

**EL DORADO COUNTY  
BOARD OF SUPERVISORS  
AGENDA TRANSMITTAL  
Meeting of November 14, 2006**

**AGENDA TITLE: Presentation by Placer County Project Manager, Brett Storey, on Biomass and Fuels Reduction for Fire Prevention**

**DEPARTMENT: Board of Supervisors**

**DATE: 11.06.06**

**CAO USE ONLY**

**CONTACT: Supervisor Norma Santiago**

**PHONE: 621-6577**

**DEPARTMENT SUMMARY AND REQUESTED BOARD ACTION:**

Placer County has begun to develop a program to reduce the threat of catastrophic wildfires and promote the utilization of woody biomass. An outline of how they have started, why it is important and where they see this leading to assist in protecting the communities in Placer County along with a listing of current projects underway with projected demonstrations and time lines will be presented.

**No Action Required.**

**CAO RECOMMENDATION:**

**Financial impact? ( ) Yes ( ) No**

**Funding Source: ( ) Gen Fund ( ) Other**

**BUDGET SUMMARY:**

Total Est. Cost       \$ \_\_\_\_\_  
**Funding**  
 Budgeted                       \$ \_\_\_\_\_  
 New Funding               \$ \_\_\_\_\_  
 Savings\*                   \$ \_\_\_\_\_  
 Other                         \$ \_\_\_\_\_  
 Total Funding Available     \$ \_\_\_\_\_  
 Change in Net County Cost   \$ \_\_\_\_\_

**CAO Office Use Only:**

415's Vote Req'd.                       ( ) Yes ( ) No  
 Change in Policy                       ( ) Yes       ( ) No  
 New Personnel                         ( ) Yes ( ) No

**CONCURRENCES:**

Risk Management  
 County Counsel  
 Other

\* Explain

**BOARD ACTIONS:**

**Vote: Unanimous \_\_\_\_\_ Or**

**I hereby certify that this is a true and correct copy of an action taken and entered into the minutes of the Board of Supervisors.**

**Ayes:**

**Date:**

**Noes:**

**Attest: CINDY KECK, Board of Supervisors Clerk**

**Abstentions:**

**By:**

**Absent:**

Rev. 7/96 j:\agendalwin96



***Wildfire Protection/Biomass Program  
for Placer County***

**Presented to El Dorado County  
Board of Supervisors**



***Brett Storey, Placer County Biomass Program Manager  
(530) 886-4651 [bstorey@placer.ca.gov](mailto:bstorey@placer.ca.gov)***



## ***Wildfire Protection/Biomass Program for Placer County***

### ***Vision***

Maintain a Healthy Forest to Cultivate Healthy Communities

### ***Mission Statements***

Placer County will be proactive in reducing the threat of catastrophic wildfires

Placer County will provide collaborative leadership in the field of Biomass  
Utilization





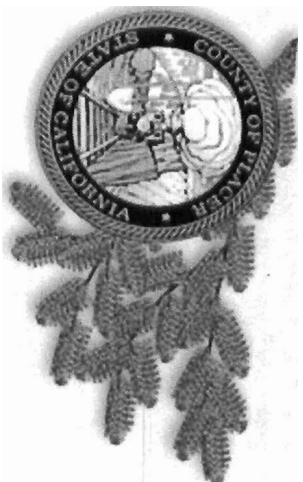
# ***Placer County Wildfire Protection/Biomass Concerns***

Current Tools not adequate to address scope of the problem

- More tons (BDT) on the ground that can currently be treated annually by traditional methods (2% – 10% treated)
- Growth of forest (4% added each year)
- Even with more treatment, what can we do with the biomass ?

- **Need to Increase Biomass utilization**

- Desire to Add potential new tools
  - Change in Land Management Treatments (support USFS)  
Bio-energy (heat, electricity, fuel)
  - Bio-based products
- Challenges
  - Air Quality regulations
  - Economics



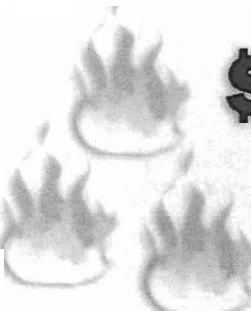
# **Air Quality Comparison (Relative Emissions)**

Note: Other emissions not included are: Transport and firefighting related; localized emissions import from fuel processing plant; fugitive dust after burns; emissions from forest decay.

