



2017 Highlights Book



SHERBURNE
SOIL & WATER
CONSERVATION DISTRICT





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Education and Outreach

Education Events Attended/Hosted: 21

Forestry

Trees Sold: 19,450

Forest Stewardship Plan Acreage: 28

Acres of Invasive Species Removed: 45

Storm Water Mitigation

Total Square Feet: 9,625 ft²

Total Phosphorus Reduction: 1.58 lbs/year

Total Suspended Solids Reduction: 1.77 tons/year

Water Quality

Sites Monitored for Bacteria: 2

Streams Monitored for Flow Measurement: 3

Streams Monitored for Phosphorus: 2

Streams Monitored for genetic markers: 5

Wetland Conservation Act (WCA)

Wetland Delineations: 15



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.

**Jason Selvog**

Reporter

District IV

**Michael Schroeder**

Chair

District I

**Larry Goenner**

Secretary

District III

**Shane Berg**

Vice Chair

District II

**Roger Nelson**

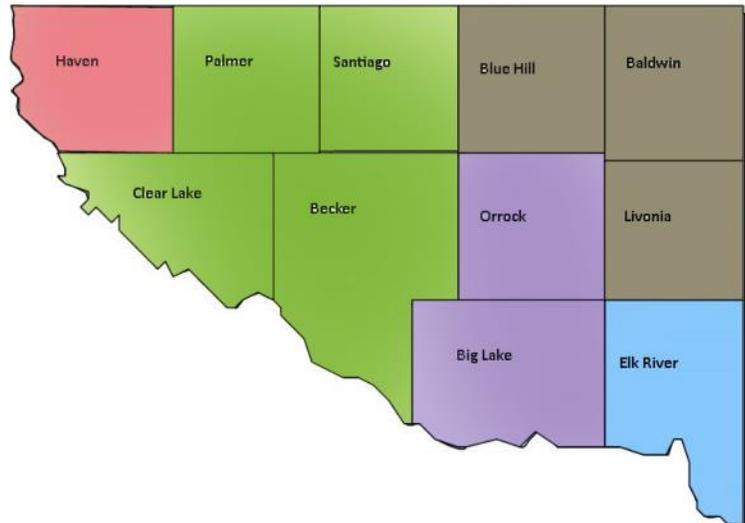
Treasurer

District V



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.

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.





Francine Larson
District Manager



Miranda Wagner
District Technician



Franny Gerde
District Technician



Bill Bronder
District Technician



Gina Hugo
Forest Resource
Specialist



Dan Cibulak
Water Resource
Specialist



Andie Bumgarner
Marketing/Admin
Assistant

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.



2017 Tree Health Consultations

Over 138 site visits were conducted to assist landowners with management of tree diseases in landscapes and throughout wooded rural residential properties. Bur oak blight was very severe in 2017 following wet spring conditions. Oak wilt has been a prevalent problem throughout the County for several decades and the trend continued in 2017.

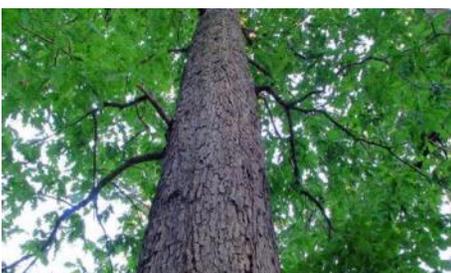
SWCD tree health consultation are meant to provide a diagnosis of the problem and options for solutions. During the evaluation, the swcd staff will monitor soil moisture, inspect trees for visible signs of distress or disease and identify pests if present. An unbiased recommendation as to corrections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



Woodpecker Activity Survey

There is a documented and proven correlation between heavy woodpecker activity in ash trees in late winter and presence of emerald ash borer (EAB) larvae. EAB is confirmed in Anoka County and in the City of Maple Grove, both within 7 miles of Sherburne Counties southeast border.

The SWCD is committed to being proactive in early detection of EAB and coordinated the 2nd round of woodpecker activity surveying in Elk River Parks. Partnering with the MN Department of Agriculture (MDA) and the Elk River Parks Department, the SWCD was able to recruit 10 volunteers. Volunteers were trained by MDA staff to conduct the surveys, which also looked at neighborhoods with high ash tree composition. No EAB was confirmed as a result of the survey. The education and outreach value of the survey is significant in creating opportunities to talk to homeowners about EAB and teaching them what to look for. The efforts will be repeated in 2018.



Citizen Pruner Program

2017 marked the 4th year of the Citizen Pruner Program in Sherburne County. 22 engaged volunteer pruners invested a total of 104 hours, pruning 385 trees in Big Lake, Elk River, Becker and Princeton!

These cities have partnered with the Sherburne Soil & Water Conservation District and the U of M Tree Care Advocate Program on a pilot program that aids in increasing effective tree care by working together and engaging citizens in community forestry. Citizen Pruners are trained in tree identification, biology, and pruning techniques. These classes help to extend the skills and ability of this steadfast volunteer force. SWCD staff partners with each city to host “Pruning Events”, where volunteers work in teams to prune city-owned trees of high priority.

My Neighborhood Tree Program

The My Neighborhood Tree Program increase the diversity, health and resilience of community tree populations by adding more trees of varying species. The program focuses on motivating homeowners through education and successful tree establishment to plant more trees on their own initiative.

The program resulted in 95 trees being planted on 39 urban lots. Tree species are selected based on potential crown spread and associated environmental benefits as well as adaptability to climate change. Other info can remain the same.

Studies have proven that the best place to plant a tree is on private property where the homeowner can water and maintain it. Even on private property, trees benefit the entire community through their environmental and societal benefits, without adding the burden of maintenance to already under resourced city staff.



