

United States Department of Agriculture



Office of
Tribal
Relations



Department of Interior, Energy & Agriculture Collaborative Biofacility Initiative

Faline Haven
Office of Tribal Relations
USDA Forest Service

fhaven@fs.fed.us

202-263-9396



Federal Land Management Agencies

PRESIDENT

Secretary of Interior

Secretary of Defense

Secretary of Agriculture

Secretary of Energy

Bureau of Land Management

Fish & Wildlife Service

National Park Service

Bureau of Indian Affairs

106 million ha

38 million ha

34 million ha

22 million ha

**FOREST SERVICE
Office of the Chief**

77 million ha

International Programs

**Research &
Development**

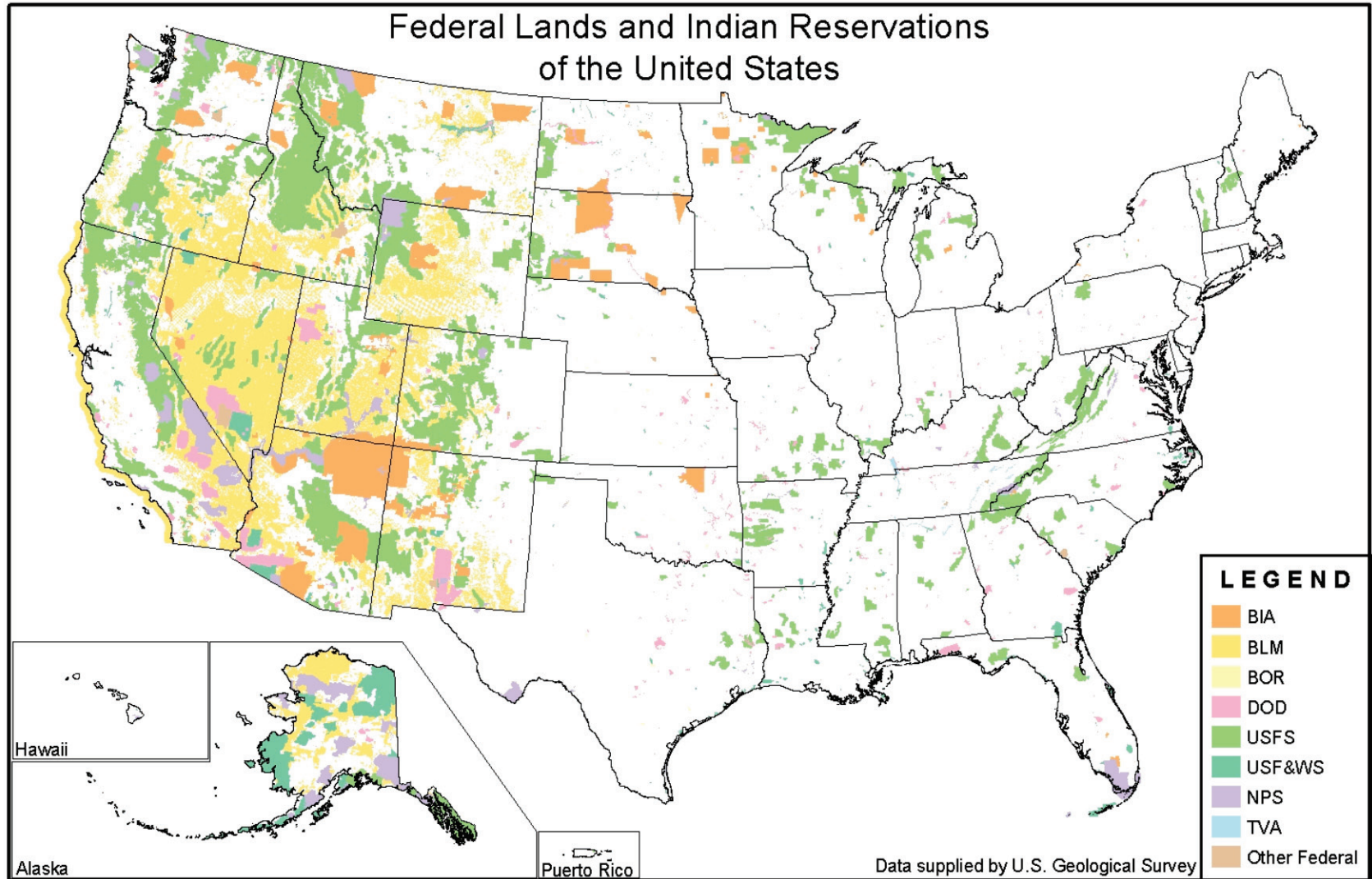
**State & Private
Forestry**

**National Forest
System**

The National Forests and Grasslands – 77 million hectares (8% of U.S. Land Area)



