

Woody Biomass Utilization Status Report 2005 and 2006 Grant Programs

USDA Forest Service • S&PF Technology Marketing Unit • Madison, Wisconsin



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Caring for the Land and Serving People

Woody Biomass Utilization Status Report 2005 and 2006 Grant Programs

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Woody Biomass Utilization Status Report 2005 and 2006 Grant Programs Executive Summary

The woody biomass utilization grant program is intended to help improve forest restoration activities by using and creating markets for small-diameter material and low-valued trees removed from forest restoration activities, such as reducing hazardous fuels, handling insect and diseased conditions, or treating forestlands impacted by catastrophic weather events. These funds are targeted to help communities, entrepreneurs, and others turn non-merchantable woody biomass from forest restoration activities into marketable forest products and/or energy products. The Woody Biomass Utilization Grant program is administered by the State and Private Forestry (S&PF) Technology Marketing Unit, located at the Forest Products Laboratory (FPL), Madison, WI.

The goals for this grant program include the following:

- Helping reduce forest management costs by increasing value of biomass and other forest products generated from forest restoration activities.
- Creating incentives and/or reducing business risk for increased use of biomass from National Forest System lands.
- Instituting projects that target and help remove economic and market barriers to using small-diameter trees and woody biomass.

In 2005, 159 pre-applications were submitted and 57 were invited back to submit full-applications. For 2005, 20 proposals were awarded, representing 12 states. In 2006, 87 full-applications were submitted and 30 were invited back to submit full-applications. For 2006, 18 proposals were awarded, representing 9 states. The combined 2005 and 2006 (38) grantees reported that in 2007, more than 435,000 green tons were removed and utilized from National Forest System lands associated with this grant program. Many of these acres would have been treated anyway; however, the grant program provided greater efficiencies in harvesting and processing for the operators.

The following lessons were learned from the 2005 and 2006 grantees:

- 1. Grantees require about 6-months to a year to install new equipment or processes and obtain raw material.
- 2. Grantees can start reporting green tons removed and utilized in about 1 year from the initiation of the grant.
- 3. The Forest Service cost per acre is often reduced due to better efficiencies of the businesses.
- 4. NFS personnel are supportive of the grant program. They see increased interest in small-diameter material being removed and utilized, although they have difficulty quantifying the results. Many suggest the grant program be extended.
- 5. The biggest impact appears to be on utilization of slash piles and avoidance of opening burning. Cost savings to the agency ranged from \$50 to \$250 per acre. These costs varied depending on the geographical terrain, and local business capacity to use material.
- 6. A few Woody Biomass Utilization grantees are still having problems obtaining material from the Forest Service, with causes ranging from high costs to litigation impediments.

Woody Biomass Utilization Status Report 2005 and 2006 Grant Programs

Background

Program Authorization: Program direction was provided for the 2005 and 2006 Woody Biomass Utilization Grant programs through the Healthy Forest Restoration Act (P.L. 108-148). In 2006 additional direction was provided through the Energy Policy Act of 2005 (P.L. 109-058).

Congressional Appropriation: The USDA Forest Service's 2005 and 2006 Woody Biomass Utilization Grant program received funding through the Interior, Environment and Related Agencies Appropriations Acts of 2005 (P.L. 108-447) and 2006 (P.L. 109-54).

Goals and Anticipated Length of the Program: The Congressional language authorizes up to \$5 million a year to the agency to conduct a grant program that will help increase the use of woody biomass from National Forest System lands. The woody biomass utilization grant program is intended to help improve forest restoration activities by using and creating markets for small-diameter material and low-valued trees removed from forest restoration activities, such as reducing hazardous fuels, handling insect and diseased conditions, or treating forestlands impacted by catastrophic weather events. These funds are targeted to help communities, entrepreneurs, and others turn non-merchantable woody biomass from forest restoration activities into marketable forest products and/or energy products.

The original intent of USDA Forest Service Chief Dale Bosworth was to fund a financial incentive program such as the Woody Biomass Utilization Grant program for 5 consecutive years to complement the ongoing technical assistance efforts of the agency. The program is currently awarding grants for its fourth year. An evaluation of the benefits of this incentive program, along with the balance between technical and financial assistance offered through the agency, will be discussed in FY 2009 for providing future direction.

Administration of Program: The Woody Biomass Utilization Grant program is administered by the State and Private Forestry (S&PF) Technology Marketing Unit (TMU), located at the Forest Products Laboratory (FPL), in Madison, WI. The TMU and the FPL, in general, have strong ties to businesses and entrepreneurs interested in converting non-merchantable woody biomass into marketable forest products and/or energy products. A Technical Steering Committee, consisting of representatives from each Forest Service Region, several Research Stations, the Northeastern Area, as well as Washington Office representatives from Fire and Aviation Management, National Forest Systems (NFS), S&PF Cooperative Forestry, FS Research, state foresters and their regional representatives, and members of the FS Woody Biomass Utilization Team serve as the principal body for developing the criteria, procedures, as well as conducting the technical and financial reviews. Policy and program oversight responsibility lies with the Forest Service Executive Steering Committee, consisting of the Deputy Chiefs for NFS, S&PF, and Research, as well as the Director of the FPL. Working together and following Congressional direction these two committees developed the following goals for the grant program:

- Help reduce forest management costs by increasing value of biomass and other forest products generated from forest restoration activities.
- Create incentives and/or reduce business risk for increased use of biomass from National Forest System lands.
- Institute projects that target and help remove economic and market barriers to using small-diameter trees and woody biomass.

<u>Solicitation Procedures:</u> A Request for Proposal is announced in the Federal Register and on www.grants.gov, as well as posting the announcement on the FPL webpage, and disseminating the information to hundreds of Forest Service partner organization. A two-step evaluation process is used to reach a final selection. Applicants are asked to submit a pre-application. If the pre-application passes the review process, then the applicant is asked to submit a full application. Grant awards are then selected from the number of full applications. The complete process and procedures are contained in the Appendix.

<u>Criteria and Weight:</u> Criteria used to rate both the pre-applications and the full applications are the following:

- Impact on NFS Lands Forest Restoration Activities 40%
- Technical Approach Work Plan 25%
- Financial Feasibility 25%
- Qualifications and Experience 10%

The applicant's discussion of the impact on NFS lands is a critical component. This is because these proposals are aimed at helping the Forest Service increase the number of acres treated and decrease the cost per acre for those NFS lands that are at risk due to hazardous fuel buildup, insects and diseases, or catastrophic weather events. A letter of support from the local Forest Service Supervisor or District Ranger is a mandatory requirement from all applicants. This letter is used by the technical review team to evaluate the NFS support and interest in the proposed project. An ancillary goal of this grant program is to increase the partnership between entrepreneurs and the NFS.

<u>Review and Selection Process:</u> A Forest Service team of regional, technical, and financial specialists, as well as technical and financial experts from USDA Rural Development and CSREES, helps review the applications. The proposals are scored and ranked. The review committee sends their recommendations to the Executive Steering Committee for final approval. Table 1 contains the number of pre-applications, full applications, and awarded grants for 2005 and 2006.

Scope and Scale of 2005 and 2006 Woody Biomass Utilization Grants:

Table	Table 1 – Number of proposals received and awarded							
Year	Pre-Applications	Full-Applications	# Funded	# States	# Tribes			
2005	159	44	20	12	1			
2006	87	37	18	9	1			

Evaluation and Monitoring of Grantees and Impact on National Forest System

Forest Service grantees are required to follow Office of Management and Budget (OMB) regulations for accountability reports for the Woody Biomass Utilization Grant program. As part of the Request For Proposal grantees accept the additional responsibility to submit annually information on the number of NFS acres treated, the cost or revenue/acre, and the green tons removed. This reporting requirement is shared by the grantee and the associated National Forest. The TMU sends out a questionnaire to both the grantees and the associated National Forests (see Appendix) yearly to measure the success of the project relative to the goals in the original proposal. Originally the questionnaire requested information after 6 months to provide baseline data from which benefits could be measured. However, after the 2005 program, the 6-month reporting was dropped; now applicants are required to submit this information starting 1 year after the start of the grant. All this information is summarized in Figure 1 and Table 1 for the 2005 and 2006 grantees. The complete information submitted is in the Appendix in Table 2 for the 2005 grantees and in Table 3 for the 2006 grantees.

Most National Forests and grantees who responded to our questionnaire indicated that it was difficult to assess the impact of the Woody Biomass Utilization grant associated with the individual National Forests early in the timeline of the grant. It often takes a business or organization 6 months to a year to acquire the equipment or implement new products and processes. However, once the purpose of the grant has been initiated by the grantee, there is usually a drastic and positive change in the numbers of green tons reported. For example, the change in green tons reported in 2006 by the 2005 recipients almost doubled, and then doubled again between 2006 and 2007. This is the reason that we dropped the reporting requirement after only 6 months. Therefore, the 2006 grant recipients reporting of green tons commenced in 2007, roughly 1 year after the grant had been awarded.

In Figure 1, the amount of green tons removed and utilized connected with the 2005 Woody Biomass Utilization grants increases in 2006 as well as 2007 as the grant purposes are put into practice. The combined total number of green tons removed and utilized that are connected with the 2005 and 2006 recipients is approximately 436,000 for the reporting year of 2007. We anticipate these numbers to increase as the 2007 and 2008 grant recipients start reporting their numbers. Many of these NFS acres would have been treated anyway, but the primary benefit to the Forest Service is that the material removed often comes from slash piles that the Forest Service can avoid burning.

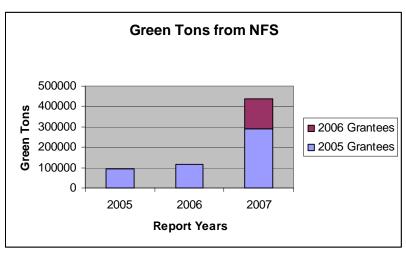


Figure 1 – Total green tons removed from NFS lands impacted by 2005 and 2006 Woody Biomass Utilization Grant program.

Table 2 – Number of green tons removed and utilized from NFS lands for 2005 and 2006 grant recipients.							
Year	2005	2006	2007				
2005 Grantees	93,856	117,900	28,7961				
2006 Grantees	NA	NA	148,016				
TOTAL	93,856	117,900	435,977				

Comments by NFS offices submitting reports indicate that the industrial capacity in the surrounding local area is increasing the ability to utilize woody biomass and small-diameter material. There are a lot of changes that need to take place to adjust to a woody biomass feedstock; sometimes NFS needs to change their procedures so that removal of the material is economical; sometimes stewardship contracts need to be put in place; and often industrial capacity and markets have to be established. All of this takes time, but the benefits of the program will last well beyond the 3-year grant award. There are a few cases where the grant recipient still has not been able to secure woody biomass from NFS for various reasons. Sometimes intervention is required by the FS regional representative, as well as the TMU and/or NFS members of the FS Woody Biomass Utilization Team (WBUT) to facilitate technical assistance, dialogue and communication. These interactions are often complex and involve building networks for partnerships, communication, industrial capacity, and expanded markets, such as higher valued products. All of this takes time, as many NFS reports indicated. However, almost all NFS replies support the Woody Biomass Utilization grants program and wish that it could be extended.

A specific impact of the Woody Biomass Utilization grant program that can be highlighted is the impact this effort has had on the White Mountain Stewardship Contract. There are four grant recipients in the White Mountain area that are getting material from the White Mountain Stewardship contract. In 2007, Future Forests LLC delivered 131,401 green tons to the businesses in the area. Of the 131,401 green tons produced annually, roughly 23,800 tons went to

Woody Biomass Utilization grantees, or 18% by volume is directly contributed to the new capacity provided through the Woody Biomass Utilization Grant program. Three of the recipients are producing value-added products from the material, and the other recipient is a sawmill, processing this material into lumber for use by other processors in the region.

Below is the relative breakdown of the 131,401 tons delivered to customers from the White Mountain Stewardship contract:

		Woody Biomass Utilization
Customer	Tons Delivered	Grantee Recipient
APC Pallets	455	
Arizona Log	932	Cheyenne Log Homes
Bill Parker	475	
Forest Energy	76,637	
Moulding Accents	803	Western Moulding
Neil Brewer Yard	468	
Precision Pine	139	
Reidhead	5,161	
Renergy	21,526	
Round Valley	21,337	Round Valley Lumber
Western Renewable	2,302	
Willy Greenwood	25	
Winners Circle	1,141	Winner's Circle (2008 grantee)
TOTAL	131,401	

The comments from the NFS contact on the Apache-Sitgreaves reflect many of the comments from other NFS personnel:

- "This grant has allowed the treatment of an additional 4,000 acres of WUI to be treated that otherwise would not be able to be treated. There will be an estimated cost savings to the Forest Service of \$873,000 during the 10-year stewardship contract."
- The grant has resulted in lower costs to the Forest Service, although we are unable to quantify at this time "...as the forwarder is still being tested. However, during the testing period, it is allowing more small-diameter and shorter logs to be removed without building new roads."

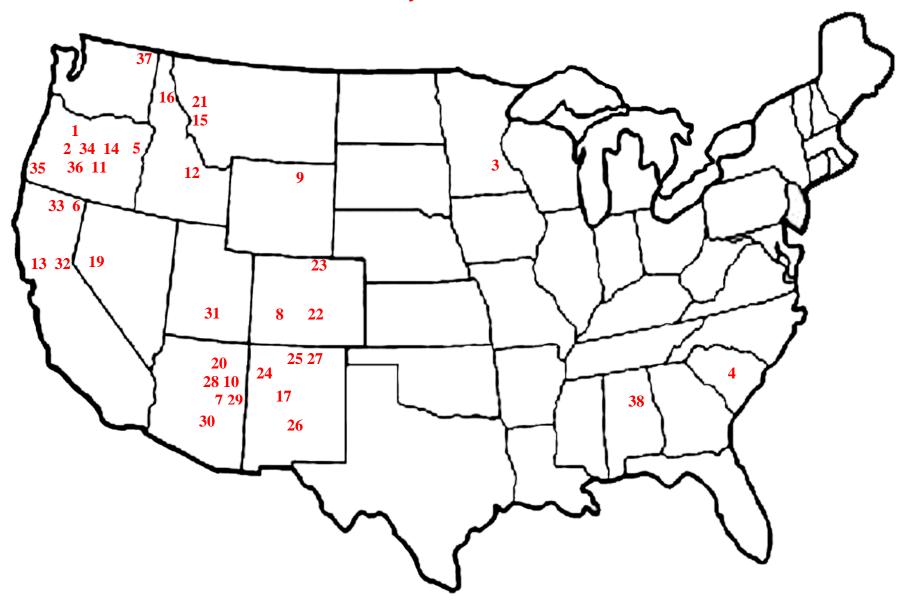
In general, the following key points summarize the findings for the 2005 and 2006 Woody Biomass Utilization Grant program.

- 1. Grantees require about 6-months to a year, from receiving their award, to install new equipment or processes and obtain raw material. It often takes the businesses and non-profits longer than they expected to get things up and running.
- 2. Because the 2005 grants were awarded in July 2005, these grantees basically missed the first field season. However, in the second year of reporting, they doubled the amount of green tons removed and utilized, and quadrupled the amount in the third year of reporting.
- 3. The 2006 grants were awarded in April 2006, and the grant recipients reported data from January 2007 to December 2007. The 2006 grant recipients reported about 148,000 green tons removed and utilized for their first reporting year. The 6-month report was dropped due to finding given in number 1 above.

- 4. The Forest Service cost per acre (when reported) is often reduced due to better efficiencies in the businesses of the grant recipients.
- 5. NFS personnel are supportive of the grant program. They see increased interest in small-diameter material being removed and utilized, although they cannot put quantifiable measures on it yet. Many suggested the grant program be extended.
- 6. The biggest impact appears to be on slash piles that are created after treatment. Typically, Forest Service will burn these piles. However, many Woody Biomass Utilization grantees are using this material, thereby offsetting agency costs. In addition, not burning these piles eliminates issues of smoke emanating from burning piles. Cost savings ranged from \$50 to \$250 per acre. These costs varied depending on the geographical terrain, and local business infrastructure.
- 7. A few Woody Biomass Utilization grantees are still having problems obtaining material from the Forest Service. The reasons range from high costs to remove material, material isn't being put up for sale, lack of stewardship contracts, litigation, and lack of funds to support NFS personnel to prepare the sales or stewardship contracts.
- 8. Favorable educational opportunities have been associated with the Woody Biomass Utilization grants to alleviate market barriers. Two grantsin particular are producing very favorable responses by the local communities and environmental groups: (1) The New Mexico Workman's Compensation Woody Biomass Utilization Grant has reduced workman compensation insurance in New Mexico by half, from \$79 per \$100 of payroll to \$30 per \$100 of payroll. More dollars available to do more work is difficult to quantify regarding the impact on NFS, although reduced Worker's Compensation Insurance can reduce the overall costs for NFS projects. (2) On the Superior National Forest, the Institute of Agricultural and Trade Policy grant has provided best management practice techniques for harvesting woody biomass for bioenergy that is being developed into statewide "Best Management Practices" for harvesting woody biomass by the Minnesota DNR. This local project is serving as a model throughout the nation for developing Best Management Practices for woody biomass.

The Woody Biomass Utilization Grant program is on target, helping to create and expand capacity for using woody biomass in areas where there is limited or no capacity. In addition to providing outlets for the Forest Service's woody biomass, the grant program is helping to retain and expand jobs in areas hard hit with changes in forest management policies. However, achieving the expected outcomes is taking longer than anticipated due to the time it takes to capitalize and implement new processing technologies. We fully anticipate that the benefit to the Forest Service will only increase as we continue collecting data regarding the impact to the Forest Service.

