



Cabin Creek Biomass Power Facility Development Project

Presented to:



October 11, 2012

Incline Village, Nevada

*Brett Storey, Placer County Biomass Program Manager
(530) 745-3011 bstorey@placer.ca.gov*





Biomass to Energy Facility Development

- DOE & USFS Grants have been used to pay for a majority of the Technical/Environmental/Economic Studies
 - Reports Complete & Published (County staff & multiple contractors)
 - Air Emissions
 - Logistics
 - Fuel Assessment
 - New Source Review
 - Preliminary Site Plan Layout/Conceptual 3D Building Design Drawing
 - Reports due this Year
 - Technical Requirements for Equipment
 - Intermediate Design layouts and Building Design
 - Reports next Year
 - Project Economics
 - Power Purchase Agreement
 - Final Design & Site layout
 - Program Guidebook



What 3rd Party Analyses Has/Is Being Done?

- Health Risk Assessment (HRA) - Air Permitting Specialists
 - Report completed September 2011
 - Results indicate ***No Significant Health Risk***
- Environmental Impact Report (EIR) - Ascent Environmental Inc
 - Draft Report released/Comment period closed 9/10/12
- Health Impact Assessment (HIA) grant – Ca Department of Public Health
 - 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



Where is Biomass Fuel Coming From?

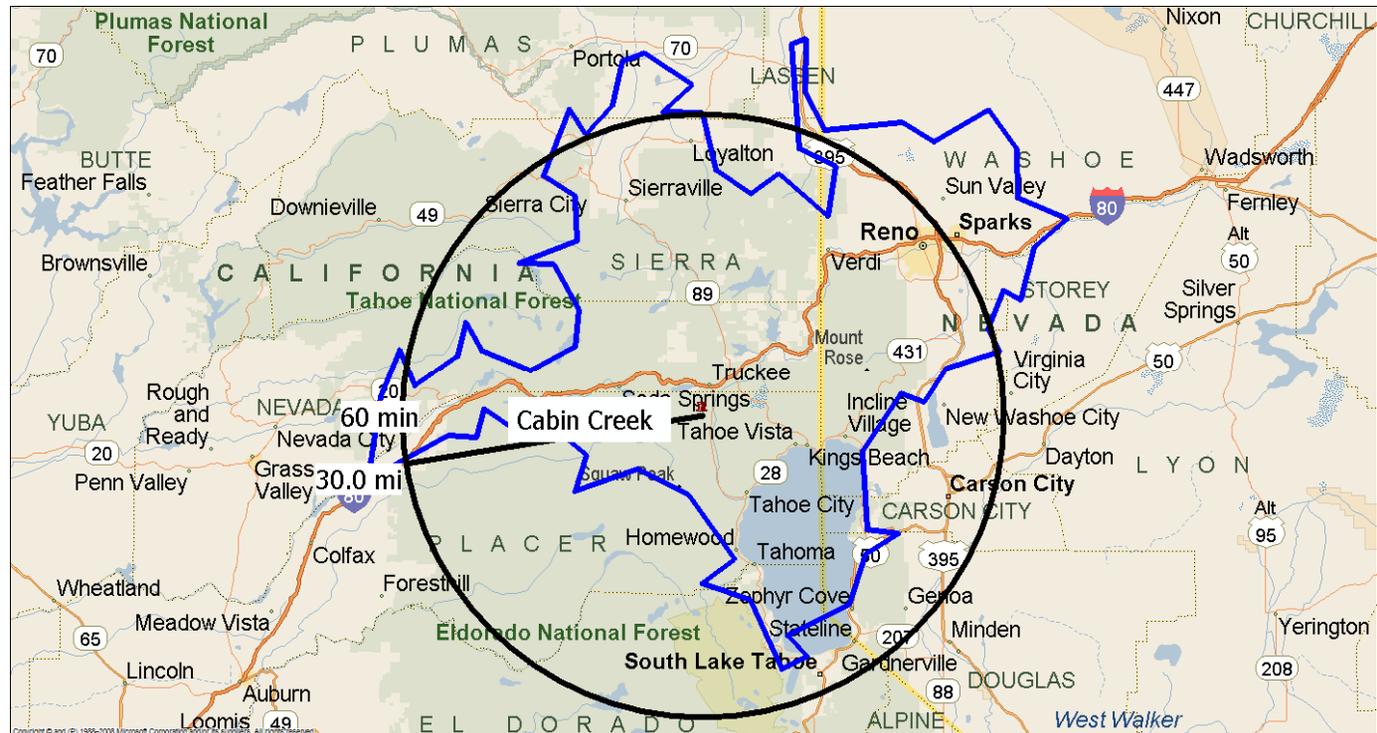
Is there enough material? **Yes**, Study shows over 112k BDT's of material within 30 miles
– current demand 40k

How much material is needed for Cabin Creek?

