

MINNESOTA FOREST RESOURCES COUNCIL

2019-2020 Report to the
Minnesota Governor and
Legislature on Implementation
of the Sustainable Forest
Resources Act

February 2021



CELEBRATING
25 YEARS



Cover photograph by Hannah Friesen

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

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MFRC CHAIR



Pete Aube, MFRC Chair

Greetings Fellow Minnesota Forest Stakeholders,

We are pleased to provide the Biennial Report of your Minnesota Forest Resources Council (Council). As you read, we hope you can appreciate the dynamic changes and work products of the Council and our collaborators over its distinguished 25-year tenure, and the most recent biennium. The changes and demands are only fitting, since Minnesota's forests are truly dynamic, as are the societal, environmental, and economic forces in play in our Northstar state, and the world.

We want you to know that your forests and their sustainability stand at the forefront of the work of the Council. The 17 members, representing varied perspectives and stakeholder groups, were appointed by the Governor to serve and make a difference in something they care deeply about, and know Minnesotans do also. As you read, you will also see that there is much work to do.

The Council recently completed a new strategic planning process involving our many new council members and committee chairs. That process updated and recommitted to the MFRC mission and vision, and set strategic direction and work plans to promote and act on sustainable forestry opportunities and threats over the next two years and into our next quarter century.

We are energized to carry on important and challenging work on your behalf. We remain your Minnesota Forest Resource Council; authorized by statute, grounded in science and best practice, fueled by cooperation and collaboration, and accountable to all who care about Minnesota's forests.

Sincerely,

A handwritten signature in black ink that reads "Pete Aube". The signature is written in a cursive, flowing style.





OUR STORY—A 25 YEAR MILESTONE FOR SUSTAINABLE FOREST MANAGEMENT

The year 2020 marked the 25th anniversary of the establishment of the Minnesota Forest Resources Council (hereafter the MFRC or the Council). Although much has changed in the world since the MFRC was created, the Council's sustainable forest mandate is more relevant than ever. As we look towards the next 25 years, the MFRC faces new challenges—combating climate change, promoting innovative wood-product markets, expanding private land stewardship, and strengthening the human-forest connection are just a few. A quick review of the MFRC's historical timeline provides some helpful insight to how the Council will approach future work.



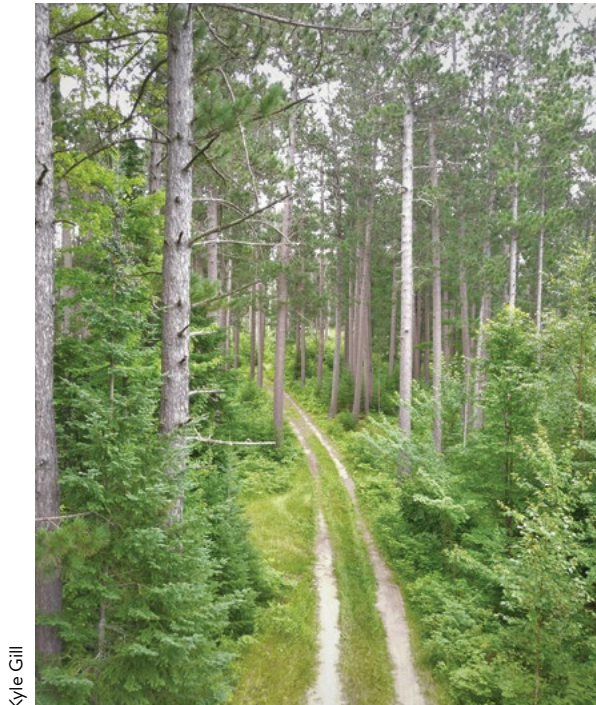
1989: A Time of Public Concern

The public reacts to increasing timber harvest levels, as demand for Minnesota's forest products rises to meet the needs of expanding pulp, oriented strand board (OSB), and sawmill production. Out of concern that these levels of harvest may not be sustainable, Minnesotans petition the state's Environmental Quality Board (EQB) to prepare a Generic Environmental Impact Statement (GEIS) on the effects of timber harvesting and forest management in Minnesota.



1994: GEIS Completion and Recommendations

The GEIS is completed by the independent consulting group Jaakko Pöyry Consulting, Inc. The final report to the EQB recommends the creation of a multi-stakeholder council responsible for developing sustainable forest management guidelines, plans, and policies.



Kyle Gill

1995: Creating a Blueprint for Forest Sustainability

In response to the GEIS, the Minnesota Legislature passes the Sustainable Forest Resources Act (SFRA, MN Statutes 89A), establishing the Minnesota Forest Resources Council (MFRC). The purpose of the statute is to advance sustainable forest policies, develop landscape-level sustainable forest plans, and implement site-level sustainable forest practices and guidelines.



Hannah Friesen

1998: Fulfilling Our Mandate

MFRC reviews and unanimously adopts its first set of voluntary site-level forest management guidelines. The guidelines were drafted using input from more than 60 stakeholders working in four technical teams covering forest soil productivity, historic and cultural resources, riparian zone management, and wildlife habitat. These science- and consensus-based voluntary site-level forest management guidelines blended existing water quality/wetland and visual quality best management practices with recent research on forest management sustainability, generating a comprehensive set of forest practices guidelines that provided a suite of cost-effective options for management.

1999 – 2020: Sustainability in Action

Voluntary implementation of site-level sustainable forest practices eventually becomes standard operating procedure for foresters and loggers in Minnesota. Annual training educates foresters and loggers on guideline details, and implementation rates are assessed by annual monitoring. At the same time, regional landscape plans bring community representatives together to create a shared future vision of their local forest resources. This local planning process, one of the first in the nation, considers not only economic values, but ecological and social values as well.

The MFRC recommends sustainable forest management policies to state, federal, and local governments. Adoption of these recommendations creates numerous programs that assist private landowners and supports forest management on public lands. Healthy sustainable forests—the goal of the SFRA—provide a range of benefits, including wood supply, non-timber forest products, maintenance of Minnesota’s biodiversity, outdoor recreation, and clean air and water.



Eli Sagor

Today: New Threats to Forest Sustainability

Current timber harvest in Minnesota has fallen to roughly half of 1995 levels—a reflection of heightened global competition and changing consumer demand for wood products. Declines in production—due to partial and full mill closures—have impacted the forest economy broadly, challenging mills throughout the interconnected supply chain, lowering the demand for sustainably-grown timber statewide, raising challenges for forestry workers and timber-dependent communities, and reducing the financial incentives for landowners to manage their forests.

Climate change is rapidly adding stress to Minnesota's forest ecosystems, making them more vulnerable to natural disturbances, such as disease, insects, drought, and wildfire. Forest professionals believe more responsive and intensive forest management actions, including prescribed burning, may be needed to avoid catastrophic impacts to Minnesota forests. Unfortunately, funding for management intervention is inadequate in the absence of local markets for forest products.

