# 2025 KOOCHICHING Conservation

## TREES

This year you'll find some newcomers to the order form for your planting convenience! We're offering everyone's favorites and some new species on the 2025 Spring Tree Sale Order included with this newsletter.

Back again is a subspecies of white oak (swamp white) which tolerates saturated conditions. Swamp white may be planted as a replacement for ash trees when emerald ash borer effects our very wet swale forests. Also added this year are Yellow Birch and Nannyberry.

It's first-come, first served for our limited inventory, so order promptly to guarantee your trees for May. For more detailed species descriptions, printable order forms, or email links to submit an order, check out our sale webpages at: <u>http://koochichingswcd.org/treesales/</u>

Order by: April 18 Pickup by: April 30 -May 1

## NATIVE PLANTS

Photo Credit: Mac Schafer

We have pre-order plant kits and seeds to suit your needs! Native plants brighten your property, conserve soil, reduce runoff, improve water retention, and bring wildlife to your window. Back again this year are blueberry shrubs and our Forager's Kit of edible plants! And...our first ever POP UP SALE is happening at On the Rocks! No need to order, just stop on by! More information on page 5!

#### Order by: April 30 Pickup by: May 22



The mission of the Koochiching SWCD is to conserve and protect the soil and water resources by educating and assisting land users in Koochiching County in being good stewards of the land and its natural resources.

#### DISTRICT SUPERVISORS

Eldon Voigt Richard Dreher George Aitchison Jody Reller Ralph Lewis Chair Vice-Chair Secretary Treasurer Member **Regular Meeting Times** 

First Monday of each month 8:30 a.m. Pam Tomevi Austin Wallin Sam Soderman James Aasen Jolen Simon District Administrator Resource Conservationist Water Resource Specialist Forest Resource Specialist Program Coordinator

DISTRICT

STAFF

#### COMMITTEES

Budget Personnel Education/Public Relations

Ralph Lewis & Eldon Voigt Ralph Lewis & George Aitchison Jody Reller & Richard Dreher TSA 8 North Central MN JPB Laurentian RC&D Council Big Fork River Board Ge Little Fork/Rat Root River Board MN SWCD Forestry Association

Jody Reller Jody Reller George Aitchison & Richard Dreher d Jody Reller & George Aitchison Eldon Voigt

**SPECIAL ACTIVITIES** 

### **A SUCCESSFUL ENVIROTHON EVENT IN 2024**

#### By Jolen Simon

Each year, Soil and Water Conservation Districts (SWCDs) around the nation take part in an event called the "Envirothon", an outdoor learning event where high school students (grades 9-12) and junior high students (grades 6-8) attend five sessions on environmental issues.

There were three teams in the Senior Division (one from Northome) and eight teams in the Junior Division (two from Northome!). In the senior division, Northome took 3rd place, earning them a trip to the state competition! It was a wonderful experience for these youth to compete at this level.. In the Junior Division, Northome teams took 1st and 6th places. Let's give a hand to our local Koochiching County teams! Thank you to our 2024 sponsors: Border Bank of Int'l Falls, Coca-Cola Bottling, Northome Grocery, 1st National Bank of Deerwood, Ridge Runners Snowmobile Club, and the Koochiching County Farm Bureau.

Our Area VIII planning team looks forward to another successful Area VIII event in Bemidji State Park for 2025.



2024 Northome Senior Team



#### By Austin Wallin

#### The Project.

2020. In Rainy Lake **Owners** Property Association (RLPOA) partnered with Koochiching SWCD (and submitted a project proposal to the Conservation Legacy Partners Grant (CPL) program. The project aimed to remove nine acres of hybrid cattail mats, increase water flow, and improve native habitat in Jackfish Bay. Funding was approved in December of 2021, and planning began. After delays due to the historic flood in 2022, our long-awaited plans went underway in the fall of 2023, cutting cattails for months.

#### **Cutting Cattails.**

In February 2024 the International Falls volunteer fire department attempted a prescribed fire on the remaining cattails. Despite little to no snow cover and good wind conditions during the burn, the material did not burn well.

In March, Koochiching SWCD (KSWCD) started receiving letters from concerned landowners in the east bay area where cattails were cut in 2023. Silt that was once locked in the roots of



Before cutting, during 2022 flooding.

the cattails had formed large clumps over winter. KSWCD staff were in contact with Lakes Aquatic Weed Removal (LAWR) coordinating plans once water levels became deep enough for the equipment and road weight limits were off to address these concerns and complete the remainder of the project.

