

Sherburne SWCD Highlights













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2016 Accomplishments at a Glance



Education and Outreach

- Education Events Attended: 19

- Education Events Hosted: 8

Forestry

- Trees Sold: 19,475

- Forest Stewardship Plans: 4

- Acres of Invasive Species Removed: 17

Storm Water Mitigation

- Total Square Feet: 14,288

- Phosphorus Reduction: 8.2lbs/year

- Suspended Solids Reduction: 72 tons/year

Water Quality

- Sites Monitored for Bacteria: 2

- Streams Monitored for Flow Measurement: 4

- Streams Monitored for Phosphorus: 3

Wetland Conservation Act (WCA)

- Wetland Delineations: 15









SWCD Supervisors and Staff

Locally Elected SWCD Supervisors



Douglas Hipsag
Vice Chair
District I



Shane Berg
Secretary
District II



Larry Goenner
Treasurer
District III



Jason Selvog Chair District IV



Roger Nelson
Reporter
District V



SWCD Staff



Back Row
Bill Bronder
District Technician

Gina Hugo Forest Resource Specialist

Andie Bumgarner Marketing/Admin Assistant

Dan Cibulak Water Resource Specialist

Front Row Franny Gerde District Technician

Francine LarsonDistrict Manager

Miranda Wagner District Technician



SWCD Services

There are fees associated with some of the services we offer.

Please contact our office for more information.

Tree Planting
Prairie Restoration/Planting
Pasture Restoration/Planting
Annual Tree Sale
Forest Stewardship Plans
Wetland Delineations
Rotational Grazing Plans
Pasture Management/Seeding Plans



2016 Tree Health Consultations

Over 130 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 2016 following wet spring conditions. Oak wilt has been a prevalent problem throughout the County for several decades and the trend continued in 2016.



Elk River Public Tree Inventory

Elk River has 45 parks and all are made more beautiful by the trees that grace their landscapes. In addition, many segments of street right-of-way include maintained trees. The SWCD worked with the Parks and Streets departments and a team of 12 dedicated volunteers to inventory all public trees in the community to prioritize and enable better tree care.

Volunteers received professional training on tree identification, tree measurements, hazard tree assessment and data collection. YTS Tree Care Experts assisted in the tree ID portion of the training. Volunteers collected data using ArcGIS Data Collector Application on Android Tablets. The data was updated in real time and every tree location is geo-referenced.

The trees with the "high" hazard ratings were filtered out and immediately visited by park staff to make corrections or do removals that mitigate the hazard. Additionally, ash trees were filtered out and will be assessed for suitability of treatment against Emerald Ash Borer.

Citizen Pruner Program

The SWCD has been coordinating the volunteer pruning program for the cities of Becker, Big Lake, Elk River and Princeton since 2014. In 2016 the program was expanded to include Zimmerman. The program attracted 5 new volunteers who were trained in October. Twelve volunteer events were hosted throughout the fall.

Trees Pruned 385 Hours 104





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 was recently confirmed in Anoka – the general infestation area is a mere 6.5 miles from the Sherburne County 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 17 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 2017.

My Neighborhood Tree Program



In 2016 we added a new division to our suite of community forestry programs called the My Neighborhood Trees Program. The goals of this program are to increase the diversity, health and resilience of community's tree populations by adding more trees of varying species. The program will also serve to motivate homeowners through education and successful tree planting to plant more trees on their own initiative.

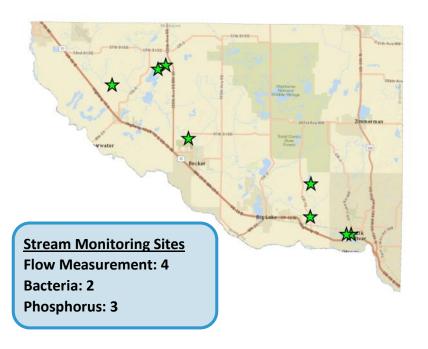
Studies have proven that the best place to plant a tree is on private property where the homeowner can water and maintain it. Even on private property, trees benefit the entire community through their environmental and societal benefits, without adding the burden of maintenance to already under resourced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

