

Minnesota Forest Resources Council 2023–2024 Biennial Report

Report to the Minnesota Governor and Legislature on Implementation of the
Sustainable Forest Resources Act



Purpose Statement and Cost Disclosure

The Minnesota Forest Resource Council's biennial report is provided to the governor and legislature in accordance with MN Statute 89A.03.

As required by MN Statute 3.197, the estimated cost of preparing this report is \$19,980, including \$9,780 for staff time and \$10,200 for production and printing.



MISSION

The mission of the Minnesota Forest Resources Council is to develop recommendations that result in the sustainable management of Minnesota's forest resources while protecting the balance of long-term economic, ecological, and social forest values in accordance with the Sustainable Forest Resources Act.

VISION

The Minnesota Forest Resources Council is a recognized leader that promotes sustainable forest policies and practices and works collaboratively to ensure ecosystems thrive, the human spirit is fed, and forest products and services meet societal needs today and into the future.

SHARED BELIEF

The Minnesota Forest Resources Council recognizes that cooperation and collaboration between public and private sectors is critical to sustainably managing the state's forest resources. It values and respects individuals' and organizations' perspectives on the management, use, and protection of forests.



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MESSAGE FROM THE CHAIR

The Minnesota Forest Resources Council proudly serves the governor and the people of Minnesota in maintaining the ecological, social, and economic benefits of our diverse forests and woodlands. The Council's 17 appointed stakeholder and Tribal representatives bring a wealth of perspectives and share a common goal—maintaining and enhancing our forest resources for future generations.

Science-based information underpins our understanding of the challenges and opportunities facing our forest resources. Through collaboration, innovation, and research, your Council seeks to find a common path forward. Ultimately, our collective responsibility is to make recommendations for sustainable forest policies and practices that allow Minnesota forests to provide lasting benefits for years to come.

In addition to serving the governor as chair for this important Council, I also have the honor and responsibility of representing forest resource interests on the Governor's Advisory Council on Climate Change. In many ways, these responsibilities are intertwined. Minnesota Forest Resources Council's representatives are well aware of the challenges that climate change poses to our forests now and into the future. We unanimously agree such challenges must be addressed through strategic, forward-looking action. Minnesota's Climate Action Framework, developed with guidance from the Governor's Advisory Council on Climate Change, is our roadmap for this work, identifying important steps for ensuring a carbon-neutral, climate resilient, and equitable future for our state.

The Climate Action Framework recognizes that Minnesota's 17.7 million acres of forests play a vital part in goals to reduce greenhouse gas emissions, build more resilient, healthy communities, and establish a clean economy that delivers both environmental and economic benefits. This recognition has brought our forestry sector unexpected but exciting opportunities for innovation and collaboration. One such example is the very real prospect of flying commercial jet airplanes with sustainable aviation fuel locally refined from logging waste and dead or dying trees from Minnesota's forests. If we can do this, imagine what else might be possible.

In other examples, the Minnesota Forest Resources Council has made scientific investments in understanding the carbon cycles of Minnesota forests and forest products. This research not only reaffirms support for the forest management activities already in practice that deliver climate benefits, but also it underscores the value of exploring new forest product markets to further support our forests' adaptability and resilience to climate change impacts.

I am proud to share this Minnesota Forest Resource's Council biennial report with you. In it you will find more about the MFRC's responsibilities and 2023-2024 activities, as well as insights into the important role of the forestry sector in providing social, environmental, and economic benefits to our state. I urge you to share these updates with others.



Pete Aube
MFRC Chair



MFRC MANDATES

Fulfilling Our Role

The MFRC was created by the Sustainable Forest Resources Act (SFRA), MN Statute 89A, passed in 1995. The SFRA provides a framework for collaboration on the sustainable management, protection, and balanced use of Minnesota's forest resources.

This biennial report shares updates on the MFRC's work to fulfill our statutory purposes in the following areas:

Sustainable Forest Policy:

Make recommendations to the governor and federal, state, county, and local governments on forest resource policies and practices that further Minnesota's economic, environmental, and social goals.

Landscape-Level Forest Management:

Support and guide locally led regional committees in forest resource planning and coordination, and seek regional, field-based perspectives and recommendations.

Site-Level Forest Management:

Develop and periodically revise on-the-ground guidelines for responsible timber harvesting and sustainable forest management.

Forest Resources Research:

Identify and initiate priority forest resources research activities.



Recognizing the continued need for the MFRC's advisory to help sustain Minnesota forests and the many benefits they provide, state legislators supported reauthorization of the SFRA in 2023, extending its sunset provision to June 30, 2033.

2023–2024 MILESTONES

Contributions to Minnesota's Climate Action Framework

The MFRC understands that while the forestry sector faces significant climate change challenges, it also plays an important part in increasing climate resilience—preparing our communities, economy, and natural environment to adapt to and recover from the impacts of climate change. Therefore, in 2023 and 2024, the Council focused efforts on strengthening the forestry sector's contributions to the Minnesota Climate Action Framework's goals, including meeting Minnesota's goal to reduce statewide greenhouse gas emissions 50 percent by 2030 and achieve net-zero emissions by 2050.

The Climate Action Framework identifies strategic actions for the forestry sector within its "climate-smart natural and working lands" goal. These include managing forests for increased carbon sequestration and storage, and for their ability to be more resilient and adaptable to the effects of climate change. The MFRC is responding to these calls to action by integrating climate change considerations across its programming.

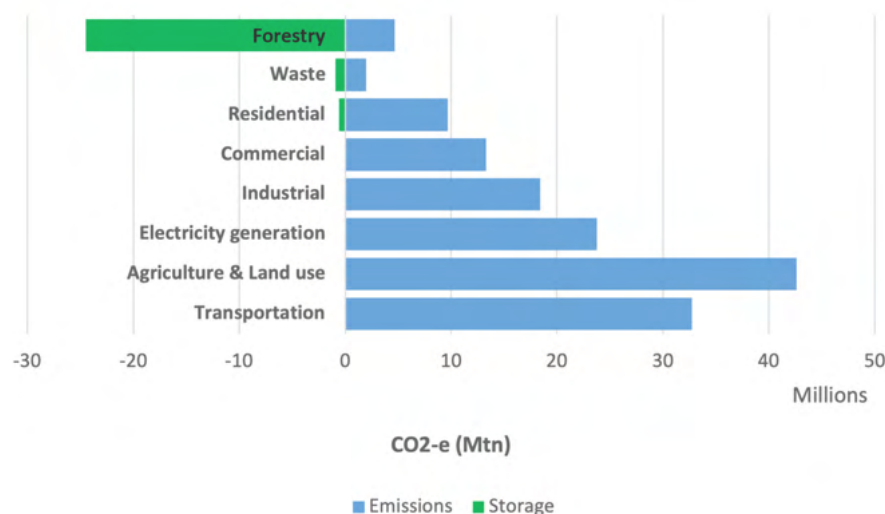
Shaping Climate Action Strategies

MFRC members are helping shape the next version of Minnesota's Climate Action Framework as participants in Climate Action Framework advisory workgroups. The workgroups of particular interest and engagement by MFRC members are Clean Transportation, Climate-Smart Natural and Working Lands, Greenhouse Gas Modeling, and Resilient Communities. Additionally, the MFRC has shared an issue brief with commissioners and the governor's policy advisors linking MFRC recommendations directly to Climate Action Framework goals and strategies.

Pioneering Research on Forest Carbon

During 2023 and 2024, the MFRC invested in and advanced research in partnership with the University of Minnesota to create a forest carbon baseline and life cycle assessment that estimates carbon sequestration, storage, and emission outcomes of forest management strategies and forest products. This groundbreaking research projects the forestry sector's unique ability to offset Minnesota's carbon emissions over the next 100 years. Results will help public and private forest landowners, foresters, forest product industries, and policymakers better understand and compare forest management approaches and associated emissions reduction outcomes in tandem with other forest benefits. Project findings also can provide insights into policy and investment opportunities to increase the ability of Minnesota's forests to further mitigate effects of climate change going forward.

2020 Minnesota Greenhouse Gas Flux by Economic Sector



Forestry is the only economic sector with "net negative" emissions in Minnesota. Graph generated from the following sources: MFRC Carbon Baseline and Life Cycle Assessment Project (preliminary results), Minnesota Pollution Control Agency Greenhouse Gas Emissions data by sector, and EPA Greenhouse Gas Inventory Data Explorer.



Photo by Ryan Klaus.

Supporting New Forest Markets

Climate and weather-based tree mortality in Minnesota forests is an increasing concern. Warmer winters, extreme storm events, droughts, and the spread of insect pests and pathogens are all contributing to the rapid and significant accumulation of dead, dying, diseased, and otherwise unmarketable trees and woody debris across forestlands. If unmanaged, this climate linked mortality creates multiple risks, including repressed regeneration, habitat loss, and reduced ability to store carbon. Also, as in the case of other forested regions of the country, Minnesota is facing a growing risk of wildfire.

Many are surprised to learn that woody biomass—whether it be dead trees in the forest, logging slash, or sawmill residuals—can be refined to create biofuels, most notably renewable diesel and sustainable aviation fuel (SAF). In 2023 and 2024, the MFRC continued to promote woody biomass as a low carbon feedstock for developing liquid fuels, including representing forestry on the Minnesota Clean Transportation Standard Working Group. Importantly, developing a biofuel market for surplus woody biomass creates an economic means for managing forests in the face of climate change. It also can provide financial resources for planting trees and implementing silvicultural practices that make Minnesota forests more resilient and adaptable to climate change. From a global standpoint, using woody biomass to create biofuels in Minnesota helps supplant carbon emissions from fossil fuels.

"The Minnesota Forest Resources Council applauds the Minnesota Legislature for its vision of establishing the Clean Transportation Standard Working Group, and the members of the working group for their collective recommendations that promote use of woody biomass feedstocks to produce low carbon renewable biofuels in our state."

- MFRC Chair Pete Aube



Wheels Up with Wood

This past year, MFRC representatives attended the North American Sustainable Aviation Fuel Conference and Expo to learn, network, and share ideas for transforming woody biomass into an economically viable feedstock for low carbon sustainable aviation fuel (SAF). Minnesota is fast becoming a national leader in advancing SAF production and technologies.

Powering Tomorrow, One Tree at a Time

A 2007 state renewable energy standard created an early bioenergy market for woody biomass. For a few short years, Minnesota forests benefited local communities with a steady supply of an average of 2.4 million green tons of woody biomass annually for the commercial and residential electrical energy markets at the height of utilization for this renewable feedstock. Unfortunately, only three such community-based cogeneration plants remain operational today providing both electricity and thermal heat to the residents of downtown St. Paul, Duluth, and Hibbing. Action taken in 2024 by Minnesota's Public Utilities Commission reopens the door for woody biomass as a "carbon free" bioenergy option.

Cultivating Locally Led Solutions

The MFRC's Regional Landscape Program is helping advance the Minnesota Climate Action Framework's "resilient communities" goal through forest planning and local coordination on climate adaptation and resiliency projects. The program brings together diverse forest stakeholders to identify and support locally led solutions to climate change challenges that are unique to regional areas. Examples include:

- ▶ **Northern Regional Landscape Plan:** Climate change considerations were infused throughout the plan, including silvicultural management for climate resilience, restoring hydrology in aquatic systems, and recognizing the importance of peatlands for carbon storage.
- ▶ **Biodiversity Crisis Wildlife Conversations:** East Central and North Central committees held wildlife-focused meetings, connecting forest and wildlife managers to discuss habitat needs in the face of climate change.
- ▶ **Response to Forest Health Issues:** The North Central Committee hosted an emerald ash borer workshop to share best management practices for increasing forest resilience in ash-dominated areas in anticipation of the northern spread of this cold-intolerant invasive insect.
- ▶ **Assisted Migration Field Tours:** Northeast and Southeast committees held tours to explore approaches to building climate resilience through assisted migration of more climate adaptable tree species and other forest management practices.
- ▶ **Coordinated Assistance for Family Forest Landowners:** Several regional committees convened practitioners from agencies and businesses to better assist private landowners by building a shared understanding of programs and opportunities for delivering technical services to family forest landowners.

