

Market Based Incentives for Restoration and Utilization of Small Diameter Materials
USDA Forest Service Grant: ONFP-01-006

2005 FINAL Report

Summary

The project was originally designed to purchase roundwood processing machinery and integrate this machinery with the Joseph Timber Company small log processing system (Chip / Saw), as well as produce a demonstration small diameter roundwood building (information kiosk) for use at the Salt Lake City Winter Olympics. The kiosk was to be returned for use in Wallowa County following the Olympics. This project was tiered with multiple projects within the Blue Mountain Demonstration Area geared to accelerating the restoration of forest stand conditions through the treatment of suppressed small diameter stands and increased utilization of this material by forest products businesses.

The grant initiation date was 16 July 2001. The original termination date of 15 July 2002 was extended due to two primary factors: (1) the Joseph Timber Company closed and was liquidated forcing the relocation of the acquired roundwood processing machinery and the start up of a new stand-alone company (Community Smallwood Solutions) built around this machinery, and (2) the Utah State Parks department bought the information kiosk constructed under this grant, and the income received was used to build a new small diameter roundwood structure for the Wallowa County Fair Grounds. This second factor resulted in further delays as we had a fairly lengthy collaborative process to decide on the priority needs within the County for a new structure, then hired an architect to design a new structure to meet this need, then had to raise additional funds from within the County to cover the full costs.

The grant award of \$172,000 was increased to \$179,000 to provide an additional \$7,000 towards the completion of the small diameter roundwood stage for the Wallowa County Fair Grounds. Just as the project was being completed, the County Commissioners provided an additional \$10,000 to cover the costs of the cement foundation and the roofing for the new stage.

Planned outcomes:

- 1) Purchase and Installation of Roundwood Processing Machinery
- 2) Roundwood Production, Marketing and Sales
- 3) Design and Construction of Olympic Information Kiosk
- 4) Shipment and Use of Kiosk at the Salt Lake Winter Olympics
- 5) Return Shipment and Use of Kiosk within Wallowa County

New Outcomes:

- Creation of new wood products company (Community Smallwood Solutions LLC) owned by residents of Wallowa County (66%) and Wallowa Resources' for-profit subsidiary (34%).

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This company leases the roundwood processing machinery purchased under this grant from Wallowa Resources. It currently employs 6 people, and utilizes about 600 tons of small log material per month.

- Sale of Olympic Information Kiosk to Utah State Parks and continued use of this facility near the Olympic cross-country ski course (Soldier Hollow field).
- Design and construction of a new small diameter roundwood structure (outdoor covered stage) for the Wallowa County Fair Grounds.

Dropped Outcomes:

- Use of Information Kiosk within Wallowa County near Wallowa Lake.

Project partners included the USFS Forest Products Lab, USFS Region 6 and Wallowa-Whitman National Forest, Oregon Department of Forestry, Oregon Economic and Community Development Department, Oregon State University, Joseph Timber Company, Bronson Log Homes, Sustainable Northwest, Community Smallwood Solutions, Wallowa County Government, City of Wallowa, local forest contractors, forestland owners and residents.

Discussion

Small Log Processing

Wallowa Resources purchased a small log processing system from Precision Sawmill Systems LLC in July 2001 that was delivered in December 2001. Joseph Timber Company poured a 70' x 100' cement slab and pulled utility lines under and through the pad between September and October 2001. The slab was located immediately adjacent to a small log processing system that was under construction. The plan was for logs to run through a debarker and cut-off saw, and then be kicked one of three directions depending on size, species and quality: to the Chip / Saw, to the pole peeler, to the chipper.

However, in early January the majority owner of the Joseph Timber Company decided to close down the entire saw mill. Inventories were run through the mill, and all lumber sold by March 2002, at which point it was shut down. Wallowa Resources moved the post and pole equipment to an adjacent property for storage while looking for options to salvage the small log processing component of this grant.

Over the course of 2002, Wallowa Resources, with support from various consultants, worked with six different qualified lead investors, as well as numerous potential secondary investors and lending institutions, to explore options for re-opening the mill. Wallowa Resources and Sustainable Northwest pledged assistance to all potential investors on the marketing and sales side – with the aim of building direct sales from the mill to custom end-users and thereby increasing the sales margins captured by the mill. This approach would have built on the success and profitability of direct sales of house construction lumber to Watercourse Homes from Joseph Timber Co in the summer of 2001. None of the parties made an offer on the mill. The major creditor served the company with foreclosure papers on May 19, 2003.

The mill's prospects have always been constrained by saw log supply since the dramatic reduction in harvest off of federal lands in the early 1990's. With this in mind, emphasis has been directed to the development of a small log processing facility (sub 7" dbh and 3" top diameter) alongside the main mill.

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Over the course of 2002 the lumber market has declined significantly in the face of increasing production from modern, ultra-efficient mills in the US and Canada, and increased imports – especially from Canada, as well as northern and eastern Europe and the southern Pacific rim.

With the closure of the Joseph Timber Co, work was initiated on the development of a stand-alone small log facility, which could produce a range of roundwood products (fencing, architectural accents, roundwood structural components, restoration products) and firewood. While new investors were sought for this business venture, two related activities took place. A treatment trial of ACQ – the environmentally preferred alternative to CCA treatment, with inter-mountain Douglas fir poles¹ (3” up to 6”) proved successful. OSU Forest Lab confirmed the success of this treatment trial on January 28, 2003. In addition, under contract from Wallowa Resources, Sustainable Northwest completed market research on the softwood flooring market, roundwood market and firewood markets in the Pacific Northwest.

