

Sherburne
SWCD

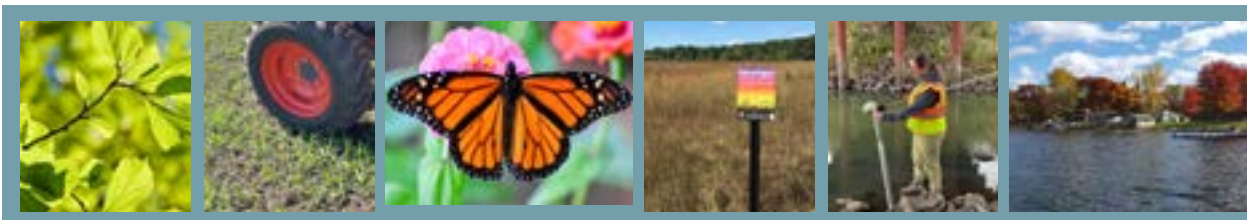
Annual Report 2021

TABLE OF CONTENTS

2021 Conservation Fast Facts.....	3
SWCD Supervisors and Staff	4 - 5
Conservation on the Land	6 - 8
Forest Management	9
Water Resources.....	10 - 15
Education and Outreach.....	16 - 18
2021 Outstanding Conservation Cooperator.....	19
2021 Completed Projects	20 - 21
2021 Activity Summary	22 - 23
2021 Financial Summary.....	24
NRCS Programs.....	25
SWCD Information.....	26

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.



2021 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

Through the course of 2020-2021 the SWCD monitored 24 obwells collecting static groundwater-level data for assessment for our groundwater resources.



AIS Monitoring

During the Summer of 2021, a total of 16 Sherburne County lakes and rivers were surveyed for Aquatic Invasive Species.



Wetland Delineations

During 2021, the SWCD completed 9 County wetland delineations comprised of 10.5 miles of future road and culvert replacement projects and one County Park trail delineation.



Tree Sale Program

Over 20,000 bareroot seedlings were distributed during the SWCD's annual Tree Sale in 2021.



AIS Volunteers

In 2021, 105 Active Volunteers participated in AIS monitoring, contributing over 530 hours of time.



Online Outreach

The SWCD continued with outreach and education during the pandemic by offering 10 online webinars on topics like pollinator habitat and nitrates in groundwater.



Native Prairie Installation

In 2021, the SWCD provided cost share for over 6 acres of native prairie.



Tree Health Assessments

Over 65 site visits were conducted to assist landowners with tree management and disease.



Forest Management Support

The SWCD assisted the Sherburne County Parks Department with over 100 hours of habitat restoration work involving critical period cutting, vegetation surveys, and native plantings.

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



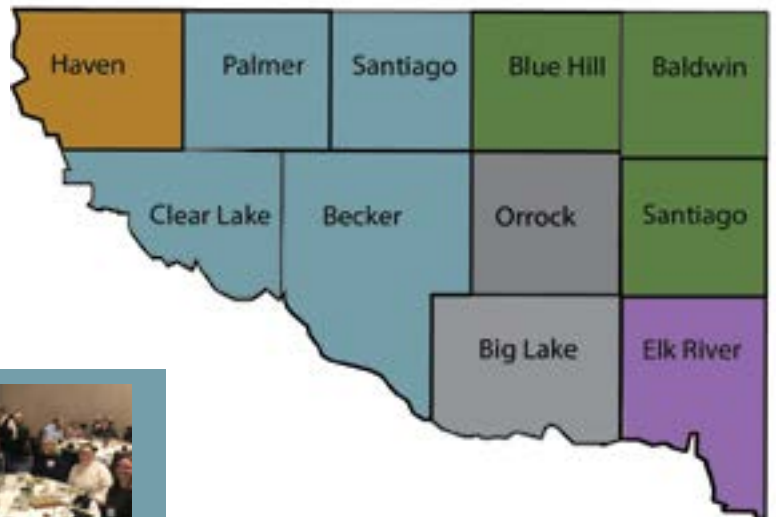
Larry Goenner
District III



Jason Selvog
District IV



Roger Nelson
District V



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 survey, 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.