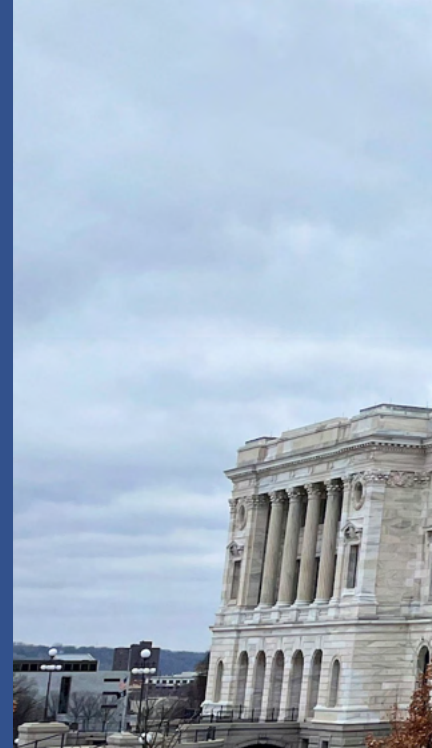


Sustainable Forest Policy

A fundamental purpose of the MFRC is to develop recommendations to the governor and federal, state, county, and local governments with respect to forest resource policies and practices that result in the sustainable management, use, and protection of the state's forest resources. The Council does this through a consensus-based process that is:

- ▶ Guided by the unique expertise and insights of its 17 stakeholder and Tribal representatives.
- ▶ Grounded in the best available science.
- ▶ Rooted in finding a common-ground path forward.

The MFRC issues resolutions, comments, and testimony to communicate Council priorities and make recommendations that address forest resource challenges and opportunities.



Serving as a Resource to Policymakers

In 2023 and 2024, the MFRC submitted comments and testimony to governing bodies as summarized below. See Appendix A for complete comments and testimony language.

Extended Authorization and Funding for the Sustainable Forest Resources Act

[House Environment and Natural Resources Finance and Policy Committee](#)
[Senate Environment, Climate, and Legacy Committee](#)

The MFRC submitted testimony to the House Environment and Natural Resources Finance and Policy Committee (March 28, 2023) and testimony to the Senate Environment, Climate, and Legacy Committee (March 23, 2023) expressing appreciation for legislation that extended authorization of the Sustainable Forest Resources Act to June 30, 2033, and increased base funding for implementing the

act's statutory purposes, including securing priority sustainable forest resource data, research, and informational needs.

Woody Biomass as Eligible "Carbon-Free" Renewable Energy Source

[Public Utilities Commission Docket Number E-999/CI-23-151](#)

The MFRC submitted comments to the Public Utilities Commission (Jan. 26, 2024) recommending use of woody biomass as a renewable energy source that qualifies as eligible carbon-free energy technology under Minnesota's Renewable Energy Standard and the newly created Carbon Free Standard of MN Statute 216B.169.

Eligible Renewable Biofuel Feedstock in a Clean Transportation Standard

[Senate Transportation Committee](#)

The MFRC submitted testimony to the Senate Transportation Committee (March 4, 2024) recommending that woody biomass be included as an eligible renewable biofuel feedstock under a Clean Transportation Standard and that sustainable forest management practices that further reduce lifecycle greenhouse gas emissions receive support through credit generation or other financial means.

Woody Biomass as Eligible Renewable Biofuel Feedstock for Sustainable Aviation Fuel

[House Environment and Natural Resources Finance and Policy Committee](#)
[House Ways and Means Committee](#)

The MFRC submitted testimony to the House Environment and Natural Resources Finance and Policy Committee (April 16, 2024) and testimony to the House Ways and Means Committee (April 24, 2024) recommending that woody biomass be included as an eligible renewable biofuel feedstock for sustainable aviation fuel (SAF) and SAF credit certificates under proposed Clean Transportation Standard legislation.



MFRC Resolutions and Legislative Actions Supporting Sustainable Forest Management

In 2023-2024, the Council approved resolutions in support of sustainable forest policies and practices and acknowledged progress in related legislative actions. See Appendix B for complete 2023-2024 MFRC resolution language.

Examine the Implications of Carbon Markets in Minnesota

MFRC Resolution 2023-2 recommends a state appropriation to examine potential tradeoffs, implications, and benefits of carbon markets for Minnesota's landowners, economy, and forest ecosystems. It also recommends that such a carbon market report include a description and analysis of future research needs and opportunities for mitigating sustainable forest management concerns.

Preserving Public Stewardship of County Forestlands

MFRC Resolution 2023-4 recommends retaining county management of 2.8 million acres of forestland

in northern Minnesota that came into the public domain over time through tax forfeiture. Compelling this resolution was a 2023 ruling by the U.S. Supreme Court on *Tyler v. Hennepin County* that determined Minnesota's tax forfeiture laws unconstitutionally retain excess value of real property above the tax debt in violation of the "takings clause" of the U.S. Constitution. In 2024, the Minnesota Legislature restored Constitutional compliance through a \$109 million appropriation for counties to settle affected tax forfeiture cases. In doing so, public stewardship, access, and other public benefits will continue to accrue on county managed forestlands.

Building Capacity for Tree Planting and Reforestation

MFRC Resolution 2022-2 (see Appendix C) recommends legislative support for achieving Minnesota's climate change goals through an increase in Minnesota's tree nursery capacity and the reforestation of 1 million acres by 2050. In 2024, the Minnesota Legislature passed legislation that provided \$19 million for increased tree planting capacity, including \$10 million in tree planting grants to local communities. The bill also included important policy provisions that removed the 10,000,000 annual seedling production cap at the Minnesota State Forest Nursery and will

allow the Department of Natural Resources to grow and sell containerized, or "plug" seedlings, at the nursery. The legislation also funded a study to review requirements and costs to reopen the General C.C. Andrews State Forest Nursery for plug seedling production. Investments are needed to modernize the Minnesota State Forest Nursery and fully enable reforestation of state-owned, private, and other public and tribal lands.

Landscape-Level Forest Management

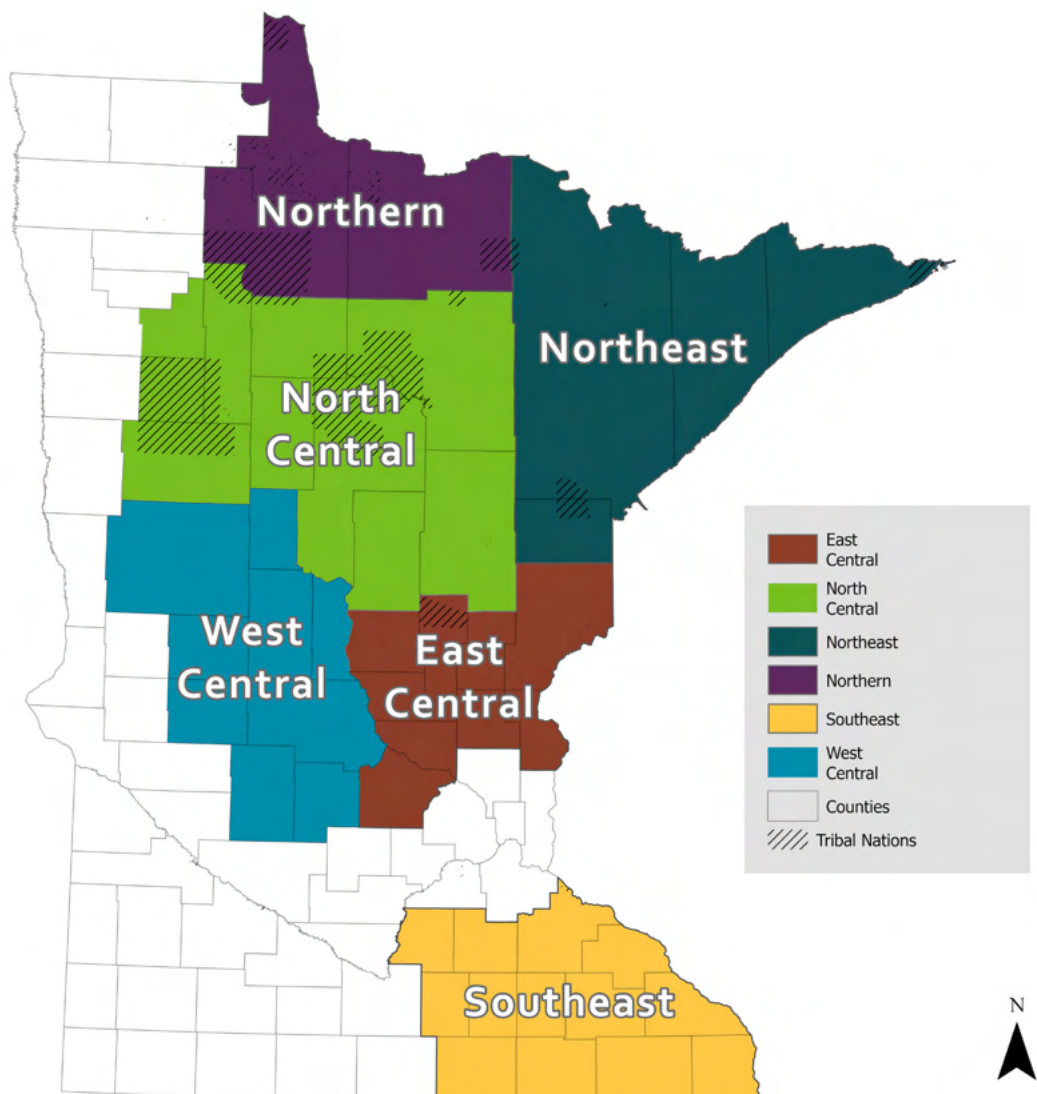
The Sustainable Forest Resources Act is founded on the belief that management of Minnesota's forest resources is best accomplished by a diverse set of stakeholders working together at both statewide and regional levels. Accordingly, the MFRC oversees six regional forest resource committees that are responsible for planning and facilitating local and regional coordination to enhance sustainable forest management across state, federal, private industrial, Tribal, and family-owned forestlands.

In 2023 and 2024, the MFRC temporarily redirected \$180,000 from its budget to reinvigorate the Regional Landscape Program and enlisted local soil and water conservation districts to help committees administer their operational funding. This temporary investment demonstrated the true potential of locally led regional committees to fully achieve their statutory responsibilities under MN Statute 89A.06.

The MFRC recommends legislative support to permanently fund the Regional Landscape Program and ensure its continued success addressing local forest resource needs in the era of climate change.

Minnesota Forest Resources Council Landscape Regions Map

The MFRC's six regional landscape committees cover approximately 16 million acres of forestland, equating to about 90 percent of Minnesota's forests.



Facilitating Connections Among Diverse Perspectives

All major land management agencies (county, state, and federal), Tribal representatives, and a diversity of forest resource stakeholders, participate in MFRC regional forest resource committees. In collaboration, they identify priorities for forest stewardship and management that include recreation, economics, jobs, wildlife, cultural resources, rare plants, and water quality. Committees benefit from the diverse professional expertise of foresters, ecologists, loggers, wildlife and fisheries specialists, and community development personnel. Citizens and small private landowners also share valuable perspectives as members or supporters of these regional committees.