This urban forest diversification project offers trees to specific neighborhoods that have been determined to have vulnerable tree populations. Neighborhoods that were selected had the lowest number of trees above a 4" trunk diameter and the lowest species diversity. The trees were offered to homeowners at a subsidized rate of \$15/tree. The District pre-ordered a set amount of 11 tree varieties that were available on a first come, first serve basis. The trees offered were conditioned in the SWCD community gravel tree bed nursery — a natural system using gravel and water that enhances root systems to reduce transplant shock, mortality and establishment time. The key to this program is the people. Trees are distributed at the gravel bed nursery location. During the distribution, staff connect with people individually to provide planting and staking tutorials as well as printed resources that will guide future tree care, purchases and installations. After the distribution communications are continued through periodic emails on tree care; appropriate for the season.



SWCD Monitoring

In 2016 six 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, and E.coli. The type of parameters vary at each site. The SWCD continued to build our stream monitoring data by adding an addition site to the Lake Orono inflows. The Lake Orono sites are in conjunction with a subwatershed assessment that finds targeted locations that are best suited for stormwater management projects.







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 (NO₃+NO₂-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.





Doug Hipsag and Peter Gillitzer



MAWQCP

The Minnesota Agricultural Water Quality Certification is a voluntary program that provides the opportunity for farmers and landowners to take the lead in implementing conservation practices that protect our surface and ground water. Certified farmers are deemed to be compliant with any new water quality rules or regulations during their period (up to 10 years) of certification. Certification is a three step process; application, assessment, and verification. The SWCD assists the farmer with the application and assessment, a licensed certifier completes the verification, and the farm is then eligible for certification. This program helps to protect and improve the water quality in Sherburne County, provides regulatory certainty for the life of the certification, recognizes the conservation efforts being done by the farmer, and provides priority access to USDA/NRCS financial and technical assistance. Two farms have been certified in Sherburne County and many more are working toward that goal.

Coalition of Lake Associations

Sherburne SWCD has been assisting lake residents in the county to form a Coalition of Lake Associations (COLA). There are numerous COLAs operating throughout the state and each has a unique identity and set of goals, however all COLAs are formed to facilitate communication between lake residents and lake associations, increase education and spearhead activities that work towards monitoring and protecting the health our lakes. Sherburne County residents are currently investigating feasibility of a COLA for this region, and determining what an appropriate organizational framework would be for this organization. A steering committee of nine individuals has spent a few months researching and interviewing



existing COLAs to determine what has worked well, and what has not worked with their respective organizations. A report will be drafted by the committee and presented to each Sherburne County lake association in early summer 2017. The report will include a summary of findings from the existing COLA research, along with recommendations on the best structure that a Sherburne County COLA might adopt in moving forward. A formal vote to assemble and election of officers for the COLA will occur at that time. Although Sherburne SWCD will not be an active member of the COLA, we look forward to serving an advisory role and working together with the COLA to move activities forward to protect and enhance Sherburne County lakes.

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. The focus of this group is the restoration and protection of land and waters in the Elk River Watershed, which covers significant areas of Benton and Sherburne County. In August of 2016, Sherburne SWCD worked with Benton SWCD to write a Clean Water Fund grant on behalf of the ERWA to fund a full-time staff person. This grant application was successful; in 2017 a Watershed Technician will be hired to work with Elk River Watershed landowners in completing conservation projects within priority areas. Having a person assigned specifically for this task will allow for a greater number of projects to be completed in 2017 and 2018.



CLEAN WATER LAND & Priority areas within the Blue Lake Watershed, Sherburne /

Isanti Counties.

Subwatershed Assessments

A subwatershed assessment is a prioritized and targeted approach to determining where improvements can be made on the land to improve water quality of a nearby stream or lake. Computer models are used to pinpoint which areas are likely to be contributing pollutants, and in-field investigations help to identify pollution sources and potential BMPs to implement. By again using computer software to estimate the amount of pollution prevention and applying a cost to each potential BMP, the most cost effective BMPs can be identified and later pursued.

Subwatershed assessments were completed on Lake Orono in partnership with the City of Elk River and the Blue Lake Watershed (Baldwin / Livonia Township, Sherburne and Isanti Counties) in a joint effort with Isanti SWCD. Each project resulted in the identification of the highest pollutant contribution areas and identified potential BMPs to address the pollution. By completing this highly targeted analysis, these waterbodies should be eligible for future grants which would allow for implementation of their highest ranked BMP projects. As both waterbodies are considered impaired due to excessive pollutants (nutrients), they would benefit from a reduction of pollution runoff from their surrounding watersheds.