Up to 17k BDT

How will long term material be acquired?

MSA with USFS



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



Principal Technology Chosen

Gasification

Two 1MW Gasification units



Gasification Unit
(Nexterra)

Creates Biochar

Creates Syngas

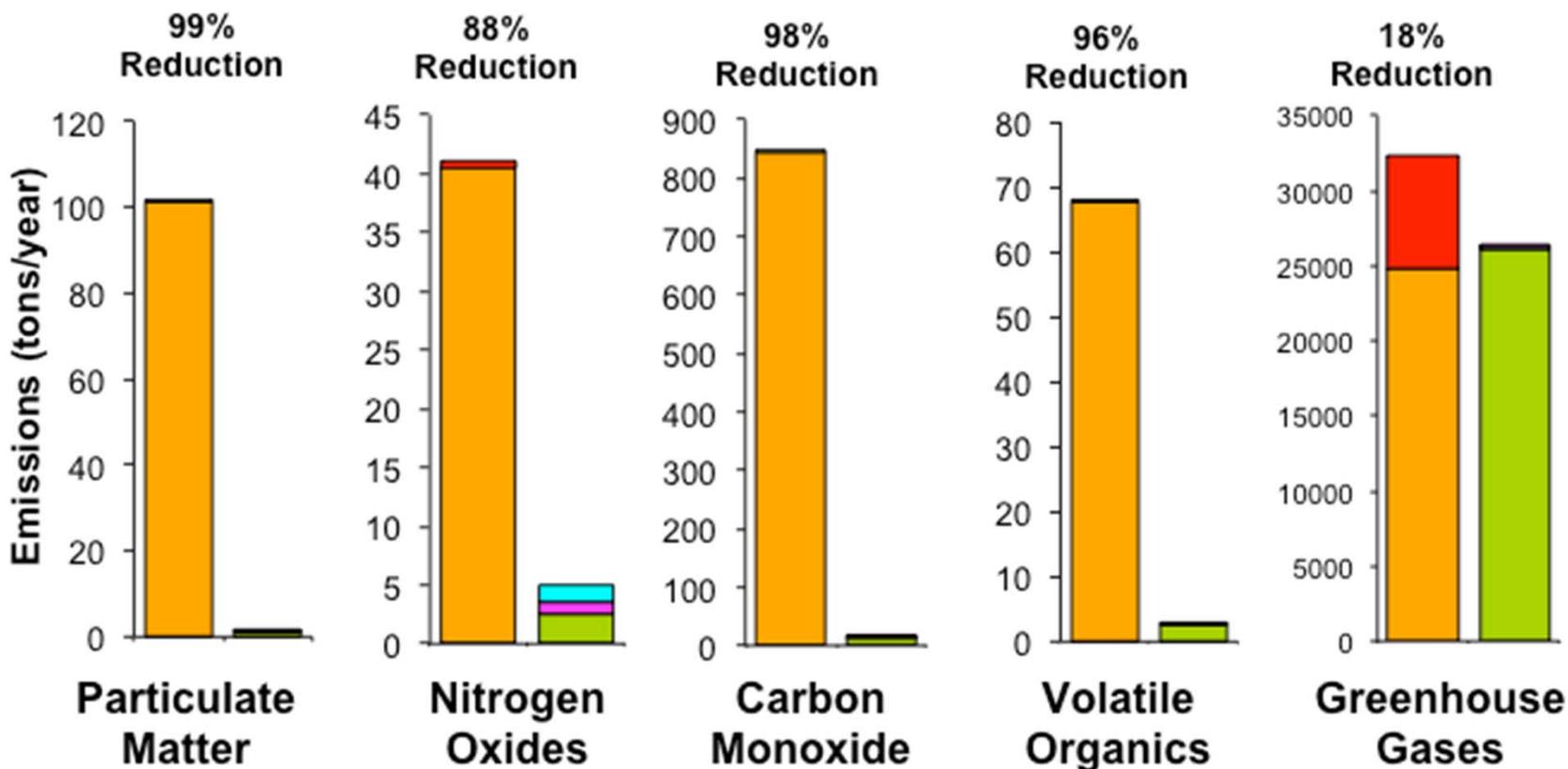
Creates Electricity



Internal Combustion Engine
Coupled with a Generator
(GE Jenbacher)



Air Pollutant Emissions Comparison





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"



