2009 Woody Biomass Utilization Status Report
for 2005, 2006, and 2007 Grant Programs

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

Susan LeVan–Green, Program Manager
JoAnn Benisch, Visual Information Specialist
S&PF Technology Marketing Unit
Forest Products Laboratory

Madison, Wisconsin
(608) 231-9518

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Caring for the Land and Serving People

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Woody Biomass Utilization Status Report 2005, 2006, and 2007 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 pre-applications were submitted and 30 were invited back to submit full-applications. For 2006, 18 proposals were awarded, representing 9 states. In 2007, 93 pre-applications were submitted and 36 were invited back to submit full-applications. For 2007, 26 proposals were awarded, representing 13 States. The combined 2005, 2006, and 2007 (64) grantees reported that in 2008, more than 535,017 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, 2006, and 2007 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.
7. The downturn in the U.S. economy, and in particular the housing industry, has made it difficult for wood processing companies to remain profitable in 2008 and many have curtailed operations until the economy recovers.

Woody Biomass Utilization Status Report
2005, 2006 and 2007 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 and 2007, additional direction was provided through the Energy Policy Act of 2005 (P.L. 109-058).

Congressional Appropriation: The USDA Forest Service's 2005, 2006, and 2007 Woody Biomass Utilization Grant program received funding through the Interior, Environment and Related Agencies Appropriations Acts of 2005 (P.L. 108-447), 2006 (P.L. 109-54) and 2007 (P.L. 110-161).

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 fifth 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.

Solicitation Procedures: 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.

Criteria and Weight: 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.

Review and Selection Process: 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, 2006, and 2007.

Scope and Scale of 2005, 2006, and 2007 Woody Biomass Utilization Grants:

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
2007	93	36	26	13	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 and utilized. 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, 2006, and 2007 grantees. The complete information submitted is in the Appendix in Table 3 for the 2005 grantees, in Table 4 for the 2006 grantees, and in Table 5 for the 2007 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 one to two years 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.

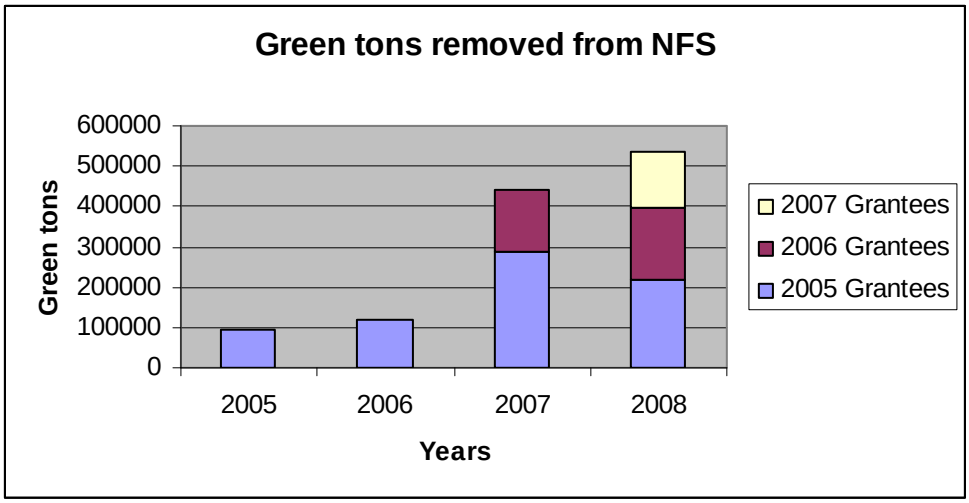
In Figure 1, the amount of green tons removed and utilized connected with the 2005 Woody Biomass Utilization grants increases in 2006 as well as 2007 as the grant purposes are put into practice. The combined total number of green tons removed and utilized that are connected with the 2005 and 2006 recipients is approximately 439,000 for the reporting year of 2007. The number of green tons removed and utilized between 2007 and 2008 did not double as anticipated, although the numbers were somewhat higher for 2008 than 2007. This is due to the economic downturn. Many grantees reported curtailments in operations due to the downturn in the economy, particularly the housing market. Many have curtailed operations until the economy

turns around. We anticipate that the numbers for 2009 may remain level with 2008 because of the economic downturn, although additional grantees will be reporting treatments, including treatments funded by the American Recovery and Reinvestment Act of 2009. 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.

Table 1 – Total green tons removed and used from NFS lands as reported by grantees and NFS.

Year	**2005**	**2006**	**2007**	**2008**
2005 Grantees	93856	117900	287961	219813
2006 Grantees	0	3000	150916	176393
2007 Grantees	0	0	0	138811
Total	**93856**	**120900**	**438877**	**535017**

Figure 1 – Total green tons removed from NFS lands impacted by 2005, 2006 and 2007 Woody Biomass Utilization Grant program.



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.

There are two specific examples of the impact of the Woody Biomass Utilization grant program that can be highlighted. The first is the impact of this program on the White Mountain Stewardship Contract. The second involves the investment in roll-off bins for transporting woody biomass.

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 101,386 green tons to the businesses in the area. Of the 101,386 green tons produced annually, roughly 22,000 tons went to Woody Biomass Utilization grantees, or 21.7% 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 101,386 tons delivered to customers from the White Mountain Stewardship contract:

Customer	**Tons Delivered**	**Woody Biomass Utilization Grantee Recipient**
APC Pallets	3337.62	2009 WBU recipient
Arizona Log	662.23	Cheyenne Log Homes
Forest Energy	75,801.66	
Moulding Accents	0	Western Moulding
Neil Brewer Yard	0	
Precision Pine	0	
Reidhead	247.38	
Round Valley	21,337	Round Valley Lumber
TOTAL	**131,386**	

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."

Roll-Off Bins:
In 2006, Montana Community Development Corporation received a Woody Biomass Utilization grant to develop a "roll-off" bin that could be used to transport woody biomass efficiently. Working with Craig Thomas, the inventor of the roll-off bin, a Stellar hook-lift, stackable bins, and first of kind "stinger steer pup trailer" were designed and built by Equipment Resources Incorporated. The use of the roll-off bins have expanded beyond Montana. Nevada Division of Forestry (NDF) obtained a Woody Biomass Utilization Grant in 2007 to purchase some bins and

pup trailer. NDF also made improvements, incorporating a stinger steer logging trailer modified for a live bottom container, developed by Forest Service San Dimas Technology and Development Center. In 2008, the Coquille Tribe of Oregon received a Woody Biomass Utilization Grant to incorporate the roll-off bins on some steep slope biomass removal projects in Oregon. Adjustments to the roll-off bins are being further advanced. The roll-off bins with the modified stinger steer logging trailer are being commercialized by Western Trailer in Boise, ID. To quote Craig Rawlings, from Montana Community Development Corporation, "It is really impressive how much impact the Woody Biomass Grant Program has on all of us that continue to work together as partners and as a network to develop a system that is contributing to the emergence of a woody biomass industry and re-development of the logging industry. Thanks for the opportunity to be a part of this and work with all of you. "

The NDF received grant funding in March of 2008 to acquire "roll off bins", a truck and other equipment to provide a portion of the transportation infrastructure to cost effectively deliver woody biomass to the Northern Nevada Correctional Center (NNCC) biomass fueled one megawatt combined heat & power plant.

Once NDF had the equipment, bins were almost immediately "in the field". The first project, a Bureau of Land Management (BLM) fuels reduction project at Indian Creek Reservoir, demonstrated the incredible potential of a closed loop biomass delivery system. Utilization of the bins resulted in diversion of 75 tons of woody biomass from burn piles in the field to the boiler at NNCC. The biomass was delivered at a cost of approximately $5 per ton, a significant savings over the $39 per ton NNCC was paying through contract suppliers.

The second project involved fuels reduction by products from Sugar Pine (California) State Park in the Lake Tahoe Basin. Approximately 32 tons of biomass was delivered to NNCC at a cost of $5 per ton, a savings of $24 a ton. Winter snows shut down bin operations in the field in early December of 2008. Since then the bins have been used to transport biomass from the University of Nevada, Reno, agricultural farm and other low elevation projects.

Summary

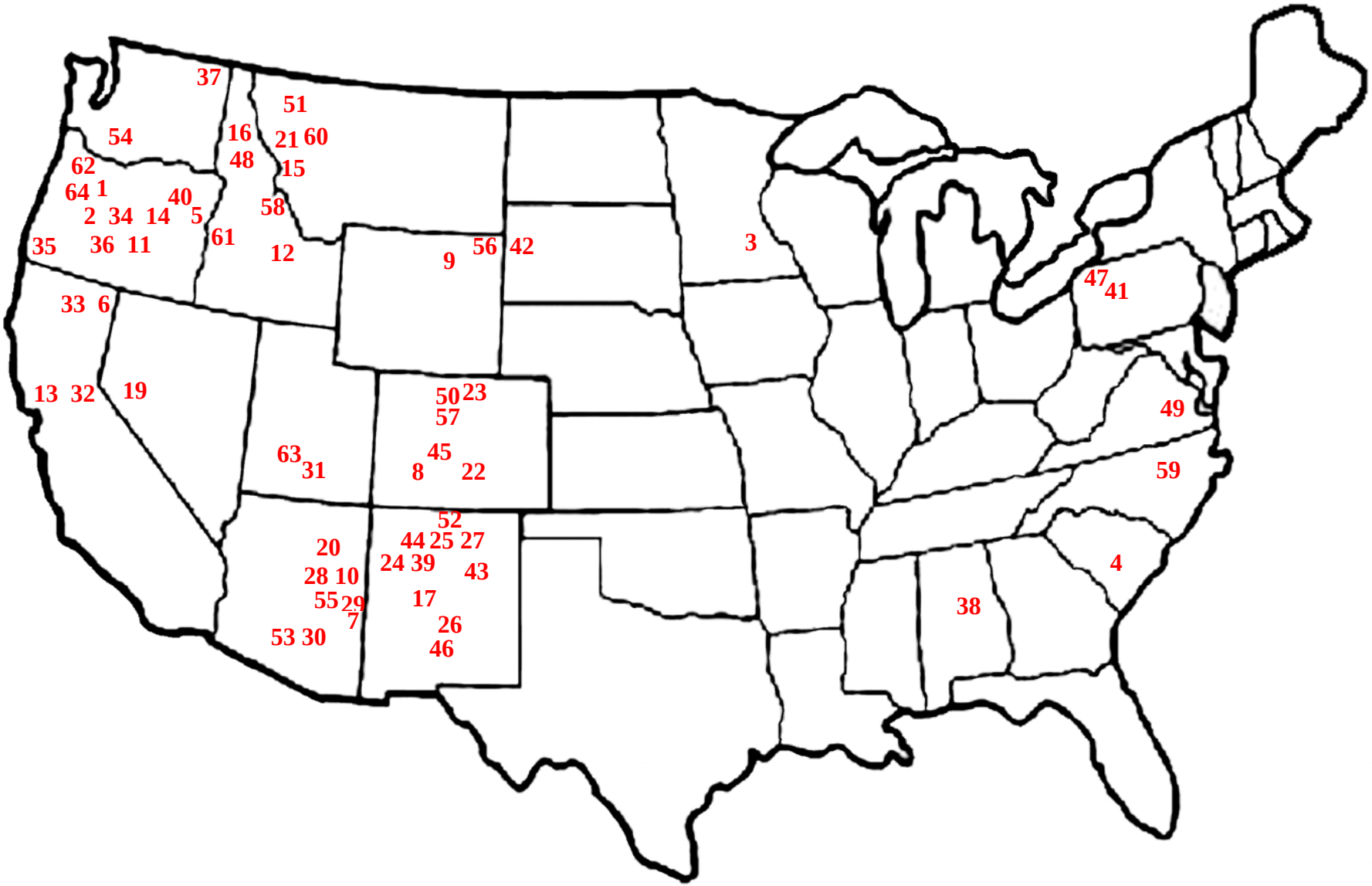
In general, the following key points summarize the findings for the 2005, 2006 and 2007 Woody Biomass Utilization Grant program.