2023-2024 Regional Forest Resource Committees Collaboration by the Numbers

38 

Regional Committee Meetings

1 

Regional landscape plan updated

333 

Regional Committee Meeting Participants

117 

Represented Agencies/Entities in Committee Meetings

203 

Landowner Participants in Committee Meetings/Sponsored Events



The East Central Forest Resource Committee holds discussions with wildlife professionals about the “Open Landscape Habitat” section of their plan.

The Landscape Program in Action

A Space for Connection, Coordination and Collaboration

Regional forest resource committee meetings are a venue for local-level public land coordination and information sharing. They also offer opportunities to strategically coordinate the delivery of technical and financial assistance supporting private family forest landowners. In 2023 and 2024, four such collaborative multi-agency projects were born from discussions at committee meetings.

- ▶ The **Southeast Forest Resource Committee** has conducted coordinated outreach to over 374 landowners during the start-up of a project to engage with and provide technical support on private land forest protection and stewardship in partnership with Minnesota's One Watershed, One Plan program. The project is made possible through a U.S. Forest Service grant.
- ▶ Discussions within the **Northeast Forest Resource Committee** have spurred the creation of several regional forest collaboratives among diverse organizations such as The Nature Conservancy, Ruffed Grouse Society, and the Superior National Forest. One such partnership, the North Shore Forest Collaborative, is a self-supporting nonprofit.

A Public Forum for Landowners, Managers, and Representative Interests

Regional forest resource committees help connect groups with different perspectives to discuss natural resource management challenges and develop shared responses. Meeting topics in 2023 and 2024 included forest management for resiliency in the face of climate change, assisted tree species migration, habitat and management considerations for wildlife, emerging forest health issues, engagement of private landowners, prescribed and wildland fire, tree seed supply, along with other regionally relevant topics. All meetings are announced on the MFRC website and open to the public.

- ▶ The **East Central and North Central Forest Resource committees** held meetings for wildlife and forest management professionals to discuss integrating wildlife needs into forest management. Discussions included practices such as maintaining den cavities and fruit and nut bearing flora, prairie openings on the prairie-forest border, and landscape connectivity. Conversations highlighted the benefits of working with wildlife professionals during planning for timber sales and other land management activities.



Alex Mehne, forest manager for the Fond du Lac Band of Lake Superior Chippewa, provides an overview of their fire program to the Northeast Forest Resource Committee.

Opportunities for Public Participation

Regional forest resource committee meetings are open to the public, providing an opportunity for landowners and citizens to discuss forest management matters with resource professionals in real-time.

- ▶ The **West Central Forest Resource Committee** championed community connections by inviting area stakeholders to participate in meetings. The outreach led to advising and learning from city park volunteers working to restore forest and prairie remnants along the prairie-forest border through many acres of buckthorn removal. The committee also engaged with Central Lakes College Ag and Energy Center in Staples to investigate potential collaborations such as hosting a native tree and shrub collection training.
- ▶ The **North Central Forest Resource Committee** coordinated a private landowner workshop attended by nearly 70 people in Walker. Participants learned about managing forests for wildlife, including insights into habitat impacts caused by the emerald ash borer.
- ▶ The **Southeast Forest Resource Committee** supported two events that engaged 110 participants, 90 percent of whom were private woodland owners.

Landscape Planning and Shared Goals

Each regional forest resource committee has a landscape plan to help guide sustainable forest management across all forestland ownerships within the region. The plans provide a framework for forestry collaboration consistent with each region's unique economic, social, and ecological conditions and needs. They also serve as a voluntary guide for coordination on shared goals among land managers, natural resource practitioners, and community development organizations. Additionally, the MFRC landscape plans are an important component of sustainable forest management certification on public and private industrial forestland in Minnesota.



Northern Forest Resource Committee members update the Northern Landscape Plan.

- ▶ In 2024, the **Northern Forest Resource Committee** completed a comprehensive update to the Northern Landscape Plan. The process included public committee meetings with invitations sent to more than 80 representative stakeholders, two open houses, an outreach campaign to solicit public comments on the draft plan, and coordination with resource professionals from the Red Lake Nation. The West Central and Northeast Forest Resource committees have requested resources to update their landscape plans, ideally during the next biennium.

Grassroots Connection for the Council

The MFRC's Regional Landscape Program is powered by voluntary community-based leadership and facilitated by the MFRC. Each committee is chaired and led by a local volunteer. Because Minnesota's forested regions vary ecologically, socially, and economically, local perspectives are integral to informing Council recommendations that reflect the entirety of Minnesota's forested landscapes. Regional forest resource committees elevate forestry-related opportunities and needs for the Council's consideration.

- ▶ Regional forest resource committees advised the Council on the critical need for funding to sustain Landscape Program operations and increase public understanding of sustainable forest management.



Launching a Forest Monitoring Collaboration

The MFRC is working with consortium of forest management stakeholders to create a web-based framework for monitoring of a wide range of forest resources across Minnesota. The Minnesota Department of Natural Resources, Resource Assessment Program is under contract to help lead the endeavor. The collective vision is to provide the latest forest resource data in an interactive website designed to help stakeholders easily access and quickly ascertain regional forest conditions and resource trends. The MFRC plans to launch the website in the next biennium.

Understanding Forest Resources

The Sustainable Forest Resources Act (Chapter 89A) defines forest resources broadly as “natural assets of forest lands.” Forest resources encompass a wide variety of assets that contribute to the environment, economy, and human well-being. Fish and wildlife, herbaceous plants, timber, recreation and tourism opportunities, wilderness, aesthetics, air, water, climate, and cultural values are just a few of many examples of forest resources.

Site-Level Forest Management

The Sustainable Forest Resources Act mandates development and periodic revisions of comprehensive Voluntary Site-Level Forest Management Guidelines (FMGs). FMGs provide practical, voluntary recommendations for conducting logging and other forest management activities to avoid or minimize impacts to other forest values and environmental conditions. These guidelines offer comprehensive recommended practices to mitigate harvest-related impacts on water quality, wildlife, soil productivity, cultural resources, biodiversity, visual quality, and other forest resources. The MFRC’s Site-Level Program manages the development of FMGs, provides counsel on monitoring implementation of the guidelines, and conducts assessments of the guideline’s effectiveness and forest health.



Keeping Current with Updated Forest Management Guidelines

In 2024, the Site-Level Program completed an extensive multi-year review of the Voluntary Site-Level Forest Management Guidelines (FMGs) that included a scientific literature review, monitoring program results, peer review, feedback from diverse stakeholders, and a public comment process. After due consideration, the MFRC finalized updates to portions of the FMGs for use on public and private forestland in Minnesota. The revised version of this resource includes the following changes:

- ▶ Additional direction on practices related to invasive terrestrial plant species.
- ▶ Language and tools to better link the FMGs and climate change risk mitigation.
- ▶ Adjustments to support consistent interpretation of the FMGs.
- ▶ Format enhancements to conform with the Americans with Disabilities Act, Web Content Accessibility Guidelines, and Section 508 accessibility compliance.

Periodic updates are important to the credibility and relevance of the FMGs. The guidelines are written to assist loggers, foresters, and other land managers in selecting and applying best management practices to site-specific conditions. This flexibility has been foundational to the FMGs from the start.

"Minnesota is fortunate to have statewide voluntary guidelines for forest management and timber harvesting that landowners, loggers, and natural resource professionals implement at such a high rate on the ground. We are excited to be releasing FMG updates that will continue supporting the sustainable management of Minnesota's forests."

- Kory Cease, MFRC Site-Level Committee chair and Itasca County land commissioner



Updated Forest Management Guidelines Flag Climate Change Considerations

Forest managers are increasingly concerned about how climate change impacts Minnesota forest ecosystems. Climate change effects can alter disturbance patterns and may increase tree mortality and impact the composition of Minnesota's forests—all of which could have significant implications for the future environmental, economic, and social benefits forests provide. The MFRC's 2024 FMG updates incorporate new climate change considerations clearly marked with a "Climate Consideration" icon to alert users to these key issues.

Increasing Educational Opportunities with the Guideline Monitoring Program

The Sustainable Forest Resources Act (MN Statute 89A.07, subd. 2) charges the Department of Natural Resources (DNR) Commissioner to establish the Guideline Monitoring Program (GMP) for monitoring silvicultural practices and application of the MFRC's Voluntary Site-Level Forest Management Guidelines (FMGs) at statewide, landscape, and site scales. In 2013, the MFRC worked with DNR to modify the program to focus monitoring at a watershed scale. The GMP is managed by the DNR, while the MFRC provides oversight and direction for its development and implementation.

Monitoring provides important information about guideline implementation trends at the regional and watershed level. This helps to identify areas where further education is needed, and evaluates how the FMGs are being implemented across county, state, federal, and private lands. The MFRC uses information from the GMP for guideline revisions and for targeted outreach and training.

The MFRC conducted a review and summary of monitoring results since the 2012 revision of the FMGs as an important step in the most recent FMG revision process. This effort identified specific FMGs in need of further clarification and broader implementation, including additional outreach and education to raise awareness of the guidelines and recommended implementation criteria. A summary of the Guideline Monitoring Program's recommended FMG revisions is available on the MFRC website.

The GMP has made great strides in educational opportunities for landowners, land managers, and loggers, and in its participation in statewide reviews of sustainable forests practices. This includes collaboration with the University of Minnesota Extension, the Minnesota Logger Education Program, and others to offer twice annual trainings for logger education, serving 50 to 100 loggers and land managers per training in locations throughout the state. The GMP also participates in program reviews and independent audits on public lands to provide insights into the FMGs, supporting the Department of Natural Resource's commitment to forest certification.

Other projects conducted in 2023 and 2024, alongside yearly monitoring and reporting, include an update to how sites are identified for sampling and development of summaries on each area of FMG interest. The 2022-2023 monitoring report is available on the MFRC website.

Forest Resources Research

The MFRC is committed to identifying and advancing forest research needs that advance its mission. Collaborating with scientific community members from state and national institutions, the MFRC shares and facilitates the development of science-based information to support forest management discussions and decisions.

Multi-agency Collaboration Grounds Forest Management Practices in Reliable Science

Updates to the MFRC's Voluntary Site-Level Forest Management Guidelines (FMGs) were informed by a science-based, collaborative process that concluded in 2024. The comprehensive approach included:



A Scientific Literature Review

The review solicited input from multiple agencies and experts on recent advances in relevant peer-reviewed scientific research. Peer reviewed publications related to forestry best management practices were identified and summarized. The literature review showed that research supports fundamental practices outlined in the FMGs and highlighted the need for updates to informational reference material such as those for endangered, threatened, and special concern species.



Peer Review Focus Groups

Peer review focus groups met in 2023, engaging diverse subject matter experts on guideline updates related to riparian management zones (i.e., lands along bodies of water), leave trees (i.e., trees left standing during a timber harvest to provided wildlife habitat), climate change considerations, and invasive species. Agencies represented in the focus groups included the Minnesota Board of Water and Soil Resources, University of Minnesota Extension, county land departments, the USDA Forest Service, the Natural Resources Conservation Service, Minnesota Timber Producers Association, Minnesota Forest Industries, UPM Blandin, and the Minnesota Department of Natural Resources, among others.



Advancing New Research on Forest Carbon

The Minnesota Forest Resources Council released a forest carbon report from the University of Minnesota that provides new insights into the role of forests in achieving the state of Minnesota's climate action goals. The research shows that Minnesota's forests, a known carbon sink, may be offsetting more greenhouse gas emissions than previously understood. It also demonstrates the importance of sustainable forest management for maintaining forest health and enhancing carbon storage over time.