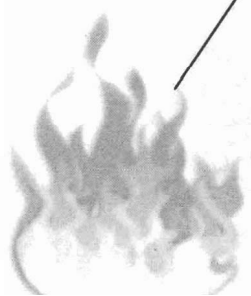
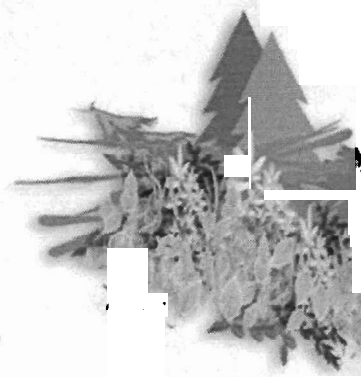


# Biomass Emission / Economic Process Model

Prescribed In-Forest Burn

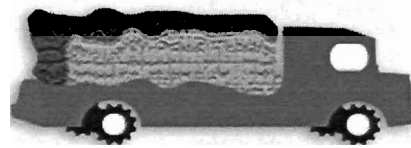


Air Pollution / Emissions from open burning



Catastrophic Wildfire

Biomass/Forest Fuel Loads



Biomass harvest

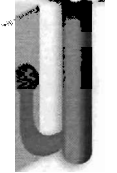
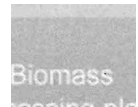
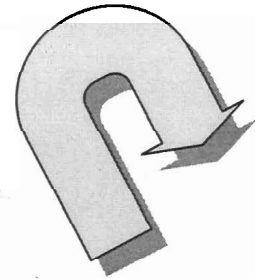
Emissions from fuel-processing plant

Relative Emissions Reduction

Possible Offsets/Credits?  
(Real, Quantifiable, Surplus, Enforceable, Permanent)

## Benefits of Biomass Use

- ✓Energy production
- ✓Reduces air emissions
- ✓Displaces need for fossil fuel usage
- ✓Reduces Greenhouse gas burden
- ✓Reduces landfill burden
- ✓Probable Water Quality Enhancements
- ✓Likely forest health improvements & recreation preservation
- ✓Reduce Public Health Burdens from Smoke
- ✓Probable lower future fire suppression costs



- ✓Bio Refinery
- ✓CoGen
- ✓Gasifier
- ✓Lumbermill
- ✓Other

## Products

- ✓Energy Products
- ✓Fuel (liquid, gas)
- ✓Electricity
- ✓Heat
- ✓Lumber Products





## ***Placer County Promotes Biomass Utilization***

**Comprehensive Vision – Board of Supervisors  
Discretionary County & federal funding on-going**

**Local/State/Federal Government collaboration**

**Rapid growth/high property values**

**Large Forested areas (549,00 acres)**

**Major fires since 2001 (Gap, Ponderosa, Star, Ralston – 30,000 acres**

**Poor Air Quality (Ozone Non-Attainment Area)**

**Developing Strategic Plan for research, program definition, partnerships,  
technology demonstrations, funding solutions**

**Plans aligned with President's and Governor's Energy Policy**



## ***Woody Biomass Presentations for Placer County***

- **Tahoe Forum**
- **Federal Woody Biomass Working Group**
- **US Assistant Secretary of Interior – Lynn Scarlet**
- **California Energy Commissioner – Jim Boyd**
- **California Secretary of Resources – Mike Chrisman**
- **Yolo County**
- **Federal Wildland Fire Leadership Council**
- **Tahoe Regional Planning Agency**
- **California EPA/Senator Feinstein Rep**
- ☐ **El Dorado County BOS (Nov)**
- ☐ **California State Senator Dave Cox (Dec)**
- ☐ **Regional Council of Rural Counties (07)**





# Biomass *Getting Started*

## – Funding

- Secure Rural Schools & Community Self-Determination Act of 2000
  - Title III
  - Placer County began in 2005, then increased in 2006

## Federal, State, Local

- Grants available
- Agency collaboration key to long term
- Elected officials

## – Commitment

Biomass Policy Team

Program Manager

Staff

County on-going funding required

Interagency invaluable



## Placer County Biomass Organization/Plans

- Team Organization
  - Working group Engaged
    - Biomass, Forestry, Fire Professionals, Legislative, Air Pollution Control, Project Management
  - Coalition being built
    - Universities, Environmental groups, Conservancies
    - Federal, State and County government & Agencies
    - Business interests (government, schools, recycling & alternative power/fuel)
- Biomass Utilization Strategic Plan Development
  - Draft Plan in 2006 (3 phase effort)
    - I) Forest Protection& Biomass collection development
    - II) Bio-energy Project Development (Proof of Concepts)
    - III) Biomass Commerce Integration



## ***Current Placer County Wildfire Protection/Biomass Projects***

- ✓ Wildfire Protection/Biomass Strategic Plan (Dec 2006)
- ✓ Fire Mitigation Coordinator (On-Board)
- ✓ Annual Defensible Space Inspections Program (Ongoing)
- ✓ Shaded Fuel Break Maintenance (Ongoing)
- ✓ Biomass Community Box Program (Spring 2007)
- ✓ CROP Analysis (On Contract)
- ✓ RAWs Project (Demo Fall 2007    purchase summer 2007)



