



# KOOCHICHING

## SOIL & WATER CONSERVATION DISTRICT

501 3RD STREET, SUITE 100 \* INTERNATIONAL FALLS, MN 56649

PHONE: 218-283-1180 \* EMAIL: KOOCHSWCD@GMAIL.COM

WWW.KOOCHICHINGSWCD.ORG

### STAFF

Pam Tomevi	District Administrator
Marcie Peeters	Resource Conservationist
Sam Soderman	Water Resource Specialist
James Aasen	Forest Resource Specialist
Jolén Simon	Program Coordinator

### BOARD OF SUPERVISORS

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

### BOARD COMMITTEES / ACTIVITIES

#### **Budget**

*Ralph Lewis & Eldon Voigt*

#### **Personnel**

*George Aitchison & Ralph Lewis*

#### **Education/Public Relations**

*Jody Reller & Richard Dreher*

#### **TSA 8 North Central MN JPB**

*Jody Reller*

#### **Laurentian RC&D Council**

*Jody Reller*

#### **Big Fork River Board**

*George Aitchison & Richard Dreher*

#### **Little Fork/Rat Root River Boards**

*George Aitchison & Jody Reller*

#### **MN SWCD Forestry Association**

*Eldon Voigt*

### BOARD MEETINGS

Koochiching County Board Room\*

Courthouse — 715 4th St

\*Teleconference option for guests

International Falls, MN 56649

1st Mondays November-April at 6:00 p.m.

1st Mondays May-October at 7:00 p.m.



## 2023 ANNUAL REPORT

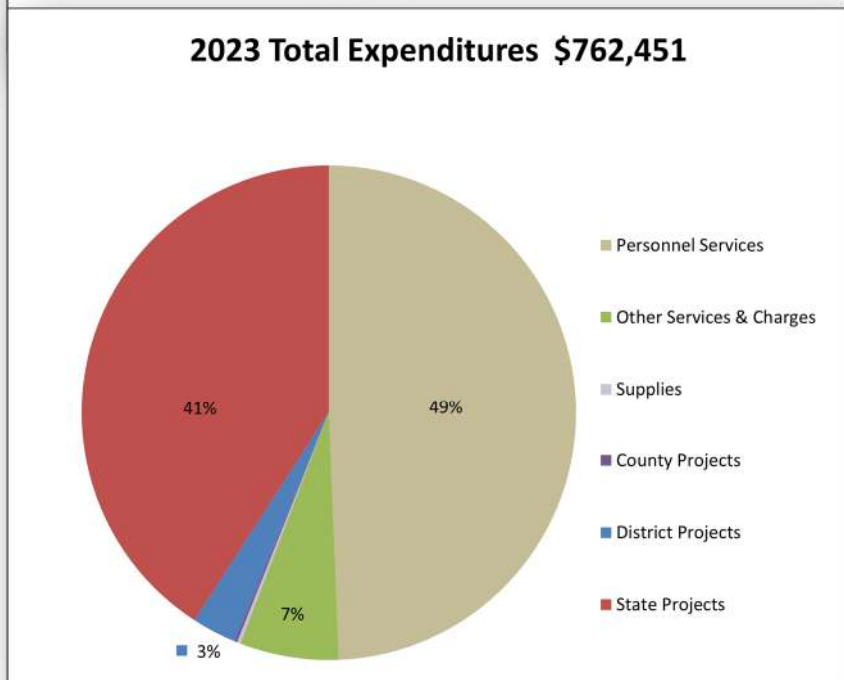
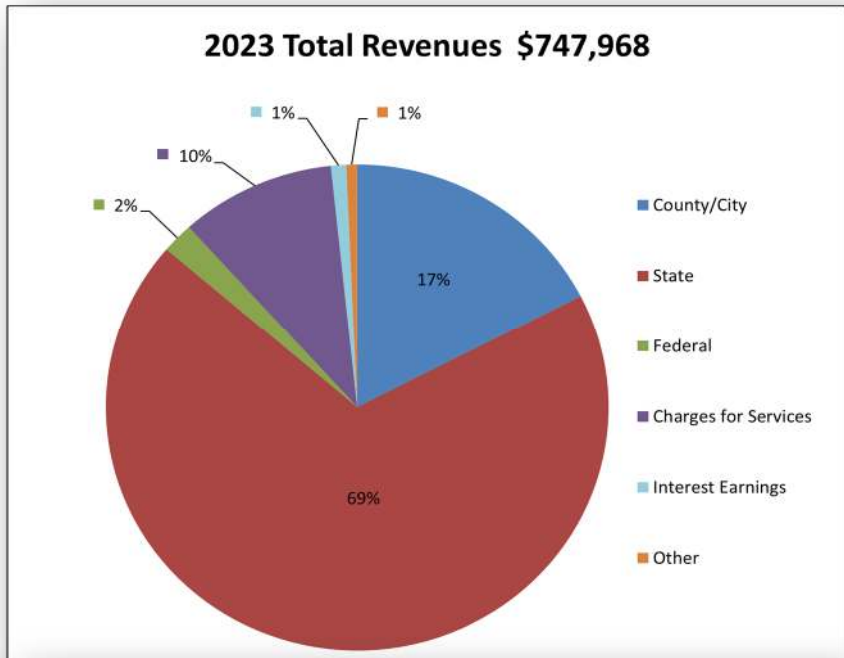


*The mission of the Koochiching SWCD is to conserve and protect the soil and water resources by educating and assisting land users in Koochiching County in being good stewards of the land and its natural resources.*



Photo Credits: Jeff Kantor

The Koochiching Soil & Water Conservation District (SWCD) operates using a diverse set of funding sources. The charts below depict the distribution of our 2023 revenues and expenditures after year-end adjusting entries (subject to audit). Revenues include general allocations, competitive/ direct grants, project contracts, charges for service, and donations to fund specific programs & educational efforts.



