



Sherburne  
**SWCD**

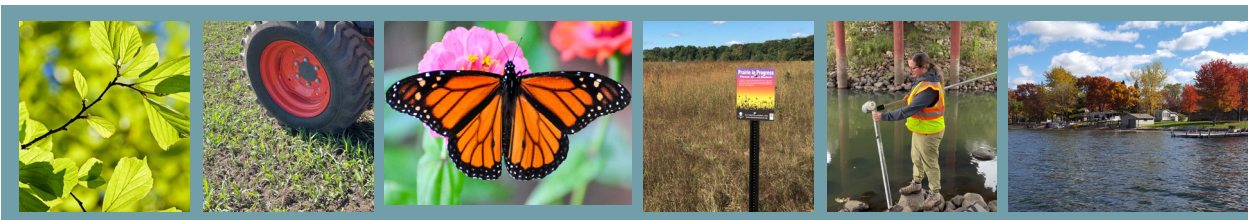
**Annual Report 2022**

# TABLE OF CONTENTS

2022 Conservation Fast Facts.....	3
SWCD Supervisors and Staff .....	4 - 6
Conservation on the Land .....	8 - 10
2022 Completed Projects .....	11
Forest Management .....	12
Water Resources.....	13 - 18
Education and Outreach.....	19 - 23
NRCS Programs.....	24 - 25
2022 Activity Summary .....	26 - 27
2022 Financial Summary.....	28 - 29
thank2022 Outstanding Conservation Cooperator .....	30
SWCD Information.....	31

## OUR MISSION

*The Sherburne Soil & Water Conservation District is dedicated to working directly with landowners and agencies in order to promote the wise and sustainable use of our land and water related resources; to educate and inform the public about these uses; to help solve the resource problems within the District and to serve as a county wide natural resource information referral center.*



# 2022 SWCD CONSERVATION FAST FACTS



## Precipitation Observation

The SWCD had 10 residents participate in the Minnesota Volunteer Precipitation Observation Program. The data measurements they collect are used for weather, water supply and flood forecasting.



## Water Quality Monitoring

Over the course of 2022, the SWCD monitored 24 obwells quarterly. The data collected is used by State agencies to monitor groundwater trends during normal, drought, and flood periods.



## AIS Monitoring

During the Summer of 2022, a total of 16 Sherburne County lakes and rivers were surveyed for Aquatic Invasive Species.



## Wetland Delineations

During 2022, the SWCD completed 3 County wetland including future road projects, future County Park updates, and County Trail expansions.



## Tree Sale Program

Over 19,000 bareroot seedlings were distributed during the SWCD's annual Tree Sale in 2022.



## AIS Volunteers

In 2022, 92 Active Volunteers participated in AIS monitoring, contributing over 350 hours of time.



## Online Outreach

The SWCD continued with outreach and education by offering online webinars on topics like pollinator habitat and nitrates in groundwater.



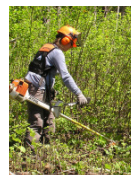
## Lawns to Legumes

Since 2020, the SWCD has helped 22 landowners install pollinator habitat on their property.



## Tree Health Assessments

Over 55 site visits were conducted to assist landowners with forest management and disease control/mitigation.



## Forest Management Support

The SWCD assisted the Sherburne County Parks Department with over 50 hours of habitat restoration work involving critical period cutting, vegetation surveys, native plantings and prescribed grazing.

# SWCD ELECTED SUPERVISORS



The Board of Supervisors is comprised of five members elected to staggered four year terms in county wide elections, but representing different nominating Districts throughout the county.

Soil and Water Conservation Districts (SWCDs) are special purpose units of government that manage natural resource programs. Minnesota's 88 SWCDs cover the entire state; their boundaries usually coincide with the county lines. The Board of Supervisors is responsible to set the goals, policies and priorities of the District and employ a staff to work toward those goals. *Find more out about our SWCD Supervisors by clicking here.*



**Shelly Binsfeld**  
District I



**Kerry Saxton**  
District II



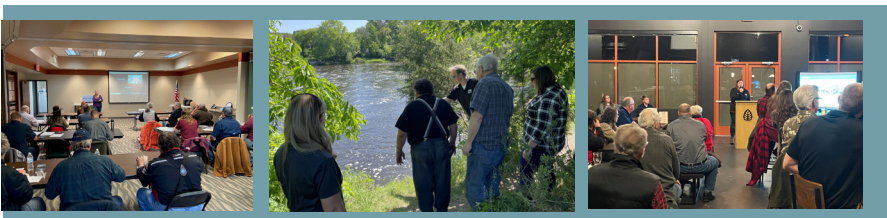
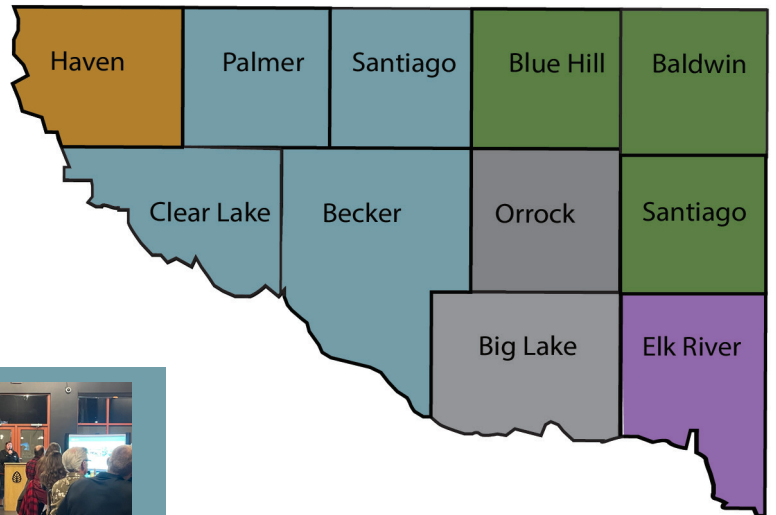
**Larry Goenner**  
District III



**Jason Selvog**  
District IV



**Roger Nelson**  
District V



# IN REMEMBRANCE



**Roger J. Nelson**  
**10/18/47 - 11/16/22**

Roger was proud to be an active member in his community as the Sherburne County Commissioner for two years, Blue Hill Township Supervisor for over 20 years, and sexton of Blue Mound Cemetery for many years. He was also on the Sherburne County Planning Commission, Board of Adjustment, and Soil and Water Conservation Board for a total of 17 years. During his time as a Supervisor for the Soil and Water District, Roger led the way in approving many great conservation practices that have been implemented throughout Sherburne County. Roger will be missed, but he leaves behind an amazing legacy in conservation.



# SWCD STAFF

The friendly and professional staff of the SWCD works cooperatively with private landowners on soil and water related projects, such as cost share programs, lakeshore protection, soil health, and pasture management to name a few. It is our goal to coordinate plans that will enable landowners to utilize their natural resources while improving water quality, conserving soil integrity and promoting plant and animal health. *Click on the images below to learn more about our staff.*



**Francine Larson**  
District Manager



**Dan Cibulka**  
Sr. Water Resource Specialist



**Franny Gerde**  
Urban Conservationist



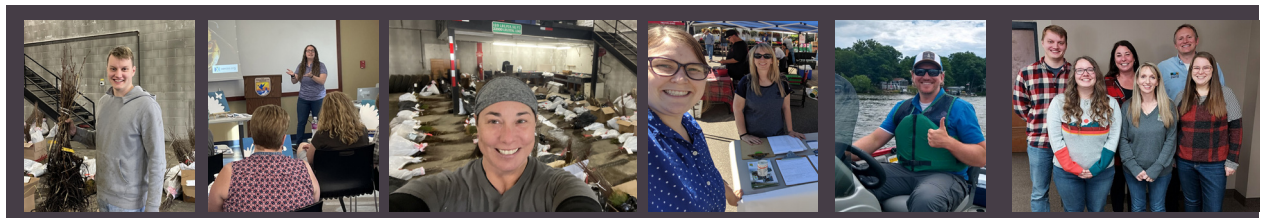
**David Wick**  
District Technician



**Miranda Wagner**  
Agricultural Conservationist



**Andie Bumgarner**  
Marketing/Admin Asst.



# CONSERVATION ON THE LAND

## Native Pollinator Program

In 2022 the SWCD received funding to assist and promote conservation practices that protect water and soil and provide wildlife habitat. A portion of these funds are allocated to providing incentives to landowners for establishing diverse native prairie. Since the year 2000, the SWCD has been establishing native prairie on residential property through incentives that include technical assistance, cost share, and affordable planting services.

