

# Bayfield Forestry Project

## Project Summary and Additionality

Encompassing ~160,000 acres, Bayfield County forests represent the third largest expanse of county forest in Wisconsin. The county has practiced intensive commercial harvesting across its ownership since the Wisconsin State Legislature established the county forest system in 1927. Timbering revenues represent the largest source of income for the county. With a limited tax base due to having one of the smallest populations in the state, forest revenues are essential for funding public services and county administration.

Bayfield County has a comprehensive, 15-year Forest Management Plan which outlines annual harvest goals based on explicit acreage and timber type thresholds. This carbon project will allow for harvest levels to be meaningfully reduced below the thresholds called for under the 15-year plan, as carbon credit sales will be able to displace revenues that would otherwise be sought through more intensive commercial timbering. If this project is financially successful, county managers may consider further curtailment of harvesting in order to prioritize greater carbon accumulation and the generation of higher credit volumes from forest growth.

Notably, this was the first forest carbon project on county land in the United States. In the process of getting this “first-of” carbon project approved by the county Board, project advocates had to dedicate substantial energy to educating stakeholders and overcoming county officials’ concerns. Bayfield’s forest management team is highly respected across Wisconsin and is often a first adopter of new forest management practices and technologies. The success of this project will likely influence the actions of other county foresters throughout the state and beyond.

# 160K

Acres protected

# 4.9M

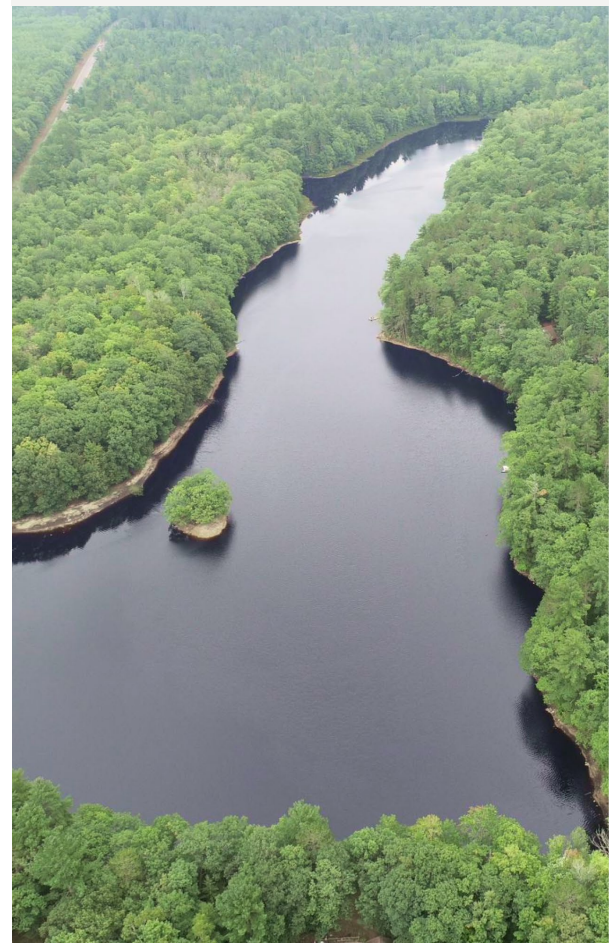
tCO<sub>2</sub>e emissions reductions  
over the project’s first 20 years

# 79

Miles of Class I-III trout streams

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**Standard:** American Carbon Registry





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## Baseline Description

(alternative land management scenario in the absence of the carbon project)

The baseline models carbon stocking across the property under a management plan that would utilize the harvest and acreage thresholds allowed within the pre-existing Bayfield County Forest 15-year Forest Management Plan, approved by the Wisconsin DNR. In the absence of the carbon project commitment, the baseline harvest levels, and the associated decline in carbon stocks, could readily be realized and would be attractive due to existing financial pressures on county government. The carbon credits that will be generated from the project reflect a change in management from the approved 15-year Forest Management Plan, via reduced harvesting and increased growth of forest carbon stocks.

## How does IFM generate both removals and conservation credits?

### Conservation Credits

Conservation credits account for climate benefit coming from the protection of the project area. Emissions that would have been released if the land was instead harvested in the absence of the project are quantified. Many of the co-benefits associated with forestry projects are inherently linked to the preservation of existing forest stands.

### Removal Credits

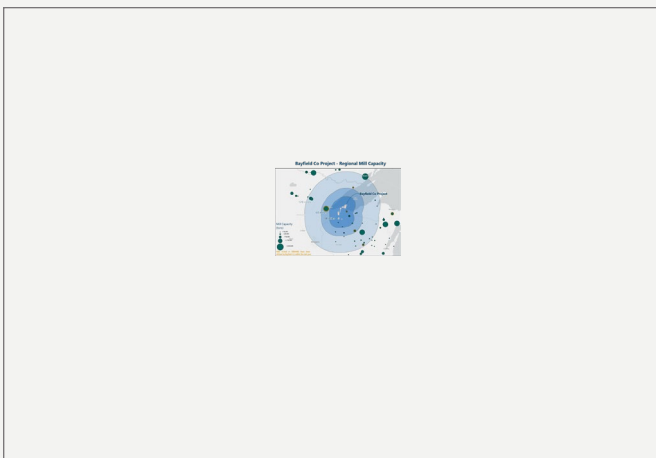
As the newly protected trees grow, carbon is pulled from the atmosphere and sequestered in the trees' wood material through the most proven direct air capture technology on the planet, photosynthesis.