The Koochiching SWCD continues to partner with state and federal agencies to leverage additional program funding for local conservation projects.

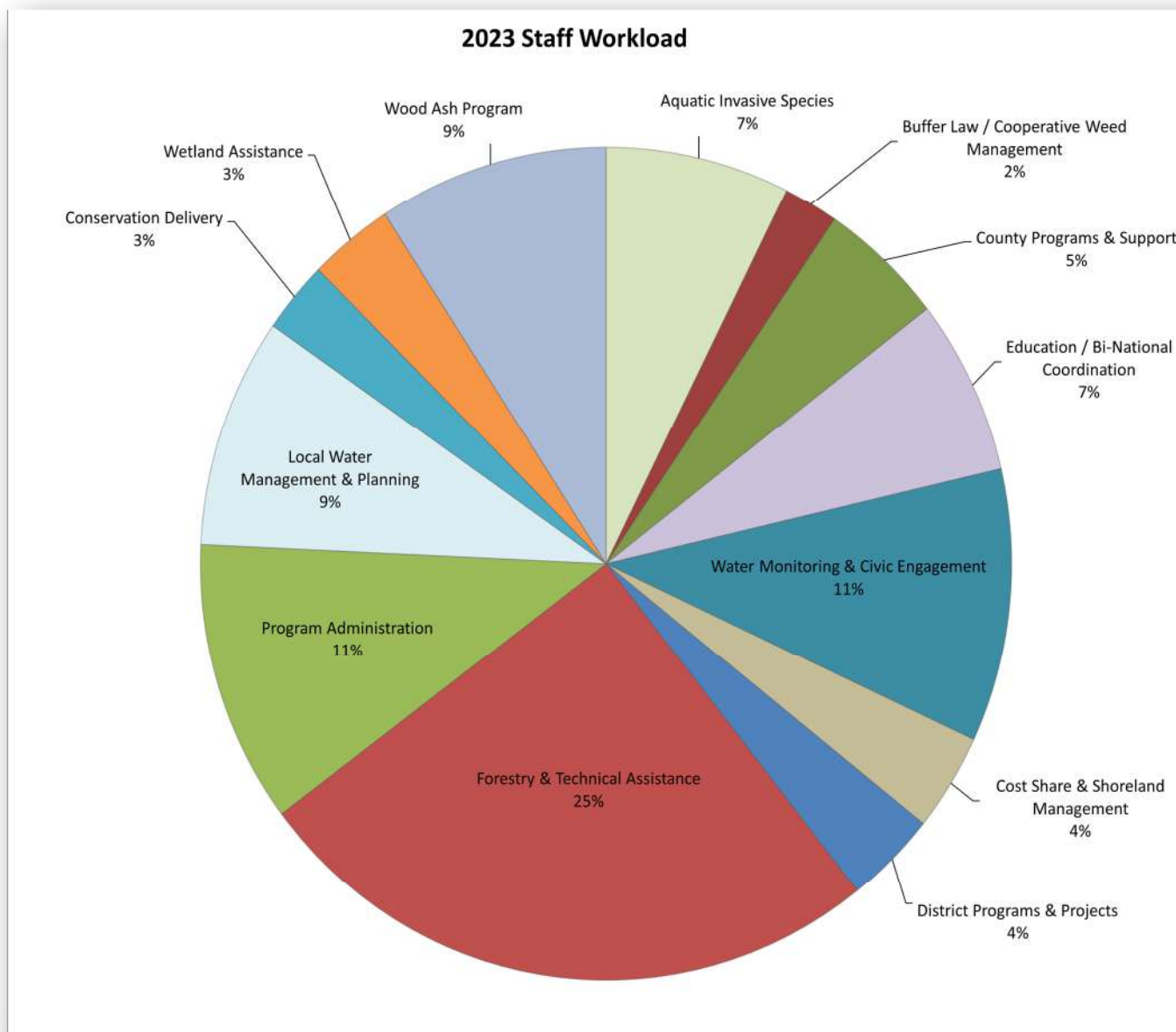


2023 was a with new adventures! We welcomed a new staff member to our team as the Resource Conservationist. We settled into our new office (lower level of the same building, Suite 100!), Other main activities this past year focused on forestry programs, technical assistance to landowners, water monitoring, workshops, wetland conservation, shoreline restoration, aquatic invasive species, water plan goals, buffer law, beneficial reuse of wood ash, and education.

While some of these activities are funded through “project specific” partner grants, approximately 40% of our staff capacity (2 full time employees) is only made possible through the Local Capacity funding, now known as SWCD Aid. Since 2016, this funding has allowed our office to provide important services to the community including forest health and stewardship, education/technical assistance, land owner water quality education/technical assistance, environmental education at schools, outdoor learning centers, and community workshops.

The chart below represents a breakdown summary of the 2023 SWCD staff workload.

For more information on our activities this past year, please see the individual program and project summaries on the following pages.



## SWCD LOCAL CAPACITY SERVICES



Established in 2016, these state funds were intended to build the capacity of local soil and water conservation districts. Responding to the resource needs of our local community, the Koochiching SWCD utilized these funds to hire a full-time Forest Resource Specialist and retain the temporary Water Resource Specialist, moving the position to full time.

