



Placer County's Proposed Cabin Creek Biomass Facility Update

Presented to:



The Truckee Town Council

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Truckee, California

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What is Common Practice?

Open Pile Burning



- Average Available Burn Days
In the LTB: >200 Days
- 50% Used for Open Burning
- Apr – Jun, Sep - Nov



- Expected to Increase



Why Develop a Biomass Facility in the Tahoe Region?

- Board Of Supervisors Direction
 - Protect the Forest/ Communities from Catastrophic Fire
 - Improve Regional Air Quality
 - Provide Long Term Solution for Forest Waste
 - Create Employment Opportunities
- Develop Strategic Plan *(adopted in 2007)*
- Work with Public/Private Agencies for Solution
 - Overall Environmental Benefit
 - Technology Increase (including emission control)
 - Economic Sustainability



Why build in Cabin Creek?

- Project Began with Suitable Locations for Energy Creation, Large Enough Space and Economics
 - Kings Beach (although other Basin sites were reviewed)
 - Cabin Creek
- Primary Site: Kings Beach (Combined Heat & Power)
 - TRPA denied an allowance for a noise variance from EIR findings (Idling Trucks)
- Alternate Site: Cabin Creek (Slightly Lower Economics)
 - Process now moving forward

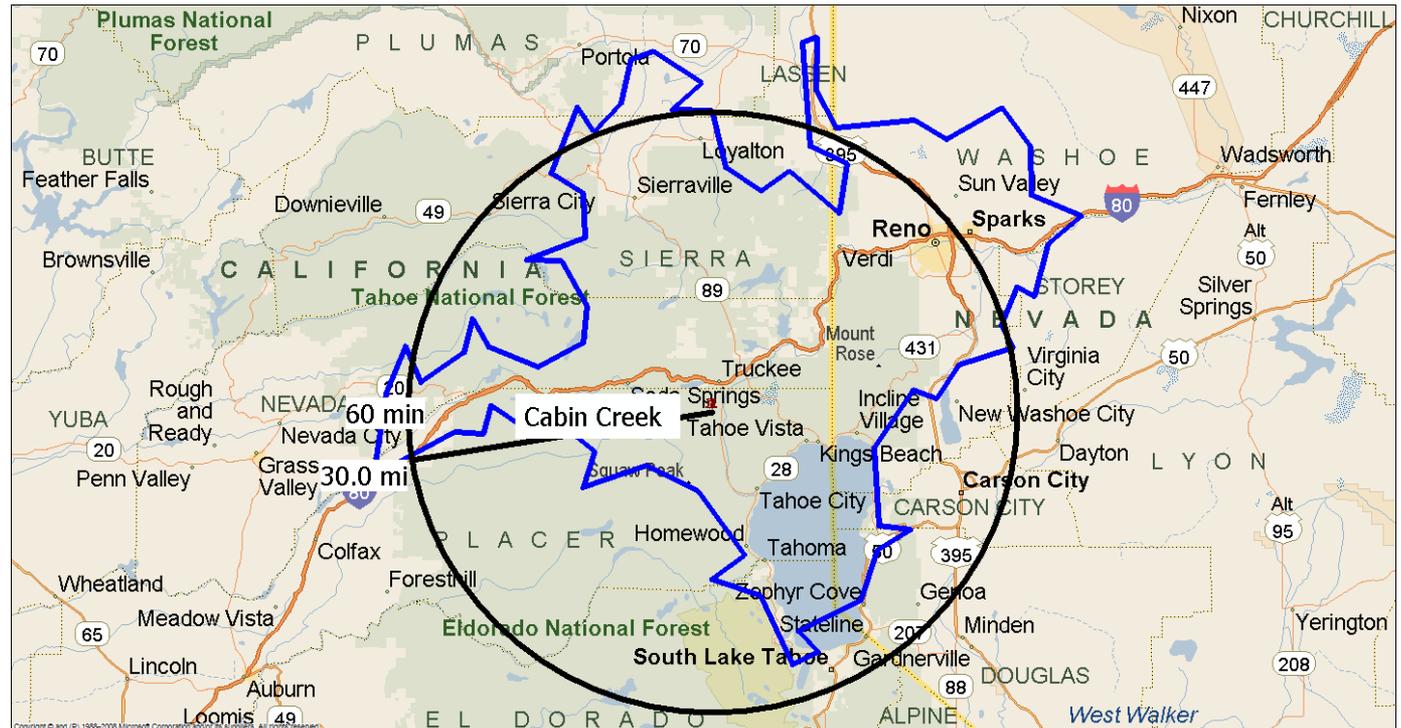


Where is Biomass Fuel Coming From?

