



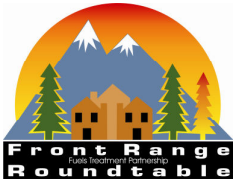
Front Range Roundtable

Biomass Utilization & Slash Sites Team
Talking Points
2010

Facilitated by:

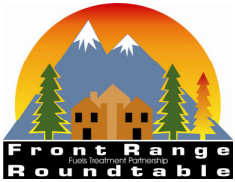


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BUSS Team Members

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Richard Dziomba	Blue Knight Group		
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Jonas Feinstein	Natural Resources Conservation Service		State Forester
Susan Ford	US Forest Service-Region 2	Community Forestry and Wood to Energy	State & Private Forestry Branch Chief
Andy Hough	Douglas County	Open Space & Natural Resources	Environmental Resources Coordinator
Craig Jones	Colorado State Forest Service	Peak to Peak Wood	Biomass Specialist
Dan Len	US Forest Service, ARP	Forest Management	Vegation Program Manager
Sara Mayben	US Forest Service, PSICC	Pike & San Isabel National Forests, Cimarron & Comanche National Grasslands	Renewable Resources Staff Officer
Bret Roller	Conifer Biomass		
Irene Shonle	Colorado State University	Gilpin County	Extension Agent
Mike Smith	Colorado Renewable Resource Cooperative		
Carl Spaulding	Colorado Timber Industry Association		President
Matt Trummer	RM Technology		
Jeff Underhill	US Forest Service, PSICC	Pike and San Isabel National Forests Cimarron & Comanche National Grasslands	Timber Program Manager
Wade Yates	Jefferson County	County Administrator's Office	Special Projects Coordinator



Front Range Biomass Utilization Talking Points

- **Context:**

- Current forest conditions and fire risk pose threats to Counties' people, water, infrastructure, and other resources. Biomass utilization is important to Counties because the alternative to WBU is fire, either planned or not.
- The timber industry in Colorado is no longer self sustaining. Think of woody biomass as a byproduct of forest management, not the main product. Think of the Colorado timber industry and its assets—mills, equipment, skills—are forest management tools and resources, not wood producers.

- **Supply Issues:** Accelerated treatments of forests infected by Mountain Pine Beetle are creating a bubble of supply that may not be sustainable long term. Local industry must be sized to scale with future variability and likely reduction in biomass supply.

- **Demand Issues:**

- Colorado's bioenergy solution is small-scale, as in the kilowatts, not megawatts. We need "rightsizing" of bioenergy opportunities: institutional bioheating, utility co-firing, and small-scale, portable biopower→ Nothing more than 1 MW of biopower
- Gilpin County's Roads & Bridges building needs approximately 400 tons of biomass per year which can be produced from treating 10-15 acres
- Boulder County's Open Space building needs approximately 750 tons of biomass per year which can be produced from treating 20-30 acres (3 buildings totaling 110,000 square feet, plans and capacity to heat an additional 90,000 square feet)
- Jefferson County has plans to build 4 more public buildings in the next 6 years—we hope bioheating feasibility will be assessed.
- Counties can be the largest owner of public buildings in an area; school boards are likely the second largest public building owners. Every newly constructed public building should have had bioheating considered. Even if a municipality cannot invest in bioenergy for new construction, it should still build enough flexibility into the building's design so that bioenergy may be added later, for example if competing fuel prices rise dramatically, making bioenergy more economically feasible (e.g., plan a future spot for a bioheating boiler, a place to drop off chips, and ample turnaround for biomass delivery trucks)

- **Transportation Issues:** Myth of the 50 mile radius: some higher value products allow producers to buy wood from longer haul distances. Road use restrictions may add time and cost to removing biomass. Conflicts regarding frequency and weight of trucks must be resolved.

- **Storage Issues:**

- Need sort yards, not just slash sites—need operations with consideration for woody biomass utilization (e.g., co-firing is a year round use, but bioheating more seasonal)
- If counties own the most optimal sites for a slash site in an area, they can consider bidding out management to private business (Jefferson County has spent approximately \$60,000 per year on slash site operations).
- Consider timing of treatments to avoid the contractor's having to move the biomass more than once; when developing a project plan, consult the contractor on where biomass is intended and when the optimal delivery times are to reduce treatment costs