Eight years later, these staff positions continue to perform important riparian zone management activities including:

- Forest stewardship planning and implementation assistance;
- Forest health education and implementation assistance;
- Buffer zone management and implementation assistance;
- Cooperative Weed Management;
- Expanded conservation service delivery including private landowner consultations and planning; county-wide site visits, Northern Landscape Committee assistance, education in schools and with the public, participation in Regional Sustainable Development Partnerships, Binational Watershed Coordination, and GIS mapping.

These funds play a critical role in the SWCD's ability to meet statutory requirements and the resource needs of our community—an area encompassing over two million acres!

## SOIL HEALTH COST SHARE

The Soil Health Cost Share grant is a new, noncompetitive grant offered by the Board of Water and Soil Resources (BWSR) and provides cost share dollars for local landowners to implement soil health practices.

Soil health grants are focused on helping build more resilient landscapes throughout the state by installing practices such as cover crops, reduced tillage, rotational grazing and agroforestry. These practices can also help improve water quality, reduce runoff and store carbon in the soil. In the long-term, they can potentially benefit producers by increasing water availability for crops and protecting the soil from erosion caused by rain and wind.



*The Koochiching SWCD tree planter getting ready for a landowner tree planting.*

For 2023, the Koochiching SWCD was working to utilize funds in the amount of \$14,175 to assist local landowners with forest buffers, tree shrub establishment, and native perennial conservation cover. Tree plantings have been planned for four landowners.

## MFRC NORTHERN LANDSCAPE PLANNING



The Northern Regional Landscape Committee, under the mandates of the Sustainable Forest Resources Act (Minn. Stat. 89A.06), is responsible for long-range, landscape-scale, strategic planning and coordination of forest resources in Koochiching, Lake of the Woods, and

northern Beltrami Counties of Minnesota. As described by statute, regional landscape committees follow a locally led, open and public process that considers the unique conditions and needs of each landscape, and that seeks to balance ecological, economic, and social values in establishing landscape-level forest resource goals and objectives.

The first edition Northern Landscape Forest Resource Management Plan was approved on May 25, 2004. In 2020, the Northern Regional Landscape Committee (NLC) notified MFRC of its decision to update its 2004 plan. The purpose of the Northern Landscape Plan Update and Coordination Project is to adequately fund the plan update and coordination work of the Northern Landscape Committee from March 1, 2023 to June 30, 2025.

The Koochiching County Soil and Water Conservation District (SWCD) is the intergovernmental agency that will be administratively responsible for completing this project.

The project will be completed in two phases. The first project phase (March 1 – June 30, 2023), completed the preliminary scoping and coordination process which included formulating plan update teams, coordinating team and committee meetings, assembling planning related data and information, identifying issues for future consideration as plan goals/objectives, and completing a phase I report. In supporting the phase I work of this project, the Minnesota Forest Resources Council (MFRC) contracted with Dovetail Partners to complete data gathering and plan writing. Beginning on July 1, 2023, Phase II of the project will complete the Northern Regional Landscape Plan update and will support regional committee/plan coordination work of the Koochiching County SWCD through to June 30, 2024.



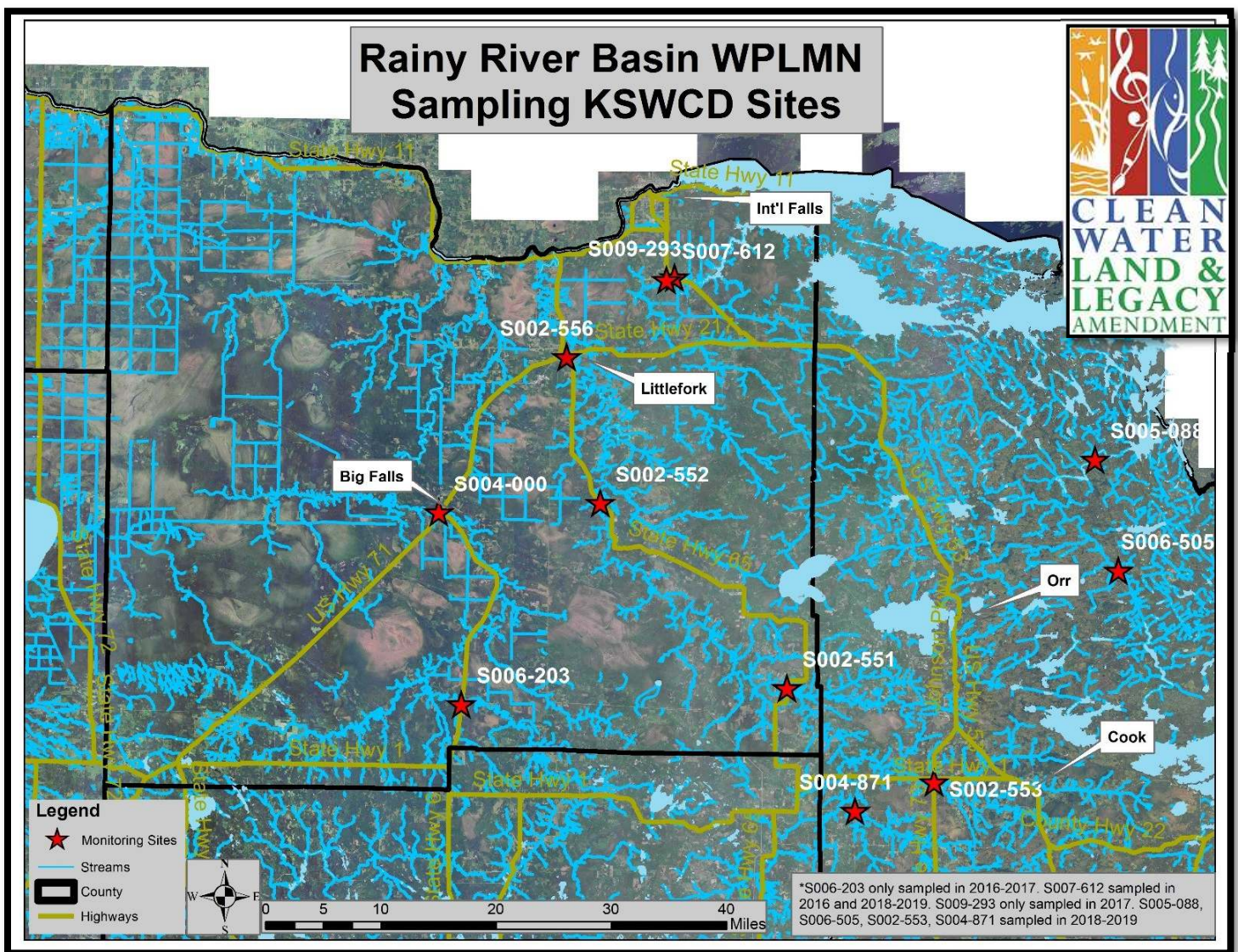
# WATERSHED POLLUTANT LOAD MONITORING (WPLMN)