2005/2006 Woody Biomass Grantee Locations



Appendix 1

Table 3 – Preliminary NFS Impacts of 2005 Woody Biomass Grant Program

Grantee and Location	National Forest	Anticipated Impact on NFS, including acres treated from grantee proposal	Objective of grant	Progress Reports from NFS	Progress Report from NFS June 06 – June 07	NFS Contact
(1) Dodge Logging, Inc Boardman, OR	Wallowa Whitman LaGrande Ranger District, Umatilla	- Treat at least 1,500 acres of NFS land and remove 4,500 to 5,000 tons of biomass - Reduce local Forest Service hazardous fuel reductions costs by 50%	- To expand small-diameter log processing at chip plant site - To improve long-term viability of sawmill upgrades to handle small-diameter material	June 05 – Dec 05 37,666 gt Jan 06 – Dec 06 66,177, gt Jan 07– Dec 07 25,149 gt	Dodge has completed the construction of the small-diameter mill at Boardman, OR. The market for lumber and paper chips has dropped off significantly in the last 10 months, to the point that small-diameter material that would be suitable for this mill is currently being chipped for paper production. Umatilla has experienced 3 years of significant wildfires on the Forest. Dodge Logging spent the majority of the 2006 and 2007 field seasons harvesting fire salvage timber sales.	Philip Musgrove
(2) Warm Springs Forest Products, Warm Springs, OR	Deschutes- Ochoco	- Treat 2,000 acres of NFS lands/year - Reduction of hazardous fuel reduction cost of up to \$100/acre	- Improve biomass fuel processing capabilities of mill for power and lumber drying through installation of extraction turbine - Double power output of turbine from same amount of biomass	June 05 – Dec 05 No response from NFS Jan 06 – Dec 06 No response from NFS Jan 07 – Dec 07 9,930 gt	485 acres were treated as demos to find costs of removing biomass and hauling it to Warm Springs. The new expanded biomass plant is currently being installed. 5,100 green tons of ponderosa pine and 800 green tons of juniper were removed. In ponderosa pine, treatment costs reduced by 75% from \$600 to \$150 per acre. In juniper removal treatments, costs of removal of biomass are much higher and therefore not feasible. Starting in FY08, the FS and BLM under an MOU with the Confederated Tribes of Warm Springs have agreed to offer 8,000 acres of biomass annually within 75 miles around the Warm Springs Forest Products plant.	Cindy Glick
(3) Institute of Ag & Trade Policy, Minneapolis, MN	Superior	- 180 acres of biomass removed from 12 harvest sites - Identification of barriers to local loggers and why they are not bidding on non- commercial fuel projects	- Help reduce fire and land management costs for Superior National Forest and other landowners by reducing bidding risks for forest contractors - Support expansion of biomass markets by increasing public acceptance of biomass harvesting - Outlet for material is biomass energy plant	June 05 – Dec 05 Too early to determine impact Jan 06 – Dec 06 Reduced costs from \$150/acre to \$50/acre. No reduction in costs for mechanical treatments – 1900 gt. Jan 07 – Dec 07 Complete 7023 gt	Study describes and assesses various harvesting operations in 6 different trials in the Superior National Forest. In most cases, conventional treatment costs are lower than the net costs of harvesting and delivering material less income from selling biomass. However, under certain scenarios and conditions, cost reductions are possible as far as 100 miles distant from biomass users and from machine trucking points. Minnesota is using results to develop Best Management Practices for biomass harvesting.	
(4) Corporation for Economic Opportunity, Columbia, SC	Francis Marion /Sumter Francis Marion Ranger District	- 990 acres treated - Reduce costs of treatment to \$23/ton	- Assist NFS with hazardous fuel reduction projects by subsidizing collection of woody biomass for Santee Cooper co-firing plant and for biomass energy plant at USC - Expand market for hazardous fuel treatment material	June 05 – Dec 05 Removal of 52,000 tons of green wood from 1,122 acre biomass project Jan 06 – Dec 06 11,418 tons of green wood removed, no results lowed costs Jan 07 – Dec 07 58,000 gt	Additional 1,396 acres were treated on the Francis Marion NF during FY07. Approximately 58,000 green tons of wood were removed. Treatment of 1,396 acres by mechanical resulted in that many more acres receiving hazardous fuel treatment. The important part about these 1,396 acres is that they are in an area of the forest that is near urban sprawl of Charleston, SC, and therefore would not likely be treated by using fire. The grant has given us another tool to treat areas of the forest that are heavily affected by urban growth	

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Grantee and Location	National Forest	Anticipated Impact on NFS, including acres treated from grantee proposal	Objective of grant	Progress Reports from NFS	Progress Report from NFS June 06 – June 07	NFS Contact
(5) Wallowa Resources, Enterprise, OR	Wallowa Whitman Wallowa Valley District	- Utilize an additional 3,350 to 3,800 tons per month of woody biomass	- Expand wood facility to handle more woody biomass	June 05 – Dec 05 No direct impact on NFS to date Jan 06 – Dec 06 No direct impact on NFS to date Jan 07 – Dec 07 7,304 gt	7,304 green tons were removed. Lodgepole pine, ponderosa pine, and Douglas-fir are being treated by the grant. The grant resulted in a reduction in hazardous fuels because it provided a market for the small-diameter wood that is often hard to sell. Now NFS can mark everything that needs to come out, and the purchaser has a market for all sizes and species of wood. With the Wallowa Mill closing, the success of the CCS is very important to our ability to complete further fuels reduction and forest restoration projects	Barbara Van Alstine
(6) Northern Cal- Neva RC&D, Alturas, CA	Modoc	- Treat 7,000 acres of hazardous fuel treatment - Expand fuel treatments, reduce haul cost by \$74.88/acre and transform costly service contracts to viable biomass sales	- Support expansion of biomass power (Big Valley Biopower) by facilitating infrastructure for delivery of woody biomass	June 05 – Dec 05 Jan 06 – Dec 06 1,640 acres on NFS. Reduced cost from \$250/acre to revenue of \$1.10/acre – 29,220 gt Jan 07 – Dec 07 23,300 gt	Forest Service treated 1,645 acres in 2007 as part of the ongoing timber sale. 23,300 green tons of biomass were removed from NFS lands and delivered to Big Valley Power.	Anne Mileck
(7) Cheyenne Log Homes dba Arizona Log and Timber-works, Eager, AZ	Apache- Sitgreaves	- Add value to material removed from Future Forests LLC White Mt Stewardship contract of \$103/acre - Additional revenue should allow treatment of additional 652 acres/year on White Mt stewardship contract	- Install pressure treating facility to develop value-added product from small-diameter - Develop marketing efforts to increase awareness of new product	June 05 – Dec 05 Jan 06 – Dec 06 "Progress underway but too early to determine direct NFS impact" Jan 07 – Dec 07 652 additional acres per year	The borate process adds \$103/acre value to material delivered from Future Forests LLC White Mt Stewardship contract. Additional revenue should allow treatment of an additional 652 acres/year. The Borate plant is fully operational and product is being treated and sold. The A-S National Forest is seeing a significant rise in the industrial capabilities of the industries in our area. Most of these are just developing, but the outlook is very positive. Without the grants, this area would still be struggling and be many years behind. The grants have worked hand in hand with the White Mountain Stewardship Contract. Together, the effort is significant. Most of the businesses now have the equipment purchased and installed. With this equipment, funded primarily by these grants, the forest is ready to increase utilization and recovery. We anticipate significant reduction in costs within the next year or two. This program is the most important grant program for the White Mountains wood industry. The industry that essentially died throughout the 1990's is re-emerging and developing at an appropriate scale. The opportunities are building upon themselves, and the grant program will have this area as a shining example within the next few years.	Jerry Payne, Robert S. Taylor

Grantee and Location	National Forest	Anticipated Impact on NFS, including acres treated from grantee proposal	Objective of grant	Progress Reports from NFS	Progress Report from NFS June 06 – June 07	NFS Contact
(8) Loblolly Logging and Lumber, Pagosa Springs, CO	San Juan	- Increased value of materials removed in fuels treatments will contribute \$200 to \$300 in revenues for every acre treated from local Forest Service operations - Estimated production of 700 poles/rails per week will ensure market outlet for small-diameter timber removed from Forest Service hazardous fuel reduction projects	- Acquire, install dowelling mill to increase use of small- diameter material - Make it feasible to pay about \$500/truckload for 4- to 8-inch roundwood that is currently chipped for off-site disposal	June 05 – Dec 05 No change yet, new mill has yet to operate Jan 06 – Dec 06 \$1,500 of savings for the East Vallecito Fuels Treatment. 150 gt Jan 07 – Dec 07 441 gt	80 acres more were treated as a result of the grant. 441 green tons were removed.	Steve Hartvigsen
(9) Wyoming Sawmill, Sheridan, WY	Bighorn	- Reduce typical fuel treatments by \$280/acre - Increase value of non- merchantable small-diameter trees	- Manufacture proprietary laminated header using material from Forest Service fuels reduction project - Move product through product testing and certification - License new header product to small log mills to manufacture product from small-diameter logs	June 05 – Dec 05 No immediate impact except National Forest has seen greater utilization of small-diameter material Jan 06 – Dec 06 No direct impact except that additional material that was uneconomical is being removed and utilized Jan 07 – Dec 07 No direct impact	This grant, to date, has not affected operations. Eventually, through this grant, additional commercial utilization of forest products will be possible; thereby reducing the future costs of mechanical fuels treatments.	Chris Thomas
(10) W. B. Contracting, Eager, AZ	Apache- Sitgreaves	- Will allow additional 4,000 acres of WUI to be treated - Cost savings to Forest Service of \$873,000 during 10-Year Stewardship Contract	- Reduce cost of logging road reconstruction and need for new roads - Access steeper slopes in WUI - Improve air quality by reducing need to pile and burn	June 05 – Dec 05 Jan 06 – Dec 06 "Progress underway but too early to determine direct NFS impact " Jan 07 – Dec 07 131,401 gt	For the time period, 131,401 green tons were treated from the White Mt Stewardship contract. The grant will allow an additional 4,000 acres of WUI to be treated that otherwise would not be able to be treated. There will be an estimated cost savings to Forest Service of \$873,000 during this 10-year Stewardship Contract.	Jerry Payne, Robert S. Taylor

Grantee and Location	National Forest	Anticipated Impact on NFS, including acres treated from grantee proposal	Objective of grant	Progress Reports from NFS	Progress Report from NFS June 06 – June 07	NFS Contact
(11) Central Oregon Intergovern- mental Council, Eastern Oregon	Deschutes- Ochoco	- Stimulate investment in local bioenergy and small log processing facilities - Reduce fuel cost treatment by \$100/acre - Increase fuel reduction programs from 63,000 to 85,000 acres/year - \$2.2 million/year reduction in fuel treatment costs on Forest Service, BLM, and BIA units	- Develop and implement protocols for Forest Service and BLM units to plan, project, coordinate, and levelize regional programs of work over 3 to 5 years - Produce & disseminate annual supply projections to promote local investment - Decrease costs/acre. Increase number of acres treated - Monitor and evaluate economic and environmental benefits - Communicate and share lessons and	June 05 – Dec 05 No response from NFS Jan 06 – Dec 06 No response from NFS Jan 07 – Dec 07 Difficult to measure 9930 gt	COPWRR has been very actively involved in removing woody biomass in Central Oregon since it's creation in 2002. The organization is viewed as such a success because the local FS and the BLM offices are supporting their work by allocating \$45,000 of funds to cover their services to the agencies over the next 3 years. COPWRR doesn't remove biomass, but rather enables industry to do so. But since the chip market was up this year, generally much more woody biomass was removed than ever before. So, machine pile burning and smoke emissions were reduced with this increased pile utilization, which will lead to reduced costs. Pile burning in this area generally occurs in November so these reductions in costs will be figured into the FY 08 program.	Cindy Glick
(12) England Sawmill, North Fork, ID	Salmon- Challis	-Annual revenue between \$900,000 to \$1,200,000 - Save National Forest between \$850,000 to \$1,100,000 in annual expenditures if National Forest had to hire crews to complete projects	- Install dry kiln - Double production capacity of mill from 750,000 bf to 9 million bf - Increase product/load from 15,000 bf green to 28,000 bf dry - Employ additional 25 to 30	June 05 – Dec 05 No response from NFS Jan 06 – Dec 06 No impact yet, but sale under contract, finished logging during summer 2006 Jan 07 – Dec 07 No direct impact.	Gary England has been an active bidder on many of the sales offered during 2007. However, due to the competition he has not been the successful bidder on any of our sales. The grant did not result in a reduction in NFS hazardous fuel treatment costs because he has been out bid by the competition on our sale offerings. In FY 2006 his grant resulted in a reduction in costs when he completed the Smith-Bates Timber Sale, which was 34 acres in size. Because of the grant, our forest has been actively working with the local industry to maximize the utilization of small-diameter material. Due to Gary England's active participation in the bidding process, he has increased the value we receive per ccf. Gary England has acquired two timber sales on the BLM in FY 2007. According to the BLM, it has had a significant impact in reducing woody biomass in the sale area. These two sales amounted to approximately 100 acres being treated.	Douglas Basford
(13) Summit Views LLC, Watsonville, CA	Los Padres	- 800 to 1600 green ton/year with a revenue to Forest Service of \$18/green ton	Expand capability to utilize hazardous fuel treatment material Demonstrate economic viability of purchasing biomass feedstock from hazardous fuel reduction projects Demonstrate how densified firelog plant can be deployed in other communities	June 05 – Dec 05 Jan 06 – Dec 06 No visible impact during this reporting Jan 07 – Dec 07 No direct impact.	This grant has not affected our fuels treatments on the Monterey RD yet. Even though Summit Views to date has not removed biomass material from NFS lands, the objectives for the project, if met, will have long-term benefits to the Forest Service.	John Bradford

Grantee and Location	National Forest	Anticipated Impact on NFS, including acres treated from grantee proposal	Objective of grant	Progress Reports from NFS	Progress Report from NFS June 06 – June 07	NFS Contact
(14) M&L Enterprises, Deschutes County, OR	Deschutes Crescent Ranger District	- Treatment savings to NFS of between \$335 - \$400 per acre - Increase treatments roughly by 500 acres/year	- Purchase new processing equipment to upgrade mill and handle more woody biomass	June 05 – Dec 05 Purchased and removed decked logs and landing slash, 971 CCF which Forest Service would have had to pile and burn Jan 06 – Dec 06 Purchased and removed 2,660 CCF of slash – 7029 gt Jan 07 – Dec 07 3380 gt	For this reporting period, 3,380 green tons have been removed from NFS lands, plus 1660 BDT in residual product. The grantee has doubled manufacturing production as a result of this grant. Considering one-half portion of the volume mentioned in response #1 above, 954.5 green tons can be attributed removed from FS lands from July 1 to December 31, 2006 and 2,425 GT removed from January 1-September 30, 2007. In addition, M&L ships shavings from the peelers as hog fuel to a biomass plant. An estimated increase of 31% hog fuel production may be attributed to the equipment purchased by the grant. From July 1, 2006 through September 30, 2007, 760 Bone Dry Ton (BDT) was created and shipped.	Judith Parker,
(15) Big Sky Forest Products, St. Regis, MT	Lolo	- Project claims it will be able to pay \$25/ton, process 300 tons/day; 75,000 tons per year, which translates into 5,000 acre/year	- Turn small-diameter material into merchantable pulp quality chips or roundwood that is left to pile and burn - Reduce cost of treating acres by creating products from underutilized material	June 05 – Dec 05 No response from NFS Jan 06 – Dec 06 No response from NFS Jan 07 – Dec 07 No impact on Lolo NF. (See material from Flathead NF below).	There was no reduction in fuel treatment costs linked directly to this grant. But the forest has pending timber sales and stewardship contracts that may lead to a future reduction in hazardous fuel treatment costs. Due in part to the efforts associated with this grant, we are more aware of the need for whole tree yarding and to have forest products available at landings.	Boyd Hartwig
(16) Panhandle Forest Products, Cocolalla, ID	Idaho Panhandle, Flathead NF	- Increase by \$13/ton the price of raw material paid to Forest Service	- Develop value-added processing down to 2-inch- diameter material, which uses material that would be piled and burned	June 05 – Dec 05 No response from NFS Jan 06 – Dec 06 No response from NFS Jan 07 – Dec 07 4464 gt from the Flathead NF	Expansions are not yet completed, therefore, no impact, although grantee has contracts with the Forest Service	Scott Bell

Grantee and Location	National Forest	Anticipated Impact on NFS, including acres treated from grantee proposal	Objective of grant	Progress Reports from NFS	Progress Report from NFS June 06 – June 07	NFS Contact
(17) Forest Guild, New Mexico	National Forests of New Mexico	- Direct contribution of cost share program should reduce treatment costs by \$250/acre - New Workmen's Comp rates should reduce treatment costs by nearly \$1 million/year	- Develop logging safety training and certification program - Provide cost share of \$100 to \$300/acre for certified contractors during 2-year implementation - Collect data to determine feasibility of new 'thinning contractor' certification	June 05 – Dec 05 Jan 06 – Dec 06 Direct impact on NFS hard to determine; however Workman's Compensation Insurance rates for certified loggers have been reduced in half	Since March 2006, 13 worker safety certificates have been offered and 240 Forest workers have been certified. The Worker's Compensation in NM has been reduced from \$79 per \$100 of payroll to \$39 per \$100 of payroll. Current efforts are aimed at forming an association to house the worker Safety training certification program.	Jerry Payne
				Jan 07 – Dec 07 Same impact as in FY2006 since training is continuing		
(18) Travis Taylor Logging, Goldonna, LA CANCELLED	Kisatchie Winn Ranger District			June 05 – Dec 05 NA Jan 06 – Dec 06 NA Jan 07 – Dec 07 NA	This grant was cancelled by Travis Taylor.	NA
(19) Northern Nevada Correctional Facility, Carson City, NV	Lake Tahoe Basin Management Unit	- When facility is online, treatment costs for NFS reduced by \$300/acre	- Install biomass co- generation facility at NNCC - Establish biomass recovery and transport system for delivery to facility	June 05 – Dec 05 No response from NFS Jan 06 – Dec 06 No response from NFS Jan 07 – Dec 07	Northern Nevada Correctional Facility is not operational at this time. Biomass removal contracts have been awarded, but material was not designated as delivery to the Correctional Facility. One small project was contracted to Carson City Renewable Resources, who is the primary fuel contractor for NNCC. They removed about 150 tons from National Forest System lands.	Amanda Brinnand
(20) American West Structures, LLC Eagar, AZ	Apache- Sitgreaves	- Increase demand from small logs by 450 bf/year to 2,000,000 bf/year - Increase value of small woody biomass by \$3/ton - Reduce cost of stewardship	- Install lumber dry kiln to allow production of kiln dried lumber from small-diameter lumber harvested from 10- year stewardship contract - Install wood laminating press to produce laminated wood decking to compliment existing product line - Establish capability to manufacture decking	June 05 – Dec 05 Jan 06 – Dec 06 "Progress underway but too early to determine direct NFS impact " Jan 07 – Dec 07 Too hard to determine est 2,000 MBF	The laminating press, compressor, and end-matching joiner are in place and operational. The dry kiln has not been purchased. This grantee is a secondary user. They have used about 2,000 MBF in the last year from the Reidhead mill.	Jerry Payne, Robert S. Taylor

Appendix 2 Table 4. Preliminary NFS Impacts of 2006 Woody Biomass Grant Program

Grantee and Location	National Forest	Anticipated Impact on NFS, including acres treated from grantee proposal	Objective of grant	Pre Grant Green tons	Progress Report from NFS	Progress Report from NFS June 06 – September 07	NFS Contact
Montana Community Development Corporation, Missoula, MT	Bitterroot,	- Partners will treat and log nearly 2,000 acres/yr , including 1,046 acres of federal land in 2006 Federal government will save \$35 - \$50/acre over what it currently pays for burn treatment.	Create privately owned and operated integrated woody biomass collection yard and roll-off container network in western MT.	No data reported	June 06 – Dec 06 No impact Jan 07 – Dec 07 No impact	Sub-contractor working on project was seriously injured but is now back to work. Therefore, they have not treated any acres per the grant.	Nan Christianson Boyd Hartwig
(22) Greenleaf Forestry and Wood Products, Inc., Westcliffe, CO	Pike and San Isabel	- Reduce NF treatment costs from \$60-\$90 for on-site mastication to zero Reduce forest biomass removal costs from \$800/acre to less than \$250/acre Increase volumes processed by 3 to 6 times current levels Treat 150 acres Increase annual small log production 3x from 300 to 900 ccf	- Increase efficiency of handling and processing small logs Increase production vol Increase quality Reduce costs.	No data reported	June 06 – Dec 06 No impact Jan 07 – Dec 07 No impact	The grantee has been unsuccessful in being awarded contracts for treatment in the past year. Therefore, no direct impact on NFS this year.	Paul Crespin
(23) Morgan Timber Products, Bellvue, CO	Arapaho- Roosevelt	- Reduce management costs by \$200 per acre on approximately 1,000 acres annually Utilization of biomass material Improved air quality from reduced controlled burning.	- Help FS meet fuels reduction targets Help Morgan Timber Products be profitable Lower fuel left on site Eliminate landing slash disposal and rehab costs Reduce smoke - Lower FS admin costs Reduce transportation costs and resulting fuel use	No data reported	June 06 – Dec 06 No impact Jan 07 – Dec 07 300 gt	Acres treated totaled 375, primarily lodgepole pine with some small ponderosa pine treated by the grant. Treatment methods changed because of the grant with increased mechanized removal / utilization for post & pole, fence material and animal bedding. Morgan Timber Products was able to upgrade post, pole & fence processing and woods operation to make the shift away from mastication toward utilization where possible.	Dan Len