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 grants in 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.
9. To date, the 2005, 2006 and 2007 grantees have treated 535,017 green tons of material from NFS lands.
10. The economic downturn has had a major impact on several grantees that have had to curtail operations until the economy turns around.

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.

2005/2006/2007 Woody Biomass Grantee Locations



Appendix 1

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

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

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 – September 08	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 **Jan 08 – Dec 08** None	Dodge completed construction of 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. Small log mill is operational. Current market conditions do not support running the mill. Depressed value of lumber and the increased value of chips have resulted in small diameter saw logs being more valuable as chip logs in today's market. Once lumber prices return to previous levels, expect this mill will have an affect on the value and volume of small diameter logs. COMPLETED.	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. Extended to 7-31-2010.	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. COMPLETED	

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

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

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 – September 08	NFS Contact
(4) Corporation for Economic Opportunity, Columbia, SC	Francis Marion /Sumter Francis Marion Ranger District	- 990 acres treated - Reduce costs of treatment to $23/ton - 1,058 acres treated	- 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 **Jan 06 – Dec 06** 11,418 tons of green wood removed, no results lowed costs **Jan 07 – Dec 07** 58,000 gt **Jan 08 – Dec 08** 39,363 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 Treated stands all lie near urban sprawl. Prescribed burning can't happen normally because of smoke dispersion problems. Extended to 7-14-2010.	Jonathan Dent
(5) Wallowa Resources, Enterprise, OR	Wallowa Whitman Wallowa Valley District	- Utilize an additional 3,350 to 3,800 tons per month of woody biomass - 84 additional acres	- 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 **Jan 08 – Dec 08** ~2,100 gt	Lodgepole pine, ponderosa pine, and Douglas-fir are being treated. Grant resulted in a reduction in hazardous fuels because it provided a market for the small-diameter wood that is hard to sell. NFS can mark everything that needs to come out, and the purchaser has a market for all sizes and species. With the Wallowa Mill closing, the success of the CCS is very important to complete further fuels reduction and forest restoration projects. District is in the process of negotiating a contract with Community Smallwood Solutions for removal of approximately 2,594 tons of slash piles generated from the Spooner Timber sale. Biomass utilization precluded the need to grapple pile/hand pile submerchantable ladder fuels. COMPLETED.	Barbara Van Alstine Paul Survis

Table 3. Preliminary NFS Impacts of 2005 Woody Biomass Grant Program (continued)

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

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 – September 08	NFS Contact
(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 **Jan 08 – Dec 08** 50,000 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. Grant allowed the FS to collaborate with adjacent land owners, 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. Tionesta Biomass sale (grant project) allowed a new business, Big Valley Power, to get a boost at a critical time. Operating successfully and have purchased several other NF and private biomass sales. Big Valley Power is Modoc NF's closest biomass market and key to keeping the cost of fuels treatment down. Extended to 12-31-2009.	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 **Jan 08 – Dec 08** 954 gt	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. Borate plant is fully operational and product is treated and sold. Seeing a significant rise in the industrial capabilities of industries in our area. Most of these are just developing, but 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, the forest is ready to increase utilization and recovery. 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. Industry that essentially died throughout the 1990's is re-emerging and developing at an appropriate scale. Opportunities are building upon themselves, and the grant program will have this area as a shining example within the next few years. COMPLETED.	Jerry Payne, Robert S. Taylor

Table 3. Preliminary NFS Impacts of 2005 Woody Biomass Grant Program (continued)

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

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 – September 08	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 savings for the East Vallecito Fuels Treatment. 150 gt **Jan 07 – Dec 07** 441 gt **Jan 08 – Dec 08** None	80 acres more were treated as a result of the grant. 441 green tons were removed. Influence on the Forest's program in acres treated and costs/revenues has been minimal. No fault of the grantee, but more a reflection of the current economic situation. COMPLETED.	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** NF has seen greater utilization of small-diameter material **Jan 06 – Dec 06** No direct impact except add'l material that was uneconomical is removed/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. COMPLETED.	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 **Jan 08 – Dec 08** 50,700 gt	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 FS of $873,000 during this 10-year Stewardship Contract. Will allow an additional 4,000 acres of WUI to be treated that otherwise would not be treated. Due to the unique capabilities of the forwarder, grantee able to increase its harvest of saw timber in comparison to chips or roundwood from previous years. COMPLETED.	Jerry Payne, Robert S. Taylor Jerry Payne

Table 3. Preliminary NFS Impacts of 2005 Woody Biomass Grant Program (continued)

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

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 – September 08	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 **Jan 08 – Dec 08** 68,741 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, much more woody biomass was removed than 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. Grantee has assisted three businesses to find Federal land derived biomass fuel. The companies assisted were T2 (hogg-grinder), Prineville Sawmill (wood boiler), and JTS Animal Bedding (shaving machine). COMPLETED.	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. **Jan 08 – Dec 08** No direct impact.	Gary England has been an active bidder on 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. 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 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. No impact on the Salmon-Challis NF. FY08 the grantee was under contract with BLM COMPLETED.	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. **Jan 08 – Dec 08** 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. Most of the fuels treatment that needs to be done is in designated wilderness, so mechanical removal is not an option. Summit View is in liquidation of business. Equipment dollars will be returned to US Treasury COMPLETED.	John Bradford

Table 3. Preliminary NFS Impacts of 2005 Woody Biomass Grant Program (continued)

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

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 – September 08	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 **Jan 08 – Dec 08** 2,896 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. Number of acres treated directly is not possible to identify. Grantee purchased a few timber sales, along with small diameter material from special forest products permits issued. This provides products the company markets. Above average winter snows limited all volume delivered off both NFS and private lands. Market trends also reduced availability of raw material private land holders which M&L relies on for deliveries. COMPLETED.	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).	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 grant, we are more aware of the need for whole tree yarding and to have forest products available at landings. FY 08--Big Sky Forest Products suffered a fire at the facility and has not been operational all summer. Extended to 12-31-2009.	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. FY 08--Projects are not completed. Extended to 12-31-2009.	Scott Bell

Table 3. Preliminary NFS Impacts of 2005 Woody Biomass Grant Program (continued)

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

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 – September 08	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 **Jan 07 – Dec 07** Same impact as in FY2006 since training is continuing	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. COMPLETED.	Jerry Payne
(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	Humboldt-Toiyabe NF 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** 1135 gt **Jan 08 – Dec 08** None	NNCF 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. Stewardship contract was awarded in FY 07. We had hoped biomass would go to NNCC, however, the contractor is utilizing limbs down to such a small diameter that the remaining slash may not be useful for NNCC. On another project, we are hoping to utilize the NDF roll-on-, roll-off bins. This biomass would be utilized by NNCC. COMPLETED.	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, but too early to determine NFS impact" **Jan 07 – Dec 07** Too hard to determine est 2,000 MBF	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 from the Reidhead mill.	Jerry Payne, Robert S. Taylor

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

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

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 08	NFS Contact
(21) Montana Community Development Corporation, Missoula, MT	Bitterroot, Lolo	- 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 **Jan 08 – Dec 08** 1,170 gt	Sub-contractor working on project was seriously injured but is now back to work. Therefore, they have not treated any acres per the grant. More aware of the economics associated with biomass utilization and need for demand to drive down costs—and that will determine future methods for treating acres. An excellent idea, but does not guarantee an available forest product that will be economically viable for a private operation. Offers an economic incentive, however, and represents a commitment to programs and markets that will hopefully find a footing in the future.	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 **Jan 08 – Dec 08** 468 gt	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 **Jan 08 – Dec 08** 2400 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. FY 08—Acres treated total 550.	Dan Len

Table 4. Preliminary NFS Impacts of 2006 Woody Biomass Grant Program (continued)

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

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 08	NFS Contact
(24) 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 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 capacity. - Supply Sunnyland Farms with 10,000 tons per year of industrial grade wood pellets 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. Working to change the focus of the grant to develop a local transportation system for Ponderosa pie from New Mexico to the Grants facility. This idea is moving ahead with Mt. Taylor looking to sell much of the equipment already purchased and reinvesting into a more useful line of transportation equipment. In addition, they are looking at a larger and better adapted feller buncher and log truck for Ponderosa pine.	Thomas Marks Jerry Payne
(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 COMPLETED.	

Table 4. Preliminary NFS Impacts of 2006 Woody Biomass Grant Program (continued)

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

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 08	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 **Jan 08 – Dec 08** 2,700 gt	257 acres were treated and 22,15.5 green tons were removed as a result of this grant. COMPLETED.	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. COMPLETED.	
(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) **Jan 08 – Dec 08** 313 gt	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. Milling operation is shut down. If the market comes back, or he can sell enough of his moulding, he will repopen.	Edward Collins Jerry Payne

Table 4. Preliminary NFS Impacts of 2006 Woody Biomass Grant Program (continued)

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

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 08	NFS Contact
(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 **Jan 08 – Dec 08** 37,197 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. Working on additional help for this operation and the WMSC product sales. Trying to bring in a pallet operation and scragg mill. If we can find a better way to process the small diameter material and pay at least $30/ton, then the Round Valley mill will be able to focus on larger logs that will increase their efficiency, their profitability, and their ability to pay a higher cost per ton. Pallet operation can take smaller material, can take crook and sweep better, and has more markets.	Jerry Payne
(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** 62,648 **Jan 08 – Dec 08** 84,406 gt	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	

Table 4. Preliminary NFS Impacts of 2006 Woody Biomass Grant Program (continued)

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

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 08	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 **Jan 08 – Dec 08** Estimate 500-1,000 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. FY 08, Fishlake NF—Skyline did not purchase/utilize any forest products off the Fishlake NF. FY 08, Dixie NF: Box shaver purchased and installed. Production capacity is expected to exceed 1,000 bags per day. Forest is working with industry to determine species and product specifications. The aspen market could be developing as a result of the box shaver. Using the developing aspen market as the basis as well as responding to a request to experiment with shaving potential from smaller diameters, it appears that between 500 to 1,000 tons were processed. COMPLETED.	Don Okerlund Don Okerlund Kevin Schulkoski
(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 **Jan 08 – Dec 08** 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. CLOSED (Could not obtain required air quality permits.)	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 **Jan 08 – Dec 08** 11,279 gt, 758 acres treated	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. Sawmill never reached full operational status before shutting down end of June, 2008, due to the very weak lumber market. Scheduled to re-open when the market strengthens. Co-generation plant, chipping the small trees into biomass, is still running as a stand alone operation. COMPLETED.	Terry Reedy

Table 4. Preliminary NFS Impacts of 2006 Woody Biomass Grant Program (continued)

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

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 08	NFS Contact
(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 **Jan 08 – Dec 08** No impact	Geovisions has asked for a time extension to further investigate their purchase of biomass equipment. Microturbine has not yet been implemented as they have not obtained their financing to expand their existing cogen plant from 8 MW to 16-20 MW. Anticipated start date for the additional cogen plant has been moved to the latter part of FY 2011. We offered as per our levelized supply agreement more than 8,000 acres and 80,000 BDT for FY 08. Unfortunately, the Tribes could not utilize the material.	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 **Jan 08 – Dec 08** Estimate 10,000 gt from BLM land. None from NFS land.	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. At this time, there are no NFS acres. However, NEPA has been completed for ~3,000 acres of treatment. Two sales have been sold, but not yet harvested. There are acres treated by BLM where the material went to the R&R biomass plant.	Joel King

Table 4. Preliminary NFS Impacts of 2006 Woody Biomass Grant Program (continued)