Before LAWR arrived on site, a meeting was held on County Road 134 between the two bays to hear property owners' concerns. On May 13th, LAWR arrived on site and began mobilizing equipment. Cattail material was removed from the previous year's cutting that had formed clumps. Once the material had been collected from the east bay (Jackfish Bay), LAWR began cutting and collecting the remaining material on the west bay. Heavy rains from late spring to early summer created problems for hauling the material to the transfer station. The access road to the dump site became rutted, forcing LAWR and KSWCD to find secondary disposal sites. Several landowners agreed to allow the last of the loads to be hauled to their upland sites before upcoming road work was to be completed on



After cutting, prior to road and culvert work.

Continued on next page

## JACKFISH BAY CATTAIL PROJECT UPDATE (Continued)

County Road 134. All disposal sites were preapproved by the County and Board of Water and Soil Resources.

A Rainy Lake Property Owners Association member used equipment borrowed from Voyageurs National Park to hand cut cattails along the Northern portion of Jackfish Bay where it was too shallow for LAWR to cut. KSWCD staff used modified rakes to pull the cattails above the ordinary high-water mark and to move and break up floating silt mats to areas that wouldn't interfere with recreation. This was a difficult and slow process due to the size and weight of the clumps and only provided results for a few weeks before the wind blew new clumps in.

Road work began in August to raise and widen County Road 134. The Koochiching County Highway Department led the road project and was able to remove the cattail material that had collected near the roadway edges between the east and west bays. County Road 134 remained open through most of this portion of the project and allowed KSWCD to frequently monitor the bays. KSWCD staff also completed multiple native plantings after water levels dropped, allowing seeds to grab hold of the land before the water rises again, as they tend to float.

Couchiching First Nations Lands and Resources Coordinator was contacted in July to procure wild rice that was native to Rainy Lake.

Unfortunately, KSWCD staff were notified in September that the wild rice crop was poor and there would be none to spare for the project.

Other wild rice seed sources on the U.S. side were checked through various agencies but the poor crop issue was state-wide. Plans remain in place to seed wild rice in 2025 and clay has already been placed at the access to make clay balls, which assist with seeding.

#### So, what's next?

In the spring of 2025, KSWCD staff will continue to monitor the bays for possible floating material, plant establishment, and remaining cattails. Staff will work with property owners to ensure the long-term success of the project and brainstorm solutions to any possible problems as they arise.

#### Deeper in the reeds... Why hybrid cattails are an issue and why this project is important.

Native broadleaf cattail and non-native narrowleaf cattail are likely the creators of the hybridized cattail species Typha x glauca, commonly named hybrid cattail. This hybrid species is known for its hyper density and impressive ability to spread rapidly through their rhizomes, making them an invasive threat. When hybrid cattails gain a foothold, they choke out native habitats and create a monoculture, driving out fauna which depend on plant diversity. They make for a poor food source, inadequate cover for fish and wetland birds, block out sunlight, reduce dissolved oxygen, trap nutrients, and slow the natural flow of water. Through our efforts in this project, our county sets an example of addressing the invasive hybrid cattails. The Jackfish Bay Cattail Removal Project will offer other communities across the state a model of ecosystem management and wetland restoration for years to come.



# Staff Spotlight

We are pleased to announce that Austin Wallin joined our team on April 15, 2024 as our new Resource Conservationist.

Austin graduated from the University of Wisconsin – Stevens Point in December 2023 with a major in Wildlife Ecology. Austin worked on various projects in college including researching ruffed grouse, light geese and waterfowl. He enjoys spending his free time hunting and fishing with family.



Over the summer of 2024, we were pleased to host Elise Monson, an intern through the Conservation Corps of Minnesota and Iowa.

Elise is from Grygla, MN and enjoys hiking, kayaking, and just being outside with friends and family. She is a recent grad from Bemidji State University (BSU) where she majored in Political Science and Environmental Studies. She will be continuing her education to get her Master's in Environmental Studies at BSU.





## ADD RICE HULLS

Rice hulls increase the volume of the seed mix making it easier to spread an even layer of seeds and mix the different seeds more evenly.

## KOOCHICHING COOPERATIVE WEED MANAGEMENT AREA (KCWMA) 2024-2025

#### By James Aasen

It seems 2024 was the busiest year yet for the KCWMA partnership. In case you're not familiar, KCWMA is a local invasive species the management group organized in 2018 to bring land managing entities together to collaborate on cross-ownership noxious weed treatment. As of 2025, the group consists of 13 official participants ranging from the varying DNR **MNDOT** divisions. districts. County departments, City Public Works, etc...and in 2024 we were happy to include the City of International Falls to our growing list of partners. On April 16th we held our yearly CWMA partner meeting to discuss priority weed treatment areas, partner equipment needs and challenges, upcoming projects, and training opportunities. As a result of that discussion, an invasive species training was organized for staff County Koochiching of the Highway Department and the International Falls Public Works department. The training and field tour was held on June 6th and included 20 staff that work on roadside spraying within the county and the city of International Falls.

