

**Eldorado National Forest Woody Biomass Utilization**  
**Ramiro Villavazo, Forest Supervisor, Eldorado National Forest**  
**May 20, 2008**

**Why is biomass Utilization Important?**

- Background: In June of 2003, a MOU on Policy, Principles for woody biomass utilization (WBU) for restoration and fuels treatments on forests, woodlands and rangelands was signed by the Secretaries of Interior, Agriculture and Energy. This MOU established 8 principles. Those that pertain to the Forest Service are:
  1. Include the private sector and interests in the formulation and consideration of woody biomass utilization strategies;
  2. Promote awareness and understanding of the quality and quantity of woody biomass available from Federal lands;
  3. Develop and apply best scientific knowledge pertaining to WBU and forest management practices for reducing hazardous fuels and improving forest health;
  4. Encourage the sustainable development and stabilization of WBU markets;
  5. Support Indian Tribes in the development and establishment of WBU within Tribal communities;
  6. Promote understanding that WBU may be an effective tool for restoration and fuels treatment projects;
  7. Explore opportunities to provide reliable, sustainable supply for woody biomass;
  8. Develop and apply meaningful measures of successful outcomes of WBU.
- In addition to the MOU, there are several laws and policies that help Federal Land Managers either to start or build upon an existing biomass utilization program.
  1. The 2000 National Fire Plan
  2. The 2003 Healthy Forests Restoration Act
  3. The 2005 National Energy Plan
  4. The 2004 Sierra Nevada Forest Plan Amendment

**What does this all mean to the Eldorado National Forest?**

- The Forest has developed a comprehensive landscape scale program of fuels and vegetation projects with biomass as a product using the above authorities.
- Our fuels and vegetation program goals include:
  1. Improve community protection from wildland fire;

2. Reduce the risk of high severity and large fires across the landscape;
3. Reduce the costs of hazardous fuels treatments;
4. Make available biomass generated from fuels treatments where the opportunity exists;
5. Restore at-risk, forest, woodland and rangeland ecosystems to healthy and resilient conditions
6. Support local economies involved in forest products.
7. Develop a sustainable program of timber and biomass products.

### **What have we done?**

- The Forest has developed a 5-year schedule of fuels and vegetation treatment activities so that potential interests and/or contractors in biomass as well as other forest products such as timber can be proactive in determining market opportunities;
- The Forest has used contract authorities such as the Integrated Stewardship Contract Authority, which uses stumpage values from commercial timber sales to fund biomass and fuels reduction work;
- To date, the Forest has collected over 1 million dollars in additional revenue to pay for fuels reduction work that would not have been afforded with our existing appropriated funds;
- Stewardship Contracting has helped develop local contractor capacity to masticate, pile and remove small diameter woody biomass all within the same contract. Biomass removal to landings is paid through the stumpage values received from sale of commercial timber;
- Treatment costs such as mastication and dozer piling of biomass has reduced from \$500 to \$600 per acre to \$300 to \$400 per acre, as a result of increasing local capacity and competition;
- The Forest accomplishes approximately 9,000 to 12,000 acres of fuels and forest health treatments per year using almost exclusively the Stewardship Contract Authority ( about 5-7 projects per year);
- Some contractors are now developing woody biomass market opportunities using small diameter material for posts and poles as well as agricultural use: support posts for vineyards and other landscaping products;

### **What are our challenges?**

- Providing a sustainable supply of biomass: changing management direction, lawsuits, all put restrictions on the way we are able to prescribe treatments on the ground where it counts;

- Local markets are limited or non-existent in utilizing the multiple biomass products generated from fuels and vegetation projects;
- Lumber prices are dropping, affecting the amount of receipts generated through Stewardship Contracts, which affect the amount of acres we can treat: The cost to pay somebody to harvest and remove all the excess biomass is currently so high that Congressionally appropriated funding for this removal work is not likely to be provided;
- Matching supply with demand and high transportation costs to point of use are currently cost prohibitive: high cost of transportation and reduced funding to treat fuels and vegetation: Unless there is subsidized funding or grant opportunities, getting biomass to markets will be difficult to achieve;
- Limited funding to start up local enterprises and develop biomass markets.

### **Success, how do we get there?**

- Need to work together to seek solutions for developing biomass markets: production of liquid fuels, energy producing such as co-generation plants that are locally developed, biomass produced heating, other biomass products such as posts and poles and agricultural products;
- Look to existing infrastructure for opportunities: such as greenhouse grown vegetable products for using biomass generated heat;
- Market development collaboration with Entrepreneurs: Federal managers do not have much control over most market forces that will drive biomass-utilization businesses, However, committing to a sustainable and steady supply of forest products so a business partner can bank on that supply;
- We need to work closely with our partners to develop cost-effective methods of biomass utilization while at the same time protecting the natural resources;
- Do a better job of describing the quality and quantity of biomass availability from Federal Lands;
- Improve our awareness of the particular nature of markets that will be important to accomplish our program goals.

### **Concluding thoughts**

- There is no one solution to meeting the Nations energy needs;
- The Eldorado National Forest has the capability to contribute biomass for the generation of heat and power as well as other biomass derived products and will

continue to develop projects within the limits of our planning direction and policies;

- Use our contract authorities to their fullest to provide biomass at the lowest cost possible without jeopardizing our ability to accomplish more acres of critical fuels needing treatment;
- Improve our marketing of biomass products to potential interests;
- Continue to work with partners such as our existing contractors that support our fuels and vegetation program, Sierra Pacific Industries, Sacramento Municipal Utilities District (power), new partners such as Renegy, Inc. (power), and local growers of produce that use biomass for generating heat.

Thank you.