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

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 08	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 **Jan 08 – Dec 08** None	4030 green tons of lodgepole and ponderosa pine were removed from 798 acres. 800 acres on Plumas NF For FY 08, logging on fire salvage sales in California, but has not produced biomass utilizing the grinder. Volume projected for California portion directly tiered to their grant proposal on both NF and private lands has been accomplished. Additional timber sale opportunities in California (Lassen NF) that might have provided biomass have been delayed due to appeals. Oregon portion of project (Deschutes NF) not accomplished due to high in/out costs, high operations and transportation costs, and the lack of local cogen market. New cogen facilities have not progressed or developed as anticipated. These factors and minimal amount of volume that remains under contract on Deschutes, make it economically unfeasible for Roseberry Timber to return to Oregon. Company moving operations to Colorado (Arapaho NF). Plan to subcontract for purchasers of sales treating a current bark beetle infestation. Grinder is expected to be used there, and may provide biomass primarily for cogen and secondary products such as wood pellets.	Cindy Glick Judith Parker

Table 4. Preliminary NFS Impacts of 2006 Woody Biomass Grant Program (continued)

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

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 08	NFS Contact
(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 **Jan 08 – Dec 08** 1,331 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. 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. Grinder not used on Colville NF in FY 08. Scheduled to be used on a project on the Colville NF, but due to scarcity of trucks they hired a contractor with both trucks and a grinder. COMPLETED.	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 **Jan 08 – Dec 08** 2,641 gt	37 Acres were treated as a result of the grant. Grant has helped us understand narrow spectrum of stand conditions that comply with agency/regional standards for biomass removal as a forest product. Hope to learn how to better package contracts to meet both agency policy and purchaser operability.	Cynthia Ragland

Appendix 3
Table 5. Preliminary NFS Impacts of 2007 Woody Biomass Grant Program

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

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 07 – September 08	NFS Contact
(39) Mt. Taylor Millwork, Inc. Milan, NM	Cibola	- Lower thinning costs by a minimum of $200 per acre.	Increase raw material flow from thinnings and restoration Treatments.	None	**June 07 – Dec 07** .66 GT		
(40) Ochoco Lumber Company, John Day, OR	Malheur	- 940 to 1,875 acres treated per year with an estimated cost savings of $100-140 per acre.	- Increase biomass utilization - Increase acres treated - Decrease cost of treatment - Job retention and creation	No data reported	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** No impact	The whole log shaver has not been purchased or installed.	Curtis Qual
(41) Elk Regional Health System, St. Marys, PA	Allegheny	- Treat 150 to 300 acres annually for hazardous fuels reduction. - Severe blow-down areas will benefit	- Assist Allegheny NF with vegetation management - Create a market for under-utilized woody biomass - Enhance the market for undervalued woody biomass - Maintain the zero net gain of greenhouse gas emissions - Reduce NF costs for removing biomass	No data reported	**June 07 – Dec 07** No impact Jan 08 – Dec 08 No report	Still in the planning stages on projects that will be used for both the Kane Area School District and the Elk Regional Health Center. Had unavoidable delays in completing the NEPA on projects being developed. Both are nearing completion with implementation anticipated in early to mid FY09. Biomass facility became operational in February 2008. No report on green tons removed from NFS. COMPLETED.	Lois DeMarco
(42) Baker Timber Products, Rapid City, SD	Black Hills	- Reduction of cost of POL disposal by 25%	- Facilitate the movement of woody biomass to the pilot ethanol plant in Upton, WY	1,503 gt	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** 11,759 gt	2,168 acres of Ponderosa Pine treated. Grantee added a piece of equipment (Fecon) and added more volume going to chip markets. Machine base and market base has expanded. COMPLETED.	Blaine Cook

Table 5. Preliminary NFS Impacts of 2007 Woody Biomass Grant Program (continued)

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

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 07 – September 08	NFS Contact
(43) Barela Timber Management Co, Inc. Las Vegas, NM	Santa Fe	- Reduce cost of harvesting up to 30% compared to traditional hand felling and skidding.	- Reduce catastrophic fire danger in the Gallinas watershed - Increase water yield per acre - Reduce cost of forest restoration - Treat add'l acres/reduce cost - Provide jobs - Use "green" techniques - Demonstrate the commercial viability of small-diameter - Increase forest health and habitat diversity	No data reported	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** 3626 gt, 70 acres	Trees are being cut, limbed, and bunched. Before they were hand felled, delimbed, and gathered. Time is being saved in the long run, but there is much time being used in learning different machines.	Jerry Payne
(44) Olguin's Sawmill, Inc. El Prado, NM	Carson	- Reduce costs by 8-15% for treatment of hazardous fuel and forest restoration projects - Treat 5,250 acres in the next five-years - Avoid piling and burning costs of approximately 200/acre on the Red Mesa Timber Sale area	- Remove approx. 1,000 MBF or approx. 10,000 tons of biomass annually. - Reduce treatment costs by approximately $200 per acre on the Red Mesa Timber Sale - Integrate new processing capacity at existing plant - Remove 5,250 MBF over 5 yrs - Increase value of biomass from $350/MBF to $1,083 - Expand the markets - Create 2 full time jobs	No data reported	**June 07 – Dec 07** No impact Jan 08 – Dec 08 No report.		
(45) Mountain Valley Lumber, Saguache, CO	Rio Grande	Able to bid on contracts for material they previously were unable to take and reduce the cost of timber sales to the Rio Grande NF	Purchase a Round Wood Systems Dowel Mill for utilization of smaller timber producing numerous end products	No data reported	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** No impact	Mountain Valley Lumber has not purchased the doweling machine. Due to changes in the markets, they are now researching the opportunity to develop a wood gasification facility.	Mary Nelson
(46) Mescalero Forest Products, Mescalero, NM	Lincoln, BIA	Continuation of the Mescalero Forest Products mill that is an outlet for material removed from the Lincoln NF	- Install a pellet mill - Reduce the waste and cost of waste disposal - Find markets locally and work with the Holloman AFB, and White Sands Missile Range to explore renewable energy options	No data reported	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** **No report.**	The tribe has negotiated with North Star wood products for to install a pellet operation and a wood shvings operation. Tribe has asked to buy a Scragg mill to mill the small diameter material that would complement their large log mill. Working with them to make this purchase and get this mill installed in the near future.	Jerry Payne

Table 5. Preliminary NFS Impacts of 2007 Woody Biomass Grant Program (continued)

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

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 07 – September 08	NFS Contact
(47) Kane Area School District, Kane, PA	Allegheny	- Increase the opportunity for hazardous fuels reduction treatment on the Allegheny NF. The objectives are to reduce 100 to 150 acres annually that totals 1,500 to 3,750 acres over the next 15 to 25 years - Severe blow-down areas will benefit from treatments such as hazardous fuel reductions - The KASD will enter into an initial stewardship contract with the Forest for the procurement of woody biomass needed for the heating system	- Increase the opportunity for hazardous fuels reduction. - Reduce hazardous fuels on 100 to 150 acres annually that totals 1,500 to 3,750 acres over the next 15 to 25 years. - Increase regional awareness of the feasibility and use of woody biomass energy heating systems - Supplement the KASD forestry curricula by offering hands-on applied forest management examples. Annually have students participate in field harvest operations. - Reduce heating costs for the KASD by projected $60,000 per year beginning with the 2008/2009 school year. Install a woody biomass energy system by 2008/2009 heating season. - Creating jobs for the delivery of wood products to the KASD.	No data reported	**June 07 – Dec 07** No impact Jan 08 – Dec 08 No report	Still in the planning stages on projects that will be used for both the Kane Area School District and the Elk Regional Health Center Biomass Grants. We have had some unavoidable delays in completing the NEPA on projects being developed. Both are nearing completion with implementation anticipated in early to mid FY09. Biomass facility became operational December 2008. No report on green tons from NFS. COMPLETED.	Lois DeMarco
(48) St. Maries Joint School District, St. Maries, ID	Panhandle	100 acres per year for 25 years	- Utilize forest residues for heating the school - Reduce FS management costs - Improve air quality by reducing air pollution from open burning - A demonstration to other school districts	No data reported	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** No impact	School district received bids for constructing a woody biomass heating system fed by wood chips for their elementary school that was beyond the budget. Excessively high bid was due to dramatically increased materials costs and fuel costs. School district is reassessing the woody biomass project and is likely to go with a different heating system (wood pellets). Once the heating system is constructed (2009), I expect favorable fuel reduction impact on the ranger district.	Charles Mark

Table 5. Preliminary NFS Impacts of 2007 Woody Biomass Grant Program (continued)

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

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 07 – September 08	NFS Contact
(49) Intrinergy, LLC Ashland, VA	National Forests in Mississippi, Desoto	- Provide a source market for woody biomass produced from active vegetation management projects on the Desoto National Forest. - The forest projects approximately 1,100 acres of vegetation projects per year	Work with the Desoto NF to pilot a program under which a steady, affordable and sizable flow of woody biomass feedstock supply for the Intrinergy Wiggins gasification project can be achieved over time	None	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** No impact	The De Soto NF has not sold any volume since Hurricane Katrina. Biomass facility has been installed and is operational. COMPLETED.	Lynn Corbitt
(50) Ranch Creek Limited, Granby, CO	Roosevelt	Savings of $250 to $800 per acre at 2447 acres to be treated per year. Long-term savings is calculated using $250/acre at a minimum of 2500 acres per year for 5 years	Harvest and process as much beetle-killed wood within the next 10 years. Pro-active involvements with FS and local landowners to put into place a long-term plan for forest maintenance.	6,500	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** 45,650 gt	Estimate that about 85 acres were treated on NFS land based on the green tons reported. Also, estimate about 330 acres treated on private land. Small reduction in hazardous fuel treatment costs on FS lands. Most of biomass has come from Winter Park Ski Area, where removal of thousands of dead and pine beetle infested trees have been brought to Ranch Creek Limited for processing. If this had not occurred, trees would have been treated at the ski area resulting in costs for removal, piling and burning of trees, or leaving on site which could be a fuel hazard. COMPLETED.	James Gerleman
(51) John Jump Trucking, Kalispell, MT	Flathead, Kootenai	800 acres	Access and treat more slash to avoid burning costs, reduce air pollution, save FS cost of disposing slash	No data reported	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** No impact	Truck transfer of slash to grinder has not been done on the forest. Grinding and removing biomass material is very costly. No reduction in cost, grinding increases cost of fuel abatement. Grinding has improved utilization and reduces impacts to local air shed. COMPLETED.	John Craig

Table 5. Preliminary NFS Impacts of 2007 Woody Biomass Grant Program (continued)

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

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 07 – September 08	NFS Contact
(52) Kuykendall and Sons, Tres Piedras, NM	Carson	Reduce treatment costs by $147/acre on 653 acres per year	- Reduce the forest treatment costs of the Red Mesa Project Area by increasing the use and value of small diameter timber - Decrease catastrophic fire hazard, reduce susceptibility to bark beetles and improve health and vigor - Increase production capacity of Kuykendall and Sons sawmill to meet demand in pre-existing markets. - Improve the competitive position of Kuykendall and Sons for future stewardship contracts and timber sales.	No data reported	**June 07 – Dec 07** No impact Jan 08 – Dec 08	Bought the Scragg mill and is ready to assemble it and begin production. However, the county permitting is taking longer than anticipated. Permit was supposed to be approved last spring, and it has still not made it through the process. In addition, The Red Mesa timber sale has been logged. Logs are being processed through the large log mill.	Jerry Payne
(53) Southwest Forest Products, Phoenix, AZ	Coconino, Kaibab, Prescott	- Reduce treatment costs of up to $39/acre - Treat 4,550/year resulting in an anticipated savings of about $175,000/ year to the three neighboring national forests	- Lower the hazardous fuel treatment cost on NFS lands by up to $39/acre - Five new full time jobs in this economically depressed area, - Steady supply of approximately 50,000 tons per year of clean chips	No data reported	**June 07 – Dec 07** No impact Jan 08 – Dec 08 No report		