Ownership of Lands Managed by the Federal Government



Total Federal Lands = 283 million hectares (1/3 of US land base)

Forest Service/Tribal Relationship



“We envision a future where the Forest Service and Indian Tribes work collaboratively through government-to-government relationships to manage the resources entrusted to their care, a future where the Forest Service has the organizational structure, skills and policies to redeem our responsibilities in this partnership”.

The FS Tribal Relations Program

- Together, Tribes and Agencies – including the Forest Service – can accomplish projects and programs that affect positive change to the country's ecosystems, economies and social systems, especially those in Native America.



The Washington Office part of the Tribal Relations Program: OTR

- The Office of Tribal Relations is still new
- Key responsibility is national policy and direction
- The field offices are primarily responsible for relations with individual Tribes and regional or local issues
- Still a small staff, with four permanent positions filled

Tribal-FS Partnerships

Native American Forestry & Wildland Fire Small Business Training

- 2 Modules
- Forest Restoration
- Small Business Development



Center for First Americans Forestlands



**College of Menominee Nation, USDA Forest Service
Partnership**

**Mike Dockry, FS Liaison to the College of Menominee
715-799-5600 x 322 or mdockry@fs.fed.us**



Forest Health Protection Assistance



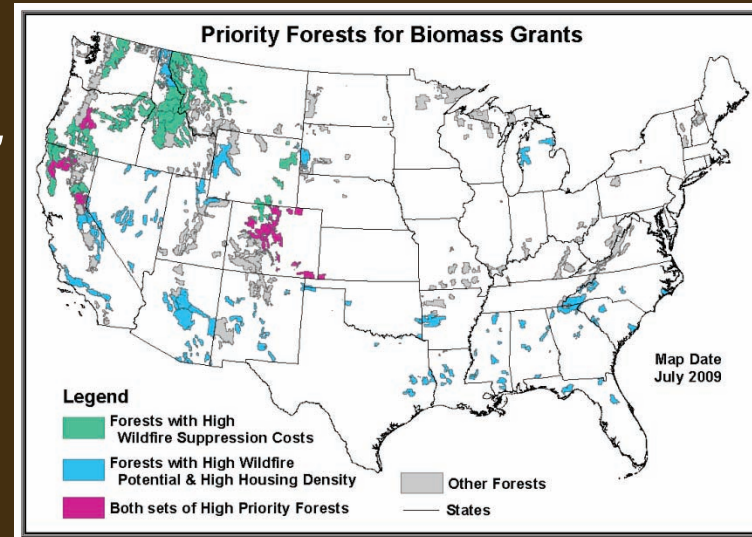
An example of an effective and valuable working relationship between the Tribes and the Forest Service, include the provision of technical assistance and funding devoted to forest health protection projects.