Wallowa Resources, and its for-profit subsidiary Community Solutions Inc (CSI), used the analysis in the integrated ton-wood processing facility to expand the business plan for the post and pole business Community Smallwood Solutions. This expanded business plan was able to attract \$145,000 in local resident investment into the company in October 2004. CSS was formally incorporated as an LLC in the State of Oregon with 12 members, the largest of which is CSI with 52% of the ownership. A second financing round was organized in the late summer and fall of 2005. A further \$175,000 in local resident investment was secured by November 2005. Some of the original investors contributed additional funds, and four new residents bought into the company bringing total membership to 16.

CSS currently employs six people and is utilizing about 600 tons of pulpwood per month. By the summer of 2006, it is anticipated that utilization will increase to at least 1,000 tons per month and employment should total 8 persons.

Further expansion and diversification of this facility is projected for 2006-07, including significant expansion in the processing and marketing of firewood, and improved use of wood peelings for landscape mulch, livestock bedding, and arena footing, raw material for some form of bio-energy production. Further out, efforts will be made to integrate a small saw mill system to process the higher grade logs into home construction and furniture products. Partnerships with a local business venture interested in producing adhesives and associated compounds from wood biomass are being explored.

Roundwood buildings

The Information Kiosk was built by Bronson Log Homes according to designs provided by the USFS Forest Products Lab and Beaudette Consulting Engineers out of Missoula, MT. It was originally constructed in Enterprise, OR, and then dismantled for shipping to Heber City, Utah, where local contractors and USFS Forest Products Lab personnel reconstructed it at the 2002 Olympic Cross Country and Biathlon Ski Event location at Soldier Hollow Field. This area was also the site of the Forest Service, Bureau of Land Management and National Park Service promotion center for “Our American Public Lands.”

Bronson Log Homes used dead standing grand fir and doug fir logs from the 1989 Canal Fire within the Wallowa Valley Ranger district of the Wallowa Whitman National Forest to build this structure. These logs were hand peeled and shaped to construct the structural frame of the building.

¹ The Douglas fir poles were harvested from the Buck Stewardship Pilot in the Wallowa Valley Ranger District.

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The structure required about 800 linear feet of material. The longest pieces (8) were 14' x 5"D top chord rafters, (8) 12' x 5" bottom chords, and (16) 10' x 6" posts and plates. The interior hub required (8) 6' x 5" and (16) 2' x 5". The roof of the cupola required 8 short pieces. Floor and roof systems were 7-1/4" core Structural Insulated Panels (SIP). The floor panels had a double 2x spline at the connection. Construction of wall panels consisted of 2x4 framing with Re-Sawn plywood and RS batts inside and out. The cupola that sits on the Hub was framed with a window in each bay.

Following the completion of the Olympics, Utah State Parks asked to buy the structure for \$20,000. With permission from the USFS, the structure was sold, and plans were initiated to build a new structure for Wallowa County. This change in project plan allowed for further innovation in the use of small logs and for local contractors (esp Bronson Log Homes) to explore further efficiencies in building with small logs.

Following fairly extensive discussions with the Wallowa County Natural Resources Advisory Committee and the Wallowa County Commissioners, agreement was reached on building a new stage for the Wallowa County Fair Grounds. Following references from the USFS Region 6 office, an architect out of Seattle, Lauren Woodward, was commissioned to help design the new structure. The design process was delayed as Lauren Woodward moved from Seattle to Austin, Texas during the project, and because the final construction cost estimates exceeded the available budget for the project. To help facilitate completion of the project, the Wallowa County Commissioners pledged an additional \$10,000 to cover cement foundation and flooring, as well as roofing, costs.

Bronson Log Homes constructed the log package for the new stage from logs pre-peeled by CSS in September 2005. The Wallowa County Fair Grounds manager took lead responsibility for contracting the site work, cement work, and final construction. Members of the Fair Grounds Board and Wallowa Resources volunteered to help complete the roofing. The new stage will be used for the first time at the 2005 4H / FFA Spring Fair in June of 2006.

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Wallowa Resources has invested other federal, state and private foundation grant funding in complementary activities in small log building over the course of this grant. The completed projects include the small log office building for CSS, the Mountain Cache Cabin, the Nez Perce Tribe Gazebo on Tick Hill, and a log structure commissioned for the California State Fair Grounds in Sacramento which was unveiled at the 2005 4th of July festivities. Each individual building has been financed with considerable cost-share from other partners. The Mountain Cache Cabin was featured in the Chief Joseph Days Rodeo parade, and was subsequently placed on Main Street in Joseph. Visitors to the cabin completed over 80 surveys, with several indicating interest in the cabin or the flooring and paneling products.

Conclusion

At the conclusion of this grant, Community Smallwood Solutions is positioned to utilize between 8,000 to 12,000 tons of small diameter log material in the next 12 months, and could consume 2 or 3 times that level through an aggressive growth and diversification strategy. The post and pole peeling and end-shaping machinery purchased with this grant are the central processing components for this business. Currently CSS supports 6 new jobs. In 2006, another 2 jobs are scheduled to be added.

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The Information Kiosk is still in use in its original location near Heber City, Utah by the Utah State Parks. The new Wallowa County Fair Grounds stage will be used for the first time in June 2006. Bronson Log Homes is positioned to sell two small log structures in 2006 based on customer response to the various demonstration buildings in the County.

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Private landowners in both Wallowa County and Baker County are exploring various forms of collaboration – both in the investment in and support to new small log processing systems in their counties, and to the formation of an association that would provide group log marketing and sales services. Wallowa Resources continues to support these efforts in both Counties following the conclusion of this grant.

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