SWCD Monitoring

In 2017, 9 stream sites were monitored through a combination of field sampling and laboratory analysis. Water samples were analyzed for the following parameters: Total Phosphorus, Total Suspended Solids, Dissolved Orthophosphate, E.coli, and Genetic Markers. The genetic markers samples were new to the parameter list in 2017. While the Elk River is impaired for E.coli, staff felt it would be beneficial to test for genetic markers to target the main sources of bacteria. The genetic markers test for host-specific bacteria (human, cattle, birds, etc.). Having a better understanding of the contributing source will allow for more targeted best management practices in the watershed. A Clean Water Funds grant has also been applied for and secured in 2017 which will allow Sherburne SWCD staff to work with landowners in the Elk River watershed to properly manage animal manure and pastures, which should aid in further reducing manure input to the river.

Wetland Conservation Act

During 2017, the District completed 11 wetland delineations. Seven were for Sherburne County Public Works comprising 27.5 miles of future road projects and one culvert replacement. Two others were for Township road projects including one culvert replacement and 2 miles of road. We also wrote 2 Restoration Orders to correct wetland violations and attended 17 Technical Evaluation meetings.

Watershed Pollutant Load Monitoring Network (WPLMN)

A Minnesota Pollution Control Agency (MPCA) lead project that is designed to obtain long term water quality trends statewide. The MPCA utilizes local partners to collect water quality samples at specific monitoring sites. The Sherburne SWCD monitors 3 of these sites for the WPLMN project. Outside of the main goals for the project, the data will be used to assist with impaired waters assessments, watershed and water quality studies and reports, watershed modeling efforts and measuring ongoing effectiveness of major watershed and restoration plans. Each site is sampled for total suspended solids (TSS), dissolved orthophosphate phosphorus (DOP), total phosphorus (TP), nitrate-nitrite nitrogen ($\text{NO}_3+\text{NO}_2\text{-N}$), and total Kjeldahl nitrogen (TKN). Flow data is also collected at each site. The flow data and sample results are used to calculate pollutant loads. The calculation results in daily and annual pollutant load concentrations that can be used to determine whether a stream is in need of pollution reduction. The Sherburne SWCD has been a part of the statewide monitoring network since 2015.



Metro Campus Groundwater Protocol (CGP) Development

The 11 county metro area received a Clean Water Fund grant to develop a groundwater conservation protocol that can be easily followed and implemented by non-engineer SWCD planning staff. Using and improving upon existing protocols, a group of metro area water planners (including Sherburne SWCD staff) developed a draft protocol process in 2017. The protocol walks the user through the many components of water usage on a campus setting such as a school, library, prison, or other medium to large sized public facility. It identifies how to measure water usage from devices such as hot water heaters, toilets, sinks, showers, and other common facility structures. Then, alternatives are proposed for each structure type that can save the facility management on water and potentially heating costs. In the end, a report will be completed for each participating facility that identifies where the high priority water consumption and savings opportunities exist, and what should be done to implement changes.

Elk River Watershed Association (ERWA)

The Elk River Watershed Association is a Joint Powers Board of Sherburne and Benton Counties and Sherburne and Benton Soil & Water Conservation Districts. This board was formed in 1994 to initiate projects to improve and protect water resources within the Elk River Watershed, which spans over 611 square miles in size and comprises 71% of Sherburne County and 67% of Benton County. The focus of this group is the restoration and protection of land and waters in the Elk River Watershed. In 2016 staff from Benton and Sherburne SWCD collaborated on a Clean Water Funds grant which secured an Elk River Watershed technician, Kelly Molitor, to begin conservation work solely within this watershed. Ms. Molitor spent her time in 2017 visiting with landowners in the watershed to conduct environmental assessments. Assessments are conducted within priority areas identified through previous strategic planning studies, and those property owners are provided help with questions on erosion, feedlot management, water runoff, nutrient management, and technical/financial assistance options.

CAMPUS GROUNDWATER CONSERVATION PLANNING



BENEFITS

ANALYZE COST-BENEFIT



Identify and rank water conservation opportunities and provide low- or no-cost solutions

SAVE MONEY



Prioritize water use reduction projects in a cost-effective manner to maximize return on investment

CONSERVE GROUNDWATER



Practice sustainable use of groundwater to meet current and future needs; groundwater is an undervalued, limited resource in Minnesota

PROCESS

KICK-OFF MEETING



Discuss process, goals, and potential water conservation opportunities

ON-SITE DATA COLLECTION



Inventory and assess water-using equipment across the campus

REPORT GENERATION



Summarize water-using equipment and prioritize water conservation opportunities



Coalition of Lake Associations

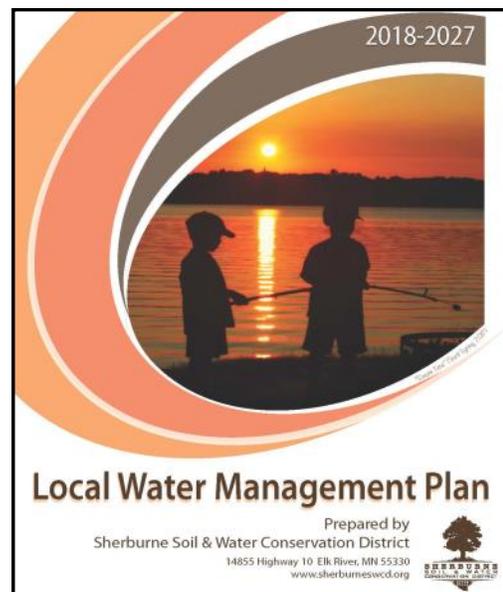
With a unanimous vote amongst attending Sherburne County lake association representatives, SC COLA was officially formed on June 8, 2017. Since then the COLA has met several times to elect officers, develop By-Laws and Articles of Incorporation, determine a Mission Statement and Vision, as well as confirming other organizational structure details. The group has developed several committees who are dedicated to completing the hefty task of building a non-profit organization out from scratch. The SC COLA strives to protect Sherburne County lakes, rivers, and streams by taking advantage of efficiencies with a larger organized group, providing education and community outreach, sharing information amongst member organizations, building capacity from within, and advocating for water protection at the state level.