The benefits of the program improve habitat by providing a diverse plant community that supports the lowest levels of the food web up through feeding and nesting cover for song birds, upland game birds and small mammals. Prairie also sequesters carbon from the atmosphere, reduces soil erosion, builds soil health, and improves water quality.

In 2022, the District partnered with the US Fish and Wildlife to restore approximately 14.5 acres of oak savanna and prairie habitat along with 0.5 acres of wetland habitat. This project will provide wetland and upland habitat for numerous native fauna including Wood Ducks and Monarch Butterflies.

The project will also provide improved water quality by filtering excess nutrients coming from the adjacent watershed and will also lessen the effects of soil erosion on downstream water bodies, including the Elk River. The FWS Biologist provided technical recommendations to the landowner regarding permitting and design. Recommendations of vegetative management were also expressed to enhance the diversity of the habitat. Find more out about our prairie and planting services.



## Buffer Law

The Buffer law was passed in 2015 and requires landowners to install buffer strips along the state protected waters and public drainage ditches. In addition to providing habitat for many forms of wildlife; buffer strips filter nutrients, sediment, and other pollutants from surface water runoff. This law requires a 50-foot perennial vegetative buffer along public waters (lakes and watercourses) and 16.5 feet on public ditches.

During 2022, the SWCD completed the fourth year of monitoring for parcels deemed compliant. The SWCD staff is working with the Board of Water and Soil Resources (BWSR) to bring all parcels into a compliant status. *Find more out about our Minnesota Buffer Requirements by clicking here.*

# CONSERVATION ON THE LAND

## Nitrate Reduction Grant

In 2019 the SWCD was awarded a Clean Water Funds grant from the Board of Water and Soil Resources. The goal of the grant is to reduce nitrates in the groundwater by promoting and implementing best management practices and alternative management tools in the priority areas of Sherburne County. Private well testing was conducted and analyzed in 6 townships: Clear Lake, Haven, Palmer, Santiago, Becker, and Big Lake. In Clear Lake and Haven, 11.3% and 13.8% of the wells tested were above the health limit of 10 mg/L respectively. Palmer, Santiago, Becker, and Big Lake Townships ranged from 2.1%-8.6% above the health limit. The Minnesota Department of Health (MDH) has also identified Wellhead Protection Areas and Drinking Water Management Areas for the cities of Clear Lake and Becker, which are included in the project area.



Cost share was available under this grant for best management practices such as: cover crops, irrigation water management, nutrient management, and perennial cover establishment. The SWCD also had Agsense units available to use during the 2022 growing season and the ability to perform uniformity tests. Furthermore, the SWCD sent out a weekly evapotranspiration report to assist with Irrigation Water Management.

Over the duration of the grant, operators in Sherburne County installed: more than 12.5 acres of native prairie, 83 acres of Nutrient Management, more than 450 acres of cover crops, more than 550 acres of Irrigation Water Management including installation of soil moisture sensors, rainbuckets, and updating systems with new nozzle packages and variable rate technology, 35 acres of hayland plantings, and 250 acres of strip-till. Furthermore, funds were used to host events such as Lunch and Learns and a Strip Till and Cover Crop Demonstration Field Day. 20 acres of Kernza was also planted as a demonstration project which included soil sampling and lysimeter monitoring which lead to more Kernza acres adopted in Sherburne County.

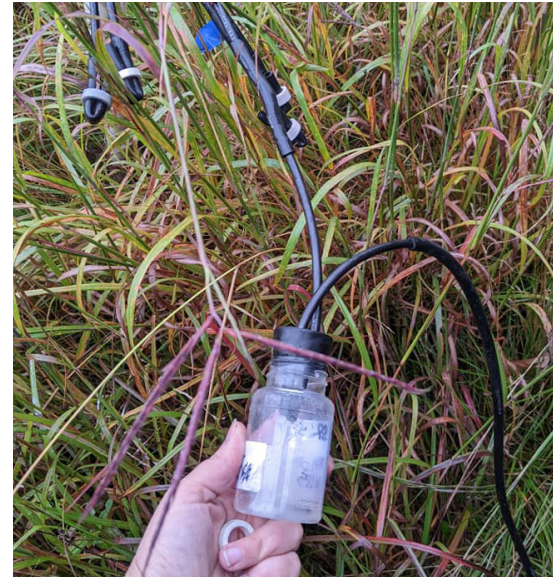




# CONSERVATION ON THE LAND

## Nitrogen Fertilizer Management Plan

The SWCD, in partnership with the Minnesota Department of Agriculture (MDA), participated in a pilot Nitrogen Fertilizer Management Plan process since 2018. High levels of Nitrates were detected in the 2014-2015 Township Testing program which prompted the process. A Local Advisory Team (LAT) has met a total of 7 times to discuss and identify Best Management Practices (BMPs) and Alternative Management Tools (AMTs) to implement in Sherburne County to reduce Nitrate leaching to groundwater. The Nitrogen Rule was adopted in 2019 and is now focusing on selected Drinking Water Supply Management Areas (DWSMAs). Efforts will continue within the townships to adopt BMPs and AMTs to continue nitrate reduction efforts.



In 2019, permanent lysimeters were installed in conjunction with the Nitrogen Fertilizer Management Plan at a farm near St Cloud. The SWCD monitored Nitrate levels throughout the growing season and will continue to use this site for side by side comparisons of BMPs and AMTs. Water is being pulled from a 4 foot depth, below the rooting zone, and serves as a good indicator of the level of nitrates “lost.”

In 2022, The LAT met to discuss best management practices, U of MN Nitrogen rates and to develop recommendations to the Commissioner of Agriculture. MDA and Sherburne staff also made themselves available to conduct farm visits to discuss Nitrogen rates and other BMPs.

## The Nature Conservancy



In 2020, the SWCD entered into a partnership with The Nature Conservancy, with support from Cargill, to implement more cover crops in Sherburne County. The goal of the program is to encourage new ways of planting multi species in a field for three consecutive years. Cover crops are an important tool in increasing soil health, decreasing erosion, scavenging nutrients, and managing water.

In 2022, almost 350 acres of cover crops were planted along with soil health tests and nitrate samples taken by staff. This was the final year in the project.

District and NRCS staff had the opportunity on October 4th, to host the Cargill Sustainability Team and The Nature Conservancy for a regenerative agricultural tour throughout Sherburne County. The tour highlighted two farms, in Palmer and Haven Townships, and presented the fantastic work producers are implementing with soil health and irrigation water management practices. Staff presented on the basics of soils, irrigation and demonstrated the rainfall simulator, which exhibits different ground cover types and their resiliency against weather events.

