Marcia Patton-Mallory

Biomass and Bioenergy Coordinator

Forest Service

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Testimony

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"GAO Report on Promoting Woody Biomass for Energy and Other Uses

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Mr. Chairman and members of the Committee, thank you for this opportunity to discuss the role of the USDA Forest Service promoting woody biomass utilization for energy and other uses.

I am Marcia Patton-Mallory, Forest Service Biomass and Bio-energy Coordinator.

In February 2005, a Government Accountability Office Report on woody biomass utilization recommended that the Chief of the Forest Service appoint an official or organization responsible for overseeing and coordinating the agency's woody biomass activities. On October 1, 2005, my position was established within the Chief's Office.

The position expands upon the efforts of a Washington Office cross-deputy Woody Biomass Utilization Team, field biomass coordinators, and other cross-deputy efforts already underway.

This afternoon I intend to discuss the agency's efforts to expand the utilization of woody biomass and the Government Accountability Office (GAO) draft report on that subject, which focused on the experiences of selected biomass users nationwide.

Woody biomass is the trees and woody plants, including limbs, tops, needles, leaves, and other woody parts, grown in a forest, woodland, or rangeland environment, that are the by-products of restoration and hazardous fuel reduction treatments. Currently most of this material is underutilized, commercial value is low, markets are small or non-existent and the infrastructure needed to process this material is insufficient or nonexistent in many parts of the country.

The agency promotes the utilization of woody biomass, consistent with resources sustainability and applicable land and resource management plans, and USDA has agreed to work with the Department of the Interior, the Department of Energy and other departments on recovering forest biomass from fuels treatments and other forest management activities. An interagency Memorandum of Understanding (MOU) was signed by the three secretaries in June 2003.

The Forest Service will spend approximately $8.5 million on dedicated biomass utilization funding across deputy areas this

fiscal year. Additional biomass utilization related work occurs across many budget line activities. The President's 2007 Budget proposes to increase that funding to $11 million.

In 2006, specific activities in each deputy and staff area are contributing to the attainment of the agency's overall woody biomass utilization objective

The Forest Service's updated 2004 – 2008 National Strategic Plan embodies the agency's many areas of responsibility by outlining the strategic goals and objectives. The Strategic Plan Goal #4 is "Help meet energy resource needs." Objective #2 under Goal #4 is:

2. Stimulate commercial use of small-diameter trees from NFS lands for biomass energy.

The National Forest System's priority activities include: reducing barriers through policy development, including making biomass more readily available, and putting further emphasis on stewardship contracting; identifying and assuring a levelized and sustainable supply of woody biomass; developing an interagency small diameter utilization desk-guide and website; and incorporating biomass utilization in the agency's buildings and facilities.

In State and Private Forestry (S&PF), the priority activities will includeimplementation of "Fuels for Schools" projects utilizing a full complement of USDA resources and programs to support State and Tribal efforts. The Technology Marketing Unit located at the Forest Products Laboratory will a dminister the Biomass Utilization Grants program, provide technical assistance to woody biomass efforts nationwide, and expand technology transfer and training opportunities through the Smallwood Conference this May in Richmond, VA.

The Fiscal Year 2007 President's Budget includes an increase in our Research and Development efforts at the Forest Products Laboratory and other Research Stations across the U.S. to provide renewable energy and biobased products from woody biomass and to improve the efficiency of petroleum consumption in manufacturing and operations. This effort includes research and development of improved in-woods operations, transportation, handling, processing and conversion, as part of integrated management and utilization systems. Additional efforts are being made in the development of new bio-based products including the conversion of cellulosic material to ethanol and other chemicals. We are cooperating with the Department of Energy on the Biomass Initiative.

Biomass has surpassed hydropower as the largest domestic source of renewable energy. A recent joint U.S. Forest Service – Department of Energy report, Biomass as Feedstock for a Bioenergy and Bioproducts Industry: The Technical Feasibility of a Billion-Ton Annual Supply, commonly known as the "Billion Ton Report," projects that there are over 1.3 billion dry tons per year of biomass potential – enough to produce biofuels sufficient to meet more than one-third of the nation's current demand for transportation fuels by 2030. About one-quarter of that total, roughly 400 million dry tons of biomass, could be produced as residues in a sustainable manner from forest lands - including private, state, tribal and lands.

A significant portion of biomass from Federal lands could potentially be produced through implementation of the President's Healthy Forests Initiative and the National Fire Plan. The Forest Service and the Department of the Interior last year treated hazardous fuels on more than 2.9 million acres of land, and reduced hazardous fuels on an additional 1.4 million acres through other land management actions.

Federal agencies plan to treat 2.9 million more acres in 2006, and accomplish hazardous fuels reduction on an additional 1.6 million acres through landscape restoration activities.

Roughly one-quarter of the acres treated resulted in biomass utilization for forest products, biobased or bioenergy purposes, but the potential exists for substantial expansion of biomass use.

An additional 4.6 million acres are planned for treatment in 2007, including 3.0 million acres of hazardous fuels treatments and 1.6 million acres of landscape restoration.

The FY 2007 President's Budget for the Forest Service proposed $292 million for hazardous fuels treatment, with $5 million to foster markets in biomass utilization.