Sherburne County Local Water Plan

Sherburne SWCD is currently coordinating an update of the Sherburne County Local Water Plan. The Sherburne County Water Plan lists existing and potential opportunities to make sure that surface an groundwater are protected; it also develops a plan of action to resolve important issues like those identified here. Ultimately, the plan is the basis for obtaining funds to keep our water healthy for future generations! It is a largely collaborative process, involving direction by a group of dedicated Water Plan Advisory Committee members as well as city, county, and township officials along with input from lake property owner organizations and the public.

The first step in the process is to work with county stakeholders in discussing areas of concern and pinpointing the top three water related concerns.

Water Related Concerns:

Surface Water Quality Groundwater Quality and Quantity Aquatic Invasive Species

These concerns were outlined in a Priority Concerns Scoping Document and presented to the Board of Water and Soil Resources Board of Directors at an October 2016 meeting. The board supported the work completed and offered further support as Sherburne County continues with the Water Plan update, to occur in 2017 and be completed by 2018.

Sherburne County Local Water Management Plan Update

Priority Concerns Scoping Document
October 2016



Restored shareline along Lake Orono, City of Elk Rive

The Priority Concerns Scoping Document identifies the top water resource concerns for the county and discusses how the Water Plan will document and address them.







Aquatic Invasive Species Prevention Plan

In 2016 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 followed a 5-year plan, created by the SWCD in 2015, to direct programs in a variety of platforms including education, monitoring, early detection, coalition building, financial assistance. The 5-year plan was updated in 2016 to reflect the implementation of several programs and direction for new programs and initiatives in 2017. This plan was approved by the Sherburne County Board of Commissioners. Some of the 2016 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.	New zebra mussel monitoring program implemented, 8 lake groups collected samples from 12 county lakes – no ZM detected!	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 (key floats, stickers, fishing bobbers) with an AIS prevention message were distributed to the public at special events.	600 hours of watercraft inspections occurred at county lake public access points.	A new AIS grant program was unveiled in 2016. The program will assist lake organizations with projects pertaining to AIS prevention, management, planning and education.
SWCD hosted an AIS early detection & rapid response presentation for lake groups.	SWCD partnered with DNR to host a watercraft inspection presentation.	







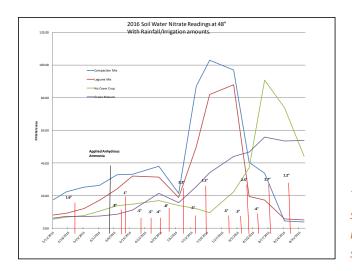


Cover Crop Demonstration Site

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. For example, early in the season farmers may only want to irrigate enough to keep the upper 12 inches moist but as the crop matures, the grower will want to irrigate to a deeper depth. The farmer can base management decisions using this data.

The graph below shows the increase in soil moisture due to precipitation or irrigation for one week in June. Watermarks are installed at 6", 12", 18", and 24" depths. Each of the units also has a tipping bucket to measure rainfall or irrigation. Watermarks measure the amount of energy it would take for the water in the soil to move into the plant roots. For example, when the soil is at "field capacity", the watermarks measure 0 cb (centibars). It has been determined that in a loamy sand soil, when the soil is 50% depleted, it takes 30 cb (centbars) of energy for the soil water to move into the plant. The farmer can also follow the progress of each individual watermark.









The soil moisture probes also show the daily changes in soil moisture as seen in the graph. Farmers use this information, along with the irrigation capacity of their system to determine when to irrigate.



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.







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 local landowners installed manure compost bins in 2016. Storing and composting manure in this type of facility reduces the potential for manure to run off by storing it on an impervious surface. By composting, harmful bacteria are destroyed, nutrients such as nitrogen and phosphorous are bound up in the compost, the size of the manure pile is reduced, and the final product is a stable material that can be used to improve soil health. Other practices installed using this program included 0.4 acres of filter strip and 720 feet of exclusion fence.