The development of the SC COLA is the culmination of the hard work of a few individuals throughout 2016 and early 2017. However, the real story has just begun as the COLA is anxious to begin developing projects that will assist lake property owners learn more about their lakes and protect them. The SC COLA is planning to pursue education projects as well as volunteer recruitment for water quality monitoring in 2018, along with several other projects. A Kickoff Fundraiser event is being planned for early summer 2018. Sherburne SWCD staff provides technical support for the SC COLA through a delegated ex-officio, non-voting membership.



Sherburne County Local Water Plan

Every 10 years, each county is responsible for developing or renewing a Local Water Management Plan (LWMP) which describes the priority concerns pertaining to water resources in the county, what the status is of those concerns, and how they will be addressed. Sherburne SWCD has been delegated this authority by the Sherburne County Board of Commissioners. After over a year of public input, data analysis, and reviews by local and state agencies, Sherburne County's 2018-2027 LWMP is nearly complete. The Minnesota Board of Water and Soil Resources (BWSR) will provide a final review in spring of 2018 and it is anticipated that Sherburne County will adopt the plan shortly afterwards. The next step is to implement the plan. Water planning entities for the county will use the plan to address manure and soil erosion, monitor and treat stormwater, educate the public on the quality of groundwater, and effectively prevent the spread of aquatic invasive species (AIS) to Sherburne County.



Aquatic Invasive Species Prevention Plan

In 2017 Sherburne SWCD continued to utilize funds provided through the State of Minnesota to prevent the introduction and spread of AIS in Sherburne County. Many local and regional partners played crucial roles in these initiatives, including many volunteers. The work follows a 5-year plan, created by the SWCD in 2015, to direct programs in a variety of ways including education, monitoring, early detection, coalition building, and financial assistance. The 5-year plan was updated in 2017 to reflect the implementation of several programs and direction for new programs and initiatives in 2018. Some of the 2017 AIS Prevention highlights are outlined below.

Public Awareness / Education	AIS Monitoring & Inspections	Community Capacity
Continued partnership with CLIMB Theater on AIS presentations for 2 nd and 5 th graders. Over 1,000 students were reached in 2017!	New zebra mussel monitoring program implemented, 9 lake groups collected samples from 13 county lakes – no zebra mussels were found!	SWCD facilitated a scoping meeting for a county Coalition of Lake Associations (COLA) and is directing an effort to determine organization structure for a Sherburne COLA.
Over 1,000 promotional items (can koozie, stickers, fishing bobbers) with an AIS prevention message were distributed to the public at special events.	2,475 total watercraft inspections occurred at county lake public access points. Data shows 97% compliance with AIS transport laws.	In its first year, the Sherburne County AIS Grant program awarded \$14,800 dollars towards six projects to help monitor, plan for, and control AIS.
A factsheet about curly-leaf pondweed was created and distributed to interested lake property owners.	County Water Patrol staff shared AIS law details with watercraft owners during three holiday weekends.	AIS volunteers were recruited and trained to educate watercraft operators at boat landings.



Cover Crop Demonstration Site

In 2014 the District received a Clean Water Fund grant from the Clean Water, Land, and Legacy Amendment. This Grant is being used to encourage irrigation scheduling based on soil moisture status. It also promotes the establishment of diverse cover crop mixes that scavenge nitrogen left over after the crop is harvested. The goal is to increase irrigation efficiency, protect and improve water quality, and improve soil health.

This past season, four AgSense automated soil moisture probes were installed in irrigated crop fields throughout Sherburne County. Farmers can make irrigation decisions based on real time data and existing soil moisture within the crop's root zone. The farmer can base management decisions using this data.

Furthermore, two plots were interseeded with a cover crop mix at the V5 stage. A 5 species mix was drilled and broadcasted to compare germination. Staff monitored the growth throughout the season.

Lastly, staff installed 6 lysimeters to monitor Nitrate levels under anhydrous ammonia and ESN/Urea fertilizers. These results will be used by staff to help discuss Nitrogen Best Management Practices with farmers.



Elk River Targeted Bacterial Reduction Program

In 2014, the District received Clean Water Funds to reduce bacterial 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.

Two landowners completed practices in 2017. A manure composting system was installed for horses along with an animal crossing and exclusion fence to protect a large wetland system from manure. Seedings accompanied these practices.

Also, cost share dollars were provided to a large beef operation in conjunction with Environmental Quality Incentive Program (EQIP) financial assistance. The final project included a 120' x 248' x 6' deep High Density Polyethylene (HDPE) lined pond to store runoff from the feedlot to prevent it from entering the Elk River. Additionally, diversions were constructed to divert clean water away from the feedlot; a lined channel will direct feedlot runoff to a pumping station to be pumped into the pond; roofs and concrete slabs installed for feed storage and ramps. Per requirements, an NRCS Comprehensive Nutrient Management Plan will be followed for manure application.



Minnesota Agricultural Water Quality Certification Program (MAWQCP)

The MAWQCP is a voluntary program that works with famers and landowners to identify and mediate risks to water quality on a field-by-field basis for the entire operation. Farmers who treat all risks to water quality on their operation are certified and deemed to be in compliance with new water quality rules and laws for 10 years. The MAWQCP is a statewide program that is delivered locally through a partnership between the MDA and Minnesota’s 89 soil and water conservation districts.