This Minnesota Pollution Control Agency (MPCA) funded grant is a long-term program designed to measure and compare pollutant load information from Minnesota's rivers and streams and track water quality trends.

Samples are collected during rain events in the spring, summer and fall months—and monthly in the winter season. Koochiching SWCD staff sampled sites 19 times in 2023, an average year in terms of amount of rain events and data collected.

This ongoing work will continue through June of 2024, at which time a new round of funding is expected which will allow us to continue these water quality monitoring efforts.

To stay up to date on annual progress, visit our website: <https://koochichingswcd.org/wplmn/>



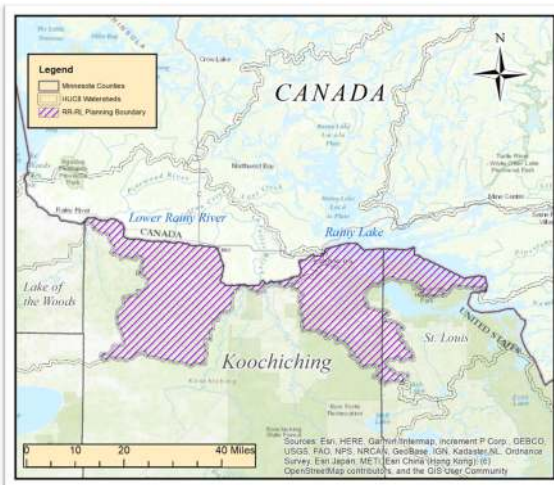
# ONE WATERSHED, ONE PLAN

One Watershed, One Plan (1W1P) is a program funded through the Board of Water and Soil Resources (BWSR) that supports partnerships of local governments in developing prioritized, targeted, and measurable implementation plans. Key principles are planning at the major watershed scale and aligning local plans with state strategies.



In April of 2023, the Koochiching SWCD received funds to develop the Rainy River-Rainy Lake One Watershed, One Plan (RR-RL 1W1P) - a planning partnership between Koochiching County, Koochiching SWCD, the City of International Falls, and the City of Ranier. This partnership aims to maintain the high quality of its natural resources and restore (when appropriate) valuable resources in the RR-RL. Through this process, the planning partners, with guidance from local experts and stakeholders, will develop a 10-year comprehensive watershed management plan that contains measurable goals and implementation actions to help achieve those goals.

The planning process for the RR-RL 1W1P is driven by local units of government, guided by an Advisory Committee comprised of local stakeholders, experts, and members of state and federal agencies. The Policy Committee (the decision-making group for the plan) is made up of elected officials from Koochiching County and SWCD, City of International Falls, and City of Ranier. The process began during the summer of 2023 when plan review authorities and stakeholders were invited to submit priority resource concerns they felt should be addressed by the plan. On September 7, 2023, the RR-RL 1W1P Policy Committee hosted a public kickoff meeting to inform watershed community members about the watershed and the 1W1P planning process, gather viewpoints from citizens about important resources in the watershed, and to capture their priorities for this plan. Next, a series of Advisory Committee topic meetings were scheduled to cover the main resource concern topics in the watershed: Water Quality, Water Quantity and Hydrology, Groundwater and Drinking Water, and Habitat and Forests.



After the final wrap up meeting scheduled for March 11, 2024, the plan writing consultant, Houston Engineering, Inc. will begin drafting the Rainy River-Rainy Lake 1W1P. The draft plan is scheduled to be ready for review by the end of summer 2024.

To learn more about the plan development process, please visit our "Watersheds" page at <https://koochichingswcd.org/watersheds> where we have a dedicated section for all things Rainy River-Rainy Lake 1W1P (currently being updated).



## LOCAL WATER MANAGEMENT

The Koochiching SWCD, in partnership with the Environmental Services Department (ESD), is one of the lead agencies responsible for implementing activities outlined in the Koochiching County Comprehensive Local Water Management Plan and the upcoming One Watershed, One Plans (1W1Ps).

Primary activities in 2023 included:

- 1W1P planning grant coordination, outreach, and meeting participation
- Website outreach maintenance
- Outreach on local, state and federal programs and projects related to water quality
- Conservation Tree & Native Plant Sales
- 2 County Hazardous Waste Collections
- 1 Outdoor Education Day Event
- Climatology Volunteer Program
- Grant writing and work plans
- Project coordination with County
- Assistance to the City of International Falls and the City of Ranier





## WETLAND CONSERVATION ACT

The Koochiching SWCD serves as the wetland technical representative in partnership with the Environmental Services Department (ESD) for Koochiching County providing technical, educational and administrative assistance to landowners and municipalities within the county.