Grantee and Location	National Forest	Anticipated Impact on NFS, including acres treated from grantee proposal	Objective of grant	Pre Grant Green tons	Progress Report from NFS	Progress Report from NFS June 06 – September 07	NFS Contact
Mt. Taylor Machine, LLC, Milan, NM	Cibola	Reduce costs from \$500 per acre to a minimum of \$400 acre,	- Develop efficient harvesting and transporting system to bring material to Mt. Taylor Machine for wood pellet production - Utilize same system to harvest invasive tamarisk - Work in cooperation with Ramah Navajo Restoration Project and Zuni Tribal Sawmill to build their capacity Supply Sunnyland Farms with 10,000 tons per year of industrial grade wood pellets for pellet boiler for 10-acre greenhouse Supply growing national demand with industrial & residential premium grade pellets Utilize marketing capacity of Mt. Taylor Millwork, Inc. Wholesale Division to secure markets for other value-added products Create more jobs for Native Americans .	No data reported	June 06 – Dec 06 No impact Jan 07 – Dec 07 No impact	No acres were treated and no green tons of wood were removed.	Thomas Marks
(25) Olguin's Sawmill, El Prado, NM	Carson	- Treat 826 acres - Produce 2,100 MBF of small wood product - Save FS \$131,735.18 in one year	- Help reduce NM Carson NF management costs by increasing biomass value - Increase use of biomass from NM Carson NF - Remove economic and market barriers to using small-diameter trees	No data reported	June 06 – Dec 06 No impact Jan 07 – Dec 07 1,326 gt	No response from NFS	

Grantee and Location	National Forest	Anticipated Impact on NFS, including acres treated from grantee proposal	Objective of grant	Pre Grant Green tons	Progress Report from NFS	Progress Report from NFS June 06 – September 07	NFS Contact
(26) Sherry Barrow Strategies, Ruidoso, NM	Lincoln	- Reduce fuel treatment costs on existing acres under contract as well as prospective projects	- Implement efficient harvesting system - Reduce fuels treatment costs on NF lands - Supply SD materials to SBS Wood Shavings	No data reported	June 06 – Dec 06 No impact Jan 07 – Dec 07 2,216 gt	257 acres were treated and 22,15.5 green tons were removed as a result of this grant.	Constance Zipperer
(27) Town of Red River, Red River, NM	Carson	- Community of 500 able to conduct hazardous fuels activities on NF. - Reduce cost of piling and burning	- To handle and transport poles at regional reload station Reduce cost of hazardous fuels projects in Pioneer Canyon Watershed on Carson NF.	No data reported	June 06 – Dec 06 No impact Jan 07 – Dec 07 No response	No response from NFS.	
(28) Western Moulding Company, Inc., Snowflake, AZ	Apache- Sitgreaves	- Install additional milling capacity for White Mountain Stewardship Contract. - Reduce cost for pile burning	- Double existing capacity of kiln drying - Install resaw to improve recovery Increase amount of woody biomass processed from NFS Decrease waste - Expand markets	No data reported	June 06 – Dec 06 No impact Jan 07 – Dec 07 Doubled capacity by 6,000 BF/ day (50 tons/day)	Installing equipment and difficult to calculate additional impact because this mill receives material from White Mountain Stewardship Contract. However, resaw has doubled capacity and the amount of material going through.	Edward Collins
(29) Round Valley Wholesale Lumber, Inc., Eagar, AZ	Apache- Sitgreaves	- Only sawmill within White Mountain Stewardship Contract area.	- Complete product recovery mill - Recover waste - Reduce NFS cost - Use revenue to offset fixed operation costs.	No data reported	June 06 – Dec 06 No impact Jan 07 – Dec 07 21,336 gt	Purchased and installed resaw, increased production, reduced total chip production by 50% and added 4 new jobs. 21,336 green tons used from stewardship contract.	
(30) Southwest Forest Products, Inc., Phoenix, AZ	Kaibab	- Estimated 8,500 acres per year (4,000 before + additional 4,500 after)	- Lower stand treatment costs by \$73 per acre Treat more acres .4,500 acres more per year.	No data reported	June 06 – Dec 06 No impact Jan 07 – Dec 07 6,2648	2,494 acres treated on Prescott, Coconino and Kaibab NF. Before grant were averaging 511 loads of logs; after the grant averaging 558 loads of logs. As of May 2007 had processed: Coconino NF – 3,808 ccf of biomass removed from 500 acres Prescott NF – 5,968 ccf of biomass removed from 750 acres Kaibab NF – 3,104 ccf of biomass removed from 400 acres	

Grantee and Location	National Forest	Anticipated Impact on NFS, including acres treated from grantee proposal	Objective of grant	Pre Grant Green tons	Progress Report from NFS	Progress Report from NFS June 06 – September 07	NFS Contact
(31) Skyline Forest Resources, Inc., Escalante, UT	Dixie, Fishlake	- 1,273 acres on Dixie NF first year - Anticipates 7,000 to 10,000 acres on Dixie Fishlake NF hazardous fuel treatment program of 8,000 acres/yr	- Convert small-diameter logs into high-value animal bedding from mixed conifer and aspen stands on Dixie & Fishlake NF	No data reported	June 06 – Dec 06 No impact Jan 07 – Dec 07 7,224 gt	Indirectly grantee has purchased biomass volume off 132 acres of NFS lands. Fuel reduction objectives are being met and a value is being generated by the sale of the forest products.	Don Okerlund
(32) Lake Tahoe Unified School District, South Lake Tahoe, CA	Lake Tahoe Basin Manage- ment Unit	- Harvest and utilize 152 acres/yr (~ cost savings of \$402/acre)	- Replace gas heating boiler South Tahoe HS with wood-fired boiler system -Use woody biomass from within Tahoe Basin Develop fuel supply system, - Demonstrate feasibility of wood fired system at public facility.	No data reported	June 06 – Dec 06 No impact Jan 07 – Dec 07 No impact	The Lake Tahoe Unified School District still hopes to fulfill the grant's intent and is fully involved with the related permitting authorities. After consultation with the relevant agencies, they are now awaiting the results of a revised approach to the health assessment process. It is hoped that the results of this assessment will provide for significant progress.	Joseph Sherlock
(33) Big Valley Power, Redding, CA	Modoc	- Treat 3,840 acres/yr - Estimated savings \$80 per acre - 64,000 green tons annually	- Subsidize - Utilize - Merchandize - Electrolyze	37,937 gt	June 06 – Dec 06 No impact Jan 07 – Dec 07 23,263 gt	Took some time to get sawmill up and running. It is now. 854 more acres were treated by grantee and 23,263 green tons of wood were removed as a result of this grant. Big Valley Power removing small trees from forest saved estimated \$400/acre for a total savings of \$551,200.	Terry Reedy
(34) Warm Springs GeoVisions, Warm Springs, OR	Mt. Hood, Deschutes, Ochoco	- Harvest and utilize material from 5,668 acres at cost savings of \$226,720.	- To economically produce 24,000- 32,000 tons of woody biomass chips/yr from NF in Central Oregon.	No data reported.	June 06 – Dec 06 No impact Jan 07 – Dec 07 No impact	Geovisions has asked for a time extension to further investigate their purchase of biomass equipment.	Cindy Glick
(35) Rough and Ready Lumber Company, Cave Junction, OR	Rogue River- Siskiyou, Klamath, Six Rivers	- Treat 1,500 to 2,000 acres/yr FS & BLM lands	- Utilize up to 15,000 bdt - Assist in treating up to 1,500 to 2,000 acres/yr - Retain 85 jobs at sawmill - Generate 7 to 10 new jobs	No data reported.	June 06 – Dec 06 No impact Jan 07 – Dec 07 No impact	Plant not yet running, although installation is complete at the time of this report. Stewardship sales are being prepared with biomass removal as a possibility. Grant has very positively affected operations on the National Forest.	Joel King

Grantee and Location	National Forest	Anticipated Impact on NFS, including acres treated from grantee proposal	Objective of grant	Pre Grant Green tons	Progress Report from NFS	Progress Report from NFS June 06 – September 07	NFS Contact
(36) Roseberry Timber, Inc., Crescent, OR	Deschutes, Ochoco, Prineville BLM Plumas	- Reduce costs to NFS	- Increase biomass removed from NF by 22,500 tons - Increase future removal by 6-10,000 tons/month - Increase acres of NF treated by 4,050 acres for first 1.5 year. - Decrease Fed costs from \$150 to \$61.73 per acre .		June 06 – Dec 06 No impact Jan 07 – Dec 07 4,030 gt Deschutes 16,273 gt Plumas	4030 green tons of lodgepole and ponderosa pine were removed from 798 acres. 800 acres on Plumas NF	Cindy Glick
(37) Vaagen Brothers Lumber, Inc., Colville, WA	Colville	- Increase utilization of biomass from 90,000 green tons per year to 200,000 green tons per year.	- Identify - Acquire - Setup - Grid	3000 acres with pile burning 4,500 acres without pile burning	June 06 – Dec 06 No impact Jan 07 – Dec 07 6,750 gt	Several landing piles have been removed and used. But no net increase in acres on NFS for FY2007. The presence of the grinder on the Colville NF is causing adjustments in way NF approaches projects but equipment is too new to have influenced projects that were already in pipeline. 6,750 green tons were removed. No impact on costs of hazardous fuel treatment costs. It has only been utilized on one small area where the special use permitee was responsible for the treatment. The Colville NF is designing future projects to incorporate use of grinder to utilize slash materials rather than burning them. This equipment has provided impetus for NF to creatively design projects to incorporate grinder to use biomass rather than burn it. The grinder has allowed Vaagen Bros. Lumber to utilize a higher percentage of yard material for co-generation of electricity, which material would have otherwise been sent to the land fill.	Ed Maffei
(38) CAWACO RC&D Council, Springville, AL	National Forests in Alabama	- 500 acres of hazardous fuel acres harvested and utilized	- Test feasibility of co-firing wood and coal in Southern Co. facilities. If the test proves viable, co-firing can be expanded to a variety of locations at other Southern Company's facilities.		June 06 – Dec 06 No impact Jan 07 – Dec 07 2,640 gt	37 Acres were treated as a result of the grant.	Cynthia Ragland

Appendix 3: Summary of 2005 Grant Projects

(Note: Numbers correspond to numbers on map and in Appendix.)

1. Grantee: Dodge Logging Inc, Boardman, Oregon

<u>Goal:</u> Improve lumber recovery from small logs that would have been burned on site during hazardous fuel reduction projects.

Status: COMPLETE

<u>Summary:</u> Installed a single pass saw line designed for small diameter logs, as well as sending chips from the single pass saw line to their new wood pellet plant in Pendleton, OR. Wood pellet mill is operational. The single pass saw line is complete and gives Dodge Logging the ability to analyze each log as it passes through the process and either makes wood chips for pulp mills or makes boards for the lumber market, depending on lumber prices. This allows Dodge Logging to utilize smaller diameter material from NFS.

The project is basically complete with the following activities:

- Installed Integrated Accounting and Inventory Software, Mas 200 and ISIS Wood Solutions completely throughout company.
- Installed Blue Mt Lumber Products Twin-Band saw, which increased productivity by 25%.
- Installed Boardman Sort/Merchandize Line and Single-Pas Line, which gives ability to analyze each log as it passes through the process and allows production of either wood chips for pulp mills or boards for lumber market, depending on economics of market.

	Pre-Grant	Post Grant				
	June 04 – June	June 05-Dec 05	Jan 06 – Dec	Jan 07 – Dec 07	Jan 08 – Dec	
	05		06		08	
Green tons utilized from NFS	59,524	37,666	66,177	25,149		

NFS Impacts: Wallowa-Whitman National Forest; La Grande Ranger District

Reporting period June 2004 to June 2005:

	Acres Treated		Cost or Re	Total Green Tons Removed	
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant	1521	4000	\$200	\$100	20,000
Post grant	2991 52446		\$200	\$100	17,000

Comments from Wallowa-Whitman NF, La Grande RD:

- "Contractor is still in the installation phase of the small diameter sawmill at the Boardman Oregon facility. Plans are to start operation by summer 2006. To date no additional acres treated as a result of the grant."
- "Our forest needs to design projects which will be competitive with other forest/districts on a unit cost basis with mix of mechanical (with and without removal) and Rx burning. No change as a result of the grant. The easy cheaper acres are going fast."
- "Grantee appears to be very comfortable with stewardship contracting and continues to be proactive in development of new markets for material. The grant could have some bearing on their level of participation, bid rates and successful implementation. It will take additional time to assess the impacts of the grant."
- "Traditional sawlog milling facilities are relying heavily upon private land log supply. Non-saw product removal is increasing from federal lands but not near enough to make a difference. The woody biomass grant program does help assist the development or maintenance of industrial infra-structure important to successful vegetative management activities. An important element of the woody biomass grant program is a concurrent program of a flexible timber management program that efficiently plans and prepares these projects as well."

Reporting period June 2005 to June 2006: No response from NF.

Reporting Period June 2006 to June 2007: No response from NF.

NFS Impacts: Umatilla NF

Reporting Period June 2004 to June 2005:

Comments from Umatilla NF for this reporting period:

"As of March 14, 2006 the small log milling facility at Boardman OR is not operational. It is my understanding that construction is underway."

Reporting Period June 2005 to June 2006:

NFS returned form and checked box that the Woody Biomass Grant had no visible effects during the reporting period of June 2005 to June 2006.

Reporting Period June 2006 to June 2007:

Comments from Umatilla NF for this reporting period:

- The addition of a small logging milling facility in the Umatilla market area is beneficial to our forest and our ability to conduct vegetative management projects. Albeit the forest has not realized measurable effects from the small log mill, I am sure the Forest will over time."
- "Dodge has completed the construction of the small diameter mill at Boardman OR. The market for lumber and paper chips has dropped off significantly in the last 10 months, to the point that small diameter material that would be suitable for this mill is currently be chipped for paper production. I expect small diameter logs to be utilized by this mill when the markets return to past averages. In addition, the Umatilla has experienced 3 years of significant wildfires on the Forest. Dodge Logging spent the majority of the 2006 and 2007 field seasons harvesting fire salvage timber sales."

2. Grantee: Warm Springs Forest Products Industries, Warm Springs, Oregon

<u>Goal:</u> Upgrade their woody biomass energy plant to increase energy output and use more woody biomass from Deschutes NF, BLM and BIA.

Status: Many delays due to securing fuel supply and securing loan from State of Oregon for \$15 million. MOU signed between FS, BLM and Confederated Tribes of Warm Springs in January 2006 regarding fuel supply. Overall project is very large with the FS grant only representing about 1% of total cost of project. Things are proceeding in a positive fashion but everything, such as securing power purchase agreement with major utility, is taking longer than expected.

NFS Impacts: Deschutes - Ochoco National Forests

Reporting period June 2004 to June 2005: No response from NF.

Reporting period June 2005 to June 2006: No response from NF.

Reporting period June 2006 to June 2007:

	Acres T	reated	Cost or Re	venue/Acre	Total Green	
	Mechanical	Rx Burn	Mechanical	Rx Burn		
Pre grant			\$150-\$800/ac	\$25/ac	0	
				(Machine Pile		
				Burn Cost)		
Post grant	1741.5 ac	7583 ac to	\$150-\$800/ac	\$25/ac	9930 GT from	
	biomass	burn machine		(Machine Pile	WBUG program	
	removed/66957.5	piles		Burn Cost)		
	acres of fuels					
	treatments					

Comments from Deschutes – Ochoco NF for this reporting period:

- "485 acres were treated in 2007 but starting in FY08, this could increase to 8,000 ac/yr. The 485 acres were done as demonstrations to determine the costs of removing biomass and hauling it to Warm Springs. The new expanded biomass plant is currently being installed at Warm Springs forest Products and will be operational at the end of FY08. Warm Springs is increasing their capacity from 8 MW to 16 MW."
- Of the green tons of wood removed, 5100 green tons were ponderosa pine and 800 green tons were juniper.
- The grant has resulted in reduced NFS hazardous fuel treatment costs. "In the ponderosa pine, very little post treatment hand piling and burning needed to be done, reducing this cost by 75%: from \$600/acre to \$150/acre. In the juniper removal treatments, costs of removal of biomass were much higher than leaving the biomass lopped and scattered on site. So at this time, juniper removal is not feasible until the value of the juniper biomass increases, the methods of harvesting it are improved, or the environmental services provided by juniper removal are valued in the ecosystem marketplace."
- The treatment methods or mix of methods have changed because of the grant. "Starting in FY08, the Mt. Hood NF, the Ochoco NF, the Deschutes NF, and the Prineville BLM have agreed under a MOU with Confederated Tribes of Warm Springs to offer 8000 acres of biomass supply annually to a market that is 75 miles around Warm Springs Forest Products plant for a period of 20 years. This action will likely increase the acres that we prepare for biomass utilization compared to the existing practice of burning piles in the woods. The agencies and its partners are also seeking carbon credits based on the carbon sequestration value in the wood products derived from the utilized biomass. In addition, the State of Oregon passed legislation allowing a transportation subsidy for biomass transported to processors/power plants.
- "Since the expanded biomass plant has taken so long to be built, no real effects have occurred that have affected our operations as yet." However, "overall the WBU grant program has been very helpful in helping businesses to develop industry infrastructure for increasing capacity to process biomass. Since the agencies have been working with partners to improve this capacity for a few years, there is some impatience to get the biomass rolling off sites. The general thinking is that once industry infrastructure is in place, the most cost effective and accessible biomass supply will be derived from timber sales and stewardship contracts. Possibly in the future, if the demand and value for biomass increases, then precommercial thinning or ladder fuel reduction work may be changed to more mechanized harvesting procedures."

3. Grantee: Institute of Agriculture and Trade Policy, Minneapolis, Minnesota

<u>Goal:</u> Address economic, environmental and information barriers associated with hindering biomass energy markets in Northern Minnesota.

Status: COMPLETE.

Summary: The project involved analyzing costs and impacts of biomass harvesting. This project involved assessing and analyzing 6 different harvesting systems in 6 different trials in the Superior National Forest. The project focused on explaining the cost effectiveness of harvesting biomass to reduce costs for fuel reduction treatments paid by the USDA Forest Service. In most cases, conventional treatment costs are lower than the net costs of harvesting and delivering material only for biomass. On the other hand, there are scenarios and conditions where cost reductions are possible as far as 100 miles from biomass users and from trucking points. Harvesting and delivering forest energy biomass under certain conditions, and under fuel reduction prescriptions, can reduce the costs of conventional mechanical treatments.

Harvesting biomass for energy as a fuel reduction tool is a new practice in the State of Minnesota. Semi-structured interviews with forest machine operators in 6 biomass harvesting trials indicate that existing fuel reduction prescriptions need to be more realistic in making recommendations that can overcome operational barriers and planning and coordination (guidelines and communications) are necessary for a viable biomass energy production system. In summary, once biomass energy production is a desired outcome, incorporating an early understanding of the production logistics of biomass harvesting can improve performance and efficiency.