Peterson & Peterson Farms

Duane and Alan Peterson of Peterson & Peterson Farms operate a 280 acre cash grain and beef farm in Becker Township. Duane and Alan are conservation minded producers that deserve to be commended for their conservation efforts! Peterson’s have been at the forefront in Sherburne county for experimenting with multispecies cover crops. They also maintain buffers, conserve water through irrigation water management, and include alfalfa in their rotation.



Diamond A Farm

The Ayers family’s dedication to conservation is apparent in the family’s 500 acre corn, soybean, rye, and edible bean farm. Diamond A Farm is located in a groundwater sensitive area and as part of the certification, the Ayers are adjusting their nutrient management strategy, planting cover crops, and incorporating nitrogen time trials to help protect and improve water quality.



Briggs Lake Chain Community Partners Grant

In 2014 the SWCD partnered with the Briggs Lake Chain Association to apply for a Clean Water Fund Grant. The purpose of receiving this grant was to reduce pollution from entering the lakes and to build the Lake Associations capacity to recommend conservation practices to lakeshore owners. Several Lake Association members volunteered their time to meet with landowners on sites suitable for conservation practices. The SWCD provided design assistance when necessary. By the end of the grant period in 2017 there was a total of 7 projects installed, varying from shoreline restoration to stormwater runoff control.



Native Prairie Incentive Program

In 2016 the SWCD received funding to assist and promote conservation practices that protect water and soil and provide for wildlife. 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 for seed and affordable planting service.

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.



Buffer Program

The Buffer Law was passed in 2015 and requires landowners to install buffer strips along 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.

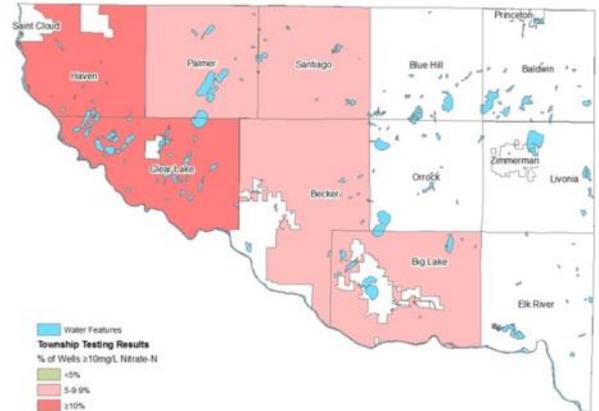
During 2017, SWCD staff worked with identified landowners affected by the Public Waters deadline of November 1, 2017. Letters were sent for the remaining parcels offering field visits and the possibility of waivers. We were able to establish compliance or complete waivers for all but one of the parcels.



Nitrogen Fertilizer Management Plan

The Sherburne SWCD, in partnership with the Minnesota Department of Agriculture (MDA), is participating as a pilot county for the Nitrogen Fertilizer Management Plan process. In 2014-2015, 6 townships were tested in Sherburne County for nitrate levels in drinking water, two of those townships were identified as having more than 10% of tested wells above the health limit. Under this process, a Local Advisory Team (LAT) was formed. The first meeting was in July and a subsequent official meeting in December. The discussion and goal of these meetings is to identify Best Management Practices (BMPs) focuses for Sherburne county and to be in compliance with the up and coming Nitrogen Rule, currently in draft form. SWCD staff identified the LAT members, helped in meeting preparations, attended meetings, and assisted with outreach.

Figure: Sherburne County Final Well Dataset Map.



Lake Julia Restoration Trent Johnson

Excess water from the road would collect in the front yard and eventually run down the length of the property causing erosion problems before making its way to the lake. This project incorporated two infiltration trenches, berms, and native plantings to help reduce the amount of excess water on the property.

Project Details	Project Funding	Project Partners
Date Installed: May 2017	2014 Clean Water Funds: \$7,157.15	Sherburne SWCD
Area: 630 ft ²	Landowner: \$3853.85	Landowner
Number of Plants: 122	Total Project Cost: \$11,011.00	



Before



After

Big Lake Shoreline Restoration Deb and Ed Hart

Erosion from wave and ice action had resulted in shoreline loss of around 8 feet in the last 10 years. This project included hard armoring of rock rip rap to protect the shore from wave action, native plants were installed upland of the rock to help stabilize the slope and provide habitat for wildlife and pollinators.

Project Details	Project Funding	Project Partners
Date Installed: May 2017	2016 Capacity Funds: \$18,559.53	Sherburne SWCD
Area: 1,200 ft ²	Landowner: \$6,300.00	Landowner
Number of Plants: 164	Total Project Cost: \$24,859.53	Briggs Lake Chain Association



Before



After

Big Lake Shoreline Restoration Erling and Michelle Teigen

Erosion from wave and ice action had resulted in shoreline loss of around 8 feet in the last 10 years. This project included hard armoring of rock rip rap to protect the shore from wave action, native plants were installed upland of the rock to help stabilize the slope and provide habitat for wildlife and pollinators.

Project Details	Project Funding	Project Partners
Date Installed: May 2017	2016/2017 State Cost Share: \$5,993.00	Sherburne SWCD
Area: 570 ft ²	Landowner: \$3,227.00	Landowner
Number of Plants: 84	Total Project Cost: \$9,220.00	



Before



After

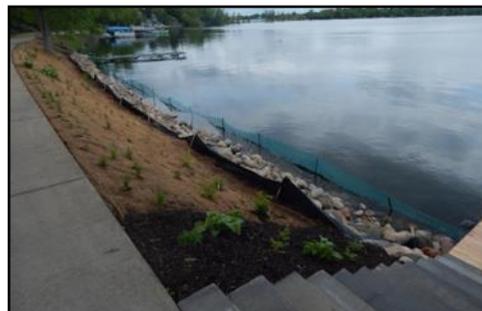
Big Lake Shoreline Restoration Pete and Sherry Swenson

Erosion from wave and ice action had resulted in shoreline loss of around 8 feet in the last 10 years. This project included hard armoring of rock rip rap to protect the shore from wave action, native plants were installed upland of the rock to help stabilize the slope and provide habitat for wildlife and pollinators.