Primary activities in 2023 included:

- Permit application assistance & review
- Processed 1 approved exemption and worked

with landowners on 2 potential violations

- Landowner technical assistance & education
- County Board/City Council Project & Legislative Support
- Multiple staff trainings
- Wetland banking assistance
- Mandated reporting compliance



Photo Credit: Jeff Kantor



## SHORELAND MANAGEMENT

In partnership with the Environmental Services Department (ESD), the SWCD supports shoreland management activities through various services.

Primary activities in 2023 included:

- DNR shoreland variance and permit review
- Non-cost shared project assistance for erosion

and sedimentation

- Working with the Conservation Legacy Partners cattail removal project update/Accomplishment Report
- Assist with public water lookup for landowners
- Mandated reporting compliance

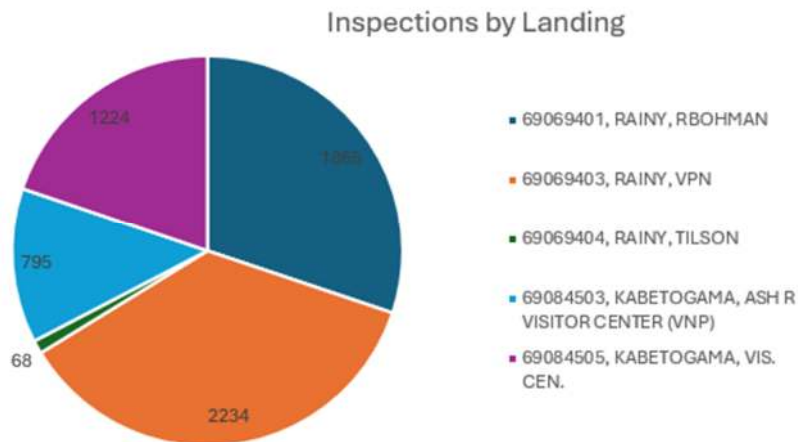


Photo Credit: Ed Lombard



Rat Root River Enterprises

## AQUATIC INVASIVE SPECIES



### 2023 Koochiching County Inspections by Public Access

show the locations of AIS in the county and surrounding areas, a map and informational brochure were created to be used at public events.

Despite efforts by multiple agencies and over many years, the Minnesota Department of Natural Resources (DNR) confirmed zebra mussel larvae are in Rainy Lake near International Falls in July 2021. Since then no adult zebra mussels have been identified in Rainy Lake. Koochiching SWCD will continue to work with Koochiching County and the DNR in order to monitor the situation. A total of 6,186 inspections were done over 5 landings.

#### WHERE DO ZEBRA MUSSELS COME FROM AND WHY ARE THEY A PROBLEM?

Zebra mussels are native to Eastern Europe and Western Russia. They tend to outcompete native species for food and habitat, cut the feet of people swimming in affected areas, and clog boat motors.

#### WHAT CAN I DO?

Boats should be cleaned, drained, and dried before moving to other waterbodies. Keep in mind that other surfaces should be cleaned to avoid adults and larvae from attaching to objects such as docks, bilges, bait buckets, and live wells. There will be assistance on Rainy Lake to check boats and to decontaminate if needed.

More information will be shared as available.

For further questions, contact Sam Soderman at (218) 283-1176 or [sam.soderman@co.koochiching.mn.us](mailto:sam.soderman@co.koochiching.mn.us).

This county aid tax bill has provided funding to prevent the spread of aquatic invasive species (AIS) from lake to lake as well as manage current AIS problems. The funding distribution is calculated by the number of public landings and the number of paved and marked parking spots.

The Koochiching Soil & Water Conservation District partnered with Koochiching County's Environmental Services Department to create education materials, attend local events, and plan for future use of the AIS funding in Koochiching County. To





## BUFFER IMPLEMENTATION

Throughout 2023, SWCD staff continued to assist Koochiching County with monitoring, reporting, and implementing Minnesota's Buffer Law and Koochiching County's buffer ordinance. These rules require vegetative buffers of 50 feet, a minimum of 30 feet on public waters, and a minimum of 16.5 feet on public drainage systems. As a result of state legislation, the Koochiching SWCD has received funding since 2016 from the Board of Water and Soil Resources (BWSR) to assist local landowners in complying with the new Minnesota Buffer Law.

In 2023, our Resource Conservationist trained with the new Northern Region Buffer & Soil Loss Specialist of BWSR. Koochiching County buffer compliance field monitoring was conducted in the Rainy River-Rainy Lake Watershed via random spot checks throughout the county and computer monitoring using aerial photography. Compliance with the state law and Koochiching County buffer ordinance has been high since the initial compliance implementation and assistance efforts.

To learn more about the state buffer requirements, benefits of buffers, and updates to the programs in Koochiching County see our website at: <https://koochichingswcd.org/buffers/>.



*Milkweed buffer in Koochiching County*



## BENEFICIAL REUSE OF WOOD ASH



In 1997, the Koochiching SWCD partnered with Boise Paper to land apply wood ash from the local paper mill. Packaging Corporation of America (PCA) acquired Boise Paper in 2013 and continued this valuable program. When applied to farm fields, wood ash serves as a liming agent due to its acid neutralizing ability. Commercial lime has an ENP (Effective Neutralizing Power) of 1000 ENP per ton. Wood ash, from burned tree bark, has ranged from 510 to 1188 ENP per ton and has helped local farmers increase their crop yields by 100% or more. The Koochiching SWCD permits eligible fields and works with the contractor to

coordinate wood ash delivery. In 2023, the Koochiching SWCD permitted 6,356 new acres of agricultural land; 48,998 tons of wood ash were delivered to these and preexisting permits. In addition to providing soil nutrient benefits, this program has saved valuable landfill space.