Additionally, authorities pursuant to the President's Healthy Forest Initiative, such as stewardship contracting, and the Healthy Forests Restoration Act allow the Forest Service to work more effectively and efficiently with the local community in treating hazardous fuels, and promoting investment in the local wood products and forest management infrastructure.

In conducting its review, the draft GAO report identified key factors facilitating the use of woody biomass among a limited number of users, as well as the challenges these users have faced in securing and utilizing biomass. GAO's draft report offers the committee a good starting point for its consideration of the effectiveness of current efforts by the government and opportunities for new authorities that might promote greater use of woody biomass.

GAO found that financial incentives to using woody biomass, such as grants, bonds, subsidies or other payments, and benefits, such as lower fuel prices in comparison to oil or natural gas, encouraged investment in woody biomass by several users. GAO also said users felt that having an affordable and reliable supply of woody biomass was critical to its use.

At the same time, GAO found that uncertainty over the availability of woody biomass, particularly from Federal lands, and the additional investment necessary to utilize woody biomass hampered the development and growth of woody biomass use. GAO also found that the absence of other forest products or wood-related industries was an impediment.

GAO's report offered several insights for policy makers to consider in attempting to promote greater use of woody biomass. First, efforts to promote woody biomass utilization may stimulate the use of competing material sources – such as sawmill residues – which may be cheaper and easier to use than woody biomass. Second, a local logging and milling capacity is critical; government activities may be more effective in stimulating use of woody biomass if they take the existing infrastructures into consideration. Third, activities to promote woody biomass utilization may be more effective if they are tailored to the scale and nature of the targeted users.

We agree with the GAO that financial incentives and benefits encourage the use of woody biomass. Several users, in fact, reported both as factors in the decision to utilize woody biomass.

This week, USDA announced $4.2 million was being awarded for the woody biomass utilization grant program administered by State and Private Forestry (S&PF), with monies provided through the Interior, Environment and Related Agencies Appropriations Act of 2006.

The 18 grant awards ranged between $50,000 and $246,000 per grant. Grant recipients are required to provide matching funds of the Federal portion by at least 20 percent.

Recipients were selected by the Forest Service based on a number of factors, including those that make it profitable to use woody biomass materials by producing marketable products that reduce the costs of biomass recovery. In addition, grants were awarded for projects targeted at removing economic and market barriers to using small-diameter trees and woody biomass. Projects aimed at revitalizing rural communities and stimulating development of forest-based economies will benefit from the grants.

This is the second year that these biomass utilization grants have been awarded. Last year, $4.4 million was awarded. The 20 grants ranged from $76,000 to $250,000. The match requirements were the same as this year's.

We agree with the GAO that efforts to promote woody biomass utilization may stimulate the use of less expensive sources such as mill residues. However, in some areas much of these wood wastes are already being used and supplies are diminishing. We will have to depend on public and private forests, managed in a sustainable manner, to provide a reliable supply of woody biomass in the future.

We agree with the GAO that the presence of forest products industries in a community aids in the development of woody biomass-related businesses. We are finding that in order to get a wood biomass utilization project completed you need to have five components: (1) an available and consistent supply; (2) infrastructure, facilities, and personnel to collect and process forest materials for instance, dimensional lumber, posts and pole, furniture, flooring, pellets, and bio-energy; (3) community support, in many cases illustrated by a Community Wildfire Protection Plan (CWPP) or a similar planning effort; (4) engaged stakeholders such as industry, States, Tribes, local governments; environmental organizations and other non-Governmental organizations; and (5) favorable market conditions and private sector financing. Without all five components, successful woody biomass utilization projects are unlikely.

We agree with the GAO that uncertainty over the availability of woody biomass, particularly from Federal lands, and the additional investment necessary to utilize woody biomass can hamper the development and growth of woody biomass use. However, focusing too narrowly on using biomass from Federal land treatments misses two critical points. First, since seventy percent of the Nation's forests are owned by entities other than the Federal Government, the effort to restore forest health and reduce the threat of wildland fire can only be effective if it is conducted across landownerships, including non-Federal lands. Additionally, a reliable supply that comes from many sources, including non-Federal lands and mill residues reduces risks and encourages private sector investment.

We are working to develop biomass supply estimates from hazardous fuels treatments in local areas, for use by businesses and communities who want to invest in biomass utilization and bioenergy infrastructure. The premise of this work is to:

- coordinate projected resource offerings within agencies and between agencies, States, Tribal governments, private landowners, etc.; and
- focus on levelizing supply over time, with volume, diameter, and species mix considered within an investor landscape of approximately 100 miles.

At this time, the levelized supply projection models involve 7 States, 27 National Forests, 79 Ranger Districts, a number of counties, Tribes and 8 BLM Districts. We have most of the data collected now but have not yet completed the analysis. We are proposing to overlay biomass supply estimates with the Strategic Placement of Treatments (SPOTS) protocol to pilot a levelized supply of woody biomass over time. The objective is to strategically place the hazardous fuels treatments while providing woody biomass predictably to attract investment in biomass infrastructure where it has been lost.

In summary, the Forest Service's woody biomass utilization activities are aimed at providing a predictable and sustainable supply, technical assistance and science to support improved utilization, and developing partnerships across woody biomass interests. Importantly, however, the ultimate decision on whether to produce a given energy resource or invest in a particular project is one made by the private sector based on market conditions.

I would be glad to answer any questions you may have.