



North St. Louis Soil & Water Conservation District

2020 Annual Activity Report

A Year of Resilience

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218-749-2000

www.nslswcd.org

www.facebook.com/nslswcd

The mission of the North St. Louis Soil and Water Conservation District is to encourage sustainable use of our natural resources by engaging people in soil and water conservation in northern St. Louis County.



Resiliency and COVID-19

Many changes were made at the beginning of 2020 with the onset of necessary precautions to prevent the spread of COVID-19. What started as temporary changes, continued as long-term fixtures to the District's policies, procedures and protocols. Many in-person meetings, programs, and trainings were canceled completely, or delayed until online platforms were organized. The District staff and elected Board of Supervisors board worked together to find ways to continue our programs while overcoming the hurdles brought upon the district and our many partners.

- Staff adapted to working from home offices when possible, and visited the office and field when necessary.
- Mask wearing and cleaning protocols were put into place
- In-person meetings were diligently planned and held only on an absolute necessity basis
- New online platforms were found and utilized extensively

North St. Louis Soil and Water Conservation District

Staff

Anita Provinzino- **District Administrator**- anita@nslswcd.org

Becca Reiss- **Community Conservationist**- becca@nslswcd.org

Beth Kleinke - **Regional Farm Bill Forester**

Lauren Soergel- **District Forester**- lauren@nslswcd.org

Natalya Walker- **AIS Program Coordinator**- natalya@nslswcd.org

Phil Norvitch- **Resource Conservationist**- phil@nslswcd.org

Board of Supervisors

Peggy Pearson, Angora, Chair

Gary Rantala, Embarrass, Vice-Chair

Frank Modich, Hibbing, Supervisor

Charles Bainter, Iron, Treasurer

Mark Peterson, Eveleth, Secretary

Funders

MN Board of Water & Soil Resources

MN Department of Natural Resources

Minnesota Humanities Center

MN Pollution Control Agency

St. Louis & Lake Counties

The Initiative Foundation

National Association of Conservation Districts

USDA Natural Resources Conservation Service

Partners

AEOA's The Rutabaga Project

Bois Forte Heritage Center

Burntside Lake Association

Chisholm & Hibbing Indian Education

Cities of Ely, Gilbert, & Virginia

Fayal Township

Friends of the Olcott Greenhouse

Iron Range Partnership for Sustainability

Iron Range Tourism Bureau

ISD 2142 Community Education

Mesabi Outdoor Adventures

Minnesota Discovery Center

North St. Louis County 4-H

Pelican Lakeshore Owners Association

RMB Labs

SWCD's in Carlton, Cook, Itasca, Koochiching, Lake & South St. Louis Counties

Technical Service Area 3 Engineers

University of MN Extension

U of M Natural Resources Research Institute

Vermilion Lake Association

Voyageurs Conservancy

Voyageurs National Park

White Iron Chain of Lakes Association

Wildlife Forever



Aquatic Invasive Species Prevention Program

A record number of watercraft inspections were conducted in 2020, despite changes made to inspector training and protocols due to precautions put into place for COVID-19. **27,569** watercraft inspections and **130** decontaminations were conducted at **36** public accesses and at **14** private accesses on **19** lakes. Boaters are educated on aquatic invasive species (AIS) and how to prevent their spread as watercraft inspections and decontaminations take place.

The program would not be possible without the partnership of lake associations, municipalities, and other SWCDs plus funding from Lake and St. Louis Counties.



AIS Outreach event



Decontamination of a Watercraft

Public Access Inspections

In 2020, inspections were completed at these **19** lakes: Bear Island, Birch, Burntside, Crane, Ely, Fall, Farm, Gilbert, Johnson, Kabetogama, Kawishiwi River, Moose, One Pine, Pelican, Shagawa, Snowbank, Tofte, Vermilion, and White Iron Lakes

Private Access Inspections

Risk analysis suggests resort visitors may pose a higher risk of introducing AIS to lakes.

- **1,640** watercraft inspections were done at private accesses by **11** resorts on Lake Vermilion and **2** resorts on Pelican Lake
- Further, **8** more resorts on Vermilion and **4** on Pelican participated in other AIS prevention measures by providing their guests with AIS prevention information.