In addition to these partner meetings, two collaborative projects were completed in 2024. The first, a wild parsnip control project that focused on high traffic areas within International Falls and Ranier. Based on community concerns and input from CWMA partners, the SWCD used funding from a Board of Water and Soil Resources (BWSR) CWMA grant to hire a Conservation Corps of Minnesota and Iowa (CCMI) crew to conduct targeted spraying of wild parsnip infestation along the bike trail between l'Falls and Ranier, around Minnesota North College Rainy River Campus, roadsides in French Addition, and areas adjacent to Forest Hill Cemetery. Backpack spraying can be more effective in areas off of roadsides and hard to reach pockets and reduces the chance of chemical drift in high traffic or residential areas compared to broadcast spraying via equipment. By late summer, the positive results of the control efforts showed, with considerable reduction of this noxious invasive species in these areas.

The second project conducted in was September in Riverview Park, International Falls. The wooded area in this park is a school forest where highly invasive European identified. **Buckthorn** buckthorn was is "allelopathic", meaning that it secretes a chemical that reduces the vigor of other plants, reducing plant diversity and in turn, can lead to erosion, especially in ravines, banks, or other steep areas. During this project we had volunteers from our area DNR forestry office



The City of International Falls chips 60 cubic yards of buckthorn material.

## NEW CONSERVATION COST SHARE OPPORTUNITIES (Continued)

and County Lands and Forest helping out our CCMI crew in identifying, cutting, and treating mature berry-producing buckthorn. After hauling up the cut stems, a volunteer crew from the International Falls Public Works department set to work chipping the material for disposal. Finally, after the mature plants were removed, a crew went through the project site carefully treating small plants. All in all after four days of hard but rewarding work, our team removed buckthorn that amounted to approximately 60 cubic yards of chipped material.

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If you feel that you might have a problem with these invasive species on your property, please reach out to: Forest Resource Specialist, James Aasen 218-283-6742 james.aasen@co.koochiching.mn.us.

#### A hot take on the forbs of Koochiching County.





#### Swamp Milkweed

Attractive to bumble bees, honey bees, hummingbirds and monarch butterflies, this is a forb powerhouse.

Katy Chayka

#### Wild Bergamot 4

This versatile forb grows in a variety of soils and is not only beneficial to pollinators, but is known as a medicinal plant as

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vinal plant as well. It can be used for ailments such as headaches, indigestion and colds and flu.



#### Purple Coneflower

Not only does this beautiful flower attract a variety of butterflies and hummingbirds, it is highly medicinal as well. Also known as

Echinacea, it can be made into a tea and thought to help with respiratory illness, reduce inflammation, and as an antiviral treatment.

#### **Purple Prairie Clover**

99

All parts of this flower are useful to insects. Known as a superfood to the Rusty Patched Bumblebee, this forb proves to be an important species.

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#### Stiff Goldenrod

To keep pollinators happy into the fall, plant this! You'll also enjoy the red leaf show in the fall season. These plant are hardy self-seeders and will attract butterflies.

## **SEDIMENT FINGERPRINTING WORK**

#### By Sam Soderman

#### **Little Fork River Watershed**

This project is being led by the United States Geological Survey (USGS) and the Minnesota Pollution and Control Agency (MPCA) with support from Koochiching SWCD and North St. Louis SWCD to address a 105-mile stretch that is impaired for turbidity (suspended soil particles in water). While it has been established that there is an excess of sediment present in the Little Fork River, it's been unknown as to how to proceed in reducing it to acceptable levels. Identifying sediment sources is the first step in targeting sediment-laden stream reaches for projects.

#### What is Sediment Fingerprinting?

The sediment fingerprinting process is an analysis of sediment that can attribute particles' source to different locations in the watershed. The procedure establishes a set of physical and/or chemical properties (tracers) based on samples collected in upland or channel locations identified as potential sources of sediment. These properties are unique for each location within the watershed. Fluvial sediment samples (sediment transferred by a river system) exhibit a composite, or "fingerprint" of Through properties. statistical source procedures, the target sediment properties can be matched to their respective upland or channel source "fingerprints". Determining the sources (erosion sites) and sinks (deposit locations) of sediment is important in developing strategies to reduce sediment loads to water bodies impaired by turbidity.



