

**USFS 2015 Wood Innovations Grants
Oregon and Washington**

OREGON

- **Oregon Forest Resources Institute (OR):** A grant of \$249,628 title “Oregon Forest Products Marketing Program.” Oregon Forest Resources Institute (OFRI) will collaborate with other statewide organizations, including universities, state agencies and non-governmental organizations, to promote the use of traditional and innovative wood products in commercial building and other markets. The program objectives are to: 1) promote the benefits of wood as a cost-effective and environmentally preferred green building material to the design/build communities; 2) develop credible, professional and science-based print and electronic materials that position Oregon wood products as a preferred green building material; 3) underscore Oregon’s sustainable forest practices and high environmental standards throughout all marketing materials, events and other initiatives; 4) advocate for Oregon as the intellectual capital of North America for forest restoration, forest management, and wood products innovation and manufacturing; and 5) expand opportunities for Oregon manufacturers to export finished goods abroad.

- **Oregon State University (OR):** A grant for \$249,888 titled “Utilization of Low-Value Lumber from Small Diameter Logs Harvested in Pacific Northwest Forest Restoration Programs in Hybrid Cross Laminated Timber (CLT) Core Layers.” The general goal of the project is to determine the technical and commercial viability of utilizing small diameter logs from East Side restoration efforts in structural CLT products. Specific objectives are to: 1) build and test CLT panels utilizing low-value lumber from forest restoration operations in core layers of homogeneous and hybrid laminations; 2) based on the findings, propose respective changes to the product standards; 3) investigate the efficiency of the primary processing options; and 4) assess the effects of regional logistics options (location of the primary processing, transportation routes/costs) on the commercial viability of the utilization scheme.

- **Central Oregon Intergovernmental Council (OR):** A grant for \$117,000 title “Central Oregon Biomass Energy Cluster Development Strategy and Project Development.” The purpose of this project is to increase the market-based utilization of forest restoration byproducts and other small diameter woody material by: a) developing an overall regional strategic plan that includes analyzing the opportunities and barriers for biomass utilization in Central Oregon; b) providing a menu of technical assistance offerings by public and private entities to help current and future projects be successfully implemented; and c) working with regional, statewide, and national partners to share best practices, bring in outside technical assistance as necessary, and promote Central Oregon as a biomass utilization hub.

- **Ed Staub & Sons (OR):** A grant for \$84,012 titled “Bulk Biomass Fuel Distribution for Thermal Market Expansion in the Northwestern United States” to conduct a business feasibility study exploring the potential to expand an existing oil and propane distribution business into bulk wood fuel distribution. In addition, the grant will conduct a market assessment to examine which geographies within the company’s territory hold the most promising opportunities for fossil fuel customer conversions to biomass. A bulk wood fuel distributor that could deliver any quantity of pellet fuel would help transform the biomass energy industry by making wood fuel supply easily available and accessible, opening up opportunities for a new market segment of biomass boiler installations.

- **Family Forest of Oregon (OR):** A grant for \$250,000 titled “Commercial Biochar Products for Forest Restoration in the Pacific Northwest. The project objective is to incentivize the development of markets for low-value biomass through production of biochar products. Project goals will be met through 1) production of new biochar products, 2) conducting a growth trial of these products, 3) development of marketing and promotional materials, and 4) evaluation of the carbon offset potential of biochar.
- **Integrated Biomass Resources (OR):** A grant for \$246,000 titled “Waste Heat Recovery and Residual Drying.” which will design, engineer and install a system to recover heat from an existing biomass boiler to increase efficiency and dry feedstock for densified energy products. The project will be designed to draft and control heat, currently exhausted from the system, into a chip dryer, thereby using existing energy to produce value-added energy products and utilize more low value forest restoration biomass.

WASHINGTON

- **Washington State University (WA):** A grant for \$249,993 titled “A Pilot Supply Chain for Advanced Manufacturing of Cross Laminated Timber in the Pacific Northwest.” In order to accelerate the manufacture of cross-laminated timber (CLT) in the Pacific Northwest, the grant will conduct a techno-market analysis in conjunction with key regional corporations throughout the supply chain. This analysis will delineate the needs of a key existing gap for CLT to be successful in commercial buildings; prefabricating mass-customized panel assemblies utilizing digital fabrication and advanced manufacturing technologies. This unique step in the supply chain moves construction activities into the manufacturing plant, thereby facilitating rapid on-site construction and transfer of value up the supply chain to the lumber and manufacturing sectors.
- **Yakima Specialties (WA):** A grant for \$97,400 titled “Conversion to Biomass in the Food Processing and Commercial Laundry Sectors in Yakima, WA.” Yakima Specialties (YS) is a non-profit organization that employs and provides job skills training to disabled members of the community. It operates a wood pallet production line as well as a commercial laundry facility, which relies on high-pressure steam. YS’s immediate neighbor is the John I. Haas, hop processing facility, which requires a significant amount of steam for its hop extraction processes. Both YS and Haas currently use natural gas to generate steam; however, their collective heat demand could be met by converting to biomass via a district energy system.