

Forest Service Programs to Support Woody Biomass Utilization

Biomass Workshop and Field Tour
“From Feedstock to Product”
September 19, 2007
Bruce Goines

USDA-FS



Forest Service Programs to Support Woody Biomass Utilization

- Overview of two programs providing technical and financial assistance to WBU Projects
- Site New Biomass Facilities in CA:
FS/CARC&D Program
- Develop in woods or value added manufacturing infrastructure: FS
National WBU Program



FS/California Assn of RC&D Areas New Biomass Facility Planning

- Engineering assistance to facilities considering replacing existing heating systems, installing new systems that will use woody biomass
- Three engineering firms specializing in developing biomass conversion projects are available to help assess feasibility of potential biomass heat/cogeneration facility installations in CA



FS/California Assn of RC&D Areas- Technical Assistance

- Firms are available to assess
 - Economic viability
 - Appropriate Technology
 - Resource availability
 - Advance engineering
- Opportunity for public facilities, conservation camps, local schools, business with heating needs to receive engineering assistance
- Up to \$25,000 of professional engineering services per site



Process and Timeline

- First round outreach complete
- 6 Sites were selected last week to receive assistance:
 - Alturas, Ft Bragg, Parlin Forks, Pioneer, Lake Tahoe, Etna
- Ongoing Outreach to additional site hosts
- Contact your local RC&D for more details



Forest Service Woody Biomass Grants Program

- \$5.0 million/year available Nationally- 5 year program
- \$50,000 - \$250,000 grants for projects that will help reduce cost of hazardous fuels reduction projects on National Forest lands



Examples of Funded Projects

- **In Woods Equipment**
 - Log Forwarder, Feller buncher, Chippers, Grinders, Loaders
- **Value added processing lines :**
 - Post and Rail Processor
 - Pressure Treatment Cylinder,
 - Log Shavers,
 - Doweling machine,
 - Laminating equipment,
 - Edger,
 - Wood fired Dry Kiln
- **Bioenergy Facilities**
 - Construct 1MW Cogeneration facility
 - Install Biomass Fueled Chip Drier
 - Turbine Upgrade



Woody Biomass Utilization Grants

Purpose

- Retain or expand in woods and value added wood products processing infrastructure
- Improve markets for byproducts of hazardous fuels reduction activities
- Provide incentives for business to diversify into value added product lines
- Institute projects aimed at removing economic and market barriers



2008 National Woody Biomass Utilization Grant

- Timeline:



RFP Sept 2007

Pre-application due November 2, 2007

Final-application due February 1, 2008

- Advice and assistance:

Gareth Mayhead (UC Berkeley)

510-665-3662

garethmayhead@nature.berkeley.edu

Bruce Goines (USDA FS Region 5)

707-562-8910 bgoines@fs.fed.us

Larry Swan (USDA FS Region 6)

541 891-7752 lswan01@fs.fed.us

2008 National Woody Biomass Utilization Grant

-  Further info: <http://www.fpl.fs.fed.us/tmu>

Forest Service Woody Biomass Grants

- Deadlines: November 2, 2007 and February 1, 2008
- Announcement in Federal Register in September
- Grants to for-profit and non-profit
- \$50,000 - \$250,000
- Details of applying: www.fpl.fs.fed.us/tmu
under biomass grant



Criteria

- Tangible and intangible benefits to national forest lands (40%)
- Technical feasibility (25%)
- Financial feasibility (25%)
- Qualifications (10%)

For more Information

- Susan L LeVan-Green-levan@fs.fed.us
 - 608-231-9518
 - www.fpl.fs.fed.us/tmu (under biomass grants)
- Bruce Goines- bgoines@fs.fed.us
 - 510-562-8910
- Gareth Mayhead-
garethmayhead@nature.berkeley.edu
 - 510-665-3662
- Larry Swan- lswan01@fs.fed.us
 - 541-883-6708



2008 National Woody Biomass Utilization Grant

- USDA Forest Service, Forest Products Laboratory, Technology Marketing Unit
- **Objective:**
“help improve forest restoration activities by using and creating markets for small-diameter material and low-valued trees removed from hazardous fuel reduction activities”
- **Goals:**
 - Reduce management costs
 - Create incentives for biomass use
 - Start projects that remove economic and market barriers to biomass utilization
- Must treat FS land
- Need letter of support from NFS



2008 National Woody Biomass Utilization Grant

- **Who is eligible to apply?**

State, local, and Tribal governments, school districts, communities, non-profit organizations, businesses, companies, corporations, or special purpose districts, e.g., public utilities districts, fire districts, conservation districts, or ports

- **What?**

Equipment

- **Match funding required:**

20%

- **Grant amount:**

\$50,000-\$250,000



Eligibility

- Non-profits
- Local/state governments
- Tribes
- Businesses, companies, corporations (for profit)
- Special purpose districts ie. PUD, port, fire districts, conservation districts
- Inclusive of adjacent lands, must have NFS component



Impact on NFS hazardous fuel reduction projects (40%)

- Class condition class (higher classes have more weight)
- Documented work on nfs
- Direct, tangible benefits (acres, volumes, raw material values)
- Indirect, intangible benefits (air, water, socio-economic)



Technical Approach Work Plan (25%)

- Technical feasibility
- Adequacy and completeness of tasks
- Likelihood of meeting project objectives
- Reasonableness of time schedule
- Identified deliverables
- Timeliness



Intangible Benefits

- Removal of material hindered by smoke issues
- Reduced fire risk
- Improved protection of wildland urban interface areas
- Protection of sensitive watersheds



Financial feasibility (25%)

- Realistic budget and timeframe
- Thorough documentation of financials
- Cost share



Qualifications of applicant (10%)

- Past efforts
- Documentation of capabilities



Tangible Benefit Examples

- Project involves acquiring more efficient equipment, which allows lower unit costs per acre treated
- Business contractor can lower cost/acre bid with offset from higher value uses for material from hazardous fuel treatments
- Investment in wood processing facility provides outlet and revenues for material that previously was hauled to landfill, lopped and scattered, piled and burned, masticated or burned on site.