This is the first statewide research to account for and forecast forest carbon storage and rates of storage across the entire forestry sector—from 'cradle to grave,' forests to harvested wood products. The research provides a current assessment of carbon storage and emissions in Minnesota's forests and forestry sector and simulates their changes over 100 years under multiple forest management scenarios. The simulation shows the highest forest carbon storage and sequestration rates occur from 2025 to 2050, aligning with state of Minnesota's target to become carbon neutral. All management scenarios modeled in the research demonstrated long-term increases in carbon storage both within forests and in harvested wood products.

The study is an important step for deepening science-based understanding of the forests' role in climate change adaptation, mitigation, and resiliency. However, like all research, report results must be carefully considered within the wider context of forestry, climate goals, and study limitations. The MFRC looks forward to delving deeper with its stakeholders and exploring the future research opportunities this effort will inspire.

The report, entitled "Estimating current and future carbon stocks and emissions in Minnesota forests and forest products under multiple management scenarios," was funded through a grant from the Minnesota Forest Resources Council.

"This research highlights Minnesota's time-sensitive opportunity to increase our forests' ability to help achieve the state's climate action goals. The MFRC commends and thanks the University of Minnesota and the broader research team for this pioneering research, which provides valuable insights into managing our forests to enhance carbon mitigation in balance with the many other ecological, social, cultural, and economic benefits they provide."

- MFRC Chair Pete Aube



Gaining Insights into Mixedwood Forests Growth

Minnesota and the Great Lakes Region have a long history of forest management. Management practices and silvicultural prescriptions continue to evolve based on expanding knowledge of native plant communities, forest regeneration, growth, and productivity. With decreasing interest in monoculture white spruce plantations due to multiple reasons (e.g., spruce budworm, high investments for establishment) and increasing interest in diversifying aspen dominated stands, some forest managers have used enrichment planting of conifer species within aspen following a clearcut harvest. The resulting forests are called mixedwood forests (i.e., forests of mixed coniferous and deciduous trees), which increase tree diversity within a forest stand.

To gain a better understanding of the regeneration, growth, and management of early-aged mixedwood forests, MFRC, in partnership with the Department of Natural Resources and UPM Blandin, supported a University of Minnesota study looking at a series of sites that differ in age but share similar characteristics. The study showed that while tree seedling regeneration density and carbon storage were greater in conventional aspen stands, diameter growth of trees and structural diversity were greater in mixedwood stands and all mixedwood stands met minimum stocking for aspen (i.e., about 3,000 trees per acre). The results, released in 2024, indicate how white spruce-aspen mixedwood systems can increase tree species and structural diversity without compromising long-term management goals for Minnesota's forests.

Coordinating on Forest Resources Informational Needs

The Interagency Information Cooperative (IIC) was established by the Sustainable Forest Resources Act to coordinate the development and use of forest resources information across state entities. Established as a voluntary program led by the dean of the University of Minnesota College of Food, Agricultural and Natural Resource Sciences, formal IIC activities ceased in 2022 when appropriated funds were no longer available for this purpose. MFRC Resolution 2022-4 "Supporting Minnesota's Informational Needs for Sustainable Forest Resource Management, Products, and Policies" (see Appendix C) recommended an annual appropriation to fund ongoing sustainable forest resource informational needs coordinated by the IIC. The recommendation has not yet been acted upon, and the MFRC continues to explore opportunities to coordinate with agencies on new forest resources information.

Public Engagement

The MFRC represents diverse forest stakeholders, engaging with Minnesotans who have a wide range of interests in the state's forests and the economic, ecological, and social benefits they provide. In addition to hosting public meetings every other month in locations statewide, the Council has prioritized participation in a variety of forestry sector events in 2023 and 2024 to connect with constituents and understand their forest interests.



MFRC members hold a kaffeeklatsch in Warroad.



MFRC Applied Forest Scientist David Wilson, right, visits with Douglas Hege, part owner of Hege Logging at the Minnesota Logger Education Program conference in Bemidji.



Photo courtesy of Kory Cease.

MFRC representatives volunteer to distribute seedlings at the annual Forest to Tap event.

A Voice for Minnesota's Forest Stakeholders

- ▶ Commercial Logging Contractors
- ▶ Conservation Organizations
- ▶ County Land Commissioners
- ▶ Minnesota Department of Natural Resources
- ▶ Environmental Organizations
- ▶ Forest Products Industry
- ▶ Game Species Management
- ▶ Minnesota Indian Affairs Council
- ▶ Labor Organizations
- ▶ Nonindustrial Forest Landowners
- ▶ Research and Higher Education
- ▶ Resort and Tourism Industry
- ▶ Secondary Manufacturing
- ▶ USDA Forest Service

Public Concerns Registration Process – Building Understanding of Forest Management Practices

In 1998, the MFRC established the Public Concerns Registration Process (PCRP) to “accept comments from the public on timber harvesting or forest management practices” (MN Statute 89A.07, subd. 5). The MFRC worked closely with its 17 Council members and their associated organizations to develop this comprehensive oversight process, allowing citizens to register concerns about timber harvesting or forest management practices that they have observed.

The PCRP is intended to be educational in nature and not punitive. The names of the parties involved are handled in a confidential manner. The focus of the PCRP is to inform and provide education to involved parties and work to improve forest management in Minnesota, thus protecting forests and other natural resources.

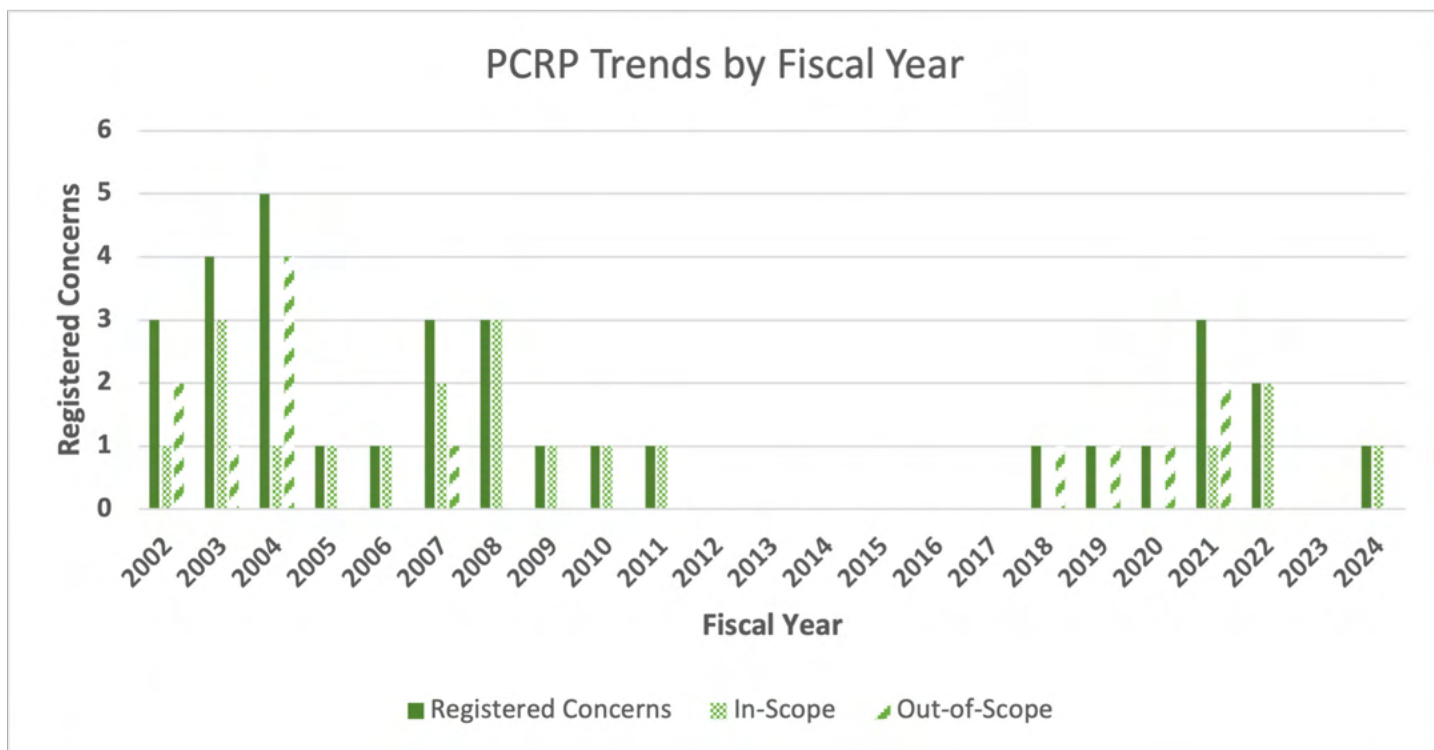
The PCRP process provides an avenue for concerned parties and land managers to:

- ▶ Formally notify the MFRC about concerns related to forest management activities,
- ▶ Be a facilitator for mitigating problems on forest management sites, and
- ▶ Learn more about forest management practices and guidelines for sustainable forestry.

Minnesotans can report concerns to the PCRP hotline (1-888-234-3702) or by completing an online form. Concerns are forwarded to an independent consulting forester for investigation and outreach. Reported concerns are assessed using a protocol that is regularly reviewed and revised in coordination with the MFRC’s Voluntary Site-Level Forest Management Guidelines (FMGs).

No PCRP concerns were reported in 2023, and one concern was reported in 2024. PCRP annual reports are available on the MFRC’s website.

Comments Submitted to the Public Concerns Registration Process





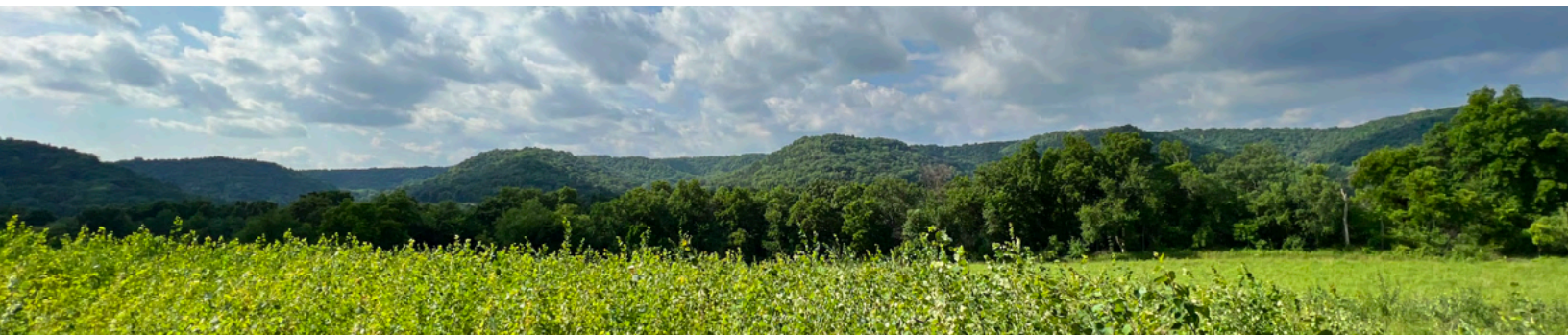
Reinvigorating Outreach on Forest Management Guidelines

The MFRC renewed its focus on education to support consistent application of its Voluntary Site-Level Forest Management Guidelines (FMGs). The MFRC engaged University of Minnesota Extension to pilot in-person workshops in collaboration with Council staff and members, the Sustainable Forests Education Cooperative (SFEC), the Minnesota Logger Education Program, and UPM Blandin. Nearly 134 individuals, including foresters, wildlife professionals and loggers, participated in October 2023 and May 2024 workshops.

