



Le Sueur County

Soil and Water Conservation District

2021 Annual Report



181 W. Minnesota St., Le Center, MN 56057

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www.lesueurswcd.org



A Year In Summary

The Le Sueur County Soil and Water Conservation District (SWCD) had another great year in 2021. This past year the SWCD celebrated its 75th Anniversary (1946-2021). Over the 75 years the SWCD has helped mold the Le Sueur County landscape working with many generations of farmers and landowners. Other milestones the SWCD celebrated were the Program Specialist Sue Prchal achieving 30 years of service and District Manager Michael Schultz achieving 10 years of service.

Throughout the year Covid-19 influenced our operation but the SWCD continued to persevere and get results. The SWCD installed \$180,000 in structural projects,



Le Sueur SWCD Program Specialist Sue Prchal Celebrated 30 years of service in 2021



Le Sueur SWCD District Manager Michael Schultz Celebrated 10 years of service in 2021

\$112,000 in CREP Easement Construction, \$25,200 in non-structural practices such as cover crops and completed \$251,000 of county drainage construction work through the SWCD Drainage Inspector.

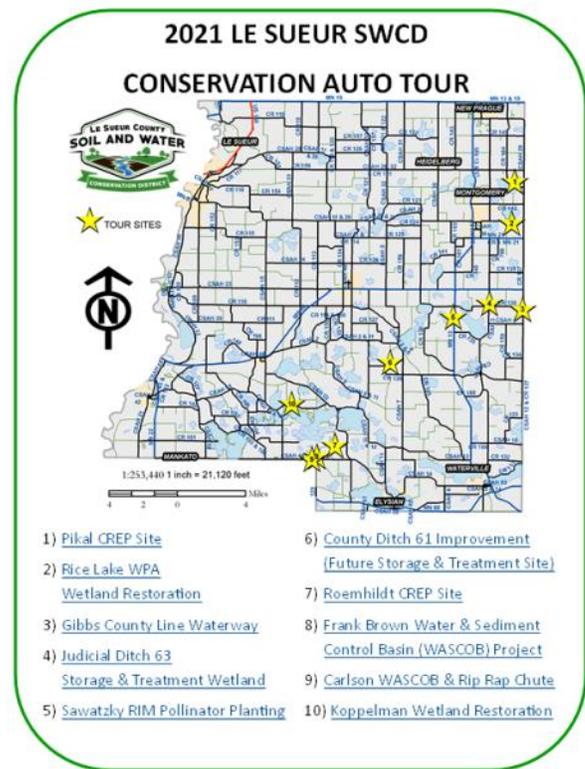
This report highlights accomplishments in Le Sueur County and how the SWCD continues to mold the landscape after 75 successful years.



Education & Outreach

Due to the Pandemic, 2021 was a unique year for Education and Outreach. The SWCD needed to adapt to new ways of interacting and communicating with our clients due to the changing environment caused by Covid-19. Despite the challenges, 2021 was still a successful year for education & outreach.

In 2021 the SWCD tried a new approach to engage our clients and partners. The SWCD Conservation Tour that is held annually with the SWCD Board was made available to everyone via an Auto Tour that could be done anytime between July and September. The SWCD received great feedback from partners regarding how well it was put together. Information could be accessed electronically through a smartphone using the phone's GPS and reading QR Codes. The SWCD also provided maps that were available to be downloaded on our website.



Top Right: Map used to get direction to the tour sites, all you needed to do is click the link. **Left:** A sign with the GPS destination at a site. Each site had a sign that could be seen from the road that had additional info on it. **Right:** Photo taken from the tour of the group exploring a site.



Education & Outreach

2021 CONSERVATION AUTO TOUR

SITE 3: GRASSED WATERWAY

- 1000 FT GRASSED WATERWAY INSTALLED
- INSTALLED 250 FT 15" & 2150 FT OF 18" TILE
- 100 ACRE WATERSHED
- \$36,400 CLEAN WATER FUND GRANT
- COMPLETED JULY 2019
- PARTNERS LE SUEUR COUNTY, SWCD & NRCS
- FOLLOW LINK FOR MORE INFO:




LE SUEUR COUNTY SOIL & WATER CONSERVATION DISTRICT
181 WEST MINNESOTA ST. LE CENTER, MN 56057
507-419-0365

Left: An example of what each site's sign looked like. Using your smartphone QR Code Reader, tour participants were able to get additional information on site. Below: An example of information provided by using the QR Code.

