Nebraska Forest Service offers assistance for biomass heating

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Seasonal heating costs can be unpredictable for the more than 325 Nebraska nursery greenhouse operations with enclosed plant growing structures. With that in mind, the Nebraska Forest Service is promoting woody biomass heating as an alternative to fossil fuels that is both eco-friendly and cost-effective. Offering technical and financial assistance through the TREES Heat Nebraska (THN) program, NFS is working with individual facilities to explore wood heating opportunities.

This renewable energy option uses woodchips, wood pellets or cordwood to produce hot water which is piped to individual structures and used to create hot air. “Woody biomass heating lowers operating costs, uses locally available wood fuel and stimulates local economic growth and job development,” said Adam Smith, NFS forest products utilization team leader. “Wood heating systems can provide significant savings by lowering fuel costs compared to fossil fuels such as propane.”

Papio Valley Nursery Inc. was the first greenhouse operation to seek NFS assistance through the TREES Heat Nebraska program in fall 2014.

“As we were interacting with landscaping firms and tree care companies, we saw a lot of wood material being wasted after tree removals or pruning jobs,” said Alan Weiss, president of Papio Valley Nursery Inc. in Papillion, Nebraska. “The increasing costs of heating with propane caused us to begin looking at other heating options, and heating with wood made the most sense given the amount of wood material available as a potential fuel source.”

A feasibility study, completed October 2014, showed evidence of significant annual heating cost savings. The business is currently working to secure final funding for the construction of the wood heating system.

“We are excited to be involved in this program. We hope to serve as an example for other greenhouse operations in the state to demonstrate this opportunity,” said Weiss.

Greenhouse operations can benefit from this heating option by taking advantage of financial assistance in the form of grants and loan guarantees available through three key programs:

- TREES Heat Nebraska through NFS
- Rural Energy for American Program through USDA-Rural Development
- Dollar and Energy Savings Program through Nebraska Energy Office

In addition, NFS provides technical assistance by working with greenhouse operations to consider all expenses related to wood heating, including calculating the potential savings of converting to a woody biomass heating system.

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