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 volunteers donated copious amounts of time to visit with landowners with sites that would be suitable for a conservation practice. The SWCD provided design assistance when necessary. By the end of 2016 five projects had been installed, varying from shoreline restoration to stormwater runoff control.







Plant Materials Learning Center

The Plant Materials Learning Center (PMLC) is a cooperative effort between the Natural Resources Conservation Service Plant Materials Center in Bismarck, the University of Minnesota Extension Service, and the Wright, Stearns, Benton, and Sherburne SWCDs. Established in 1996 on the University of Minnesota Sand Plain Research Farm in Becker, more than 100 species of trees and shrubs have been evaluated for suitability for use in soil conservation practices such as field windbreaks. Over the years, the PMLC has assisted in developing and promoting over a dozen new conservation plants.

Each July staff from the Research Farm, Natural Resources Conservation Service, and the local SWCDs get together for the *Weed and Feed*. The staff use this opportunity to come together as a group to weed out undesirable plants, repair, replace, and install new signs, and to spruce up the grounds for visitors. The site is open to the general public for self guided tours and serves as an example of plant performance on the Anoka Sand Plains.

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. Details about the law can be viewed online at: http://www.bwsr.state.mn.us/buffers/index.html. In July 2016, the Minnesota Department of Natural Resources (DNR) published the official perennial vegetation buffer map found here:

http://www.dnr.state.mn.us/buffers/index.html

During 2016 SWCD staff worked diligently to identify possible parcels without the minimum buffer established; over 10,000 parcels were reviewed using aerial imagery.





Letters were sent to the identified landowners. 88 parcels were identified among 62 landowners. The Sherburne SWCD, along with Tom Gile from BWSR, hosted an informational meeting in January 2017 which included an overview of the law and financial and technical assistance options. One of the financial assistance options available is the District's Native Buffer Incentive Program; partial financial assistance will be provided to landowners that are willing to plant native vegetation for their required buffer. SWCD staff will also be offer free technical assistance in the form of field visits and seeding plans.

Staff have begun scheduling appointments and working with landowners to evaluate their land. Additionally, staff will be identifying other waters that are not included in the Buffer Law but could benefit from non-mandated buffers or other conservation measures.



Wetland Conservation Act

During 2016, the District completed 15 Wetland Delineations. Twelve of them were for County and Township road projects. The SWCD wrote 2 Restoration Orders for violations of the Wetland Conservation Act. Staff also attended 15 Technical Evaluation Panels where projects that would impact wetlands are reviewed.



Birch Lake Stormwater Improvements

In 2014, Sherburne SWCD conducted a study that examined all potential stormwater contribution areas to Birch Lake, in Big Lake Township. The study pointed towards several retrofit options to reduce stormwater input to the lake. In 2016, several of these stormwater Best Management Practices (BMPs) were implemented through funds made available by a Clean Water Fund grant. Infiltration basins were installed on the public right-of-way on 224th Avenue and 159th Street which collect and remove pollutants from stormwater before the water reaches the lake. A slotted drain with sump storage was installed at the public landing as well. The treatment of stormwater from these high priority areas is a great step in the right direction for protecting Birch Lake.





Above: A slotted drain intercepts stormwater several feet before it reaches the lake at the public access location. Infiltration through sandy soils will treat the stormwater before releasing it to the aroundwater table.

Project Details	Project Funding	Project Partners
Date Installed: October 2016	2014 Clean Water Fund: \$65,645.00	Sherburne SWCD
Drainage Area Treated: 12.5 Acres		Big Lake Township
Number of BMP's: 4		CLEAN WATER LAND & LEGACY AMENDMENT

John and Kristy Hendrickson Julia Lake Restoration

The Hendrickson's contacted the SWCD in 2015 after their property was ground truthed by Lake Association volunteers. The purpose of the ground truthing is to identify potentials areas in need of best management practices. The property had an impervious surface cover over the 25% limit set for lakeshore properties, the Hendrickson's were more than willing to remove a large portion of their driveway to bring that percentage down to 25%. Native plants were installed where the driveway used to be, along with a pervious paver path to connect the rest of the driveway to the house. In addition to the work done at the front of the property, a buffer of native plants was installed along a portion of their shoreline. Lastly, a rain barrel was installed at the base of a downspout to reduce roof runoff from reaching the lake.

