



## FRC sees Stewardship Contracting in Oregon ... continued from page S2

designed the Siuslaw Stewardship Fund to encourage restoration on the forest and in the watershed.

Forty percent of retention of receipts funds goes to projects on private lands, and 60 percent to Forest Service restoration projects. The RC&D serves as fiscal agent for the fund.

Good news and bad news arrived in 2003, when the project status changed from pilot to a full-blown 10-year stewardship authority. While the project life was extended, the new authority precludes the use of retention of receipts for achieving socio-economic objectives identified for the local community. Funds are limited to on-the-ground restoration projects and cannot be used for planning, monitoring, education, outreach or the economic development of value-added processing for products of thinning.

As Sundstrom said in a report, "The business of conservation (administration, overhead and planning/design efforts) is rarely funded, but it is essential to the success of on-the-ground projects."

But he still believes that stewardship contracting works when all the cards line up. "It's an innovative and a useful way of doing work on public lands and brings benefits back to the community."

## Oregon family forest thrives, FRC learns

COTTAGE GROVE, OREGON -- NACD's Forest Resource Committee started the day early when it met for three days of work in west-central Oregon. A Sunday morning field review of the Steve Woodard family's Certified West Coast Tree Farm in the lush Oregon hillside provided a chance to view family-forest sustainable forestry first-hand.

"One of my goals is to plant 100 trees on my 100th birthday," said Woodard, a gritty Oregonian in his '70s. Much of the forest is today planted to Douglas fir. It has been part of the Woodard family since 1946, but a 140-acre parcel was sold by Woodard's father in 1952. Steven reacquired it in 1996. The family lives in a historic log-cabin in a lush arboretum on the property.

"This is the third Green Tag Forest in Oregon," said Keith Argoe, president and chief executive officer of the National Woodland Owners Association, who described the 200-acre Tree Farm as "common-sense forestry." Green Tag Forestry is a "third-party" certification

that was developed by the National Forestry Association in cooperation with the Association of Consulting Foresters and the National Woodland Owners Association. Woodard's property has undergone 10 evaluations by certified foresters.

Woodard taught forestry in local high schools and served on the East Land Soil and Water Conservation District board, noted Ralph Perkins, chair of the board. Woodward continues to cooperate with the district on education and outreach.

"A Tree Farm with the soils and climate we enjoy here can grow at least 800 board feet per acre every year and therefore provide about 40,000 board feet in 50 years," Woodard noted in a handout to the group. "That is about 12 truckloads of logs in 50 years from each acre."

As for other benefits, he said, "A variety of animals have abundant habitat here, several people enjoy hiking and riding horses on the many available trails, and some loggers work here part of every year."

## Biomass needs, promise converge in South ... continued from page S1

sequestration in deep root systems, wildlife habitat and reduced need for pesticides and nutrients for the native plant.

"Co-firing is a viable option, but there are some complications," said Susan LeVan - Green, a scientist at the USDA Forest Service Forest Products Laboratory in Madison, Wisconsin. Scale is a consideration, as is proximity to fuel stocks. But as America moves to carbon-credit sharing among businesses and industries, co-firing will increase, she said.

### Refining biorefineries

Biorefineries that produce transportation fuels and an array of other value-added substances hold major promise as America meets its future energy needs, several speakers said. "It's a way to get maximum value from steam, power, chemicals, syngas, black liquor and other substances," said LeVan.

Dale Threadgill, professor and department head in the University of Georgia Department of Engineering, stressed that integrated systems present promise in biore-

fining. "We are focusing on a range of options in bioenergy. We should be building a bio-based economy," he said. The university's own research focuses this integrated approach and the potential to create biofuels, capture hydrogen, create high-value chemicals and produce charcoal that serves as a high-value soil additive.

"I don't need a subsidy," said Larry Stewart about producing ethanol and other transportation fuels. Stewart spoke on behalf of BioConversion Technology, LLC, a firm that specializes in bioconversion technology.

Through various pyrolysis systems, his firm converts carbon-containing substances to clean energy. "We can produce ethanol at 40 to 80 cents per gallon," he said. The firm's mobile unit was chosen for a forest slash demonstration project in Jefferson County, Colorado, in which the Department of the Interior is a partner.

### New world of pulp

The paper industry in America is poised to enter into the forest products biorefinery

business in a big way, said Harry Callihan, director of the Alabama Center for Paper and Bioresource Engineering at Auburn University.

Many mills across the country need to replace their pulping facilities, and the industry is moving toward extracting high-value hemi-cellulose for chemicals and polymers prior to pulping and also extracting liquid fuels and chemicals from a pulping process that relies on gasification. The combined values of the byproducts can exceed those of the pulp itself, Callihan said. "This is the way the industry has to go. Practically, this will be in the next five to 10 years, when they are replacing facilities," he said. "Pulp is a global commodity these days. Aging mills in America become an asset." That's because newer mills elsewhere in the world won't be converting their pulping processes for several decades because of the heavy investment in existing systems.

