

ISANTI SWCD 2017 ANNUAL HIGHLIGHTS



Rum River Cedar Tree Revetments



Buffer Law Assistance



Water Monitoring



Blue Lake Project Planning



Long Lake Shoreline Protection



The mission of the Isanti SWCD is to provide technical, financial and educational resources in order to implement practices and projects that preserve, protect and enhance water quality, soil, and other natural resources.

The Isanti Conservation District is a legal Subdivision of State Government organized under provisions of Minnesota Statute 103C. The District is governed by a Board of Supervisors composed of five members nominated by the voters of Isanti County, and who are responsible for directing all District activities. The board meets monthly on the third Tuesday of the month.

SWCD Supervisors and Staff

District Supervisors

Wayne Calander-Chairman
 Roger Larsen-Vice Chairmen
 Barb Kilpatrick-Secretary
 Al Koczur-Treasurer
 Clark Anderson

Area of Representation

District 5: North Branch, Isanti Twp
 District 1: Maple Ridge, Stanchfield, Springvale, Dalbo Twp.
 District 2: Bradford, Athens, Oxford Twp.
 District 4: Cambridge Twp.
 District 3: Spencer Brook, Wyanett, Stanford Twp.



Pictured left to right: Roger Larsen, Al Koczur, Barbara Kilpatrick, Wayne Calander, Clark Anderson.



SWCD Staff

Tiffany Determan, District Manager
 tdeterman@isantiswcd.org

Todd Kulaf, District Technician
 tkulaf@isantiswcd.org

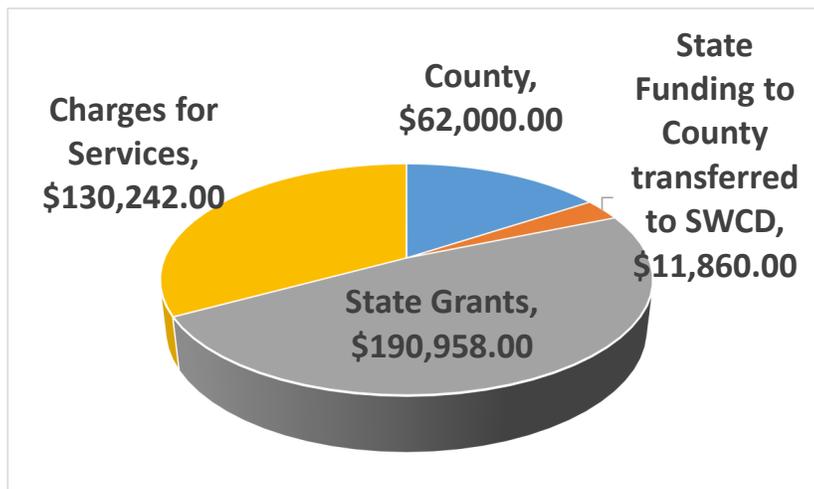
Anne LeRoy, Shared Administrative Assistant
 aleroy@isantiswcd.org



Conservation Partners: Natural Resources Conservation Service

Josh Bork, District Conservationist
 Nichole Sternquist, Area 3 Agricultural Engineer
 Tacy Call, Ultima Contracted Employee

2017 Financial Summary



Isanti SWCD Revenue Summary

Total Revenue in 2017: \$395,060

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

Programs & Technical Assistance

There are fees associated with some of the services we offer. Please contact our office for more information.

Water Monitoring

Lake and stream monitoring provides the data necessary to manage the health of Isanti County's lakes, rivers and streams for recreation, wildlife, and consumption (groundwater). Upon request, the SWCD contracts with lake groups and other organizations to provide water quality monitoring services, including monitoring plan development, water monitoring and summary reports.