Francine Larson
District Manager

Dan Cibulka
Sr. Water Resource Specialist

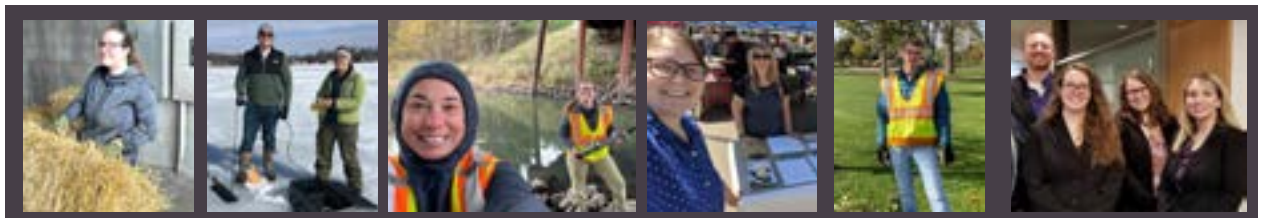
Franny Gerde
Urban Conservationist

David Wick
District Technician

Miranda Wagner
Agricultural Conservationist

Bill Bronder
District Technician

Andie Bumgarner
Marketing/Admin Asst.



CONSERVATION ON THE LAND

Native Pollinator Program

In 2021 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.

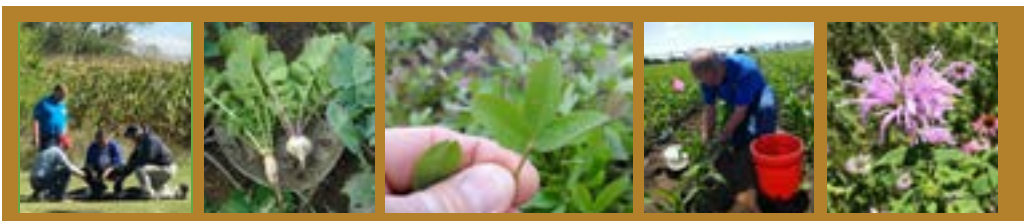
The benefits of the program improve habitat by providing a diverse plant community that supports the lowest levels of the food web up through feeding and nesting cover for song birds, upland game birds and small mammals. Prairie also sequesters carbon from the atmosphere, reduces soil erosion, builds soil health, and improves water quality. In 2021, the District helped cost share over 6 acres of native prairie. *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 2021, the SWCD completed the third 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.*



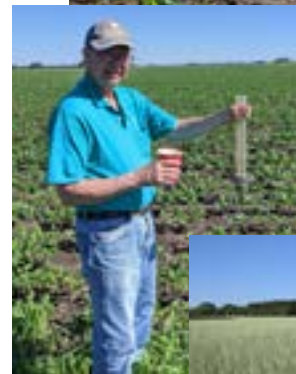
CONSERVATION ON THE LAND

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.

In 2021, SWCD staff monitored 20 acres of Kernza that was planted as a demonstration project to highlight a perennial crop being researched for food and feed production in 2019. The crop will be assessed for the value the crop has toward nitrate reduction.

Cost share is available under this grant for best management practices such as: cover crops, irrigation water management, nutrient management, and perennial cover establishment. The SWCD also provided Agsense units to landowners to use during the 2021 growing season and assisted in 6 uniformity tests. Furthermore, the SWCD sent out a weekly Evapotranspiration report to assist with Irrigation Water Management.



Elk River Targeted Bacteria Reduction Program

In 2018, the SWCD received Clean Water Funds to reduce bacteria loading in the Elk River. The funds are being used to install conservation practices that reduce the amount of animal waste (manure) entering the Elk River or its tributaries from pastures and feedlots.

The SWCD worked with four landowners in 2021, with two projects completed. A manure stacking slab was completed as well as a pasture seeding. An additional manure stacking slab is planned for 2022. Healthy pastures reduce the amount of water and nutrients running off the pastures into nearby surface waters. Secondly, healthy pastures promote healthy animals and higher quality habitat. Properly stored and spread manure also reduces the amount of bacteria and nutrients making it to our waterways.

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.”