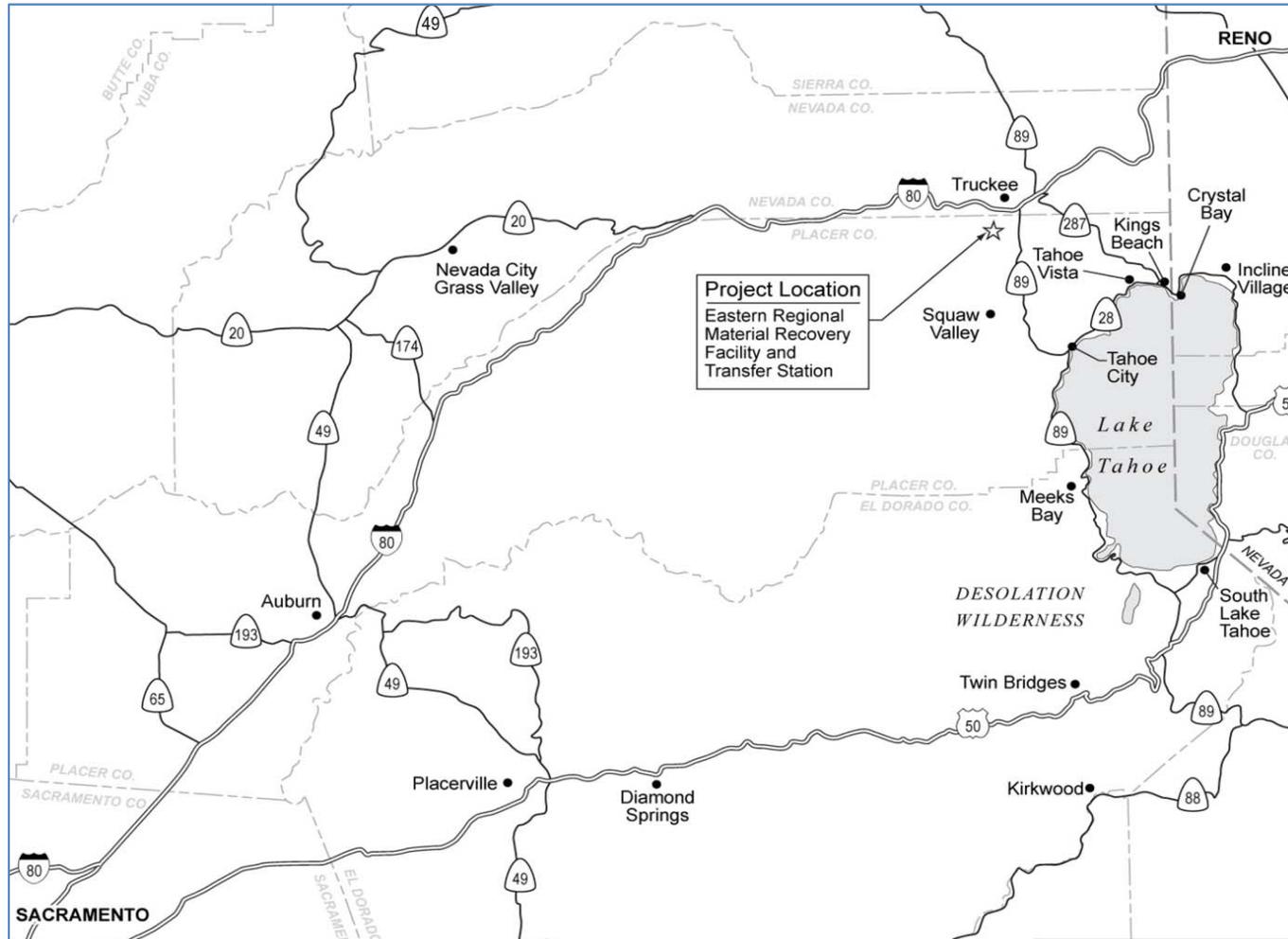


Facility Attributes

- **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**
- **5 month on-site stockpile/supply (approximately an acre)**
- **Average 11 truckloads per day (25 during peak operations)**
- **Tied directly into local electricity grid using existing transmission lines**
- **Reducing reliance on Fossil fuel (replacing mostly coal based energy)**