2021 CONSERVATION AUTO TOUR

SITE 2: RICE LAKE WPA WETLAND RESTORATION

The Rice Lake Waterfowl Production Area was acquired by the United States Fish and Wildlife Service in the early 2000's as a North American Conservation Act Project. The wetlands were identified early on but construction was put on hold due to funding shortfalls.

Le Sueur County in partnership with the SWCD received a 2013 LCCMR Grant (Environmental Natural Resource Trust Fund or commonly known as lottery dollars) in the amount of \$400,000 to work on 13 priority sites in the Le Sueur, Blue Earth and Waseca County areas.

Total Cost of the project:	
Grant:	\$48,000
Local Sportsmen Club Match:	\$14,500
Le Sueur County Aggregate Funds:	\$10,388
Total:	\$72,888

Rice Lake WPA Wetland Restoration will serve as an area that will store and treat water prior to entering Rice Lake. The restored 16 acre drained wetland had been previously ditched and was not providing the clean water and wildlife benefits it was capable of. The restoration was calculated to reduced pollution reduction loads by 59.40 T/yr TSS, 59.40 T/yr. Soil and 89.10 lbs./yr. Phosphorus annually.

SITE 2: RICE LAKE WPA WETLAND RESTORATION



Construction Photos:




Above: The SWCD Board with Francis Budin, the 2021 Outstanding Conservationist, as we stopped at his JD63 Storage Project



Education & Outreach

BOARD OF WATER AND SOIL RESOURCES

2021 February Snapshots

Le Sueur SWCD stokes conservation



Farmers implement practices to slow and filter runoff. Lake association members support phosphorus-reduction measures. In the Jefferson German chain of lakes watershed, Clean Water Funds spark cooperation.



LE CENTER — The most conspicuous of Le Sueur County Soil & Water Conservation Districts (SWCD) water quality improvement projects within the Jefferson German watershed restored a 2.5-acre wetland at the edge of a hog farm directly across a county road from Middle Jefferson Lake.

"The water doesn't come off of our farm, but we get blamed for it because it runs across our property," said Leo Koppelman, who runs the feeder pig operation with his brother and son. "All I've heard is, 'Koppelman's hog farm is polluting the lake.'"

Middle Jefferson — one of five lakes in the chain that includes German, East Jefferson, West Jefferson and Swede's Bay — is impaired for aquatic recreation due to nutrient loading.

The SWCD's \$484,000 phosphorus reduction project aims to improve water quality in the chain with strategically placed best management practices that help to reduce nutrient loading. The chain lies within the Cannon River watershed, which drains into the Mississippi River.

With his brother and son, Leo Koppelman runs a contract feeder pig operation. About 8,000 mixed-breed Hampshire-Duroc hogs live on the farm at any one time. He raised his first litter of pigs on a 2.5-acre wetland near School Avenue Farms of Anneton project in 2008. The 200-acre farm site has been in Koppelman's family since 1960. Before they switched to hogs in the late 2000s, his father had raised corn for about 80 years. Koppelman talked about the operation and the farm's history with Mike Schultz, center photo. Photo Credit: Ann Vescei, BWSR



Contractors in summer 2020 excavated more of the wetland to increase flood storage, and installed a culvert connecting it to the upper watershed. Photo Credit: Le Sueur County SWCD

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a major recreational lake, you want to be able to do that," said Ryan Jones, the Mankato-based South Central Technical Service Area (TSA) engineer who worked on the wetland design.

The 540,000 wetland project on Koppelman's land now diverts water from a ravine and treats runoff from about 200 acres — most of it from neighboring fields fertilized with cow manure and hog manure — before it enters the lake.

The Cleveland Township site is one of 13 identified as high priorities within the 15,400-acre watershed, based on terrain analysis, the Total Maximum Daily Load (TMDL) study and onsite verification. It's one of 10 that Minnesota Water Resource Center monitoring had identified and prioritized years earlier.

A \$387,000 Clean Water Fund grant from the Minnesota Board of Water and Soil Resources (BWSR) made it possible for Le Sueur County SWCD staff to pursue projects with willing landowners. Matching funds include \$34,000 from Le Sueur County's aggregate mining tax. Landowners' share was tiered, based on projects' priority.