## 2006 Tahoe Basin

### Biomass Removal Program

Granlibakken & Chinquapin

Private & Federal Funding

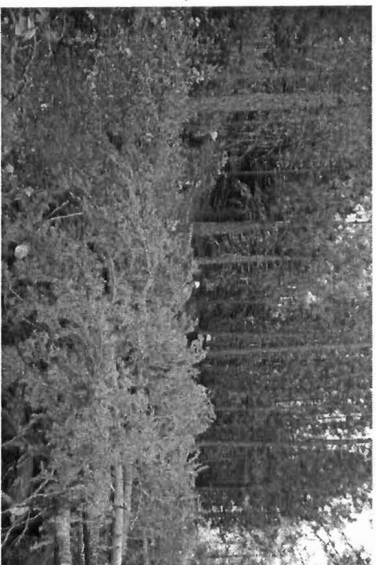
The Nevada Fire Safe Council



Cost of clearing  
& shredding slash: \$30,000



Firewood:  
Free to the Public





# 2006 Tahoe Basin Biomass Removal Program Granlibakken & Chinquapin

*Private & Federal Funding*

The Nevada Fire Safe Council



*Cost of transporting biomass \$3,000*





# **2006 Tahoe Basin Biomass Removal Program Granlibakken & Chinquapin**

*Private & Federal Funding*

**The  
Nevada Fire Safe Council**

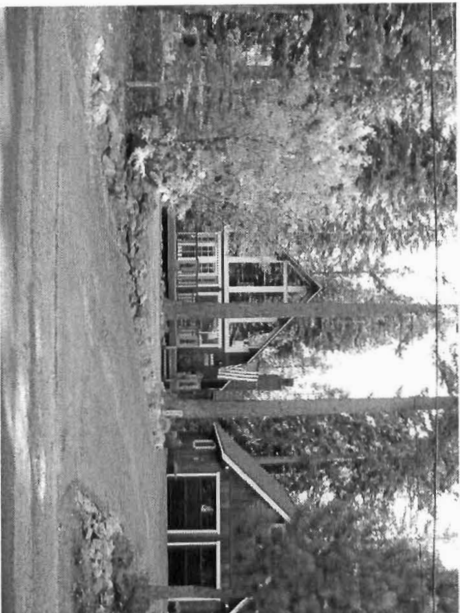


*Price of working together: \$0*



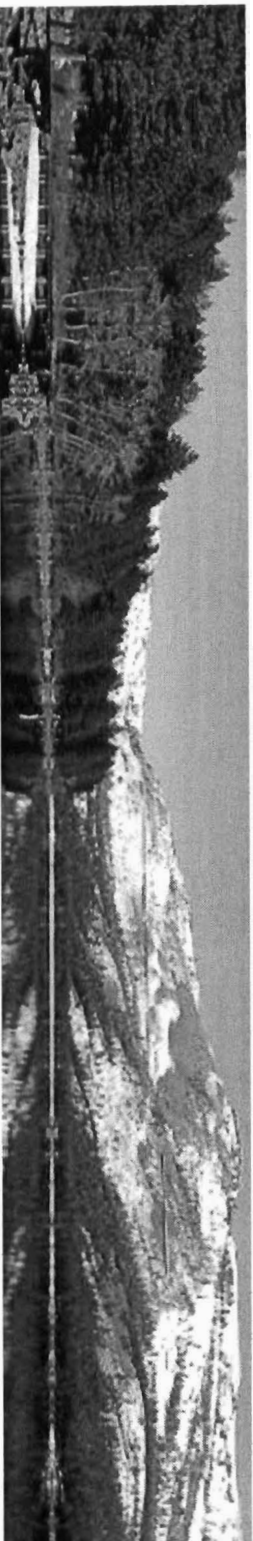
The Nevada Fire Safe Council

# 2006 Tahoe Basin Biomass Removal Program



*Protecting Communities  
&  
Creating Clean Energy:*

*Priceless*





# ***Projected Placer County Wildfire Protection/Biomass Projects***

- **Wildfire Protection**
  - Full time Fire Mitigation Coordinator
  - Mechanical mastication funding
  - More Shaded fuel breaks/Increased Forest Thinning
  - Increased biomass removal programs/equipment
- **Biomass Utilization**
  - Air quality regulation/measures development
  - Heating/electrical County facility in Tahoe
  - Bio fuel fermentation (UC Davis) research at Cabin Creek
  - Biomass to alcohol program at Valley MRF site
  - Viable High School heating facility
- **Tahoe Stewardship Program**