# CONSERVATION ON THE LAND

## Grams Park HELP Grant

Sherburne SWCD in partnership with the Sherburne County Parks Department received a Habitat Enhancement Landscape Pilot (HELP) grant in 2022. This new grant program is focused on restoring and enhancing diverse native habitat on conservation lands and natural areas strategically located across Minnesota to address declining pollinators and other beneficial insects. The HELP grant is being used to fund a 24-acre prairie restoration at Grams Regional Park located near Zimmerman. The park was acquired by the County in 2002 and consists of over 100 acres of wetlands, oak forest and open meadow. The goal of the grant program is to restore the prairie with minimal use of herbicides as that is a priority of the park currently due to the high traffic of pedestrians.



## Activities Completed in 2022



### Summer - Prescribed Fire

A summer burn is not typically conducted for prairie restorations, however if coupled with other chemical free techniques it can be quite effective. This method was used in order to remove the “duff” layer of dead vegetation and encourage new growth of the existing grasses. This stresses the plant by forcing it to use energy reserves to resprout. It also creates tasty, tender shoots perfect for grazing animals.



### Summer/Fall - Conservation Grazing

Once the regrowth was at the proper height, Grams Park welcomed over 200 goats and sheep to graze happily on the unwanted vegetation. These new park visitors were a common sight for several weeks in August, September, and October. The park was separated into several small paddocks to help focus efforts on grazing down to the ground. The grazers were rotated through the site multiple times in order to deplete the nutrient stores in the plants roots, which reduces survivability to the plant significantly without the need for chemical herbicides.



### Planned for 2023

- Light disking in the spring to create a smooth seed bed
- No-till drill seeding 3 different native mixes
- Trample grazing to help incorporate the native seed into the ground, reduce weed competition
- Planting seedling plugs not included in the seed mixes

*Find more out about the Grams County Park Restoration by clicking here.*

# 2022 COMPLETED PROJECTS

## Lawns to Legumes

The SWCD was awarded a Lawns to Legumes grant in 2020. This grant funding is provided by the Environmental and Natural Resources Trust Fund (ENRTF). The goal of this grant is to increase pollinator habitat in residential lawns while raising awareness to the importance of protecting our pollinators. The program is especially geared toward the protection of at-risk species, such as the newly federally endangered rusty patched bumblebee. There are 4 categories of planting types that landowners can select: pollinator meadow, pocket planting, pollinator lawn, and beneficial trees and shrubs. The grant was completed in 2022, there were a total of 22 landowners that participated in the program, some of which installed multiple practices.

### 2022 Accomplishments

Practice Type	Qty
Pollinator Meadow	8
Pocket Planting	4
Pollinator Lawn	2
Beneficial Trees & Shrubs	5



## District Cost Share Program

The SWCD receives funds annually to implement conservation practices that provide erosion control, sediment control, and improve water quality. These funds are available county-wide, with reimbursement amounts differing based on location within certain priority areas. Staff work with individual landowners or municipalities on the initial site investigation, project planning and construction oversight. Staff also provide maintenance recommendations after the project has been installed to ensure successful establishment.

### Raingarden Installation



Before



After



# FOREST MANAGEMENT

## 2022 Tree Health Consultations

Over 55 site visits were conducted to assist landowners with the management of tree diseases within forested landscapes, rural residential properties, and urban properties. Oak wilt has been a prevalent problem throughout the County for several decades and the trend continued in 2022. With the severe droughts experienced in 2021 and 2022, fungal issues were less prevalent, but bark beetle infestations were much more common and fatal.

SWCD tree health consultations are meant to provide a diagnosis of the problem and options for solutions. During the evaluation, the SWCD staff will monitor soil moisture, inspect trees for visible signs of distress or disease, and identify pests if present. An unbiased recommendation for management and the future care of your trees is provided.



## Citizen Pruner Program

The citizen pruner program started in 2014 to increase the capacity of city parks in their maintenance efforts. The SWCD hosts volunteer events at parks and public spaces selected by the cities in need of structural pruning. This pruning is essential, especially for younger trees, to prevent hazardous branches as the trees mature. Pruning efforts take place in late fall and early spring when pest and disease risks are at their lowest. In 2022 the SWCD hosted 7 pruning events across the county to address pruning needs on both young and old trees.

## Woodpecker Activity Survey

There is a strong correlation between woodpecker activity and the presence of the emerald ash borer beetle (EAB). Volunteers canvas local areas with known populations of ash trees to observe any sign of heavy woodpecker activity. Suspect trees are reported to the MDA and monitored periodically. In 2022, an ash tree in Elk River was found to be infested with emerald ash borer. Future woodpecker activity surveys will be targeted in Big Lake and Zimmerman to help monitor the spread as EAB continues to work its way across the County.



# WATER RESOURCES



## Elk River Monitoring 2022

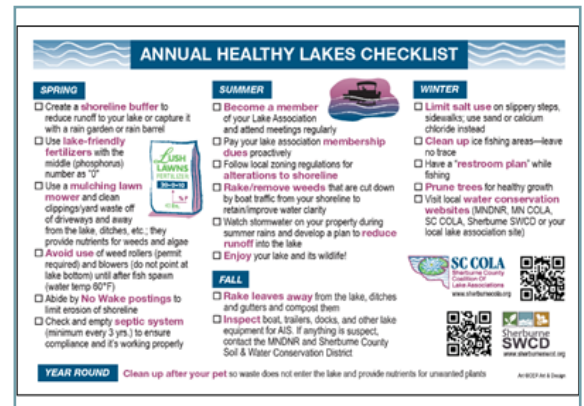
Since 2015 the Sherburne SWCD has assisted the City of Elk River with water quality monitoring for a select few tributaries that flow into Lake Orono. The goal of this monitoring is to gain a better understanding of the potential pollutants that are flowing into the lake from the surrounding watershed. This will allow the City to best target areas where conservation practices can be installed in order to reduce the pollutants from reaching the lake, leading to better water quality for the community. Starting in 2021 a small wetland outlet was sampled just north of Highway 10 to the

east of the north basin. Although the water clarity was quite good, sample results indicate there are high amounts of phosphorus leaving the wetland. As 2021 was such an unusually dry year, the SWCD continued monitoring for the 2022 season. Once enough data is collected, the City of Elk River and the SWCD will work together on targeting areas for pollution reduction projects.

## Sherburne County Coalition of Lake Associations (COLA)

The SWCD works very closely with the COLA to help protect our lakes. In 2022, the SWCD and COLA teamed up to work on several important projects:

- A Sub-Committee developed a visual based Early Detection and Rapid Response Plan. The plan can be used by lake residents or visitors to understand the steps necessary to identify, report, and manage a non-native plant or animal.
- The COLA developed an “Annual Healthy Lakes Checklist” magnet. The magnet features lake protection tips for all seasons and can be conveniently placed on a refrigerator for quick review. Magnets were printed and distributed to all lake property owners on COLA member lakes in Sherburne County.
- The COLA board is working to promote numerous lake stewardship educational topics including water quality projects, increasing success with grant writing, aquatic invasive species issues, and lake safety. *Find more out about the Sherburne COLA by clicking here.*



# WATER RESOURCES

## Wetland Conservation Act

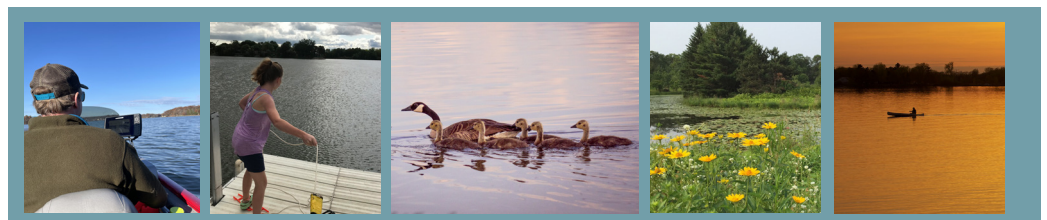
During 2022, the SWCD completed 3 County wetland delineations future road projects, future County Park updates, and County Trail expansions. SWCD staff attended 40 Technical Evaluation Panel meetings and wetland site visits with the County and Cities of Elk River, Big Lake, and Clear Lake. Staff also worked to correct 6 wetland violations.