Based on this work, Minnesota DNR incorporated much of the information into the development of Minnesota's Site Level Guidelines for Sustainable Biomass Harvesting. These guidelines will influence most forest biomass harvest across public and private lands in Minnesota, and are being used as a template for the State of Wisconsin to develop a similar guideline. The Superior National Forest staff is working with the team that analyzed the test harvests to discern and integrate the lessons of this project. Analysis indicates process and outcome improvements can be obtained by changes from initial management planning through environmental analysis and contracting. Production changes will be implemented over the next year as a result of this project.

NFS Impacts: Superior National Forest, Tofte, LaCroix, Kawishiwi Ranger District

Reporting Period June 2004 to June 2005:

	Acres Treated			Cost or Revenue/Acre		
	Mechanical	Rx Burn	Other	Mechanical	Rx Burn	Other
Pre grant FY 2004	462	14282	-	\$176.01/acre	\$95.18/acre	-
Post grant FY 2005	1464	14413	-	\$23.72/acre	\$250.00/acre	-

Comments from Superior National Forest during this reporting period:

- "NEPA has not been completed on the 4 sites selected for treatment."
- "Still to be determine (sic whether or not treatment methods changed because of grant)."
- "At this point, activities associated with the Grant are still in planning stages, so it is preliminary to assess the effects."
- "The program is providing an opportunity to test the viability of a biomass program in the area."

Reporting Period June 2005 to June 2006:

Returned form and checked no impact for reporting period June 30 2005 to June 30, 2006. However, Superior NF now has reports since harvesting started after June 30, 2006.

	Acres Treated			Cost or Revenue/Acre			
	Mechanical	Rx Burn	Other	Mechanical	Rx Burn	Other	
Pre grant 12 months	1464	14,394	11	Cost	Cost	Cost	
ending 9/30/05				\$500/acre	\$150/acre	\$10/acre	
Post grant 12 months	1900	18042	2111	Revenue	Revenue	Cost	
ending 9/30/06				\$500/acre	\$100/acre	\$1000/acre	

Notes: Other acres are wildland fire use fires.

Costs are estimated averages

Table below includes	those acres tha	it change cond	dition class and	d includes other BLIs

	A	cres Treated		Cost or Revenue/Acre			
	Mechanical	Rx Burn	Other	Mechanical	Rx Burn	Other	
Pre grant 12 months	3340	14,613	11	Cost	Cost	Cost	
ending 9/30/05				\$500/acre	\$150/acre	\$10/acre	
Post grant 12 months	7023	18290	2111	Revenue	Revenue	Revenue	
ending 9/30/07				\$500/acre	\$50/acre	\$1000/acre	

Comments from Superior NF, Toftee, Kawishiwi & LaCroix RD for this reporting period:

- "The harvesting for this project started after June 30, 2006."
- "The mixes of treatment methods are expected to change because of what has been learned so far in the implementation of this grant. There have been changes to our timber sales methods due to new information learned during this process."
- "The process has taught us that there is some value in biomass and has provided the forest with some potentially new tools to use while implementing the forest plan and implementing Community Wildfire Protection Plans."
- "This is a good program that is providing the Forest and its partners with the added resources necessary to
 be able to experiment with new tools. This added structure and support is very helpful as we try new ways
 to implement our Forest Plan."

June 2006 to June 2007 Reporting Period:

• "This project involved assessing and analyzing 6 different harvesting systems in 6 different trials in the Superior National Forest. The project focused on explaining the cost effectiveness of harvesting biomass to reduce costs for fuel reduction treatments paid by the USDA Forest Service. In most cases, conventional treatment costs are lower than the net costs of harvesting and delivering material only for biomass. On the other hand, there are scenarios and conditions where cost reductions are possible as far as 100 miles from biomass users and from trucking points. Harvesting and delivering forest energy biomass under certain conditions, and under fuel reduction prescriptions, can reduce the costs of conventional mechanical treatments."





4. Grantee: Corporation for Economic Opportunity, Columbia, South Carolina

<u>Goal:</u> To increase the use of woody biomass from the National Forests in South Carolina, particularly for woody biomass energy.

<u>Status:</u> Prior to the grant, the Francis Marion/Sumter NF (FMSNF) did not collect and sell the woody biomass, which resulted from fire hazard fuel reduction projects. The grant, with the Grantee's help, stimulated a new biomass stewardship contract. Also, as the word got out and the Grantee began to work on this project, the FMSNF was contacted by a number of potential users of woody biomass from the eastern part of the state. Increased demand for the FMNF's biomass was the result. So much so, that the original intended customer for FMNF biomass, namely Santee Cooper Electric Utility, was out bid for that biomass.

Prior to the grant, FMSNF produced no woody biomass for sale. Now, for the last two seasons, FMSNF is averaging 58,000 green tons/year. The price it is getting for FMNF biomass has gone from \$1.92/ton to \$3.00/ton. Unfortunately, the markets around the SNF are not strong and recent efforts to solicit bids on stewardship contracts have been unsuccessful. Johnson Controls (U of South Carolina Gasifier) only wanted to pay \$21/ton delivered to downtown Columbia. This is less then even the harvesting. The grantee has been working with others to attract users to the SNF's part of the state,, with some preliminary success. North America Biomass, a wood pellet manufacturer, has provided a Letter of Interest, offering \$25/ton for woody biomass, delivered to a site near the SNF.

CEO is now exploring the potential of torrefaction from material off the National Forests. Torrefaction involves the low-temperature conversion of green wood chips into a fuel product similar to coal. A budget modification was approved that allowed the grant funds to be used for harvesting, transporting and processing material in the torrefaction chamber for material removed from National Forest lands. The demonstration projects will involve sites on National Forest System lands.

NFS Impacts: Francis Marion/Sumter National Forest, Francis Marion Ranger District

Reporting period June 2004 to June 2005:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant District	0	50,730	0	\$35/ac	0
Fuels					
Accomplishment					
Fiscal Year 2004					
Pre-grant District	0	54,385	0	\$35/ac	0
Fuels (thru May					
2005)					
Also misc amounts	0	23,748	0	\$35/ac	0
of various					
hardwoods					

Comments from the Francis Marion NF for this reporting period:

- "No acres have been treated by grantee to date. However, one 1,122 acre biomass removal contract has been sold and awarded (Nov 2005) and will begin harvesting."
- "At completion of the 1,122 acres approximately 52,000 tons of wood have been removed."
- "To date, most of the work done has been planning and contract preparation. When the drier annual weather patterns begin, sale administration activities will begin."
- "Good opportunity for us to treat a lot of post-hurricane Hugo acres, to reduce fire hazard, to reduce the potential for Southern Pine Beetle outbreak and to improve the forests."

NFS Impacts: Francis Marion/Sumter NF, Francis Marion Ranger District

Reporting period June 2005 to June 2006:

	Acres Treated		Cost or Revenue/Acre		Total Green
					Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant from	0	54,385	0	\$35/ac	0
6/1/04 to 5/30/05					
Post-grant from	0	47,809	0	\$34/ac	0
6/1/05 to 5/31/06					

Comments from the Francis Marion NF for this reporting period:

- "11,418 tons (sic of green tons of wood were removed as a result of grant)".
- "Grant has not yet resulted in lower treatment costs."
- "The results of the biomass thinning to date have been outstanding. Now we can say with confidence that we are doing the right thing to manage these post-Hurricane Hugo stands."
- "No acres have been treated by grantee. However, harvesting activities have begun on the 1,122 acre Macedonia Biomass contract mentioned in the previous report. Thru the month of May 2006, 100 acres have been reported as cut and accepted."

NFS Impacts: Francis Marion/Sumter NF, Wambaw/Witherbee Ranger District

Reporting period June 2006 to June 2007:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant from 6/1/04 to 5/30/05	0	54,385	0	\$35/ac	0
Post-grant from 6/1/05 to 5/31/06	1,396	62.743	\$73/ac	\$35/ac	58,000

Comments from the Francis Marion NF for this reporting period:

- No other National Forest, other than the Francis Marion, received treatments by grantee during FY07. An additional 1,396 acres were treated on the Francis Marion during FY07.
- Approximately 58,000 green tons of wood were removed during FY07.
- The stands that are being treated are young loblolly pine stands. Other associated species include Longleaf pine, and various southern hardwood species including hickory, sweetgum, blackgum, yellow poplar, southern red oak, white oak, etc. Loblolly pine accounts for 99% of the volume with the other 1% being the longleaf pine and various hardwood species.
- Treatment of 1,396 acres by mechanical treatment resulted in that many more acres receiving hazardous fuel treatment. The important part about these 1,396 acres is that they are in an area of the forest that is near urban sprawl of Charleston, SC and therefore would not likely be treated using prescribed fire.
- Due to the grant and efforts of the grantee and the National Forest, the Forest did attempt to award a similar contract as has been ongoing on the Francis Marion NF on its sister Forest (Sumter NF). The Forest prepared and advertised a 475 acre biomass removal sale; however, even though it generated interest from 2 companies, no bids were received. The grant has given us another tool to treat acres of the forest that are heavily affected by urban growth, thus areas where burning can not be accomplished to practically treat the heavy fuel buildup that can occur over time.
- The woody biomass utilization grant program has generated interest from the private sector to use woody biomass product. However, the product is, generally speaking, still just beyond the market when talking about price, infrastructure, etc.

5. Grantee: Wallowa Resources, Enterprise, Oregon

Goal: To expand existing post and pole plant to include production of clean mill chips and hog fuel.

Status: Equipment has been purchased and is being leased to Community Smallwood Solutions LLC (CSS).

Operation is established is being purchased by Upstream 21.

Year to date, from January 1 through September 24th, CSS has purchased 7,304 tons of small diameter logs for its post and pole and firewood operations. Total expenditures to date for all logs purchased are \$310,798 bringing the average per ton purchase cost to \$42.55. Of these totals, Wallowa purchased 3,727 tons off the Wallowa Whitman NF from 4 different sales as follows:

Moss Potter Timber Sale (LaGrande RD)	2,770 tons	\$121,887.50
Arroz Stewardship Contr (Wallowa Valley RD	872 tons	\$30,541.35
Spooner Stewardship Contr (Wallowa Valley RD)	58 tons	\$1,815.67
Foothills Stewardship Contr (LaGrande RD)	26 tons	\$1,076.25

Total expenditures for logs purchased from National Forest System lands for the year to date is \$155,320.77 and the average per ton purchase price has been \$41.67. As reported earlier and with USFS approval, CSS shifted its original plans under this grant from the production of clean chips and hog fuel to production of firewood, loose and bundled. Significant sales orders of bundled firewood, hops poles and tree stakes have fueled the growth in CSS's operations this year. Equipment purchased and installed with this grant has contributed to production improvements for these new product lines.

These improvements have increased employment to a total of ten persons – 9 on payroll (6 in post and pole production and 3 in firewood production) and one on contract. In addition, an assistant log buyer was also brought on in a part-time capacity to facilitate log procurement which had been primarily handled by Wallowa Resources. However, CSS is facing limitations to growth and consistent profitability because of capital and equipment limitations. Improvements to the company this year positioned it for an offer from Upstream 21 to purchase CSS and expand its operations. The deal is nearing completion.

Upstream 21 – an innovate SRI company – is planning to bring additional capital and equipment to our facility in Wallowa, expand its operations and employment, and expand the breath and volume of woody biomass material utilized. They are exploring options for expanding firewood production, producing clean mill chips and clean consistent hog fuel, as well as potentially wood pellets.

With the Wallowa Forest Products sawmill closing – and on the indefinitely inactive list – this expansion of CSS is all the more important to our community. Further, we see this expansion as contributing to the goals for increased use of woody biomass utilization in Wallowa County.

NFS Impacts: Wallowa-Whitman National Forest, Wallowa Valley Ranger District

Reporting Period June 2004 to June 2005:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant FY 2004	200	8181	\$225 Cost	\$25 Cost	0
Post grant FY 2005	932	2996	\$225 Cost	\$25 Cost	0

Comments from the Wallawa Whitman NF, Wallowa Valley Ranger District for this reporting period:

• "There is not direct impact on National Forest System lands to date. Wallowa Resources did offer \$30 per ton for pulp wood from the Fire Ridge Hazardous Fuel Reduction Project off the Wallowa Valley Ranger District. This offer came after the official bidding round had closed without any bids offered. The sale still did not sell do to lack of close processing plants. The sale offered contained approximately 700+ acres of

mostly ponderosa pine, and some Douglas fir. At this time the small diameter ponderosa pine does not have an economical market."

- "We are unable to assess the impact of the grant at this time."
- "No additional materials were removed to date as a result of this grant."
- The forest hoped that the grant be used to help develop new uses and markets for small diameter logs. We have had trouble selling sales with a large percentage of small ponderosa pine and high fiber component."
- "The forest was under the impression that this grant was aimed at the development of markets or uses and
 has worked with various groups and industry. We are confused that we have been asked about the number
 of acres treated on NFSL if this is a development grant."

NFS Impacts: Wallowa-Whitman NF, Wallowa Valley Ranger District

Reporting Period June 2005 to June 2006:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Post grant					
From 6/1/05 to					
5/31/06					

Comments from NF during this reporting period:

• "No acres have been treated. Grantee is working with local groups for developing biomass. One group is seeking a "Fuels for Schools" solution to heating the schools in Enterprise. Another group is working on a proposal for a co-gen plant with a value-added product. The grantee has been the main contact between the local Ranger District and the groups working on the proposals. We have worked with the grantee to do an assessment of the volume available for use in a biomass operation.

Reporting Period June 2006 to June 2007:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Post grant From 6/1/06 to	~730 (est)				7304
6/30/07					

Comments from NF during this reporting period:

- "7,304 green tons were removed. Species were lodgepole pine, Ponderosa pine, and Douglas-fir".
- "The grant resulted in a reduction in hazardous fuels because it provided a market for small diameter wood that is often hard to sell. Many times a purchaser would rather leave it decked. With the grantee being local, the haul costs are considerably lower than hauling to Clarkston, Washington or LaGrande."
- "We are completing NEPA and covering the removal of small diameter wood. But several of the sales we had offered in recent years, we had to drop units with a high percentage of small diameter wood, or not marked the small diameter trees. Now we can mark everything that needs to come out and the purchaser (grantee) has a market for all sizes and species of wood."
- "The grantee is very proactive in coming up with new solutions to problems that we face. They often come up with money, or contractors, or work force to complete activities we do not have the budget to complete. With the Wallowa Mill closing, the success of CCS is very important to our ability to complete further fuels reduction and forest restoration projects."
- "This is a great program. I wish you had more money to award."

6. Grantee: Northern Cal-Neva RC&D Council, Alturas, California

<u>Goal:</u> To accomplish approximately 9,600 acres of hazardous fuel reduction within the WUI surrounding Tionesta, a federal register "community at risk".

<u>Status:</u> The Modoc NF, Doublehead Ranger District has completed 1645 acres in 2007 as part of an ongoing timber sale. From this, 23,300 green tons of woody biomass were removed and delivered to Big Valley Power

NFS Impacts: Modoc National Forest, Doublehead Ranger District

Reporting Period June 2004 to June 2005: No response from NF.

Reporting Period June 2005 to June 2006:

	Acres Treated		Cost or Revenue/Acre		Total Green
					Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2005			\$250/ac cost		
Post grant 12 months ending 6/30/2006	1640		\$1.10/ac revenue		29,220

Comments from the Modoc NF, Doublehead Ranger District:

- "Approximately 1640 acres on NF and 960 acres on private lands have been treated."
- "Grant enabled us to package a timber sale to support local emerging biomass market and saved approximately \$250/acre treatment costs."
- "Product mix and areas we can economically treat are changing with the recent expansion of the local biomass and small log market."
- "Grant allowed us great opportunity to implement project collaborating with community, private landowners, and industry in a WUI. Through some creative collaboration and project pre-work and with \$ boost from the grant, we were able to actually package a timber sale and sell biomass. Not only did this save implementation cost per acre, but it also jump-started a project in a WUI that would otherwise not have been funded."
- "When funding is tight, it's opportunities like this that make it possible to get good ideas off the ground. We expect long term benefit from the grant as the biomass industry and market develops locally."

Reporting Period June 2006 to June 2007:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2005			\$250/ac cost		
Post grant 12 months ending 6/30/2007	1645		\$1.10/ac revenue		23,300

Comments from the Modoc NF, Doublehead Ranger District:

- "As a result of this grant, the Modoc NF has treated 1645 acres in 2007 as part of the ongoing timber sale. From this 23,300 tons of biomass were removed from NFS lands and delivered to Big Valley Power."
- The primary species is ponderosa pine.
- The grant has resulted in lower costs to the FS because "....as stated in earlier reports/responses the grant allowed the FS to collaborate with adjacent landowners, agencies and to package a plantation and fuels management biomass project that could be marketed and sold rather than be implemented through an expensive service contract."
- "The Tionesta Biomass sale (WBU grant project) allowed a new business, Big Valley Power to get the boost it needed at a critical time. They are operating successfully at this time and have purchased several

- other NF and private biomass sales since Tionesta. Big Valley Power is Modoc NF's closest biomass market and is key to keeping the cost of fuels treatment on the Modoc down."
- "The WBU grant was a good thing that came at a good time, both for the FS, needing to manage plantations in a WUI, as well as local industry infrastructure, without which we wouldn't be able to manage the forest."
- "In my estimation, it would be beneficial for almost every "small" mountain/forest community to have a small (5 MW) biomass power plant to utilize small excess trees from surrounding private and FS lands. Our forests continue to grow and produce fuels and biomass at a rate we'll never keep up with. Specialty products/uses, value-added, etc are all good, but will never handle the BULK of material that our forests are producing and that needs to be managed over time."

7. Grantee: Chevenne Log Homes, Eagar, Arizona

<u>Goal:</u> To install a pressure treatment cylinder at their post and pole facility to add value to material coming from the White Mt Stewardship project.

<u>Status</u>: Cheyenne Log Homes dba Arizona Log and Timberworks has completed the installation of a treatment plant for using EnviroPlus (borate treatment). Product is being treated and sold. April 2nd 2007 there was a ribbon cutting ceremony to celebrate the completion of the project. The borate process should add about \$103/acre value to material removed and delivered from Future Forests LLC's White Mt Stewardship contract.

NFS Impacts: Apache-Sitgreaves National Forest

Reporting Period June 2004 to June 2005: No response from NF.

Reporting Period June 2005 to June 2006:

NFS checked box that the grant program has had no visible effects during time period June 2005 to June 2006. However, received comments below:

Comments from the Apache-Sitgreaves NF for this reporting period:

• "Grantees are small operators that require time to capitalize their share of the costs that the grants cover. They are also continuing to research details of the equipment they are considering to purchase to ensure that they are getting the appropriate technology for the intended use. Each recipient is also attempting to acquire serviceable used components from other areas of the country to maximize the equipment acquired – this takes more time than buying ready-made brand new equipment and saves tens of thousands of dollars. We remain confident that the equipment and processes these grants cover will strengthen and diversify the infrastructure that support our forest restoration work. They just simply haven't had enough time yet to bring all the pieces together."