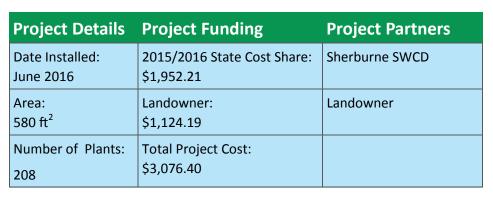


Project Details	Project Funding	Project Partners
Date Installed: October 2016	2014 Clean Water Funds: \$10,739.67	Sherburne SWCD
Area: 935 ft ²	Landowner: \$3,579.89	Landowner
Number of Plants: 600	Total Project Cost: \$14,319.56	Briggs Lake Chain Association CLEAN LAND & LEGACY LAND & LEGACY



Katherine Nerison Eagle Lake Restoration

The Nerison family contacted the SWCD in 2015 after an informational meeting presented to the Eagle Lake Association. The Nerison's were interested in restoring their shoreline to a more natural state to help reduce erosion while adding wildlife habitat. The shoreline at the time was mostly invasive reed canary grass and sparse rock rip-rap. The SWCD designed a planting plan that included native grasses, sedges, flowers, ferns, and shrubs.









Doug Solem Briggs Lake Restoration

In 2016 Doug Solem contacted the Sherburne SWCD with interest in solving erosion issues that were occurring on a steep slope that leads to the lake. The slope was mostly covered with weedy vines and invasive species such as buckthorn. The shoreline itself also had obvious signs of under cutting from wave action. Doug worked with Minnesota Native Landscapes on a restoration design for the slope and shoreline. Minnesota Native Landscapes planted over 600 native plugs, shrubs, and live stakes. The slope was also hydro-seeded with native plants to ensure maximum coverage.



Project Details	Project Funding	Project Partners
Date Installed: September 2016	2014 Clean Water Funds: \$11,130.00	Sherburne SWCD
Area: 4,500 ft ²	Landowner: \$3,800.00	Landowner
Number of Plants: 600	Total Project Cost: \$14,930.00	Briggs Lake Chain Association CLEAN WATER LAND &



Tara and Joe Aldrich Briggs Lake Restoration

In 2015 the Aldrich's contacted the SWCD to assist with the family cabin's erosion issues. Most of the issues were coming from excess runoff from the cabins roof and sidewalks. The cabin sits on a fairly steep slope, which only augments the erosion issues as the runoff makes its way downhill and toward the lake. The Aldrich's worked with Prairie Restorations on a design plan to help minimize the runoff. Several areas around the property were converted to native plantings including the shore area. The deep rooted nature of the native plants help slow down and infiltrate the excess water reducing erosion and the amount of excess water from making its way to the lake.



Project Details	Project Funding	Project Partners
Date Installed: October 2016	2014 Clean Water Fund: \$3,245.00	Sherburne SWCD
Area: 814 ft ²	Landowner: \$1,085.00	Landowner
Number of Plants: 500	Total Project Cost: \$4,430.00	Briggs Lake Chain Association CLEAN WATER LAND & LEGACY





Sherburne SWCD Recognizes Peter and Debra Jensen of Baldwin Township as the 2016 Outstanding Conservation Cooperators



Peter, Debra and faithful companion Maddie near Lily Lake

Over the last 27 years Peter and Debra Jensen have embraced the land ethic of the previous landowners, Jack and Dorothy Grill, who really didn't want to see the land developed because of their deep appreciation for the natural setting. Peter and Debra have more than honored this wish. They have developed a symbiotic relationship with the land and are continually learning its language and responding to its needs. They understand that planting, growing, tending and harvesting trees are just a small part of caring for the land. Peter and Debra are also truly grateful for their land, feeling privileged to own it and want to see it benefit others, evidence of this is their hosting of the 2015 MN Forestry Association Field Day and welcoming over 200 people onto their land. The Jensen's are so deserving of this recognition. Their motivation lies in the simple pleasure of working on the land and leaving it better than they found it.

Jensen's steward nearly 200 acres of land, bordered on the east and south by Battle Brook, the property completely surrounds Lily Lake. The first 80 acres was purchased in 1992. In the years since the Jensen's worked to purchase the remaining 110 acres. In 2001, 166 acres became a certified Tree Farm. In 2005, 70 acres was enrolled into the MN Land Trust, forever protecting the land that surrounds Lily Lake. The Jensen's management has been guided by a MN DNR Forest Stewardship Plan for the past 12 years.