## Aquatic Invasive Species Prevention Plan

In 2022 the SWCD continued to utilize funds provided through the State of Minnesota to prevent the introduction and spread of AIS in Sherburne County. This was the eighth year of active AIS prevention through this program and the third year of implementing the 2020-2024 AIS Prevention Plan that was created by the SWCD and AIS Task Force in late 2019. A summary of 2022 activities are outlined below:

PUBLIC AWARENESS / EDUCATION	AIS MONITORING & INSPECTIONS	COMMUNITY CAPACITY
Six AIS related events were held engaging 191 residents and visitors.	16 lakes and streams were surveyed for AIS through a variety of programs and tools. A new population of phragmites was found along the Rum River and a rapid response plan was carried out.	The AIS Grant program provided \$15,771 towards eligible projects being completed in the County for AIS surveys, control, and capacity building.
Five social media posts were created and observed by 765 followers. Funding was provided to assist Minnesota Traditions with a state-wide marketing campaign.	2,328 total watercraft inspections occurred during 965 hours at ten lake public access points. Data shows 97% compliance with AIS transport laws. Sherburne County Water Patrol spoke with 811 boaters about AIS.	Sherburne County AIS programs empower communities to learn more about our waters and protect them. In 2022, 92 volunteers completed over 350 hours of AIS work in Sherburne County.



## Golden Clam Research and Publication

After the initial discovery of golden clams in Briggs Lake, Megan Weber from the University of Minnesota Extension / Minnesota AIS Research Center and Dan Cibulka from Sherburne SWCD conducted a year-long assessment of the clams. A report drafted from their work, titled “Overwinter Survival of *Corbicula fluminea* in a central Minnesota lake” was accepted by the scientific journal PLOS One in summer 2022.

RESEARCH ARTICLE

### Overwinter survival of *Corbicula fluminea* in a central Minnesota lake

Megan M. Weber<sup>1,2\*</sup>, Daniel Cibulka<sup>3</sup>

1 University of Minnesota Extension, Andover, Minnesota, United States of America, 2 Minnesota Aquatic Invasive Species Research Center, University of Minnesota, St. Paul, Minnesota, United States of America, 3 Sherburne Soil and Water Conservation District, Elk River, Minnesota, United States of America



## 2022 Research Partnership Award recipient by MAISRC



SWCD Sr. Water Resource Specialist, Dan Cibulka was named a 2022 Research Partnership Award recipient by the Minnesota Aquatic Invasive Species Research Center (MAISRC).

This award recognizes people, groups, and organizations who have gone above and beyond to contribute to MAISRC’s mission: advancing aquatic invasive species (AIS) knowledge, and inspiring action to protect and restore Minnesota’s cherished lakes, rivers, and wetlands. Dan is one of only 3 individuals/groups acknowledged for this honor.

Dan is recognized for his service as a co-investigator on a golden clam rapid response monitoring project funded by MAISRC, providing significant technical and field support to the study. This work has helped MAISRC gain a much deeper understanding of the threat this species poses to Minnesota lakes.

# WATER RESOURCES

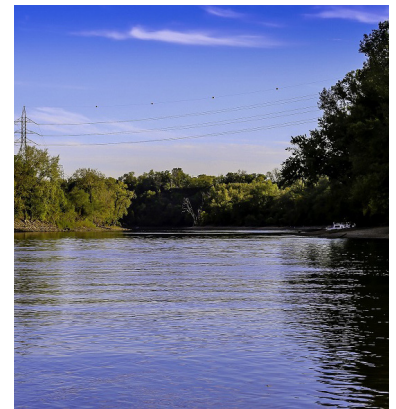
## Mississippi River St. Cloud Watershed Restoration and Protection Strategies



The Watershed Restoration and Protection Strategies (WRAPS) project is sponsored by the Minnesota Pollution Control Agency (MPCA). The MPCA has adopted a “watershed approach” to addressing the state’s 81 major watersheds. In 2022, the local partner team (LPT) of Stearns, Benton, Wright and Sherburne counties and the Clearwater River Watershed District carried out Phase II of the WRAPS project for the Mississippi River St. Cloud watershed. The project includes watershed analysis, civic engagement, development of restoration and protection strategies, and planning. The information obtained will serve as a precursor for One Watershed, One Plan for this watershed.

## Mississippi River St. Cloud One Watershed, One Plan

One Watershed, One Plan (1w1p) is a comprehensive planning process to bring upstream and downstream partners together to manage water on a watershed basis. Sherburne County and SWCD are taking part in this initiative for the Mississippi River St. Cloud Watershed. The plan, comprehensive in nature, will identify and prioritize resources and issues in the watershed while setting measurable goals for protection and restoration. The project began in November 2022 and will include 11 local governmental units along with a variety of state and federal agencies to support local efforts. Look for more on this project in 2023!



## Rum River Comprehensive Watershed Plan Implementation



With the Rum River Watershed Comprehensive Management Plan in place, Sherburne SWCD is partnering with other districts and counties in this watershed to carry out the plan. In its first year, the partnership will focus on Tier 1 waterbodies for protection and restoration. In Sherburne County this includes areas draining to the mainstream Rum River and the watershed area near Blue Lake (Isanti County).



# WATER RESOURCES

## Stormwater Education and Permitting

Since 2014, the SWCD has worked with Sherburne County and other Municipal Separate Storm Sewer System (MS4) permitted governmental units on permit documentation and outreach. Annual events are held each year to provide education, including information targeted towards elected officials, lake property owners, and school-aged children. In 2021 this group developed an Adopt-A-Storm-Drain program for the county and began evaluating a pet waste education campaign. This program aims to engage volunteers within the community to “adopt” drains and in working together, improve our understanding of stormwater and its potential impacts to water quality. Volunteers sign up for the program and select drains in their neighborhood through an interactive website. The volunteers are responsible for keeping the drain clear of litter and other debris a few times a month. The interactive website also allows reporting of clogged or damaged storm drains to local municipalities, reducing the potential for flooding or other safety concerns. All drain data is entered on the interactive website by the volunteers in order for the District to quantify the benefits of this program. This program not only give residents an opportunity to learn about stormwater and its potential impacts but also empower them to make a difference in the health of their local water ways. *Find more out about the Find more out about Adopt A Storm Drain program by clicking here.*



## Eagle Lake Carp Study

The Sherburne SWCD and Big Eagle Lake Improvement Association (BELIA) have worked on several projects since 2019 to understand potential impacts of common carp (*Cyprinus carpio*) in Eagle Lake. Carp are bottom feeders that disturb the sediment, increase water turbidity, damage native vegetation and contribute nutrients to the water through their excrement. Field studies have shown that the carp in Eagle Lake likely exceed the recommended threshold of 90 lbs/acre, indicating that they may be negatively impacting the lake environment. There are approximately 3,394 individual fish in the lake contributing as much as 362 lbs of phosphorus to the lake nutrient budget. In 2022, carp fitted with radio tags were tracked in the lake to determine congregation and spawning areas. Much was learned about the activities of carp in Eagle Lake that could guide potential future management strategies.