Reporting Period June 2006 to June 2007:

Comments from the Apache-Sitgreaves NF for this reporting period:

- "The borate process should add \$103/acre value to material removed and delivered from Future Forests LLC, White Mt Stewardship contract. Additional revenue should allow treatment of additional 652 acres/year (equivalent to roughly 6500 additional green tons.)"
- "In FY 07 before the borate plant was operational, 932 green tons of material were delivered to Cheyenne Log Homes (Arizona Log &Timber) from the White Mt Stewardship contract." However, the borate plant is fully operational and product is being treated and sold. Too early to know additional volumes. "We will know much more at the end of this fiscal year."
- The treatment methods or mix of methods used by NFS has changed since this grant was instituted. The A-S NF is seeing a significant rise in the industrial capabilities of the industries in our area. Most of these are just developing, but the outlook is very positive. The businesses all met to prepare these reports. Progress was discussed, holes and problems were discussed, and solutions identified. With these holes filled, there will be real opportunity for growth in our area.
- "Without the grants, this area would still be struggling and be many years behind. The grants have worked hand in hand with the White Mt Stewardship contract. Together, the effort is significant. Most of the businesses now have equipment purchased and installed. With this equipment, funded primarily by these grants, the forest is ready to increase utilization and recovery. We anticipate significant reduction in costs within the next year or tow. There are still major holes and opportunities for businesses. However, these have been identified and new entrepreneurs are being sought."
- "The woody biomass utilization grant program is the most important grant program for the White Mts wood industry. The industry that essentially died throughout the 1990's is re-emerging and developing at an appropriate scale. The opportunities are building upon themselves and the grant program will have this area as a shining example within the next few years.

8. Grantee: LobLolly Logging and Lumber, Pagosa Springs, Colorado

Goal: Purchase a dowelling mill for the manufacture of ponderosa pine railings and fencing.

Status: The dowelling machine has been delivered and installed. Employees have been trained on its operation. Market is strong and production rates are good. He is selling to several Denver outlets such as Universal and Weatherwood. [No progress report received in 2007.]

NFS Impacts: San Juan National Forest, Pagasa Springs and Columbine Ranger District

Reporting Period June 2004 to June 2005:

Comments from the San Juan NF, Pagosa Springs & Columbine RD for this reporting period:

- "Grantee ordered dowelling mill in 2004, recently received mill, and is currently setting up for operations.
 Grantee has been stockpiling material from private land sales. Grantee intends to utilize mill in FY06 on Dolores RD "Ferris" Timber Sale."
- "There have been no additional green tons removed at this time."
- "We expect fuel treatment costs to drop once grantee begins hauling material for new mill."
- "At this time, treatment methods have not changed. Depending on capacity of mill once underway, we
 expect less mowing of small diameter conifer via service contracts, which should also provide for larger
 prescribed burning windows due to less combustible material on ground as compared with areas currently
 undergoing mowing."
- "The bulk of the grantee's material being run through his operation over the last 10 to 15 years has been timber off of private land. We expect an increase in activity on FS lands as described above."
- "The program provides a significant opportunity to have an influence on the health and resilience of San Juan NF lands."
- "No change, as yet, from pre- to post-grant accomplishments. Mill has yet to operate."

Reporting Period June 2005 to June 2006:

Comments from the San Juan NF, Pagosa Springs & Columbine RD for this reporting period:

- There were "...approximately five (5) acres" additional acres and "...approximately 150 tons" additional material.
- "A small portion of an active service was hauled to Mr. Wright's mill, material for which the contractor could not find a mill for its use. Given current costs for treatment of large poles/small sawtimber, it is estimated that \$1,500 of potential savings was realized (for the East Vallecito Fuels Treatment project)."
- Though Mr. Wright has not bid on any San Juan Public Lands contracts (service, timber sale, or stewardship) in the last year, we fully anticipate he will be bidding on a timber sale contract we (Pagosa RD) will be offering in the spring of 2007. Unlike recent offerings, we will be requiring bidders to commit to cutting and removing a significant amount of small diameter ponderosa pine. (Without Mr. Wright's potential, much of the small diameter material would be offered as 'timber subject to agreement.')"
- "We believe that with time, Mr. Wright will fill gaps in his stump-to-product processing operation. (Steve has a current commitment to complete a large timber sale, with a moderate amount of small diameter material, on the west end of the Forest.) Lat year's grant allowed Mr. Wright to begin to convert from a large-diameter to a small-diameter product operation. Since that time, the Wright's LobLolly Logging has purchased processing equipment to complement the dowelling mill, and added timber hauling capacity as well. Hence, the 2005 grant enabled conversion to offering of a product for which the Forest has in overly abundant amounts. In other words, the grant program is initiating the establishment of a market for excess biomass and thereby reaching objectives for fuels reduction and forest health in Southwest Colorado.
- "Mr. Wright will be serving as a destination for the material from the Beaver Meadows Stewardship contract, thereby potentially avoiding a default by a separate contractor, and allowing this project to move to completion. Additionally, when Mr. Wright LobLolly Logging was awarded the Ferris Timber Sale on the Dolores Ranger District of the San Juan NF. It was shortly before the closing of the Olathe, Colorado Louisiana-Pacific OSB mill, where he had arranged for delivery of the sale's material. The FPL grant has enabled the grantee to avoid significant losses by allowing for an outlet for the small diameter component of that sale as well."

• "Given that Mr. Wright/Loblolly Logging is still in the process of securing an expanded workforce, hauling capacity, and woods production capacity, differences between the pre- and post-grant acres, cost/revenue figures, or tons removed are minimal at this time."

NFS Impacts: San Juan National Forest, Pagasa Springs Ranger District

Reporting Period June 2006 to June 2007:

Comments from the San Juan NF, Pagosa Springs for this reporting period:

- "80 acres were treated as a result of this grant and 441 green tons removed."
- "We expect a reduction in costs when the timber sale area where Mr. Wright is operating is prescribed burned following completion of the sale. But, given the product capability of Mr. Wright's dowelling mill, we believe that that utilization of material in the timber sale area is high. Hence, future fuels treatment costs should be lower as a result."
- Our treatment methods have changed. "We have prepared timber sale offerings in WUI areas that included a greater proportion of small-diameter material due to the grantee's capability via the grant, to work with and produce a product from such material."
- "Without appearing presumptuous, our plans for future projects rely, to some degree, on Steve Wright's LobLolly Lumber operations to meet goals/objectives for some project areas sooner, and more economically efficiently, than if that option were not available to us."
- "I wish that there were a mechanism that would somehow obligate a grantee without economic penalties to become involved in projects/contracts on federal lands. The reality is that Steve Wright could pursue product from private lands only. But harvest on private is still a good thing!"
- "Note: The above table does not appear to be useful in the sense that changes to the San Juan Public Lands fuels reduction program, as a result of Mr. Wright's grant, are only minor/incremental at this time. Mr. Wright is still working to increase his production rate throughout his production string. He will have to invest in specialized equipment to increase production in the woods to now meet the production potential at his mill, as a result of the dowelling mill grant."

9. Grantee: Wyoming Sawmill, Sheridan, Wyoming

<u>Goal</u>: To complete final stages for obtaining commercial building code approval for a new value-added product (laminated headers) for use in structural buildings.

Status: The purpose of the grant is to remove market barriers to make production of insulated header product economical. The project started with harvesting small diameter trees and processing them through the sawmill and planer to create the raw material for the header. Headers were tested and results showed that to meet code certification a stronger lam stock had to be placed on the top side. However, market analysis showed that the market place would not accept product that had restrictions on which side had to be on top. Therefore, no production is anticipated.

NFS Impacts: Bighorn National Forest

Reporting period June 2004 to June 2005:

Comments from the Bighorn NF for this reporting period:

- "Winter conditions resulted in no National Forest lands being treated over this time period. Rather the grantee utilized raw wood products from adjacent private lands."
- "No direct benefits to hazardous fuel treatment costs at this time."
- "Our treatment methods have not changed at this time. We have seen more commercial utilization of small diameter material as the industry re-tools. Utilization of additional wood has reduced the amount of post commercial harvest fuels treatment needed, but his has not been quantified."
- "It is our hope that this grant will assist local purchasers in their ability to better utilize small diameter material, including topwood and ultimately smaller diameter trees. With commercial utilization of smaller diameter size class material, we foresee at a minimum reduced costs for treatments, and eventual revenue production from the treatments."
- We also foresee these grants having additional benefits beyond direct fuels treatment: Better utilization of
 wood from our forests should assist our sustainability goals through carbon sequestration, rather than
 consumption of wood through burning. Reducing the tons of wood burnt for fuels treatment will assist in air
 quality concerns.

Reporting period June 2005 to June 2006:

Comments from Bighorn NF for this reporting period:

- No more acres were treated as result of grant.
- No more green tons were removed as result of grant.
- "As the grants is not for direct acres treated, but rather for increasing the utilization from existing projects it is impossible to reliably estimate the reduction in (sic Forest Service) costs."
- "Our treatments methods have not changed, but additional utilization has been seen on existing projects. Additional small diameter material that was thought to be uneconomical is being removed or utilized."
- "I still believe that this grant has allowed a local purchaser/contractor to better utilize material that would otherwise be left on site, or placed in piles for Forest Service burning. As such, while it is difficult to quantify I see value in this grant by increasing the utilization of woody biomass generated on this Forest.
- "While this project may not directly affect acres treated, I believe it has a much larger effect on all the acres
 we commercially treat, and almost all of these acres are accomplishing fuels related target objectives. Better
 utilization means more woody biomass put to commercial use, rather than burnt in piles or left on site. This
 should mean better economic returns to our purchasers/contractors and eventually lower costs to us."

Reporting period June 2006 to June 2007:

Comments from Bighorn NF for this reporting period:

"This grant to date, has not affected our operations. We hope through this grant that additional commercial
utilization of forest products will be possible; thereby reducing the future costs of mechanical fuels
treatments."

10. Grantee: W.B. Contracting, Eagar, Arizona

<u>Goal</u>: To purchase a whole tree "log forwarder" to allow hazardous fuels removal on the White Mt Stewardship Project. The additional equipment will allow more acres to be treated, save time, and reduce the cost to the Forest Service by avoiding unnecessary road construction and repairs to deteriorated roads as required by more conventional equipment.

<u>Status:</u> On 8/28/06 purchased a used log forwarder. It was delivered the end of October 2006. Employees have trained on machine. Company has put a processing head on the forwarder and this has increased capacity in the woods.

NFS Impacts: Apache-Sitgreaves National Forest

Reporting Period June 2004 to June 2005: No response from NF.

Reporting Period June 2005 to June 2006:

NFS checked box that the grant program has had no visible effects during time period June 2005 to June 2006. However, received comments below:

• "Grantees are small operators that require time to capitalize their share of the costs that the grants cover. They are also continuing to research details of the equipment they are considering to purchase to ensure that they are getting the appropriate technology for the intended use. Each recipient is also attempting to acquire serviceable used components from other areas of the country to maximize the equipment acquired – this takes more time than buying ready-made brand new equipment and saves tens of thousands of dollars. We remain confident that the equipment and processes these grants cover will strengthen and diversify the infrastructure that support our forest restoration work. They just simply haven't had enough time yet to bring all the pieces together."

Reporting Period June 2006 to June 2007:

- "This grant has allowed the treatment of an additional 4,000 acres of WUI to be treated that otherwise would not be able to be treated. There will be an estimated cost savings to FS of \$873,000 during the 10-year stewardship contract."
- A total of 131,401 tons were delivered to customers of W.B. Contracting.
- "The forwarder is being tested on flat ground in order for operators to become efficient and safe in its use. It is intended to be used in areas where new road construction is not authorized and would allow treatment where, under normal operations, the area would not be available."
- The species of interest are ponderosa pine and mixed conifer."
- "The forwarder will allow us to access and treat areas without reconstructing or building new roads."
- The grant has resulted in lower costs to the FS, although we are unable to quantify at this time "...as the forwarder is still being tested. However, during the testing period, it is allowing more small diameter and shorter logs to be removed without building new roads."

•	Customer	Tons Delivered	WBU Grantee Recipient
	APC Pallets	455	-
	Arizona Log	932	Cheyenne Log Homes
	Bill Parker	475	-
	Forest Energy	76637	
	Moulding Accents	803	Western Moulding
	Neil Brewer Yard	468	_
	Precision Pine	139	
	Reidhead	5161	
	Renergy	21526	
	Round Valley	21337	Round Valley Lumber
	Western Renewable	2302	•
	Willy Greenwood	25	
	Winners Circle	1141	
	TOTAL	131401	

11. Grantee: Central Oregon Intergovernmental Council; Eastern Oregon

<u>Goal</u>: Develop and implement scheduling protocols for FS, BLM units to predict 5-year programs of work, coordinate annual programs to stabilize outputs, enable private investment in local cogeneration and small log facilities and implement independent monitoring and evaluation of results.

<u>Status:</u> COIC's project is just beginning to produce results that fit the quantitative measures of the standard Woody Biomass Utilization Grant reporting forms. Therefore, COIC has not reported any quantitative measures of tons or volumes utilized or associated costs or revenues.

However, COIC can report significant progress on the implementation of our grant objectives and the growth of new business enterprises that have just started to utilize woody biomass from the National Forest System, and will continue to do so in the future.

In the summer of 2006, COIC put out the first version of the Coordinated Resource Offering Protocol (CROP) database. Version 1 provided some useful data to local businesses, but COIC felt there were some significant issues with the format and data in version 1 including:

- Format led to multiple counting of the same acreages
- Data enterers overestimated their ability to perform, entering data for "everything under the sun" if they had perfect market and budget conditions
- Data enterers were unfamiliar with how to enter biomass green tons and therefore, were significantly under-representing that value.

The format of the database was overhauled and biomass volume studies were conducted in winter 2006-2007. Version 2 was completed in the summer of 2007. COIC is now able to perform CROP monitoring in 2008 to determine whether projected volumes were actually offered, bid, and utilized. This is the data that will be needed to complete evaluations, such as the Woody Biomass Utilization Grant reporting forms.

COIC reports that this project has already lead to investments by local businesses and expanded woody biomass utilization options for material removed from federal forestlands.

- JTS Animal Bedding Company combined a FY2007 Woody Biomass Utilization Grant and private investment to purchase and install a whole log shavings facility. Prior to these investments, JTS consulted the CROP database to determine the potential volume and characteristics of future supply offerings. Production of animal bedding from small diameter pine logs began in Fall 2007 with a forecasted demand of 15,000 BDT per year at full production.
- The Prineville Sawmill Company invested in a wood-fired boiler system for its lumber kiln-drying operation in 2006-2007 that will consume approximately 5,000 BDT of hog fuel and chips per year. This company is currently developing a small diameter primary processing operation.
- T2, a company that supplies hog fuel to biomass power plants, used the CROP database to expand
 operations into the Deschutes NF and Central Oregon and has leased a horizontal wood grinder, which will
 make it economically efficient for the company to utilize a wide variety of types of landing piles. T2
 utilized 5,500 BDT from the Deschutes NF in 2007 and hopes to increase this volume in 2008.
- Warm Springs Biomass LLC is completing the permitting for its planned 15+MW biomass power plant, which is scheduled to begin operation in spring 2009. The Forest Service and BLM are making approximately 80,000 BDT of biomass available within the Warm Springs supply landscape every year under an MOU with the Confederated Tribes of Warm Springs.
- COIC and CROP have made good progress implementing the other objectives of the grant. The federal forests have coordinated to produce a year 1 levelized supply offering in the Warm Springs 75-mile supply landscape to meet their commitments under the MOU. In addition, COIC has implemented two years of environmental monitoring on a sampling of projects from the CROP database.

Summary: COIC's Woody Biomass Utilization Grant was unlike many other Woody Biomass Utilization grant projects in that it built up regional capacity to utilize woody biomass instead of building up the capacity of an individual business. As COIC starts to see the effect of the Woody Biomass Utilization grant program, COIC believes there is an excellent argument for building this kind of "capacity" and that it yields substantial benefits. Although this kind of "capacity" does not fit comfortably into the Woody Biomass Utilization Grant program framework, the benefits indicate that investments in "capacity building" can have substantial payback.

NFS Impacts: Deschutes and Ochoco National Forests

Reporting Period June 2004 to June 2005: No response from NF.

Reporting Period June 2005 to June 2006: No response from NF.

Reporting Period June 2006 to June 2007:

	Acres Treated		Cost or Rev	venue/acre	Green tons
	Mechanical	Rx Burn	Mechanical	Rx Burn	removed
Pre-Grant			\$150-800/ac	\$25/acre for	
Treatment			cost for	machine pile	
			thinning	burning	
Post-Grant	1741.5 acres	7853 acres	\$150-800/acre	\$25/acre for	9930 GT due to
treatment FY	biomass	machine pile	cost for	machine pile	Woody Biomass
07	removed	burned	thinning	burning	Util Grants
	66957.5 acres				
	of HF				
	treatments				

Comments from Deschutes and Ochoco NF for this reporting period:

"It takes time to obtain industry infrastructure and COPWRR has been very actively involved in making it happen in Central Oregon since it's creation in 2002. The organization is viewed as such a success that the local USFS and the BLM offices are supporting their work by allocating \$45,000 of funds to cover their services to the agencies over the next three years."

"COPWRR doesn't remove biomass, but rather enables industry to do so. They've assisted with writing grants for animal bedding development, small and large biomass plants, and other industries. They've also helped to develop carbon markets to help subsidize the removal of biomass. One of COPWRR's major roles is securing agreement among stakeholders so that appropriate economic development can move forward in the biomass utilization industry."

"The primary species that have been used are ponderosa pine, juniper, lodgepole pine and white fir."

"This is the first year that biomass has expanded into non-traditional markets as indicated by much more utilization in timber sales and stewardship contracts. But since the chip markets was up more this year, generally more woody biomass was removed than ever before. So machine pile burning and smoke emissions were reduced with this increased pile utilization, which will lead to reduce costs. Pile burning in our area generally occurs in November so these reductions in costs will be figured into the FY08 reporting."

COPWRR has helped alter the treatments methods. "COPWRR helped create the CROP where three local national forests and one BLM unit have entered into an agreement to offer a levelized, steady supply of biomass to industry to enable investment in infrastructure development. COPWRR has also begun a public land monitoring program with stakeholders that are helping the agencies develop trust with their publics."

"COPWRR has helped to improve stakeholder perception and trust of the Central Oregon public land management agencies that could not have otherwise been obtained."

"Overall, the Woody Biomass Utilization Grant program has been very helpful in helping businesses to develop industry infrastructure for increasing capacity to process biomass. Since the agencies have been working with partners to improve this capacity for a few years, there is some impatience to get the biomass rolling off sites. The general thinking is that once industry infrastructure is in place, the most cost effective and accessible biomass supply will be derived from timber sales and stewardship contracts. Possibly in the future, if the demand and value for biomass increases, then precommercial thinning or ladder fuel reduction work may be changed to more mechanized harvesting procedures."

12. Grantee: England Sawmill, North Fork, Idaho

Goal: To install a dry kiln that will expand current sawmill capacity from 750,000 board feet to 9 million board feet

<u>Status:</u> The dry kiln has been installed. But due to the down turn in the stud market, England Sawmills is retooling to produce Douglas-fir flooring and a beam saw plant. Due to the installation of the dry kiln, they were able to make this switch and stay in business as many stud mills were going out of business.

