

Climate Change Response Framework at Chequamegon-Nicolet National Forest

There is a clear and pressing need to bridge the gap between climate change research and actual management activities on National Forests. In the Lake States and Northeast, we are working to identify several initial actions that we can take to address the management challenges brought on by the uncertainty of climate change. Our fundamental focus remains on practicing long-term sustainable management and supporting ecosystem resilience.

Our goal is to establish a 'Climate Change Response Framework' that will serve as a model for climate change adaptation and mitigation for National Forests both regionally and nationally.

Project Summary

The Chequamegon-Nicolet National Forest (CNNF) Climate Change Response Framework will incorporate information and expertise from a wide variety of scientists and land managers to help identify specific challenges posed by the changing climate, as well as our potential responses. In designing this Framework, the CNNF has been designated by the Eastern Region as a "Climate Change Model Forest for Landscape Management." This project, initiated in 2009, will ultimately address four major questions:

- **What parts of the CNNF are the most vulnerable in the face of climate change?**

An Ecosystem Vulnerability Assessment and Synthesis will compile a variety of information to inform the CNNF about what ecosystem components are most vulnerable to change under a variety of future climate scenarios.

- **What options exist on the CNNF to mitigate climate change?**

A Mitigation Assessment will describe options to increase carbon stocks in forests and wood products, increase the use of wood for bioenergy, and engage in greenhouse gas markets and registries.

- **How can the CNNF work with its neighbors in northern Wisconsin to respond to climate change?**

A Shared Landscapes Initiative will bring together local forest owners and managers and the public to discuss the potential ecological and management pressures associated with climate change and evaluate opportunities for partnerships to encourage discussion and effective ecosystem management in the face of climate change.

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

Scientists and managers will be brought together to discuss climate change science needs, applications, and monitoring at the CNNF to continue science-based land management.

Expected Outcomes

The fundamental outcome of this project will be a **Climate Change Response Framework** for the CNNF. This document will incorporate information from the Assessments, Shared Landscapes Initiative, and focused discussions between scientists and managers about the integration of research and management in the context of climate change. The Framework will provide guidance to better adapt ecosystems to changing climate, mitigate carbon emissions, respond to climate change impacts across ownership boundaries, and rapidly incorporate science and monitoring information into CNNF management activities. Both the Assessments and the Framework 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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