

PROJECT AWARD YEAR AND TITLE: 2013

Analysis of Wood Resource Availability in the Northeastern United States

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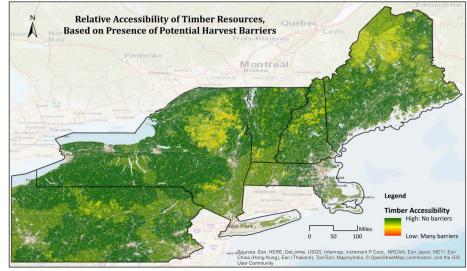
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Project Impacts

NSRC-FUNDED RESEARCH FINAL REPORT

Wood Resource Availability in the Northeastern United States



Forests are important to the culture and economy of the Northern Forest region, but demand for wood for renewable energy raises concerns about sustainability. Accurate estimates of available wood supply are a critical starting point and must take into account that not all forested acres are accessible for harvesting. This involves answering questions such as: How many forested acres are unavailable for harvesting because they are within riparian buffer areas? How many forested acres have slopes too steep to harvest as a result of equipment limitations or soil erosion concerns?

NSRC researchers used a GIS (Geographic Information System) to create spatial datasets that represent factors affecting accessibility of standing timber (such as distance from roads, protected areas, stream buffers, and elevation, etc.), as well as a predictive model for estimating degree of forestland parcelization, for Maine, New Hampshire, Vermont, New York, Massachusetts, and Pennsylvania. Each data layer represented a potential barrier to harvesting, or a condition that increases the environmental, social, or financial cost of harvest operations (e.g. areas within stream buffers are a barrier with a higher "cost" than areas without). Researchers produced a cumulative map of potential harvest limitations, highlighting locations with the greatest potential for reduced timber accessibility.

On average 41% of the relevant land base in each state has one or more barriers that may reduce the accessibility to standing timber. Researchers also integrated results into an existing wood supply modeling tool. These datasets, <u>available online</u>, will improve the accuracy of wood supply analyses in the region and increase the utility of assessment tools.