Vicinity Map – Cabin Creek





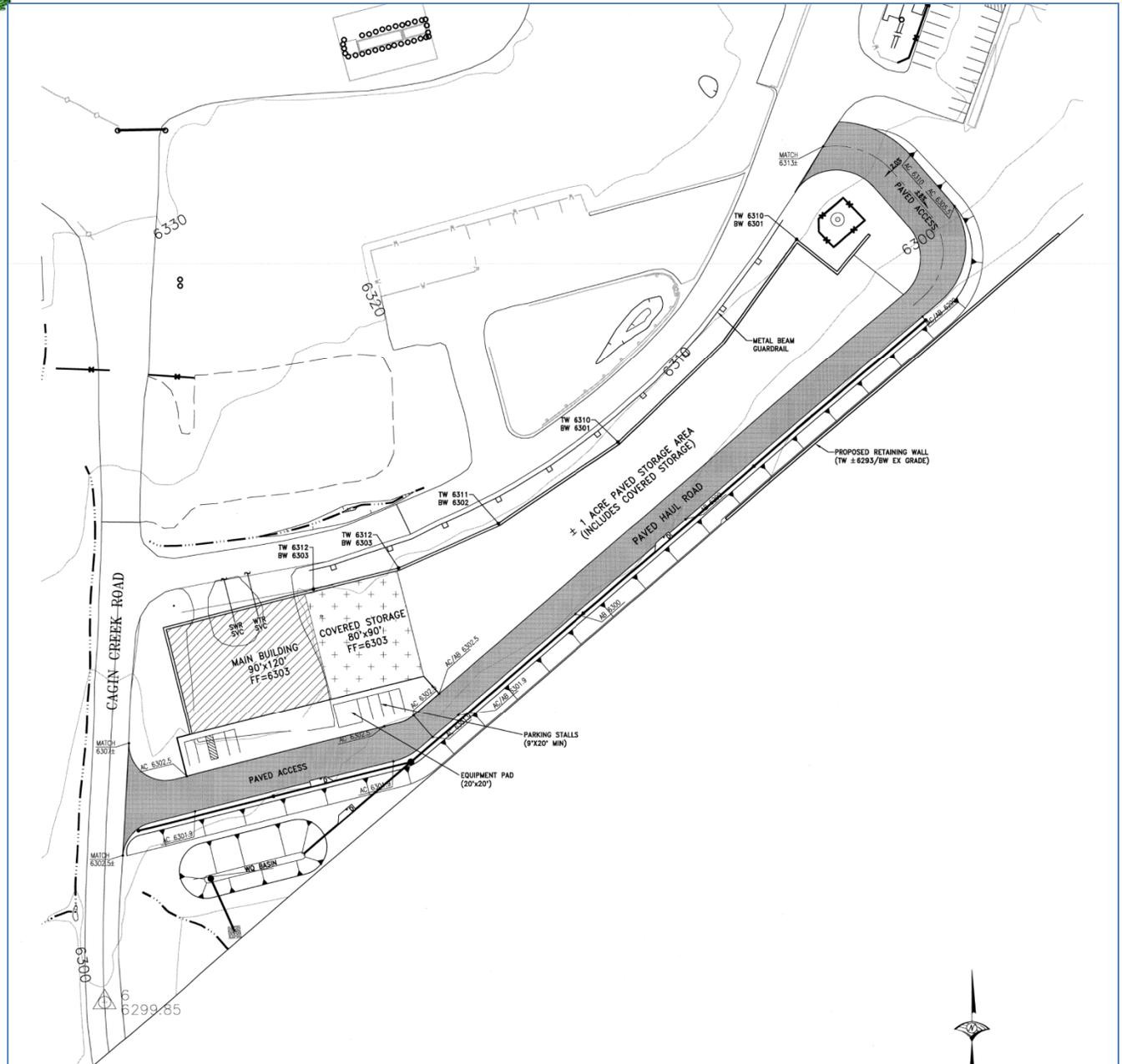
Cabin Creek General Area





Cabin Creek

Site Map





What Does the Facility Look Like?



VIEWPOINT 1 VISUAL SIMULATION

CABIN CREEK BIO MASS FACILITY
PLACER COUNTY, CALIFORNIA


WOOD ROGERS
DEVELOPING INNOVATIVE DESIGN SOLUTIONS
3301 C Street, Bldg. 100-B Tel: 916.341.7760
Sacramento, CA 95816 Fax: 916.341.7767



What is the rest of the Process to Build ?

- Joint Environmental Document:
 - CEQA: EIR Lead agency = Placer County, NEPA: EA Lead agency = DOE
 - “After implementation of the proposed mitigation measures, all of the adverse effects associated with the proposed project would be **reduced to less-than-significant level.**”
- Present Project and FEIR to Planning Commission: Dec 2012
 - Conditional Use Permit
- Present to PCAPCD: Jan 2013
 - Authority to Construct/Permit to Operate
- Investors decision for Construction: Spring 2013
 - Site prepared summer through fall 2013
 - Accepting material summer through fall 2014
 - Facility could be “on-line” Jan 2015



Questions/Comments

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