The division of large tracts of land into smaller parcels for the development of residences or businesses makes sustainable forest management more difficult. In particular, stewardship of small tracts of private forestland is a growing concern.

Today's challenges to the management of Minnesota's forests are occurring amidst a fundamental shift in how the public views nature and forest management. At the same time, there is a clarion call to reduce carbon emissions to combat global climate change. This creates an impetus to shift from fossil fuel and petroleum-based products to renewable energy sources such as sustainably grown and harvested woody biomass.

Discussion at the birch clearcut with reserves site as part of an October 2, 2019 UMN Sustainable Forests Education Co-operative workshop entitled SNF Climate Change Pocket Guide Workshop in the Isabella, MN area. A large percentage of the harvest area was in reserve patches including paper birch, which will provide new seed to regenerate the stand after a prescribed burn that was tentatively scheduled for spring 2020, the year after this harvest was completed.



Eli Sagor

Future: Preparing for Tomorrow's Threats and Opportunities

Minnesota forests are more important than ever to meet society's future needs for renewable energy, sustainable building products, clean water, and other critical social and environmental values. State-of-the-art technologies may provide for new uses of wood and woody residuals as a sustainable, renewable resource. These include creation of cellulosic biofuels, bio-thermal energy, bio-electricity, and expanded use of wood in new residential and commercial construction. In addition, the growth of carbon market opportunities in response to climate change may provide an innovative funding stream for the maintenance and protection of our forests, as well as carbon-focused, sustainable forest management.

The MRFC—representing broad stakeholder interests from environmental and conservation organizations, loggers and forest industry, private landowners, tourism, Native Tribes, Minnesota universities, and federal, state, and local government forestland stewards—is charged with navigating a consensus-based path through these forest-related threats and opportunities to achieve a sustainable future.

NRRI Executive Director and MFRC Research Advisory Committee member Rolf Weberg stands next to a newly installed moving bed torrefaction kiln at NRRI's Biomass Conversion Lab in Coleraine, MN. This kiln employs super-heated steam to process energy enhanced biomass.

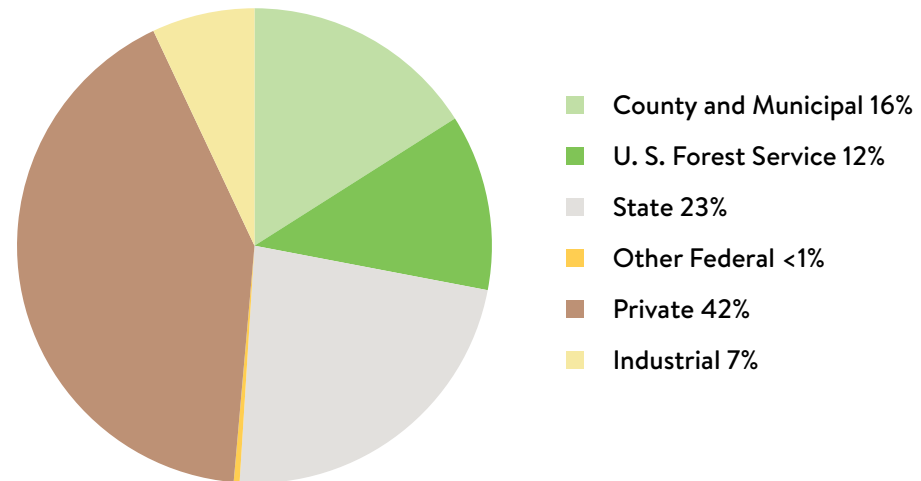
UWNRRI



MINNESOTA'S FORESTS

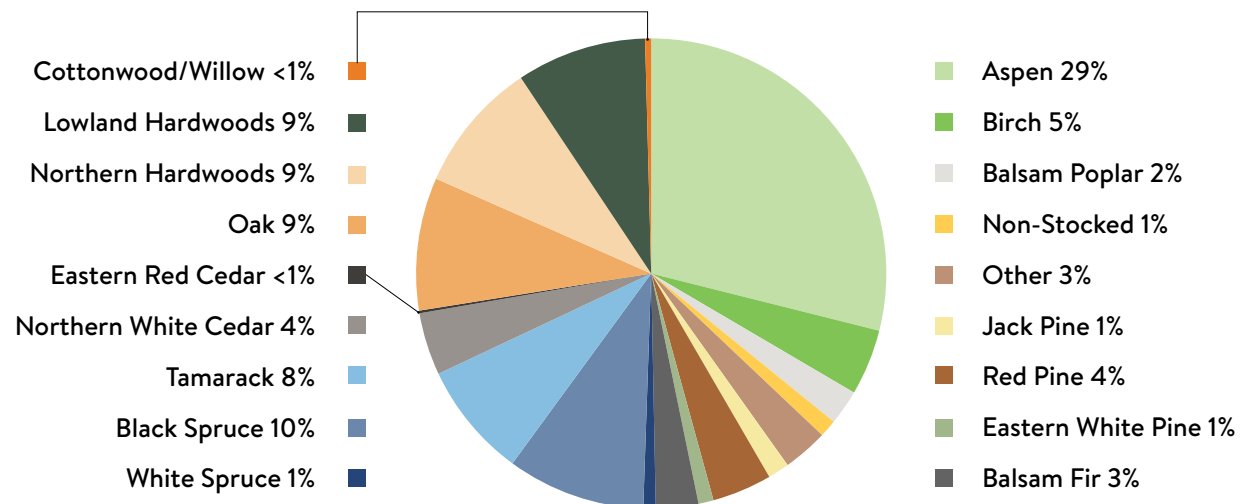
Of the approximately 54 million acres that make up the state of Minnesota, about 18 million acres, or roughly one-third of the state's land area, is forestland. Minnesota's forests are biodiverse, with more than 50 native tree species and hundreds of herbaceous and woody species making up the forest understory. Maintaining healthy, biodiverse forests is vital for ensuring that Minnesota's ecosystems properly function and continue to provide essential services. These services include protection of water and soil quality, filtering out pollution, recycling nutrients, aiding in ecosystem recovery following disturbances; and providing economic opportunity through the forest products, recreation, and tourism industries. Sustainable management of these forest resources is the charge of the MFRC and drives the MFRC's programming.

Timberland ownership in Minnesota by ownership type



Tribal forestlands, which were estimated as approximately 4% of state forested lands in 2018, are included in the "Private" category in the chart above.

