

FUTURES PROJECT ANTICIPATES CHANGES AND CHALLENGES FACING FORESTS OF THE NORTHERN UNITED STATES

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Abstract

The Northern Forest Futures Project aims to reveal how today's trends and choices are likely to change the future forest landscape in the northeastern and midwestern United States. The research is focused on the 20-state quadrant bounded by Maine, Maryland, Missouri, and Minnesota. This area, which encompasses most of the Central Hardwood Forest region, is the most heavily forested and most densely populated region in the Nation (Shifley et al. 2012). The Northern Forest Futures Project adds detail and context (e.g., Bowker and Askew 2013, Cordell et al. 2012, U.S. Forest Service 2014) to national projections of forest conditions conducted as part of the recent Resources Planning Act assessment (U.S. Forest Service 2012). Analyses for northern forests explore projected conditions from 2010 to 2060 for seven scenarios with differing assumptions about changes in population, land use, harvest removals, and climate. Results suggest that differences in the trajectory of forest change attributable to alternative climate scenarios will become apparent in about 2050. Additionally, other anthropogenic disturbance factors associated with shifts in land use, population change, management practices, and the inadvertent transport of invasive organisms will continue to greatly influence future trajectories of forest change. Some urgent northern forest management issues include: (1) limited structural forest diversity due to age classes clustered in the 40- to 80-year range; (2) decline in forest area in response to increasing urban land area; (3) management of urban trees and forests to improve quality of life for urban residents; (4) damage from invasive species; (5) decline in rates of wood volume growth and carbon sequestration; (6) low level of management of private forests; and (7) barriers to management for nontimber objectives.

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