## Regional Harvest Activities



All harvests/forest losses larger than 5 acres that happened between 2001 and 2021 within a 60 mile radius from the project area are depicted in orange<sup>1</sup>, showing the very real pressures on forests in the area. The carbon project ensures sustainable management on the project area for 40 years, twice as long as the period depicted above.



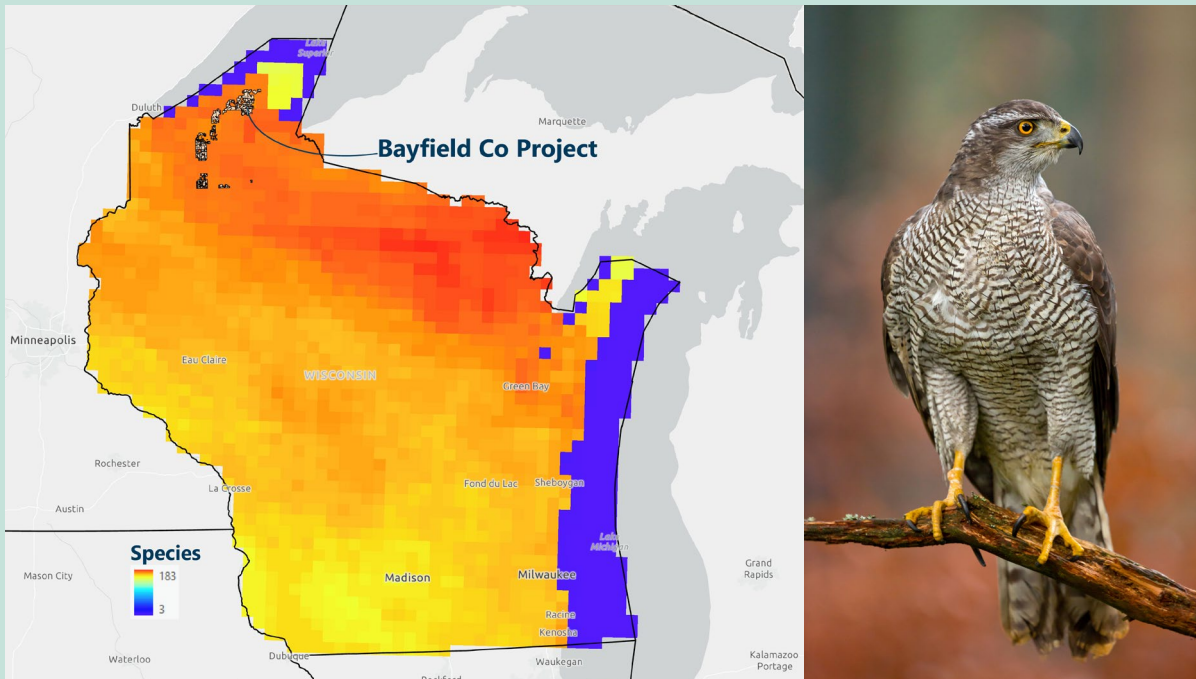
## Regional Mill Capacity

This map represents forest product mills within the vicinity of the Bayfield County project area. Circle size is relative to total capacity, and mills circled in orange have been utilized by Bayfield County in the distribution of harvested material during the past year.

<sup>1</sup> Hansen, M. C., P. V. Potapov, R. Moore, M. Hancher, S. A. Turubanova, A. Tyukavina, D. Thau, S. V. Stehman, S. J. Goetz, T. R. Loveland, A. Kommareddy, A. Egorov, L. Chini, C. O. Justice, and J. R. G. Townshend. "High-Resolution Global Maps of 21st-Century Forest Cover Change." *Science* 342 (15 November 2013 & updates): 850–53. Data available on-line from: <https://glad.earthengine.app/view/global-forest-change>.

## Ecological Feature: Northern Goshawk

Bayfield County's forest carbon project helps to ensure the forest management practices that promote Northern Goshawk populations are continued. Lighter-touch management like that done under a carbon regime increases the proportion of mature forests and large diameter trees that the species prefer. This is especially important considering their status as a federal species of concern. Ultimately, this project is expected to have a positive impact on Northern Goshawk habitat and populations.



This map illustrates relative bird species diversity throughout the state of Wisconsin, with darker red colors showing high diversity and yellow/blue colors showing relatively low diversity. The Bayfield County project lies within an area of high bird species diversity.



## Sustainable Development Impacts



The protected forest helps preserve the soil, which acts as a natural filter for the stormwater flowing into the many lakes and ponds in the project area.



This project will help trees grow into maturity and sequester a greater amount of atmospheric carbon dioxide through their natural life cycles. Over its first 20 years, the project is anticipated to create over 4.9 million tCO<sub>2</sub>e of emissions reductions.



A variety of tree species provide habitat for the Northern Goshawk, Kirtlands warbler, sharp-tailed grouse, ruffed grouse, black bear, beaver, and white-tailed deer.