Percent coverage of common Minnesota forest types





OUR MANDATE: SUSTAINABLE FOREST RESOURCES ACT (MN STATUTES 89A)

The Sustainable Forest Resources Act established sustainable forestry as the policy of the State of Minnesota. The SFRA requires sustainable management and use of the state's forest resources, encourages cooperation and collaboration in forest management actions, emphasizes consideration of forest resource issues across a range of scales, and recognizes and incorporates diverse perspectives regarding the management and use of the state's forest resources. The SFRA also created the 17-member MFRC to lead and coordinate efforts related to implementation of the SFRA. The MFRC meets its statutory charge through four primary programs: sustainable forestry policy, landscape planning and coordination, site-level management guidelines, and applied forest research and monitoring.

SUSTAINABLE FOREST POLICY

The MFRC advises the Governor, as well as local, state, and federal policy makers, on sustainable forest policies and practices across all landownerships. In general, MFRC recommendations promote the establishment, retention, management, sustainable use, and protection of healthy, diverse, multi-valued forestland for the benefit and enjoyment of all Minnesotans.

LANDSCAPE LEVEL PLANNING AND COORDINATION

The MFRC works with partners to coordinate landscape-scale sustainable forest programs, projects, and activities within six of Minnesota's forested regions. Regional landscape committees, representing the interests of their local communities, develop the plans and serve as a forum for forestland owners and stakeholders to address forest resource issues in their region. This work provides a community-based approach for balancing the economic, environmental, and social values of forests unique to each region.

Field site discussion near the Isabella, MN, area on conifer strongholds that occurred during an October 2, 2019 UMN Sustainable Forests Education Co-operative workshop entitled "SNF Climate Change Pocket Guide Workshop."



Kyle Gill



Eli Sagor



SITE-LEVEL MANAGEMENT GUIDELINES

The MFRC develops and updates forest management guidelines to guide loggers, foresters, and landowners on the use of effective site-level practices to sustain our forest resources. The MFRC's forest management guidelines are practical, science-based approaches that work to protect wildlife habitat, soils, water quality, wetlands, aesthetics, and historic and cultural resources. Most importantly, though these guidelines are voluntary, they are widely adopted by loggers, managers, and owners of private and public lands as a means to minimize impacts to forest resources during management activities. The Minnesota Department of Natural Resources, in cooperation with the MFRC, monitors implementation of site-level management guidelines to assess compliance.

APPLIED FOREST RESEARCH

The MFRC identifies and supports key research needed to improve forest management and the sustainable use of forest resources. These efforts include work conducted by the MFRC's Research Advisory Committee (RAC) and its Applied Forest Research Program.

MFRC's former Director of Applied Research and Monitoring, Rob Slesak, surveys a research site in a spruce bog near Ely, MN.



2019 – 2020 PROGRAM HIGHLIGHTS

STRATEGIC PLAN GUIDES FUTURE ACTION

Under the co-direction of Chair Pete Aube and Committee Chairs, the MFRC created a strategic operational plan to guide its work over the next biennium and beyond. The plan puts into action the Council's two-pronged vision of being a recognized leader that promotes sustainable forest policies and practices, and of working collaboratively to ensure ecosystems thrive, the human spirit is fed, and forest products and services meet societal needs today and into the future.

The Council's six committees are leading implementation of the plan to address on-going and emerging threats to and opportunities for forest sustainability, with a particular focus on: understanding and mitigating the impacts of climate change on Minnesota's forest resource; promoting healthy and diverse forestry markets in order to fund the management of forest ecosystems; avoiding destructive wildfires, such as those occurring in other states; and supporting forest stewardship efforts among private woodland owners.





POLICY RECOMMENDATIONS: LOOKING AHEAD TO 21ST CENTURY ISSUES

MFRC's Policy Program meets its statutory mandate by conducting thorough analyses, producing reports, and writing issue statements that leverage the best available science, while representing the diverse perspectives of Council members and their representative stakeholder groups. These activities are managed by the MFRC's Policy and Information Committee (formerly known as the Information Management Committee), which was reconfigured and renamed in 2020 to reflect its charge to analyze and communicate key policy initiatives and recommendations.

In the last two years, the MFRC has focused its analysis on the following policy topics:

- Climate change adaptation, including ways that forest landowners, forest managers, and forest-dependent industries and communities can prepare for ecological, social, and economic changes related to climate change.
- Opportunities for Minnesota's forests to help mitigate atmospheric greenhouse gas levels, such as forest carbon markets.
- Forest products market strength and adaptation, including ways to support existing industry while also developing markets for emerging forest products.
- The creation of bio-energy markets for otherwise non-commercial tree species and related opportunities for woody biomass and mill residuals.

For 2021, MFRC's top policy recommendation is to extend the "sunset" clause for the Sustainable Forest Resources Act (which is currently set to expire on June 30, 2021). By extending the Act, the critical science-based programs and multi-stakeholder processes that have successfully protected forest sustainability for the past 25 years, can be brought to bear against climate change and other future threats.

LANDSCAPE PLANNING AND COORDINATION: COLLABORATION BUILDS OPPORTUNITY

The Landscape Planning and Coordination Program facilitates large-scale, cross-boundary forest management. Since its inception in 1997, the Landscape Planning and Coordination Program has worked through six regional landscape committees to:

- a) Create landscape-level forest management plans based on multi-stakeholder input.
- b) Enhance information sharing and relationship building through volunteer-driven meetings.
- c) Communicate local-level forestry issues and opportunities to Council Members.
- d) Promote coordinated management across ownerships.

The regional landscape committees operate through citizen-led meetings that bring together natural resource professionals and land managers from public agencies, private industry, and conservation organizations, as well as private woodland owners. The existence of this multi-stakeholder forum is particularly valuable due to the patchwork nature of Minnesota land ownership, which makes landscape-level forest management difficult without considerable cross-boundary coordination.



Lance Cheung, U.S. Department of Agriculture

Skiers enjoy the trails at the Pincushion trail system in the Superior National Forest, near Grand Marais, MN. The USDA-Forest Service utilizes “all lands” management to promote strong partnerships and collaboration across the landscape and provide for a diverse community of plants and animals, as well as products for human needs.



Eric Schenck

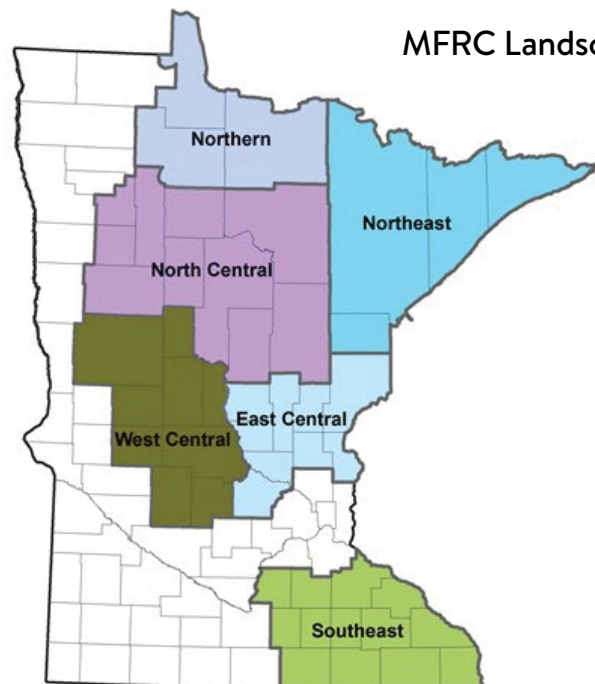
MFRC member Janet Erdman (right) and Southeastern Regional Landscape Committee Chair Larry Gates (left) enjoy an autumn hike with canine companion, Buck.

