale gasification systems (≤ 3 MW) are currently in use in the United States, British Columbia, Austria, Denmark, Finland, France, India, Italy, Switzerland, and elsewhere. The nearest small-scale plants using gasification technology for electrical energy generation include: (1) a 500-kilowatt (kW) facility in Merced, California; (2) a 1 MW facility in Oakdale, California (under construction); (3) a 250-kW facility in Kamloops, British Columbia; and (4) a 50-kW facility in Winters, California.

Placer County has not identified a preferred manufacturer of gasification system equipment. Placer County maintains a vendor database with over 35 companies that develop and produce gasification systems. The County has on multiple occasions solicited technical information from its vendor database that has been used to develop the proposed project. If the project is approved, the County would select the manufacturer later in the process. Proposed structures have been designed to accommodate the range of available technologies.

WASTE HEAT COMPONENT

The County is evaluating options to utilize waste heat generated as a byproduct of the electrical generation process as part of the proposed project. Some technologies include the use of additional equipment that can convert waste heat into electricity. It is expected that such equipment could be housed in the proposed power generation building. Also the waste heat that is generated could supply heat to melt snow for the facility's paved and concrete areas, such as the material storage area access road, parking spaces, and sidewalk areas. Waste heat could also be used to provide heat to buildings within the Eastern Regional MRF and Transfer Station complex in the future.

WOODY BIOMASS FUEL SUPPLY

The proposed fuel supply for the proposed project would be solely woody biomass, derived from a variety of sources including forest-sourced material (hazardous fuels residuals, and forest thinning and harvest residuals) and clean urban-sourced material (tree trimmings and pine needles, and clean construction and demolition wood). The facility would be certified as a renewable energy facility by the California Energy Commission (CEC) based on the proposed sole use of renewable woody biomass as its fuel source.

As stated in California Public Resources Code (PRC) Section 25743(f), the CEC categorizes facilities generating electricity from biomass energy as in-state renewable electricity generation facilities if they report to the CEC the types and quantities of biomass fuels used and certify to the satisfaction of the Commission that the fuel utilization meets certain requirements. Facilities using wood and wood wastes must demonstrate that the fuel sources meet all of the following requirements:

- ▲ have been harvested pursuant to an approved timber harvest plan prepared in accordance with the Z'berg-Nejedly Forest Practice Act of 1973 (Chapter 8 [commencing with Sec. 4511] of Part 2 of Division 4, California PRC);
- ▲ have been harvested for the purpose of forest fire fuel reduction or forest stand improvement; and
- ▲ do not transport or cause the transportation of species known to harbor insect or disease nests outside zones of infestation or current quarantine zones, as identified by the California Department of Food and Agriculture or the California Department of Forestry and Fire Protection, unless approved by those agencies.

Forest-sourced material for the proposed project would generally include:

- ▲ residuals as a result of forest fuels reduction and defensible space activities; and
- ▲ timber harvest residues including limbs, treetops and unmerchantable logs generated as byproducts of commercial timber harvest activities.

High-quality recoverable urban wood for the proposed project would generally include the following materials currently processed at the Eastern Regional MRF and Transfer Station:

- ▲ tree trimmings and green waste; and
- ▲ clean (untreated) construction and demolition wood from building/remodeling activities.

To generate two MW of power using a gasification system, the plant would consume between approximately 14,000 and 17,000 bone dry tons (BDT) of woody biomass fuel annually depending on the technology ultimately chosen.¹ This material would be delivered to the project site already processed (chipped and ground). The woody biomass fuel supply is anticipated to originate from within and around the Lake Tahoe Basin, generally within a 20-mile radius from the project site and up to a one-hour drive. Costs associated with transport of woody biomass limits the market area for fuel acquisition. However, fuel sources could come from longer distances if economics allow. All material to be used in the power generating facility would be required to meet County fuel specifications.

FUEL DELIVERY, SITE ACCESS, AND PARKING

Trucks hauling fuel to the site would use SR 89 and Cabin Creek Road to access the site. The proposed project would include installation of a six to eight parking spaces, an aggregate base haul road south of the material storage area, and a paved vehicle circulation area.

The County has evaluated a variety of truck types that could haul materials to the site. Each BDT of wood chips is approximately equivalent to 200 cubic feet or 7.41 cubic yards. Because forest thinning operations do not occur during the winter months, material would be delivered to the site on weekdays during the months of May through November for a total of approximately 152 days. Depending on the design capacity of the vehicle selected by the County (expected to be between 20 and 93 cubic yards) and assuming up to 17,000 BDT of woody biomass fuel would be consumed annually, the number of truck deliveries on a typical weekday would be between 42 truckloads (if a smaller 20 cubic yard truck is used) and 9 truckloads (if a 93 cubic yard chip van truck is used). These are all new vehicles trips to the ERL site. For those occasions when a back-up winter supply is needed, woody biomass fuel suitable for energy production will be obtained onsite at the existing ERL operations. Because these materials are already being delivered to the ERL for processing under the current solid waste facilities permit, no new truck trips will be generated for the back-up winter supply.

Material transported to the site would be unloaded and stored on site, some in the covered materials storage structure and most piled on open ground in the materials storage area. On-site equipment would include a diesel-fueled wheeled loader used to move unloaded material into piles in the storage building and then to push material into the system that feeds the gasification equipment. Woody biomass fuel would be compacted during storage in the material storage area to avoid spontaneous combustion of the material.

FACILITY OWNERSHIP AND EMPLOYMENT

Ownership of the proposed biomass facility at the Eastern Regional MRF and Transfer Station is uncertain at this time, but may include a partnership between Liberty Energy and Placer County or a new energy partner. It is assumed that a private partnership would be established for the proposed biomass facility.

The project is expected to create six new jobs. Because electrical generation at the facility would occur 24 hours per day, it is estimated that one to three employees would be on the site at all times, and up to three employees at any one time. Placer County also estimates that an additional eight jobs would be created off-site to collect, process, and transport biomass fuel to the facility.

MATERIALS HANDLING AND STORAGE

Material transported to the site would be unloaded and stored in the covered materials storage structure as well as the uncovered storage area. On-site equipment would include a diesel-fueled wheeled loader used to

¹ A "bone dry ton" refers to an amount of wood that weighs 2,000 pounds at zero percent moisture content. Conversely, a "green ton" refers to 2,000 pounds of undried biomass material. Moisture content must be specified if green tons are used as a measure of fuel energy.

move material into piles in the storage building (and uncovered storage area) and then to push material into the system that feeds the gasification equipment. The adjacent proposed one-acre storage area would be expected to accommodate storage for approximately four to five months. Woody biomass fuel would be compacted during this longer term storage in the fuel yard to avoid spontaneous combustion of the biomass. The loader would also be used to load the biochar into outgoing haul trucks (see below). Should more material be needed (beyond the four to five months) during the winter, chipped material would be hauled from the wood debris area at the Eastern Regional MRF and Transfer Station facility located within the same complex.

Hazardous materials storage on the site would include: (1) diesel fuel in a 250-gallon, above ground storage tank with secondary containment that would be used for the wheeled loader; (2) urea reagent used in the nitrogen oxide (NO_x) emissions control system for the power generating facility (if required by the PCAPCD; and 3) propane if necessary for the start-up of the gasification technology chosen for the project.

BIOCHAR PRODUCTION

Gasification of forest-sourced woody biomass can produce approximately three to five percent biochar per volume of woody biomass input. Therefore, the 14,000 to 17,000 BDT of woody biomass used in the power generation process would yield an estimated 420 to 850 tons of biochar per year, or between 8 and 16 tons per week.

BIOCHAR HANDLING

Biochar would be transferred directly from the gasification vessel into a biochar containment tank housed within the power generating building. Assuming approximately 800 pounds of biochar per cubic yard, the removal of biochar from the site is anticipated to require off-haul and disposal of between 20 and 40 cubic yards of biochar per week, which could be accomplished using two to four 10 cubic yard truckloads per week. The biochar would be fully contained within the trucks so that no biochar would be exposed to wind during its transport. No biochar would be stored in open piles on the site.

Biochar generated at the site would either be reused in one of several non-disposal applications (e.g., charcoal, soil amendment, or as a potential bio-sequestration of carbon agent), or disposed of at an appropriately permitted facility (e.g., Lockwood Regional Landfill in Sparks, Nevada).

OPERATING HOURS

The proposed project would operate 24 hours per day, approximately 330 days per year, with fuel deliveries and unloading activities limited to daytime hours throughout the late spring, summer and fall months. Truck deliveries would likely occur on weekdays only and be limited to the months of May through November. While the delivery process may be limited by weather conditions during the winter months, the daily activity of moving material from the onsite material storage area to the biomass facility could proceed each day.

WATER/WASTEWATER REQUIREMENTS

The proposed project would receive water from three existing aboveground water tanks (with capacities of 60,000 gallons, 150,000 gallons, and 250,000 gallons) that serve the existing Eastern Regional MRF and Transfer Station and TART/DPW facilities in the southern portion of the site, and wood and inert processing activities (via water trucks) on the northern part of the site. The tanks are located within an off-site easement that crosses National Forest Service lands immediately west and uphill from the Eastern Regional MRF and Transfer Station property. Water is supplied to the County-owned tanks by an on-site, 100 gallon per minute groundwater well and pump located near the existing buildings and scale house. A gasification system would require water at a continuous flow of up to five gallons per minute (gpm), and up to 7,200 gallons per day (gpd). The project would

also include a restroom and fire suppression equipment that would require water service. No new water storage is proposed and no new wells are needed for operational needs.

Wastewater service is provided to the southern part of the site by the Tahoe City Public Utility District (TCPUD). Existing sanitary sewer lines serve the existing Eastern Regional MRF and Transfer Station operations and TART/DPW facilities in the southern portion of the site. Wastewater may require pretreatment before discharge to the TCPUD sewer main that connects to the Tahoe-Truckee Sanitation Agency (T-TSA) sanitary sewer system. T-TSA's sanitary sewer lines extend along SR 89 to a treatment facility located east of the Town of Truckee.

ELECTRICITY REQUIREMENTS

An existing overhead power line that extends from Liberty Energy's 60-kV transmission line on the east side of the Truckee River brings electricity to the Eastern Regional MRF and Transfer Station site to power the existing Eastern Regional MRF and Transfer Station, the TART/DPW facilities, and on-site caretaker residences. The proposed project would include extension of the existing electrical line across the site, which may be undergrounded, to bring electricity to the proposed biomass facility. (Note: the exact location of the proposed extension is unknown at this time, but will be included in the EIR).

The project would also require a connection to the existing power line to bring power generated at the site to the electrical grid. Based on preliminary discussions with representatives of Liberty Energy (which owns and maintains the lines), the existing power line would have capacity to accommodate electricity generated at the project site. The proposed project would likely require the construction of transformer and phase shifting pads and equipment that would be used to transfer power at the correct voltage to the grid, but no off-site electrical improvements (i.e., power line extensions) would be required.

RELEVANT PLANNING INFORMATION

Placer County will use the EIR to consider the environmental effects, mitigation measures, and alternatives when reviewing the proposed project for approval. Placer County maintains discretionary authority over the primary project approvals. A partial list of the discretionary approvals follows:

- ▲ Conditional Use Permit (Placer County)
- ▲ Improvement Plans/Drainage Report (Placer County)
- ▲ Building Permit (Placer County)

Other potential permits and/or approvals that may be required for development of the proposed project include, but are not limited to, the following:

- ▲ Authority to Construct/Permit to Operate (PCAPCD)
- ▲ Encroachment Permit (Placer County)
- ▲ Sewer and Water Connection Permits (TCPUD)
- ▲ Construction/Industrial Storm Water Permit (Lahontan Regional Water Quality Control Board)
- ▲ Fire Protection Agency Pre-Approval (Truckee Fire Protection District)

The project is also required to comply with the existing Solid Waste Facilities Permit for the Eastern Regional MRF and Transfer Station, or seek amendments thereto, and any applicable greenwaste and composting regulations administered by the California Department of Resources Recycling and Recovery's (CalRecycle) solid waste local enforcement agency (LEA). While the issuance of these permits and/or approvals is not contingent upon EIR certification, the applicable permitting agencies may review information contained in the EIR as part of the approval process.

PROBABLE ENVIRONMENTAL EFFECTS

This section provides a brief discussion of the probable environmental effects associated with the proposed project. For any potentially significant effects that are identified, mitigation measures will be recommended.

The following subject areas will be analyzed in the EIR:

LAND USE AND PLANNING

Land use impacts to be addressed in the EIR include changes to on-site land uses, compatibility with surrounding land uses, and General Plan consistency.

AIR QUALITY, GREENHOUSE GAS EMISSIONS (GHG), AND CLIMATE CHANGE

The proposed project would result in short-term construction emissions, long-term operational emissions, and cumulative air quality changes. The proposed project will be designed to comply with all federal, state, and PCAPCD laws, regulations, and rules pertaining to air quality. Specifically, the proposed power generating facility would be subject to the following PCAPCD rules: PCAPCD Rules 242 (Stationary Internal Combustion Engines) for the gasification technology and 502 (New Source Review), among others. The EIR will identify nearby sensitive receptors; discuss potential emissions of odors and/or hazardous air pollutants generated by stationary, mobile, and area sources; discuss compliance with applicable rules; include a general conformity applicability discussion; and determine the significance of air quality impacts in comparison with applicable local, state, and federal standards and significance thresholds and by PCAPCD-adopted emissions limits.

The air quality analysis will quantify existing emissions resulting from current biomass material treatment practices (i.e. biodegradation, open burning), and will compare those emissions with the project's treatment of the same quantity of biomass material (controlled emissions of the power generating facility coupled with emissions from transporting materials to the facility). The analysis will include a discussion of the potential health risks associated with locating a small-scale power plant in proximity to nearby sensitive receptors, which includes preparation of a Health Risk Assessment (HRA) that identifies potential impacts to nearby sensitive receptors.

The EIR will include an analysis of potential project effects on global climate change. This analysis will include a quantitative estimate of operational carbon dioxide emissions, as well as potential regional reductions, from both stationary and mobile sources (e.g., truck trips related to materials transport). The analysis will determine whether the project would result in a "net loss" or "net gain" in carbon dioxide. Carbon dioxide will be used as a proxy for all greenhouse gases potentially emitted during operation of the proposed project. The EIR analysis will also address the avoidance of GHG emissions from alternative fates (e.g., biodegradation, open burning of the biomass wastes).

NOISE

The project would generate noise from truck trips and on-site power generating and material handling activities. The EIR will assess potential short-term (i.e., construction) noise impacts relative to sensitive receptors and their potential exposure. Noise levels of specific construction equipment will be determined based on published resources and a list of construction equipment likely to be used during project construction. The resultant noise levels at nearby receptors (at given distances from the source) will be calculated. Long-term (i.e., operational) noise impacts, including increased noise from mobile (primarily truck traffic) and stationary (power generating equipment, and on-site equipment and truck operation) sources will be assessed. Given that the site would operate 24 hours per day, the ability of the project to meet established community noise equivalent level (CNEL)

standards, as well as daytime and nighttime hourly L_{eq} and L_{max} noise performance standards at the property line of noise-sensitive receiving uses, and the need for noise mitigation measures will also be assessed.

HYDROLOGY AND WATER QUALITY

Construction of the proposed project would require ground disturbance, which could result in short-term increases in sediment load. Both construction and operational impacts will be identified and analyzed in the EIR. This will include non-point pollution sources from the project, potential contaminants, proposed source control methods, and proposed best management practices (BMPs) to address potential impacts to water quality. Construction of the project has the potential to increase peak flow surface runoff downstream of the project site and overflow the actual or designed capacity of existing storm water facilities. The EIR will evaluate this impact as well as impacts to the existing drainage pattern of the site and area.

GEOLOGY AND SOILS

The project would require grading and alteration of the existing site topography to accommodate project buildings, material storage, and on-site circulation and parking areas. Minor off-site (but within the limits of the Eastern Regional MRF and Transfer Station site) grading may be necessary to accommodate utility (e.g., sewer, water, or natural gas) connections to the site. The EIR will include a general discussion of topographic alteration, slope stability, and erosion potential. In addition, the EIR will evaluate the potential for unstable cut and fill slopes; collapsible and expansive soil; erosion of graded areas; geologic/geomorphological hazards (e.g., avalanche, earthquake, landslides, mudslides, ground failure, subsidence, and liquefaction); unprotected drainage ways, and the potential for exposure to contaminated soils.

HAZARDS AND HAZARDOUS MATERIALS

The proposed project would involve the transportation of hazardous materials (e.g., fuel, paint) to the project site for construction purposes. The potential for these materials to be released to the environment will be evaluated. Historical uses and the potential for site contamination will be documented in the EIR to the extent that information is available, and areas of potential soil or groundwater contamination on the project site or surrounding property will be investigated. The site is down slope and setback from the closed landfill area. The risk of migrating landfill gas will also be evaluated. Small amounts of hazardous materials (e.g., 250-gallon diesel fuel tank) would be stored at the site. A urea reagent and propane tank may also be stored at the site. This analysis will also address potential fire hazard risks at the site associated with storage of woody biomass feedstock materials and facility operation, as well as effects on fire protection services.

TRANSPORTATION, CIRCULATION, AND PARKING

The proposed project would generate short-term, construction-related traffic. Long-term traffic related to employee trips and truck trips associated with biomass material brought to the site and removal of biochar generated at the site will also be discussed. The transportation analysis will include identification of major roadways that may be affected by the proposed project, a discussion of traffic volumes and vehicle mix on those roadways and their overall operating conditions, on-site and off-site circulation and turning movements, and potential impacts to traffic flow, safety, and road wear.

PUBLIC SERVICES AND UTILITIES

The proposed project would increase the demand for public services. The EIR will assess the degree to which affected public service providers can adequately serve the project. Water supply and sanitary sewer disposal demands will be quantified for the project to verify adequate utility system capacities and evaluate the effect of

development on current service levels. Additional resources required to maintain or meet project demands will be identified.

BIOLOGICAL RESOURCES (VEGETATION AND WILDLIFE)

The potential for special-status plants or wildlife to occur will be assessed based on habitat available on the site. In addition, the potential for wetlands, riparian habitat, and other sensitive habitats to occur on site will be discussed. The EIR will consider the effects of tree removal as it relates to habitat loss. Impacts to native vegetation and wildlife will be described based on the proposed site development. The analysis will also generally discuss the types of impacts at fuel source areas and the extent in which those impacts have previously been evaluated under separate environmental review.

AESTHETICS

The project would be located in a remote area at a site that is already disturbed and used for similar industrial purposes. The EIR will evaluate whether the proposed project, including visible water vapor plumes (under certain conditions, such as at lower outdoor temperatures) generated by the project, will be visible from SR 89 or other scenic vistas, viewpoints, or resources. The potential impacts from construction and operation of the proposed project will be evaluated in the EIR.

CULTURAL RESOURCES

The EIR will provide an overview of the project area prehistory, history, study methodology, a discussion of documented cultural resources, the potential impacts to these and unrecorded sites, features or objects, and suitable measures designed to mitigate project-related impacts.

CUMULATIVE IMPACTS AND INDIRECT EFFECTS

The EIR will identify reasonably anticipated projects likely to occur in the project area, including any remaining components of the 2001 Eastern Regional Landfill Master Plan that have not been implemented, as well as growth contemplated in the Placer County General Plan and that may result in cumulative impacts when combined with the proposed project. Cumulative impact findings will be made for each of the resource areas described above.

The cumulative impacts and indirect effects section will also include an analysis of the cumulative demand (e.g., other existing and planned biomass power plants) for biomass resources in the region, the effect on forest practices, and the sustainability of forest resources over the long-term.

GROWTH-INDUCEMENT

The proposed project would increase the number of jobs available in the region on a temporary basis during construction and on a long-term basis. By providing additional power generating capacity in eastern Placer County, the project could directly add an increment of growth. The EIR will summarize the employment projection for the proposed project and the resultant potential for growth.

In addition to the resource topics described above, the EIR will also evaluate whether the proposed project would result in impacts to agricultural, mineral resources, recreation, and population and housing.

ALTERNATIVES

The EIR will likely consider the following three alternatives to the proposed project:

1. **No-Project Alternative (required by CEQA):** The existing condition at the time this NOP was published (November 2011), as well as what would be reasonably expected to occur in the foreseeable future if the proposed project were not approved.
2. **Alternative Technology:** An alternative employing direct combustion technology that would be constructed at the same location as the proposed project (i.e., at the Eastern Regional Materials Recovery Facility and Transfer Station). The building footprints and site improvements for this alternative would generally be the same as the proposed project, except that this alternative would require a small cooling tower and other appurtenant structures to be located outside the building footprints (which is not a component of the proposed project).

In direct combustion systems, the biomass fuel is directly burned (combusted) in a furnace or combustion unit under controlled conditions to minimize emissions and then supplies heat generated to a boiler. The boiler then creates steam for powering the electric generator. Nearly all commercial biomass power applications today use direct combustion boiler systems in conjunction with a steam turbine to generate electricity. Direct combustion also produces ash (about three to five percent of total forest-sourced woody biomass used) that remains as a powdery solid and must be disposed of or may be used for other products such as a soil amendment or concrete amendment. Direct combustion technology is not as efficient as gasification technology, and so this alternative would require additional woody biomass fuel to generate the same amount of energy as a gasification facility. The additional woody biomass fuel that would be required for a direct combustion system would result in a corresponding increase in truck trips and associated air emissions relative to a gasification system.

3. **Alternative Site:** An alternative that would include the same components as the proposed project, located at a different site within the Eastern Regional MRF and Transfer Station Property. This alternative site would be on the west side of the internal haul road at an undeveloped midpoint location between the existing MRF building and wood and inert material processing area (see Exhibit 3).

The EIR will also discuss other off-site locations considered by Placer County but dismissed from further evaluation.