Project Details	Project Funding	Project Partners
Date Installed: May 2017	2016 Capacity Funds: \$9,317.75	Sherburne SWCD
Area: 840 ft ²	Landowner: \$5,017.25	Landowner
Number of Plants: 245	Total Project Cost: \$14,335.00	



Before



After

Big Lake Shoreline Restoration City of Big Lake

Excess water from the road would collect in the front yard and eventually run down the length of the property causing erosion problems before making its way to the lake. This project incorporated two infiltration trenches, berms, and native plantings to help reduce the amount of excess water on the property.

Project Details	Project Funding	Project Partners
Date Installed: May 2017	2017 Capacity Funds: \$6,818.50	Sherburne SWCD
Area: 550 ft ²	Landowner: \$3,671.50	City of Big Lake
Number of Plants: 110	Total Project Cost: \$10,490.00	



Before



After

Big Lake Shoreline Restoration Ron Berthiaume

Erosion from wave and ice action had resulted in shoreline loss of around 8 feet in the last 10 years. This project included hard armoring of rock rip rap to protect the shore from wave action, native plants were installed upland of the rock to help stabilize the slope and provide habitat for wildlife and pollinators.

Project Details	Project Funding	Project Partners
Date Installed: May 2017	2017 Capacity Funds: \$9,652.50	Sherburne SWCD
Area: 825 ft ²	Landowner: \$5,397.50	Landowner
Number of Plants: 106	Total Project Cost: \$15,105.00	



Before



After

Big Lake Shoreline Restoration

Bettina Potter

Erosion from wave and ice action had resulted in shoreline loss of around 8 feet in the last 10 years. This project included hard armoring of rock rip rap to protect the shore from wave action, native plants were installed upland of the rock to help stabilize the slope and provide habitat for wildlife and pollinators.

Project Details	Project Funding	Project Partners
Date Installed: June 2017	2016/2017 Capacity Funds: \$5,200.00	Sherburne SWCD
Area: 540 ft ²	Landowner: \$8,940.88	Landowner
Number of Plants: 149	Total Project Cost: \$14,140.88	



Before



After

Eagle Lake Outlet Restoration

Ed and Deb Peitso

Fluctuation water levels led to erosion and poor vegetation cover along the shore of the tributary that enters Eagle Lake. The landowners wanted to increase wildlife and pollinator habitat on their property. Native vegetation was installed along the entire stretch of streambank on their property to help stabilize the shore and provide habitat.

Project Details	Project Funding	Project Partners
Date Installed: July 2017	2015/2016 State Cost Share: \$4,189.48	Sherburne SWCD
Area: 3,300 ft ²	Landowner: \$2,411.52	Landowner
Number of Plants: 352	Total Project Cost: \$6,601.00	



Before



After

Big Lake Shoreline Restoration

Cheryl Hegarty

Erosion from wave and ice action had resulted in shoreline loss of around 8 feet in the last 10 years. This project included hard armoring of rock rip rap to protect the shore from wave action, native plants were installed upland of the rock to help stabilize the slope and provide habitat for wildlife and pollinators.

Project Details	Project Funding	Project Partners
Date Installed: August 2017	2017 Capacity Funds: \$8,324.55	Sherburne SWCD
Area: 770ft ²	Landowner: \$5,732.45	Landowner
Number of Plants: 188	Total Project Cost: \$14,057.00	



Before



After

Eagle Lake Sediment Reduction

Town of Orrock

A dead end road near Eagle lake was a hot spot for excess sediment entering the lake. A device called Hydroguard was installed to remove sediment from runoff before entering the lake. The Hydroguard will remove up to 80% of the sediment from stormwater runoff.

Project Details	Project Funding	Project Partners
Phosphorous Reduction: 10 lbs. / yr.	2015/2016 State Cost Share: \$16,840.08	Sherburne SWCD
Sediment Reduction: 29 ton / yr.	Orrock Township: \$5,613.36	Orrock Township
	Total Project Cost: \$22,453.44	



Before



After

Sherburne SWCD Recognizes Patrick Plant and Cindi Edwards-Plant of Elk River as the 2017 Outstanding Conservation Cooperators



Patrick Plant and Cindi Edwards-Plant

For over 30 years, Patrick and Cindy have been dedicated lake stewards of their beloved Lake Orono. Individually, Patrick excels in strategic planning and leadership as well as long-term visioning and succession plan development. Cindi's exceptional talents lie in marketing, graphic design and writing for their lake association website and other materials.

Together, they regularly complete MPCA-sponsored water quality monitoring on the lake and are very active in the numerous AIS monitoring projects that Sherburne SWCD sponsors. Patrick and Cindi paid out-of-pocket for a shoreline restoration project involving grade stabilization and a native planting plan. Their intent was to create a public demonstration site to show other potentially interested lake homeowners how the shoreline restoration process and final product looks like. Instead of pursuing cost-share from Sherburne SWCD, they instead sought only guidance as they wanted cost share funds to go towards other projects that would need incentive funds to complete. In 2016-2017, Patrick and Cindi led their lake group through a structured lake management plan update process which incorporated much stakeholder input from lake residents, the City of Elk River, and locally elected officials. The Plant's made lake

management a full time job through pursuing grants to fund scientific studies on the lake's ecology, developing and distributing a stakeholder survey to lake and City of Elk River residents, approaching locally elected officials about lake management and protection, and investigating multiple approaches to long-term succession planning and restoration / protection funding for Lake Orono.