Furthermore, 170 acres of cover crops were seeded using new broadcasting equipment after seed corn as a demonstration project. Nitrates will be monitored utilizing the permanent lysimeters to show the ability of an overwintered cover crop on spring Nitrate leaching.

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 2021, almost 200 acres of cover crops were planted along with soil health tests and infiltration tests taken by staff. The project will continue for one more year and changes to infiltration and soil health will be tracked.

Click image to view video

FOREST MANAGEMENT

2021 Tree Health Consultations

Over 65 site visits were conducted to assist landowners/land managers with management of tree diseases within forested landscapes and wooded rural residential properties. Oak wilt has been a prevalent problem throughout the County for several decades and the trend continued in 2021. With the severe drought experienced in 2021, 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 are 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 selected by the cities in need of structural pruning. This pruning is essential, especially for younger trees in order 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 2021 the SWCD hosted 10 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. 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. Due to Covid, monitoring in 2020 and 2021 was not as intensely performed as in previous years. In 2022, renewed training and monitoring will be hosted to ensure continued monitoring and prompt identification when emerald ash borer eventually does invade Sherburne County.

WATER RESOURCES



Elk River Monitoring 2021

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. 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. Since 2021 was such an unusually dry year, the SWCD plans for a second round of monitoring during 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 2021, the SWCD and COLA teamed up to work on several important projects:

- An AIS Early Detection and Rapid Response sub-committee created a visual-based template for all Sherburne County lake groups to use. The template is customizable; each group can make modifications to fit their unique setting. It also features a tiered system allowing novice and experienced lake users alike to use the system to identify, report, and manage AIS.
- COLA volunteers constructed 40 zebra mussel settling platforms which were distributed to numerous county lakes. The platforms can be checked periodically through the summer for early signs of zebra mussels.
- The COLA board is working to promote numerous lake stewardship educational topics including water quality projects, increasing success with grant writing, participation in Adopt-A-Storm-Drain, septic system maintenance, and lake safety. *Find more out about the Sherburne COLA by clicking here.*



WATER RESOURCES

Wetland Conservation Act

During 2021, the SWCD completed 9 County wetland delineations comprising 10.5 miles of future road and culvert replacement projects and one County Park trail delineation. The SWCD staff also wrote 6 Restoration Orders to correct wetland violations and attended 18 Technical Evaluation Panel meetings with the County and Cities of Elk River, Big Lake, and Clear Lake. Approximately 45 on-site reviews of landowner wetland applications were also completed.



Aquatic Invasive Species Prevention Plan

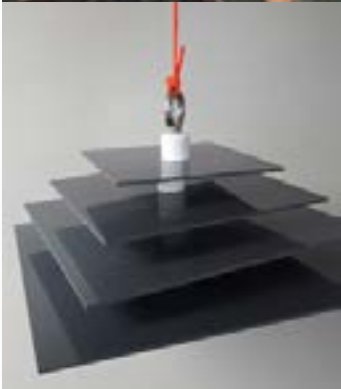
In 2021 the SWCD continued to utilize funds provided through the State of Minnesota to prevent the introduction and spread of AIS in Sherburne County. This was the seventh year of active AIS prevention through this program, and the second year of implementing the 2020-2024 AIS Prevention Plan that was created by the SWCD and AIS Task Force in late 2019. A summary of 2021 activities are outlined below:

PUBLIC AWARENESS / EDUCATION	AIS MONITORING & INSPECTIONS	COMMUNITY CAPACITY
Despite the COVID-19 pandemic, six AIS related events were held engaging 135 residents.	Sherburne County recreation law enforcement officers were trained on AIS laws and registered 60 hours of time on county lakes. These officers made positive connections with 811 watercraft operators about AIS concerns and water safety.	The SWCD and Sherburne Coalition of Lake Associations (COLA) developed a visually-based, interactive AIS Early Detection and Rapid Response template. The document can be used by novice and experienced lake users to record and report suspect AIS.
10 social media posts were created and observed by 628 followers.	A record 4,543 total watercraft inspections occurred during 1,527.5 hours at nine lake public access points. Data shows 95% compliance with AIS transport laws.	COLA volunteers assisted SWCD staff in building 40 zebra mussel settling plates, which were distributed amongst county lakes to help catch potential early infestations.