Table 5. Preliminary NFS Impacts of 2007 Woody Biomass Grant Program (continued)

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

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 07 – September 08	NFS Contact
(54) Mt. Adams Resource Stewards, Glenwood, WA	Gifford Pinchot	Treat about 3000 acres while reducing FS costs $280/acre.	- Provide economic opportunities that will create jobs & enhance the quality of life in forest-based communities while restoring healthy forest conditions - Create local market for biomass through establishment of a small diameter wood processing facility & associated businesses that reduces cost of fuels reduction treatments	25 gt	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** 50 gt	NFS treatment on 30 acres of grand fir and lodgepole pine. Grant reduced fuel treatment costs. Most of the wood removed would have been piled and burned, or the wood was removed from existing slash piles that would have been burned. Fuel treatment costs were reduced by $5,400.	Jon Nakae
(55) High Country Green Waste, Lakeside, AZ	Apache-Sitgreaves	- Utilize waste from 2,500 acres from the White Mountain Stewardship Contract - Reduce the illegal dumping of forest waste on 600 acres of NFS lands surrounding the communities within the Apache-Sitgreaves NF - Utilize waste from 960 acres of utility right-of-way clearing in the local area - Utilize the material from 3,497 acres of private land per year	- Reduce hazardous fuels while promoting further participation in fire hazard mitigation activities on the Apache-Sitgreaves NF and surrounding intermixed private and public lands by operating an affordable/accessible facility. - Utilize all NF and other sources of woody biomass to produce profitable value-added products. Provide green waste disposal and processing site for Northeastern Arizona. - Improve processing and marketability of products. - Reduce "wildcat dumping" of green waste on NFS lands. - Reduce green waste going to the local land fill. - Publicize the "Serving Biomass Markets from Fire Hazard Mitigation Activities" as a model for other communities.	No data reported.	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** 12 acres, 242 gt	Material is processed and delivered to the Snowflake White Mountain Power biomass plant. There are another 334 acres of material in the yard waiting to be processed. The SWMP company and High Country Green Waste have been negotiating a price. Finalized within the last month and processing movement of material has once again begun.. Material from other lands diverts illegal dumping and resultant slash cleanup on the NF. Estimated saving of cleaning up 600 acres at $50/acre or $30,000 to the Forest. Also, the resulting fuel load drop on lands adjacent to NFs are allowing the hazardous fuel work to be completed on other acres thus extending the miles of hazardous fuel along the private land boundary. Significantly lowering the fire risk to NFS lands.	Jerry Payne Ed Collins

Table 5. Preliminary NFS Impacts of 2007 Woody Biomass Grant Program (continued)

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

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 07 – September 08	NFS Contact
(56) Bearlodge Forest Products, Inc. Hulett, WY	Black Hills	Will result in a reduction of cost of POL disposal by up to $700/ac for future contracts acquired by Bearlodge Forest Products from the Black Hills NF. After 3 years of operation, they estimate an increase of capacity to accommodate removal of more than 5,000/ac/yr up from 500/ac/yr.	The purchase of the equipment proposed in this project will increase the removal and utilization of POL from the Black Hills NF. Pallet market is currently dominated by products from Canada	No data reported.	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** No impact	Cant-line is installed, with minimal work left to finish the waste handling system. Building is 80% complete, but will be sufficient to run the system when the other elements are complete.	Blaine Cook
(57) Mountain Parks Electric, Inc. Granby, CO	Medicine Bow-Routt	This grant investment will result in a further outlet for Mountain Pine Beetle killed LPP in Northern CO which is currently just the Pittington Sawmill. An increase in removal from the local forests of 2,000 acres.	Support the design, verification and specification process necessary to provide adequate documentation for public financing. Verification work will evaluate the adequacy of a gasification system vs a steam system for electricity generation supply to customers. Many sources of low cost financing available for REA's as well as being able to access sources for Renewable Energy Credits.	1225 gt, 142 acres treated	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** 2199 gt, 255 acres treated	This grant with Mountain Parks Electric will never effect the operations of this district or forest.	Mark Westfahl/Mike Wright
(58) Forest Fuels Solutions, Salmon, ID	Salmon-Challis, BLM	- Reduce treatment costs by $100-150/ acre - Increase amount of acres mechanically treated by 20% by 2010	- Reduce treatment costs by $100-150/ acre - Increase amount of acres mechanically treated by 20% by 2010 - Create a profitable roundwood manufacturing entity in Lemhi County, establishing an annual payroll of almost $148,000 in the first year of operations and $175,000 by year 2.	8500 gt	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** 960 gt, 20 acres treated	Estimate that grantee removed 960 green tons before sale was litigated and operations were suspended. Overall, the grant has affected operations little or not at all. However, the forest has become very "sensitive" to communications by, and needs of, awardee. Grant has probably stimulated awardee to more aggressively bid on local sale offers. Bidding has, in turn, raised revenues (bid premiums) through extra competition as awardee has not been high bid on various sale offers.	Dave Faike

Table 5. Preliminary NFS Impacts of 2007 Woody Biomass Grant Program (continued)

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

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 07 – September 08	NFS Contact
(59) North Carolina State Univ. Dept. of Forestry, Raleigh, NC	Croatan	- This is a demonstration, so the direct impact will be to the 356-acre demonstration. If successful, the potential for future use of the machinery on more acres is high	- Demonstrate efficient (for profit) harvesting/utilization of Woody Biomass - Improve fuel condition class on the Croatan NF - Publish reports on the machinery development	No data reported	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** 137 gt	A Total of 43.7 acres were treated on the Croatan NF. Species treated varied from hardwoods and pine to pocosin vegetation (evergreen shrubs with high oil content).	William Dienst
(60) North Slope Sustainable Wood, LLC, Missoula, MT	Lolo	- 4000 acres over 3 years	- Increase the demand for higher end products - Reduce the cost of managing lands with small diameter trees - Reduce fire hazard and the cost to do this work	No data reported	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** 516 gt, 426 acres treated	Approximately 426 acres of small diameter larch were treated. Too early to measure a reduction in treatment costs. Market demand in the future may generate measurable reduced costs. Due to the interest associated with grant, we are more aware of the efforts locally to establish niche markets and demand for small diameter material	Boyd Hartwig
(61) Parma Post and Pole, Inc. Parma, ID	Payette, Wallowa-Whitman, Sawtooth, Malheur, Boise	- Remove an additional 5,000 tons - Save the forests $150-$200 per acre by removing additional material - With proposal project PP&P projectsthat the forests will be treat an add'l 1,250 acres a year.	- Increase production to 18,000 – 20,000 tons of non saw material a year - Remove an additional 5,000 tons on material to be removed from the National Forest annually - Increase annual sales by 15% - Hire 2-3 additional full time employees	No data reported	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** 250 gt, 50 acres treated	The Redfish salvage timber sale was 920 ccf. Timber purchaser stated that approximately 2/3 of this volume went to Parma Post and Pole. For the Wallowa-Whitman NF, removal of biomass from the NF is a large expense for accomplishing our fuels reduction program. A place that can take material and pay a decent price offsets the cost of treating our fuels.	Alan Young Carla Monismith
(62) Sustainable Northwest, Portland, OR	Wallowa-Whitman, Deschutes, Ochoco, Shasta-Trinity, Okanogan, Wenatchee	- Treat 12,501 acres per year while utilizing 90,000 tons of biomass annually and reducing fuels reduction costs on 5 NFs	- Increase small business capacity to utilize the raw material from fuels treatment while increasing the market demand for the products manufactured through these sources - Place products manufactured from woody biomass in over 10 strategic market outlets through-out the region.	No data reported	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** **No report.**		

Table 5. Preliminary NFS Impacts of 2007 Woody Biomass Grant Program (continued)

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

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 07 – September 08	NFS Contact
(63) Piute County Dept. of Econ. Development Junction, UT	Fishlake	Direct net benefit to FS is approximately $818 per Acre.	- Provide incentives, training, and financial assistance to establish new small wood businesses	No data reported	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** 3,200 gt. Revenue per acre $410.	Clover Flat Vegetation Treatment Project covers 22 acres and is the source of the aspen being used. Potential to treat additional acres as Piute County expands operation. Grant indirectly resulted in a reduction in NFS hazardous fuel treatment costs. Initially, Piute County was the successful bidder on the Clover Flat Vegetation Treatment Project and was awarded a Stewardship Contract that covered the removal of the forest products and construction of a temporary protection fence around project area. Grant made it possible for Piute County to make a value-added product from the timber removed from the Fishlake NF. The removal of the timber is a 22 acre hazardous fuel treatment project that would have not been economically feasible for the FS to implement. To complete the same level of treatment required of Piute County, it would cost the FS approximately $850 per acre or about $18,000. If the FS were to complete the same treatment on the 22 acres, it would be treated by prescribed burning with no utilization of the wood product, valued at $9,000.	Don Okerlund
(64) JTS Animal Bedding, Redmond, OR	Deschutes, Ochoco	- Purchase 15,626 green tons from FS treatments. - Reduce cost per acre by $150/acre - Enable 208 to 627 more acres of treatment per year through cost savings by second year of production	- Expand and stabilize local markets for small diameter pine material in Central Oregon by launching a pine shavings animal bedding production facility	No data reported	**June 07 – Dec 07** No impact **Jan 08 – Dec 08** 9,375 gt	JTS added other shaving machinery, in addition to the shaver bought through the grant. Tripled production going from processing 1 ccf/20 min to 3 ccf/20 min, or from 15 truck loads/month to 60 truckload/month. Much of the wood supply came from Federal lands from Deschutes and Ochoco NFs. It is unknown how much was derived from private supply. JTS is paying high prices ($25-30/GT) in buying their supply from lumber mills, due to the lack of logging occurring. They processed approximately 9,375 GT or about 375 truckloads. Created 3 jobs, and often run 3 shifts.	Cindy Glick

Appendix 4: Summary of 2005 Grant Projects

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

1. Grantee: Dodge Logging Inc, Boardman, Oregon

Goal: Improve lumber recovery from small logs that would have been burned on site during hazardous fuel reduction projects.
Status: COMPLETE
Summary: 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 05	June 05-Dec 05	Jan 06 – Dec 06	Jan 07 – Dec 07	Jan 08 – Dec 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 Revenue/Acre		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.

Reporting period June 2007 to June 2008: No response from NF.

NFS Impacts: Umatilla National Forest

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."

Reporting period June 2007 to June 2008:

Comments from Umatilla NF for this reporting period:

- "The small log mill is operational at this time. The current market condition does not support running the mill at this time. The depressed value of lumber and increased value of chips has resulted in small diameter saw logs being more valuable as chip logs in today's market. This market condition is not expected to continue. Once lumber prices return to previous levels, I expect this mill will be operational and have an effect on the value and volume of small diameter logs removed from the forest."

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

Goal: 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.

Warm Springs has not yet installed their microturbine. They are still trying to work out their financing and their power purchase agreement to increase their production of biomass power from the existing 8MW to 16-20 MW. The earliest plans they have for opening up this plant has been postponed until 2011.

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

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."

Reporting period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant	--	--			
Post grant					

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

Goal: 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 Districts

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 ending 9/30/05	1464	14,394	11	Cost $500/acre	Cost $150/acre	Cost $10/acre
Post grant 12 months ending 9/30/06	1900	18042	2111	Revenue $500/acre	Revenue $100/acre	Cost $1000/acre

Notes: Other acres are wildland fire use fires.
Costs are estimated averages

Table below includes those acres that change condition class and includes other BLIs

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

Reporting period June 2007 to June 2008:

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

Goal: To increase the use of woody biomass from the National Forests in South Carolina, particularly for woody biomass energy.
Status: 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 Fuels Accomplishment Fiscal Year 2004	0	50,730	0	$35/ac	0
Pre-grant District Fuels (thru May 2005)	0	54,385	0	$35/ac	0
Also misc amounts of various hardwoods	0	23,748	0	$35/ac	0

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 National Forest, 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 6/1/04 to 5/30/05	0	54,385	0	$35/ac	0
Post-grant from 6/1/05 to 5/31/06	0	47,809	0	$34/ac	0

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 National Forest, 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.