The future bodes well. "Biomass is the only renewable resource to meet the demand for carbon-based liquid fuels and chemicals," Callihan said.

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At Work Across the Country: District leaders focus on forest health, biomass

### NACD to sponsor National Biomass Conference

NACD is a major sponsor of the March 14-16, 2006, "Bioenergy and Wood Products Conference II: Restoring Forests and Strengthening Economies" in Denver, Colorado. The national conference will explore successes in utilizing woody biomass, and feature innovations and strong partnerships.

This is the second national-level bioenergy and wood products conference. The first was held in 2004, and the federal Departments of Energy, Agriculture and the Interior were main sponsors. This time, non-governmental groups were asked to become major sponsors, and NACD stepped forward to take a major role in implementing and planning the conference.

The conference will focus on utilizing biomass removed from public and private forests to provide a reliable supply for bioen-

ergy production and wood products businesses. As a renewable, domestic energy source, woody biomass is helping America to reduce its reliance on non-renewable foreign energy. It is also stimulating domestic markets for wood products. Fuels reduction in forests also reduces wildfire threats and the staggering costs of fighting those fires. The "Bioenergy and Wood Products Conference" will stress these themes with presentations by experts from around the country, tours, displays, poster presentations and other activities.

The full list of sponsors in addition to NACD includes the National Association of Resource Conservation and Development Councils; Western Forestry Leadership Coalition; Departments of the Interior,

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Mark Your Calendars for the

### Bioenergy & Wood Products Conference II

Restoring Forests and Strengthening Economies

**March 14-16, 2006**  
**Denver, Colorado**

Watch for details at  
[www.nationalbiomassconference.org](http://www.nationalbiomassconference.org)

### South Biomass Conference Resources

The first of two NACD regional biomass conferences, "Bioenergy: Status, Trends and Future of the South's Forest and Agricultural Biomass" shared valuable information. Much of that information is being prepared for sharing on the Web.

Conference reports, photos, presentations and other information are available on NACD's biomass pages: [www.forestry.nacd-net.org/biomass/](http://www.forestry.nacd-net.org/biomass/).

Click on "Bioenergy in the South."

Conference proceedings, speaker PowerPoints, speaker contact information and answers to questions asked at the conference available at: [www.biomass.sref.info/proceedings.htm](http://www.biomass.sref.info/proceedings.htm).

Other valuable bioenergy Web sites:

Southern Alliance for the Utilization of Biomass Resources -- [www.saubr.ua.edu](http://www.saubr.ua.edu)

US Department of Energy Biomass program -- [www.eere.energy.gov/biomass/](http://www.eere.energy.gov/biomass/)

USDA Forest Products Laboratory [www.fpl.fs.fed.us/](http://www.fpl.fs.fed.us/)

Bioenergy Information Network [www.bioenergy.ornl.gov/](http://www.bioenergy.ornl.gov/)

National Renewable Energy Laboratory [www.nrel.gov/biomass](http://www.nrel.gov/biomass)

Biomass Research and Development Initiative -- [www.bioproducts-bioenergy.gov](http://www.bioproducts-bioenergy.gov)

### Biomass needs, promise converge in South

ATHENS, GEORGIA -- Speakers at a conference sponsored by NACD here in August stressed that events at home and abroad have lined up to create a convergence of possibilities for biomass utilization in America. "Bioenergy: Status, Trends and Future of the South's Forest and Agricultural Biomass" was the first of two regional conferences sponsored this year by NACD.

#### Time is right

The continuing rise in petroleum prices and the geopolitical costs of acquiring the resource have helped to level parts of the field for biomass, speakers said. "What is the market threshold for bioenergy? I think we are there now," said David Bransby, professor of energy crops and bioenergy at Auburn University. "I don't think we'll see \$2 a gallon gas again," he added. From a national security standpoint, "Hauling (coal) energy from the West to the Southeast is as bad as importing oil." The transportation infrastructure over that distance is vulnerable, he said.

Bransby and others advocated increased reliance on biomass for transportation and energy production. "Policy is more of a barrier than technology. We have technologies that work right now," he said.

#### Carbon connection

Carbon, a major greenhouse gas, is at once the problem and the solution to meeting energy needs, speakers noted. "Carbon

and global warming are red-hot topics. They are going to be a major driver of policy," said Steven Smith of the Southern Alliance for Clean Energy.