Patrick and Cindi have gone above and beyond the vision of protecting Lake Orono however; the two were instrumental members of a Coalition of Lake Association (COLA) steering committee and were amongst a team that successfully created the Sherburne County COLA. Continuing to serve as leaders on their new-found devotion to watershed-based planning and protection, both Patrick and Cindi elected to serve as Lake Orono delegates on the COLA board and Patrick was nominated as the Sherburne County COLA Chair.





Conservation Tour and Volunteer Appreciation Luncheon

The Sherburne SWCD and NRCS office held a conservation tour on Thursday, September 7th. The tour highlighted some of the conservation projects completed in the county throughout the past year. Over 40 people attended the tour, including County Commissioners, State Representatives, Lake Association Board Members, County Planning Commission, and SWCD Supervisors. A tour bus ushered attendees to 5 different stops throughout the county. Highlights of the tour included; Aquatic Invasive Species presentation with the Sherburne County Water Patrol, stormwater management practices utilizing gravel infiltration beds and a slotted drain on Birch Lake, a tree pruning demonstration given by volunteer citizen pruners in Big Lake, a fun and educational exhibit on soil health and finished by visiting an established 5 acre native prairie in Becker.

At the conclusion of the tour, volunteers and partners of Sherburne Conservation District were honored at an appreciation luncheon. The luncheon is SWCD's chance to recognize the contributions and assistance volunteers have provided to the District, which are an important part of conservation programming. Some of the events and programs they are utilized in are: rain gauge reading, Elk River clean up, citizen pruner, tree survey and zebra mussel monitoring.



Soil Health Field Day

District Technicians Miranda Wagner, Bill Bronder and NRCS Soil Conservationist Yara Gonzalez led a soil health field September 20th. We welcomed Jay Fuhrer, NRCS Soil Health Specialist, to lead demonstrations and provide soil health information to local farmers. Also, NRCS staff from the MN State office joined us with the state rainfall simulator. The event was held at Haven Town Hall in Clear Lake. The field day also highlighted the Sherburne SWCD Irrigation Scheduling Grant. Onsite, the group was able to view interseeded cover crops and SWCD staff presented on nitrate monitoring and irrigation scheduling using agsense technology.

MASWCD Leadership Program

Sherburne SWCD District Manager, Francine Larson and Yara Gonzalez, NRCS Soil Conservationist were selected to participate in the 2017-2018 Leadership Institute sponsored by the Minnesota Association of Soil and Water Conservation Districts (MASWCD).

The year-long program is designed to strengthen the leadership skills and capacity of local natural resource agencies to better serve the public and address the complex natural resource conservation issues found in communities throughout Minnesota. Francine Larson was among a group of 23 conservation leaders from across Minnesota who visited Washington, D.C. in February 2018 as part of the leadership development program.

While in Washington, the group met with Minnesota and federal lawmakers, including the United States Department of Agriculture and Natural Resource Conservation Service. The Washington D.C. seminar is one of seven sessions that are part of MASWCD's Leadership Program led by the University of Minnesota Extension. Sherburne SWCD is proud to take part in the future of conservation leadership!



Sherburne County Fair and Parade

The Sherburne SWCD has a display and information booth each year during the Sherburne County Fair. The SWCD booth is located at the corner of the Commercial building. During the fair, staff is on hand to answer questions and provide information on the programs and technical assistance the SWCD can provide. Staff also participated in the County Fair Parade. The theme of the parade was board games, staff and friends are shown here with their float titled "Go Fish for AIS".

Legislative Day

SWCD Staff and Supervisors spent March 21st at the State Capitol talking with legislators about conservation practices that are important to Sherburne County as part of MASWCD Legislative Day. A Legislative briefing day is set aside each year for SWCDs to meet at the State Capitol and make their statewide membership visible to legislators.



Watershed Cleanup

2017 was the 9th annual Elk River Watershed Clean up event. The SWCD has an excellent group of volunteers that donate their time each year to help clean up along the Elk River. This year we had 28 volunteers and 6 SWCD staff in attendance. The group split up into 5 smaller crews to cover more ground along the river. After only 2 hours the group collected around 320 lbs of trash from the roadside and around bridge crossings.

Nitrate Testing

The Sherburne 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. Staff tested more than 25 samples in 2017. 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.





2017 Tree Sale

In 2017 just under 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 and 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 snowfences, scenic buffers, wildlife habitat, and more.

Cub Scout Tree Planting

2016 marks the 8th consecutive year that Elk River Area Boy Scouts and Cub Scouts have stepped up to plant trees on park property. 400 seedlings were planted by 27 Scouts, adults and siblings from Boy Scout Troops 90 and 111, and Cub Scout Packs 90 and 111 .

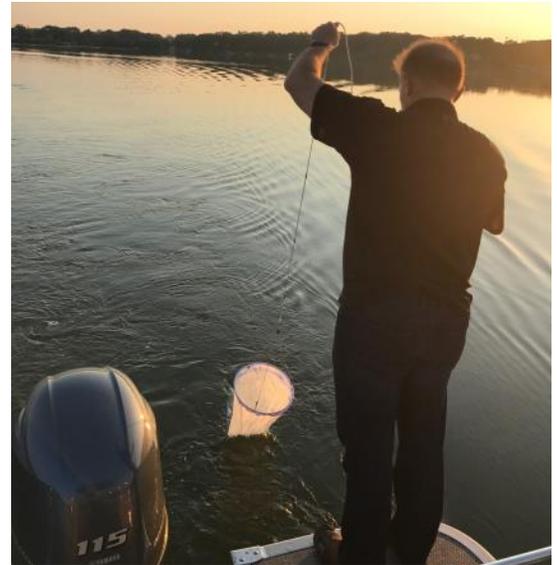


Climb Theater AIS Presentation

In an effort to educate our youth about the threat aquatic invasive species pose to our lakes, the SWCD partnered with CLIMB Theater to develop an Aquatic Invasive Species (AIS) lesson for 2nd and 5th graders. The topic of AIS is getting more popular ever since the State of Minnesota delegated funding to each county for the sole purpose of developing an AIS Prevention and Management plan. The Sherburne Soil and Water Conservation District recognizes the importance of education in preventing the spread of AIS. Over 1,000 elementary students participated.