- **25,929** watercraft inspections
- **130** watercrafts decontaminated
- **12,135** inspector hours worked
- Employed **>40** seasonal workers
- Utilized boat traffic data and risk analysis to efficiently staff inspectors and successfully averaged **2.2** inspections/hour
- **Kabetogama** and **Crane** Lakes were new lakes this year and were much busier than anticipated, averaging **>3** inspections/hour.
- **White Iron Chain of Lakes** were also new to the program in 2020. The South access on Birch Lake was the busiest access on the chain at **2.3** inspections/hour



Eurasian Water Milfoil



Curly Leaf Pondweed



Rusty Crayfish



Zebra Mussels



Spiny Waterflea



Forestry Services

Working with private landowners to plan for the next generation of forests.

The District's foresters continue to partner with Carlton, Cook and Lake County SWCD foresters on a USDA NRCS grant to assist landowners to implement conservation practices utilizing the federal Environmental Quality Incentives Program (EQIP). 117 forestry plans, EQIP applications, implemented practices and certifications were completed for landowners in 2020. Of those, **51** were in northern St. Louis County. This group also assisted NRCS to connect landowners, in the Mesabi region of the Superior National Forest and the Lake Superior watersheds, with funding for qualifying management plans and practices.

Landowners worked with our foresters to **reduce wildfire hazards, plant trees and shrubs for pollinators and wildlife, thin timber stands, and remove invasive weeds.**

We also assist landowners not wishing to seek federal funding. Our intention is to help you meet your goals for your wooded acreage.

Let us guide your management efforts to maximize your woodlands.



Planting Project



Pine thinning: Before



Pine thinning: After

Annual Tree and Native Plant Sale

Each January-April, orders can be placed for tree stock, with pickup dates in May. In 2020 we rolled out **online ordering** of over **25** types of **trees and shrubs**, and, also new, **native plant kits** for pollinators, shoreland and woodland shade. A total of **10,850 trees** and **2916 native plants** were planted by people just like you! Unsold and unclaimed trees were **donated** to the **Laurentian Environmental Learning Center** and to **Camp Esquagama**.



Need **trees** and **plants** for 2021 planting?
New this year, a **septic mound seed mix**!
Order at www.nslswcd.org

Stewardship Plans

Free site visits are offered to all landowners interested in managing their woodedland.

6 landowners participated
525 acres enrolled in programs

Landowners with 40 acres or more can elect to have a more formal plan drafted for a fee, and could enroll in state financial incentive programs that protect forest habitat on private property. All landowners, with at least 20 acres of wooded land, can receive assistance applying for DNR cost share for forest improvement projects.

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North St. Louis SWCD Annual Activity Report

Outreach and Education



We Are Water MN

Plans were in place to host a We Are Water MN exhibit at the Minnesota Discovery Center in partnership with Minnesota Humanities Center in 2020 but was postponed due to COVID-19. The District looks forward to hosting events throughout 2021 with exhibit dates at MDC in Chisholm from May 13th– July 12th.

We adapted to COVID-19 concerns, online learning, and social distancing, like all of you.

- Continued partnering with **5** local organizations to **plant 2** food forests in Virginia and Chisholm via a Urban Agriculture Conservation competitive grant from the National Association of Conservation Districts.
- Changed to online learning for the Urban Agriculture grant to conduct **3 summer lessons** on water quality, worms & soil, and trees.
- Adapted the annual **Conservation Coloring and Poster Contest** with online voters getting to choose the winners!
- Conducted **4** in-person **youth programs** on pollinators, environmental careers, soils, & water quality & water sampling.
- Conducted and assisted with workshops and webinars on Invasive Plants, Shrubs and Trees, Water Quality, and Private Septic Systems & Wells.
- 11** volunteers monitored and reported invasive species treatment at **6** wildlife management areas, totaling **101** hours.



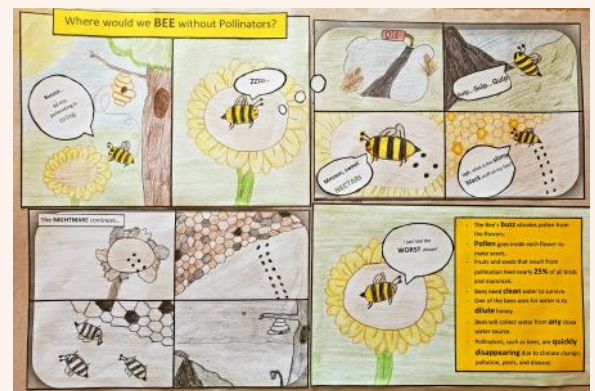
4-H program on worms and soils



4-H program making an edible plant ~ a healthy snack!