Reporting period June 2007 to June 2008:

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: COMPLETED. 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 Contract (Wallowa Valley RD	872 tons	$30,541.35
Spooner Stewardship Contract (Wallowa Valley RD)	58 tons	$1,815.67
Foothills Stewardship Contract (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 innovative 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 6/30/07	~730 (est)	--	--	--	7304

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."

Reporting period June 2007 to June 2008:

- "Undoubtedly, future ability to manipulate created and existing slash and submerchantable ladder fuels through burning operations will be limited as a result of EPA imposed particulate emission restrictions. Biomass utilization opportunities will provide the tool to continue to strive towards restoring historic and sustainable fuel patterns on the landscape."

JOHN DEERE

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

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

Reporting period June 2007 to June 2008:

Comments from the Modoc NF, Doublehead Ranger District:

- "This grant was a good thing that came at a good time. The FS needed to manage plantations in a SUI and the local biomass market and supporting local industry infrastructure needed a boost. Without a local market for biomass and in-woods infrastructure, prohibitively high fuels treatment costs would prevent the Modoc NF from meeting our accomplishment objectives".
- "If the FS wants to accomplish low cost fuel treatments and product biomass for the energy market it is critical we re-visit our current timber sale policies, rules and regulations with respect to low value biomass fuel treatments. The cost of our requirements, including volume estimation and product accountability far exceed the value of the product."

7. Grantee: Cheyenne Log Homes, Eagar, Arizona

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

Reporting period June 2007 to June 2008:

- "Because of the grant, we were able to generate additional sales that we normally would not have had and therefore we were able to maintain enough sales to allow us to continue to operate."

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

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

Reporting period June 2007 to June 2008:

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

- "Due to the downturn in the economy and, in particular, the downturn in the wood products industry in recent years, this grant has not compensated for high costs and low revenues for Loblolly Lumber. I believe the grant program in a time of moderate to good prosperity could be instrumental in helping to reduce fuels and improve utilization of small diameter material. But not at this time."

- **9. Grantee: Wyoming Sawmill, Sheridan, Wyoming**

Goal: To complete final stages for obtaining commercial building code approval for a new value-added product (laminated headers) for use in structural buildings.
Status: COMPLETED. 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."

Reporting period June 2007 to June 2008:

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

Goal: 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.
Status: COMPLETED. 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**	

Reporting period June 2007 to June 2008:

11. Grantee: Central Oregon Intergovernmental Council; Eastern Oregon

Goal: 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.

Status: COMPLETED

By removing the biomass, piling and burning costs have been avoided which can vary from $250-$500/acre. In our stewardship contracts, we used our grapple pile funds to pay for biomass removal @150/acre. In the timber sales, most of our landing piles were removed, taken as hogg fuel to a 53 MW biomass plant in Roseburg, Oregon (90 mile haul distance).

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 Revenue/acre		Green tons removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre-Grant Treatment			$150-800/ac cost for thinning	$25/acre for machine pile burning	
Post-Grant treatment FY 07	1741.5 acres biomass removed 66957.5 acres of HF treatments	7853 acres machine pile burned	$150-800/acre cost for thinning	$25/acre for machine pile burning	9930 GT due to Woody Biomass Util Grants
Post-Grant treatment FY08	Still collecting data	Still collecting data	$150-400/acre	$30/acre	68,741 GT

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."

Reporting period June 2007 to June 2008:

Comments from Deschutes and Ochoco NF for this reporting period:
"The grants in general have helped the Central Oregon area to develop biomass processing capacity and have served as a catalyst to bring together stakeholders to collaborate to solve resource issues. In addition, some trust has been built with COIC-COPWRR conducting public monitoring projects of fuels treatment and biomass utilization projects."

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.

Status: 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 05	June 05-Dec 05	Jan 06 – Dec 06	Jan 07 – Dec 07	Jan 08 – Dec 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.

Reporting period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre-grant 12 months ending 6/30/2007	0	0	0	0	0
Post grant 12 months ending 6/30/2008	0	0	0	0	0

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."

Reporting period June 2007 to June 2008:

- "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

Goal: Purchase equipment and upgrade mill to more efficiently utilize and process small trees down to 1-inch diameter.
Status: COMPLETED
Summary: Equipment has been purchased and is operating throughout the millyard, 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 05	June 05-Dec 05	Jan 06 – Dec 06	Jan 07 – Dec 07	Jan 08 – Dec 08
Green tons utilized from NFS			7029	4311	

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.

Reporting period June 2007 to June 2008:

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

Goal: 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.
Status: Big Sky Forest Products made little progress on this project during 2008. Little was done the first three months of the year because of the winter weather in Western Montana. Some progress was made in May and the first part of June 2008. No progress has been made since June 14, 2008, when Big Sky suffered a catastrophic fire.

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."

Reporting period June 2007 to June 2008:

NFS Impacts: Flathead National Forest

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

Reporting period June 2007 to June 2008:

16. Grantee: Panhandle Forest Products, Cocolalla, Idaho

Goal: Obtain value-added equipment for processing small diameter trees for expansion of post and pole operation.
Status: The projects are 70 and 80 percent complete respectively. Our focus during 2008 has been to recover from a catastrophic fire at Big Sky Forest Products. I expect the Panhandle project to be operational by March 2009.

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 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

NFS Impacts: Flathead National Forest

Reporting period from June 2006 – June 2007:
:

- 4464 tons of logs acquired from Flathead NF

Reporting period June 2007 to June 2008:

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

Goal: 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: COMPLETED
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 (www.forestguild.org)
- 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."

Reporting period June 2007 to June 2008:

19. Grantee: Northern Nevada Correctional Center – Biomass Cogeneration, Carson City, Nevada

Goal: 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
Summary: 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."

Reporting period June 2007 to June 2008:

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

Goal: 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.
Status: 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.

Reporting period June 2007 to June 2008:

Appendix 5: Summary of 2006 Grant Projects

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

Goal: 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.

Status: 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."

Reporting period June 2007 to June 2008:

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

Goal: 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.

Status: 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.
Equipment for the system is not fully installed or fully functional yet. The manufacturer of the equipment has suffered many delays due to employee problems and scheduling with production of other products. The current downturn of the economy is slowing our planned progress.

NFS Impacts: Pike and San Isabel 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	1,000	1,500	$250/acre cost	$200/acre cost	N/A
Post grant 12 months ending 6/30/2007	1,200	1,300	$350/acre	$200/acre	N/A

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."

Reporting period June 2007 to June 2008:

23. Grantee: Morgan Timber Products, Bellvue, Colorado

Goal: 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 Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2006	375				3,000
Post grant 12 months ending 6/30/2007	750				3,200

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."

Reporting period June 2007 to June 2008:

24. Grantee: Mt Taylor Machine LLC, Milan, New Mexico

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 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 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.
  - "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.
  - 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."
  - 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."

- "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."
- "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."
- "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."
- "Nonetheless, we intend to pursue the entire project to the best of our ability with the goal of absolute success."

Reporting period June 2007 to June 2008:

25. Grantee: Olguin's Sawmill, El Prado, New Mexico

Goal: 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 Forest

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

Reporting period June 2007 to June 2008:

26. Grantee: Sherry Barrow Strategies, Ruidoso, New Mexico

Goal: 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 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 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."

Reporting period June 2007 to June 2008:

27. Grantee: Town of Red River, Red River, New Mexico

Goal: 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.

Status: 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					

Reporting period June 2007 to June 2008:

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

Goal: 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.

Status: 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 Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2006					26 tons per day
Post grant 12 months ending 6/30/2007					50 tons per day

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."

Reporting period June 2007 to June 2008:

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

Goal: 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: Chips shipped decreased by at least 50%. Higher freight costs are driving up production costs and weakening returns on lumber sales.

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 ending 6/30/2007					21,336

Reporting period June 2007 to June 2008:

30. Grantee: Southwest Forest Products, Phoenix, Arizona

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

Status: 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

Reporting period June 2007 to June 2008:

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

Goal: 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.

Status: The new shavings plant began operation on August 1, 2008. The plant consists of a Verville four station compression bagger, impulse sealer, Precision shaker screen, Blue Diamond box shaver, storage silos with unloading system, ten yard surge bin, Alan Bradley motor controls, in-floor pallet hoist and various conveyors to move product. Presently, the plant is operating one full shift with a crew of four employees. A second shift will be added as raw material supply increases with improved weather conditions. To date five fuels projects have been completed on both Federal and private lands. Over 7,800 tons have been removed and converted into value-added products including bagged and bulk shavings. It is clear to us that without this critical biomass conversion element in our processing and value-added product stream that Skyline would be shut down and possibly permanently if not for the availability and flexibility that this new machine center provides us for our new and established customers.

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 by-products 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 Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2006					
Post grant 12 months ending 6/30/2007	132	0	Revenue: Total $12,040 Or $91.12/acre	0	7,224

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."

Reporting period June 2007 to June 2008:

4X4
Skyline Forest
Resources, Inc.
Escalante, Utah

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

Goal: 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.

Status: 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					

Reporting period June 2007 to June 2008:

- "The Lake Tahoe project may be closed out with no action and no expenditures because of difficulties securing an operating permit from the El Dorado County Air Quality Management District."

33. Grantee: Big Valley Power, Redding, California

Goal: 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.

Status: The sawmill shut down at the end of June, 2008, due to the very week lumber market. It is scheduled to re-open when the market strengthens.

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 ending 6/30/2007	1,378		$585		23,263

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."

Reporting period June 2007 to June 2008:

- "Generally, I believe that it is a good concept to assist start-up businesses, knowing that any new business is at risk of failure. The fact that the country is facing a severe financial situation that has affected the new housing market, as well as most other markets, makes it even more difficult for these new businesses. For the taxpayers to get a solid return on their investment, there needs to be more oversight and guidance by experts. In this case, perhaps direct, hands on input from a sawmill specialist and some step by step mandatory requirements that the grantee has to meet to obtain the funds would have been beneficial."

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

Goal: 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.

Status: 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.

The Confederated Tribes of Warm Springs efforts to develop their Biomass Plant have stalled due to restrictions in the credit markets. While they are pursuing stimulus dollars to get the project back on track the delay directly affects the Tribes' biomass removal efforts as well. GeoVisions remains very much committed to finding ways to support the USFS and the Tribes' desire to reduce hazardous fuels in the Mt Hood, Deschutes, Ochoco, and Willamette NFs and the Warm Springs Reservation.

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					

Reporting period June 2007 to June 2008:

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

Goal: 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.

Status: 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."

Reporting period June 2007 to June 2008:

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

Goal: 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.

Status: Roseberry Timber purchased a Peterson 4710B Horizontal Grinder. The project treated the original acres and removed 19548.84 tons of biomass. It also treated 987 acres private timberland of Sierra Pacific Industries in California producing 8920 tons. The biomass was ground into chip form and transported to cogeneration plants. New markets are being developed in Colorado's Mountain Pine Beetle affected timberlands.

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."

Reporting period June 2007 to June 2008:

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

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

Status: 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 ending 6/30/2006	3,000 (includes harvest acres)	1,000	$300 (does not include harvest acres)	$85	0
Post grant 12 months ending 6/30/2007	4,500 3,000 (includes harvest acres)	1,500	$300 (does not include harvest acres)	$85	190

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 co-generation of electricity which material would have otherwise been sent to the landfill. This use of waste material will increase over time."