"That's what I've always wanted to do, but I've never had the resources to do it myself, or never felt that I wanted to do it for somebody else just to appease them," said Koppelman, whose share of the project cost was 10%.

Over the years, the Koppelmans had taken steps to curb runoff.

In the 1970s when the county determined that

“Our goal is to work with anyone and everyone around the chain of lakes that is interested in preserving the quality of the water.”

— Ralph Redding, Greater Jefferson German Lakes Association president



50% of the recommended phosphorus (reductions) from the WRAPS," Schultz said, referring to the Minnesota Pollution Control Agency's (MPCA) Watershed Restoration and Protection Strategy.

Phosphorus feeds the algae that can turn lakes green.

Nutrient impairments are just one factor affecting the watershed. Schultz said the SWCD also is dealing with higher-than-average lake levels and flooding caused in part by increasingly frequent heavy rains.

The Jefferson chain of lakes' water level in 2019 was 1.63 feet higher than the historical average, which dates to 1971. Technically, German Lake levels are recorded separately. Because German Lake is connected to the chain, its levels vary only slightly.

Todd Piepho, the Minnesota Department of Natural Resources' (DNR) Waterville-based area hydrologist, said 2019 water levels remained high nearly all season. Coupled with high winds, sustained high-water levels can cause significant shoreline damage.

A 6-inch rain put Koppelman's wetland restoration to the test shortly after construction finished in summer 2020.

"Everything worked exactly the way it was supposed to work. It took all the water that would run down the ditch and across our driveways. It stopped everything. It backed that excess water up in the wetland area," Koppelman said.

overflow caused by rain and snowmelt was polluting the lake, the Koppelmans built a lagoon and closed a couple of barns. Six years ago, Koppelman enrolled land in the Federal Conservation Reserve Program (CRP) and replaced a 1960s-built gabion basket. Designed for erosion control, it no longer functioned properly.

Most recently, Environment and Natural Resources Trust Fund dollars made a bluff stabilization possible.

When he meets with lake association members, Le Sueur County SWCD Manager Mike Schultz stresses the need for cooperation — and money.

"I always tell these lake associations, 'If you want to do something for the lake, you need money. Pancake feeds. Do something. If you can't bring something to the table, how are we going to have the other half come to the table?'" Schultz said. "I feel like my role is bringing these two together and making sure that we understand that we're moving forward together. Leo's been a great example of how this works."

The Greater Jefferson German Lakes Association contributed \$12,000 toward Jefferson German water quality improvements.

"Our goal is to work with anyone and everyone around the chain of lakes that is

interested in preserving the quality of the water," said association President Ralph Redding. He's one of about 130 shoreland property owners on Middle Jefferson Lake, and one of about 900 on the chain of lakes.

The 136-member association raised \$10,000 through a raffle and event at Beaver Dam Resort. To raise the rest, Redding asked area businesses to contribute items for an auction.

The 21 best management practices completed by early December 2020 represent about 70% of the work planned in connection with the Clean Water Fund grant, which runs through December 2021. Practices tied to the grant include structures designed to slow and filter runoff, 275 acres of cover crops, and two wetland restorations totaling about 7 acres.

The Koppelman project alone is projected to reduce soil erosion by 161 tons a year, curb sediment loading by 69 tons a year and reduce phosphorus loading by slightly more than 79 pounds a year.

"If they're all completed and function at their fullest, we will address 40% to

The SWCD had two projects highlighted in the Minnesota Board of Water and Soil Resources' "Snapshots" for both February and March. The projects highlighted were the Jefferson/German Clean Water Fund Wetland Restoration Project with Leo Koppelman and the JD63 Storage and Treatment Clean Water Fund Multipurpose Drainage Project.

BOARD OF WATER AND SOIL RESOURCES

2021 March Snapshots

New option for drainage + water quality



First-of-its-kind arrangement in Le Sueur County incorporates wetland restoration and easement held by drainage authority

MONTGOMERY — A first-of-its-kind fix for flooded farm fields and impaired waters has implications for Montgomery Township, where the Le Sueur County Soil & Water Conservation District (SWCD) multipurpose drainage management project finished this fall, all the way to the Gulf of Mexico, where excessive nutrients from the Mississippi River create a dead zone.

The 5.5-acre wetland restoration adjacent to a judicial ditch is the first multipurpose drainage management project involving a wetland restoration and an easement held by a drainage authority.