Second Generation Planning

By 2005, each of the six regional landscape committees had completed 10-year, comprehensive forest management plans. As of today, the North Central, Northeast, and Southeastern Committees have also completed second-generation plans, which update the original plans to consider the best available science and to address emerging issues and opportunities facing the local forested resource.

Currently, the East Central Regional Committee is undergoing its plan revision, with about 70 percent of its second-generation plan completed. Highlights of the revised East Central plan include special attention to current and anticipated impacts of climate change, consideration for challenges and opportunities facing local forestry markets, and strategies to help family forest owners increase their stewardship planning. In addition, the Northern Regional Committee will soon commence its own landscape plan revision, and step-one—the compiling of technical support documents pertinent to the local forested resource—is already underway.

The East Central Landscape Committee formally began the process of revising their regional forest management plan or landscape plan on January 25, 2019.



MFRC Landscape Regions

The MFRC divided the state into six major forested regions plus two other (metro and prairie) regions. Solid lines represent administrative boundaries; shaded areas represent ecological boundaries. Although regional borders tend to follow county boundaries (light grey lines) to facilitate coordination among units of government, they also correspond closely with the borders of ecological regions.

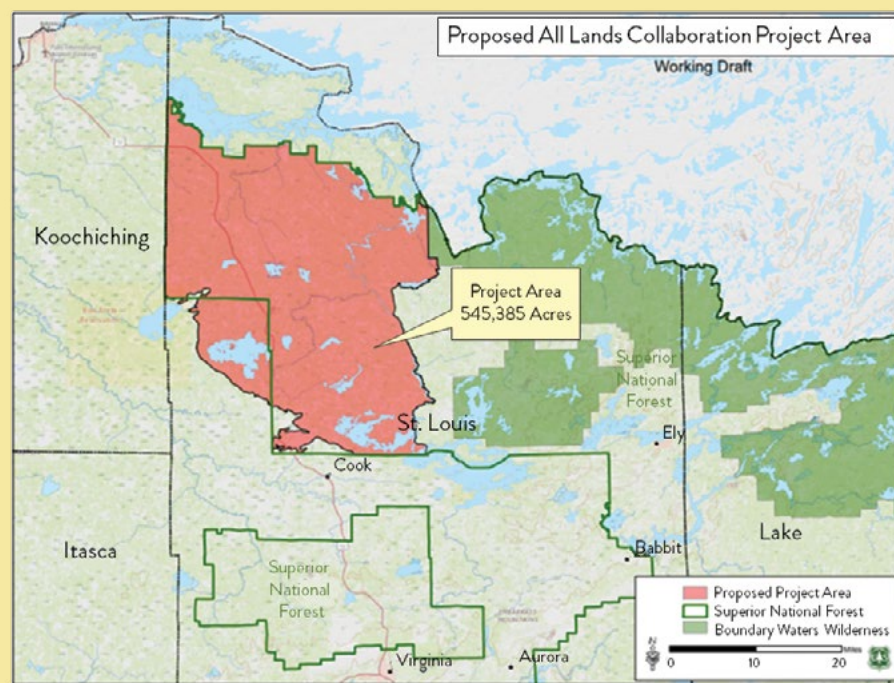


LANDSCAPE COORDINATION: ARROWHEAD PILOT PROJECT

Collaborative projects enhance forest health and productivity

The Arrowhead Pilot Project is a pioneering, large-scale effort to coordinate implementation of the 2014 Northeast Landscape Plan across federal, state, county, tribal, and private lands. This initiative, which will occur on 545,385 acres of mixed ownership forestland in St. Louis County, is unique in that it offers an opportunity to manage vegetation at economies of scale, with consideration for landscape-level improvement to the goods and services provided by forests, including habitat, watershed quality, and biodiversity.

Conceptualized in 2018, the Arrowhead Pilot Project is now seeing the successful implementation of its first on-the-ground management operations. Though partners lead implementation in the Arrowhead Pilot Project, the MFRC plays a key project management role with a responsibility to communicate lessons-learned to stakeholders and the other regional committees, which may help inform future forest management collaborations.



Map depicting the proposed area for the Arrowhead Pilot Project in northern St. Louis County.



U.S. Forest Service

REGIONAL LANDSCAPE COMMITTEES: ANNUAL HIGHLIGHTS

Despite the challenge of switching to virtual meetings due to COVID-19 in early 2020, the six regional landscape committees have adapted and continued to pursue their individual and collective priorities during the last biennium. Their work represents many hundreds of hours of donated time and collaboration by busy professionals and dedicated private landowners.

Regional Accomplishments in Brief

The regional landscape committees individually hosted dozens of forest resource experts at quarterly meetings on timely topics. These included climate change adaptation, emerging ecosystem markets, the current state of regional mills, tribal forest management, rare and endangered species, and ash management in the context of emerald ash borer—promoting information sharing and stimulating discussions about unique local-level impacts.

Several committees launched successful landscape management projects, including:

- The Arrowhead Pilot Project in the Northeast Region;
- The Littlefork Non-industrial Private Forest Stewardship Project in the Northern Region, which surpassed its goal of enrolling 4,000 acres of private woodlands; and
- A forest conservation initiative in the Southeast Region, where the region's landscape plan was leveraged by NGO partners to acquire several thousands of acres of forestland through fee or conservation easement.

Many committees spent time establishing a regional voice in state and federal policy discussions, such as the North Central Region, whose members spoke at the state legislature in hearings on the 'No Child Left Inside' legislation. All committees reviewed and commented on the 2020 State Forest Action Plan Update, lending a critical local, multi-stakeholder perspective.



Committees also pursued a range of outreach and education programs, such as legislative forest field tours and participation in workshops with area youth to promote careers in natural resources.

Several committees pursued funding opportunities for forest restoration and management, such as the Southeast Committee, where members were awarded grant dollars from the Outdoor Heritage Fund for private landowner outreach within the Wabasha Soil and Water Conservation District.

All committees spent time articulating future goals for their regional landscape committees and strategizing how to continue to respond effectively to emerging threats and opportunities for forest management, given current uncertainties and challenges.