# WATER RESOURCES

## Drinking Water and Nitrates Outreach



In 2022, the District entered into a partnership with the Minnesota Department of Health (MDH) to provide education and outreach regarding drinking water and Nitrates. In 2022, the SWCD held two nitrate clinics in conjunction with this partnership; one in Big Lake Township and one in Blue Hill Township. Also, The District held a Turf Alternatives Workshop for private landowners. Presentations about alternative turf and how they can be incorporated into their existing landscape were given by James Wolfin with Twin City Seed. James highlighted bee lawns, which includes several short stature flowers to increase pollinator habitat while still allowing for a functioning lawn. Aside from bee lawns, James also explained the benefits of reducing lawns and instead installing native plants that require less inputs like fertilizer and watering. Alayna with Metro Blooms detailed financial assistance opportunities available to landowners interested in some of these practices. Each participant was sent resources on how to complete these projects on their own or where to find agencies that will be able to assist with design planning and installation guidance.



# EDUCATION AND OUTREACH

## Elk River Cleanup

The SWCD has coordinated a watershed wide river clean up most years since 2008. In 2022, 10 volunteers and 4 SWCD staff braved the cold fall morning to clean up the Elk River and some of it's tributaries. During the 2-hour event, over 500 pounds of trash was collected, mainly around area bridge crossings. Some interesting finds included tires, a mattress and roofing shingles. We would like to thank each volunteer for donating their time and energy to help keep the Elk River watershed clean for everyone to enjoy!



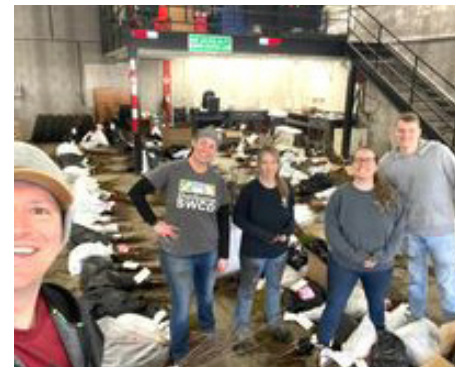
## Gravel Bed Tree Program

During the summer of 2022, we reestablished the community gravel bed program. Over the course of the summer, 55 six-foot saplings grew in the gravel bed and were able to develop amazing root systems! In the early fall, the saplings were removed from the gravel bed to be planted in their forever homes across the County. The saplings were planted on both public and private lands that were affected by the recent drought or to replace trees killed by diseases and pests.



## 2022 Tree Sale

In 2022 almost 20,000 trees were sold during the SWCD's annual tree sale. A new addition to the 2022 tree sale were native plant kits and native seed mixes. These were well received and will increase pollinator habitat throughout the county. The tree and native plant sale is an important annual program that runs between January 1 to mid April. The sale originated in order to provide landowners with an affordable and convenient way to purchase trees and shrubs for conservation practices, such as windbreaks, shelterbelts, living snow fences, scenic buffers, wildlife habitat, and more. *Find more out about our tree sale by [clicking here](#).*



# EDUCATION AND OUTREACH

## Pollinator Photo and Coloring Contest

As part of the 2022 Pollination Celebration, the SWCD hosted a Pollinator Photo and coloring contest. Many terrific images of bees, moths and butterflies were submitted. The coloring contest was focused towards Sherburne County's budding artists. The SWCD is happy to announce Paige H. of Zimmerman as the winner of our 4-6 year old division and Sophia L. also of Zimmerman as the winner in our 7-11 year old division. Both girls received prizes and certificates. The pollinator photo contest was open to the general public. The SWCD received many fantastic submissions. Lauren Y. from Elk River was selected as our winner. Lauren's photo captured a tiny sweat bee flying towards a big bee balm flower. Lauren received a \$25 gift card to a local native nursery. *Click on the images to view highlights from each contest.*



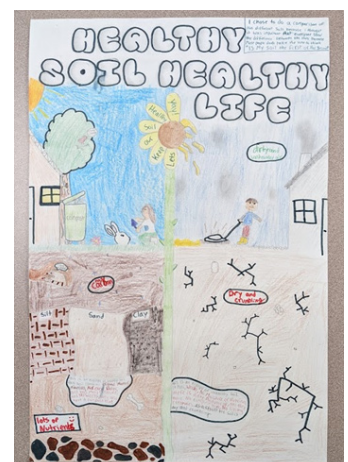
*Click the image to watch a recap of our Pollinator Paint Night.*

## Pollinator Paint Night

During pollinator week (June 20th-26th), SWCD staff offered a variety of events and activities to promote awareness of our essential pollinators. One such event was the first ever Sherburne SWCD Pollinator Paint Night! Sherburne residents gathered at the Sherburne National Wildlife Refuge to learn about pollinators and what the SWCD is doing to improve their habitat. In between presentations, participants were lead through a painting exercise until they ended up with a complete portrait of a flower with either a bee or butterfly friend. We look forward to continue these fun activities during the 2023 pollinator week!

## Poster Contest

The SWCD has hosted an annual poster contest since 2016 for Sherburne County 5th grade students. The contest has a conservation related theme each year. In 2022 the theme was "Healthy Soils: Healthy Life." Students learned about the importance of healthy soils and how they can make an impact in their own backyard. The SWCD received over 100 posters from 5 different schools throughout the county. The top 4 winners were awarded with a monetary prize.



# EDUCATION AND OUTREACH

## Nitrate Clinic

The SWCD office houses a nitrate testing machine. Landowners are encouraged to bring in a cold water sample from their home and in most cases the samples were tested immediately and counseled on the results. Additionally, staff held 3 nitrate clinics during 2022 in partnership with Haven and MDH. High levels of nitrate in drinking water can be dangerous to health, especially for infants and pregnant women. This service gives residents pertinent information for their health and safety.



## SWCD Webinars



*Click image to view video*

A webinar is an online seminar that turns a presentation into a real-time conversation from anywhere in the world. Webinars allow large groups of participants to engage in online discussions or training events and share audio, documents or slides – even when they’re not in the same place. SWCD staff started utilizing webinars to reach county residents during the pandemic. We have continued to use this technology as it allows a convenient way to host more presentations than would typically occur in person. A total of 4 webinars were held in 2022 ranging from topics like “Tree Pests” to “Wetland and Shoreline Protection.”

## Rain Gauge Readers

The SWCD partners with the Minnesota Department of Natural Resources State Climatology Office to facilitate and collect rain gauge reader data on a monthly basis. The measurements collected by the 10 SWCD rain gauge readers are used for:

- weather
- water supply
- flood forecasts
- assessing drought severity
- severe storm prediction
- crop growth and yield forecasts
- assessing hail damage
- contracting snow removal
- predicting mosquito outbreaks
- planning fishing trips
- snowmobiling outings



*Find out more on the Rain Gauge program by clicking here.*

# EDUCATION AND OUTREACH

## Wildlife Festival

The SWCD participated at the Wildlife Fest in Zimmerman with a booth. Staff provided information on available SWCD services and programs. The staff fielded questions throughout the day on native plants and pollinators. Offered on site nitrate testing and handed out information on SWCD services. Sherburne SWCD has been a presence at the expo for several year. Children of all ages were also encouraged to take a picture as their favorite native flower.



## Strip-Till and Cover Crop Demo

SWCD Staff hosted an In-Field Demonstration of Strip-Till and Cover Crop Seeding. A & L Peterson Farms showcased their Soil Warrior for Strip Till and Nutrien Ag Solutions demonstrated their John Deere and Salford box interseeding set-up for cover crops. Operators and ag professionals were able to see the equipment in action, ask questions, and foster discussion.