## FORESTRY PROGRAMS & SERVICES

In 2023, the Koochiching SWCD continued delivering forestry program services including new and updated forest stewardship planning for forestland owners and NRCS Conservation Activity Plans (available to participants enrolled in federal Farm Bill programs).

These voluntary programs provide professional advice and assistance from a certified forester to private landowners who are interested in actively managing the health and productivity of their woodlands. As a part of the process, a 10-year management plan is developed based on a personal forest inventory, research into the local landscape, current forest management techniques and, most importantly, the landowner's property goals. Plans provide a record of how the forest has come to look like it does and what the best practices are to manage it according to the landowner's vision for it in the future. Forest Stewardship Plans cover a variety of topics including:

- Timber Harvest and Management
- Recreation and Trail Development

- Tree Planting Strategies
- Insect and Disease Issues
- Wildlife Habitat Improvement
- Forest Project Cost-Share Opportunities

Obtaining a forest stewardship plan also gives participating landowners eligibility for financial incentive programs including 2c Managed Forest Land and Sustainable Forest Incentive Act (SFIA). Accomplishments during 2023 include the completion of five MN DNR forest stewardship plans covering 519 acres of eligible forestland, one "small acreage" forest plan for a wooded family resort property on the shore of Rainy Lake, and one vegetation management plan for a non-profit trust with conservation easements on four Rainy Lake islands. Four tree plantings projects were developed with landowners covering 11.4 acres and 7340 trees. Once the plans are developed by the Forest Resource Specialist, cost-share is coordinated through partners like NRCS or the MN DNR forestry private forest



## FORESTRY PROGRAMS & SERVICES (CONT'D)

management contact.

In addition, the Koochiching SWCD Spring Tree sale distributed a record 23,815 trees to landowners in 2023.

### **Forestry Practice Services**

During 2023, in addition to providing regional landowners advice regarding forest planning, tree health, project development, and protection incentive and cost-share programs, Koochiching SWCD continued to offer basic forestry services for landowners. This includes hand-planting, tree pruning, and seedling browse protection installation. This provision is supplemented with written outreach descriptions via the website and social media regarding the benefits of stewardship projects and how landowners may accomplish these practices themselves. See our forestry updates at <https://koochichingswcd.org/forest-resources/>

### **Cooperative Weed Management**

As part of the Cooperative Weed Management Area grant administered by the Board of Water and Soil Resources (BWSR), the Koochiching SWCD developed and led a project aimed at removing wild parsnip.

Koochiching SWCD began working with landowners in 2023 to assist in the purchase of herbicide for the spraying of wild parsnip. While hand pulling this noxious invasive plant is best when possible, mowing at the correct times and spraying are sometimes necessary in cases where the affected area is large such as the photo shown to the left.



*A large area of wild parsnip which was later sprayed for control*

### ***What to look for:***

#### **Stem**

- Stout, grooved, hollow stems.

#### **Leaves**

- Rosettes are pinnately compound, green and shiny, with five to fifteen broad, ovate to oblong leaflets.
- Stem leaves are yellowish-green with alternate arrangement and have five to fifteen egg-shaped leaflets that are sharply toothed or lobed at the margins. Leaves towards top of the plant are smaller.

#### **Flowers**

- Flat-topped, broad umbel flower cluster two to six inches wide, with numerous five-petaled yellow flowers.
- Blooms from June to late summer.

#### **Seeds**

- Small (one fourth inch), flat, rounded, slightly ribbed, straw-colored and abundant; takes three weeks to ripen before they can reseed.
- Survive in the soil for four years

#### **Roots**

- Long, thick taproot.

If you think you might have wild parsnip on your property, contact the Forest Resource Specialist at 218-283-6742 . We can provide you with knowledge and guidance to help you minimize this invasive plant.

For more information, please go to our website at: <https://koochichingswcd.org/cwm/>

## EROSION CONTROL AND WATER MANAGEMENT PROGRAM (STATE COST-SHARE)

The MN Board of Water and Soil Resources (BWSR) provides funding for Soil and Water Conservation Districts to lead projects related to erosion or sediment control and improving water quality. These State Cost-Share funds are available to land occupants who request financial and technical assistance from their local SWCD in implementing conservation practices. In August 2023, BWSR adopted the Conservation Contracts Program Policy to replace the State Cost-Share Program following amendments to Minnesota Statutes, section 103C.501. The change broadens project eligibility and allows SWCD offices to expand on conservation assistance in their communities.

In 2023, Koochiching SWCD used these funds to establish a shoreline stabilization project that will secure roughly 1,200 linear feet of shoreline using rock riprap. This project area experiences high traffic on unstable artificial and altered shorelines. Erosion concerns were exacerbated by the historic flood in 2022. The project construction will be underway in Spring 2024.