WATER RESOURCES

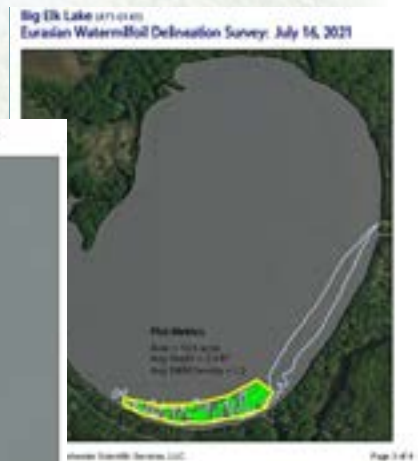
AIS Early Detection Monitoring



The SWCD partners with the Sherburne County Coalition of Lake Associations to complete monitoring work for aquatic invasive species. In 2021, 16 Sherburne County lakes were assessed in this program. In the fifth year of participating in the Starry Trek day of AIS monitoring, 16 Sherburne County volunteers joined others across the state to search for invasive species on our lakes and rivers. In late summer, the COLA and lake residents circulated a 1-page handout and YouTube video that helps waterfront property owners clean their water equipment (docks, swim platforms, boatlifts, etc) and search it for signs of invasive species. Searching this equipment is a good way to find an early infestation, or to stop transport of AIS from one lake to another when the equipment is sold.

AIS Grant Program

The SWCD Aquatic Invasive Species Grant was again active in 2021, with 11 grants being awarded. \$17,447 in grant funds were awarded and \$45,120 additional dollars leveraged for AIS projects. These projects helped to monitor aquatic plants, develop lake vegetation management plans, control existing invasive plants, and increase AIS awareness.



WATER RESOURCES

Golden Clam Research

Following a unique discovery of golden clams (*Corbicula fluminea*) in Briggs Lake in 2020, staff from Minnesota AIS Research Center (MAISRC) and the SWCD collaborated on a year-long investigation for this species. Golden clams, previously thought to have a low probability of overwinter survival in this region of the US, were documented to survive over the winter of 2020-2021 in Briggs Lake. Further, several age cohorts were determined to exist which indicates potential survival of two or more winters. This represents the first time this species has been found to overwinter in a Minnesota lake and has gained state-wide and regional attention. Although currently not suspected to be impacting the Briggs Lake ecosystem, further investigation is necessary on this newly documented occurrence.



Eagle Lake Carp Study

The SWCD staff are working with the Big Eagle Lake Improvement Association (BELIA) and a consultant to understand how many common carp (*Cyprinus carpio*) are in the lake, and what impact carp are having on the water quality and aquatic habitat. Carp are bottom feeders that disturb the sediment, increase water turbidity, damage native vegetation and contribute nutrients to the water through their excrement. Two field studies have been completed to estimate carp abundance, both have resulted in estimates exceeding the recommended threshold of 90 lbs/acre (172 and 109 lbs/acre). The field studies indicate that there are approximately 3,394 individual fish in the lake, and they may contribute as much as 362 lbs of phosphorus to the lake nutrient budget.

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 2021, the local partner team (LPT) of Stearns, Benton, Wright and Sherburne counties and the Clearwater River Watershed District began planning for 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 winter 2021-2022 and will include 12 local governmental units along with a variety of state and federal agencies to support local efforts. Look for more on this project in 2022-2023!



Rum River One Watershed, One Plan



Sherburne County and SWCD joined 18 local governmental unit partners in spring 2019 to begin this project. The project was extended 1-year due in part to the COVID-19 pandemic but is now scheduled for completion in summer 2022. The process results in a Comprehensive Watershed Management Plan for the Rum River and specifies priority resources and targeted zones for work in the next 10 years. Watershed Based Funding will be provided by the Board of Water and Soil Resources to be used towards projects as outlined in the plan.

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 will sign up for the program and select drains in their neighborhood through an interactive website. The volunteers would then be 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 will 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.