Jensen Management has included:

- establishing a 6.5 acre native prairie
- planting 13 acres of mixed pine, bud capping white pine seedlings
- pine pruning for disease prevention
- pine thinning
- mature pine harvest and reforestation
- oak forest selective harvest
- buckthorn management
- timber stand improvement through the UDSA, NRCS Environmental Quality Incentive Program
- enrolling 70 acres into a permanent conservation easement through the MN Land Trust





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.

Briggs Lake Chain

The SWCD has a long-standing partnership with the Briggs Lake Chain Association which has included participating in a workshop each spring to educate the interested residents about different types of restoration projects, plants, strategies, and grants to help protect the lakes and area wildlife.





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.

Volunteer Appreciation Dinner

Sherburne SWCD held a Conservation Volunteer Appreciation Dinner November 10th at Russell's on the Lake in Big Lake. This event is the SWCD's chance to recognize the contributions and assistance volunteers have provided to the District. The evening's program included the honoring of the 2016 Outstanding Conservation Cooperator Peter and Debra Jensen. Keynote speaker Kevin Farnum presentation on "Efforts to control Starry Stonewart on Lake Koronis". The event had a highly successful turnout.







2016 Tree Sale

In 2016 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.

Watershed Cleanup

October 1st turned out to be a perfect day for a cleanup event! Thirteen volunteers and five SWCD staff members gathered together at Lakeside Park in Big Lake to kick off the 8th Elk River Watershed Clean up event. The volunteers and staff enjoyed coffee and light snacks before heading out to one of 4 clean up locations along the Elk River and some of it's tributaries. The crews collected an estimated 300 lbs of trash, this was estimated using the MN DNR's Rubbish Weights Guide. Many of the usual suspects were collected such as plastic bottles, aluminum cans, fast food wrappers, cigarette filters, Styrofoam and cardboard. Some unusual items that were found was a piece of metal roofing material and springs from an old recliner chair.



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.



2016 Native Plant Sale

In 2016 the SWCD brought back the native plant sale to encourage landowners to incorporate native plants into their landscape. Plants were offered in ready to go kits and individual species. Over 2,200 plants were sold during our plant sale.





Cover Crop Demonstration Field Day

District Technician Bill Bronder and NRCS Soil Conservationist Yara Gonzalez led a cover crop demonstration field day November 4th. The demonstration was held in at Triple J Farms in Clear Lake. Attendees were able to view and compare first hand the benefits provided by the 4 species mixes inter-seeded into field corn with two different herbicide treatments. These benefits include erosion control, improving soil and water quality, reducing weeds and soil compaction, and recycling nutrients.

Nitrate Clinic

During the Sherburne County Fair the SWCD held a water testing Nitrate Clinic for the public. Residents were asked to bring in cold water samples from their home. The samples were tested and participants were immediately counseled on the results. High levels of nitrate in drinking water can be dangerous to health, especially for infants and pregnant women. SWCD Nitrate Clinic's are held on a biannual basis. These Clinic's are well received by the public, because they provide instant feedback about the quality of water the residents have running into their homes.







Forestry Preparedness Meeting

The SWCD partnered with the MN Shade Tree Advisory Committee (MN's Tree Board) to host a Community Forestry Preparedness meeting on the impending threat of Emerald Ash Borer for local decision makers and State Legislators. Participants were informed on The MN Community Forestry Partnership Act — Senate File 1987/House File 2219. The meeting was facilitated by Scott Zlotnik, St. Cloud Park Director.

Legislative Day

SWCD Staff and Supervisors spent March 22nd 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.





2016 Conservation Leadership Tour

Sherburne SWCD hosted a tour stop for the NACD Conservation Tour. A beautiful Minnesota day was showcased for tour members who stopped at the Plant Materials Evaluation Site in Becker and learned about research being done at the evaluation site and the gravel bed tree nursery. During the tour stop, Sherburne SWCD was recognized by the NACD as one of the hosts of the 2016 Conservation Leadership Tour. District Manager Francine Larson is shown here accepting a plaque from president of the NACD, Lee McDaniel.