## BIG FORK WRAPS CYCLE 2

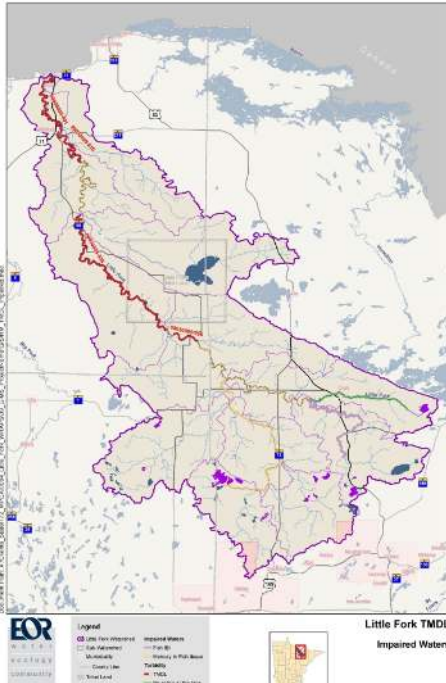
In April of 2022, this grant was funded by MPCA through Clean Water funds. The goal of this project is to identify and prioritize targeted restoration and protection areas where there are data gaps within the Big Fork River Watershed to maintain and enhance water quality. Through an increased technical agency partnership, this contract will support research, monitoring, analysis, and planning activities to develop strategic implementation and protection management practices in targeted locations of the watershed. This contract will also support public outreach and education to inform the public of the WRAPS process and educate on various relevant restoration and protection strategies. The strategies developed through this project will be integrated into an updated Big Fork River WRAPS Report and provide the foundation for future implementation projects that have been requested by the Koochiching County SWCD.

Activities in 2023 included culvert inventory work around Big Falls area; cold water spring inventory review and planning; field work planning with MPCA, Itasca SWCD, and Leech Lake; participating in an Impaired Waters meeting, monthly team meetings; promotion through the Koochiching and Itasca Fairs, creation of posters for displays including a traveling display to be used in 2023 and 2024; and completion of required semi-annual reporting.





## LITTLE FORK WRAPS CYCLE 2



**Impairments within the Little Fork River Watershed. Red shows the 105-mile stretch of turbidity being addressed in this project.**

As a follow-up to the WRAPS Support in Rainy Basin Watersheds Grant, this work will continue the sediment fingerprinting. Work in this grant includes Itasca SWCD and North St. Louis SWCD.

This project is being led by the United States Geological Survey (USGS) and the Minnesota Pollution and Control Agency (MPCA) with support from the 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 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 the 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 source properties. Through statistical 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.

### Progress in 2023

Project fieldwork was wrapped up and data has been reviewed. Projects results are being written into a final report for public consumption in the winter of 2024. 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 used to pinpoint areas for 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.



**SWCD staff collecting a sample in the Little Fork River at the bridge on Highway 65 from a passive sampler.**

## RAINY RIVER SEDIMENT-BOUND PHOSPHOROUS AS A POTENTIAL DRIVER OF LAKE OF THE WOODS ALGAL BLOOMS

A project similar to the sediment fingerprinting is beginning in 2023 that will look 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 USGS, MPCA, and Lake of the Woods SWCD to map sediment and the transfer of phosphorus throughout the Rainy River system into Lake of the Woods. This is a grant funded project through the LCCMR.



*Passive samplers on Rainy River*

Lake of the Woods (LOTW) is a vital ecosystem impacted by recurring harmful algal blooms. The Rainy River basin comprises 80% of the total drainage area to LOTW and contributes 45-75% of the total phosphorus (TP). Despite major reductions in total phosphorus 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 LOTW, 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 now and into the future.

In 2023 staff from LOTW SWCD and Koochiching SWCD started gathering data on three of the eight sampling locations. This work will continue in 2024 and be completed at the end of the year. Water

quality samples and sediment samples will be 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 will be mapping sediment and collecting data in the Rainy River and Four Mile Bay to better understand the phosphorus chemistry of sediment in storage and in transport. The study will use geophysical tools to examine the extent and thickness of fine sediment deposits. It 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. Long-sediment cores will be collected in Four Mile 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 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 the greatest potential to contribute to the bioavailable pool of phosphorus downstream and to fuel algal blooms into the future.



*Sediment sampling on Rainy River*



## CLEAN WATER ACT SECTION 319 SMALL WATERSHEDS FOCUS GRANT

The U.S. Environmental Protection Agency (EPA), through the federal Clean Water Act Section 319 grant program, provides funding to states to address nonpoint source (NPS) water pollution in small focused watersheds. The Minnesota Pollution Control Agency (MPCA) then passes through Section 319 grants annually to local governments and organizations to implement best management practices (BMPs) and adopt strategies to mitigate nonpoint source (NPS) pollution. The goal of the Small Watersheds Program is to achieve the water quality objectives in the selected watersheds through the implementation of watershed-based nine element (NKE) plans.

The intent of the program is to make measurable progress for the targeted waterbodies in the Focus Watersheds, ultimately restoring impaired waters and preventing degradation of unimpaired waters. The Small Watersheds Program will provide sustainable, longer-term funding to a select number of Focus Watersheds, which will develop detailed nine element (NKE) plans following the EPA guidance and using existing local water plans and state reports. They will then be eligible to receive Section 319 grant funds to implement the NKE plan over the course of multiple grant cycles, for up to approximately sixteen years.



The Koochiching SWCD submitted a letter of interest to receive funding for future work in the Rat Root River, part of the Rainy River-Rainy Lake watershed, and was selected to move forward as part of the Section 319 Small Watersheds Focus program. The targeted goal for this watershed is to reduce phosphorus (P) loading by 5% and total suspended solids (TSS) loading by 5%. This will improve the health of the Rat Root River and decrease P and TSS loading to Rainy Lake.

Currently, SWCD and MPCA staff are making final edits to the draft NKE plan for the Rat Root River. Upon completion, the plan will be submitted to the EPA for approval later this year. Projects are expected to begin in 2025, one of those projects in the coming years to be the removal of a failing bridge, causing log jams on the Rat Root River, shown above.