Speakers noted that sustainable forest and agricultural systems that produce carbon-containing biomass fuel stocks sequester carbon for long periods of time. Burning these renewable resources along with coal in co-fired power plants and using them for biorefineries will reduce production of atmospheric greenhouse gases.

"The bioenergy benefits include reduced nitrous oxide, sulfur dioxide, mercury and carbon," said Jim Sheppard, chair of the forestry department at Mississippi State University.

He noted that the Santee Cooper Power Company has signed an agreement with the Francis Marion National Forest in South Carolina to purchase 75,000 tons of woody biomass removed in forest thinning projects.

The power company plans to retrofit its boilers to burn 10 percent wood chips and 90 percent coal. While the wood chips will represent 50 percent of volume because of lower bulk density, the environmental results are impressive. "It will produce 30 percent less greenhouse gas than coal while serving 1.5 million people," Sheppard said. Agricultural crops present similar potential, he said, citing switchgrass for its harvestability and heat value, along with environmental benefits from growing it. They include less erosion, increased carbon

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## Committees view stewardship contracting in Oregon

MAPLETON, OREGON -- No one says it's easy, but people involved with one of the nation's first stewardship contracts here in west central Oregon say the work is worthwhile, both for the forest resource and the local community.

The Siuslaw Stewardship Pilot was one of 84 in the nation used to test the new contracting authority granted to the US Forest Service and the Bureau of Land Management. The pilot is located on the Siuslaw National Forest in central Oregon Coast Range and focuses on the Siuslaw River Watershed.

"You can't go into this as though it's easy. But the benefits long-term for the community and agency, we think, are worthwhile," says Johnny Sundstrom, chair of the Siuslaw Soil and Water Conservation District Board, who led a field review of the project for NACD's Forest Resource Committee and the National Association of State Foresters' Forest Resources Management Committee in August. The story that unfolded for the committees is one of promise and accomplishment mixed with frustration and disappointment.

### Local economy reels as logging dries up

The local economy was reeling in the 1980s and '90s. Five lumber mills shut down and the shock waves were felt by an array of related businesses. Logging operations halted work on much of the forest land because of endangered species issues.

Enter stewardship contracting, which allows public agencies to achieve restoration goals such as fuels reduction on their



Exploring the potential of stewardship contracting on a field review in the Siuslaw National Forest in Oregon are NACD's Forest Resource Committee and the National Association of State Foresters' Forest Resources Management Committee. The tour was led by Johnny Sundstrom (gesturing in the foreground at left), chair of the Siuslaw Soil and Water Conservation District Board and president of the California Association of Resource Conservation Districts. The Siuslaw District is a major partner in the stewardship contracting project and in an array of other conservation activities in western Oregon.

lands and by guaranteeing products to contractors who sign long-term agreements.

Stewardship contracting hasn't fixed all of that, but it has put people to work on projects that benefit the forest, the local economy and the watershed. The local conservation district has been among key project managers, overseeing a number of river restoration projects designed to enhance salmon habitat, restore streams and culverts, establish riparian plantings and remove noxious weeds.

Two key parts of stewardship contracting have helped the local effort. Under the "goods for services" provision of the contracts, local contractors are able to trade

their services in exchange for the value of the products removed from projects. Under "retention of receipts" provisions, earnings from the project are retained for other project work.

The latter provision led local partners to establish a restoration fund to address watershed health. Federal Wyden Amendment authority also allows the Forest Service to use its funds on private land where projects will enhance overall health of a national forest.

The conservation district has sponsored nine projects in recent years, with total project value of more than \$200,000. Other project sponsors include the Cascade Pacific Resource Conservation and Development Council and the Siuslaw Watershed Council.

The work is known and recognized internationally. The Siuslaw River Basin Restoration Project won the prestigious 2004 International Thiess Riverprize, last year.

### Local partners, local projects

Work done in the stewardship contract is overseen by a working group comprised of local stakeholders. The Siuslaw Stewardship Group functioned as a monitoring team for the pilot and has evolved into a broader partnership. It has a role in advising the Forest Service about new restoration projects. The Forest Service and SSG jointly



Oregon Tree Farm Owner Steve Woodard explains activities on his 200-acre family forest. The NACD Forest Resource Committee members and advisors conducted a field review on the site. Woodard is a third-generation landowner who sustainably manages the forest for wood production, wildlife and other values.

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### Urban Committee focuses on wildfire protection plans

NACD's Urban, Community and Coastal Resources Committee devoted considerable time on its busy agenda this year to districts' role in addressing forest health and biomass utilization in the wildland-urban interface. The committee met in August in Spokane, Washington.

Dave Vickery, community outreach specialist at National Interagency Fire Center in Boise, Idaho, told the committee that NIFC has identified 25,000 communities across the country considered at risk from wildfire. He pointed out that conservation districts can be strong partners in efforts to address those risks, especially by taking active roles in the development of community wildfire protection plans. About 1,200 communities in the West have completed CWPPs so far.