Status of Regional Committee Plans

North East

Second generation plan completed in 2014

North Central

Second generation plan completed in 2017

North

First generation plan completed in 2004, amended in 2010

East Central

Second generation plan under revision (estimated 2021)

West Central

First generation plan completed in 2003

South East

Second generation plan completed in 2014

In September of 2019, the Southeast Landscape Committee partnered with the Wabasha County Soil & Water Conservation District to set up a Job Opportunities Workshop. This workshop provided opportunity for 33 Conservation Corps members to learn from representatives from DNR Forestry, Minnesota Land Trust, and four regional service providers about the paths that led them to their careers and the skills, knowledge and abilities they deemed important in working with private landowners. Half the day was a classroom setting and the remainder was in the field at an active logging site.



SITE-LEVEL MANAGEMENT GUIDELINES: A MINNESOTA SUCCESS STORY

Since the adoption of its first set of voluntary site-level forest management guidelines (FMGs) in 1998, the MFRC guidelines have been widely used by foresters and practitioners. The guidelines are science- and consensus-based, with particular focus on forest soil productivity, historic and cultural resources, riparian zone management, and wildlife habitat. The most recent revision of the guidelines was published in 2012, with a condensed “pocket field guide” version of the FMGs published by the MFRC in 2014. A companion field guide, covering site-level considerations and climate change adaptation strategies was published by the Northern Institute of Applied Climate Science (NIACS) and the University of Minnesota in 2017.

During 2020, a full review of the FMGs was initiated that will continue into the next biennium. The MFRC Site-level Committee is undertaking this review using a three-pronged approach:

- 1) Completion of a stakeholder survey to understand how practitioners and others view the effectiveness of the guidelines and what they see as opportunities for revision (summer of 2020).
- 2) Thorough review of the monitoring results from the Minnesota Department of Natural Resources (MN DNR) Guideline Monitoring Program to determine specific areas where guideline implementation may be lacking, and/or where guideline revision may be helpful (fall of 2020 and winter of 2021).
- 3) Comprehensive scientific evaluation of peer-reviewed literature for new or recently updated site-level information relevant to the FMGs (spring of 2021).



Hannah Friesen

Members of the MFRC and its partners listen to a talk about mixed hardwood management by MFRC Commercial Logging Contractors representative, Scott Pittack, during a field tour in Itasca County. From left: David Wilson, Director of the DNR’s Guideline Monitoring Program; MFRC Executive Director, Eric Schenck; Itasca County Land Commissioner and MFRC member, Kory Cease; Itasca County district foresters, Jesse Lehner and Perry Leone; Scott Pittack; MFI Director of Forest Policy and former MFRC member, Rick Horton; and SFEC Program Manager, Eli Sagor.



Eric Schenck



Eli Sagor



Eric Schenck

Up-to-date MFRC site-level guidelines are important to the continuing education programs offered through the Minnesota Logger Education Program (MLEP) and Sustainable Forests Education Cooperative (SFEC). These programs work to ensure that loggers, foresters, and natural resource managers have the best available information on sustainable forestry practices, thereby enhancing their ability to meet the SFRA's call for sustainable forest management. In addition, forest certification entities—including the Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (SFI)—base sustainable forest certification in Minnesota on the adoption and implementation of the MFRC forest management guidelines (see Forest Sustainability Certification sidebar, next page).

MFRC member and owner of Pittack Logging, Inc., Scott Pittack explains how his CTL machine operates (1), while MFRC Executive Director, Eric Schenck (2), and Applied Research Program Coordinator, Hannah Friesen (3), get a closer look at the inner working of the machine.



FOREST SUSTAINABILITY CERTIFICATION

Forest certification is a voluntary process whereby an independent third-party assesses a particular landowner's forest management practices against a set of standards, thereby helping to inform consumers about the ecological, social, and economic sustainability of their forest products. There are two internationally recognized certification programs at work in Minnesota –the Sustainable Forestry Initiative (SFI) and the Forest Stewardship Council (FSC). These organizations currently certify more than 7 million acres of Minnesota private and public forestland as 'sustainably managed' under their Forest Management Standards. Many of these certified-acres are on state lands. In fact, with more than 4.5 million acres of state-owned land under dual-certification, the Minnesota DNR is the largest single FSC-certified land manager in the United States.

Most major paper, lumber, and composite wood manufacturing industries also ensure sustainable raw material procurement through SFI and FSC Fiber Sourcing Standards. Both organizations derive the basis for forest management certification in Minnesota from the adoption and implementation of the MFRC's site-level management and harvesting guidelines.



MFRC member Scott Pittack speaks to a group of students from Deer River High School during a Future Forest Stewards event associated with the North Star Expo in Grand Rapids, MN, in 2019, demonstrating his willingness to help educate the next generation of forest users on the benefits of forest management in MN.

GUIDELINE MONITORING PROGRAM: FOREST MANAGEMENT GUIDELINE USE

David C. Wilson, PhD, Guideline Monitoring Program Consultant, Division of Forestry

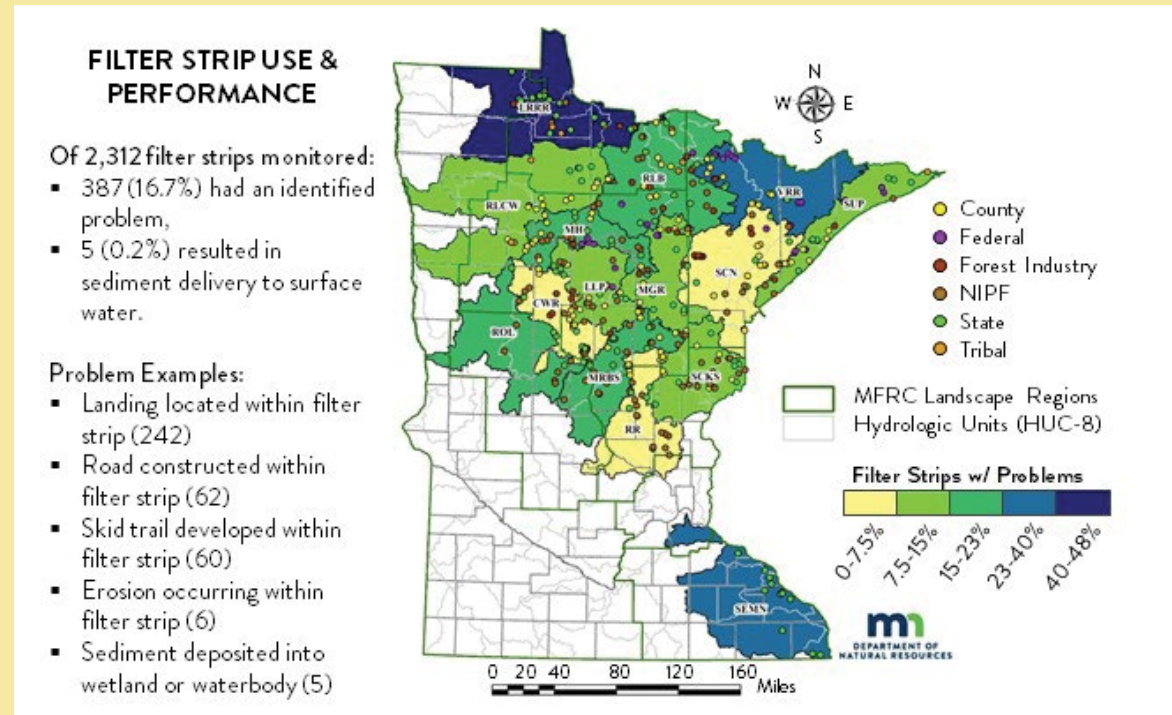
To protect the important ecological, economic, and social values that Minnesota's forests provide, and to ensure sustainable management of our forest resources, the MFRC's partners in the DNR's Guideline Monitoring Program (GMP) assess the implementation and effectiveness of the forest management guidelines (FMGs) at logging sites across Minnesota.