Virtual Watershed Demonstration



2021 1st Place Poster Contest Winner



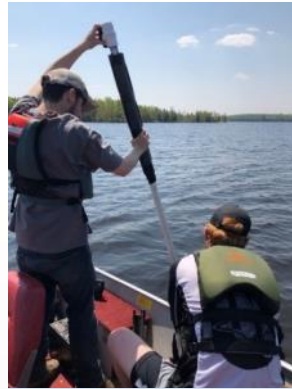
National Public Lands Day event

Public Participation & Data Collection

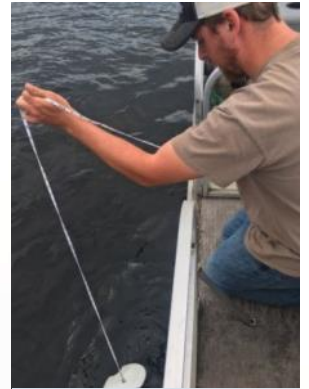
Watershed Restoration and Protection Strategies (WRAPS)

WRAPS are active in the Little Fork, Rainy River Headwaters, St. Louis, and Vermilion River watersheds.

- Partnered with Koochiching SWCD, Lake of the Woods Watershed Sustainability Foundation and MN Pollution Control Agency to co-host 7 **"Ask an Expert" webinars** on water quality in the Rainy Basin with speakers from both Minnesota and Ontario.
- **30+ people** received free well water testing through the MN Department of Health by attending a virtual **private septic and well workshop** sponsored with the U of MN Water Resources Center
- Produced new outreach materials on topics including backyard conservation, forestry, lakeshores, and water quality.
- **13 people** were interviewed about their **social values** about the Rainy River Headwaters or Vermilion River Watersheds to better understand local views on water quality and conservation.
- Collected in-stream sediment samples in the Little Fork River Watershed as a part of a Sediment Fingerprinting study in conjunction with the US Geological Survey and the MPCA.
- Installed **3 Crowd Hydrology Stations**, on the Burntside, Cloquet, & West Two rivers people can text in water levels.



Integrated water sampling



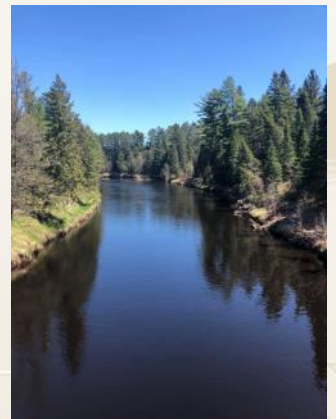
Water clarity with secchi

Surface Water Assessment

To determine the health of lakes and streams the Minnesota Pollution Control Agency provided funding to North St. Louis SWCD and partners to **collect water quality data** in the St. Louis River Watershed as part of the 10-year WRAPS cycle.

Sampled Water From

9 stream sites and **7** lake sites in the St. Louis River Watershed were sampled and tested in 2020



Beauty on the St. Louis River



Crowd Hydrology gauge on Burntside River

Resource Conservation

Erosion Control Cost-Share

North St. Louis SWCD receives annual funding from the MN Board of Water & Soil Resources to share the cost with land occupiers who implement projects that **control erosion**.

- After visiting with the landowner and viewing the site, our resource conservationist and Technical Service Area III's engineers develop a site-specific plan to prevent or control erosion.
- Landowners may choose to apply to the District Board for up to 75% of the project's cost.
- These projects are designed to prevent or reduce erosion, resulting in improved water quality.

Projects Installed in 2020

2 shoreline protection projects
stabilized **445** linear feet of
shoreline on Birch & Ely Lakes

Annual Pollution Prevented

53.35 tons of soil from eroding
45.35 pounds of phosphorus from
entering the water each year!



Shoreline protection project on Birch Lake: Before & After

Wetland Conservation

The **Minnesota Wetland Conservation Act** is a state regulation that aims to 1) achieve "no net loss" of and 2) increase the quantity, quality, and biological diversity of Minnesota's wetlands. When wetland impacts must occur, the value of those wetlands is replaced.

Our Resource Conservationist provides technical assistance and information to both public and private landowners regarding wetlands. He can walk your property with you.

Orr Area Trout Stream Improvements

A DNR Conservation Partners Legacy grant enabled the District to continue its **trout habitat** work on the Lost River system, near Orr.