“The workshop format and standardized curriculum, including a podcast series and lesson plans for each FMG module, represent a successful start of a new FMG training program for Minnesota.”

- Anna Stockstad, University of Minnesota Extension educator and principal investigator for the pilot workshops

In addition, MFRC Applied Forest Scientist David Wilson collaborated with University of Minnesota Professor Charlie Blinn to develop and deliver FMG training related to erosion control and harvest planning during an April 2024 SFEC webinar, reaching 65 participants. The MFRC also attended May 2024 Minnesota Logger Education Program conferences to discuss updates to the FMGs with this key audience.



Tribal Relations

The Sustainable Forest Resources Act outlines stakeholder representatives to serve on the Council, including an appointee from the Minnesota Indian Affairs Council, providing valuable perspectives to support the MFRC's mission. The MFRC recognizes Tribal nations in Minnesota have a unique legal relationship with the state, and the Council respects the fundamental principles that establish this relationship. The MFRC has begun to establish an intentional communication and coordination process for engaging with individual Tribal nations on issues that may affect forest management within their boundaries and treaty areas. In 2024, the MFRC also held a coordination meeting with Red Lake Tribal resource staff seeking their input and recommendations for updating MFRC's Northern Landscape plan. Red Lake Tribal leaders and foresters shared important insights regarding what is happening within their managed forests that helped guide final plan development.

Supporting Family Forest Landowners

Two of 17 seats on the Minnesota Forest Resources Council are dedicated to the representation of non-industrial private forest landowners, a constituency that manages more than 40 percent of Minnesota's forests . The Council reaffirmed its commitment to supporting this landowner group in its 2020 strategic plan and again in 2023 by forming a Family Forest Landowners Committee. The new committee launched a strategic planning process in late 2024 and will be seeking additional input on strategies from local, state, and federal agencies that provide services to family forest landowners.

Meet the MFRC Family Forest Landowners Committee

The Family Forest Landowners Committee assists the MFRC in understanding and addressing matters related to privately-owned non-industrial lands through various activities such as:

- ▶ Evaluating and recommending forest policies beneficial to family forest landowners.
- ▶ Exploring forest stewardship topics, issues, and concerns of family forest landowners.
- ▶ Raising awareness of the stewardship role and scope of family forest landowners.
- ▶ Working with partners that assist family forest landowners in stewardship of their land.
- ▶ Promoting the role of family forest landowners in mitigating climate change, protecting clean water, providing wildlife habitat, and producing sustainable wood supplies.
- ▶ Supporting coordination and collaboration among agencies, technical service providers, forest industry, and other organizations with common interests in assisting family forest landowners.



¹See 2024 Minnesota State and Private Forestry Fact Sheet, prepared Oct. 23, 2024.
https://apps.fs.usda.gov/nicportal/temp/pdf/sfs/naweb/mn_std.pdf



MEET THE MINNESOTA FOREST RESOURCES COUNCIL

MFRC Members

Member	Position/Seat	Term End
Pete Aube	MFRC Chair	01/07/2027
Kim Berns-Melhus	Environmental Organization Representative	
Kory Cease	County Land Commissioner Representative	01/03/2028
Dale Erickson	Commercial Logging Contractor Representative	
Dale Gentry	Environmental Organization Representative	01/04/2027
Rick Horton	Primary Forest Products Industry Representative	01/04/2027
Faron Jackson Sr.	Minnesota Indian Affairs Council Representative	01/03/2028
Scott Johnson	Game Species Management Organization Representative	01/04/2027
Dr. Michael Kilgore	Higher Education and Research Representative	01/03/2028
Linda Kingery	Private Forest Landowner Representative	01/03/2028
Dr. James Manolis	Conservation Organization Representative	01/04/2027
John Rajala	Private Forest Landowner Representative	01/03/2028
Michael Stansberry	U.S. Forest Service Representative	01/03/2028
Deb Theisen	Resort and Tourism Industry Representative	01/04/2027
Patty Thielen	Minnesota Department of Natural Resources Representative	01/03/2028
Benjamin Wallace	Secondary Wood Products Manufacturer Representative	01/03/2028
Tim Wegner	Labor Organization Representative	01/04/2027

MFRC Staff

Eric Wolf Schenck	Executive Director
Elizabeth Hutchison	Forest Program Administrator & Communications Specialist
Grace Solorzano	Student Worker
Jaimé Thibodeaux	Landscape Program Coordinator
David Wilson	Applied Forest Science Coordinator



APPENDIX A



March 28, 2023

The Honorable Fong Hawj, Chair
Environment, Climate, and Legacy Committee Room 1150 Minnesota Senate Bldg
St. Paul, MN 55155

RE: SF2438--A bill appropriating money for environment and natural resources (FY24 & FY25).

The Minnesota Forest Resources Council (MFRC) expresses its appreciation and support for FY24 and FY25 funding to acquire high priority sustainable forestry, climate change and forest carbon informational needs. Specifically, SF2438 provides an appropriation of \$906,000 the first year and \$926,000 the second year for MFRC to implement the Sustainable Forest Resources Act (MN Stat. 89A). If appropriated, MFRC plans to use increased base funding of \$49,000 in FY24, \$69,000 in FY25, and in each year thereafter, to secure immediate and on-going priority sustainable forest resource information, data and research needs as determined by MFRC's seventeen stakeholder representatives.

Entering FY24 and FY25, MFRC's highest priority informational needs are scientific assessments to better inform, prepare, and enable policymakers, communities, stakeholders, and forestry sectors to anticipate, respond, and adapt to climate change. Such information is vital to develop and implement sustainable forest resource management strategies; improve forest carbon sequestration and storage; offset greenhouse gas emissions; and promote state-of-the-art, climate-friendly forest product development critical to the implementation of the Governor's Climate Adaption Framework.

I respectfully request that this written testimony and the attached MFRC Resolution 2022-4 "Supporting Minnesota's Informational Needs for Sustainable Forest Resources Management, Products, and Policies" be included in the record of the March 28 hearing of the Environment and Natural Resources Finance and Policy Committee.

Pete Aube, Chair
Minnesota Forest Resources Council 1530 Cleveland Ave. North
St. Paul, MN 55108
651-247-1367
eric.schenck@state.mn.us
<https://mn.gov/frc/>

Cc: Pete Aube, Chair
Rick Horton, Policy Committee
Patty Thielen, DNR



March 28, 2023

The Honorable Rick Hansen, Chair
Environment and Natural Resources Finance and Policy Committee
407 State Office Building
St. Paul, MN 55155

RE: HF2310--A bill appropriating money for environment and natural resources (FY24 & FY25).

The Minnesota Forest Resources Council (MFRC) expresses its appreciation and support for FY24 and FY25 funding to

acquire high priority sustainable forestry, climate change and forest carbon informational needs. Specifically, HF2310 provides an appropriation of \$906,000 the first year and \$926,000 the second year for MFRC to implement the Sustainable Forest Resources Act (MN Stat. 89A). If appropriated, MFRC plans to use increased base funding of \$49,000 in FY24, \$69,000 in FY25, and in each year thereafter, to secure immediate and on-going priority sustainable forest resource information, data and research needs as determined by MFRC's seventeen stakeholder representatives.

Entering FY24 and FY25, MFRC's highest priority informational needs are scientific assessments to better inform, prepare, and enable policymakers, communities, stakeholders, and forestry sectors to anticipate, respond, and adapt to climate change. Such information is vital to develop and implement sustainable forest resource management strategies; improve forest carbon sequestration and storage; offset greenhouse gas emissions; and promote state-of-the-art, climate-friendly forest product development critical to the implementation of the Governor's Climate Adaption Framework.

I respectfully request that this written testimony and the attached MFRC Resolution 2022-4 "Supporting Minnesota's Informational Needs for Sustainable Forest Resources Management, Products, and Policies" be included in the record of the March 28 hearing of the Environment and Natural Resources Finance and Policy Committee.

Pete Aube, Chair
Minnesota Forest Resources Council
1530 Cleveland Ave. North
St. Paul, MN 55108 651-247-1367
eric.schenck@state.mn.us
<https://mn.gov/frc/>

Cc: Pete Aube, Chair
Rick Horton, Policy Committee
Patty Thielen, DNR



January 26, 2024

Representing:

Commercial Logging Contractors Conservation Organizations County Land Commissioners Department of Natural Resources Environmental Organizations Forest Products Industry Games Species Management Indian Affairs Council Labor Organizations Nonindustrial Forest Landowners Research and Higher Education Resort and Tourism Industry Secondary Manufacturing USDA – Forest Service

Consumer Affairs Office
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul MN 55101

RE: PUC Docket Number E-999/CI-23-151

Commissioners,

The Minnesota Forest Resources Council (MFRC) is a 17-member board created under the Sustainable Forest Resources Act (Minnesota Statute Chapter 89A) to develop policy recommendations to the Governor and federal, state, and local governments and to encourage the adoption of sustainable forest management policies and practices. Council members represent a wide range of forest resource interests. See <https://mn.gov/frc/> for more information.

The MFRC has taken a strong interest in the potential ecological, economic, and social impacts that climate change poses to our forests. The following reports clearly demonstrate these threats and quantify how forests absorb carbon and store it in ecosystem pools and harvested wood products:

MFRC Climate Change and Minnesota's Forests 2020
MRFC Carbon in Minnesota's Forests 2022
MFRC Forest Carbon Dashboard

Our forests also provide the means to reduce atmospheric carbon levels, sustainably meet societal needs for goods and services, support rural economies, and meet the energy demands of the future. Sustainably sourced renewable wood products can be substituted for fossil-fuel intensive feedstocks in energy production. This has multiple benefits: reducing the release of fossil carbon as well as harmful sulfur and mercury; reducing forest wildfire risk; increasing forest health; sustaining rural economies; reducing waste sent to landfills; and reducing reliance upon imported fossil fuels. In 2022 the MFRC passed the below-linked Resolution entitled, "Supporting Minnesota's Climate Change Goals Through Development of Sustainable Forest Products Markets." It details the abundance of renewable woody biomass available in Minnesota's forests and the many benefits of finding uses for these materials. We support new and expanded Minnesota markets for forest and mill residuals and encourage elected and appointed officials to "Include woody feedstocks in statewide fuel or energy standards and/or offer broadly available production incentives for low carbon renewable biofuels derived from woody biomass or other bioenergy feedstocks."

MFRC Resolution 2022-1 Develop Markets For Forest Residuals

PUC Docket Number E-999/CI-23-151 is currently collecting public comments on Implementing Changes to the Renewable Energy Standard and the Newly Created Carbon Free Standard under Minn. Stat. § 216B.1691. There is a real opportunity to meet the carbon free energy by 2040 goal by converting coal-burning power plants to enable the use of renewable woody biomass feedstocks. This is already a practice at District Energy in St. Paul, Minnesota Power's Hibbard facility in Duluth, and Hibbing Public Utilities.

Producing electricity with little to no net carbon dioxide (CO₂) emissions is a crucial step in mitigating climate change and reducing the environmental impact of energy production. It involves balancing the amount of carbon emissions released into the atmosphere during the generation of electricity with an equivalent amount of carbon removal or offsetting measures. The goal is to achieve a net-zero carbon footprint for the entire electricity generation process.

A carbon neutral designation for renewable woody biomass is important in order for utilities to make significant investments in converting coal-fired power plants to use woody biomass. Utilities need assurance that the subsequent energy production from those facilities will meet the requirements of Minn. Stat §216B.1691 as amended by the Legislature in 2023. These facilities will be necessary to provide reliable and affordable base-load power for consumers, supplemented by other renewable energy sources that may have limited production at times due to the vagaries of weather.

