

Spatial Analysis of Woody Biomass for Bioenergy Production in Missouri

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Abstract

Before regional economic and environmental impacts from combining renewable energy production and sustained forest management can be assessed, one must first be able to spatially determine how much woody biomass is located where and its potential availability. Supported by a \$50,000 grant from the Missouri Forest Foundation, a team of MU foresters and spatial analysts have integrated forest biomass data from the US Forest Service's Forest Inventory and Analysis (FIA) database and deciduous forest cover data from the Missouri Resource Analysis Project (MoRAP) into an interactive online geographical information database. This user-friendly spatial analysis tool allows potential bioenergy entrepreneurs, community leaders, and policy makers to develop customized reports that will not only provide them with available woody biomass information, but also information on relative harvesting pressure within their area of interest and community resource data. The team used the tool to identify three communities in the Missouri Ozarks for potential bioenergy development and was awarded a \$44,000 USDA Forest Service Jump-Start Energy grant to facilitate a series of town hall meetings that have begun to build community and regional wood-to-energy partnerships.