

Can Forests Meet Our Energy Needs?

The Future of Forest Biomass in Colorado

Craig Jones

Biomass Specialist

Biomass Utilization Project Coordinator

Colorado State Forest Service

Colorado State Parks

303 443-2088

craigjo@lamar.colostate.edu

Forest Biomass in Colorado

The Nature of the Resource

Supply

Do We Have it or Not?

Gross Supply vs. Available Supply

- ❖ **The Billion Ton Report**
- ❖ **Forest Inventory Analysis (FIA)**
- ❖ **CROP Study**
- ❖ **Biomass Opportunities Along the Front Range**
- ❖ **State-Wide Supply Study/Project Supply Plans**

Forest Biomass in Colorado

The Nature of the Resource

Factors Relating to Supply Availability

- **Low-Value Nature of the Material**
- **Lack of Traditional Forest Industry**
 - **Value-Added Products Offset Lower-Value Material**
- **Infrastructure**
 - **Collection and Transportation Networks**
- **Access/Terrain/Road Types/Ownership & Status**
 - **Roadless, Wilderness, RMNP, Administrative Closure**

Forest Biomass in Colorado

The Nature of the Resource

Biomass Utilization Opportunities

- **Facility Heating**
- **Bio-Based Products**
- **Biofuels/Biorefining**
- **Small-Scale/Small Diameter Products**
 - **Small Logs, Post and Poles, Firewood**
 - **Compost/Mulch, Specialty Products**

The KEY in Colorado

Scalable and Sustainable Industry

Forest Biomass in Colorado

The Nature of the Resource

Working Partnership Grant



Biomass Collection, Processing and Marketing

- Larimer County
- Boulder County
- Gilpin County
- Clear Creek County
- Jefferson County



Forest Biomass in Colorado

The Nature of the Resource

Owner	USFS	CSFS (Pvt.)	St Parks	Other
Acres	4500 ac.	3425 ac.	255 ac.	175 ac.
(2 Yr. Avg. = 8,355 Acres)				

2008	5500 ac.	3285 ac.	530 ac.	300 ac.
(Target = 9,615 Acres)				

9,615 acres to be treated in 2008

80% of these acres will NOT involve product removal = 7,692 acres

7,692 acres will equate to **123,072 tons of biomass NOT Utilized**; This is a conservative estimate; The range is 98,458 – 230,760 tons.

For the 5-County Project Area

Forest Biomass in Colorado

The Nature of the Resource

Project Goal

Significantly increase the amount of small-diameter material/biomass FROM the Forest TO the Market Place

- **Collection Sites/Sort yards**
- **Community Collection**
- **Value-Added Processing**
- **Marketing to Local Businesses**
- **Recycling as Part of the Strategy**
- **Sharing the Costs of Utilization**
 - **Forestry Professionals, Communities, Private Sector, Broad-Based Funding**

This Represents a Vertically Integrated Strategy