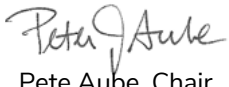
Forestry is the only economic sector that is net negative in its carbon emission. Making the Forestry sector more net negative will help Minnesota meet its targets for carbon net zero, and with opportunities in Forestry we can broaden climate smart contributions across Minnesota. This will also create greater participation in the green economy, an important goal of the Governor Walz Climate Action Framework and a requirement of Minnesota Statutes 2022, section 216B.1691, subdivision 9, Local Benefits.

Minnesota's forests produce an abundance of under-utilized renewable raw materials in the form of mill residues, tree tops/limbs, salvage from fires/insect damage, and tree species with limited markets. The MFRC has established forest residue harvest guidelines to ensure that sufficient woody materials are left onsite to provide wildlife habitat and protect forest soil productivity (<https://mn.gov/frc/issues/biomass/>). Kukrety, et al. (2015) demonstrate that at an average rate Minnesota could potentially produce a sustainable annual residue harvest of 537,900 tons of oven-dried material. This would have a power generation potential of 613.7 million Kilowatt-hours (enough to power 56,871 homes). They estimate reduced emissions of 550,933 t CO₂e annually and avoided emissions of 594,800 – 2,000,000 t CO₂e per year, for a net emission reduction potential of 970,000 – 2,785,500 t CO₂e annually over the use of coal. This would be the equivalent of removing 96,782 cars from the road per year.

Minnesota's renewable energy objectives as defined within Minnesota Statutes section 216B.1691, subdivision 1(c)(5) list biomass as a qualifying renewable energy source for eligible energy technologies to generate carbon-free electricity. Minnesota Forest Resources Council recommends that the Minnesota Public Utilities Commission provide clarification by including renewable woody biomass as a qualifying renewable energy source for eligible carbon-free energy technologies. This definition should not be constrained by forest type, harvest method, or landownership, so long as the MFRC Site-Level Guidelines are fully considered.

If you have questions or require further input please contact MFRC Executive Director Eric Schenck at 651-247-1367 or eric.schenck@state.mn.us.

Thank you for your consideration,



Pete Aube, Chair
Minnesota Forest Resources Council

References:

Sidhanand Kukrety, David C. Wilson, Anthony W. D'Amato, and Dennis R. Becker. 2015. Assessing sustainable forest biomass potential and bioenergy implications for the northern Lake States region, USA. *Biomass and Bioenergy* 81 (2015) 167-176. 10,791 KWh per home annually per EPA: <https://www.eia.gov/tools/faqs/faq.php?id=97&t=3> Megaton CO₂e to car number converter: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>



Testimony to the Senate Transportation Committee
March 4, 2024

I am Eric Schenck, executive director of the Minnesota Forest Resources Council. The Minnesota Forest Resources Council was legislatively established through the Sustainable Forest Resource Act (MFRC, MN Stat. 89A) to develop policy recommendations for the Governor and Minnesota State Legislature that promote sustainable management, use, and protection of the Minnesota's forest resources. This testimony is supported by MFRC resolution 2022-1 adopted by the Council on January 18, 2022.

In 2016, Washington state made national news when an Alaska Airlines commercial jet flew from Seattle to Washington, DC, using a jet-fuel blend containing 20 percent wood-based biofuel from Pacific Northwest forest residuals. This dramatic achievement demonstrates the potential for Minnesota to also lower greenhouse gas emissions in our state by supporting transportation policies that support wood-based biofuels.

The Minnesota Forest Resources Council urges the committee to 1) include “woody biomass” as an eligible biofuel feedstock within Minnesota’s Clean Transportation Standard (CTS) policy and 2) support, through credit generation or other financial means, sustainable forest management practices that further lower life-cycle greenhouse gas emissions associated with woody biomass feedstocks. These inclusions help ensure that the CTS capitalizes on the environmental and economic benefits afforded by engagement of Minnesota’s sustainable forestry sector.

These two recommendations directly support the Clean Transportation Standard (CTS) policy objective to reduce carbon emissions from Minnesota’s transportation sector through a transition to low carbon-emitting fuels. Woody biomass a biofuel source offers an advantage to this objective due to its low carbon intensity (CI) score. For example, diesel fuel refined from fossil fuel petroleum has a CI of 90, biodiesel made from soybeans has a CI of 58, while renewable diesel derived from woody biomass has a CI of 8. Therefore, transitioning to woody biomass biofuels offers a rapid pathway to reducing transportation sector emissions.

Minnesota has a sustainable supply of woody biomass that is vast, underutilized, and rapidly increasing on private, public, and urban forestland. This is partially attributed to rising tree mortality associated with climate influenced weather, invasive insects, and tree disease. The incorporation of woody biomass in CTS policy enables market development for this underutilized wood to deliver not yet realized economic benefits to communities while reducing transportation sector emissions. Moreover, CTS support and incentives for sustainable forest management practices can create new financial and management opportunities to adaptively manage Minnesota forests. This additional support of proactive measures to increase forest resilience amid climate changes can fortify Minnesota’s already robust sustainable forest management framework**.

Today, innovative technologies are rapidly transforming woody biomass into an economically viable feedstock for renewable and low-carbon diesel, sustainable aviation fuel, and other biofuels. The inclusion of Minnesota’s sustainable forestry sector in CTS policy will spur needed innovation and participation in emerging markets—both of which are important strategies to achieving the environmental, economic, and societal benefits of climate action sought by Minnesota’s Climate Action Framework.

Thank you for considering this testimony. I am glad to answer any questions the Committee may have.

Eric Schenck, MFRC Executive Director, Phone: 651-247-1367 Email: eschenck@state.mn.us Website: <https://mn.gov/frc/>

**** Minnesota uses a sustainable forest management framework that includes climate change considerations in forest planning and management decisions. The Minnesota Forest Resources Council (MFRC) also is developing methodology to track carbon sequestration, carbon storage, and carbon emissions more accurately within the state's forestry sector.**



Testimony to the House Environment and Natural Resources Finance and Policy
April 16, 2024

I am Eric Schenck, executive director of the Minnesota Forest Resources Council (MFRC). The 17 stakeholder members of MFRC are statutorily responsible for providing policy recommendations to the Legislature that promote sustainable management, use, and protection of the Minnesota's forest resources. This testimony is supported by Council resolution 2022-1 adopted on January 18, 2022.

A year ago, Washington became the third state in the country to implement a clean transportation fuel standard. Prior to this, **Washington State also made national news in 2016 by flying an Alaska Airlines commercial jet from Seattle to Washington, DC. What made this flight noteworthy was that it used a biofuel derived from wood.** This dramatic achievement demonstrates the potential for Minnesota to also lower greenhouse gas emissions of the transportation sector by supporting wood-based biofuels, including Sustainable Aviation Fuel.

MFRC has three recommendations for this committee to consider: 1) include woody biomass as an eligible renewable biofuel feedstock for Sustainable Aviation Fuel (SAF), 2) include woody biomass as an eligible feedstock for Sustainable Aviation Fuel under a Clean Transportation Standard (CTS); and 3) support, through fuel credit generation, all sources of woody biomass that further lower life-cycle greenhouse gas emissions associated with Sustainable Aviation Fuel. Please consider the following:

First, using low carbon emitting woody biomass for biofuels vastly reduces carbon emissions compared to petroleum-based fuels and provides a more rapid pathway to achieving Minnesota's emission reduction goals. To understand this potential, simply compare the Carbon Intensity (CI) of 8 for wood-based renewable diesel, with soybean-based biodiesel's CI of 58, and petroleum diesel's CI of 90+. Similar dramatic carbon emission benefits are associated with using renewable woody biomass for Sustainable Aviation Fuel.

Second, Minnesota has a sustainable supply of woody biomass that is vast, underutilized, and rapidly increasing on private, public, and urban forestlands. SAF can support sustainable forest management by providing a market for important forestry measures and actions that will further enhance forest resiliency to climate change.

Finally, innovative technologies are rapidly transforming woody biomass into an economically viable feedstock for sustainable aviation fuel, renewable diesel, and other biofuels. Eligibility of woody biomass as a SAF feedstock supports the forestry sector, spurs more technological innovation, and promotes the environmental, economic, and societal benefits sought by Minnesota's Climate Action Framework.

Eric.schenck@mn.state.us 651-247-1367 Minnesota Forest Resources Council, St. Paul, MN <https://mn.gov/frc>



Minnesota Forest Resources Council Resolution 2022-1
"Supporting Minnesota's Climate Change Goals
Through Development of Sustainable Forest Products Markets"

1. WHEREAS, Minnesota is facing multiple challenges related to over-abundance of mill residuals, forestry residuals, and underutilized tree species.

2. WHEREAS, uneven policy support in Minnesota for bioenergy production using mill residuals, forest residuals, excess woody biomass, dead trees, diseased trees or otherwise unmarketable timber has resulted in the loss of a number of markets for such woody material.
3. WHEREAS, management of trees killed by extreme storm events, diseases, or insects such as emerald ash borer and spruce bud worm, is a critical problem in Minnesota that is expected to continue to grow over time with climate change.
4. WHEREAS, dead and dying wood, if unmanaged, creates multiple risks including risk of wild fire, habitat loss, and loss of the biogenic carbon sink.
5. WHEREAS, active forest management and stewardship, supported by local markets, and following sustainable forest management practices and sustainable management plans, is essential to maintaining healthy, productive forests that are resilient and adaptable to climate change.
6. WHEREAS, under the direction of the Minnesota Sustainable Forest Resources Act (MN Stat. 89A) the Minnesota Forest Resources Council (MFRC) has developed forest management guidelines for the sustainable harvest of forest residuals and woody biomass.
7. WHEREAS, MFRC is charged by statute with developing recommendations to the governor and to state government with respect to forest resource policies that result in the sustainable management, use, and protection of the state's forest resource.
8. WHEREAS, it is important that MFRC recommendations for new market attraction strategies to support sustainable forest management not create additional competition for otherwise marketable wood species.
9. AND WHEREAS, it is desirable for Minnesota to be a leader in developing and attracting the most advanced forest products industries to the state and to set the example for sustainable management of its forests
10. BE IT THEREFORE RESOLVED, the Minnesota Forest Resources Council, consistent with its statutory responsibility, recommends support for new and expanded Minnesota markets for forest and mill residuals, and other types of sustainably harvested woody biomass and encourages elected and appointed officials to:
 - a. Include woody feedstocks in statewide fuel or energy standards and/or offer broadly available production incentives for low carbon renewable biofuels derived from woody biomass or other bioenergy feedstocks.
11. BE IT FURTHER RESOLVED, the Minnesota Forest Resources Council commits to developing an action and communications strategy to further align new market development and sustainable forest management by:
 - a. Evaluating appropriate sources of material that could be considered “woody biomass” or “forest residuals” such as mill residuals, harvest residuals, wood waste, diseased wood, unmerchantable wood, and other material removed for fuel reduction.
 - b. Describing how harvesting of these materials acknowledges Tribal treaty rights while integrating with existing forest management plans, timber harvesting guidelines, and forest certification standards.
 - c. Recommending policies and strategies for attracting new markets that align with the state’s management objectives, to potentially include energy products (e.g commercial and residential heating, pellets, biofuels) and non-energy products (e.g thermally-modified wood, biochar, activated carbon, biobased chemicals and extractives, and engineered and specialty wood products).

Motion supporting the resolution “Supporting Minnesota’s Climate Change Goals Through Development of Sustainable Forest Products Markets” (MFRC Resolution 2022-1) as a 2022 priority policy recommendation of the Minnesota Forest Resources Council; and directing the MFRC Policy Committee, MFRC Landscape Advisory Committee, and MFRC Communications Committee to collaboratively develop an action and communications strategy for conveying the recommendation to the Governor, Legislature, and stakeholders.

