

## **Using Thermal Modification Technology to Add Value to Small-Diameter Logs from Underutilized Species**

This current U.S. Forest Service Wood Innovations project supports forest management needs and enhances the competitiveness of the nation's forest products industry. The goal is to develop economically-attractive and value-added forest products from low-value and underutilized hazardous woody fuels (such as, balsam fir and eastern hemlock) removed from National Forest System and other public and private lands in Forest Service Region 9. This is a partnership project with the U.S. Forest Service Forest Products Laboratory and Michigan Technological University.

Specifically, the objectives are to:

1. define product performance benchmarks by identifying mechanical, physical, and biological durability performance targets for the selected thermally modified materials;
2. develop effective thermal modification treatment schedules for each species; and,
3. transfer knowledge concerning performance benchmarks and thermal modification treatments to stakeholders, including those in commercial and other building markets.

This project will advance wood thermal modification technology toward the development of high-performance and sustainable, value-added wood products. This process dramatically improves dimensional stability, resistance to biodeterioration and weathering, extends service-life, and reduces environmental impacts.