Zebra Mussel Early Detection

Early detection of aquatic invasive species (AIS) is very important. Finding an infestation early can result in quick management to control or severely limit the presence of AIS in a lake. Early detection also allows for managers to monitor potential transport to other lakes, which limits further spread of the AIS. In 2017, volunteers collected water samples in 13 lakes to look for the larval stage of zebra mussels (called “veligers”). The larvae are microscopic and float within the lake soon after zebra mussels, if present, begin to reproduce. Sampling occurs with a very fine mesh net, and samples are sent to a lab for analysis under a microscope. In 2017, no zebra mussels were found in the 13 Sherburne County lakes.



Becker Invasive Species Presentation

In 2017 the SWCD expanded their education reach to Becker High School. Becker High School science teachers requested a presentation on invasive species and how Sherburne SWCD handles education and management of either new species or established populations. Three SWCD staff presented to over 80 students, which included a hands on activity to further illustrate the impact invasive species has on an ecosystem. The SWCD and Becker High School plans to continue this partnership for future presentations relating to their curriculum.



AIS Billboard

Educating the public on aquatic invasive species (AIS) can occur in many ways. In 2017, a billboard was purchased along the heavily traveled US-10 south of Becker using the State AIS

Prevention funds. The billboard is a highly visible image of lake recreational activity, and includes in large text the AIS message that has been consistently marketed by Minnesota Department of Natural Resources and other agencies fighting aquatic invasive species – CLEAN, DRAIN and DRY. It is estimated that this location resulted in over 1.155 million impressions in 2017.

Starry Trek

Sherburne SWCD hosted a group of 12 volunteers to participate in the first-ever statewide Starry Trek (starry stonewort monitoring event). Over 220 lakes were searched statewide for AIS on August 5th; 10 Sherburne County lakes were searched during this event.

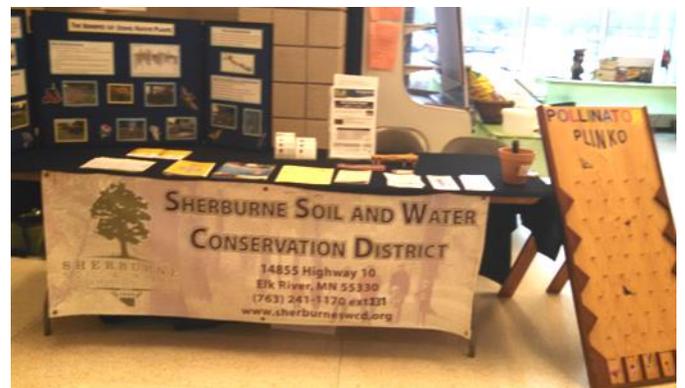


Water Plan Photo Contest

During the revision of Sherburne County's Local Water Management Plan, it was decided to host a photo contest amongst county residents. Many submissions were received that showcased the county's numerous water resources – photos included wildlife, sunsets, streams, wetlands, recreational activity, and family time spent on or near the lake. The Water Plan Advisory Committee selected Scott Syring's submission, titled "S'more Time", as the photo that best showcased our water resources. Mr. Syring's photo was featured on the updated 2018 Local Water Management Plan.

Garden Education Expo

The SWCD Staff represented the SWCD with a display booth at the 11th Annual Garden Education Expo in Big Lake on Saturday, April 11th. The staff fielded questions throughout the day on native plants and pollinators. They also handed out information on services provided by the SWCD. Sherburne SWCD has been a presence at the expo for several years.



Poster Contest

The Sherburne SWCD started the poster contest in 2016 as a way to incorporate a conservation message into the 5th grade curriculum. In 2017, 330 students from 3 schools were presented with the theme “Healthy Soils are Full of Life!” The students were then given the option to create a poster that illustrates the theme. Monetary prizes were awarded to the 1st-4th place winners. The 1st place winning student’s teacher was also awarded a monetary prize to be used in the classroom.



4th Place Winner
Trent Ouellette
Princeton Intermediate



3rd Place Winner
Sawyer Hahn
Meadowvale Elementary



1st Place Winner
Ariana Steele,
Princeton Intermediate

2nd Place Winner
Alexandra Silvola
Meadowvale Elemen-

Conservation education is important to teach people of all ages, in both rural and urban areas, to appreciate the country’s natural resources and learn to conserve those resources for future generations. Through conservation education, people develop the skills necessary to understand the complexities of natural resource problems.



NRCS (Natural Resources Conservation Service) getting conservation on the ground in 2016

Environmental Quality Incentive Program (EQIP)

In 2017 obligated \$252,276 for conservation on 1,109.3 acres in Sherburne County. EQIP provides financial and technical assistance to agricultural producers in order 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.

Conservation Stewardship Program (CSP)

In 2017 obligated \$26,986 on 622 acres in Sherburne County. CSP helps agriculture producers maintain and improve their existing conservation systems and adopt additional conservation activities to address priority resources concerns.

Conservation Reserve Program (CRP)

Conservation plans written for 43 acres enrolled in CRP in 2017. CRP is a conservation program administered by the Farm Service Agency. NRCS provides technical assistance to producers.