AIS Monitoring

In 2016 Sherburne SWCD partnered with Waterguards LLC. A total of 521 watercraft were inspected by staff with the Sherburne County AIS Inspection program. Staff were trained as Level 1 Inspectors by the DNR. The vast majority of these watercraft were fishing boats (342). In only 6 cases were aquatic plants or stagnant water found on these watercraft, and in only 5 cases the drain plug had not been removed in accordance with Minnesota law. 240 watercraft of the 521 had been out of the water for greater than 5 days, allowing for drying time and mortality of any potential aquatic hitch-hikers. Over 64% of the time that a watercraft was found entering a lake, the user was a Sherburne County resident.





AIS Volunteer Meeting

Sherburne SWCD hosted an Aquatic Invasive Species (AIS) Volunteer Training session May 17th. Over 30 people attended the event held at the Sherburne History Center in Becker, MN. DNR Watercraft Inspection Supervisor Evan Freeman spoke about the AIS Ambassador & Volunteer program, gave a background on the biology of several invasive species, and directed the attendees on boat inspection procedures. After taking the class participants are now eligible to become AIS Volunteers and can educate boaters on the importance of controlling Zebra Mussels, Eurasian Watermilfoil, and other AIS by using the Clean-Drain-Dispose method.

Becker Invasive Species Presentation

In 2016 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 40 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.







Sherburne County Fair

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. This year the SWCD participated in Childcare day at the fair. Children were invited to stop by the booth, check out the installed raingarden and test their luck at pollinator plinko.

Sherburne County Fair Parade

SWCD staff and friends participated in the Sherburne County Fair parade July 16th. The SWCD float was decorated with a demonstration rain barrel complete with simulated rain cloud. Native plants donated by Minnesota Native Landscapes surrounded the rain barrel while whimsical bumble bees and butterflies floated above. Staff handed out educational material on Aquatic Invasive Species and wildflower seed packets to the parade crowd. The SWCD Float proudly took 3rd place in the Sherburne County Fair Parade competition for the best showcasing of the theme "Going Green".



Charles Charle

Baldwin Fun Fest

This is the 2nd year the SWCD has had a booth at the Baldwin FunFest in Young Park. Staff provided information on available SWCD services and programs. Children of all ages were also encouraged to play a game of Pollinator Plinko. A installed raingarden at the park was on display for all to enjoy throughout the day. The raingarden was designed and installed by the SWCD with coordinated efforts from volunteers.





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 SWCD introduced the Poster Contest in 2016 for 5th grade students in Sherburne County. The poster contest follows a theme that is selected by the National Association of Conservation Districts (NACD), which differs each year. The theme for 2016 was "We All Need Trees." The SWCD staff presented to students at Meadowvale Elementary, Twin Lakes Elementary, and North Elementary on the benefits of trees. The students then used this information to create their posters. Monetary prizes were awarded to the 1st - 4th place winners. The 1st place winning student's teacher was also awarded with a monetary prize to be used in the classroom. The SWCD plans to continue the poster contest in 2017.



1st Place Winner: Emma Cira Teacher Tim Evenson Meadowvale Elementary



2nd Place Winner: Kaelyn Diehl Twin Lakes Elementary



3rd Place Winner: Gavin Kivisto
North Elementary



4th Place Winner: Alex Deeg Meadowvale Elementary

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

Conservation Stewardship Program (CSP) - 2016 obligated \$57,136 on 1695.6 acres. Annual payments made on 5727.8 acres for \$70,449.00. CSP helps agriculture producers maintain and improve their existing conservation systems and adopt additional conservation activities to address priority resources concerns.

Environmental Quality Incentive Program (EQIP) - 2016 obligated \$47,489.16 for conservation on 587.3 acres. NRCS staff has been processing 2017 applications requesting \$323,471.00 in funds for conservation practices. 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 Reserve Program (CRP) - Conservation plans written for 70.3 acres enrolled in CRP in 2016. CRP is a conservation program administered by the Farm Service Agency. NRCS provides technical assistance to producers.