## Starry Trek

The Sherburne County Coalition of Lake Associations (COLA) and Sherburne SWCD co-hosted a group of 17 volunteers to participate in the annual statewide Starry Trek (starry stonewort monitoring event). Over 220 lakes were searched statewide for AIS; 16 Sherburne County lakes were searched during this event. Starry Trek is coordinated by the University of Minnesota Extension and MN AIS Research Center in partnership with the Minnesota DNR and local groups.

*More on Starry Trek can be found [here](#)*

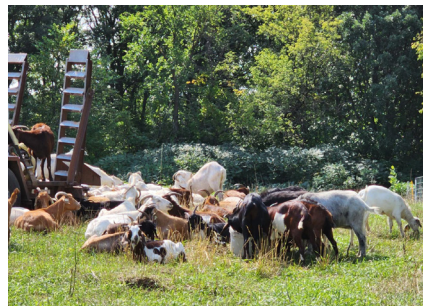


# EDUCATION AND OUTREACH

## 2022 Annual Tour of Conservation Practices

Sherburne Soil and Water Conservation District held their annual tour of conservation practices for elected officials on September 13th. The tour is held each year to highlight the annual progress being made to conserve natural resources and to discuss escalating topics in conservation throughout Sherburne County. This year's tour included presentations on strip-till, irrigation water management, cover crops, aquatic invasive species, and featured the Grams County Park conservation grazing project as part of the newly implemented HELP grant. Each stop gave the opportunity to ask questions about the conservation practice being showcased and fostered conversations about conservation at the local government level.

*[Click here to watch our tour highlights video.](#)*



# PARTNERSHIP WITH NRCS

## Natural Resources Conservation Service

### Environmental Quality Incentives Program (EQIP) and Regional Conservation Partnership Program (EQIP-RCPP)

EQIP is a federal program administered by the Natural Resources Conservation Service (NRCS) and assisted by the Sherburne Soil & Water Conservation District. EQIP provides financial and technical assistance to agricultural producers to address natural resource concerns and deliver environmental benefits, such as improved water and air quality, conserved ground and surface water, reduced soil erosion and sedimentation, and improved or created wildlife habitat.

- Payments made in FY2022 to Sherburne County producers for installation of conservation practices = \$65,494
- Conservation practices installed in 2022 through EQIP & EQIP-RCPP:
  - 1 energy improvement plan written
  - 1 comprehensive nutrient management plan written
  - 1 variable rate irrigation (VRI) system
  - 139 acres of irrigation water management
  - 4 soil moisture sensors installed for irrigation water management
  - 2 seasonal high tunnels
  - 1 energy improvement project for lighting
  - 24.3 acres of prescribed grazing
- EQIP and EQIP-RCPP contracts obligated in FY2022 = 2 contracts, total of \$29,183



### Conservation Stewardship Program (CSP)

CSP is a voluntary program that helps agricultural producers maintain and improve their existing conservation systems and adopt additional conservation activities to address priority natural resource concerns.

- Payments made in FY2022 to Sherburne County producers for completing conservation practices and enhancements = \$29,773

*Click here to visit the NRCS web page.*





# PARTNERSHIP WITH NRCS

## Conservation Reserve Program (CRP)

CRP is a land conservation program administered by the Farm Service Agency (FSA). In exchange for a yearly rental payment, farmers enrolled in the program agree to remove environmentally sensitive land from agricultural production and plant species that will improve environmental health and quality. Contracts for land enrolled in CRP are from 10 to 15 years in length. The long-term goal of the program is to re-establish valuable land cover to help improve water quality, prevent soil erosion, and reduce loss of wildlife habitat.

Signed into law in 1985, CRP is one of the largest private-lands conservation programs in the United States. Thanks to voluntary participation by farmers and landowners, CRP has improved water quality, reduced soil erosion, and increased habitat for endangered and threatened species.

- Active contracts in Sherburne County = 88
- Total acres in CRP in Sherburne County = 965 acres
- Total annual rental payments to Sherburne County landowners = \$41,380
- Conservation practice types enrolled in CRP:
  - Rare and Declining Habitats, Tallgrass Prairie
  - Pollinator Habitat
  - Filter Strips
  - Riparian Buffers
  - Native Grass Plantings
  - Wetland Restorations
  - Field Windbreak
  - Living Snow Fence

## Natural Resources Conservation Service (NRCS)

NRCS provides farmers, ranchers, and forest managers with financial and technical assistance to voluntarily put conservation on the ground, not only helping the environment but agricultural operations, too. NRCS's goal is to help landowners develop conservation plans and provide advice on the design, layout, construction, management, and evaluation of voluntary conservation practices.

### *Elk River NRCS Staff*



Logan Berg, Kelly Bistodeau, Katie Evans

Katie Evans  
District Conservationist (763) 567-7373  
katie.evans@usda.gov

Logan Berg  
Soil Conservationist (763) 567-5367  
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Soil Conservation Technician (763) 241-1150  
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# Sherburne SWCD 2022 Activity Summary

## Objective 1: Protect and/or Improve Water Quality and Quantity

Actions	Results
Assist 20+ landowners with technical and/or financial assistance for lake/stream erosion	25 site visits were completed for landowners experiencing either lakeshore or streambank erosion.
Maintain and assist lake associations with volunteer water quality monitoring programs	All previous associations continued with monitoring in 2022. Volunteers were trained on 3 additional lakes to implement monitoring programs.
Complete 8 projects targeting impaired waterbodies (1 in Rum River, 7 in St Cloud watersheds)	1 raingarden, 1 streambank stabilization, 1 erosion control project, 3 urban prairies, 2 rural prairies were completed in the St. Cloud Watershed
Work with landowners to address 3 bacteria sources to Elk River and tributaries	Meetings were held with 4 landowners with to address various bacteria source concerns around the Elk River and its tributaries.
Certify 1 new operation for MAWQCP accreditation	SWCD provided MAWQCP outreach to landowners. Outreach led to 1 interested landowner and 1 certified farm receiving irrigation enhancement.
Oversee the 2022 AIS grant program	Program resulted in over 2,200 watercraft inspections, 16 waterbodies surveyed and a single new infestation (rapid response actions taken).
Monitor 12+ lakes for AIS using early detection protocols	16 lakes were surveyed through programs including; Starry Trek, Zebra Mussel sampling plates, and AIS grant funded projects.
Partner with Sherburne County COLA on 1 AIS activity	Annual Healthy Lakes Checklist magnet was developed by SC COLA and SWCD. Magnets were distributed to over 2,000 COLA members and lake residents.
Participate in the completion of the Rum River 1W1P Planning Process	The Rum River Watershed Comprehensive Management Plan was approved in summer of 2022. Plan is in process of Implementation.
Work with Mississippi River - St. Cloud Watershed partners on WRAPS monitoring and strategic plan	Development of a 2nd Cycle WRAPS report is in process. Partners are planning numerous outreach events to bring awareness of watershed resources to the public.
Expand use of advanced scheduling tools for irrigation management, work with 5 irrigators	Worked with 3 operators on IWM, also provided outreach for irrigator training and RCPP.

## Objective 2: Promote Healthy Soils - Reduce Soil Loss from Wind & Water Erosion

Actions	Results
Complete 2 lake or river shoreline development or erosion inventories	Shoreline development surveys were completed on East and West Hunter Lakes.
Maintain compliance with the Buffer Law (Minn. Stat. 103F.48)	Aerial monitoring was completed October through December. Sherburne County maintains over 99% compliance.
Establish a baseline precision agricultural and soil health practices inventory	MDH Grant funded, will be sent to operators in March 2023
Implement 3 field-based BMP's aiming at nitrate reduction	Cover Crops, IWM, Prairie, and Strip Till practices were all implemented within the County.
Complete County Wetland Delineations	Completed three delineations for the county in 2022
Infield nitrate monitoring at 3 sites	Monitored at 2 sites with cover crops as part of the TNC funding. Plans for an additional site in 2023 with MDA support near Palmer.