Conservation plans written on 2,497 acres

In 2017 Conservation was applied to improve Soil Quality on 1,878 acres, Soil Health on 582 acres, Water Quality on 1,921 acres, Improve Fish & Wildlife Habitat on 79 acres, Irrigation Water Efficiency on 43 acres and Grazing land on 32 acres.



Yara Gonzalez
NRCS Soil Conservationist

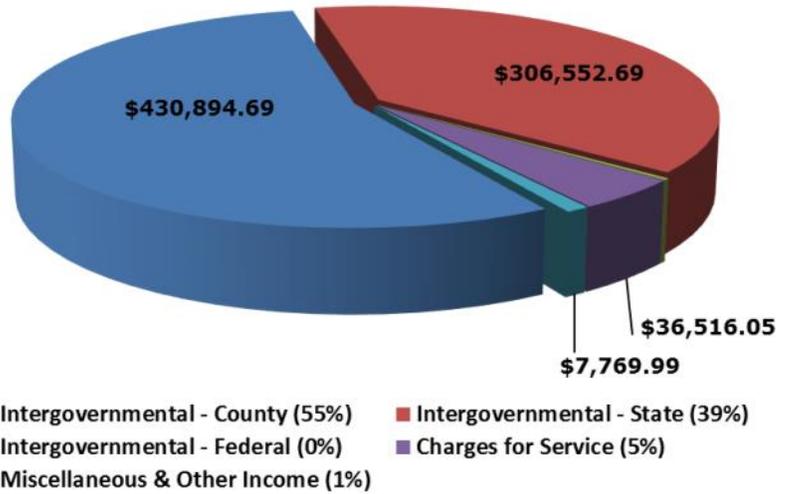


An Equal Opportunity Provider and Employer

The Sherburne SWCD finances its day-to-day operations through a variety of revenue sources. These sources include County Allocation (55%), State Grants (39%), Charges for Services (5%), and other Miscellaneous Income (1%). 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.



Sherburne SWCD - Revenue Summary
Total Revenue in 2017 was \$783,733.42



Note: Intergovernmental County includes State Pass-through revenues.

Thanks to increased capacity funding, the Sherburne Soil and Water Conservation District is engaging more and more landowners in conservation work, using incentives to increase interest and generate more program sign-ups.

Getting more conservation on the ground in the county’s priority areas has increased awareness of the SWCD’s work and strengthened their partnerships with other local government units, landowners and lake associations.

Locally-driven conservation is a cost-effective way to protect Minnesota’s natural resources. Targeting these practices to where they’re needed most, and getting more practices implemented thanks to funding like this, empowers and motivates the community. That wouldn’t be possible without this additional support.



2018 Legislative Priorities: Compiled by the MN Association of Soil and Water Conservation Districts (MASWCD) and Sherburne SWCD

The following positions are aimed at ensuring the continued effective delivery of conservation on private lands, and continuing the ability of Soil and Water Conservation Districts to leverage other private, local, state and federal funds.

SWCD
Statutory
Funding
Authority

SWCDs are seeking to continue to build support for changes to state statute that would allow SWCDs to have their own independent funding authority through options that include a water quality fee authority, and an ad valorem levy authority.

Appropriations to SWCDs have fallen short of what SWCDs need to meet statutory obligations aimed at delivering private lands conservation programs and services. SWCDs statewide are experiencing a \$19.5 million shortfall per biennium.

General fund
appropriations
for SWCD
Conservation
delivery

We support shifting \$11 million in SWCD capacity funds out of the Clean Water Fund for FY19 and into general fund appropriations for BWSR for FY19 and thereafter, becoming part of BWSR's general fund base, providing a level of sustainability and predictability. Even with this funding, SWCDs statewide are experiencing a \$19.5 million shortfall per biennium. Alternatively, SWCDs would also support Capacity Funding being delivered as SWCD program aid through a tax bill appropriation.

Bonding for
CREP

We support bonding funds for Minnesota's water quality focused Conservation Reserve Enhancement Program (CREP). CREP easement dollars are appropriated to BWSR for SWCDs to enroll interested landowners in permanent conservation easements. Governor's proposal includes \$30 million.

Legacy
Funding:
Outdoor
Heritage Fund
HF 2789 / SF
2688

We support the funding recommendations of the Lessard-Sams Outdoor Heritage Council (LSOHC), which include the following appropriations:

- Reinvest in Minnesota Reserve program buffer easements: \$5 million
- Reinvest in Minnesota Reserve program wetland easements: \$10 million
- Both of these allocations get leveraged as part of CREP.

An emerging
threat:
Emerald Ash
Borer Fund
HF 2031 / SF
1687

Minnesota communities are losing critical shade tree benefits as emerald ash borer populations spread and grow at an exponential rate. This bill appropriates \$10,000,000 bonding proceeds to fund the commissioner of agriculture for grants of up to \$1,000,000 to cities, counties, towns and park and recreation boards for removal and replacement of publicly owned shade trees damaged or lost to forest pests or disease, or to establish a more diverse community forest better able to withstand EAB.

Funding RIM:
HF 3226

Sherburne County has not historically utilized Reinvest in Minnesota funds. A new partnership in the Rum River Watershed however will change this. This bill would authorize \$45,000,000 from the bonds proceeds fund to BWSR to acquire conservation easements, which could be used in Sherburne County to protect our resources.

Please join us for our

Sherburne SWCD Summer Tour for Future and Present Leaders

Save the Date

Thursday, August 2nd 2018

- Kid Friendly
- Hands on Activities
- Adventures and Discoveries
- And much more!



SWCD Services



Tree Planting

Prairie Restoration/Planting

Annual Tree Sale

Forest Stewardship Plans

Wetland Delineations

Rotational Grazing Plans

Pasture Management/Seeding Plans



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