	Pre-Grant	Post Grant				
	June 04 – June	June 05-Dec 05	Jan 06 – Dec	Jan 07 – Dec 07	Jan 08 – Dec	
	05		06		08	
Acres treated			34 acres	100 acres BLM		

NFS Impacts: Salmon-Challis National Forest

Reporting Period June 2004 to June 2005: No response from NF.

Reporting Period June 2005 to June 2006:

Comments for this reporting period:

NF checked box that the WBU grant program had no visible effects during this time period; however provided the following comments:

• "Gary England completed the kiln late this summer. As of now, it has not been fired yet, but he intends to fire it and use it later this year. Gary did have a sale under contract this year and finished logging it earlier this summer."

Reporting Period June 2006 to June 2007:

Comments for this reporting period:

- "Gary England has been an active bidder on many of the sales offered during 2007. However, due to competition he has not been the successful bidder on any of our sales. Therefore, Gary has not removed any green tons of wood from NFS this year, although he did complete the Smith-Bates Timber Sale of 34 acres in FY2006."
- "Our forest has been active working with the local industry to maximize the utilization of small diameter material. Due to Gary England's participation in the bidding process he has increased the value we receive per ccf."
- "Gary England has acquired two timber sales on the BLM in FY2007. According to the BLM it has had a
 significant impact in reducing woody biomass in the sale area. These two sales amounted to approximately
 100 acres being treated.





13. Grantee: Summit Views LLC; Watsonville, California

Goal: Expand all-wood densified firelogs plant, coordinate biomass acquisition and begin transporting, processing, and utilizing materials from fuel reduction projects in the Los Padres National Forest.

Status: Summit Views have completed all major construction and installation of the 12MM BTU burner. The saw dust fired burner enables Summit Views to utilize up to 2 green tons of biomass per hour to both heat their rotary dryer and to dry the biomass feedstock for their densified wood fire logs. The burner/dryer system experienced numerous delays in 2006, including a fire at the plant. We had to re-locate our logmaker for fire-safe operations, requiring additional conveying and material handling equipment beyond the scope of the original grant funds. We are currently raising funds to acquire and install this equipment.

NFS Impacts: Los Padres National Forest, Monterey Ranger District

Reporting Period June 2004 to June 2005: No response from NF.

Reporting period June 2005 to June 2006:

• NFS returned form and checked box that indicated that the WBU grant program had no visible effects during the reporting time period – June 2005 – June 2006.

Reporting period June 2006 to June 2007:

Comments for NFS for this reporting period:

- No acres or green tons were removed as a result of this grant.
- "This grant has not affected our fuels treatments on the Monterey Ranger District as yet. Most of the fuels treatment that needs to be done is in designated Wilderness so mechanical removal is not an option. However, I am interested in seeing if this type of biomass utilization can be used to reduce fuels I our wildland/urban interface areas outside of Wilderness."
- "Even though Summit Views to date has not removed biomass material from NFS lands, the objectives of the project, if met, will have long term benefits to the FS."

14. Grantee: M&L Enterprise, Sunriver, Oregon

<u>Goal:</u> Purchase equipment and upgrade mill to more efficiently utilize and process small trees down to 1-inch diameter.

Status: COMPLETED

<u>Summary:</u> Equipment has been purchased and is operating throughout the milliard, including forklift, front-end loader, and Linkbelt processor. The new log peeler has been installed under a new shed and runs full shifts. An additional extension on the shed over the raw log end-feed is planned, to keep the snow out of this work area. The small, older existing peeler has been upgraded and is used to produce the smaller posts and poles.

A new office modular has been installed and provides ample work space for the mill owner and secretary. Some surfacing (old black top and asphalt removed off local state highway repaving jobs) has been purchased and bladed-in part of the sort yard and on some of the roads through the milliard. More surfacing is planned in the future. Above-ground scales have not been purchased, but are still planned. A mill manager is still planned, however, a qualified candidate has not yet been found. Newer office supplies and equipment have been purchased.

Full-time, reliable employees have increased between 10-12, due to the grant. Firewood production has doubled, due to the processor. Manual firewood cutters have been reduced. Post and pole production has increased due to the peeler, which also provides the ability to handle larger and longer logs. This has provided new market opportunities; the most recent has been large orders of hop orchard stakes. Shavings from the peelers are shipped as hogfuel to a Southern Oregon biomass energy plant. Production of this bi-product has increased approximately 31%. The small wood chunks left over from cutting post, poles, and firewood ("tailings") has increased significantly. The grantee offers this material as free firewood to the local community.

During the period from June 24, 2005 to August 2007, M&L Enterprises have accomplished the majority of the goals for the grant. In addition, to the equipment listed in the original grant, an additional processor was purchased to help keep the supply of material to two peelers. This used processor has required over \$60,000 in repairs to keep it running. The loss of time from this breakdown has been detrimental. A shed was constructed over the peeler during the fall and winter months of 2005-2006. Heavy snow fall during this time caused the construction to more costly and took more time. Other factors were the lack of steady employees, inexperienced employees and other equipment breakdowns during 2006 resulted in a lack of increase in production. The labor costs increased by 43% while sales decreased 0.03% or stayed the same.

This year 2007 looks very good to start with. Thru April there has been an 11% increase in utilization of material. The equipment is working very well. We still consistently purchase material off of Forest Service lands as sales become available.

	Pre-Grant	Post Grant			
	June 04 – June	June 05-Dec 05	Jan 06 – Dec	Jan 07 – Dec 07	Jan 08 – Dec
	05		06		08
Green tons utilized from			7029	4311	
NFS					

NFS Impacts: Deschutes National Forest, Crescent Ranger District

Reporting period June 2004 to June 2005:

Comments from the Deschutes NF, Crescent Ranger District for this reporting period:

• "Prior to grant availability, this district awarded the grantee a timber sale of 5-9 inch dbh across 1,125 acres totaling 2,404 CCF. The grantee was the only bidder on the sale. If it had not been sold, this volume would have been piled and burned. Approximately 7% of the volume on this sale was cut and removed during the time period October/November 2005. However, award of this grant can not be specifically attributed to changes in typical fuels reduction procedures on the district during the time period addressed."

- "The grant has provided the recipient more incentive to purchase sales and permits of small diameter woody usually of no interest to other purchasers. We are unique in having this mill here locally, during the current focus on hazardous fuels reduction, as the district will continue to be a consistent source of small wood."
- It is (sic the grant program) a program that benefits opportunities that might not happen without it. Our hope is that it will continue to be funded at an even greater level and remain a high priority for the Forest Service to support."

Reporting period for June 2005 to June 2006:

Comments from the Deschutes NF, Crescent Ranger District for this reporting period:

- "The number of acres the grantee has treated directly is not possible to identify. The Grantee purchases timber sales and permits for non-saw materials, which become the products (posts, poles, firewood) the company markets. During this time period, he did not purchase additional sales or permits that could be directly attributed to the grant. He did remove from FS land approximately 2,660 CCF of material from sales he has purchased and from other purchasers operating on FS lands. This material, during this time period, had been of little or no interest as a product and typically is piled and burned by the FS."
- "There may be a slight, indirect cost savings due to material being removed and utilized that otherwise would have been thinned during post sale activities, piled and burned. What that amount is would be better access later when the grant's time span is completed."
- "A concern of this forest....this survey's questions might lead to a perception that this grant can significantly alter or change forest health conditions. This grant has enabled increased production of underutilized material by being able to accept more of the product then before award. This has helped on those acres treated, however for it to significantly affect changes to how operations are carried out on the forest is misleading. Market conditions, such as at this time (Fall Winter 2006) with increased pulpwood prices, influence operations to remove even more small-diameter wood. Not necessarily one time opportunities (such as grants) that come during depressed or downward trends."
- Grantee has doubled production capability of small diameter and non-saw material off FS and local private
 lands, receiving the material from several sources. This makes the information requested here difficult to
 quantify for this grant. Because of this, suggest a survey that addresses positive changes and improvements,
 along with volumetric increases, are considered for manufacturing-based grant recipients. Not all positives
 come from FS cost savings, especially in small communities where this mill provides local employment and
 important infrastructure stability."

Reporting period June 2006 to June 2007:

	Acres Treated		Cost or Revenue/Acre		Total Green
					Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant					
Post grant June 06 – June 07 NFS					~3380 (est)
Post grant June 06-June 07 Private					~13285 (est)

Comments from the Deschutes NF, Crescent Ranger District for this reporting period:

• "The number of acres the grantee has treated is not possible to identify. The grantee purchases timber sales and special forest products permits for small diameter material which become the products (posts, poles, firewood and hogfuel) the company markets. During this reporting time, the grantee did not purchase any NFS timer sales, and conducted limited operations on the three sales it currently has under contract. Additionally, a limited amount of material from NFS permits was received. As a result, grantee relied on a

- supply source of material off local, private land, much of which is near or adjacent to NFS lands and in the wildland urban interface around the communities of Crescent and Gilchrist, Oregon."
- "The Grantee has doubled manufacturing production as a result of the grant. Considering one-half portion of the volume mentioned in response #1 above, 955 green tons can be attributed removed from FS lands from July 1 to December 31 2006 and 2,425 GT removed from January 1 to September 30, 2007. From private lands 6,727 GT can be attributed removed from July 1 December 31, 2006 and 9,965 GT from January 1 September 30, 2007."
- In addition, M&L ships shavings from the peelers as hogfuel to a biomass plant. An estimated increase of 31% hogfuel production may be attributed to the equipment purchased by the grant. For the period from July 1, 2006 through September 30, 2007, 760 BDT was created and shipped."
- "Another by-product that can be associated with the grant are the "tailings", small chunks of wood cut off
 while manufacturing posts and poles. M&L has offered this material as free firewood to the local
 community. For the timeframe from July 1, 2006 through September 30, 2007 an estimated 1,000 pick-up
 and trailer loads of this material has been utilized, generating an estimated 900 BDT that can be grant
 attributed."
- "The grant has not significantly affected fuels reduction costs on this district since award and no vegetation treatment methods have been changed since this grant.

15. Grantee: Big Sky Forest Products, St. Regis, Montana

<u>Goal:</u> Purchase a small log chipper to complete their plans to expand processing and merchandizing small and low value logs into the highest value products possible.

<u>Status:</u> Big Sky is continuing to make progress on the small log chipper. Excavation and grading is completed; footings, foundations and piers are in place; engineering for debarker is completed and electrical conduit is in place. The project is 60% complete. Work remaining includes installation of log kicker, log transfer, chain and some chip conveyors, electrical wiring and control, drives for metal detector and waste conveyors, truck loader, start up and debugging. Big Sky is acquiring logs for this project from the Flathead NF. Big Sky acquired 4464 tons of logs from the Flathead.

NFS Impacts: Lolo National Forest

Reporting period from June 2004 to June 2005: No response from NFS.

Reporting period from June 2005 to June 2006: No response from NFS

Reporting period from June 2006 to June 2007:

Comments from Lolo NF for this reporting period:

- "No additional acres were treated."
- "No additional tons were removed as a result of the grant."
- "The intended species for utilization would be Douglas fir, grand fir, and lodgepole pine. The grantee is particularly interested in lodgepole pine."
- "There was no reduction in fuel treatment costs linked directly to this grant. But the forest has pending timber sales and stewardship contracts that may lead to a future reduction in hazardous fuel treatment costs."
- "Due in part to the efforts associated with this grant, we are more aware of the need for whole tree yarding and to have forest products available at landings."
- "The program is an excellent idea but certainly does not guarantee an available forest product that will be economically viable for a private operation."

NFS Impacts: Flathead NF

Reporting period from June 2006 to June 2007:

Comments from Flathead NF for this reporting period:

• 4464 tons of logs were acquired from the Flathead NF

16. Grantee: Panhandle Forest Products, Cocolalla, Idaho

<u>Goal</u>: Obtain value-added equipment for processing small diameter trees for expansion of post and pole operation.

<u>Status</u>: Panhandle Forest Product's is continuing to make steady progress on the pointer capper project. Site has been excavated and graded; 350 yards of crushed rock and fill is completed; pointer capper equipment has been delivered to site; log transfer and electrical equipment is on site. Pointer capper needs to be installed. 4464 tons of logs have been acquired from the Flathead NF.

NFS Impacts: Lolo NF

Reporting period from June 2004 to June 2005: No response from NFS.

Reporting period from June 2005 to June 2006: No response from NFS

NFS Impacts: Flathead National Forest

Reporting period from June 2006 – June 2007:

4464 tons of logs acquired from Flathead NF



17. Grantee: Forest Guild, Santa Fe, New Mexico

<u>Goal:</u> Worker's Compensation Insurance for thinning treatments in New Mexico can account for 20% to 50% of treatment costs per acre. By introducing a logger safety program with certification, the project intends to improve safety, reduce Worker's Compensation Insurance losses, and thus reduce treatment costs.

Status: COMPLETE

Summary: Since March 2006, 13 forest worker safety certification courses have been offered in locations across New Mexico and 240 forest workers have become certified. In June 2006, the Public Regulation Commission of New Mexico directed the National Council on Compensation Insurance to create the state Special Classification: 2721-Certified Loggers. Certified forest workers in New Mexico are now eligible to receive the new rate of \$30 for every \$100 of payroll. This is a significant reduction from the 2005 rate of \$79 for every \$100 of payroll and the 2006 rate of \$61 for every \$100 of payroll. A New Mexico Forest Industry Association is in the development phase and is a likely permanent home for the forest worker safety certification program. \$200,000 from the NM Mexico Legislature has been appropriated to provide additional training sessions and support outreach and education initiatives in 2007. The Forest Guild and the Advisory Group are currently developing a curriculum for recertification courses, working on compliance and education initiatives with the USFS and BLM and monitoring the impact of the program on the cost per acre to treat NFS lands.

The following specific activities were completed:

- Evaluated logger education/safety program and incentives used in other states
- Established advisory board for Forest Worker Safety Certification Program, meeting quarterly first year and biannual in subsequent years
- Established the New Mexico Forest Industry Association as home from program and gained additional financial support from State Legislature for training program
- Developed a brochure explaining program (<u>www.forestguild.org</u>)
- Developed a monitoring program to evaluate impact
- Course now offered every four months. Currently 14 courses have been offered in Taos, Silver City, Ruidoso, El Rito, Grants, Jemez Pueblo, Las Vegas, Pine Hill and Santa Ana Pueblo. There is a very high demand for this course.
- The program is being transitioned from the Forest Guild to the New Mexico Forest Industry Association.

NFS Impacts: All National Forests in New Mexico

Reporting period from June 2004 to June 2005: No response from NFS.

Reporting period from June 2005 to June 2006:

Comments:

"Direct impact on NFS hard to determine; however Workman's Compensation Insurance rates for certified loggers have been reduced in half."

Reporting period from June 2006 to June 2007:

Comments:

"Direct impact on NFS hard to determine; however Workman's Compensation Insurance rates for certified loggers have been reduced in half."

19. <u>Grantee</u>: Northern Nevada Correctional Center – Biomass Cogeneration, Carson City, Nevada

<u>Goal:</u> Install a facility heating and co-generation plant at the Northern Nevada Correctional Center in Carson City. The facility would consume 16,000 tons of biomass per year and assumes 11,200 tons would come from NFS.

Status: COMPLETED

<u>Summary:</u> The Nevada Department of Corrections has completed construction of Biomass Cogeneration Plant at the Northern Nevada Correctional Center. This project utilizes biomass materials to provide for electrical and thermal requirements of NNCC. The plant is a model facility for Nevada in cost effectively using forest and residential waste and renewable energy technologies.

The project included the construction of a 1,000kW generation facility utilizing woody biomass as its fuel. The plant utilizes between 12,000 and 16,000 tons of woody biomass annually.

The construction has been completed and the testing is underway to bring the system up. The grant of \$250,000 has made beneficial use of woody biomass material from our surrounding areas. Ribbon cutting ceremony was held on Sept 4, 2007. As of 10/04/2007, 140 tons of woody biomass was purchased for \$3,995.

NFS Impacts: Lake Tahoe Basin Management Unit

Reporting period from June 2004 to June 2005: No response from NFS.

Reporting period from June 2005 to June 2006: No response from NFS.

Reporting period from June 2006 to June 2007:

Comments from Lake Tahoe Basin Management Unit during this reporting period:

 "NNCC is not operational at this time. Biomass removal contracts have been awarded but material was not designated for delivery to NNCC."





20. Grantee: American West Structures, LLC, Eagar, Arizona

<u>Goal:</u> Install a lumber dry kiln and wood laminating press to produce laminated wood decking from local small-diameter trees harvested from Forest Service 10-year stewardship contract.

<u>Status</u>: The laminating press, compressor, and end matching joiner are in place and operational. The dry kiln has not been purchased. The size that was affordable is too small. The intent is to find more funding and put in a large community kiln that will service many of the local businesses in the area. The remaining grants are being held for installation of this kiln.

NFS Impacts: Apache-Sitgreaves National Forest

Reporting Period June 2004 to June 2005: No response from NF.

Reporting Period June 2005 to June 2006:

NFS checked box that the grant program has had no visible effects during time period June 2005 to June 2006. However, received comments below:

Comments from the Apache-Sitgreaves NF for this reporting period:

• "Grantees are small operators that require time to capitalize their share of the costs that the grants cover. They are also continuing to research details of the equipment they are considering to purchase to ensure that they are getting the appropriate technology for the intended use. Each recipient is also attempting to acquire serviceable used components from other areas of the country to maximize the equipment acquired – this takes more time than buying ready-made brand new equipment and saves tens of thousands of dollars. We remain confident that the equipment and processes these grants cover will strengthen and diversify the infrastructure that support our forest restoration work. They just simply haven't had enough time yet to bring all the pieces together."

Reporting Period June 2006 to June 2007:

Comments from the Apache-Sitgreaves NF for this reporting period:

- "The grantee is a secondary user. They have used about 2,000 MBF in the last year from the Reidhead mill."
- "The primary species are ponderosa pine and mixed conifer species."
- NFS treatment methods have not changed because of the grant.





Appendix 4: Summary of 2006 Grant Projects

21. Grantee: Montana Community Development Corporation, Missoula, MT

<u>Goal:</u> Develop a central biomass collection system of 17 roll-on/roll-off containers located at logging job sites. Logging contractors use the containers to collect slash at the job site for transport to the central yard. There, biomass from the region is aggregated and sorted so that it can be sold for its highest value as logs, chips, or hog fuel. The project includes a marketing program in order to attract maximum use of the central yard.

<u>Status:</u> A partner of Montana Community Development was seriously injured causing delays in the project. He is currently back to work and has signed a contract with the USFS to start a fuels reduction project. There should be very measurable results to deliver in the next reporting period.

NFS Impacts: Bitterroot and Lolo National Forests

Reporting Period June 2006 to June 2007:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months					
ending 6/30/2006					
Post grant 12 months					
ending 6/30/2007					

Comments from the Bitterroot National Forest for this reporting period:

• "The operator with who Montana Community Development was working was seriously injured but is now back to work. Because of the injury, they have not treated any acres per the grant yet. They have signed a contract with the USFS to start a fuels reduction project. Despite the unforeseen and unavoidable delay, it appears that they are back on track with the grant."

Comments from the Lolo National Forest for this reporting period:

• "The program is an excellent idea but certainly does not guarantee an available forest product that will be economically viable for a private operation. In the case of this grantee, other circumstances (injury to a key employee) impacted their operations and their ability to get work accomplished this fiscal year."