- **Blue Lake:** 2 lake sites (sampled by volunteers), 4 tributary sites (sampled by SWCD).
- **Green Lake:** 1 lake site (sampled by volunteers), 2 tributary sites (sampled by SWCD).
- **Lake Francis:** 1 tributary site (sampled by SWCD).
- **Long Lake:** 1 lake site (sampled by volunteers), 3 tributary sites (sampled by volunteers)
- **Oxford Township Lakes:** 7 lakes (sampled by SWCD), 1 stream site (sampled by SWCD), PLUS vegetation and shoreline surveys (conducted by SWCD).
- **Groundwater:**
 - 1) 11 groundwater observation wells (SWCD)
- **Precipitation:**
 - 1) 7 manual precipitation gauges (volunteer program)



Aquatic Invasive Species

Eurasian Watermilfoil survey on Spectacle Lake.



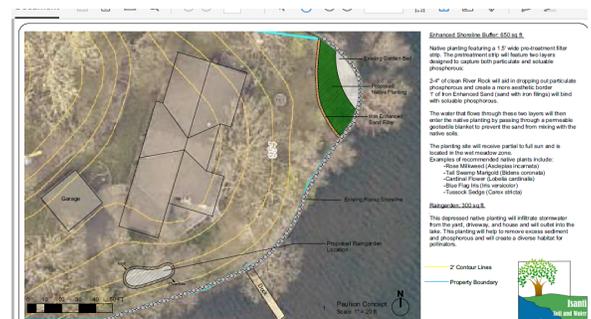
Mapping for local treatment permits: The Department of Natural Resources (DNR) requires mapping before issuing permits to treat curly-leaf pondweed and Eurasian watermilfoil. The SWCD offers mapping services to lake groups in order to expedite permit issuance, ensure treatment occurs as early as possible and to authenticate the necessity of treatment. In 2017 the SWCD completed mapping of AIS for Blue and Spectacle Lakes.

County Assistance: The County implements the States Aquatic Invasive Species Prevention Planning at the local level. The SWCD assists the county with implementation of the plan, specifically with early detection monitoring and education.

In 2017 the SWCD 1) inventoried 12 recreational lakes for new AIS infestations; 2) provided AIS education at the 6th grade Environmental Education Day; 3) contracted with CLIMB Theater to provide education to 170 5th graders at Isanti Intermediate Schools and 4) produced an Eurasian Watermilfoil identification video with the Spectacle Lake Improvement Association.

State Cost Share

The SWCD receives annual funds from the Board of Water and Soil Resources (BWSR) so that we can help landowners offset the costs of installing conservation practices that protect and improve water quality by controlling rainwater runoff, soil erosion, and reducing sedimentation. Cost share can be used to fund a variety of projects including lakeshore restorations, rain gardens and well sealing. The SWCD dedicated the State Cost Share funds in 2017 for projects on Blue Lake. Blue Lake is a high priority lake because it has declining water health.



Raingarden Concept-Blue Lake

Programs & Technical Assistance

County Water Management Plan

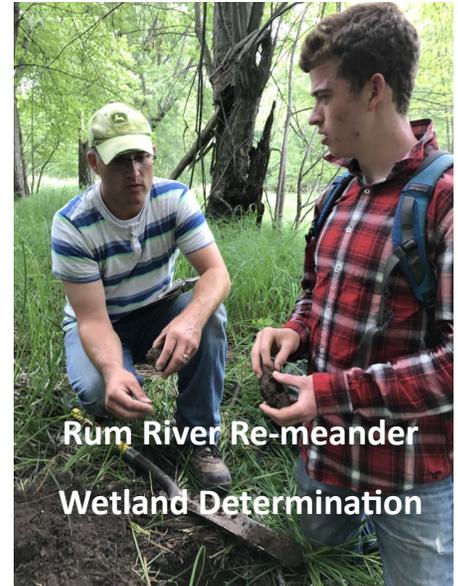
The Isanti County Water Plan was adopted as the SWCD's annual plan of work and the SWCD is one of the key agencies responsible for implementing the activities outlined in it. In order for the SWCD to be eligible for grants the activities included in grant applications must be identified in the water plan.