Forest Products Laboratory

<http://www.fpl.fs.fed.us/aboutus.html>

2010 Hazardous Fuels Woody Biomass Utilization Restoration Activities on All Priority Forestlands

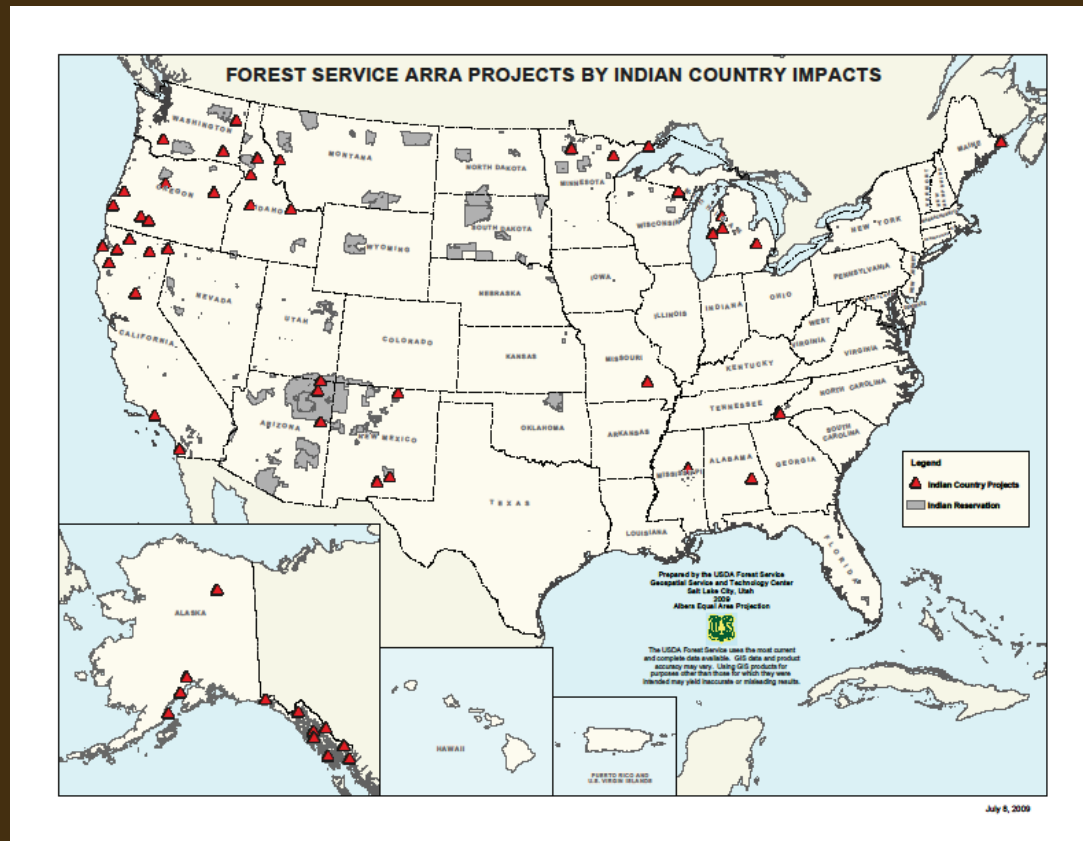
- To address the goals of Public Law 110-234, *Food, Conservation, and Energy Act of 2008, Rural Revitalization Technologies (7 U.S.C. 6601)*,
- Address the nationwide challenge in dealing with low-valued material removed from hazardous fuel reduction activities, restoration of insect and diseased conditions or catastrophic weather events.
- grant that will be not less than \$50,000 or more than \$350,000 each.
- funds are targeted to help communities, entrepreneurs, and others turn residues from forest restoration activities into marketable forest products and/or energy products.



Susan L. LeVan-Green,
Program Manager,
Technology Marketing Unit,
Forest Products
Laboratory. 608-231-9504
or slevan@fs.fed.us.

American Recovery & Reinvestment Act (ARRA)

- Wildland Fire Management (State and Private Lands)
 - \$25.6 million
 - Hazard Fuels Reduction
 - Biomass
 - Training & Crew Development
- Wildland Fire Management (Federal Lands)
 - \$90.4 million
- Capital Improvement and Maintenance (Federal Lands)
 - \$90.1 million



Ecosystem Services

www.fs.fed.us/ecosystemservices

...the benefits people obtain from ecosystems



Marketable

Non-Marketable

\$\$\$\$

\$\$\$

\$\$

\$

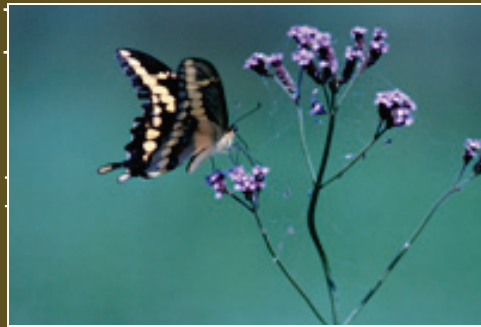
Priceless

3 categories of ecosystem services

Provisioning



Regulating



Cultural



DRIVERS of ECOSYSTEM DECLINE

climate change
increases in population, wealth
globalization
disconnect between people & nature
etc..