Click image to view video

Birch Lake Water Quality Success Story

Birch Lake was listed as an “impaired” waterbody in 2006 due to excessive phosphorus levels. SWCD staff completed a series of evaluations into the sources and amounts of pollution and engaged Big Lake Township to arrive at several stormwater solutions. In 2016, the SWCD received a Clean Water Funds grant to construct several infiltration basins, ditch modifications, slotted drains, and vegetation projects on several locations on the west side of the lake. Following water quality monitoring, which was completed in 2019-2020, it was determined that the lake was now meeting water quality standards! The lake is being recommended for “de-listing” from the impaired waterbodies list by the State of Minnesota. Recognizing this rare achievement and great success story, the Sherburne SWCD formally acknowledge Big Lake Township as the Outstanding Conservation Cooperator in 2021 for their contributions to the stormwater projects that made this delisting possible.



EDUCATION AND OUTREACH

As the global outbreak of coronavirus (COVID-19) made another resurgence in 2021, events and gatherings were once again lessened or halted all together to help prevent further spread. This had a huge impact on the events scheduled for 2021. The SWCD was able to still host a few events, pictured below. The pandemic has challenged SWCD staff to think outside the box and utilize new and innovative means to provide outreach to the community.

Elk River Cleanup

The SWCD has coordinated a watershed wide river clean up almost every year since 2008. In 2021, 19 volunteers and 5 SWCD staff braved the cold fall morning to clean up the Elk River and Big and Mitchell Lakes. During the 2-hour event, approximately 300 pounds of trash was collected, mainly around area bridge crossings. 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!

Click image to view video

Lunch and Learn

November of 2021, the SWCD hosted a Lunch and Learn for local farmers and agricultural professionals. Speakers included staff from The Nature Conservancy, the University of Minnesota, and the Minnesota Soil Health Coalition. Promoting Best Management Practices reduces pollutants and sediment from reaching our groundwater and surface waters making meaningful impact on our State's natural resources. Additional partners included the Minnesota Department of Agriculture as well as funding from the Clean Water Funds.

Click Image to view video

Pollinator Photo Contest

As part of the 2021 Pollination Celebration, the SWCD hosted a Pollinator Photo Contest. Many terrific images of bees, moths and butterflies were submitted. Ashley of Zimmerman was selected as our winner with this beautiful bumble bee image.

 **Pollinator Photo Contest Winner**



Ashley J. of Zimmerman

EDUCATION AND OUTREACH

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 2021 the theme was “Healthy Forests = Healthy Communities.” Students learned about the benefits of all forest types and how they can make an impact in their communities. The SWCD received over 70 posters from 5 different schools throughout the county. The top 4 winners were awarded with a monetary prize.



Starry Trek



The Sherburne County Coalition of Lake Associations (COLA) and SWCD co-hosted a group of 16 volunteers to participate in the third statewide Starry Trek (starry stonewort monitoring event). Over 220 lakes were searched statewide for AIS; 12 Sherburne County lakes were searched during this event. The event is hosted by the Minnesota AIS Research Center. A live golden clam was found on Big Lake, representing the 2nd occurrence of this species in the county. Additionally, a half-shell of a zebra mussel was found amongst a clump of aquatic plants on Big Eagle Lake. It is unclear if the shell was transported to Big Eagle Lake on the clump of plants or if a living population of mussels are in the lake (to date, no living specimens have been found). Early Detection and Rapid Response actions are being carried out on both Big Lake and Big Eagle Lake to learn more about these findings.

2021 Tree Sale

In 2021 over 20,000 trees were sold during the SWCD’s annual tree sale. This sale was one of the most successful on record. The tree 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

Nitrate Clinic

The SWCD office now 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 participants were counseled on the results. Additionally, staff held 2 nitrate clinics during 2021 in partnership with Haven and Big Lake Townships. 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

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 continued using this technology during the COVID-19 pandemic to share information on everything from “The importance of Pollinators” to “What is Sherburne County soil made up of.”

Click image to view video

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.