AYES (9)

Craig Engwall, Janet Erdman, Kathleen Preece, Katie Fernholz, Kim Berns-Melhus, Kory Cease, Mike Kilgore, Pete Aube, Rick Horton

NAYS (1) Keith Karnes
ABSTAIN (2) Forrest Boe, Jim Manolis
ABSENT (4) Bob Owens, Connie Cummins, Deb Theisen, Scott Pittack

Attested to by: Pete Aube

Pete Aube, Chair, Minnesota Forest Resources Council

01/18/2022

Date



Written Testimony to the House Ways and Means Committee
USING WOOD TO FLY PLANES
Amendment Supporting Biomass Eligibility for SAF Credit Certification Under HF3911DE1
April 24, 2024

I am Eric Schenck, executive director of the Minnesota Forest Resources Council (MFRC). The 17 stakeholder members of MFRC are statutorily responsible for providing policy recommendations to the Legislature that promote sustainable management, use, and protection of the Minnesota's forest resources. This testimony is supported by Council resolution 2022-1 adopted on January 18, 2022.

MFRC has two recommendations for this committee to consider: 1) include woody biomass as an eligible renewable biofuel feedstock for Sustainable Aviation Fuel (SAF), and 2) include woody biomass eligibility for SAF credit certificates. HF3911DE1 bill language, as adopted by the Environment and Natural Resources Finance and Policy Committee, unfortunately excludes eligibility of woody biomass for SAF production and SAF credits.

Background: Sec. 6. Minnesota Statutes 2023 Supplement, section 41A.30, subdivision 1, states: "Sustainable aviation fuel" means liquid fuel that is "derived from biomass, as defined in section 41A.15, subdivision 2e." The definition of "Biomass" as stated in section 41A.15 means "any organic matter that is available on a renewable or recurring basis, including agricultural crops and trees, wood and wood waste and residues, plants including aquatic plants, grasses, residues, fibers, animal waste, and the organic portion of solid wastes".

HF3911DE1 amendment language (lines 123.17 to lines 123.21): " (b) If the sustainable aviation fuel for which the business is applying for a credit certificate was derived from biomass or from gaseous carbon oxides derived from biomass, **the business also must demonstrate that the biomass was: (1) grown on agricultural land** that had previously been cropped or hayed in five or more of the previous ten years; (problematic language in bold).

Unintended Consequence: As drafted, **HR3911DE1 excludes all the 41A.15 forms of biomass not grown on agricultural land.** Thus, trees, wood, wood waste, and wood residues coming from urban areas, forests, construction sites, and sawmills would not be eligible for SAF credit certification, and by default, would not be used as a low carbon emitting source of Sustainable Aviation Fuel production. **Alternative language to prevent this problem: "(b) If the sustainable aviation fuel for which the business is applying for a credit certificate was derived from biomass or from gaseous carbon oxides derived from biomass, and such biomass originated from agricultural lands,"**

WHY WOODY BIOMASS SHOULD BE ELIGIBLE FOR SAF CREDITS

Reason 1: Using low carbon emitting woody biomass for biofuels vastly reduces carbon emissions compared to petroleum-based and agriculture-based fuels and provides a more rapid pathway to achieving Minnesota's emission reduction goals. To understand this potential, simply compare the Carbon Intensity (CI) of 8 for wood-based renewable diesel, with soybean-based biodiesel's CI of 58, and petroleum diesel's CI of 90+. Similar dramatic carbon emission benefits are associated with using renewable woody biomass for Sustainable Aviation Fuel.

Reason 2: Minnesota has a sustainable supply of woody biomass that is vast, underutilized, and rapidly increasing on

private, public, and urban forestlands. Much of this available wood supply comes from trees that are dead, dying, diseased, or damaged by invasive pests, tree diseases, and extreme weather. SAF can support sustainable forest management by providing an economic market and financial incentives for forestry measures and actions that will enhance forest resiliency against climate change.

Reason 3: innovative technologies are rapidly transforming woody biomass into an economically viable feedstock for sustainable aviation fuel, renewable diesel, and other biofuels. Eligibility of woody biomass as a SAF feedstock supports the forestry sector, spurs more technological innovation, and promotes the environmental, economic, and societal benefits sought by Minnesota's Climate Action Framework.

CAN WOOD REALLY BE USED AS A FUEL TO FLY PLANES?.....YES!

In 2016, Washington State made national news by flying an Alaska Airlines commercial jet from Seattle to Washington, DC. using sustainable aviation fuel derived from wood. This dramatic achievement demonstrates the potential for Minnesota to also lower greenhouse gas emissions of the transportation sector by supporting wood-based biofuels, including Sustainable Aviation Fuel.

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APPENDIX B



Minnesota Forest Resources Council Resolution 2023-2 "Examine the Implications of Carbon Markets in Minnesota"

Background

The September 2020 report of the Minnesota Forest Resources Council (MFRC) Research Advisory Committee (RAC) entitled "Climate Change and Minnesota's Forests"¹ thoroughly examined the role our forestlands play in sequestering and storing carbon by examining the full carbon cycle. Understanding the dynamics of carbon as it moves from atmosphere to living trees to forest products helps us make informed choices about forest management alternatives. This document should serve a key role in any efforts to modify forest management to address climate change.

In June 2022 the RAC released the report, "Carbon in Minnesota's Forests: Current Status and Future Opportunities"². It identified several information needs, potential policy actions and funding priorities surrounding forest carbon management in the state. These in turn were ranked by Council members. The two highest priority items are currently being addressed by the MFRC Ad Hoc Committee on Climate Change and Carbon.

The third ranked topic (score = 4.0) is, "There remains great uncertainty about the long-term effects of lands enrolled in forest carbon programs and impacts to available wood for forest product markets".

Proposed actions include:

- a. Conduct review of existing carbon programs, including those outside MN that may be relevant to Minnesota forests and forest landowners.
- b. Identify relevant areas of concern, further research opportunities from results of review, identify opportunities for mitigating sustainable forest management concerns, including wood supply for forest product markets.
- c. Recommend Carbon Credit Forest Management Report appropriation to state legislature.

There are significant concerns that carbon markets that focus on paying landowners to not harvest forests will constrain fiber supplies. The forest products industry employs over 69,000 Minnesotans, generates \$17.4 billion in gross sales and results in nearly \$500 million in state and local tax payments (Minnesota DNR February 2022). The MFRC has produced numerous reports on the competitiveness of the industry in the state (most recently in 2014), and in each we have identified fiber supply and cost as one of the most impactful constraints on competitiveness in Minnesota.

Other concerns have been raised about the potential impact of private lands carbon offset markets on private landowners. At the September 19, 2022 MFRC Minnesota Private Lands Forest Stewardship Working Group meeting panelists representing Soil & Water Conservation Districts, Consulting Foresters, Minnesota Forestry Association, and Minnesota Tree Farm expressed concern about how to advise landowners about private carbon markets.

Carbon offset markets also have potential benefits. They can monetize currently undervalued ecosystem services provided by older forests. They provide income to forest landowners that could incentivize establishing new forests and may help keep forests forested. However, there are very valid concerns about impacts to traditional markets and other forest benefits.

References:

1. Friesen, H., (2020). Climate change and Minnesota's forests: a report prepared for the Minnesota Forest Resources Council by the Research Advisory Committee.
2. Russel, M., C. Edgar, M. Windmuller-Campione, R. L. Moser, E. Sager, J. Alder, J. Zobel, & C. Babcock. (2022). Carbon in Minnesota's Forests: Current Status and Future Opportunities. A report prepared for the MFRC.

Resolution

1. Whereas, Minnesota's forests provide opportunities for increased mitigation of greenhouse gas emissions through carbon absorption, carbon storage in the ecosystem and in wood products, reduced emissions from decay, and by using wood products in the place of more fossil fuel-intensive materials; and
2. Whereas, forest carbon offset markets that focus solely on ecosystem carbon storage have the potential to restrict fiber supplies and have financial implications for landowners; and
3. Whereas, the current design of forest carbon offset markets focused on reduced timber harvest prevents advancing the circular economy by restricting the development and use of bio-based products. Restricting the amount of wood fiber available for existing industry also impacts society's ability to substitute renewable wood-based products for unsustainable fossil fuel-based products in order to mitigate climate change; and
4. Whereas, there is a need to fully understand if forest carbon credits are incentivizing sustainable forest management practices; if potential impacts on wood products economies, forest health, wildfire risk, and wildlife are properly understood and accounted for; and if forest carbon credits are producing real climate mitigation benefits, and
5. Whereas, per Minnesota Statutes 89A Subd2, it is the role of the Minnesota Forest Resources Council to recommend policies and practices that: foster the productivity of the state's forests to provide a diversity of sustainable benefits at site levels and landscape levels; enhance the ability of the state's forest resources to provide future benefits and services; and foster no net loss of forest land in Minnesota;
6. BE IT THEREFORE RESOLVED, the Minnesota Forest Resources Council recommends that the Minnesota Forest Resources Council should examine the tradeoffs, potential implications, and potential benefits of carbon markets on Minnesota's landowners, economy and forest ecosystems by pursuing a state appropriation to contract developing a Forest Carbon Offset Market Report to the state legislature. This report shall include:
 - a. A comprehensive review of existing carbon programs, including those outside Minnesota, that may be relevant to Minnesota forests and forest landowners.
 - b. A comprehensive analysis of carbon credit programs operating in the state, that includes:
 - i. A summary of their program requirements, funding mechanisms, length and terms of contracts, carbon accounting schemes, and accreditation mechanisms,

- ii. An evaluation of each program's forest management plan and implementation requirements,
 - iii. An evaluation of each program's use of the full carbon cycle to balance atmospheric carbon absorption rates, ecosystem carbon storage, reduced emissions from decay, carbon storage in products,
 - iv. An evaluation of each program's additionality, leakage, and permanence,
 - v. An assessment of the potential tradeoffs impacting the people of Minnesota, the state's economy, and future forest conditions (e.g., forest types, age classes, forest health, climate resilience, etc.).
- c. An analysis of carbon credit regulatory frameworks in other states.
 - d. A description and analysis of concerns, future research needs, and opportunities for mitigating sustainable forest management concerns identified in this report, including wood supply for forest product markets.

AYES (13) Pete Aube, Tim Wegner, Rick Horton, Mike Kilgore, Bob Owens, Keith Karnes, Jim Manolis, Deb Theisen, Janet Erdman, Kory Cease, Michael Stansberry, Katie Fernholz, Kathleen Preece

NAYS (0)

ABSTAIN (1) Patty Thielen

ABSENT (2) Kim Berns-Melhus, Scott Pittack

Attested to by: Pete Aube
 Pete Aube, Chair, Minnesota Forest Resources Council

01/17/2023

Date



Minnesota Forest Resources Council Resolution 2023-4

Resolution to adopt Retain County Managed Forestland in Minnesota as a policy recommendation of the Minnesota Forest Resources Council.

RETAIN COUNTY MANAGED FORESTLAND IN MINNESOTA

Background

Widespread tax delinquency of abandoned cut-over forestland in northern Minnesota began more than a century ago and peaked at about 8 million acres during the Great Depression. During this period tax forfeiture laws were established in an attempt to return these lands to private ownership. These laws provided for tax delinquent lands to forfeit into a state held trust and for the sale and management of these lands by the counties. Tax delinquency and forfeiture remained high into the 1960s and continues to a much lesser degree still today. Minnesota counties currently manage 2.8 million acres of tax-forfeited trust forestland across 16 northern counties.