Management CHALLENGES

wildfire & extreme events
pests & invasives
loss of open space
water scarcity & decline
recreation pressures
etc..

Management OPPORTUNITIES

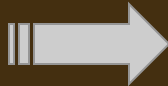
climate mitigation
new ecosystem markets
alternative energy
sustainable operations
collaboration; new partners
etc..

Ecosystem MANAGEMENT



restoration
fuels treatments
biomass utilization
demonstration projects
etc..

Ecosystem SERVICES protection & enhancement

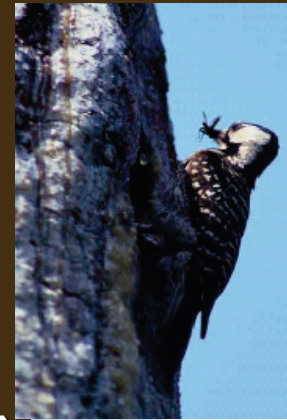
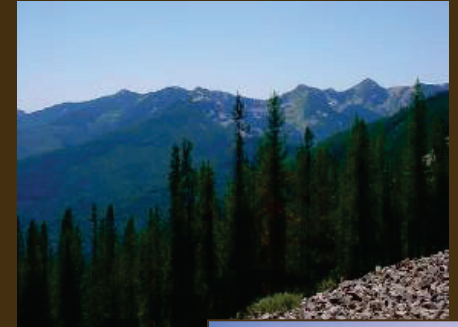


cleaner air and water
species diversity
climate adapted forests
flood control
cultural & educational values
etc..

An ECOSYSTEM SERVICES perspective...

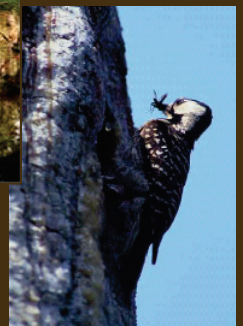
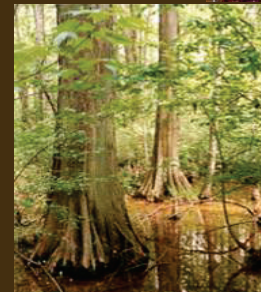
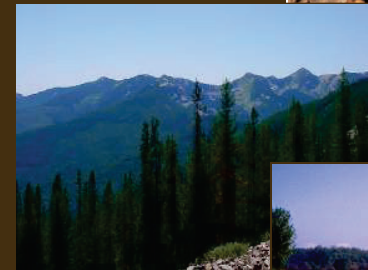
What services are currently marketable?

- Carbon sequestration
- Watershed services
 - Wetlands
 - Water quality
- Biodiversity (T&E Habitat)
- Renewable energy (bioenergy)



Markets for forest ecosystem services

- **Traditional markets**
 - Wood/Food Products
 - Recreation/Hunting leases
- **New emerging markets**
 - Renewable energy (bioenergy)
 - Carbon sequestration
 - Watershed services
 - Stream and Wetlands
 - Water quality
 - Biodiversity (T&E Habitat)
 - Avoided deforestation





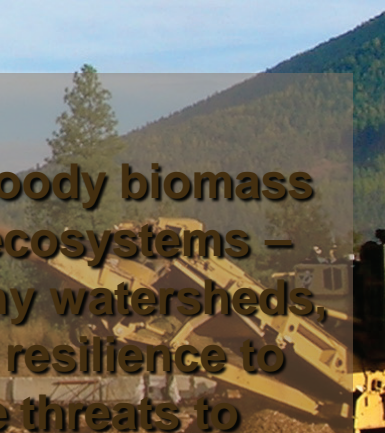
Federal Woody Biomass Working Group

- Providing technical and policy advice
- Serving as an information clearinghouse
- Overseeing research and development
- Coordinating, planning and encouraging woody biomass utilization
- Implementing the Woody Biomass MOU