OUTSTANDING CONSERVATION COOPERATOR

Big Lake Township



Big Lake Township Supervisors

The Sherburne SWCD has selected the Big Lake Township Board and staff as their 2021 Outstanding Conservation Cooperator. A 2013 Sub-Watershed Analysis identified priority catchments and potential conservation projects along Birch Lake, a nutrient impaired waterbody within the Township's borders. When a 2015 Clean Water Funds grant was obtained, the partnership was prepared to implement these projects. Stormwater infiltration basins, grassed swales, vegetated berms and a slotted drain were installed within Township owned locations during 2016-2018, and shoreline restorations were coordinated with lake property owners. Lake monitoring in 2019-2020 revealed that water quality standards are now being met. As a result, in 2021 the MPCA recommended Birch Lake be removed from the State's Impaired Waterbodies list. Big Lake Township remains committed to maintaining the quality of the lake through regular street sweeping, MS4 permit coordination with Sherburne County, and partnership in a new county wide Adopt-A-Storm-Drain program.



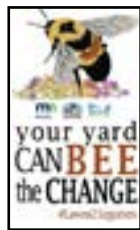
*Photos: 224th Ave infiltration basin capturing and treating local stormwater (2017).
Slotted drain at boat landing, which captures runoff from street and parking area.*

2021 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, bee lawn, beneficial trees and shrubs.

2021 Accomplishments



Practice Type	Qty
Pollinator Meadow	1
Pocket Planting	3



2021 COMPLETED PROJECTS

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.

2021 Accomplishments



Practice Type	Qty
Cover Crop	1
Shoreline Restoration	1
Streambank Stabilization	2
Raingardens	3
Native Prairie	7



2021 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	20 site visits were completed for landowners experiencing either lakeshore or streambank erosion.
Enroll 1 lake association in volunteer water quality monitoring programs	No new volunteers in 2021. A volunteer from Lake Diann will begin collecting water chemistry and secchi disk samples in 2022.
Complete 8 projects targeting impaired waterbodies (3 in Rum River, 5 in St. Cloud watersheds)	3 shoreline restoration projects and 2 raingardens were completed in the St. Cloud watershed.
Complete 1 sub-watershed assessment in 2021.	A Sub-watershed assessment was completed for Little Elk Lake in partnership with Baldwin Township.
Work with landowners to address 5 bacteria sources to Elk River and tributaries	Staff worked with 5 operations in 2021. One manure slab was installed, one pasture installed. Technical assistance was provided on all.
Identify 1 water quality BMP retrofit opportunity along a public ditch system	A potential project has been identified along an abandoned ditch system, staff are evaluating feasibility with landowner.
Certify 1 new operation for MAWQCP accreditation	Staff worked closely with one landowner working toward certification.
Oversee the 2021 AIS grant program	The 2021 program was successful with a record number of watercraft inspections and volunteer participation, along with new studies for carp and golden clams.
Monitor 12+ lakes for AIS using early detection protocols	16 County lakes were monitored in 2021 through a variety of programs.
Partner with Sherburne County COLA on 1 AIS activity	The SWCD and COLA developed an AIS Early Detection and Rapid Response template that is visually based, engaging, and customizable for lake group.



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

Actions	Results
Complete 1 lake or river shoreline development or erosion inventory	A shoreline development survey was completed for Little Elk Lake.
Maintain compliance with the Buffer Law (Minn. Stat. 103F.48)	SWCD along with BWSR staff work towards 100% compliance. Staff met and measured buffers for landowners installing new buffers. Staff completed monitoring.
Implement 3 field-based BMP's aiming at nitrate reduction	Staff worked with three operators with cover crops and irrigation water management. Practices spanned over 400 acres.
Complete 10 County Wetland Delineations / 1 Private Delineations	Completed all county delineations, over 10.5 miles.
Infield nitrate monitoring at 3 sites	Staff monitored cover crops, kernza and corn comparisons at 4 farms. Monitoring utilized permanent and temporary lysimeters.

2021 ACTIVITY SUMMARY



Objective 3: Provide Forest Management Support to Landowners / Communities

Actions

Results

Perform 50+ tree health consultations with landowners	69 tree health consultations were performed.
Assist County Parks Department with 100 hours of habitat restoration work	100+ hours of critical period cutting, vegetation surveys, and native plantings were completed.
Re-visit City EAB Preparedness plans	EAB preparedness plans were reviewed and no new action is required at this time. Once EAB has been positively identified in Sherburne County additional actions will be required.
Continue EAB early detection monitoring program	EAB early detection woodpecker monitoring was not completed in 2021, however it will be restarted in the spring of 2022.