Status of Front Range Biomass Utilization

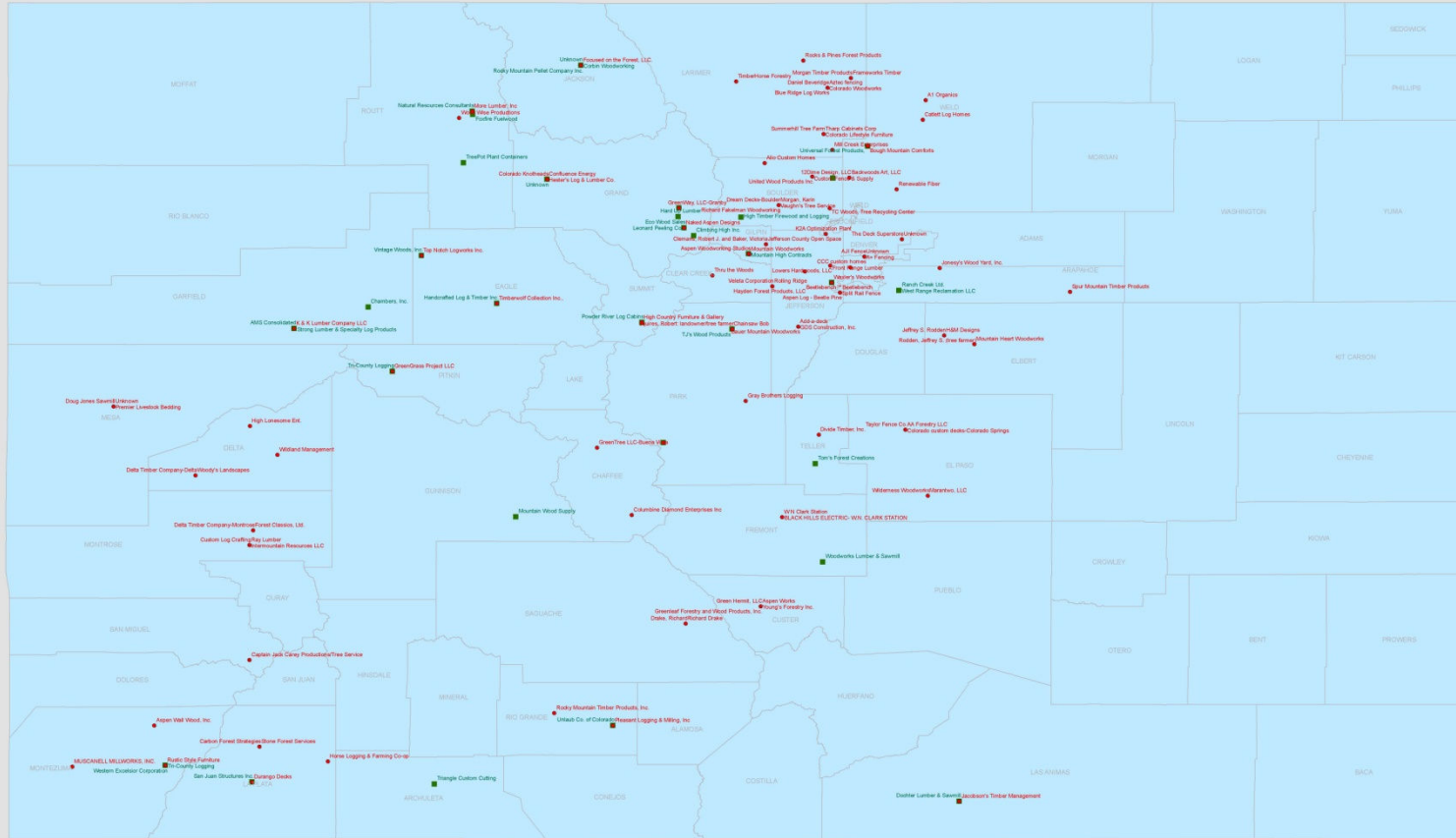
County	Slash Sites ¹	Sort Yards	Biomass Processing Facilities	Biomass Consumption Facilities
Boulder	1	1	13	1 current (County Open Space building) 2 planned (County Jail, Cemex)
Clear Creek	1		3 New: Silver Plume pellet plant (EEP)	
Douglas	2		1	
El Paso	1		5	2 planned • Colorado Springs Utilities co-firing • USAFA (studying bioheating)
Gilpin	1		5	1 current (County Road & Bridges building)
Grand	1		11	
Jefferson	6		16	1 in development (NREL)
Larimer	7		16	2 current: 1. Colorado State University (what building?) 2. Colorado State Forest Service Fire Building
Park	1	1. Wood Village, Hartsel (private) 2. Planned: Fairplay	8	2 current 1. South Park K-12 campus: wood chips 2. Fairplay Rec center: wood pellets (Confluence) 1 Planned: County Offices and Jail: feasibility study underway
Teller	1		1	
Total Front Range	23	1	80 (out of ~158 in Colorado, 21 of which don't have known addresses)	6 current, 3 planned?

1. As of September 2009 (Note: There are other places where people take slash but they are not advertised as slash sites or are drop-off sites for other material, etc.)



Draft Map of Biomass Utilization Destinations

BUSS Biomass Facility



- BUSS_Biomass_Facility_Physical_Address
- BUSS Biomass Facility Mailing Address

Source: BUSS team analysis

Addresses taken from:
Roundtable BUSS biomass users (consolidated) 031810 gb v3.xlsx Montrose 81403 zip converted to 81401
Non-Colorado address not shown
3/18/10 dme