

Climate Change Response Framework in Northern Wisconsin

The forests of northern Wisconsin are a defining feature of the region's landscape, and these ecosystems are expected to undergo a number of changes as a result of a changing climate. Land managers currently face the immense challenge of anticipating the effects of climate change on forest ecosystems and developing and applying management responses for adapting forests to future conditions. There is a need to identify several initial actions that can be taken to address the management challenges brought on by the uncertainty of climate change, based on the principles of practicing long-term sustainable management and supporting ecosystem resilience.

The goal is that the Climate Change Response Framework that will serve as a model for climate change adaptation and mitigation for land managers both regionally and nationally.

The Climate Change Response Framework Project is a highly collaborative effort to help land managers in northern Wisconsin understand the potential effects of climate change on forest ecosystems and integrate climate change considerations into management. This project includes numerous tasks to bridge the gap between scientific research on climate change impacts and on-the-ground management. The information and tools developed as part of this project can be used by forest owners and managers throughout northern Wisconsin and beyond.

- **How are northern Wisconsin's forests vulnerable to the effects of climate change?**

An *Ecosystem Vulnerability Assessment and Synthesis* contains a variety of information to inform land managers in northern Wisconsin about the ecosystem components that are most vulnerable to change under a variety of future climate scenarios.

- **What options exist to mitigate climate change?**

A mitigation assessment is underway to describe options for increasing carbon stocks in forests and wood products, increasing the use of wood for bioenergy, and engaging in greenhouse gas markets and registries.

- **How can land managers in northern Wisconsin work together to respond to climate change?**

A Shared Landscapes Initiative provides a forum for local forest owners, forest managers, and the public to discuss the potential ecological and management pressures associated with climate change and to evaluate opportunities for ongoing discussions and effective ecosystem management partnerships.

- **How can the latest science be applied to on-the-ground activities?**

Scientists and managers have been brought together through a climate change science roundtable to improve the rapid incorporation of science and monitoring information into management activities

Information and partnerships developed from the above activities were incorporated into the *Forest Adaptation Resources: Climate Change Tools & Approaches for Land Managers* document in order to help land managers consider regional climate change impacts and use adaptation strategies and approaches to address those impacts in their decision-making processes. Both the assessments and this document will be updated with new and more detailed information as it becomes available. Ongoing interaction with the Shared Landscapes Initiative will ensure that these documents are actively shared and discussed with both landowners and the general public.

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For more information on this project, visit: ww.nrs.fs.fed.us/niacs/climate/

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