Objective 4: Protect, Enhance, and Establish Native Habitat

Actions

Results

Work with 3 landowners to install prairie on their property	4 native prairies were installed on properties.
Assist 20+ landowners with technical and/or financial assistance with habitat projects in rural and urban settings	12 site visits were completed to discuss small pollinator plantings in urban settings. 6 site visits were completed in rural settings. Additionally, numerous phone calls in both settings provided technical assistance.



Objective 5: Increase District Awareness and Promote Community Education

Actions

Results

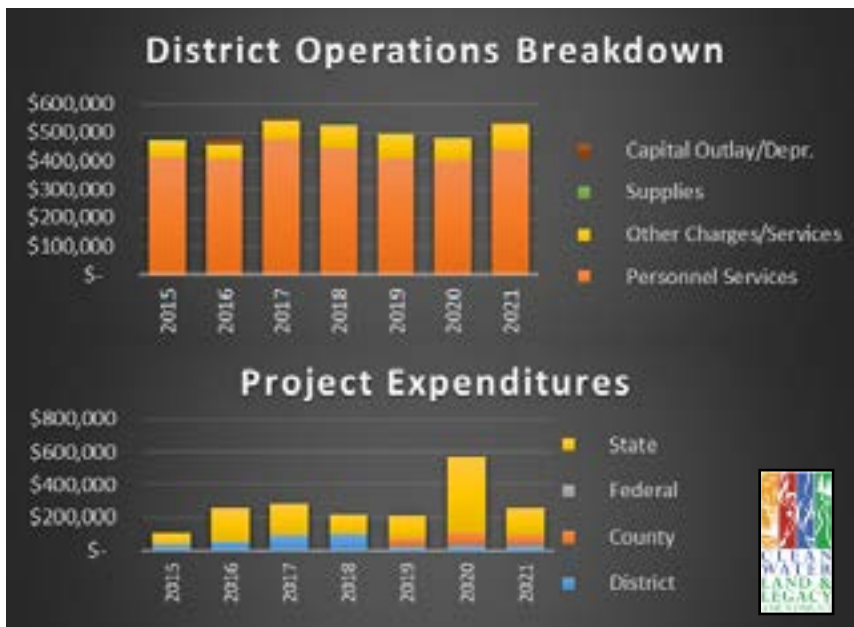
Host 10+ educational events targeting students and general public on conservation related topics.	Staff hosted 9 educational webinars for the public and a poster contest was held for 5th graders throughout the county.
Host an annual MS4 partners meeting	An annual MS4 partners meeting was held in spring 2021 with participation from all county MS4 permit holders.
Host a stormwater educational workshop for elected officials	Shoreland ordinance training has been moved from 2021 to 2022 with the Board of Adjustments.
Promote loan and grant programs as well as educational opportunities for SSTS	Information on AgBMP loans provided in Operator Opportunities publication and several newsletters, 2 applications received in 2021.
Target high-use and high-risk public access sites for AIS education	Watercraft inspections occurred at nine public accesses in 2021 through paid Level 1 inspectors (1,528 hrs) and volunteers (225 hrs).

2021 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 (46%), State Grants (47%), Charges for Services (5%), and other Miscellaneous Income (2%).



Although governed by an elected Board of Officials, Conservation Districts do not have levy authority and must secure funds from many sources to maintain programs and services. The baseline level of support from the taxpayers of Sherburne County is critical for leveraging outside funding from state and federal government agencies. The financial health of Sherburne SWCD allows the District to pursue opportunities to assist landowners and other partners with their natural resource concerns.



Sherburne SWCD is a leading partner in watershed-based initiatives including One Watershed, One Plan (1w1p; active in the Rum River Watershed and MRSC Watershed) and the Watershed Restoration and Protection Strategies (WRAPS; active in the Mississippi River St. Cloud Watershed) projects. In 2021, the SWCD also partnered with Sherburne County on a Lessards-Sams Outdoor Heritage Fund project for a habitat restoration and enhancement project at Sherburne County's Oak Savanna Park. As a result of taking on the Fiscal Agent role for these initiatives and many other large projects, the SWCD's 2020 and 2021 state revenue and state project expenses reflect these pass-through funds.



PARTNERSHIP WITH NRCS

Natural Resources Conservation Service

Environmental Quality Incentive Program (EQIP)

EQIP provides financial and technical assistance to agricultural producers to address natural resource concerns and deliver environmental benefits such as improved water & air quality, conserved ground & surface water, reduce soil erosion & sedimentation, and improve or create wildlife habitat. In 2021 \$16,944 were obligated through EQIP for conservation on 57.00 acres in Sherburne County.

- Cover Crops
- Irrigation Water Management
- Farmstead Energy Improvements
- Residue and Tillage Management, No Till
- High Tunnel System
- Agricultural Energy Management Plan
- Pollinator Plantings
- Comprehensive Nutrient Management Plan
- Prescribed Grazing Plan



Kelly Bistodeau
NRCS Soil Conservation Technician

Conservation Reserve Program (CRP)

251.74 acres were enrolled in CRP in 2021 in Sherburne County. CRP is a conservation program administered by the Farm Service Agency, landowners enrolled in the program agree to remove environmentally sensitive land from agricultural production and plant species that will improve environmental health and quality. NRCS provides the technical assistance to producers and writes the conservation plans.

Find more out about the Natural Resources Conservation Service by clicking here.



SWCD INFORMATION



Sherburne SWCD

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

Mailing Address
425 Jackson Ave NW
Elk River, MN 55330

Hours of Operation

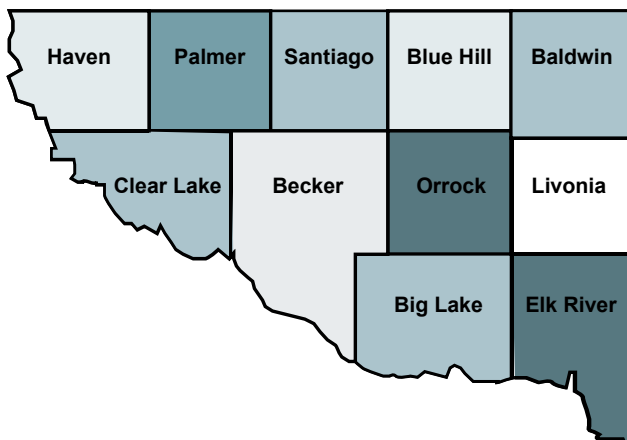
Monday - Friday
8:00 a.m. - 4:00 p.m.

Closed Sat & Sun
Closed on Federal Holidays

Programs & Services

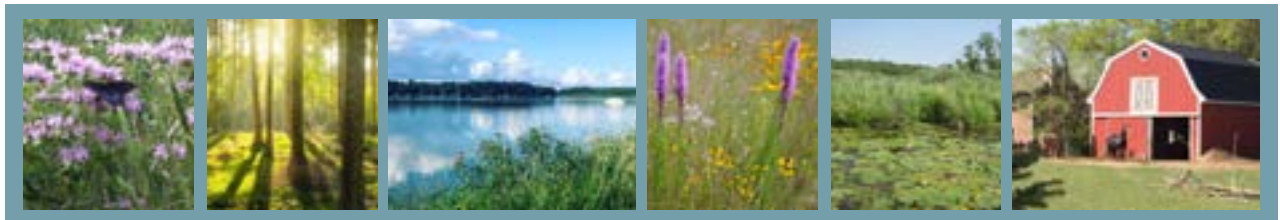
The primary focus of the Sherburne SWCD is implementing voluntary, non-regulatory conservation programs to protect and enhance soil, water, native habitat and other natural resources. We utilize partnerships and programs to assist agricultural producers, rural and urban landowners, municipalities, lakeshore 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 image to view video



Sherburne Soil and Water Conservation District
www.sherburneswcd.org

425 Jackson Ave NW
Elk River, MN 55330
763-220-3434