Vickery noted that NACD will be conducting an on-line survey of conservation

districts to determine their interest in participating in or leading efforts to establish CWPPs.

Committee members provided feedback on CWPPs and districts, and what NACD can do, including the following recommendations.

- Encourage district participation in CWPP development.
- Expand current Web site WUI information to provide more tools and information on how districts can get involved, share examples and success stories and share information on FireWise, Homeland Security and other sources of information and assistance.
- Use Forestry Notes and NACD's News & Views to share information.
- Visit with other groups about expanding

zoning models rather than focusing just on individual defensible space, and promote the concept to districts for sharing in local discussions.

- Develop a model/profile of districts' activities in urban/communities and forests to show how districts are already involved.

Vickery, who has worked closely with NACD on efforts to encourage district involvement in forest and rangeland health and biomass utilization, also provided information on the history of wildfires and congressional response; NIFC's work on reducing fuel loads and identifying communities at risk; the wildland urban interface (WUI); rural fire assistance; biomass components of the Healthy Forest Restoration Act; and ongoing maintenance of fuel reduction areas.

### Speakers Bureau to promote biomass, forest health

The National Association of Conservation Districts is developing and coordinating a Biomass and Forest Health Speakers Bureau.

The Speakers Bureau will provide qualified speakers on the subject of woody biomass and the National Fire Plan for events where the public is invited.

Speakers will be available for presentations at state, regional and national meetings of conservation districts and resource conservation and development councils. They

will also be available for organizations such as the National Association of County Officials and for a broadening list of partners. These include government and non-governmental agencies engaged in utilizing biomass for a variety of domestic benefits, including renewable energy and value-added products while building better local economies and protecting forest resources.

Development of the Speakers Bureau is part of NACD's ongoing agreement with the

US Department of Agriculture and Department of the Interior. The collaborative approach applies the strengths of America's 3,000 conservation districts to achieve woody biomass utilization, restoration and fuel treatments on forests, woodlands and rangeland.

*NACD welcomes input on the development of this bureau. Contact Bill Horvath at billhorvath@charter.net with suggestions for speakers and topics.*

### Tool puts wood-boiler costs in perspective

A new tool for considering woody biomass fueling of small-scale heating systems was highlighted at the NACD-sponsored conference "Bioenergy: Status, Trends and Future of the South's Forest and Agricultural Biomass."

A wood-fueled boiler financial feasibility user's manual and spreadsheet program can be used to make preliminary determinations about small-scale heating systems that rely on woody biomass for fuel. The information was shared by Sue LeVan-Green, program manager of the State and Private Forestry Technology Marketing Unit of the US Forest Service, during the conference in Athens, Georgia. Small-scale-system applications include schools, factories, hospitals, community centers and government buildings. Using wood biomass for heat is a given in some sector, such as industry, LeVan noted.

"Wood Fueled Boiler Financial Feasibility" is designed for easy use on a personal computer. The woodboiler feasibility

spreadsheet program in Microsoft Excel and an accompanying manual in Adobe Acrobat format are available at [www.forest.wisc.edu/extension/boilermanual.htm](http://www.forest.wisc.edu/extension/boilermanual.htm).

The program was designed by University of Wisconsin-Stevens Point College of Natural Resources Professor Robert Govett and colleagues to provide a starting point for interested parties to perform financial feasibility analysis of a steam boiler system for space heating or process heat.

By allowing users to input the conditions applicable to their current or proposed fuel systems, "Wood Fueled Boiler Financial Feasibility" provides an opportunity to compare wood or bark fuel as alternatives to the existing fuel.

It provides information on annual savings and potential payback of wood fuel. More detailed financial feasibility estimates can also be done on a 20-year period of analysis.

For more information, contact Govett at [rgovett@uwsp.edu](mailto:rgovett@uwsp.edu) or LeVan-Green at [slevan@fs.fed.us](mailto:slevan@fs.fed.us), 608-231-9518.

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Energy and Agriculture; National Association of Counties; the Western Governors' Association; and the Intertribal Timber Council.

#### Survey will help plan conference

To meet the needs of conference attendees, NACD is supporting a needs assessment, on-line survey tool. District leaders are asked to respond to the survey and share their knowledge about local resource needs. The survey should take 10 to 15 minutes to complete, and all information will be kept strictly confidential. The survey is being coordinated by Dr. Daniel Cassidy at the University of Georgia. The link to the survey is at: <http://www.surveymonkey.com/s.asp?u=253591195954>.

For more details on this conference, visit [www.nationalbiomassconference.org](http://www.nationalbiomassconference.org).