In 2020 a contractor **replaced an undersized culvert** on the Bulldog Hansen Creek that was a **barrier to fish passage**. Additional work will occur in 2021



*Before During After
Improving Fish Passage on Bulldog Hansen Creek*

Weed Management for Wildlife

In 2020, **11 Ely-area volunteers** contributed **101 hours** surveying previously treated areas with invasive species at **6 wildlife management areas**. They learned how to document infestations on EDDmaps, so that the data is shared and available.

This work was done as match toward a DNR Conservation Partners Legacy Grant.

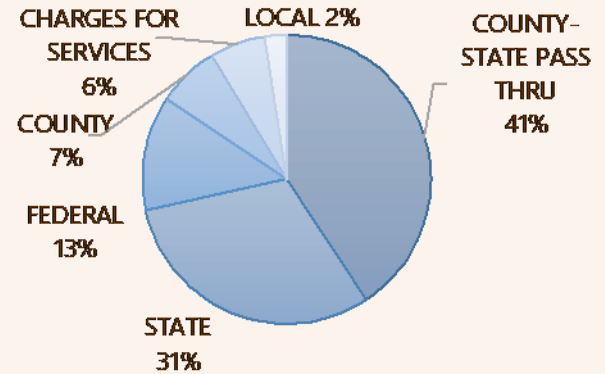


Financial Summary

2020 SWCD Revenue Sources

Revenue Source	Amount	Percentage
COUNTY-STATE PASS THRU	\$388,212	41%
STATE	\$295,499	31%
FEDERAL	\$122,252	13%
COUNTY	\$66,000	7%
CHARGES FOR SERVICES	\$59,391	6%
LOCAL	\$23,894	2%
Total	\$955,248	100%

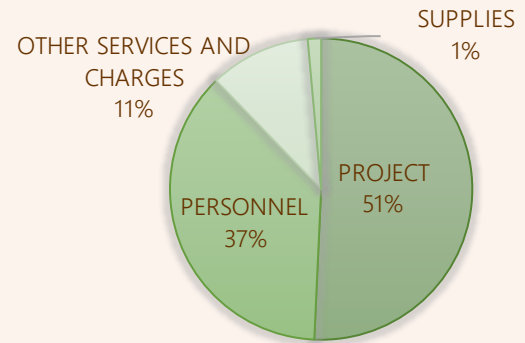
Note: Financial data is preliminary and not audited.



2020 SWCD Expenses

Expense type	Cost	Percentage
PROJECTS	\$479,353	51%
PERSONNEL	\$350,302	37%
OTHER SERVICES AND CHARGES	\$101,924	11%
SUPPLIES	\$13,442	1%
Total	\$945,021	100%

Note: Financial data is preliminary and not audited.



In the Works for 2021

Aquatic Invasive Species Prevention Program

- Inspect watercraft on 19 lakes in Lake & St. Louis Co.
- Operate watercraft decontaminations on or near Burntside, Crane, Gilbert Pit, Kabetogama, Shagawa, and Vermilion Lakes.
- Encourage more resorts, campgrounds and marinas to conduct watercraft inspections at their accesses.
- Try several Community Based Social Marketing initiatives to engage people in AIS prevention efforts.
- Partner on AIS prevention with Burntside, Pelican, Vermilion and WICOLA lake associations, Cities of Ely & Gilbert, Fayal Township, Koochiching and Lake County SWCDs, Voyageurs National Park and Voyageurs Conservancy.

Outreach and Education

- Reach larger and broader audiences with a variety of conservation topics and methods of delivery.
- Engage people in the WRAPS of the Little Fork, Rainy Headwaters, St. Louis, and Vermilion River Watersheds.
- Actively participate in the development of a watershed-based plan for the St. Louis River.
- Host 'We Are Water MN' exhibit at the Minnesota Discovery Center in Chisholm from May 13–July 12.

Forestry

- Meet with landowners to learn their goals, suggest ideas and develop a plan for managing their wooded acreage. Connect them with federal and state funding sources, if desired.
- Work with volunteers to monitor previously treated areas for terrestrial invasive species within wildlife management areas.
- Contract for alder thinning and tree planting to provide shade to keep streams colder on the Lost River system near Orr, which is known for trout.

Resource Conservation

- Share the cost with landowners to stabilize a steep and eroding roadway near the Whiteface Reservoir.
- Collect sediment samples for the Little Fork River Watershed Sediment Fingerprinting study.
- Oversee a contractor's replacement of a culvert that is a barrier to fish passage on an unnamed tributary to the Lost River near Orr.
 - Take part in the Technical Evaluation Panel for wetland applications. Develop restoration plans for violations. Provide wetland guidance to landowners.