The Isanti SWCD serves on the county water plan task force which advises water quality efforts county-wide. In 2015 the SWCD began assisting the county with updating the plan, updates are required every 10 years. Priorities included in the Water Plan update include: 1) Groundwater, 2) AIS, 3) Land Use, and 4) Surface Water. The updated plan is scheduled to be adopted by the County by May of 2018.

Wetland Conservation Act (WCA)

The Isanti SWCD serves as a wetland technical representative for Isanti County. In 2016 330 hours were spent fulfilling SWCD duties associated with WCA as follows:

- 1) 8 Technical Evaluation Panels
- 2) 11 site visits
- 3) 1 restoration orders
- 4) 5 certificates of satisfactory completion
- 5) 5 Level One delineations
- 6) 44 Maps Developed



"Todd was great! He was deliberate in providing accurate information. It's a plus that he found the answers after searching and talking with others. While there's a ton to learn, he's thorough, friendly and has a sense of humor. Among his positive traits these will serve him and the public well!!" ~ Wetland Conservation Act Customer.



Site Planning

As part of the County's Zoning Ordinance, when residents apply for a variance or building permit that may impact water health in the shoreland area they must develop a stormwater management plan with guidance from the SWCD. In 2017 the SWCD provided assistance to seven variance/building permit applicants.

District Tree Program

The tree sale is an important annual program that supports small backyard habitat projects as well as large forestry restoration projects. The sale originated in order to provide landowners with an affordable and convenient way to purchase trees and shrubs for conservation practices such as windbreaks, shelterbelts, living snow fences, scenic buffers, wildlife habitat, and more. In 2017 over 29,000 trees were sold. Additionally, the SWCD employed 5 temporary Tree Sale Technicians to assist with the sale.



Studies and Plans

Stormwater Retrofit Assessments (SRA)

The SWCD completes these assessments which map and model using advanced computer applications to calculate how much stormwater turns into runoff and makes it untreated into our lakes and streams. The outputs of these studies are used to target the use of grant funds. Ideal project locations are then identified to maximize benefits while minimizing costs. SWCD has completed SRAs for: Rum River discharge points in the City of Cambridge and Isanti, Fannie and Skogman Lakes, Green Lake direct watershed, Blue Lake Watershed and most recently for the two main inlets into Green Lake: North Brook and Wyanett Creek.

The SRA completed for the North Brook and Wyanett Creek Watershed was done via a partnership with the Green Lake Improvement District. The SRA identifies 92 rural/agricultural projects in the watersheds.

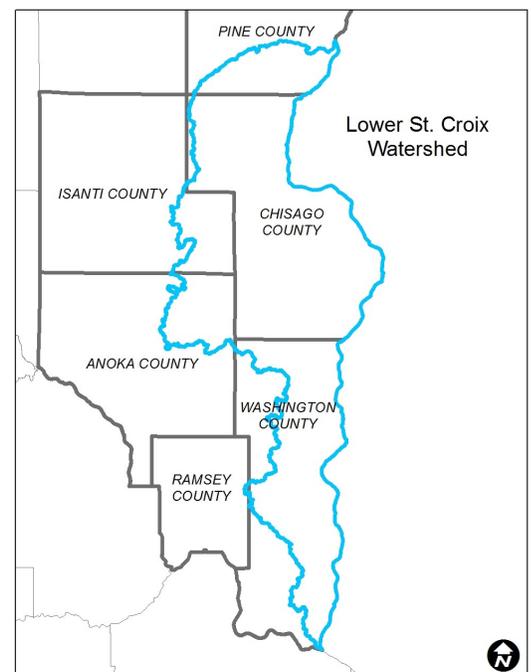
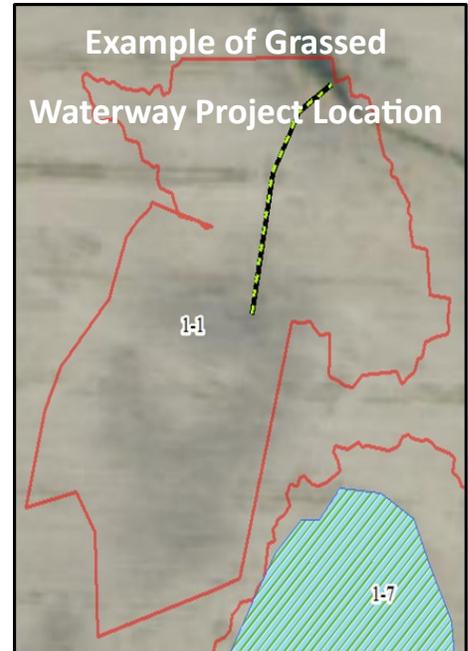
Staff also began work on an SRA for Spectacle Lake. The SRA will be complete in 2018.

Rum River Watershed Restoration and Protection Strategy (WRAPS)

The Rum WRAPS is a management plan for the Rum River and all the lakes and streams in its watershed. The plan was developed by a conglomeration of partners from the 10 counties covered by the watershed including Isanti SWCD. The plan includes strategies for restoring unhealthy waters that do not meet state water quality standards as well as protecting waters that are currently healthy. The Rum WRAPS was complete in July 2017. Information from the WRAPS report was used to apply for a Clean Water Fund grant to improve the health of Blue Lake and a Conservation Partners Legacy Grant to improve riparian habitat

Lower St. Croix One Watershed One Plan (1W1P)

The goal of 1W1P is to align local water planning on major watershed boundaries (instead of county boundaries) with prioritized, targeted and measurable implementation plans. In 2017 planning partners joined together to submit an application to the Board of Water and Soil Resources (BWSR) to develop a comprehensive watershed plan (aka 1W1P) for the Lower St. Croix Watershed. The Lower St. Croix as one of six watersheds across the state to receive a planning grant. In late 2017 the 17 watershed partners began developing a work plan to dictate how the partners will work together to develop the watershed plan. The plan will focus on work that is most effectively implemented across the boundaries of local water planning entities, most effectively accomplished thorough cooperation, or local issues of regional significance. The Isanti SWCD is actively participating in the process as the overall Project Coordinator and Plan Notification Coordinator. The bulk of work will be completed in 2018 and the plan is targeted for completion in 2019 or early 2020.



Projects

Long Lake Rehabilitation and Stormwater Treatment 2.0



The SWCD partnered with the Long Lake Improvement District (LLID) and Lake Association (LLIA) to apply for a second Clean Water Fund Grant (the first was applied for in 2016). Both grants expanded upon a program led by the LLID that promoted and funded near-shore water quality projects. Funds were used to install six lakeshore restorations and two rain gardens to improve the health of Long Lake. As a result of these grants and an increasing demand from lakeshore owners, the LLID membership voted to increase 2018 funds to help cost share more lake improvement projects—from \$4,800 to \$10,000!



Rum River Cedar Tree Revetments

Cedar tree revetments are a cost-effective bioengineering practice that can be used to stabilize actively eroding riverbanks. Isanti SWCD, with the help of Anoka Conservation District and Conservation Corp of Minnesota (CCM), installed cedar tree revetments on two residential properties and one city-owned property along the Rum River in the fall of 2017. Erosion at the properties, which was dominated by bank undercutting, was in the beginning stages of creating a more serious issue. By applying low-cost ecologically friendly bank stabilization approaches such as cedar tree revetments, the partners hope to minimize the long-term need for costly armament that is often necessary to correct severe erosion.

Rum River High Meadows Re-Meander

The SWCD received a Department of Natural Resources (DNR) Conservation Partners Legacy (CPL) grant to work in partnership with the MN DNR and a local engineer in an effort to restore and enhance aquatic and terrestrial habitat by reconnecting over a mile of the Rum River to its historic channel. The project involves repair to a shortcut in the river channel caused by humans prior to the 1950's. The shortcut has since caused excessive sedimentation, channel head cutting, floodplain disconnection and erosion of adjacent lands. The repair design includes removal of aggraded sediment from the natural channel in order to activate flow. Once the natural channel is activated a plug (fill with two toe-wood sod mats) will be inserted into the man-made diversion. The river will then flow stably through its natural one-mile channel. SWCD staff spent the majority of 2017 applying for the permits required by local, state and federal agencies. The project is targeted for construction in winter 2018/2019.

2017 Project Summary At-a-Glance

Project Type	Number	Amount	Phosphorus Reduction lbs/yr	Sediment Reduction lbs/yr
Shoreline Restoration	6	418 linear ft	2.14	3,187
Rain Gardens	2	288 sq ft	.40	—
Cedar Tree Revetments	3	585 linear ft	28.00	40,950
TOTAL	11	1,033 linear ft/ 4,060 sq/ft	30.54	44,137

Agricultural Conservation Programs

In 2017 several programs were available to assist agricultural producers implement structural and management conservation practices that optimize environmental benefits on working agricultural land.

In 2018 the SWCD plans to enhance the agricultural services provided by the Natural Resource Conservation Service (NRCS) by implementing a targeted agricultural outreach plan. This plan includes hiring technical staff to provide better assistance of the NRCS in Isanti County.

The NRCS has a mission to protect natural resources for the long term while at the same time improving Minnesota Farms. Programs offered by the NRCS are voluntary and incentive based. Producers can apply to participate and NRCS provides technical guidance and financial assistance to implement proven conservation practices.

Conservation Planning

A good plan is the foundation of successful land management and natural resource protection. Conservation plans include an inventory of the property with a skilled conservation professional to identify resource concerns, objectives and goals. In developing a conservation plan the existing production methods are combined with recommended conservation practices. This helps producers make informed decisions to manage their operations unique natural resources, while allowing for sustainable growth, productivity and improvement.

Recommended conservation practices can provide benefits of improving soil health, water quality, forest stewardship and wildlife habitat. Through conservation planning producers also learn of further NRCS programs that may assist with land management goals.



Environmental Quality Incentives Program (EQIP)

The Environmental Quality Incentives Program is available to all eligible agricultural producers and provides technical and financial assistance for specific environmental and conservation practices. EQIP covers a wide array of conservation practices. In Isanti County EQIP most often funds applications for no till planting, cover crops, grazing systems and high tunnels. Applications are accepted on a continuous basis with annual submission deadlines for evaluation and approval.

Conservation Stewardship Program (CSP)

Conservation Stewardship Program looks at the overall operation of a farm and works to address resource concerns. CSP offers options to enhance or improve current practices and producers choose the enhancements that best fit their operation. CSP offers annual incentive payments for installing selected practices. Common enhancements include: forest openings to improve hardwood stands, establishment of pollinator habitat, extended filter strips for water quality protection and use of cover crop mixes.



Agricultural Conservation Programs

Minnesota Agricultural Water Quality Certification Program (MAWQCP)

MAWQCP is a unique program that ensures MN's farms and waters can prosper together. Producers who implement and maintain agricultural best management practices and overall exemplary stewardship receive MAWQCP certification. In turn, they obtain "regulatory certainty" and are regarded as in compliance with any new water quality regulations for a period of 10 years. Mille Lacs and Carlton SWCDs assist Isanti SWCD with this program. To date, Isanti has 10 producers signed up for the program in, 2 have been Certified through the program thus far.

Through this program, certified producers receive:

- **Regulatory certainty:** certified producers are deemed to be in compliance with any new water quality rules or laws during the period of recognition.
- **Recognitions:** certified producers may use their status to promote their business as protective of water quality.
- **Priority for technical assistance:** producers seeking certification can obtain specially designated technical and financial assistance to implement practices that promote water quality.



Pheasants Forever Planting Assistance

The Isanti County Chapter of Pheasants Forever offers cost sharing grants to landowners for habitat enhancement. Isanti SWCD serves as the point of contact and administrator for these grants. Cost share is typically paired with federal funding for the Conservation Reserve Program (CRP). The CRP is a land conservation program administered by the Farm Service Agency (FSA). In exchange for a yearly rental payment, farmers enrolled in the program agree to remove environmentally sensitive land from agricultural production and to plant species that will improve environmental health and quality. In 2017 three projects totaling 56 acres of tall grass prairie were completed.

District No-Till Seeding Program

The Isanti SWCD owns a seed drill suitable for planting native grasses and wildflowers. This drill is rented to landowners for habitat projects. In 2017 the drill was used to plant 25 acres of pasture/hay and 117 acres of native prairie.

Buffer Law Compliance Assistance

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. The law requires a 50-foot perennial vegetative buffer along public waters and 16.5 foot buffer on public ditches.

In 2017 the SWCD focused on providing outreach and technical assistance to landowners in need of buffers along public waters. Staff sent out 4 mailings to notify landowners of potential non-compliance, conducted over 15 site visits to determine compliance or flag required buffer boundaries, and assisted 12 landowners with filling out compliance waivers to extend the buffer deadline to July 1, 2018.



Other News and Updates

Conservation Corps Minnesota—Apprentice

The SWCD received a free summer Apprentice through a the Conservation Apprentice Academy, a program developed by Conservation Corps Minnesota (CCM). The Apprentice worked along side SWCD staff on projects such as lake and stream water monitoring. The position also helped the County Zoning office by developing stormwater education documents.



Outstanding Conservationists

Each year the State association of SWCDs and local SWCDs recognize individuals and organizations for outstanding accomplishments in implementing conservation practices and improving Minnesota’s natural resources. The SWCD board selected the David and Bev Medvecky as the 2017 Isanti County Outstanding Conservationists. The Medvecky’s are true leaders of conservation. It’s a fact:

more often than not they implement conservation on their land with their own hard-earned money. Examples of conservation they have implemented over the years include: A Multi Story Cropping to improve utilization and recycling of soil nutrients, cover crops, wetland restorations including vernal pools, native prairie and buffer

“With minimal debate, the Isanti SWCD board voted unanimously to name Dave and Bev Medvecky as the 2017 Outstanding Conservationists.” Said Wayne Calander, board chair of the Isanti Soil and Water Conservation District. “It’s great to be able to recognize the work they’ve done locally,” Calander said.

Blue Lake Priority Protection Project

Staff put a significant amount of time in to securing relationships, planning projects and preparing a Clean Water Fund grant application to help protect the health of Blue Lake. Our efforts paid off!

The SWCD, in partnership with the Blue Lake Improvement District and Spencer Brook and Stanford Townships, were selected to receive over \$250,000 to protect the health of Blue Lake! The projects will be initiated in 2018 and include: two rain gardens and a sump to treat runoff from right-of-ways in Spencer Brook Township, a gully and shoreline repair to treat erosion and runoff from a public access in Stanford Township, a sand filter to capture organic materials released from a channelized wetland on the southeast side of the lake, and multiple lakeshore buffers to treat overland flow on private properties. The projects will reduce phosphorus making it’s way into the lake by approximately 95 pounds per year—that enough phosphorus to grow 9,500 pounds of algae!



ISANTI SWCD



110 Buchanan Street N, Cambridge, MN 55008



So what's next?

2018, like every other, is going to be an exciting year for the SWCD!

Stay tuned to find out more about the following planned projects:

- ⇒ **Targeted Agricultural Outreach**
- ⇒ **Conservation Technician– NEW Position!**
- ⇒ **Campus Groundwater Conservation Planning**
- ⇒ **Spectacle Lake SRA**
- ⇒ **Blue Lake Protection Projects**