### Objective 3: Provide Forest Management Support to Landowners / Communities

#### Actions

Perform 50+ tree health consultations with landowners
Assist County Parks Department with 100 hours of habitat restoration work
Re-visit City EAB Preparedness plans
Continue EAB early detection monitoring program
Re-establish Gravel Tree Bed to promote tree diversity

#### Results

Assisted 50+ landowners with pest and disease identification, reforestation, planning, and wildlife enhancements.
Critical period cutting was performed by County Parks interns in 2022. County Parks funds were used to assist with prescribed grazing at Grams Park.
EAB Preparedness Plans have been revisited with 3 cities. 3 cities. Work will continue as EAB spreads through the county
Volunteers have been trained to monitor the spread of EAB across the County.
Gravel Tree Bed was successfully re-established. District provided over 50 trees to municipalities and landowners.

### Objective 4: Protect, Enhance, and Establish Native Habitat

#### Actions

Pursue 2-3 landowners for easements near sensitive or high priority areas
Work with 5 landowners to install prairie on their property
Assist 20+ landowners with technical and/or financial assistance for habitat projects in urban settings
Perform 10+ Forest Habitat improvement projects with landowners

#### Results

MNLT partnered with SWCD for land easement program. Ranking for a Sherburne County parcels has increased due to high priority area. 114 postcards were mailed out.
3 installed in Clear Lake township, 1 in Big Lake, 1 in Orrock, 2 additional interested landowners have been contacted.
25 site visits to address soil erosion and habitat improvement projects in urban residential areas were completed.
Assisted over 15 landowners with wildlife planting plans, invasive species identification, removal techniques, timber harvest planning and habitat expectations.

### Objective 5: Increase District Awareness and Promote Community Education

#### Actions

Host 10+ educational events targeting students and general public on conservation related topics.
Host an annual MS4 partners meeting
Host a stormwater educational workshop for elected officials (NEMO)
Provide resources to contractors for stormwater BMPs (1 event, or 1 new publication)
Promote loan and grant programs as well as educational opportunities for SSTS/AgBMP
Publicize education on well sealings, promote well sealing
Target high-use and high-risk public access sites for AIS education

#### Results

Staff hosted over 15 events including; webinars, paint night, AIS meeting, pollinator week, poster contest, BLCL presentation, nitrate clinics, Ag demo night, woodpecker training, Cargil tour, tree sale and annual tour of conservation practices.
Focus was shifted to from MS4 partners meeting to 2022 permitting and compiling materials for a state program county-wide audit.
A Shoreland ordinance training was held in March for the Board of Adjustments.
Event/publication was rescheduled to 2023 for planning purposes
3 AgBMP successful Loan applications / 1 Ag Equipment / 1 New Well / 1-Septic.
3 Wells were sealed in 2022. Well sealing program is publicized on MDH website. 5 landowners were contacted by phone.
10 lakes listed by MAISRC as high risk / high traffic targeted for watercraft inspections and early detection programs.

# 2022 FINANCIALS

Programs that SWCD staff administer go towards improving the quality of our land and water resources in many ways:

- Increasing crop yields by improving soil health
- Maintaining aquifer reserves and reducing farming costs through irrigation efficiency programs
- Retaining riparian property values through increasing lake and stream quality
- Improving the quality, aesthetics, and wildlife within our county parks
- Improving the outdoor experience for residents and non-residents by increasing wildlife habitat

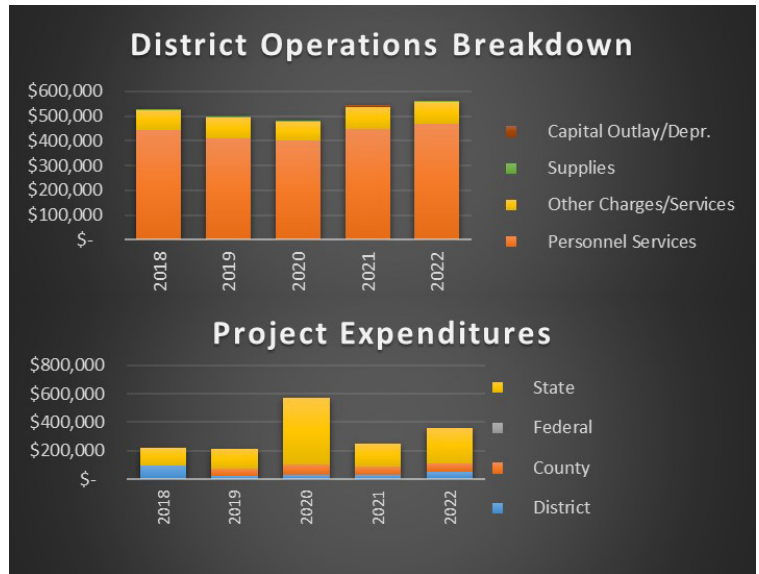
Much of the technical resources and programs the Sherburne SWCD coordinates are free of charge to county residents. This is not the case in every Minnesota county; however, the District feels that

this is an important aspect of working with landowners on voluntary conservation projects. District staff work hard to secure grant funding from local, state and federal programs to cover implementation of projects.

Funds from Sherburne County and elsewhere directly impact the local economy in a number of ways:

- When possible, the District ensures that funding is spent with local businesses. Landowners implementing projects with the District often source items and materials from local nurseries, landscape companies, and agricultural suppliers. Additionally, engineering services have been sought from local firms for numerous projects.
- The SWCD cover crop program has been steadily increasing over the past decade. The integration of cover crops to a farming schedule increases the organic matter of the soil, retains moisture, reduces wind and water-based erosion, and minimizes the need for the producer to add extra fertilizer to the crops. All of these factors increase the yield for the producer.
- Numerous programs are conducted with the goal of retaining soil and nutrients on the land and subsequently reducing their transport to the lakes and streams of our county. Retaining nutrients on the land benefits the bottom-line of the agricultural producer, but what is the value of reducing these nutrients in our waters? Researchers at Bemidji State University believe that a change in a lake's water clarity can influence property values by as much as \$400 per foot of shoreline. It has been proven time and time again that buyers prefer, and will pay more for, parcels on lakes with better water quality. And those from outside the county prefer to visit lakes of higher quality, ample wildlife, and natural surroundings.

New resource concerns continue to arise, and they require increased financial support, continued staff education and training, and efforts to re-prioritize and focus staff time and resources. The elected Board of Supervisors make strategic determinations where to prioritize staff involvement related to these issues.