## HYBRID CATTAIL REMOVAL AND WATER FLOW ENHANCEMENT



*Dump site: Cattails after draining with remaining mud.*

In 2020, the Rainy Lake Property Owners Association (RLPOA) partnered with Koochiching SWCD to submit a project proposal to the Conservation Legacy Partners Grant (CPL) program. The project aims to remove nine acres of hybrid cattail mats, increase water flow, and improve native habitat in the Elks Bay and Jackfish Bay. Funding was



approved in December of 2021, and planning began. Our long-awaited plans went underway this past fall after delays due to the historic flood in 2022.

Lakes Aquatic Weed Removal (LAWR) cut and collected eight acres of the hybrid cattail biomass, completing the portion of the wetland reclamation on the east side of County Road 134. Heavy muck subsurface material made up the bulk of the biomass. LAWR spent 97 hours cutting the biomass and over 670 hours collecting the biomass and disturbed muck that gathered on the water's surface. Approximately 665 truckloads of cattail biomass, 12 cu. yards per load, were hauled away from the restoration site. Following the site clean-up, rock and sand materials were used to recover the public access, the primary location for biomass piling and removal. The remaining acre of hybrid cattails on the



*Harvester barge*



## HYBRID CATTAIL REMOVAL AND WATER FLOW ENHANCEMENT (CONT'D)



*LAWR cuts cattails on the east side of CR 134. Photo Credit: Tom Dougherty*

west side of County Road 134 is planned to be removed in the spring of 2024. Terrestrial seed mix will be planted to recover the area around the public access further. A seed mix of transition species will be planted along the northern edge of the reclaimed wetland. County Road 134 will be raised to incorporate a navigable box culvert, 10 ft x 16 ft in size, to allow for increased water flow and safer road conditions during floods. The road project is estimated to be completed by August 31, 2024. Wild rice will be introduced in the fall of 2024.

Despite the challenges, this stage of the cattail removal appears to have been successful and positive. Landowners' and partners' feedback was collected and found to be optimistic about the progress. Support is received for the continuation of removal on the west side of CR 134. Research supports that wild rice is viable at this wetland depth, recovered after hybrid cattail removal. The community looks forward to the next stages and what this project could mean for the future of Rainy Lake and others in our state.



## CONSERVATION DELIVERY

The Koochiching SWCD provides technical, financial, administrative, and educational assistance to landowners and land users including non-industrial private forest landowners, agricultural producers and Federal/State/Local government units seeking to effectively manage resources and ensure their long-term sustainability.

Main activities throughout 2023 included:

- Landowner and partner assistance
- Farm Bill Programs
- GIS mapping & aerial photos
- Tree planting plans
- Technical assistance on water quality and sediment control projects
- Board Supervisor activities
- Grant writing



## COUNTY PROJECTS AND SUPPORT



The Koochiching SWCD works closely with County Commissioners and individual departments to provide quality and streamlined assistance to county taxpayers and visitors. In addition to county project support described in previous sections, other cooperative efforts in 2023 included:

- Plat Book distribution
- Environmental Services Department and Land & Forestry Department project support including tree planting for the Island View Sewer Project, landowner outreach, and office support
- County Board meeting attendance and Commissioner support
- General landowner assistance including GIS mapping, aerial photos and education materials
- 1W1P grant writing and development



## DISTRICT PROGRAMS, PROJECTS & PARTNERSHIPS

The Koochiching SWCD was officially organized in December 1953 as a way to coordinate technical, financial, and educational resources that would assist local land owners in addressing natural resource concerns.

Although our programs have evolved over the years to meet changing landowner and resource needs, our commitment to natural resource sustainability remains unchanged.

In addition to the many conservation projects described in the previous sections, here is a look at

some of our 2023 administrative activities:

- Time Tracking and Priority Goal Setting
- Administrative & Financial Training/Support
- District Board Meetings & Legislative Updates
- Financial Management & Grant Tracking
- Staff Training & Ongoing Education
- Long-Range Planning
- Project & Financial Reporting
- Website Maintenance & Social Media Updates
- Partner Meetings & Cooperation
- Landowner Correspondence
- Operational Policy Reviews & Updates

**January 1954** marked the first official meeting of the **Koochiching County Soil & Water Conservation District (SWCD)**, a local government unit organized under Minnesota Statute 103c that provides land users access to natural resource management and conservation services.

**Thank you for allowing us to serve you for an incredible  
70 years!**



Ralph Lewis  
District I Board Member



George Aitchison  
District II Board Member



Eldon Voigt  
District III Board Member



Richard Dreher  
District IV Board Member



Jody Reller  
District V Board Member



Pam Tomevi  
District Administrator



Marcie Peeters  
Resource Conservationist



Sam Soderman  
Water Resource Specialist



James Aasen  
Forest Resource Specialist



Jolen Simon  
Program Coordinator

## Special Thanks to Our Conservation Partners

# A HUGE Milestone: 70 Years!

With our mission “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”, the Koochiching SWCD has worked hard over the past 70 years to become good leaders in natural resource management and sustainability.

The support and guidance of our many local, state and federal partners and the cooperation of local land users, patrons, and numerous volunteers has allowed the Koochiching SWCD to make tremendous progress in achieving our mission.

As we continue advancing our programs and service delivery, we are extremely grateful for these strong and growing partnerships...without them, we would not be where we are today!

THANK YOU!



Koochiching County  
Landowners, Volunteers,  
Neighbors and Visitors!