Vision Statement

Ecologically and economically sustainable woody biomass utilization will result in more diverse forest ecosystems – characterized by native flora and fauna, healthy watersheds, better air quality, improved scenic qualities, resilience to natural disturbances, and reduced wildfire threats to communities – and provide an alternative waste management strategy contributing to rural economic vitality and national energy security



United States
Department of
Agriculture

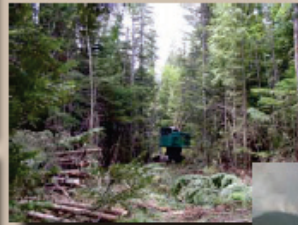
Forest Service

National Technology
& Development Program

2400—Forest Management
September 2007



WOODY BIOMASS UTILIZATION DESK GUIDE



http://www.forestsandrangelands.gov/Woody_Biomass/documents/biomass_deskguide.pdf

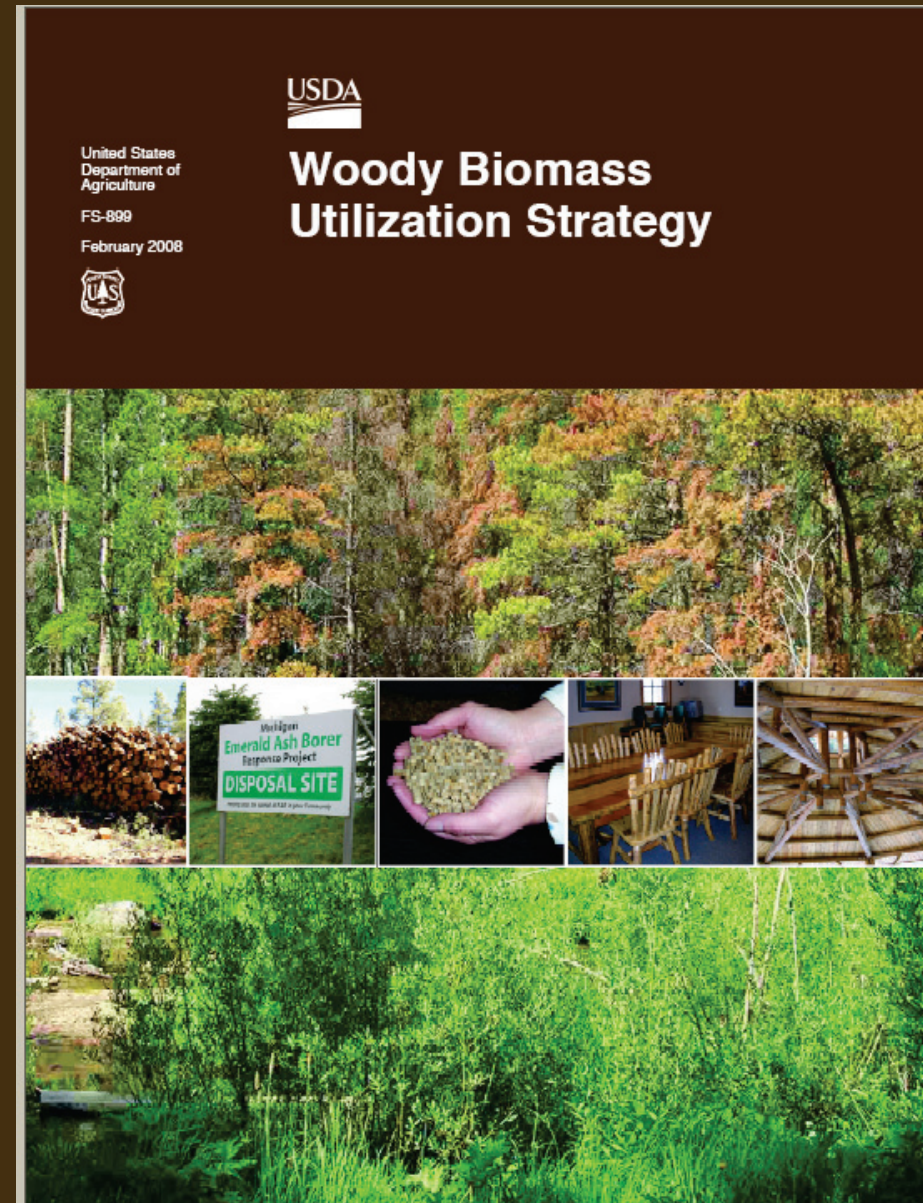
Strategy Goals

Goal 1: Identify and Build Partnerships Through Collaboration

Goal 2: Develop and Deploy the Needed Science and Technology

Goal 3: Help Develop New and Expanded Markets for Bioenergy and Biobased Products