Though the FMGs are comprehensive and address a wide variety of forest management activities and forest values, implementation monitoring places particular emphasis on the guidelines that address impacts to water resources in forested watersheds, while also assessing disturbance patterns. Since the original passage of the SFRA and the adoption of the FMGs, implementation monitoring has been conducted at over 1,100 individual harvest sites.

In 2014, the GMP was modified to provide assessment of implementation monitoring results at the watershed scale. This adjustment has resulted in FMG implementation monitoring of 434 sites during the years of 2014-2018 across watersheds encompassing 32 million acres.

These watersheds are composed of at least 20% forest cover, and include the vast majority of Minnesota's 17.6 million acres of forestland. This new approach provides information about guideline implementation, disturbance patterns, and

potential water quality impacts at a scale that can provide useful insight for outreach and stakeholder engagement. Reports for the 2014-2018 monitoring cycle are available on the MFRC website.



This map provides an example of data that can be produced using the GMP's implementation monitoring results. On this map, filter strip implementation and management in Minnesota during the years of 2014-2018 is assessed at the watershed and statewide level.

APPLIED FOREST RESEARCH: NEW PRIORITIES FOR A CHANGING ENVIRONMENT

RAC Research Prioritization Effort

In 2019, the MFRC's Research Advisory Committee (RAC) completed a multi-year, comprehensive assessment that identified priority forest resources research needs in Minnesota. The [report](#), titled *Priority Research to Sustain Minnesota's Forest Resources*, identifies essential forest science information and technology needs, and attests to the importance of continued investment in our forests to maintain a sustainable supply of forest resources and benefits for all Minnesotans. Using a panel of 26 scientific experts to evaluate multidisciplinary research issues, the RAC's report establishes research priorities grouped under three integrated themes:

- Theme 1: Maintaining Forest Health and Function
- Theme 2: Forest management for the 21st century
- Theme 3: Enhancing Forest Economies

In addition to completing a review of priority forest research needs in Minnesota, the RAC and the Applied Research Program of the MFRC have provided support for on-going research projects focused on emerald ash borer (EAB) effects on Minnesota's black ash forests, soil operability during forest management activities, and forest management in peatland ecosystems. The partnerships between the MFRC and research

institutions including the University of Minnesota, the U. S. Forest Service's Northern Research Station, and the Natural Resources Research Institute (NRRI) provide the basis for continued support for applied forest resources research.

Lake States Applied Forestry Research Cooperative

Beginning in 2019, MFRC's Director of Applied Research and Monitoring spearheaded an effort known as the Lake States Applied Forestry Research Cooperative (LSAFRC), to bring together forest research scientists and key stakeholders from across Minnesota, Wisconsin, and Michigan to increase applied research coordination and collaboration across state boundaries. To date, members of the cooperative have met monthly to review and compare respective research priorities, and have developed a targeted list of key research needs across the region. In the coming months, the LSAFRC will conduct a series of virtual summits and stakeholder conversations focused on priority research needs for the collective Lake States region.

Researchers clear snow and collect data from sites in northern Minnesota. These research sites investigate how the absence of snow cover affects the development of soil frost in a peatland environment.



Hannah Friesen

RAC REPORT ON CLIMATE CHANGE

Following the completion of the research prioritization effort, and in response to interest from within the RAC, the MFRC, and the legislature, the RAC embarked upon a review of the likely impacts of climate change on Minnesota's forests, including associated challenges for forest management and potential opportunities related to carbon sequestration. The resulting [report](#), titled *Climate Change and Minnesota's Forests*, was published in the fall of 2020.

This report is broadly broken into four sections:

- Section 1: Climate Change Challenges for Forest Management focuses on the economic, ecological, and social benefits that forests provide for Minnesota and how climate change may threaten these values.
- Section 2: Forest Carbon Storage and Sequestration emphasizes the role of forests as tools for mitigating global carbon emissions and explores the potential benefits of: the maintenance and enhancement of forest cover, the usage of climate-forward forest management, and markets (e.g., biofuels, carbon markets, and long-lived wood products) as a means of amplifying carbon storage and replacing fossil fuel usage.
- Section 3: Climate Change Adaptation Strategies by Cover Type describes climate change threats specific to several important and iconic Minnesota forest types and recommends possible strategies by which these forest types might be maintained in the face of a changing climate.
- Section 4: Knowledge Gaps and Next Steps for Minnesota summarizes the information from the prior three sections, emphasizes the importance of continuing to pursue science related to climate change to fill knowledge gaps, and recommends several policy proposals and/or actions that should be supported to prepare Minnesota's forests for our climate future.



Minnesota has the opportunity to build a climate strategy and to be at the forefront of the emerging climate threat. Our forestlands will be crucial to any such strategy. The RAC and MFRC remain committed to continuing efforts to understand this threat and support policies and actions that address it and ensure that our forest ecosystems continue to thrive, the human spirit is fed, and forest products and services meet societal needs today and into the future.

PUBLIC INVOLVEMENT AND COMMUNICATIONS

Although they share in the overall appreciation for our state forests, Minnesotans have many different views, values, and visions about forest management. Fundamental to the MFRC's work is the careful consideration of these diverse perspectives, as well as a fair and inclusive process for determining future courses of action. Our statutory mandate is to maintain a balanced approach to sustainable forest management, use, and protection with equal consideration to the economic, environmental, and social goals of the state.

During the biennium, the MFRC established a new committee to provide more focused attention on stakeholder communication. The newly formed Communications Committee's first task is to develop and implement a communications plan that will help MFRC be more responsive to all who enjoy and value Minnesota's forests. Also underway is a complete revision of the MFRC website, a project for which the Communications Committee provides guidance.