Reporting period June 2007 to June 2008:

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

Goal: 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.
An extension of the grant was approved in order to address questions regarding the efficiencies of biomass harvesting and biomass sustainability. The inter-relatedness of biomass harvesting, forest health and the logistics of market creation is a complex issue. The extension will allow for evaluation of the removal of biomass regarding the available habitat for predator species of root-feeding insects with a sub-study on soil productivity. Additional biomass harvesting is scheduled for later this year on the Talladega NF.

NFS Impacts: National Forests in 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 ending 6/30/2007	37		(To be determined)		1,142
Post grant 12 months Ending 6/30/2008					2,641

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."

Reporting period June 2007 to June 2008:

Appendix 6: Summary of 2007 Grant Projects

39. Grantee: Mt. Taylor Millwork, Inc., Milan, New Mexico

Goal: Purchase chipper and other equipment to supply biomass to make industrial pellets. Plan to also initiate a tamarisk eradication program and will have access to wood from those treatments. Contribute to forest rehabilitation by increasing raw material flow from thinnings and restoration treatments.

Status: To date there has not been a single contract opportunity for us to engage in mechanized Pinon/juniper harvesting in the Cibola National Forest or any other New Mexico Nation Forest.

NFS Impacts: Cibola National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007					
Post grant 12 months ending 6/30/2008					48 gt

Comments from the Cibola National Forest for this reporting period:

- "

40. Grantee: Ochoco Lumber Company, John Day, Oregon

Goal: Project consists of the purchase & installation of a whole-log shaver, rotary drum dryer, & log & material handling systems. Production from the shaver will supplement existing bagged wood shavings sales. Approximately 8000 tons of small logs and tops will be needed. Raw material will be sourced primarily from projects on nearby FS lands.

Status: The whole log shaver has not been purchased or installed.

NFS Impacts: Malheur National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007					0
Post grant 12 months ending 6/30/2008					0

Comments from the Malheur National Forest for this reporting period:

- "

41. Grantee: Elk Regional Health System, St. Marys, Pennsylvania

Goal: The Elk Regional Health System (ERHS) will implement a biomass project for heating and cooling the acute care hospital and the long term care facility. By implementing a 24/7 biomass energy system the ERHS will save approximately $300,000 per year in energy costs. The project will save the Allegheny National Forest funds that would normally be earmarked to biomass removal. A blow down area (165 acres) will be addressed in year one of this project. ERHS will assist Allegheny NF with vegetation management through utilization of woody biomass. They will create a market for underutilized woody biomass from harvesting and TSI projects, enhance the market for undervalued woody biomass, provide a positive impact on the health of the ANF by utilizing woody biomass, maintain the zero net gain of greenhouse gas emissions, and reduce budgetary costs for the Allegheny NF in removing biomass products.

Status: Biomass facility became operational February 2008.

NFS Impacts: Allegheny National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007					
Post grant 12 months ending 6/30/2008					

Comments from the Allegheny National Forest for this reporting period:

- "We are still in the planning stages on projects that will be used for both the Kane Area School District and the Elk Regional Health Center Biomass Grants. We have had some unavoidable delays in completing the NEPA on projects being developed for both grants. Both are nearing completion with implementation anticipated in early to mid FY09."

42. Grantee: Baker Timber Products, Rapid City, South Dakota

Goal: The purchase of the equipment proposed in this project will facilitate the movement of woody biomass to the pilot ethanol plant in Upton, WY.

Status: COMPLETED. Equipment was added (Fecon mulchers) and more volume is going to chip markets. We have picked up two other chip accounts. We believe that the environmental quality has greatly improved because of reduced fuel loading. Because of the housing turn-down, our main chip market has been cut in half. We continue to look for new markets, however at this point because of high input costs (fuel, parts, machinery, labor), we are struggling to maintain our business as usual.

We've expanded our post mill operation and have upped production and have added a rerun line which has added to substantial production. We were just recently awarded the bid to continue delivering chips to Star Academy, a facility in Custer, SD that uses wood chips for heat.

NFS Impacts: Black Hills National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007	602		$385.00 per acre revenue		1,503
Post grant 12 months ending 6/30/2008	1,554		$305.00 per acre revenue		7,377
Post grant 12 months Ending 5/31/2009	1,706				

Comments from the Black Hills National Forest for this reporting period:

- "

43. Grantee: Barela Timber Management Co., Inc., Las Vegas, New Mexico

Goal: Reduce catastrophic fire danger in the Gallinas watershed. Increase water yield per acre in the Watershed. Reduce the cost of forest restoration. Treat additional acreage of NFS lands at reduced costs. Provide jobs in a traditional sector plagued by serious underemployment. Use modern "green" techniques for harvesting. Efficiently harvest and utilize harvested materials. Demonstrate the commercial viability of products derived from small diameter material and supply new markets. Increase forest health and habitat diversity.

Status: Total production of ground material has increased because of the grant—material ground into fuel product.

NFS Impacts: Santa Fe National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007					
Post grant 12 months ending 6/30/2008	70				3626

Comments from the Santa Fe National Forest for this reporting period:

- "

44. Grantee: Olguin's Sawmill, Inc. El Prado, New Mexico

Goal: Conduct thinning and harvest on Carson National Forest. Remove approximately 1,000 MBF or approximately 10,000 tons of biomass annually. Reduce treatment costs by approximately $200 per acre on the Red Mesa Timber Sale. Integrate new processing capacity at existing plant to expand utilization. Remove 5,250 MBF over 5-years. Increase value of biomass from $350/MBF to $1,083 by the end of the grant period. Expand the markets for value added small wood products. Create 2 full time jobs in Taos County. Publish and disseminate information about products and forest related issues and opportunities.

Status: Part One of this grant has been accomplished. A feller buncher was purchased and is operational. Because not all the funds were used to purchase the feller buncher, permission was sought and received to purchase a skid steer loader to enhance the processing of timber in the forest. That skid steer loader is on site and operational. The remaining funds will be requested to purchase the planer and put it on line.

NFS Impacts: Carson National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007					
Post grant 12 months ending 6/30/2008					

Comments from the Carson National Forest for this reporting period:

- "

45. Grantee: Mountain Valley Lumber, Saguache, Colorado

Goal: The objectives are to reduce the cost of hazardous fuel reduction projects on the Rio Grande NF

Status: Mountain Valley Lumber has not purchased the equipment identified in the grant (dowelling machine).

NFS Impacts: Rio Grande National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007					
Post grant 12 months ending 6/30/2008					

Comments from the Saquache Ranger District, Rio Grande National Forest for this reporting period:

- "Due to changes in the markets, they are now researching the opportunity to develop a wood gasification facility."

46. Grantee: Mescalero Forest Products, Mescalero, New Mexico

Goal: Install a pellet mill, reduce the waste and cost of waste disposal, find markets locally and work with the Holloman AFB, and White Sands Missile Range to explore renewable energy options for the facilities.

Status:

NFS Impacts: Lincoln National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007					
Post grant 12 months ending 6/30/2008					

Comments from the Lincoln National Forest for this reporting period:

- "

47. Grantee: Kane Area School District, Kane, Pennsylvania

Goal: Implement a biomass project for heating and cooling the acute care hospital and the long term care facility on the St. Mary's campus. This state-of-the-art system would enable the Health System to become a leader in healthcare energy efficiency while assisting the national forest with vegetation management through the utilization of wood biomass materials.

Status: The Kane High School alternative fuel project construction began in June 2007 and was completed in December 2008. The new biomass equipment was brought on line December 8, 2008 for equipment trials. A few minor adjustments to the equipment were required. There has been a noticeable difference in energy costs and the reduction of the fossil fuel usage. The system has become a showcase for many organizations, both profit and non-profit, who are exploring the option of changing energy systems.

NFS Impacts: Allegheny National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007					
Post grant 12 months ending 6/30/2008					

Comments from the Allegheny National Forest for this reporting period:

- "We are still in the planning stages on projects that will be used for both the Kane Area School District and the Elk Regional Health Center Biomass Grants. We have had some unavoidable delays in completing the NEPA on projects being developed for both grants. Both are nearing completion with implementation anticipated in early to mid FY09."

48. Grantee: St. Maries Joint School District, St. Maries, Idaho

Goal: This project proposes to establish a contractual agreement between the Kane Area School District and the Allegheny NF to assist in the reduction of hazardous fuels. The woody material obtained from the forest will be used to fuel a biomass heating system designed to utilize fuel for heating the high school. The project will serve as a model for replication throughout western Pennsylvania and the southern tier of New York and will enhance existing vocational and academic curricula at the secondary level.

Status: The school district received bids for constructing a woody biomass heating system fed by wood chips for their elementary school that was way beyond the budget for the project. The excessively high bid was due to dramatically increased materials costs and fuel costs. At this time the school district is reassessing the woody biomass project with a consultant and is likely to go with a different heating system (wood pellets).

NFS Impacts: Panhandle National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007	0	0	0	0	0
Post grant 12 months ending 6/30/2008	0	0	0	0	0

Comments from the Panhandle National Forest for this reporting period:

- "Once the heating system is constructed (next year – 2009), I fully expect favorable impacts due to fuels reduction on the ranger district."

49. Grantee: Intrinergy, LLC, Ashland, Virginia

Goal: Work with the Desoto National Forest to pilot a program under which a steady, affordable and sizable flow of woody biomass feedstock supply for the Intrinergy Wiggins gasification project can be achieved over time.

Status: The De Soto NF has not sold any volume since Hurricane Katrina.

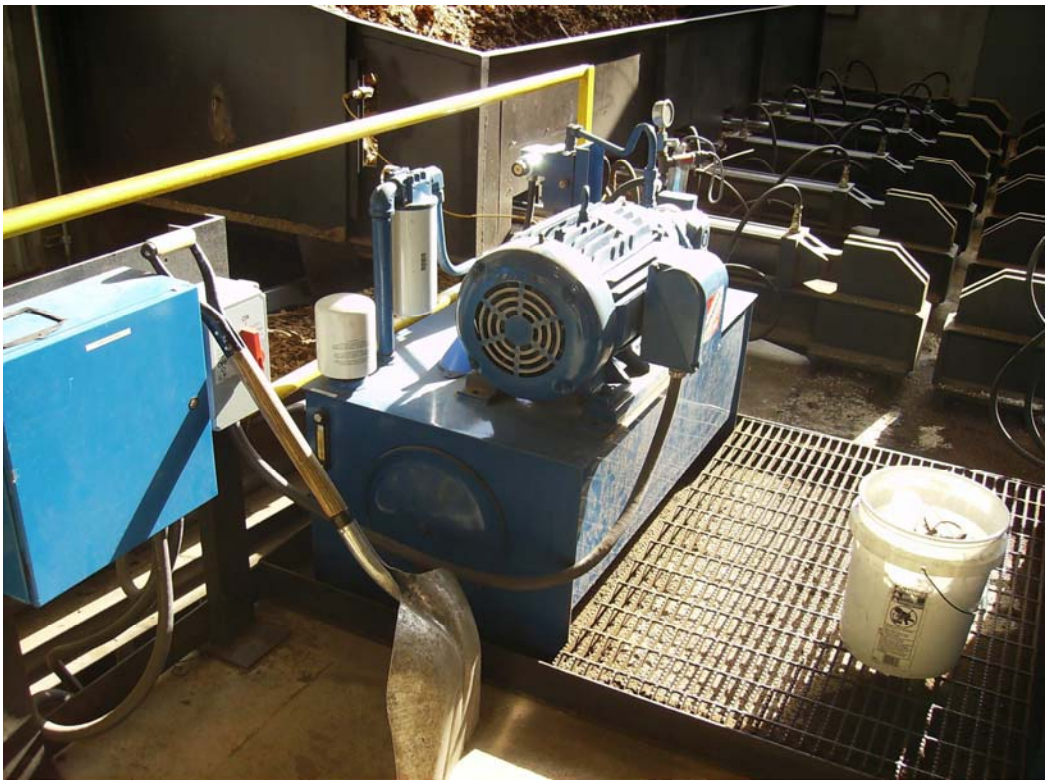
NFS Impacts: National Forests in Mississippi, Desoto National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007	700	86,447	200,000	2,593,410	0
Post grant 12 months ending 6/30/2008	1,400	87,506	400,000	2,625,180	0

Comments from the De Soto National Forest for this reporting period:

- "A strong biomass market will be very beneficial to our vegetation management programs on the National Forests in Mississippi, as well as private industry and private landowners."