Is there enough material?

Yes, Study shows over 112k BDT's of material within 30 miles – current demand 40k

***How much material is needed for Cabin Creek?
Up to 20k BDT***



What affect will Cabin Creek have on other local facilities? Very little



What is Technology?

Two 1MW Gasification units



Gasification Unit
(Nexterra)

Creates Syngas

Creates Electricity

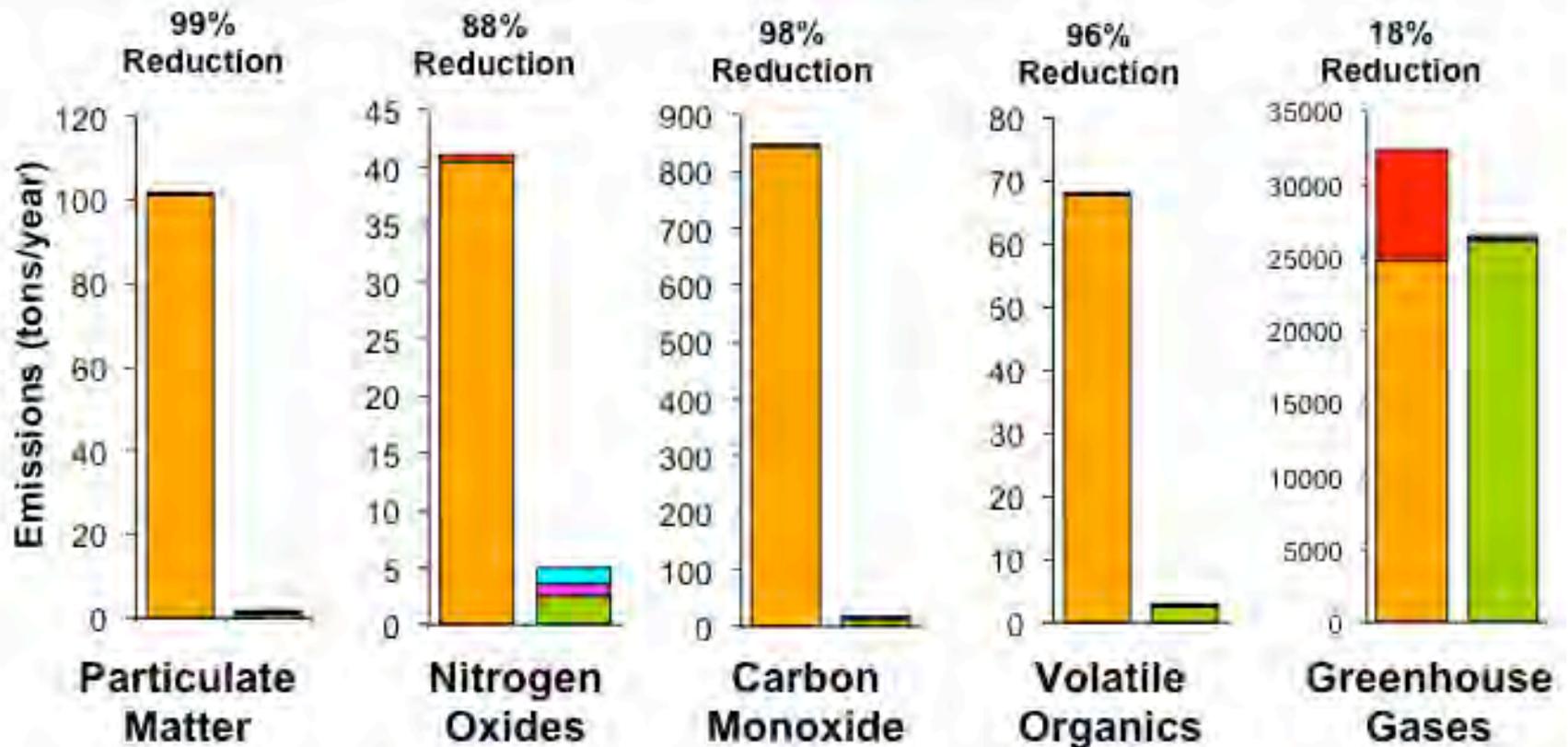


Internal Combustion Engine
Coupled with a Generator
(GE Jenbacher)

Creates Biochar



What are Air Pollutant Emissions Comparison/Benefits?





What Do Results Mean?

- US Environmental Protection Agency Recognizes Outstanding & Innovative Efforts to Achieve Cleaner Air
 - 2010 Clean Air Excellence Award for
Forest Resource Sustainability in Placer County

We have processed and transported 15,000 BDT's of waste to biomass energy facilities which has fueled the generation of 15,000 MW hours of renewable electricity, enough to power more than 1,500 homes for one year.

This Project was chosen "for its impact, innovation and replicability"





What Analyses has been done?

- DOE Grant – *Technical/Environmental/Economic Studies*
 - Reports Complete & Published (County staff & multiple contractors)
 - Air Emissions
 - Logistics
 - Fuel Assessment
 - Reports due this summer
 - Project Economics
 - New Source Review
 - Technical Requirements for Equipment



What 3rd Party Analyses Has/Is Being Done?

- Health Risk Assessment (HRA)
 - Air Permitting Specialists were hired to review both sites
 - Report completed September 2011
 - Results indicate No Significant Health Risk at either site (CC lower)
- Environmental Impact Report (EIR)
 - Ascent Environmental Inc has been hired to perform
 - Draft Report to be released soon
- Health Impact Assessment (HIA) grant
 - Community Stakeholder Process used to identify how a project might influence health
 - Scope looks at health in all human populations affected by the project
 - Looks at changes in physical, community, social and economic structure that affect health – ***for better and for worse***
 - Results may be used to improve project design



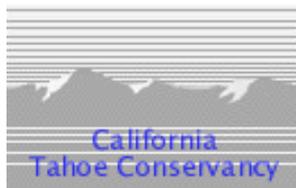
Who are the Business Partners?



- Placer County (approximately 1/3 Ownership)
- CalPeco (approximately 2/3 Ownership)
 - Partnership of Emera Inc. and Algonquin Power
 - Known as Liberty Energy in this Region



Who are the Supporting Agencies?



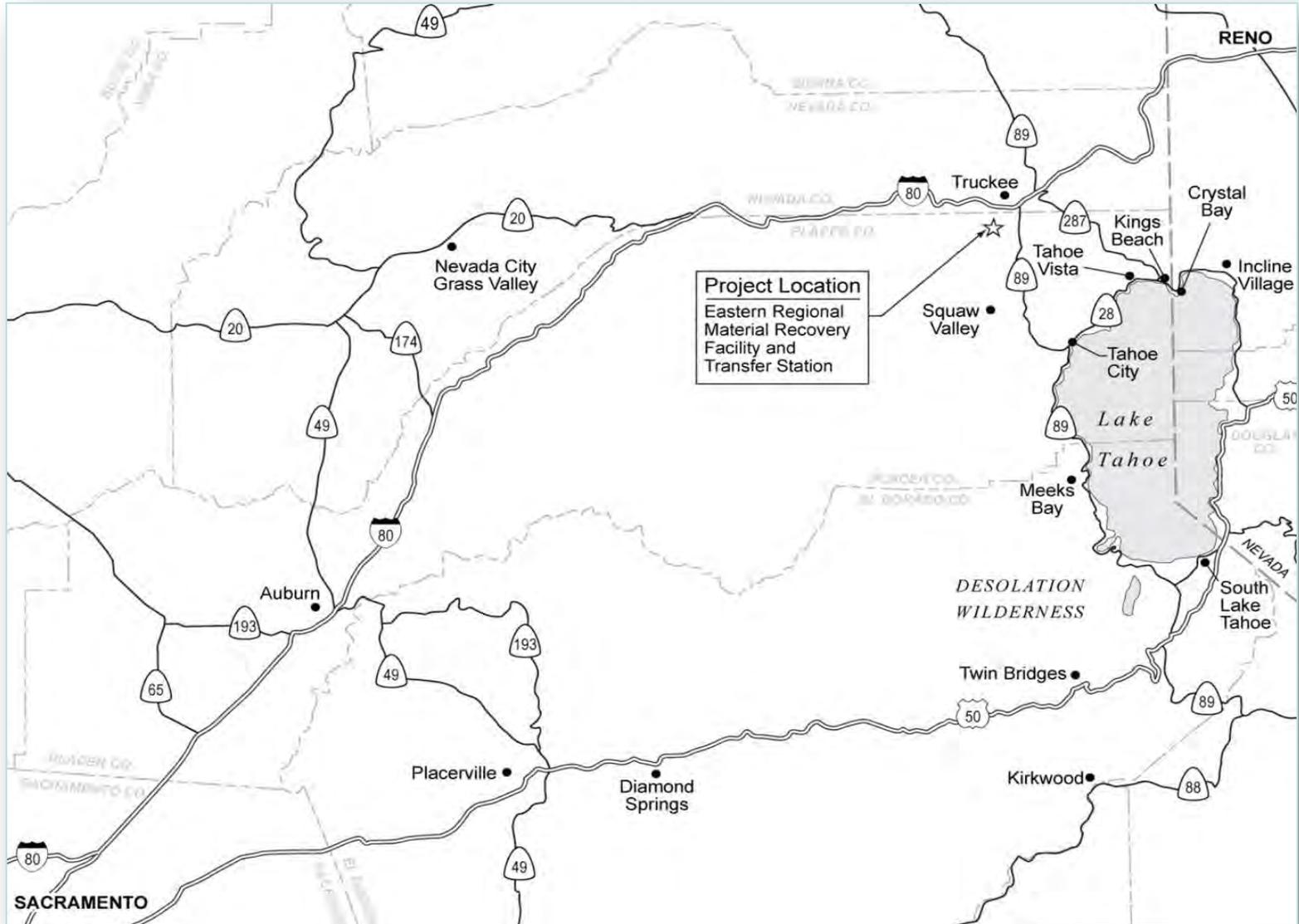


What Are the Facility Attributes?

- Proposed 2MW Electrical Generation at site
 - Power for 1500 Homes Annually
- 2 story facility w/ approximately 100' X 120' footprint within a 2 + acre Placer County-owned site
 - 10,800 SF + 7,200 attached covered storage area
- 6 month on-site stockpile/supply (approximately an acre)
- About 4 – 6 truckloads per day (10 – 15 peak operations)
- Tied directly into local electricity grid
- Reducing reliance on Fossil fuel (replacing mostly coal based energy)



Where is it Cabin Creek Located?





Cabin Creek General Area





What Does the Facility Look Like?



VIEWPOINT 1 VISUAL SIMULATION

CABIN CREEK BIO MASS FACILITY
PLACER COUNTY, CALIFORNIA



What is the Environmental Review Process?

- Joint Environmental Document:
 - California Environmental Quality Act (CEQA)
 - Environmental Impact Report (EIR)
 - Lead agency = Placer County
 - National Environmental Policy Act (NEPA)
 - Environmental Assessment (EA)
 - Lead agency = DOE
- Administrative Draft EIR expected to be released early May 2012
- Draft EIR for public review and comment anticipated for release in summer 2012
- Presented to PC Planning Commission: Late summer 2012
 - Conditional Use Permit



Questions/Comments

<http://www.placer.ca.gov/Departments/CommunityDevelopment/Planning/Biomass.aspx>