These tax-forfeited forestlands are now sustainably managed by Minnesota counties to provide income to the local taxing districts, as well as to fund continued forestland improvements that enhance ecological, social, and recreational values that benefit citizens of the state. Stewardship of these lands is substantially governed by third-party certification by the Forest Stewardship Council (1,127,250 acres) and/or the Sustainable Forestry Initiative (1,502,100 acres), further ensuring that they are managed in a socially, economically, and ecologically responsible manner. Professional county forest management programs follow the Minnesota Forest Resources Council Voluntary Site Level Guidelines and timber harvesting is conducted by Minnesota Logger Education Program-trained loggers. Harvested forests are quickly reforested by the counties, planting 2.3 million tree seedlings and direct seeding over 4,300 acres each year.

County-managed forests provide contiguous areas of natural habitat across the landscape to the benefit of both game and non-game wildlife; critical and sensitive habitats for rare, threatened and endangered flora and fauna; mitigation of the effects of wildfires, insects and disease outbreaks; watersheds that sustain clean air and clean water in wetlands, lakes and rivers; access and resources essential for tribal communities to exercise their retained treaty rights; climate change mitigation benefits through forest soil and peatland conservation, wetland retention, carbon storage and sequestration; and public use and recreation for social, cultural, and spiritual benefits. These forestlands are essential for 9,186 miles of locally sponsored grant-in-aid recreational trail systems across these counties.

Timber sale programs in these counties generate an average of 690,000 cords of timber annually, which accounts for 24% of the annual stumpage in the state. Forestry-derived employment in these counties provides 17,504 direct jobs totaling \$1.13 billion in labor income, supporting Minnesota's 5th largest manufacturing industry. These county-managed lands generate an average of over \$28 million per year. After expenses and investments in beneficial land improvements, all remaining funds are apportioned to taxing districts in accordance with Minnesota Statute Chapter 282. Funding goes to the school district, county, township, or municipality where the timber was harvested, and provides annual funding for teachers in rural schools, for local road improvements, for volunteer emergency and fire protection, and for community parks and trails.

In addition to forestland management, counties also manage tax-forfeited rural, residential, and commercial properties, typically remediating them before returning them to the tax rolls. Remediation of these properties can include demolition of neglected buildings, blight clean-up, well capping, removing leaking tanks, and other actions. Many of these remediation and cleanup costs are funded from the proceeds of county timber sale programs before apportionment.

On May 25, 2023, the U.S. Supreme Court ruled on *Tyler v. Hennepin County*, opining that Minnesota's tax forfeiture laws unconstitutionally retain the excess value of real property above the tax debt in violation of the Takings Clause of the Fifth Amendment.

Before the court decision, five bills¹ were introduced in the 2023 Minnesota state legislature, prematurely attempting to address this issue by proposing changes to Minnesota's tax-forfeiture laws. If enacted, the consequences of these bills would significantly impact the ability of counties to retain and sustainably manage the 2.8 million acres of tax-forfeited forestlands in Minnesota. These consequences highlight the importance of future potential legislative changes to Minnesota tax forfeiture laws to recognize and acknowledge the unique circumstances of northern counties sustainably managing these tax-forfeited forestlands compared to counties in the rest of the state, which primarily manage recent forfeitures.

Resolution

1. WHEREAS, Minnesota counties sustainably manage tax-forfeited trust forestlands on behalf of the State of Minnesota in accordance with Minnesota Statute Chapter 282; and
2. WHEREAS, the Supreme Court of the United States opinion on *Tyler v. Hennepin County* has challenged certain elements of Minnesota Statute Chapters 279-282 and has created claims for past and future equity compensation; and
3. WHEREAS, legislation has been introduced in the Minnesota legislature that would jeopardize the ability to retain and make long-term sustainability investments in forest lands managed by Minnesota counties; and
4. WHEREAS, disposal of these undeveloped rural forestlands, which are highly intermingled with other ownerships, would greatly diminish the public forest benefits while dramatically increasing the county burden to provide public services; and
5. WHEREAS the local taxing districts would likely request state General Fund money to replace the lost revenue from the county timber sale programs:

BE IT THEREFORE RESOLVED:

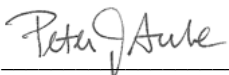
Under the direction of Minnesota Statute 89A Subdivision 2, the Minnesota Forest Resources Council advises the Minnesota Legislature and Governor to ensure that any modifications to Minnesota Statute

Chapters 279-282 recognize and protect the unique significance of the 2.8 million acres of tax-forfeited lands managed by Minnesota counties. Furthermore, the Council strongly advises that the Minnesota Legislature and Governor ensure any future legislative actions, including modifications to these tax-forfeiture laws, fully support the retention and sustainable management of these public forests by the counties and do not impact the full range of benefits (e.g., timber, outdoor recreation, wildlife habitat, clean water, etc.) these forests provide to the public.

AYES (15) Pete Aube - Chair, Keith Karnes, Kory Cease, James Manolis, Janet Erdman, Kathleen Preece, Deb Theisen, Bob Owens, Kim Berns-Melhus, Mike Kilgore, Rick Horton, Tim Wegner, Michael Stansberry, Scott Johnson, Dale Erickson

NAYS (0)

ABSENT (2) Patty Thielen, Dale Gentry

Attested to by: 
Pete Aube, Chair, Minnesota Forest Resources Council

07/18/2023

Date

Proposed Minnesota Legislation pertaining to tax forfeiture introduced in 2023:

House File 1929

House File 2812

Senate File 1109

Senate File 3283

Senate File 3315

APPENDIX C



Minnesota Forest Resources Council Resolution 2022-2 “Contributing to Minnesota’s Climate Change Goals by Increasing Minnesota Nursery Capacity”

1. WHEREAS, Minnesota's forests provide critical benefits for the economy, recreation, wildlife, clean water, biodiversity, and greenhouse gas mitigation; and
2. WHEREAS, the state forest nursery once produced over 12 million seedlings per year to support those benefits, but now produces < 4 million; and
3. WHEREAS, the State Nursery is outdated, inefficient, and incapable of producing containerized seedlings; and
4. WHEREAS, a modernized state forest nursery and additional private nurseries could play a critical role in mitigating climate change and increasing other benefits forests provide; and
5. AND WHEREAS, per Minnesota Statutes 89A Subd2, it is the role of the Minnesota Forest Resources Council to recommend policies and practices that: foster the productivity of the state's forests to provide a diversity of sustainable benefits at site levels and landscape levels; enhance the ability of the state's forest resources to provide future benefits and services; and foster no net loss of forest land in Minnesota;
6. BE IT THEREFORE RESOLVED, the Minnesota Forest Resources Council recommends enhancing nursery capacity in both State run and privately owned forest nurseries by:
 - a. Upgrading State Forest Nursery facilities by 2027, to produce both containerized and bare-root seedlings, using modern technology to track seed-source locations, while minimizing risks to seeds that are stored on site.
 - b. Increasing State Forest nursery production from current capacity of 4 million trees per year to 10 million trees per year by 2027, to double SFN capacity again by 2032, and to continue to increase SFN production capacity as necessary to plant up to 1 million acres of new forest by 2050.

- c. Providing long-term contracts and other incentives to support the expansion of private nursery operations in furtherance of reforestation goals.
- 7. BE IT FURTHER RESOLVED, the Minnesota Forest Resources Council recommends enhancing tree seedling capacity, production, and delivery by:
 - a. Promoting collaborative efforts to reforest 1-million acres of appropriate non-forested lands by 2050.
 - b. Incentivizing private land tree planting through cost-share programs, partnerships, and projects to fully utilize planned increases in nursery stock.
 - c. Increasing funding for state forest nursery staff and contracted seed collectors to ensure adequate labor for the entire process from collecting seed to preparing seedlings for distribution.
 - d. Utilizing tree seed orchards, localized tree storage/distribution centers, and other nursery supply diversification strategies.
 - e. Re-evaluating the current “enterprise” model for the State Nursery that depends upon annual seedling sales to cover operational costs.
 - f. Removing legislative prohibitions on state forest nursery production capacity and seedling sales.
 - g. Implementing quality assurance strategies to improve seedling survival, tree genetics, disease resistance, and species suitability for changing climate.

Motion adopting “Contributing to Minnesota’s Climate Change Goals by Increasing Minnesota Nursery Capacity” (MFRC Resolution 2022-2) as a 2022 priority policy recommendation of the Minnesota Forest Resources Council; and directing the MFRC Chair to submit the resolution to The Honorable Governor Timothy Walz, and to the Chairs and Ranking Minority Members of the appropriate House and Senate Committees of the Minnesota State Legislature.

AYES (11)	Craig Engwall, Janet Erdman, Kathleen Preece, Katie Fernholz, Kim Berns-Melhus, Kory Cease, Mike Kilgore, Pete Aube, Rick Horton, Keith Karnes, Jim Manolis
NAYS	None
ABSTAIN (1)	Forrest Boe
ABSENT (4)	Bob Owens, Connie Cummins, Deb Theisen, Scott Pittack

Attested to by: Pete Aube
 Pete Aube, Chair, Minnesota Forest Resources Council

01/18/2022
 Date



Minnesota Forest Resources Council Resolution 2022-4
“Supporting Minnesota’s Informational Needs
For Sustainable Forest Resource Management, Products, and Policies”

1. WHEREAS, the Minnesota Forest Resources Council (MFRC) is charged by the Sustainable Forest Resources Act (SFRA) with developing recommendations to the governor and to state government with respect to forest resource policies that result in the sustainable management, use, and protection of the state's forest resources.
2. WHEREAS, MFRC's Research Advisory Committee (RAC) also is charged by the SFRA to undertake an assessment of strategic directions in forest resources research and to promote these informational needs to forest managers and users, and to the public.

3. WHEREAS, the Interagency Information Cooperative (IIC), as defined by the SFRA, is maintained by the dean of the College of Food, Agricultural and Natural Resources Sciences at the University of Minnesota for the purposes of coordinating the development and use of forest resources data and information in the state.
4. AND WHEREAS, up-to-date, science-based, forest resource information is essential for achieving the purposes of the Sustainable Forest Resources Act, benefitting the people of Minnesota, and protecting the sustainable future of Minnesota's forest resources.
5. BE IT THEREFORE RESOLVED, the Minnesota Forest Resources Council, consistent with its statutory responsibility, recommends an annual appropriation to the Council to support securing immediate and ongoing priority information, data, and research needs as determined by MFRC's 17 stakeholder representatives.

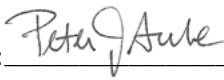
Motion adopting a resolution "Supporting Minnesota's Informational Needs For Sustainable Forest Resource Management, Products and Policies" (MFRC Resolution 2022-4) as a 2023-2024 priority policy recommendation of the Minnesota Forest Resources Council; and directing the MFRC Chair convey the recommendation to the Governor, Legislature, and stakeholders.

AYES (13) Tim Wegner, Deb Theisen, Katie Fernholz, Bob Owens, Pete Aube, Craig Engwall, Kory Cease, Jim Manolis, Janet Erdman, Kathleen Preece, Kim Berns-Melhus, Mike Kilgore, Rick Horton

NAYS (0)

ABSTAIN (0)

ABSENT (2) Keith Karnes, Scott Pittack

Attested to by: 
Pete Aube, Chair, Minnesota Forest Resources Council

01/16/2022

Date

The Minnesota Forest Resources Council

exists to help Minnesota residents, lawmakers, and forest professionals make sound decisions regarding the stewardship of public and private forestlands. Get the latest on our efforts by scanning the QR code to receive our email newsletter.



We also invite you to join the MFRC's bimonthly public meetings in-person or virtually. View the meeting schedule on our website at mn.gov/frc.

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