50. Grantee: Ranch Creek Limited, Granby, Colorado

Goal: Harvest and process as much beetle-killed wood within the next 10 years. Pro-active involvements with FS and local landowners to put into place a long-term plan for forest maintenance. Ranch Creek will accomplish this through the use of a portable sawmill, and other wood production equipment either in service, being put into service or being purchased in the summer of 2007. Ranch Creek will generate a very diverse and marketable product line of fence posts, rough cut lumber, house logs, and railing and fencing. This includes slash burning with an air-curtain destructor.

Status: Although it is still the early stages of the grant, there is already a small reduction in hazardous fuel treatment costs on Forest Service Lands. Most of the biomass that has been removed from NFS lands has come from Winter Park Ski Area, where removal of thousands of dead and pine beetle infested trees have been brought to Ranch Creek Limited for processing.

NFS Impacts: Roosevelt National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007	650		$357 cost $629 revenue		6,500
Post grant 12 months ending 6/30/2008	1,140		$1,519 cost $2,696 rev.		45,650

Comments from the Roosevelt National Forest for this reporting period:

- "Our treatment methods have not necessarily changed as of today, however as merchantable beetle infested sawtimber deteriorates to the point of nonmerchantability, we may look at alternative product processors such as the grantee to take this material for utilization."
- "It is early in during this grant but there have been small indications that the grantee could take on an increased role in removing and processing of this beetle infested material that also accomplishes hazardous fuel reduction work as well."

51. Grantee: John Jump Trucking, Kalispell, Montana

Goal: Buy trucks to transfer slash short distances to a grinder to access more material. Access and treat more slash to avoid burning costs, reduce air pollution, save FS cost of disposing slash

Status: Truck transfer of slash to grinder has not been done on the forest.

NFS Impacts: Flathead and Kootenai National Forests

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007					
Post grant 12 months ending 6/30/2008					

Comments from the Flathead National Forest for this reporting period:

- "

Comments from the Kootenai National Forest for this reporting period:

- " Seems like a lot of emphasis placed on developing equipment to get biomass material out of the woods but not enough on developing markets. If the price is right and local stable markets are available, biomass material will get harvested without grants subsidizing removal. The equipment developed thru grants is going to sit idle without local markets. Multi year funded grants for market development is needed."

52. Grantee: Kuykendall and Sons, Tres Piedras, New Mexico

Goal: Reduce the forest treatment costs of the Red Mesa Project Area by increasing the use and value of small diameter timber. Decrease catastrophic fire hazard, reduce susceptibility to bark beetles and improve health and vigor, Increase production capacity of Kuykendall and Sons sawmill to meet demand of small diameter wood products in pre-existing markets. Improve the competitive position of Kuykendall and Sons for future stewardship contracts and timber sales.

Status: Scragg mill has been purchased and is ready to assemble. However, the county permitting is taking longer than anticipated. The spring was supposed to be approved last spring, and it has still not made it through the process.

NFS Impacts: Carson National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007					0
Post grant 12 months ending 6/30/2008					0

Comments from the Carson National Forest for this reporting period:

- "The Carson NF has put up very little additional timber to bid on. Currently, Danny Kuykendall is starting to harvest and process material from the Jicarilla Tribal lands. This is about 11 MMBF. While working this material, they are working the the Carson to identify and bid upon all timber offered in a reasonable distance from Tres Piedres."

53. Grantee: Southwest Forest Products, Phoenix, Arizona

Goal: Lowering the hazardous fuel treatment cost on National Forest System lands by up to $39/acre, five new full time jobs in this economically depressed area, steady supply of approximately 50,000 tons per year of clean chips.

Status: Southwest FP has rapidly put this award to work with an operational project coming online by the end of 2007. The JD 20454 with Waratah head is an excellent machine for treating stems from hazardous fuel stands. This unit has a total of 7,111 hours of operation put on it and is meeting or exceeding performance expectations. A total of 66,126 ccf of volume has been treated and removed on 6,183 acres.

NFS Impacts: Coconino, Kaibab, and Prescott National Forests

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007					
Post grant 12 months ending 6/30/2008	6,183				??

Comments from the Coconino National Forest for this reporting period:

- "

Comments from the Kaibab National Forest for this reporting period:

- "

Comments from the Prescott National Forest for this reporting period:

- "

54. Grantee: Mt. Adams Resource Stewards, Glenwood, Washington

Goal: Provide economic opportunities that will create jobs & enhance the quality of life in forest-based communities while restoring healthy forest conditions. Immediate goals are to create a local market for biomass through the establishment of a small diameter wood processing facility & associated businesses that significantly reduces the cost of fuels reduction treatments.

Status: Nearing completion of infrastructure at their small diameter log processing center. They are using small logs not only for biomass, but also for posts, poles, and value-added wood products. They will be able to process up to 150 green tons per day by spring 2009.

NFS Impacts: Gifford Pinchot National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007		10		$180	25
Post grant 12 months ending 6/30/2008		20		$180	50

Comments from the Gifford Pinchot National Forest for this reporting period:

- "The treatment methods for projects currently being planned (NEPA) include options to facilitate small tree utilization. In addition, stands that typically would not be considered for treatment are now being analyzed."
- "The grant to Mt. Adams Resource Stewards has facilitated greater cooperation between our local timber industries and environmental groups. Both groups find common ground in thinning stands that are overstocked with small diameter trees in order to reduce fire hazards and meet other resource objectives. This is now leading to a number of traditional timber sales and stewardship sales, where the decision to implement was not appealed or no appeals are expected."
- "While to date there has been only limited tonnage of wood removed as a direct result of this grant, I expect the amount of wood removed to greatly increase as planned projects move to the implementation phase."
- "Recent investments in woody biomass utilization appear smart and well-timed. We have had inquiries of woody biomass from other loggers and companies who may or may not work with Mt. Adams Resource Stewards. Still, the growth of Mt. Adams Resource Stewards adds to the critical mass needed to establish a competitive and sustained local market."

55. Grantee: High Country Green Waste, LLC, Lakeside, Arizona

Goal: Reduce hazardous fuels while promoting further participation in fire hazard mitigation activities on the Apache-Sitgreaves National Forest and surrounding intermixed private and public lands by operating a processing facility that is affordable and accessible. Utilize all National Forest and other sources of woody biomass to produce profitable value-added products. Provide green waste disposal and processing site for Northeastern Arizona. Improve processing and marketability of High Country Green Waste biomass products. Reduce "wildcat dumping" of green waste on NFS lands. Reduce green waste going to the local land fill. Publicize the "Serving Biomass Markets from Fire Hazard Mitigation Activities" as a model for other forest-based communities.

Status: Rebuilt horizontal grinder is on site and installed. Material is being processed and delivered to the Snowflake White Mountain Power biomass plant. Without the help of a grant, High Country Green Waste would no longer be in business due to their inability to process material.

NFS Impacts: Apache-Sitgreaves National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007					
Post grant 12 months ending 6/30/2008					3100

Comments from the Apache-Sitgreaves National Forest for this reporting period:

- "As stated in the grant, the material from other lands diverts illegal dumping and resultant slash cleanup on the National Forest. This resulted in an estimated saving of cleaning up 600 acres at $50/acre or $30,000 to the Forest. Also, the resulting fuel load drop on lands adjacent to National Forest are allowing the hazardous fuel work to be completed on other acres thus extending the miles of hazardous fuel along the private land boundary. This is significantly lowering the fire risk to NFS lands."

- "We are working in concert with the land owners to get the entire 180 miles of private land boundary thinned and protected. As they agree to do the work on their side of the fence, it allows us to move to other acres and this is almost doubling the rate of work along the boundary."

- "The grant has made a big difference in the Pinetop/Lakeside area. The amount of cleanup on the Forest from illegal dumping of slash from private lands has dropped to almost nothing. The partnership of effort has allowed the Forest to protect many miles more boundary than was happening without the equipment that the grant purchased."

56. Grantee: Bearlodge Forest Products, Inc., Hulett, Wyoming

Goal: The grant provides funding to purchase and install a pallet cant processing system to make pallet lumber from material not suitable for sawlogs. We are able to help the Forest Service increase the number of acres treated by providing a market for material that would otherwise go under-utilized.

Status: The cant-line that was purchased with grant funds is installed, as well as the dust collection system. The building is 80% complete, but will be sufficient to run the system when the other elements are complete. Phase two of the dust collection system will be completed by mid-summer 2009. This will keep the sawdust contained and allow it to be dried, eventually exiting as a wood fuel pellet through our wood pelletizer.

NFS Impacts: Black Hills National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007					
Post grant 12 months ending 6/30/2008					

Comments from the Black Hills National Forest for this reporting period:

- "... the effectiveness of the grant cannot be determined until after start-up of the entire system. Start-up is anticipated the end of August, and data will begin to be collected at that time."

57. Grantee: Mountain Parks Electric, Inc, Granby, Colorado

Goal: A unique partnership in rural northern CO has developed a plan for the design and implementation of a community-based, community-scaled woody biomass fueled CHP facility. Funds from this grant will support the design, verification and specification process necessary to provide adequate documentation for public financing. The verification work will evaluate the adequacy of a gasification system versus a steam system for electricity generation supply to customers.

Status: The biomass project is approximately 90% complete. The overall context of this project has changed substantially with the dramatic changes that have taken place in the economy and wood products sector in particular. Given these conditions, Mountain Parks Electric reevaluated options and identified a different implementation opportunity. We are now completing the final phases of meetings with the biomass gasification technology provider to identify any remaining issues prior to proceeding.

NFS Impacts: Medicine Bow-Routt National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007	142	0	$414/acre revenue	0	1,225
Post grant 12 months ending 6/30/2008	255	0	$414/acre revenue	0	2,199

Comments from the Medicine Bow-Routt National Forest for this reporting period:

- "Great program. Would like to see more programs like this in the future."

58. Grantee: Forest Fuels Solutions, Salmon, Idaho

Goal: Forest Fuels Solutions requested grant dollars to purchase equipment for a post and pole manufacturing plant in Salmon, ID. Their goal is to reduce treatment costs by $100-150/ acre, increase amount of acres mechanically treated by 20% by 2010, create a profitable roundwood manufacturing entity in Lemhi County, establishing an annual payroll of almost $148,000 in the first year of operations and $175,000 by year 2.

Status: Wallace timber sale: Estimate that grantee removed 960 GT before sale was litigated and operations were suspended.

NFS Impacts: Salmon-Challis National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007	0	0	0	0	0
Post grant 12 months ending 6/30/2008	20	0	$449[1]	0	960

[1] Indicates Gross (pre-expense) Revenue/Acre (i.e. Bid price per acre)

Comments from the Salmon-Challis National Forest for this reporting period:

- "Grant has probably stimulated awardee to more aggressively bid on local sale offers. Bidding has, in turn, raised revenues (bid premiums) through extra competition as awardee has not been high bid on various sale offers."

59. Grantee: North Carolina State University Department of Forestry, Raleigh, North Carolina

Goal: Develop efficient machinery to swath harvest small diameter woody biomass, specifically the redesign of the FECON mulching head into a harvesting/collection system. Demonstration of the design will occur on the Croatan NF, in eastern North Carolina. Demonstrate efficient (for profit) harvesting/utilization of Woody Biomass, improve fuel condition class on the Croatan NF, and publish reports on the machinery development.