Conservation plans written on 1136 acres. 2016 Conservation was applied to improve soil quality on 1353 acres, soil health on 930 acres, water quality on 1556 acres, forestland on 110 acres, wildlife on 62 acres, non-federal land improve fish & wildlife habitat on 617, irrigation water efficiency on 43 acres and grazing land on 95 acres.



Mary Monte
NRCS District Conservationist





Yara Gonzalez NRCS Soil Conservationist



An Equal Opportunity Provider and Employer

USDA/NRCS 2016 Highlights



NRCS works with partners to leverage additional conservation assistance for agricultural producers and landowners in priority conservation areas.





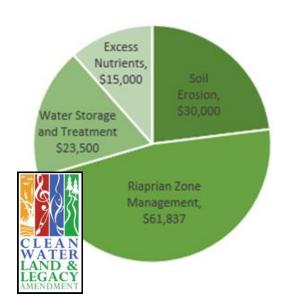


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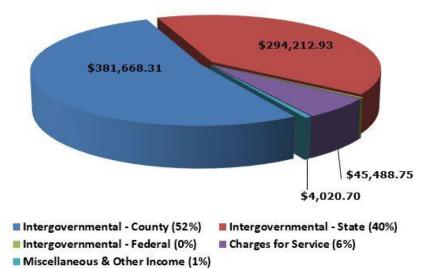
2016 Financial Summary

The Sherburne Soil & Water Conservation District finances its day-to-day operations through a variety of revenue sources.

These sources include County Allocation (52%), State Grants (40%), charges for Services (6%), 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 2016 was \$727,390.69



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.

LOCAL IMPLEMENTATION ACTIVITIES	WATER QUALITY CONCERNS			
	Soil Ero- sion	Riparian Zone Mgmt	Water Storage & Treatment	Excess Nutri- ents
Education/Information	✓	✓	✓	✓
Forestry Practices			✓	
Streambank or Shoreline Protection		✓		
Water Quality Practices	✓			✓
Equipment	✓	✓	✓	

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, and motivates the empowers community. That wouldn't be possible without this additional support.

Sherburne County Information







Total Land Area: 451 Square Miles

11,520 Acres **Total Water Area:**

127 Lakes:

Rivers and Tributaries: 493 Miles

Population: 91,126 *U.S. Decennial Census

Native Vegetation: Oak Savanna

Wet Soils/Water **Conifer Forests**

Cities

Becker Big Lake Clear Lake Elk River (county seat)

Princeton

(partly in Mille Lacs County)

St. Cloud (partly in Stearns County)

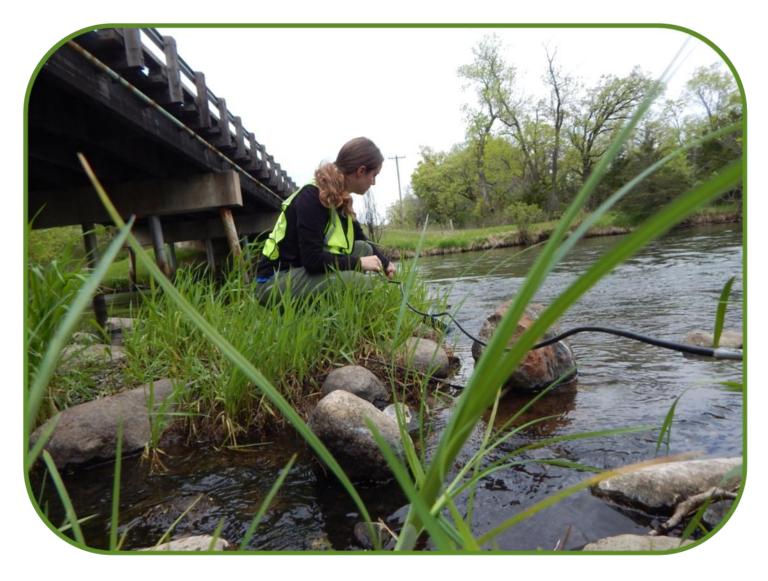
Zimmerman

Townships

Baldwin Township Becker Township Big Lake Township Blue Hill Township Clear Lake Township Haven Township Livonia Township **Orrock Township** Palmer Township Santiago Township







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.



Sherburne Soil & Water Conservation District 14855 Highway 10 Elk River, MN 55330 (763) 241-1170 Ext. 4 www.sherburneswcd.org