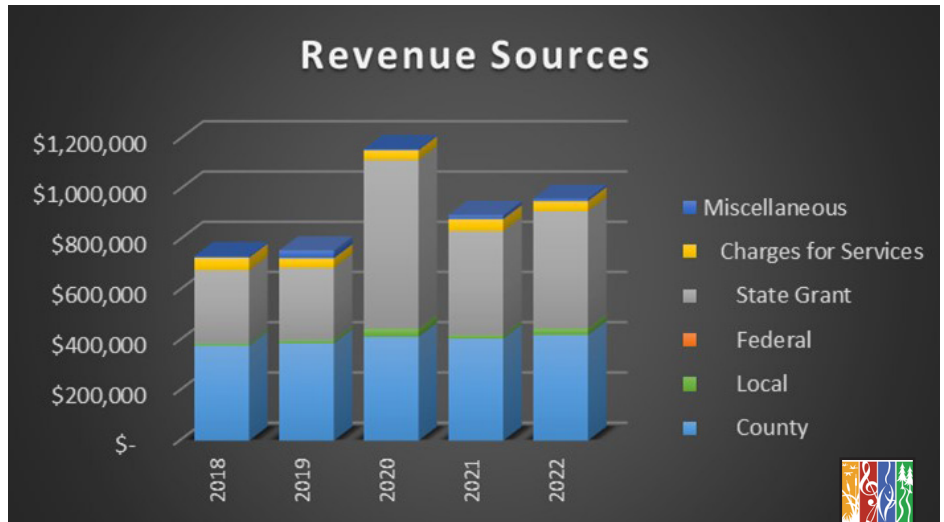


# 2022 FINANCIALS

Sherburne SWCD operates on a combination of County, State, Federal, and nonprofit grants and other agreements. Much of the funding is allocated via competitive grants, so the sources, amounts, and partnerships vary by year. These sources include County and Local Grants, State Grants, Charges for Services, and other Miscellaneous Income.

Since 1944, Sherburne SWCD has constantly adapted to the challenges that face the landscape and the waters of Sherburne County. Wind erosion, poor soil health, tree pests, lack of wildlife corridors, green lakes and streams – the concerns facing our natural resources have grown and diversified over the years.

Sherburne SWCD employs staff that can effectively address the issues that our county landowners face. Whether a landowner owns a 200-acre field of tillable land, a 40-acre hunting camp, a 20-acre hobby farm, a 2-acre suburban homestead, or a 0.5-acre parcel on the Mississippi River, that landowner has access to some of the most knowledgeable resource professionals in Central Minnesota. Technical staff are supported by outreach and marketing staff which increase education and awareness of the public, a District Manager who oversees business operations, and a Board of Supervisors who ensures the programs staff develop meet the needs of our landowners.



# OUTSTANDING CONSERVATION COOPERATOR

## A & L Peterson Farms Inc.



Ryan and Nick Peterson

A & L Peterson Farms Inc, operated by Ryan and Nick Peterson, are a cash grain, edible beans, and small grains operation that continues to diversify with every opportunity. Within the last year, Ryan and Nick have become MAWQCP certified with the Irrigation Enhancement, worked with the U of MN to plant Winter Camelina for harvest, and purchased strip-till equipment. The brothers have also been a strong voice on MDA's Nitrogen Fertilizer Management Plan Local Advisory Team which will help address groundwater nitrate impairment, and worked along District staff and Nature Conservancy staff on a three year cover crop project to measure impacts on soil health and nitrates. They continue to do outstanding work, implementing conservation practices and carrying on the legacy of their father, Alan.

A & L Peterson Farms Inc was also named as one of the finalists for the state's 2022 Outstanding Conservationist Award by The Minnesota Association of Soil and Water Conservation Districts (MASWCD). The award program recognizes farm families, individuals, conservation organizations, and other groups for their accomplishments in implementing conservation practices and improving Minnesota's natural resources.

Sherburne SWCD congratulates A & L Peterson Farms, Inc. for this honored nomination!



Photography by Scott Ampe

# SWCD INFORMATION



## Sherburne SWCD

Tel (763) 220-3434  
www.sherburneswcd.org

Mailing Address  
425 Jackson Ave NW  
Elk River, MN 55330

## Hours of Operation

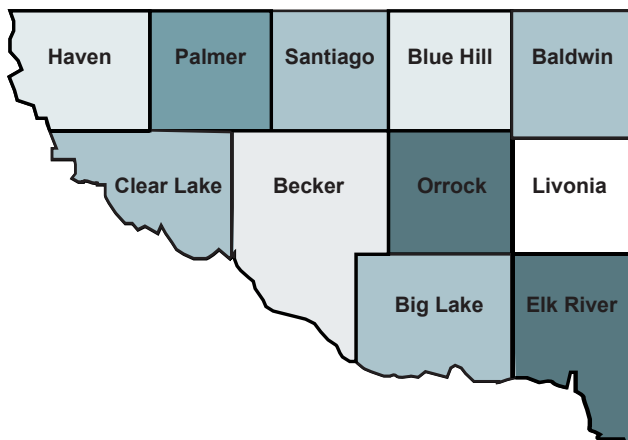
Monday - Friday  
8:00 a.m. - 4:00 p.m.

Closed Sat & Sun  
Closed on Federal Holidays

## Programs & Services

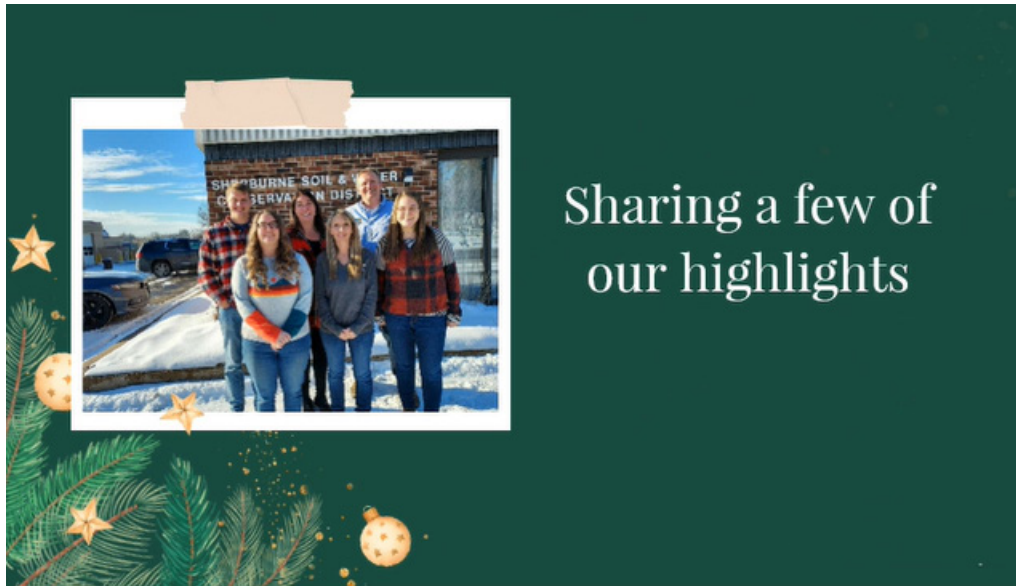
The primary focus of the Sherburne SWCD is implementing voluntary, non-regulatory conservation programs to protect and enhance soil, water, native habitat and other natural resources. We utilize partnerships and programs to assist agricultural producers, rural and urban landowners, municipalities, lakeshore and shoreline owners, in addition to providing educational and outreach services on natural resource issues to all residents of Sherburne County.

- **Agriculture:** animal waste facilities, erosion control, cover crops, nutrient and irrigation management
- **Rural landowners:** native plantings, wetland restorations, easements, habitat planning
- **Urban landowners:** habitat planning, vegetation management, stormwater management
- **Municipalities:** stormwater management, community tree programs
- **Lakeshore/Riverfront:** shoreline restorations, erosion control, rain gardens, invasive species prevention and management
- **All County Residents:** Adult and student educational conservation focused programs



**Total Land Area:** 451 Square Miles  
**Total Water Area:** 11,520 Acres  
**Lakes:** 127  
**Rivers and Tributaries:** 493 Miles  
**Population:** 97,238 \*2019 Estimate  
**Native Vegetation:** Oak Savanna Sandy Soils/  
Conifer Forests

Click the image to view our virtual Holiday Highlights card.



Sherburne Soil and Water Conservation District  
[www.sherburneswcd.org](http://www.sherburneswcd.org)

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