Goal 4: Facilitate a Reliable and Sustainable Supply of Biomass



Interagency Biofacility Initiative



- Department of Interior
Bureau of Land Management
- Department of Energy
National Energy Technology
Laboratory (NETL) Federal
Energy Management
Program (FEMP)
- USDA Forest Service
- Tribes and States



DOI, USDA & DOE Collaboration Goals

USDA & DOI

- To transform woody biomass residues into a long-term revenue stream.
 - Reduce costs and need for on-site disposal (chipping, crushing, burning) or slash removal/landfilling.
 - important suppliers of a renewable energy resource for use by federal agencies and the general public.
- reduction of smoke, particulate matter and GHG emissions through the controlled use of biomass
- short- and long-term job creation benefits to the public.

DOE

- The work will advance FEMP's mission in assisting federal agencies in meeting their renewable energy mandates.
- American Recovery & Reinvestment Act funding for the preparation of the Feasibility Studies.

Bioenergy Facility Initiative

Deliverables

Feasibility Studies for each regional project

Studies will evaluate:

- Heat and power demand by site
- Woody Biomass residues by site
- Discussion of technologies used to convert woody biomass to heat and power with benefits and risks associated with each technology
- Discussion of contracting and financing options
- Descriptions of Roadmaps 1 and 2 and their respective objectives and benefits
- Discussion of how power is wheeled, and possibility for Power Purchase Agreements
- Recommendations on project development
- Proposed Task Order Lists
- Next steps in project development

Biomass Project Types

Roadmap 1

- For smaller projects where a site would use its own woody biomass resources to generate its own heat and/or power.
- Will use the Super Energy Savings Performance Contract, Super ESPC, as the contracting vehicle.
- Super ESPCSs utilize private sector financing for capitalization needs and provide guaranteed energy cost savings to the government agency for each year of the performance period.

Biomass Project Types

Roadmap 2

- larger biomass projects where the biomass resources exceed the heat and/or power demand of an individual site.
- one or multiple sites with excess biomass resources will be bundled to provide feedstock to a larger biomass facility.
- That facility may or may not be located on federal property.
- The heat and power needs of the participating sites would be addressed first with excess renewable electricity wheeled to other federal agencies and the public through Power Purchase Agreements.
- FEMP would assist in identifying potential buyers and in contract development with the local utility.

Project Sites

Agency	Region	No. of biomass resources sites in Region
Forest Service	1	2
Forest Service	2	21
Forest Service	3	5
Forest Service	4	3
Forest Service	5	3
Forest Service	6	3
Bureau of Land Management	Oregon	53
Yakama & Colville Tribes	Washington	5
Total Number of Projects	8	113

Project Schedule

- November 9, 2009 Biomass surveys sent to all F.S. and BLM sites
- November 24, 2009 Briefing to Woody Biomass Steering Committee
- December 18, 2009 Biomass surveys due from F. S., BLM & Tribal sites
- December , 2009 Data analysis begins
- January 30, 2010 Data analysis completed
- February 2010 Regional Office visits/briefings at 6 Forest Service Regional Offices, BLM Oregon Office, and Yakama Tribal Office. Regional and site officers to attend.
- March – April 2010 Site visits/briefings
- February – May 2010 Preliminary Task Order lists developed for each project; preliminary biomass plant site selections
- June 2010 Visits to all Forest Service Regional Offices, BLM Oregon Office, Yakama Tribal Office to present, discuss, review, and adjust as necessary Task Order Lists.
- July – August 2010 Feasibility Studies finalized
- August 30, 2010 Feasibility Studies submitted for review to offices
- September 30, 2010 Finalized Feasibility Studies submitted

Nature is humanity's landlord....

*...and we have been getting
free rent and utilities!*





The End

*Any Burning
Questions?*