Ash Utilization

Using Wood in the Aftermath of EAB: Opportunities in Southeastern Michigan

The Challenge

The emerald ash borer (EAB) was first detected in southeastern Michigan in the summer of 2002. Since then, this insect has impacted much of the northeastern portion of the United States. As a result, tens of millions of ash trees have died or been removed as a precaution. The resulting wood supply has created several needs—support for emerging wood-related businesses and relief of some of the wood disposal burden for local communities.

The Solution

The Northeastern Area State and Private Forestry Wood Education and Resource Center provided funding to the Southeast Michigan Resource Conservation and Development (RC&D) Council to promote using wood removed in EAB projects for value-added products or as fuel for energy. The Council and its partners identified two significant challenges to doing this in southeast Michigan: the lack of skilled workers and the lack of wood energy opportunities.

The RC&D Council has provided training programs for several years on better ways to use urban wood resources. Their affordable, quality educational programs have helped increase the skills of local workers and improve the competitiveness and profitability of local businesses.

The RC&D Council has also emphasized using more urban wood to produce energy in the region by providing a grant to Oakland University in southeast Michigan to demonstrate the benefits of using wood residues for its energy needs.

Oakland University's wood chip-fired boiler facility will be an integral component of the new Clean Energy Research Center on campus. Together with a planned solar hot water heater, the woody biomass-based boiler system is expected to save the university \$50,000 a year in natural gas costs, while also providing a no-cost solution to the university's own wood disposal needs. In addition, the Clean Energy

When combined with a planned solar hot water heater, the woody biomass-based boiler system is expected to save Oakland University \$50,000 a year in natural gas costs.



This wood-fired boiler facility was recently installed at Oakland University.

Research Center will host other applied research with wood pellets.

Although wood-fired boilers are now proven technology, continuing to offer wood-fired boiler demonstration grants shows that this technology works; demonstrates that purchasing, handling, and storing biomass fuel is manageable; and helps provide a financial incentive for others to switch to renewable energy.

Resulting Benefits

- Created new interest in services for the wood industry
- Developed a larger base of trained workers in the wood industry
- Provided markets for urban wood in community programs
- Lowered costs to communities for wood disposal
- Increased the use of local woody biomass as an energy source

Sharing Success

- Created opportunities for technology transfer to local businesses, municipal foresters, and governments
- Developed strong partnerships among stakeholder groups
- Conducted workshops on safely felling trees to 28 participants, resulting in 900 hours of training

Federal ID Number: 2006-DG-11244225-268



February 2012

U.S. Department of Agriculture Forest Service Northeastern Area State and Private Forestry www.na.fs.fed.us

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