22. Grantee: Greenleaf Forestry and Wood Products, Inc., Westcliffe, CO

<u>Goal:</u> Install upgraded systems/equipment for sorting, handling, length cutting, processing, storing, and shipping small-diameter logs. Increase production to 300 ccf (900 green tons) annually, and then double that over several years, to better economically treat 90 to 180 acres of small diameter timber per year.

<u>Status:</u> Equipment still being located, fabricated, purchased, restored, and installed. Full system may take all of 2008 to complete. Current production level is at 170 ccf or 510 green tons per year.

NFS Impacts: Pike and San Isabel National Forests

Reporting Period June 2006 to June 2007:

	Acres Treated		Cost or Revenue/Acre		Total Green
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months	1,000	1,500	\$250/acre	\$200/acre	N/A
ending 6/30/2006			cost	cost	
Post grant 12 months	1,200	1,300	\$350/acre	\$200/acre	N/A
ending 6/30/2007					

Comments from the San Isabel National Forest, San Carlos Ranger District for this reporting period:

- "The grantee has been unsuccessful in being awarded contracts for treatment in the past year. I am not aware
 of possibility of other contractors having delivered products to grantee which may have come from NFS
 sales. The grantee has bid unsuccessfully to secure one Stewardship contract and one small sale contract
 both on the San Carlos Ranger District."
- "In the past year, the grantee was successful in being awarded a contract with Custer County to develop and produce a Community Wildfire Protection Plan. In my opinion, this plan will result in more treatment opportunities on both private and NFS lands as a result of bringing attention, focus, and awareness with the county to the hazard fuel levels and the potential for destructive wildland fire."
- "I wholly support this grant opportunity and the potential it provides for developing innovative means of treating hazardous fuels and assisting small operators with equipment and operational costs that would otherwise not be possible. The grantees long range plans are inline with the intent of this program and his unconventional thinking and approach to dealing with the challenges of unhealthy forests (private and public) is correct and necessary to having a successful affect."

Comments from the Pike and San Isabel National Forests, Leadville Ranger District for this reporting period:

• "The grant has not resulted in more NFS acres being treated. Local timber purchasers may be sending material from their smalls to Greenleaf Forestry, but Greenleaf Forestry has not bid directly on sales on this district."

23. Grantee: Morgan Timber Products, Bellvue, CO

<u>Goal:</u> Purchase a horizontal grinder and 5-band resaw to reduce fuels reduction costs by shifting from chipping and masticating fuels to recovering, processing, and marketing them.

Status: Development and expansion of small diameter round wood and sawn products is progressing well. Development and sales of mulch and biomass products has been disappointing and has not yet warranted the investment of the grant money or the personal resources invested. The grant has definitely lowered the amount of fuel left on site as utilization of solid wood material is now consistently down to 2.5 inches or 3 inches. While the use of limbs as biomass and mulch is still disappointing, use of the stem of the tree has exceeded our expectations. Traditional landing slash disposal and rehabilitation costs are almost completely eliminated as the new equipment utilizes a cut-to-length system of harvesters, forwarders, and loading of "set out" trailers. Consequently, traditional lands cease to exist. The elimination of risk and smoke from burning has been a virtual success. Employment has increased from 11 employees to 15 employees currently.

NFS Impacts: Arapaho and Roosevelt National Forests

Reporting Period June 2006 to June 2007:

	Acres Treated		Cost or Revenue/Acre		Total Green
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months	375				3,000
ending 6/30/2006					
Post grant 12 months	750				3,200
ending 6/30/2007					

Comments from the Arapaho and Roosevelt National Forests for this reporting period:

- "It is unclear at this time whether the grant resulted in a reduction in FNS hazardous fuel treatment costs. Increased removed was achieved versus mastication or pile and burn. Mechanized costs have yet to decline due to utilization. Outlook is positive as markets evolve."
- "Continue grant funding for improved technology to established wood processing companies, but in reality increased production is not going to be dramatic, but slow to moderate at best."

24. Grantee: Mt Taylor Machine LLC, Milan, NM

Goal: Develop efficient harvesting and transporting system to bring material to Mt. Taylor Machine for wood pellet production. Utilize same system to harvest invasive tamarisk. Work in cooperation with Ramah Navajo Restoration Project and Zuni Tribal Sawmill to build their capacity. Supply Sunnyland Farms with 10,000 tons per year of industrial grade wood pellets for pellet boiler for 10-acre greenhouse. Supply growing national demand with industrial and residential premium grade pellets. Utilize marketing capacity of Mt. Taylor Millwork, Inc. Wholesale Division to secure markets for other value-added products. Create more jobs for Native Americans.

Status: Still in preparation phase vis-à-vis purchasing equipment and developing the necessary processing infrastructure for this project. The number and severity of roadblocks related to implementing this woody biomass grant are incredibly high. The area lacks any infrastructure necessary to begin the harvesting and implementation process. Additionally, once material is harvested, it will be necessary to have a system in place for processing the resulting material. Therefore, FY 2006 grant efforts focused on purchasing equipment, as well as developing and implementing appropriate infrastructure. Also the Cibola NF keeps changing the rules and requirements for participation in the grant process (i.e. mechanized harvesting is encouraged, but no mechanized harvesting opportunities are offered). Lack of consistency and continuity make grant compliance very difficult.

NFS Impacts: Cibola National Forests

Reporting Period June 2006 to June 2007:

	Acre	Acres Treated		Cost or Revenue/Acre	
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months					
ending 6/30/2006					
Post grant 12 months		_			
ending 6/30/2007					

Comments from the Cibola National Forest, Mt Taylor Ranger District for this reporting period:

- Cibola inserted Matt Allen's (co-owner of Mt Taylor Mill Works) response to these questions:
 - "To date, the grant monies we have been awarded have not helped us in the National Forest. Our intent, based upon the date we were originally given, was to focus on Pinon/Juniper harvesting. We purchased equipment we felt was appropriate for this project. When new Pinon/Juniper harvesting opportunities became available, the contracts specified "non-mechanized" harvesting. This stopped the grantee from pursuing any actual harvesting.
 - o "I find it frustrating that in Arizona the Stewardship contracts awarded allow for payment of around \$470.00 per acre for the contractors doing the work, while in New Mexico we are supposed to do this work for the "goods for services" trade. I don't think that work in New Mexico costs less than in Arizona. This creates very little opportunity for success.
 - O I believe that while the Woody Biomass Utilization program is good and should be pursued, it is imperative that we pursue the start-up of companies that will create products from the material that is harvested. This MUST be balanced. We cannot harvest wood with no end market and we cannot create an end market if no one is harvesting the wood."
 - "Our grant money is not enough to do both. We can harvest or we can create finished products.
 But to do both, will require many hundreds of thousands of dollars."
 - O Also, the grant documents specify the grantees may not use the money for purchase payments or for lease payments on equipment. I think this is a mistake. It we were able to leverage government backed grant money we could finance a harvesting and utilization project. The grant program requires that we spend the money. We should instead use it for payments on equipment. We could buy more and better equipment, and the ensuing income could then make a good portion (if not all) of the payments."

- o "For example, if we were granted \$250,000 with a guarantee from the government that any company selling awardees equipment would never face default on the loan, we could purchase a great deal of equipment for both harvesting and processing. Then payments would be made starting with the original grant money awarded. In the meantime, the grantee would be starting to develop income. Said income would be used in conjunction with the original \$250,000 for equipment purposes. A schedule of minimum payments would be required."
- o "Conversely, why not have the government purchase the equipment needed and lease it to the awardees with the stipulation that if the awardees are not successful within a given period the equipment is recovered by the government and re-issued to other grant recipients so that they can use it."
- o "Our current situation is quite frustrating. We have been determined to not waste government money from day one. However, we feel that the "game plan" as originally presented to us changed once we were under way. We also recognize that the amount of money is awarded is too small to get the job done. We feel we are failing, but we also feel that it is not our fault. Failure is somewhat built into the program."
- o "Nonetheless, we intend to pursue the entire project to the best of our ability with the goal of absolute success."



25. Grantee: Olguin's Sawmill, El Prado, NM

<u>Goal:</u> Help reduce NM Carson NF management costs by increasing biomass value. Increase us of biomass from NM Carson NF. Remove economic and market barriers to using small-diameter trees.

Status: Due to the grant, we have actually produced three new avenues for product expansion: 1) kiln dried wood which we have never had in the Taos area other than finished wood brought into the local lumber /hardware yards; 2) a new type of flooring, specifically tongue and groove and ship lap material, and 3) log siding. We are excited about the prospect of the log siding as it can use small diameter timber whereas regular logs produced fro log homes generally cannot. From June 2006 until December 2007, we have used 884 green tons from National Forests and 442 green tons from our sustained yield units.

NFS Impacts: Carson National Forests

Reporting Period June 2006 to June 2007: No response from the National Forest





26. Grantee: Sherry Barrow Strategies, Ruidoso, NM

<u>Goal:</u> Implement efficient harvesting system; reduce fuels treatment costs on NF lands; supply small diameter material to SBS Wood Shavings.

Status: Purchased a Swing Harvester System to process material off National Forest System lands more efficiently. From the start of the grant in June 2006 until December 2007, we processed approximately 1673 green tons. A hundred percent of this material was utilized. The harvester head is much more efficient and allows us to process small diameter trees down to a 2" top and remove for utilization. We are utilizing material that was previously left in the woods to be piled and burned if burn windows permitted. In addition, SBS is able to access acres that were previously inaccessible due to slope, soil conditions, and ephemeral drains, etc. The swing arm system has a reach that allows for "reaching" to cut and swing the tree around to an area where it can be more easily processed and removed to a landing. Safety and production has improved.

Previously, small diameter material was masticated and left on the ground. While the treatment changed the condition class, the ecological effects of leaving the woody biomass on the forest floor are not as desirable as the current posts-grant operation which allows for removal of more material and improved ecosystem function. The same 6-month pre-grant period compared to the post grant timeframe indicated more than double the volume of material is being produced even though the pre-grant stand of trees had 50% more trees per acre. The current post-grant terrain is much more challenging with areas treated at 50% slope.

The grant award has retained 6 jobs directly affected by the forest contracts. The low-impact swing harvester system gives the Lincoln National Forest the ability to reduce fuel loads and thereby improve ecosystem function and protect the WUI in areas with up to 50% slope. It also allows access to areas formerly deemed inaccessible due to the 4"-tree classification. The system has low impact in that it has fewer entries and walks on slash, reduces the amount of material left on the forest floor, and the costs of prescribing burning.

The versatile Swing Harvester System has garnered two new projects for the coming year. Both projects are priority areas within the WUI that have been delayed due to the difficult terrain and accessibility to the project areas.

NFS Impacts: Lincoln National Forests

Reporting Period June 2006 to June 2007:

	Acres Treated		Cost or Revenue/Acre		Total Green
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2006	257	257	\$250.00 cost	\$50.00 cost	
Post grant 12 months ending 6/30/2007	257	257	\$500.00 cost	\$50.00 cost	2218.5

Comments from the Lincoln NF, Smokey Bear Ranger District for this reporting period:

- "As a result of this grant, 257 additional acres were treated and 854 or 2218.5 green tons were removed."
- "The primary species is ponderosa pine."
- "The grant has not resulted in reduction in NFS treatment costs."
- "Under a grant, the Lincoln NF does not have project guidelines in place like under a contract so enforcement or on-the-ground administration is a verbal agreement. Under a grant the Lincoln NF is not receiving money for the value of the wood extracted. Under a contract, the LNF would receive some value for the wood."
- "Collaborative relationships are being developed. Some concern that biomass is being subsidized instead of paying for itself. Thus, the government is bearing the burden."

27. Grantee: Town of Red River, Red River, NM

<u>Goal:</u> Facilitate the loading and transportation of small-diameter pole material being produced from the Town of Red River hazardous fuels treatment in the wildland urban interface.

<u>Status:</u> The Town has acquired and placed in service the specified equipment, and hired and trained the required driver/operators. Although the equipment has not been in service for the full year that we need for comparison purposes, positive trends are clear and apparent.

NFS Impacts: Carson National Forest

Reporting Period June 2006 to June 2007: No response from the National Forest

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months					
ending 6/30/2006					
Post grant 12 months					
ending 6/30/2007					

28. Grantee: Western Moulding Company, Inc., Snowflake, AZ

<u>Goal:</u> Purchase and install a dry kiln and resaw, install an existing sawdust bin and blowpipe and fabricate and install a floor chain to increase biomass recovery to use in dry kiln. The project also provides capacity for surrounding wood products businesses by custom heat treating for international markets.

<u>Status</u>: Merry-go-round resaw and the floor chain assembly are installed. Western Moulding still has several small projects to complete. Production has doubled and will continue to increase as projects are finished. Employment has increased from eight full time employees and one part time employee pre-grant to ten full time employees and four part time employees currently.

NFS Impacts: Apache-Sitgreaves National Forest

Reporting Period June 2006 to June 2007:

	Acres Treated		Cost or Revenue/Acre		Total Green
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months					26 tons per day
ending 6/30/2006					
Post grant 12 months					50 tons per day
ending 6/30/2007					-

Comments from Apache-Sitgreaves National Forest, Lakeside Ranger District for this reporting period:

- "The operation experienced significant down time in order to install the new machines, train operators, and get all the systems into synchronous operation. Western Moulding is in a better position today then at any time since beginning the first phase of the project four years ago."
- "In late summer, the plant was processing 12,000 BF of material per day. This is double the amount processed prior to the installation of the merry-go-round resaw."
- "Current processing equates to 1.75 trucks of small diameter logs each day or 46.4 tons/day or 232 tons/5 day week or 973 tons per 21 day month."
- "This is another market for small diameter trees being thinned in the White Mountain Stewardship project that was previously used for lower value products such as chips for pellets. When fully operational, this will add capacity and thus additional acres of treatment."
- "The new equipment also improves utilization from the logs, thus adding value. His value-added product, custom moulding, fetches a much better price than standard moulding which with other efficiencies will allow him to pay 9% more for his preferred size (8-10 in.) small diameter logs and maintain the same price for less desirable 6-7in. material."





29. Grantee: Round Valley Wholesale Lumber, Inc., Eagar, AZ

<u>Goal:</u> To construct a bi-product recovery mill to turn slabs, created from processing small-diameter logs, into a higher-valued, marketable product increasing the value and recovery lumber harvested from the White Mt Stewardship project.

Status: Round Valley Wholesale Lumber purchased the resaw and other machinery listed in the grant. The substructure and waste handling equipment was constructed and coupled to the existing machinery. Initial production, testing, and shake down began in 2007. Recovery improved from sawing slabs into lumber versus chipping material. Board feet recovery is increasing and is expected to improve to between 25% and 30%. Indirect effects include 2 new operator jobs and 2 laborer jobs created. This reporting period does not reflect benefit from by-product recovery mill. Mill was only in production for a one-month period. However, the equipment is fully operational and progress will be tracked for future reporting.

NFS Impacts: Apache-Sitgreaves National Forest

Reporting Period June 2006 to June 2007: No response from National Forest.

	Acres Treated		Cost or Revenue/Acre		Total Green
				Tons Removed	
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months					
ending 6/30/2006					
Post grant 12 months					21,336
ending 6/30/2007					

30. Grantee: Southwest Forest Products, Phoenix, AZ

<u>Goal:</u> Lower hazardous fuel stand treatment cost and treat more acres annually through the use of a Waratah dangle head processor.

<u>Status:</u> Equipment was delivered in November, 2006. Since Southwest began operation with the equipment, they have completed forest thinning projects on three national forests. Between May, 2007 and October, 2007 this project has run continuously treating hazardous stands primarily on the Coconino National Forest.

NFS Impacts: Coconino, Prescott and Kaibab National Forests

Reporting Period June 2006 to June 2007: No response from National Forest.

	Acres Treated		Cost or Revenue/Acre		Total Green
					Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2006	0		0		0
Post grant 12 months ending 6/30/2007	2,493.5		\$809.37		62,648.15



31. Grantee: Skyline Forest Resources, Inc., Escalante, UT

<u>Goal:</u> Harvest and utilize softwood and hardwood log material that otherwise adds to fuel loading on the forest floor by establishing a "Value Added Wood Shavings" business.

<u>Status</u>: The Jackson Wood Shaving Mill is on order and will be delivered on or before March, 2008. The shaving mill utilizes cutter heads for producing wood shavings. A compressed bagging system is currently being installed and will be operational by November, 2007. Softwood lumber production and associated byproducts are at record low levels. Skyline is endeavoring to avoid any curtailments by concentrating on specialty solid wood and fiber products. The addition of the Value Added Wood Shavings as facilitated by this grant is seen by Skyline as critical to their company's survival.

NFS Impacts: Fishlake National Forest

Reporting Period June 2006 to June 2007:

	Acres Treated		Cost or Revenue/Acre		Total Green
	36 1 1 1	.	36.1.1		Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months					
ending 6/30/2006					
Post grant 12 months	132	0	Revenue:	0	7,224
ending 6/30/2007			Total		
			\$12,040		
			Or		
			\$91.12/acre		

Comments from the Fishlake National Forest, Fremont River Ranger District for this reporting period:

- "Indirectly, the grantee has purchased biomass volume off 132 acres of NFS lands. Hardison Logging purchased the Lost Springs Aspen Sale and by agreement with Skyline Forest Resources, delivered the forest products to their mill operation."
- "As a result of the grant, Skyline had a product market for aspen and other small diameter/low-value tree species found on the Fishlake NF. For the forest to have a demand for low value/small diameter trees, creates treatment opportunities for aspen ecosystems that otherwise would be prescribed burned to meet management objectives. Fuels reduction objectives are being met and a value is being generated by the sale of the forest products."





32. Grantee: Lake Tahoe Unified School District, South Lake Tahoe, CA

<u>Goal:</u> Replace the old natural gas boiler system with a wood-fired boiler that will utilize slash material generated by hazardous fuel reduction projects within the Lake Tahoe Basin.

<u>Status:</u> The subject grant has not resulted in the harvest of woody biomass due to lack of proper permits. The Lake Tahoe Unified School District still hopes to fulfill the grant's intent and is fully involved with the related permitting authorities. After consultation with the relevant agencies, they are now awaiting the results of a revised approach to the health assessment process.

NFS Impacts: Lake Tahoe Basin Management District

Reporting Period June 2006 to June 2007: No response from the National Forest

	Acres Treated		Cost or Revenue/Acre		Total Green
					Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months					
ending 6/30/2006					
Post grant 12 months					
ending 6/30/2007					



33. Grantee: Big Valley Power, Redding, CA

<u>Goal:</u> Construct a sawmill that will utilize small-diameter logs that are not customarily sawn into lumber. By-products from the sawmill will be used as fuel for the 7.5 MW power plant located on site. A portion of the small tree component normally chipped for fuel will be converted to lumber, thereby creating value not now available to Forest landowners in the area.

<u>Status</u>: Some work has commenced, including the purchase and dismantling of a sawmill from California. The sawmill is close to being completed with production expected to begin in September 2007. The sawmill is configured to saw small logs through a scragg mill and larger logs through a band saw mill. The grant has contributed to the hiring of a crew to construct the sawmill. Most of the construction crew will ultimately be employed in the sawmill. We expect to hire 12 full time equivalent employees.