Kyle Gill

PUBLIC CONCERNS REGISTRY

The Sustainable Forest Resources Act (SFRA) mandated the creation of a Public Concerns Registration Process (PCRP, MN Statutes 89A.07, Subd. 5) to accept comments from the public on timber harvesting or forest management practices. The process is initiated when a citizen reports a concern about a specific activity they have observed via the PCRP hotline (1-888-234-3702) or by using a web form on the MFRC website. A third-party professional forester may inspect the site to determine if the reported activity has deviated from MFRC's recommended management or harvesting guidelines. Rather than punitive, the program serves to educate practitioners who have not followed the guideline recommendations.

During the biennial period (2019-2020), MFRC received four inquiries or concerns registered by concerned citizens. Three of these were determined to be outside the scope of MFRC's field management guidelines. One report resulted in a site investigation by a consulting forester who determined that the guidelines had been followed on the property cited in the complaint. [PCRP Annual Reports](#) are available on the MFRC website.

INTERAGENCY INFORMATION COOPERATIVE

The Interagency Information Cooperative (IIC) was established within the College of Food, Agricultural and Natural Resource Sciences of the University of Minnesota for the purpose of coordinating the development and use of forest resource data in the state. This responsibility includes promoting statewide guidelines for the sharing of forest resources data and developing information systems that support public access and use.

During the biennium, IIC supported the following projects, four of which culminated in publication in peer-reviewed professional journals.

- Surveying silvicultural practices in the state.
- Developing new growth and yield models for the state's forest types.
- Publishing an online application serving timber inventory information.
- Developing a GIS data portal for the Arrowhead Landscape Pilot Project.
- Advancing forest planning methodologies, including coordination across ownerships.
- Examining new forest inventory technologies and analyses.
- Enhancing a forest wildlife habitat framework.

MEET THE MFRC

Pete Aube

Chair

MFRC Chair Pete Aube has worked his entire 40-year career in Minnesota's Forest industry. He has a BS in Forestry and MS in Forest Economics from the U of M. His experience includes service as a Forest Economist, Area Forester, Strategic Planning Manager, Mill Manager, and Resource Manager. Pete built and managed Minnesota's largest sawmill in Bemidji and managed 378,000 acres of timberland for Potlatch in Minnesota and Wisconsin. Now retired, Pete continues to engage his passion for forestry by managing his private forestland near Bemidji, and in 2019 he began his appointment as MFRC chair. He also serves on the board of Greater Bemidji and Sanford Health of Northern Minnesota.

Kathleen Preece (beginning Sept. 2019)

Nonindustrial Private Forest Landowners

Kathleen Preece is currently a private landowner representative on the MFRC and serves as the Executive Director for the Minnesota Forest Resources Partnership (MFRP). She also serves as the Communications Director for the Minnesota State Tree Farm Committee and publishes a magazine aimed at Minnesota's private woodland owners, **BetterFORESTS**. Kathleen previously served as the MFRC Chair (ending Sept. 2019) and is currently serving as chair of the MFRC's new Communications Committee.

Dave Parent (ending Sept. 2019)

Nonindustrial Private Forest Landowners

Dave Parent served as the nonindustrial private forest landowner representative on the Council for 20+ years. He also served as the chair of the Site -Level Committee. Under his leadership, the Council revised the site-level forest management guidelines in 2012 and produced a pocket guide of the guidelines in 2014. Dave's expertise on the connection between water quality and healthy forests was an incredible asset to the Council. His passion and ability to bring short-term solutions while keeping an eye on long-range trends served Minnesota well.

Susan Solterman-Audette (ending Jan. 2020)

Environmental Organizations

Susan Solterman-Audette was a senior lead auditor and compliance analyst for SCS Global Services, with work focused on leading management evaluations and compliance audits for Forest Stewardship Council (FSC) certification. She served on the MFRC from 2012 to 2020.

Kim Berns-Melhus (beginning June 2020)

Environmental Organizations

Kim Berns-Melhus is the Minnesota State Director of The Conservation Fund. Under her leadership, The Conservation Fund was recently able to acquire 72,000 acres of former PotlatchDeltic Corporation forestland in Minnesota, resulting in one of the largest land conservation efforts in recent Minnesota history.

Greg Bernu
(ending Sept. 2020)

County Land Departments

Greg Bernu is the Carlton County Land Commissioner. He served on the MFRC as County Land Department Representative, representing 2.8 million acres of tax-forfeited county lands. He also served on the Landscape Committee during his entire term with the MFRC, and, during the last year of his tenure, as the chair for the MFRC's Site-Level Committee.

Kory Cease
(beginning Sept. 2020)

County Land Departments

Kory Cease serves as the MACLC representative for the MFRC. He is the Land Commissioner for Itasca County and oversees the management of 300,000 acres of public forestland. He began serving on the MFRC in 2020, following appointment by Gov. Walz, and serves as chair of MFRC's Site-Level Committee.

Forrest Boe
Department of Natural Resources

Forrest Boe is the Minnesota State Forester and director of the Division of Forestry with the Minnesota Department of Natural Resources (DNR). He has served in this capacity for the past nine years. In his role at the DNR, Forrest oversees the management of 4.2 million acres of Minnesota forestland, including school trust lands. In addition to serving on the MFRC, Forrest serves as President of the Northeast Midwest State Foresters Alliance and is also an active board member for the National Association of State Foresters.

Darla Lenz
(ending June 2020)
USDA Forest Service

Darla Lenz served as the Forest Supervisor for the Chippewa National Forest from 2010 – 2020. In this role, Darla helped develop and implement a Shared Stewardship agreement between the US Forest Service and the Leech Lake Band of Ojibwe for the management of Chippewa National Forest lands. She recently took a position as the Forest Supervisor for the Ottawa National Forest in Michigan, ending her service with the MFRC.

Constance (Connie) Cummins
(beginning June 2020)

USDA Forest Service

Connie Cummins is the Forest Supervisor for the Superior National Forest, overseeing the management and maintenance of three million acres of federal forestlands, including the one-million-acre Boundary Waters Canoe Area Wilderness. She joined the MFRC in the summer of 2020.

Craig Engwall
Game Species Management Organizations

Craig Engwall is the Executive Director of the Minnesota Deer Hunters Association. In this role, he oversees 60 chapters, which represent 20,000 members, and has spearheaded several conservation projects aimed at preserving forestland and habitat for Minnesota's deer and moose populations. He serves as the chair of the MFRC's Policy and Information Committee.

Janet Erdman
Nonindustrial Private Forest Landowners

Janet Erdman represents Minnesota's non-industrial private forest landowners and is herself the owner of 225 acres of forestland in southeastern Minnesota. In addition to her service on the MFRC, Janet also serves on the MFRC's Landscape and Communications committees and attends meetings of the MFRC's Southeastern Regional Landscape Committee.

Kathryn Fernholz

Environmental Organizations

Kathryn (Katie) Fernholz is the President and CEO of Dovetails Partners, Inc. She is a forester by training and has more than 20 years of experience working in the forest sector, including a focus on sustainability concerns and forest certification.

