National Fire Plan

Assessing Biomass Resources and Reducing Fire Danger in North Dakota

"Here in North Dakota we felt that knowing our biomass resources and their potential use was our number one need," said Jackson Bird, North Dakota Forest Service community forestry coordinator.

The University of North Dakota Energy & Environmental Research Center (EERC) is partnering with the North Dakota Forest Service (NDFS) to identify and quantify the state's biomass resources; including grasslands, municipal wood waste, dead and dying trees in windbreaks and along rivers. Working under a $108,000 National Fire Plan grant from the USDA Forest Service's Economic Action Program (EAP), the partnership will also identify potential product markets and existing energy infrastructure with the ultimate goal of matching biomass resources to various markets.

"We want to gather as much information as we can about materials that create a fire risk, materials that typically go to waste but could be put to other uses or turned into a marketable product," said Darren Schmidt, EERC research manager. The program aims to assist other states with the same goal.

"The fire season we're having this year has really reminded people that conditions are ripe to cause fire and severe damage," said Jackson Bird, NDFS community forestry coordinator. "Several parts of the state have high fire loads. Often those communities cut down trees or vegetation and take it to landfills or burn it. We want to identify other opportunities that will same on landfill space and at the same time reduce high-risk fire conditions," he added.

The EERC assessment will consider quantity, cost, quality, availability, and reliability of these biomass resources relative to their potential use. The resulting county-by-county database will identify and seek to match existing markets and potentially new markets with biomass resources. Biomass can be used as a high-value product as with mulch, particleboard, and laminated wood or as a source of energy in existing coal- or gas-fired power plants that could co-fire biomass. The study will also look for high-end users like furniture makers and artists of small-diameter logs and wood wastes.

More information is available from EERC by contacting Thomas Erickson, EERC Associate Director for Research, at (701) 777-5153, terickson@undeerc.org .