NFS Impacts: Modoc and Lassen National Forests

Reporting Period June 2006 to June 2007:

	Acres Treated		Cost or Revenue/Acre		Total Green
					Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2006	2,232		\$355		37,937
Post grant 12 months	1,378		\$585		23,263
ending 6/30/2007					

Comments from the Modoc National Forest, Big Valley Ranger District for this reporting period:

- "Now that the sawmill is getting into production, they are able to cut lumber from some of the small trees previously considered non-merchantable."
- "The successful start-up of the sawmill that can process small logs in conjunction with the power generation plant that uses chips and waste wood from the sawmill will greatly increase the ability to reduce very high fuel loadings to more acceptable levels. Without this infrastructure the Modoc NF would have to rely on very limited appropriated funds to do the work."
- "The WBU grant program helps companies get established that can reduce the fuel loading through the removal of small trees, assists in the production of power from a renewable resource, and reduces dependence on oil. It also adds employment opportunities in rural America."

34. Grantee: Warm Springs Geo Vision, Warm Springs, OR

<u>Goal:</u> Replace the old natural gas boiler system with a wood-fired boiler that will utilize slash material generated by hazardous fuel reduction projects within the Lake Tahoe Basin.

<u>Status</u>: The subject grant has not resulted in the harvest of woody biomass due to lack of proper permits. The Lake Tahoe Unified School District still hopes to fulfill the grant's intent and is fully involved with the related permitting authorities. After consultation with the relevant agencies, they are now awaiting the results of a revised approach to the health assessment process.

NFS Impacts: Lake Tahoe Basin Management District

Reporting Period June 2006 to June 2007: No response from the National Forest

	Acres Treated		Cost or Revenue/Acre		Total Green
					Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months					
ending 6/30/2006					
Post grant 12 months					
ending 6/30/2007					

35. Grantee: Rough and Ready Lumber Company, Cave Junction, OR

<u>Goal:</u> Install boiler, turbine generator, fuel and waste handling and storage systems, and electrical and air quality monitoring controls. Proposed improvements will increase kiln drying capacity and generate electricity for the grid (1.5 MW) and will require about 15,000 bdt/yr from fuels treatment prescriptions.

<u>Status</u>: We are completing construction of a new cogeneration boiler. The boiler will be supplied 50% by sawmill residuals and the balance coming from biomass/stewardship contracts on Federal, State, and private forests. We will see a dramatic increase in acres treated and biomass produced during 2008 when the power plant is operating at 100%.

NFS Impacts: Rogue River-Siskiyou, Klamath, and Six Rivers National Forests

Reporting Period June 2006 to June 2007:

	Acres Treated		Cost or Revenue/Acre		Total Green
					Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months					
ending 6/30/2006					
Post grant 12 months					
ending 6/30/2007					

Comments from the Rogue River-Siskiyou National Forests for this reporting period:

• "The plant is not yet installed. Stewardship sales are being prepared with biomass removal as a possibility."



36. Grantee: Roseberry Timber, Inc., Crescent, OR

<u>Goal:</u> Purchase a horizontal grinder to treat 4,050 acres and remove biomass from three Ranger Districts on the Deschutes National Forest in Oregon and the Plumas National Forest in California. The biomass is ground into chip form and transported to cogeneration power plants.

<u>Status:</u> Roseberry Timber has purchased a horizontal grinder. The Oregon project has yet to be started. The Warm Springs cogen plant is not buying fuel and the proposed cogen plant in LaPine, Oregon has not been finalized. The USFS timber sale reached contract termination in June, 2007. Last summer, while Roseberry was working on the California half of the project, most of their piles on the Deschutes NF were burned without notifying Roseberry. All these piles were needed to make the Oregon project economical. Roseberry doesn't have a strong feeling that the Oregon project will ever materialize.

On a stronger note, the California half of the project has exceeded expectations. The decks from the Guard Timber sale have been processed and delivered to the local cogen plants. We continued past the original decks and are still processing on the Guard timber sale. This area was so dry that the weight of the material harvested was much less than expected. Since payment is on BDT delivered, less tons means less payment. This forced Roseberry to work on producing the product more efficiently.

NFS Impacts: Deschutes, Ochoco, and Plumas National Forests; Prineville BLM

Reporting Period June 2006 to June 2007:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2006			\$150-800 ac/to pile burn	\$25/ac cost to pile burn	
Post grant 12 months ending 6/30/2007	1741.5 acres of biomass thinned and removed/ 66,957.6 acres fuels treatment acres	7,583 acres machine pile burned	+\$5.035 revenue from removing machine piles; \$150- 800 ac thinning costs	\$19,950 in B. d. cost savings to not burn machine piles; \$25/ac cost to burn machine piles	9,930 GT specifically due to Woody BUG program

Comments from the Deschutes National Forest for this reporting period:

- "No biomass utilization acres were done on the Deschutes NF as the contractor moved to California shortly after receiving this grant and has reduced overall the amount of work done in the Central Oregon area. Roseberry Timber was one of our most conscientious and innovate loggers. We were sorry to see them move."
- "Overall, the program has been very helpful in helping businesses to develop industry infrastructure for increasing capacity to process biomass. Since the agencies have been working with partners to improve this capacity for a few years, there is some impatience to get the biomass rolling off sites. The general thinking is that once industry infrastructure is in place, the most cost effective and accessible biomass supply will be derived from timber sales and stewardship contracts. Possibly in the future, if the demand and value for biomass increases, then precommercial thinning or ladder fuel reduction work may be changed to more mechanized harvesting procedures."

37. Grantee: Vaagen Brothers Lumber, Inc., Colville, WA

Goal: Operate a tub grinder that can utilize much of the material currently left in the woods.

<u>Status</u>: Vaagen Brothers Lumber purchased a horizontal grinder to grind material into usable fuel to convert to green power production as well as landscape grade products. The machine has worked very well and is used regularly to convert bark, limbs, sticks, stumps, and chunks into usable material. There have been some good success stories, but also some challenges in getting this machine into the woods regular, especially on USFS projects. The biggest challenge is getting the agency to see and do things differently.

NFS Impacts: Colville National Forest

Reporting Period June 2006 to June 2007:

	Acres Treated		Cost or Revenue/Acre		Total Green
					Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months	3,000	1,000	\$300 (does	\$85	0
ending 6/30/2006	(includes		not include		
	harvest		harvest acres)		
	acres)				
Post grant 12 months	4,500	1,500	\$300 (does	\$85	190
ending 6/30/2007	3,000		not include		
	(includes		harvest acres)		
	harvest				
	acres)				

Comments from the Colville National Forest for this reporting period:

- "The presence of the grinder is causing adjustments in the way the NF approaches projects, but the equipment is too new to have influenced projects that were already in the pipeline before it arrived on the scene."
- "The Colville NF is designing future projects to incorporate the use of the grinder to utilize slash materials rather than burning them. This includes designing large scale landing to pile slash for the grinder to use, the distribution of slash piles in the woods, and the location of slash piles in proximity to roads for access by the grinder. In other words, the NF is working to design projects to source more biomass for the grinder."
- "The grinder has allowed Vaagen Brothers Lumber to utilize a higher percentage of yard material for cogeneration of electricity which material would have otherwise been sent to the landfill. This use of waste material will increase over time."

38. Grantee: Forest-Based Economic Development Services, Inc., Springville, AL

<u>Goal:</u> Establish viable harvesting techniques and sustainable markets for small diameter stems and unmerchantable woody material, thus enabling the National Forests in Alabama to increase efficiencies in rehabilitating lands from Condition Class 2 and 3 to Condition Class 1.

Status: Project is underway and on schedule. Impacts on NFS lands are yet to be determined.

NFS Impacts: National Forestsin Alabama

Reporting Period June 2006 to June 2007:

	Acres Treated		Cost or Revenue/Acre		Total Green
					Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months					
ending 6/30/2006					
Post grant 12 months	37		(To be		1,142
ending 6/30/2007			determined)		

Comments from National Forests in Alabama, Oakmulgee Ranger District for this reporting period:

- "The first treatment under this grant treated overstocked Loblolly pines that were targeted for a restoration treatment to return the site to longleaf pine. The treatment was incorporated into this project as a means to provide test material to Alabama Power for co-firing with coal in the production of energy."
- "The cost effectiveness of this treatment has not been evaluated as the intent was to supply wood chips for testing in the co-firing operation. The management effectiveness of biomass removal will be evaluated with the next 2 years on the Oakmulgee District."
- "While it is too early to determine the operational effectiveness of biomass removal from a fuels reduction standpoint, the grant has been extremely important as a catalyst in developing a new market. Due to the apparent success of the co-firing operation at the Gadsden plant, Alabama Power now wants to test at another facility."
- "The grant has also provided a platform for the study of "in-woods" processing of biomass removal. While efficiencies have not yet been gained, we are beginning to have a better understanding of the current limiting factors."
- "To have the means to work through the biomass harvesting/utilization issues is invaluable. Without the support of the grant, we would not have the opportunity to ask and answer these real-life questions."

Appendix 5: Forest Service Woody Biomass Utilization Grants Procedures

Action: Approximately \$4 million in competitive grants is awarded each year. Selected projects increase the use of woody biomass removed from forest management activities on or near National Forest System lands.

Purpose: Federal funds help to improve forest restoration activities by using and creating markets for small-diameter material and low-valued tress removed from forest restoration activities, such as reducing hazardous fuels material which contribute to forest fires, handling woody biomass material left after insect and diseased trees die, or treating forestland impacted by catastrophic weather events in which woody material is an environmental liability.

Outcome: These funds are targeted to help communities, entrepreneurs, and others turn residues from forest restoration activities into marketable forest products and/or energy products.

Awards:

Grants range from \$50,000 to \$250,000. The recipients must provide at least 20 percent of the total project cost as matching funds.

Authority:

Annual Appropriation Acts. CFDA 10.674.

Grant Announcement and Award Process:

Request for Proposal is placed in the Federal Register and at www.grants.gov on or around September of each year.

Pre-Application:

- Pre-application is required to screen applications that fit the scope and goals of this
 grant program. Successful pre-applicants are invited back to submit a full
 application. Pre-application requires a 5 page narrative, budget and budget
 justification, 424 and 424A and required letter from National Forest System Forest
 Supervisor or District Ranger, as documentation of collaboration between applicant
 and NFS.
- Usually during November pre-applications are reviewed by a technical team consisting of federal technical, financial and Forest Service policy specialists. Approximately 26 to 30 reviewers are included in the process. Each application is reviewed by 6 reviewers. One grants officer, two administrative assistants, and one computer specialist help make the process run smoothly. Selection criteria are posted at http://www.fpl.fs.fed.us/tmu/grant-2008/biomass-2008/index.html.

On average 50% of the 80 to 120 pre-applications are invited them back to submit a full application. Instructions for the applicants are posted at http://www.fpl.fs.fed.us/tmu/grant-2008/biomass-2008/index.html.

Full application:

- Full applications require confidential financial information and allows up 10 pages of narrative as well as attachments, 424, 424A, budget, budget narrative and justification and requires a letter of support from National Forest System Forest Supervisor or District Ranger, as documentation of collaboration between applicant and NFS.
- The technical team reviews the following criteria: 1) impact on National Forest System, 2) technical merits, and 3) qualifications, as well as letters from Forest Service line officers who must address the relationship between the applicant's proposal and the mission of the agency. Each proposal has 6 reviewers.
- Financial reviews are conducted my experts from various federal agencies. The
 reviewers in the past have included staff from USDA Rural Development, SBA as
 well as Forest Service folks experienced in business finances. Each proposal has 3
 financial reviewers, who must rate the suitability of the applicant to handle and
 manage grant dollars and the financial feasibility of meeting their proposals
 objectives
- Once the technical and financial reviewers have completed their reviews, they send their scores back to the Technology Marketing unit where they are tabulated prior to either a face to face discussion with all reviewers or a webinar/conference call session. During this discussion each proposal is discussed at length by the reviewers, who talk about the pros and cons of each proposal and why the reviewer gave it the particular rating. Attached is a financial reviewer rating form and also a technical reviewer rating form.
- At the close of the technical and financial review discussion, the Forest Service regional representative in the region of the particular proposal is asked to comment. The regional representative provides the regions priorities, goals, objectives, as well as experience and/or knowledge (if any) of the particular organization submitting the proposal. The regional representative helps to clarify any questions or concerns. The regional representative also summaries the Regional Forester's and his line officers' priorities.
- Upon completion of the overall discussion, reviewers can change their merit-based scores. Information that might not have been discovered during their initial review of the application can be considered. Information must be found in the application. After completion of the discussion, revisions to scores are documented and initialed by the individual reviewers. During the process, we use a running Excel spreadsheet that tabulates and averages scores so that information is always up-to-date. Also,

after finalizing scores for a particular proposal, these scores are deemed final and reviewers cannot change them.

- Top ranked proposals are funded according to how much money is available. A
 process of reducing individual awards to reach more applications is not a
 recommended policy of this grant program.
- All applicants receive written evaluation comments from each reviewer but with the reviewer's name deleted.

Grant Applicant Announcement:

After the technical and financial reviews have been completed, the recommendations for funding are submitted to an Executive Steering Committee, composed of the three Deputy Chief's or their representatives, and the Director of the Forest Product Laboratory. The technical and financial review team discusses the top recommended proposals with the Executive Steering Committee. The recommended proposals are solely based on their technical and financial scores. At this time, the Executive Steering Committee can make changes to the recommended list based on policy or political concerns. Proposals that are not recommended for funding because of not enough dollars and that may have political ramifications are highlighted to the Executive Steering Committee. If the Executive Steering Committee concurs with the list of recommended proposals for funding, then this list is forwarded to the Department for review and public announcement. This announcement is generally done at the Secretary level.

Program Note:

In the past, travel was required for both reviews. For the FY 2008 year, we used webinars (online conferencing program with capability of participants to see Excel spreadsheet simultaneously on their computer) was used to conduct the review processes. This action saved the agency approximately \$60,000 in travel costs. There are pros and cons to the process but in general we think this has potential for the future.

2008 Woody Biomass Utilization Grants – Financial Evaluation

Na	me (PI):
Pr	oject Title:
Fir	nancial Evaluator: Date:
ı.	SF-424A (fill in the blanks and check the box for "YES" or leave blank for "NO")
	 □ Is the SF-424A complete? □ Does the SF-424A agree with the project budget information (SF-424, and Table 1)? □ Does the project have a 20% non-federal match? What is the Non-Federal Match?
II.	For-Profit Organizations ONLY – Businesses (enter your score in each box and go to Section V.)
	Historic and <i>pro forma</i> projections (3 years each) of company financials including list of assumptions and justification of assumptions—10 points maximum
	Balance Sheet (0 to 3 points)
	Income Statement (0 to 3 points)
	Company Cash Flow Analysis (0 to 3 points)
	Clear, concise, and complete company financial information (1 points extra effort)
III.	Non-Profit Organizations ONLY (enter your score in each box and go to Section V.)
	Work Plan and Project Cash Flow—10 points maximum
	3 most recent IRS Returns (0 to 3 points)
	Non-Profit Organization Work Plan–organization's purpose & work plan (0 to 3 points)
	Project Cash Flow Analysis (0 to 3 points)
	Clear, concise, and complete organization financial information (1 points extra effort)

IV.		tate, and Tribal Governments or Special Purpose Districts ONLY (enter your each box and go to Section V.)
	Scope	e of Work and Project Work Plans—10 points maximum
		Governmental entity's Scope of Work-organization's purpose (0 to 3 points)
	<u>_</u>	Work plans–description of the government entity's tasks and objectives (0 to 3
		points)
	_	Statement describing how project meets the goals & objectives of this RFP (0 to 3
		points)
		Clear, concise, and complete organization financial information (1 points extra
		effort)
٧.	_	LL Applicants (enter a score in each box)
	Page _	2 of 2
	Proje	ct Budget—10 points maximum
		Project budget justification narrative (0 to 3 points)
		Table 1—Woody Biomass Budget (0 to 3 points)
		List of assumptions and justification of assumptions used (0 to 3 points)
	_	Clear, concise, and complete project budget information (1 points extra effort)
	Proje maxir	ct financial feasibility including discussion of justification of assumptions—4 points num
		Project financial feasibility narrative (0 to 3 points)
		Clear, concise, and complete financial feasibility information (1 points extra effort)
		cial feasibility substantially supports the goals and objectives of the Woody
	■ Bioma Utiliza	ass ation Grants program (1 point extra effort)
۷I	Financia	al Feasibility Final Score & Comments
•••	· manon	ar reactionity i man coord a commente
	Fine	N Seare 25 points may
		al Score - 25 points max.

Scoring Instructions—use the following criteria to evaluate & score the applicant's financial

information:

Criteria Missing—required financial information was not submitted Deficient/Questionable—submitted but incomplete, unjustified assumptions, unable to determine if valid. Minimally Sufficient—minor deficiencies but sufficient enough to deem the information fairly credible and accurate, assumptions are at least marginally justified; good financial support for the project. Sufficient—no deficiencies, accurate and justified assumptions, indisputable financial support for the project

In addition, one (1) point extra effort can be awarded for project financial feasibility that shows substantial support for the goals and objectives of the Woody Biomass Utilization Grants program. One point extra effort can also be awarded for "Clear, Concise and Complete" documentation for company financials, project budget, and financial feasibility.

Number:	Grantee Name (PI):
Reviewer	
Name:	
Impact on Natio	onal Forest System Hazardous Fuel Reduction Projects – <mark>40 points maximum</mark>
disease ridicate r	of the forestlands proposed for the project, such as Fire Regime Condition Class, insect and sk conditions, or degraded forestlands due to catastrophic weather events. (7 points maximum ngible benefits with and without the grant (increased acres treated from forest restoration increased value of raw material removed from forest restoration activities, and reduced FS's (20 points maximum.) ntangible benefit (such as air quality benefits; water quality benefits; socio-economic, wildlife and watershed improvements.) (5 points maximum) ity created for using woody biomass material around NFS lands in locations where no or limit capacity exists. (8 points maximum.)
Sub-Tota	
Comments:	
Technical Adequacy Likelihoo Identified Timelines Evaluatio Sub-Tota	oach Work Plan – 25 points maximum feasibility of the proposed work (5 points maximum) and completeness of the proposed tasks (5 points maximum) d of meeting project objectives (5 points maximum) deliverables/tasks (3 points maximum) and reasonableness of time schedule (2 points maximum) n and monitoring plan (5 points maximum) al Score
Comments:	
Qualifications a	nd Experience of Applicant – <mark>10 points maximum</mark>
Demonstr Scoring for	ce, capabilities (technical and managerial) rated capacity or qualifications: 8 to 10 points for demonstrated expertise and capacity to ensure success 6 to 8 points for expertise or capacity in another area but project is an expansion of capability
	4 to 6 points for entering into new area which requires completely new knowledge and expand
capacity Sub-Tota	d Score
Comments:	
Total Sec	ore – <mark>75 points maximum</mark>

CERTIFICATION OF NO CONFLICT OF INTEREST:

It is imperative that the Woody Biomass Utilization Grants avoid the **appearance** of conflict of interest in reviewing pre-applications and full-applications in our scoring and discussions. Therefore, you must disqualify yourself as a reviewer for any proposal where 1) the applicant or consultants (if any) are employed at your home institution; 2) you served either as advisor or collaborator on a project;

3) coauthored a joint publication with the applicant within the past four years; 4) you acted or will act as a paid consultant to the applicant, or will gain some benefit from the project;, or 5) you have any affiliation or financial interest in the organization or principal investigators submitting this proposal. If any of the above situations apply, please notify Susan LeVan at 608-231-9518 so another reviewer can be assigned. If you have a situation about which you are uncertain, please contact Susan LeVan for an opinion.

Signature of Reviewer	Date