Status: Held two demonstration days at site I, produced a video of the machine system which was distributed at the 2008 Small Wood Conference, and represented preliminary results at a NCSU Seminar, AABAE meeting, and the 2008 Small Wood Conference.

NFS Impacts: Croatan National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007	300	20,000	110	25	0
Post grant 12 months ending 6/30/2008	250	20,000	120	25	0

Comments from the Croatan National Forest for this reporting period:

- "As the experimental harvester worked, it proved that it left a lot to be desired as far as removing biomass from sites. As planned and contracted, it did reduce the cost for this project. It would not reduce cost for future projects as the machine is currently built."
- "The project was definitely interesting to us and if the machine can be rebuilt to work, it could be another tool in the box. This project took a substantial amount of my personal time to help get this project moving."

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60. Grantee: North Slope Sustainable Wood, LLC, Missoula, Montana

Goal: Marketing Larch and DF flooring to the high-end market, creating a higher value product. Increase the demand for higher-end products, reduce the cost of managing lands with small diameter trees, reduce fire hazard and the cost to do this work.

Status: Good progress has been made in implementing the marketing plan on a schedule and in a manner which was laid out in the grant proposal. Those marketing efforts had significant effect on sales in flooring and trim milled from small-diameter trees, as anticipated in the proposal, although there was about a six-month lag time from the time the marketing monies were spent and the time there was a substantial rise in sales.

NFS Impacts: Lolo National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007	0	0	0	0	0
Post grant 12 months ending 6/30/2008	426	0	0	0	516

Comments from the Lolo National Forest for this reporting period:

- "We are more aware of the economics associated with biomass utilization and the need for demand to drive down costs—and that will determine in part future methods for treating acres"
- "The program is important but certainly does not guarantee an available forest product that will be economically viable for a private operation."

61. Grantee: Parma Post and Pole, Inc., Parma, Idaho

Goal: Parma Post and Pole wishes to increase its peeling capacity by purchasing a Zedco Doweling Machine. The system which consists of the Zedco Doweler, air compressor, dust collection system, live decks and a waste system will increase production to 18,000 – 20,000 tons of non saw material a year. An additional 5,000 tons of material will be removed from the National Forest annually.

Status: Being awarded a grant has allowed us to process wood much faster and produce a much higher quality product. We have attracted several new customers but this might be attributed to the weak U.S. dollar which is putting a great deal of Canadian round wood producers on the ropes.

NFS Impacts: Payette, Wallowa-Whitman, Sawtooth, Malheur, and Boise National Forests

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007					
Post grant 12 months ending 6/30/2008					250

Comments from the Payette National Forest for this reporting period:

- "

Comments from the Wallowa-Whitman National Forest for this reporting period:

- "The ability of Parma Post & Pole to take additional volume has helped and will continue to help the Wallowa-Whitman NF achieve its fuels reduction targets by creating an outlet for the biomass material removed from national forest land."

- "It is wonderful to see money being given to businesses such as Parma Post & Pole. Over time, we will see increased utilization of material that otherwise would not have a commercial outlet."
-

Comments from the Sawtooth National Forest for this reporting period:

- "Created firefighter safety and defensible space around private land."

Comments from the Malheur National Forest for this reporting period:

- "

Comments from the Boise National Forest for this reporting period:

- "

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POST & POLE
208-722-6

62. Grantee: Sustainable Northwest, Portland, Oregon

Goal: Sustainable Northwest's Healthy Forests, Healthy Communities (HFHC) will provide strategic financial & technical assistance to four separate projects treating at-risk forests & processing the small material into value-added products. By packaging funding with assistance in business & product development, tech transfer, marketing, & peer learning, HFHC will successfully improve the economic viability of fuels reduction projects & increase the impacts on regional forests. These projects will document & share their results & knowledge acquired by hosting site visits from professional peers who are also looking for new ways to profitably utilize the by-products of fuel reduction, thereby adding to the capacity for woody biomass across the region.

Status: In partnership with Central Oregon Intergovernmental Council, Sustainable Northwest conducted a biomass heating workshop in Bend, Oregon that was very well attended.

NFS Impacts: Wallowa-Whitman, Deschutes, Ochoco, Shasta-Trinity, Okanogan, and Wenatchee National Forests

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007					
Post grant 12 months ending 6/30/2008					

Comments from the Wallowa-Whitman National Forest for this reporting period:

- "

Comments from the Deschutes and Ochoco National Forests for this reporting period:

- "What Sustainable Northwest grant did with the Deschutes and Ochoco NFs is with their partnership with the Central Oregon Intergovernmental Council."

Comments from the Shasta-Trinity National Forest for this reporting period:

- "

Comments from the Wenatchee National Forest for this reporting period:

- "

63. Grantee: Piute County Department of Economic Development, Junction, Utah

Goal: Piute County is seeking financing to develop a processing and manufacturing incubator park. Four new businesses and 14-16 new jobs are projected with this project and future treatment projects on National Forest System lands. Provide incentives, training and financial assistance to establish new small wood businesses.

Status: The Piute Wood Product operation is making 6-in. tongue and groove paneling, Wainscot, chair rail, casement, crown and architectural profiles. We have processed and manufactured nearly 40M lineal ft.; we have sawed and kiln dried 62 units each containing 1200 ln ft which is ready for manufacturing. The mill is up and operating and so far in the project we have provided training and/or advanced training for the personnel in the mill. Our priority now is marketing. Because of the home market collapse, we have changed our focus from new home construction to the remodeling industry.

NFS Impacts: Fishlake National Forest

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007					
Post grant 12 months ending 6/30/2008	22		Revenue per acre $410		3,200 gt

Comments from the Fishlake National Forest for this reporting period:

- "The grant has increased the opportunity for using woody biomass on the National Forest. The Fishlake has a large inventory of small diameter tree species that have little value. The tree species within the Clover Flat Vegetation Treatment Project area are very typical. To be able to generate a market for these tree species has opened opportunities to manage areas on the National Forest that otherwise would be uneconomically feasible to manage. As mentioned, aspen is the desired tree species on the Fishlake National Forest because of many factors, one being that it reduces the risk of wildfire occurrences by not being a hazardous fuel vegetative species."
- "As was highlighted in the application submitted by Piute County for the Woody Biomass Grant, Piute County is economically depressed, with 51 percent of the families below the nation's average income level and 16.2 percent below the nation's poverty level. Piute County's unemployment rate is double the average rate in Utah and Piute County has the second smallest economy and the second smallest population in the State of Utah. The Woody Biomass Utilization Grant Program has been very instrumental for Piute County to develop a sustainable industry that has created 12-14 new jobs representing a 4 percent increase in employment in the county. From a Fishlake National Forest perspective, it has created management opportunities for small diameter tree species of low value and reduction of hazardous fuels and utilization of woody biomass."

64. Grantee: JTS Animal Bedding, Redmond, Oregon

Goal: Expand and stabilize markets for small diameter pine log by-products of thinning & fuel treatment projects in central Oregon by launching a green shavings animal bedding production facility. Running a loader, debarker, and shaver for two shifts per day, JTS will be able to utilize small pine material from 1108 acres of treatments per year in WUI and FRCC 2 & 3 stands.

Status: In May 2008, JTS added other shaving machinery in addition to the shaver bought through the grant. They tripled their production going from processing 1ccf/20 min. to 3 ccf/20 min., or from 15 truckloads/month to 60 truckloads/month. Much of the wood supply came from Federal lands from the Deschutes and Ochoco NFs. It is unknown how much was derived from private supply. Currently, JTS is paying high prices $25-30/GT in buying their supply from lumber mills, due to the lack of logging occurring currently. It is estimated that they processed approximately 9,375 GT or about 375 truckloads of biomass. They also have created 3 new jobs, and often run 3 shifts around the clock.

NFS Impacts: Deschutes and Ochoco National Forests

Reporting Period June 2007 to June 2008:

	Acres Treated		Cost or Revenue/Acre		Total Green Tons Removed
	Mechanical	Rx Burn	Mechanical	Rx Burn	
Pre grant 12 months ending 6/30/2007	14,800	7,100	$150-800/ac	$25/ac	9,930 gt
Post grant 12 months ending 6/30/2008			$150-400 ac	$30/ac	68,741 gt

Comments from the Deschutes and Ochoco National Forests for this reporting period:

- "Our overall per acre total treatment costs were reduced from $500-1,000/acre to $400-700/acre for all treatments including logging and fuels treatments. Landing pile burning was eliminated as well as some hand pile and burning."
- "The operation has convinced some agency personnel and some of our external public that biomass markets are beginning to be developed or expanded in our area. Internally, we will most likely consider more strongly biomass removal as a fuels treatment option."
- The grants in general have helped the Central Oregon area to develop biomass processing capacity and have served as a catalyst to bring together stakeholders to collaborate to solve resource issues. In addition, some trust has been built with COIC-COPWRR conducting public monitoring projects of fuels treatment and biomass utilization projects."

Link-Belt

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Appendix 7
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

Name (PI): _____ **$ Request**: _____

Project Title:

_____

Financial Evaluator: _____ **Date:** _____

I. 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 <u>ONLY</u> – Businesses (enter your score in each box and go to **Section V.**)

Historic and *pro forma* 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 <u>ONLY</u> (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. Local, **State**, and **Tribal Governments** or **Special Purpose Districts ONLY** (enter your score in each box and go to **Section V.**)

☐ Scope of Work and Project Work Plans—10 points maximum

- ☐ Governmental entity's Scope of Work–organization's purpose (0 to 3 points)
- ☐ 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)

V. For ALL Applicants (enter a score in each box)
Page 2 of 2

☐ Project 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)

☐ Project financial feasibility including discussion of justification of assumptions—4 points maximum

- ☐ Project financial feasibility narrative (0 to 3 points)
- ☐ Clear, concise, and complete financial feasibility information (1 points extra effort)

☐ Financial feasibility substantially supports the goals and objectives of the Woody Biomass
Utilization Grants program (1 point extra effort)

VI. Financial Feasibility Final Score & Comments

☐ **Final Score** - 25 points max.

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

Score	Criteria
0	Missing—required financial information was not submitted
1	Deficient/Questionable—submitted but incomplete, unjustified assumptions, unable to determine if valid.
2	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.
3	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.

Woody Biomass Utilization Grants - Evaluation Criteria and Point System

Number: _____Grantee Name (PI):_____

Reviewer Name:_____

Impact on National Forest System Hazardous Fuel Reduction Projects – 40 points maximum

_____ Condition of the forestlands proposed for the project, such as Fire Regime Condition Class, insect and disease risk conditions, or degraded forestlands due to catastrophic weather events. (7 points maximum)

_____ Direct, tangible benefits with and without the grant (increased acres treated from forest restoration activities, increased value of raw material removed from forest restoration activities, and reduced FS's cost per acre.) (20 points maximum.)

_____ Indirect, intangible benefit (such as air quality benefits; water quality benefits; socio-economic, wildlife habitat, and watershed improvements.) (5 points maximum)

_____ Opportunity created for using woody biomass material around NFS lands in locations where no or limited industry capacity exists. (8 points maximum.) .

_____ **Sub-Total Score**

Comments:

Technical Approach Work Plan – 25 points maximum

_____ Technical feasibility of the proposed work (5 points maximum)

_____ Adequacy and completeness of the proposed tasks (5 points maximum)

_____ Likelihood of meeting project objectives (5 points maximum)

_____ Identified deliverables/tasks (3 points maximum)

_____ Timeliness and reasonableness of time schedule (2 points maximum)

_____ Evaluation and monitoring plan (5 points maximum)

_____ **Sub-Total Score**

Comments:

Qualifications and Experience of Applicant – 10 points maximum

_____ Experience, capabilities (technical and managerial)

_____ Demonstrated capacity

Scoring for 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 expanded capacity

_____ **Sub-Total Score**

Comments:

_____ **Total Score – 75 points maximum**

Additional Comments:

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: