

Addressing Economic and Information Barriers Hindering Northern Minnesota Biomass Markets

Institute for Agriculture and Trade Policy
Don Arnosti, Project Coordinator

Project Summary:

The Institute for Agriculture and Trade Policy (IATP) along with three partners (the Superior National Forest (SNF), the Laurentian Energy Authority (LEA), and a cooperative logging business, Forest Management Systems (FMS) are working together to address key barriers hindering the removal of woody biomass from the Superior National Forest. The first barrier is the unwillingness of many loggers to bid on contracts for biomass reduction on non-commercial timber sales due to unfamiliarity with operating conditions, equipment incompatibility and unknown costs of production.

The second barrier concerns the inefficiency of completing environmental assessments on prescribed biomass removals from National Forest sites due to present shortcomings of the local “Best Management Practices” (BMPs), which were developed without considering biomass removals from the forest. The BMPs need to be updated to describe biomass removal limits to provide for future site productivity and the need for coarse and fine woody debris for wildlife habitat. Researchers have identified the need for information describing actual biomass removal rates from fuels reduction management activities in Minnesota as an important key to the proper interpretation of soils and habitat research in the updating of the BMPs.

Project partners will conduct 12 test biomass harvests comprising approximately 180 acres on SNF sites in high-priority fuels treatment areas identified in Wildfire Protection Plans within designated wildland urban interface areas. All sites will have little potential for commercial timber harvest, due to low or no merchantable volumes. Three common forest conditions will be test-harvested utilizing several different combinations of equipment and technique by FMS. Data will be gathered, compiled and analyzed for costs and productivity for each of the tests.

On these same harvest sites, transects, variable and fixed radius plots and other sampling techniques will be used to gather data on pre-harvest and post-harvest biomass quantities. Variables factors such as standing and down, green and dead, and size class and species will be gathered. These data will be compiled, analyzed and cross-referenced with harvest systems and techniques. All information from these tests will be published, publicized and available to the public at no charge.