A water pump is prepared to drop into the Little Fork River for sampling.

#### Progress in 2024

Project fieldwork was wrapped up and data has been reviewed. Projects results have been written into a final report for public consumption in the summer of 2025. This final report will give local partners a starting point for addressing the sediment impairment in the Little Fork River Watershed. The results will be for used to pinpoint areas project implementation in the watershed to reduce the amount of sediment that is entering the river. Local partners will be collaborating with local, state, and federal agencies to complete projects throughout the watershed in the years to come.

## SEDIMENT FINGERPRINTING WORK (Continued)



Staff prepare to take a water sample on Rainy Lake.

#### **Rainy River-Rainy Lake Watershed**

A similar project began in 2023 that is looking at sediment and phosphorus in the Rainy River and its main tributaries (Little Fork River, Big Fork River, and Rapid River). This study is a collaboration with the USGS, MPCA, and the Lake of the Woods SWCD to map sediment and the transfer of phosphorus throughout the Rainy River system into Lake of the Woods (LoW). This is a grant-funded project through the Legislative-Citizen Commission on Minnesota Resources (LCCMR).

LoW is a vital ecosystem impacted by recurring harmful algal blooms. The Rainy River basin comprises 80% of the total drainage area to LoW and contributes 45-75% of the total phosphorus (TP). Despite major reductions in TP concentrations in the Rainy River, blooms persist in downstream Lake of the Woods. Previous investigations have explored the inputs of phosphorus from the Rainy to LoW, but none to date have explored the detailed phosphorus chemistry of sediments in storage and in transport in this large river network, and as a result, we lack understanding of how legacy phosphorus in this system may serve to fuel blooms downstream.

Last year staff from LOTW SWCD and Koochiching SWCD gathered data on the 8 sampling locations. This field work was completed in 2024 and the data is being analyzed. Water quality samples and sediment samples were taken during ice out and throughout the open water season to help understand the sediment and phosphorus transfer in the Rainy River and its tributaries. In conjunction with the local sampling efforts, USGS staff mapped sediment and collected data in the Rainy River and Four Mile bay to better understand the Phosphorus chemistry of sediment in storage and in transport.

The study uses geophysical tools to examine fine sediment deposit extent and thickness and will analyze how phosphorus is bound to sediment in the stream bed and in suspension throughout the Rainy River and in three key tributaries on the U.S. side of the river. Longsediment cores were collected in Fourmile Bay to link the results of this investigation of legacy phosphorus storage to the longer-term history of sediment deposition in this dynamic river mouth, and in the lake itself. The results of this study will provide critical information for resource managers, pinpointing hotspots of legacy phosphorus introduction and storage. This study will identify the in-stream source areas with greatest potential to contribute to the bioavailable pool of phosphorus downstream and to fuel algal blooms into the future.

## ONE WATERSHED, ONE PLAN UPDATES

#### By Pam Tomevi

Last year at this time, the "Partnership" (Koochiching Soil & Water Conservation District (SWCD), Koochiching County, City of International Falls, and City of Ranier) was just getting started on the Rainy River-Rainy Lake Comprehensive Watershed Management Plan (RR-RLCWMP).

With guidance from a Steering Committee (lead staff from each planning partner) and an Advisory Committee (local stakeholders, experts, and members of state and federal agencies), the Partnership worked with plan writing consultant, Houston Engineering, Inc. to create the draft 10-year watershed management plan for Rainy River-Rainy Lake.

After an internal review over the summer, the draft plan went out for a formal 60-day review between October 1 – November 29, 2024. During this time, the Partnership also held a Public Open House on October 22, 2024 to make the full plan and appendices available to local residents and seek any additional comments and feedback. Attendees cast their vote for the final plan cover (shown right). The



Boundaries of the Rainy River-Rainy Lake 1W1P Planning Area

cover photo is credited to and in honor of the late Jeff Kantor.

On December 17, 2024 the Partnership held the required Public Hearing to receive public comments on the draft Rainy River-Rainy Lake Comprehensive Watershed Management Plan. Copies of the summary of public and agency comments received to date were distributed to attendees. With no additional comments received during the hearing, the Partnership approved the draft plan and authorized it to be submitted to the Board of Water and Soil Resources (BWSR) for final approval.

On March 4, 2025 the plan was presented to the BWSR Northern Regional Committee for preapproval. By unanimous vote, the Committee approved the plan to move forward for full BWSR Board approval on March 26, 2025.