John Fryc

Labor Organizations

John Fryc serves as the labor organization representative on the MFRC after having served for nearly 19 years as the secretary of Chapter 939 of the SEIU Local 32BJ NCFO District. He also serves as the labor organization representative for the Minnesota Fiber Resource Council. John worked at Sappi North America's Cloquet Mill for nearly 10 years, and is currently employed with Lake Superior College.

Wayne Brandt (ending Sept. 2019)

Forest Products Industry

Wayne Brandt was the MFRC's forest products industry representative until his death in September of 2019. Wayne was the Executive Vice President of Minnesota Forest Industries and the Minnesota Timber Producers Association.

Rick Horton (beginning Oct. 2019 and ending Oct. 2020)

Forest Products Industry

Rick Horton is the Director of Forest Policy at Minnesota Forest Industries (MFI), a trade organization representing member companies that produce a spectrum of forest products from paper to timber to energy production. He served as a member of the MFRC from 2019 to 2020, and currently serves as the state coordinator for the Sustainable Forestry Initiative (SFI) Implementation Committee. He continues to serve as an alternate to Forest Products Industry representative, Mike Birkeland.

Mike Birkeland (beginning Dec. 2020)

Forest Products Industry

Mike Birkeland is Executive Vice President of Minnesota Forest Industries (MFI) and the Minnesota Timber Producers Association, trade associations that represent and advocate for the 32,000 men and women who work in the woods and mills of Minnesota's forest products industry. A northern Minnesota native, Mike has personal roots and family ties to the forest products industry, and has worked nearly 30 years at advocating for rural issues, rural industries, and rural communities.

Keith Karnes

Minnesota Indian Affairs Council

Keith Karnes is the forester for the Leech Lake Band of Ojibwe and is responsible for the management of forestland within the Leech Lake Reservation. Keith has been integral in the development of Shared Stewardship and management agreements between the Leech Lake tribe

and the US Forest Service's Chippewa National Forest, and has championed plans that aim to restore habitat and improve ecological management.

Alan Ek (ending June 2020)

Research and Higher Education

Alan Ek is a Professor Emeritus and former Head of the Department of Forest Resources in the University of Minnesota's College of Food, Agricultural, and Natural Resource Sciences. He served on the MFRC for 12 years and acted as the MFRC's liaison to the Research Advisory Committee (RAC).

Mike Kilgore
(beginning June 2020)

Research and Higher Education

Mike Kilgore is the current Head of the Department of Forest Resources in the University of Minnesota's College of Food, Agricultural, and Natural Resource Sciences. He also serves as the Director of the Center for Environment and Natural Resource Policy, and is a former executive director of the MFRC. Mike began serving as a member of the MFRC in 2020.

Jim Manolis

Conservation Organizations

Since 2014, Jim Manolis has served as Forest Conservation Program director for the Nature Conservancy in Minnesota, North Dakota, and South Dakota. His program focuses on increasing the resilience of forests to climate change, so that they can better sustain a diverse array of wildlife species, provide clean water, sequester carbon, and maintain a full suite of cultural, economic,

and scenic values. His team conducts on-the-ground forest restoration and enhancement projects, cultivates landscape-scale collaboration, and encourages policies that address forest sustainability goals. The team assists with forest land acquisition and conservation easement projects, manages over 23,000 acres of forest treatments on partner forestlands and manages an additional 10,000 acres of TNC forestlands.

Bob Owens

Secondary Wood Products Manufacturers

Bob Owens is the former owner of Owens Forest Products, LLC, which manufactured and distributed building materials, including engineered wood flooring and style and rail hardwood doors, from 1974 until he retired and the company was sold in 2010. He is also a past president of the National Hardwood Lumber Assoc., American Hardwood Export Council, North American Wholesale

Lumber Association, and Hardwood Forest Foundation. Bob is recognized for his hobby business, Romeo Kennels, breeders of Yellow and Black Labrador Retrievers in Duluth, MN. His dogs are titled in Field Trials and Hunt Tests and are excellent hunters and pets.

L. Scott Pittack

Commercial Logging Contractors

Scott Pittack is a logger and owner of Pittack Logging, a family-owned and operated company in Bovey, MN, established in 1979. Scott has been named Lakes States Outstanding Logger (2008) by the Forest Resources Association, and Minnesota Logger of the Year (2008) by Minnesota's SFI Implementation Committee.

Deb Theisen

Resort and Tourism Industry

Deb Theisen is co-owner of Pine Park Resort, a 3rd-generation family-owned and operated resort on Island Lake near Park Rapids, MN, which recently celebrated its 100th year in operation. For the last 41 years, she has also owned and operated a salon and spa in Bemidji, MN, while providing training to hairdressers across the country. She previously served as a director on the Minnesota Resort and Campground Association, now Hospitality Minnesota, and has represented the Resort and Tourism Industry on the MFRC since 2015.



MFRC STAFF



THE MFRC WELCOMES A NEW EXECUTIVE DIRECTOR

Eric Schenck joined the Minnesota Forest Resources Council as Executive Director in April of 2020. He is responsible for leading the Council's public policy, landscape planning, communications, and forestry research efforts that seek to sustainably grow and expand the economic, environmental, and social benefits of Minnesota's forest resources. Eric has more than 32 years of professional conservation experience,

including nine years of public policy experience in Washington, DC, and more than 23 years of delivering multiple-use conservation programs in Illinois, Indiana, and Kansas. Prior to MFRC, he served as Executive Director of the Illinois Conservation Foundation.

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MFRC RELATED PUBLICATIONS

Friesen, H.C., R.A. Slesak, M.B. Schmitz, et al. 2020. **Climate Change and Minnesota's Forests: A report prepared for the Minnesota Forest Resources Council by the Research Advisory Committee.** Minnesota Forest Resources Council: St. Paul, MN. https://mn.gov/frc/docs/Climate_Change_and_Minnesota's_Forests_2020.pdf

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IN MEMORIAM— REMEMBERING WAYNE BRANDT

1957 – 2019

Wayne Brandt was a committed member of the MFRC from its early days until his death in 2019 following a battle against pancreatic cancer. His advocacy for the forest products sector throughout his 30-year career as the Executive Vice President of Minnesota Forest Industries (MFI) and the Minnesota Timber Producers Association made him the face of the Minnesota timber industry.

Following his death, then-MFRC Chair Kathleen Preece stated, “Wayne Brandt didn’t just take his place at the Council table: he filled a place. He brought wisdom, experience, guidance, and humor to the deliberations, discussions, and decisions of the Council. Wayne’s commitment to this organization will continue to serve as a model for Council members—both present and those who will serve in the future. Thank you, Wayne, for your brilliant service.”





Hannah Friesen



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