



Northern Pine Management Initiative (NPMI)



Caption 2: Red pine forest after harvest using the ICO approach at Vilas County. Photo Credit: Wisconsin DNR.

Principal Investigators & Partners

- Wisconsin DNR
- Bayfield County
- US Forest Service

Timeline

- Launch – May 2023
- Expected Completion Date – 2030
- Status – Ongoing

Contact Information

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Project Overview

The Northern Pine Management Initiative (NPMI) is a federally funded project to develop new methods that replicate historical spatial patterns contributing to resilience. The operational approach is to adopt ICO (Individuals, Clumps, and Openings), which was developed by Jerry Franklin and others to add greater spatial complexity to forests on the west

coast, to Wisconsin pine forests. In each of three established sites (Bayfield County Forest, Papoose Creek Pines State Natural Area in Vilas County, and the Peshtigo River State Forest in Marinette County) different treatment combinations were implemented including controls, regular thinning, and harvests using ICO approach, both with and without prescribed fire. The ICO approach is centered on using historical reference data to estimate the numbers and sizes of small (2-4), medium (5-9) and large (>10) groups of trees as well as individual trees (far enough for separate crowns from neighbors) to help achieve spatial patterning which can add heterogeneity and resilience.



Caption 1: Map of project locations across WI. Map Credit: Wisconsin DNR.

Key Points

- Reduce hazardous fuels and crown fire potential using silviculture and prescribe burning.
- Develop new silvicultural prescriptions to increase forest resilience.

Management Implications

- Demonstrate new methods of silviculture and prescribed burning in archiving multiple objectives including climate change resilience, wildfire hazard reduction, increased forest complexity.
- Maintain and increase fire-dependent plant communities and promote natural regeneration of red pine.