Cover of the Rainy River-Rainy Lake 1W1P, photo by the late Jeff Kantor

While we await final approval of the Rainy River-Rainy Lake Comprehensive Watershed Management Plan, efforts are underway to secure our Watershed Based Implementation

## **ONE WATERSHED, ONE PLAN UPDATES (Continued)**

Funding (WBIF) – provided through the Clean Water Land & Legacy Amendment as an alternative to the traditional project-by-project competitive process often used to fund water quality improvement projects. This funding allows collaborating local governments to pursue timely solutions based on a watershed's highest priority needs.

At the same time, new partnerships have been busy preparing for the next round of planning efforts:

On September 4, 2024 the BWSR approved proposals submitted by both the Koochiching and Itasca SWCDs to develop comprehensive watershed management plans for the Little Fork River and Big Fork River watersheds. Led by the Itasca SWCD, the Big Fork River Watershed One Watershed, One Plan process will include required planning partners Itasca County, Koochiching County. Itasca SWCD. and Koochiching SWCD. Also invited to join the planning partnership is Leech Lake Band of Ojibwe, Bois Forte Band of Chippewa, and the City of Big Falls.



Boundaries of the Big Fork 1W1P Planning Area



1W1P Planning Area

Led by the Koochiching SWCD, the Little Fork River Watershed One Watershed, One Plan process will include required planning partners Koochiching County, Koochiching SWCD, St. Louis County, and North St. Louis SWCD.

Also invited to join the planning partnership is Itasca County, Itasca SWCD, Bois Forte Band of Chippewa, City of Littlefork, and City of Cook.

A Memorandum of Agreement (MOA) will be signed by the planning partners that will become the decision-making body known as the "Policy Committee" for each watershed.

For more information and to stay updated on the planning process, please call Pam Tomevi, District Administrator at 218-283-1174 or visit our website at <u>https://koochichingswcd.org/rrrl\_1w1p/</u>



## WATERCRAFT INSPECTION PROGRAM

#### By Sam Soderman

Koochiching SWCD, in conjunction with Koochiching County, will be implementing watercraft inspections for the 9th consecutive year on public water accesses around the county. Koochiching County and the SWCD have been working to stop the spread of invasive species entering and exiting area lakes and rivers by providing watercraft inspections to boaters and recreators on public waters. The goal of this program is not to only inspect watercraft but also to educate boaters on the best practices to prevent the spread of invasives.



A total of 4,500 inspections were performed over 4 accesses, covering 2 waterbodies.



The number of inspections have trended up over the years, with a significant increase in 2020 due to many people recreating in a way that also allowed distance. This program is part of a statewide effort to stop the spread of aquatic invasive species. Staff are trained and authorized by the MN DNR to inspect watercrafts. We have also been partnering with Voyageurs National Park and surrounding SWCDs to broaden our inspection program to surrounding lakes and rivers.



Photo courtesy of DNR

Did you know? Did you know? THERE ARE 69,200 MILES OF RIVERS AND STREAMS IN MINNESOTA. THAT'S ENOUGH TO CIRCLE THE EQUATOR 2 3/4 TIMES!

## WOOD ASH PROGRAM

#### By Austin Wallin

Whether you are new to the wood ash program or have been using it for years, we welcome you to send in your soil samples! There have been some changes to the program over the last year, however. The most noteworthy change was the NDSU soil testing lab closure in January. We will now have soil testing kits for the University of Minnesota and a limited number of Aqvise testing kits on hand in our office. As always, you can use any lab you choose as long as the test includes the following: pH. buffer pH. Phosphorus, Potassium, soluble salts, organic matter. If your field is more than 40 acres you will need multiple samples with no more than 40 acres per sample. You will also need to provide your name, address, phone number, sample date, the township, range and section of the field.

To qualify for wood ash, your pH must be at or below 7.1. Other qualifying factors will be taken into consideration such as field portions which are within 200' of water courses and waterbodies and a slope of greater than 6%. It can (but may not) take between 1-2 years to receive wood ash so sample your fields early. A soil sample/permit is valid for a period of three years from the day the field was sampled. Feel free to call Austin Wallin at 218-283-1175 to begin the process.



## SPECIAL THANKS TO OUR CONSERVATION PARTNERS





501 3rd Street, Suit 100 International Falls, MN 56649



## WOOD ASH PROGRAM LOW SOIL PH?

FREE DELIVERY WITHIN 90 MILES

FREE SPREADING WITHIN 50 MILES

FREE SOIL SAMPLE KITS AVAILABLE AT:

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KOOCHICHING SWCD 501 3RD STREET, STE 100 INT'L FALLS, MN 56649 218-283-1180 FOR PROGRAM QUESTIONS: #www.koochichingswcd.org/wood-ash