"This is the type of project that should be our highest priority," said Dave Bucklin, technical coordinator with the Greater Blue Earth River Basin Alliance (GBERBA). "If you can store water, the damage not done downstream all the way down to the Gulf of Mexico is just amazing. We really have to try and keep our water on our land as much as possible."

Increasingly heavy and frequent rains combined with more tillage in farm fields has, over the decades, put more pressure on 100-year-old ditch systems than they were designed to handle. Backed-up water floods cross

Contractor Darrell Brothers Inc. of Killebuck constructed the 275,000 wetland restoration adjacent to judicial ditch 63 this summer. Work on the project 4 miles south of Montgomery finished Oct. 7. The wetland restoration provides water retention. Because the option was less expensive, the contractor moved an existing driveway to make it part of the wetland embankment. Photo Credit: Le Sueur County SWCD



Photo Credit: Le Sueur County SWCD

upstream. Downstream, cities flood and shorelines erode.

"So these ditches get more water; they all dump into a natural water body — either lake or stream," Bucklin said. "When lakes and streams flood? They unravel, those streams, which means the banks are all eroding and the streams are getting bigger and bigger. They're flooding more often. So everybody says we've got to do something."

One of the water bodies that originates in our watershed is in ditches, that was a very obvious place for us to start."

The 275,000 project 4 miles south of Montgomery temporarily stores water from a 112-acre watershed and its three tributaries in the Killebuck Hills. It gets a \$50,000 grant (GBERBA awarded to the SWCD). The joint ditch authority provided the land, which was the cost of the easement.

The GBERBA award is part of a \$301,200 Clean Water Fund multipurpose drainage management grant the Minnesota Board of Water and Soil Resources (BWSR) awarded to the 10-county alliance in 2017.

"Every spot along the way, the same amount of water to be stored gets more and more expensive because there's more of it, and more damage. So we stop at the top of individual (wetlands) like this one in Le Sueur (County), that's by far the best place to do it," Bucklin said.

Multipurpose drainage management incorporates water quality improvements with ditch fixes.

"If you can keep that water there, you're not sending it somewhere else," said Jay Gross, GBERBA administrative

“Prior to this, there was no mechanism to give the ditch system funding to potentially do storage, so this is a unique opportunity for us to start looking at ditches in a different way, of (not) just sending water downstream.”

— Mike Schultz, Le Sueur County SWCD manager



Danny O'Keefe represents Montgomery Township. He said the wetland easement would take some pressure off the Judicial Ditch 63 system, which he described as being in tough shape.

"I think it turned out great," O'Keefe said of the project.

"We have several areas that could benefit from a project like this, and we have willing landowners that have already come to us and told us that they would be willing to put up some property for storage like this," O'Keefe said.

"The wetland will slow and filter water released downstream."

"The opportunity to do water storage and provide water quality benefits is what makes this project so unique," said Mark Hiles, Mankato-based BWSR clean water specialist.

"Hopefully drainage authorities and SWCDs across the state can replicate this in their jurisdiction and leverage water quality funding and benefits while providing additional storage where it is needed."

Gross applauded the many partners — which included the township, county, highway department, SWCD and BWSR — and noted water-storage wetlands were never in drainage authorities' job descriptions.

"Their job was to move the water," Gross said.

"Now it's trying to change the mind-set a little bit and kind of scale back and say, 'We know we've got to move this much water; but can we hold any of that back so we don't need a 36-inch at the end?' Can we save money for the project even if we put some money up here in the upland? What do we have to do?" Gross said.

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Education & Outreach

In December, the SWCD attended the 85th Annual Meeting of the Minnesota Association of Conservation Districts. It was the first convention since 2019 due to the Pandemic. It was a great opportunity for fellow SWCDs to reconnect and for business to get done. It was a busy three days starting off with the Leadership Forum, followed by the Business Meeting and ending with honoring our Outstanding Conservationist.



Top: Planary Session– SWCD Role in Making Minnesota Landscapes More Resilient. Leann Buck, MASWCD Director, with MN Dept. of Ag Commissioner Thom Petersen, MN DNR Commissioner Sarah Strommen, BWSR Director John Jaschke and MN NRCS State Conservationist Troy Daniell.

Right: Outstanding Conservationists, Francis and Shirley Budin

Bottom: Outstanding Conservationist Awards Luncheon





Education & Outreach

In 2021 the SWCD was able to increase its social media presence through Facebook users by 494% compared to 2020. The SWCD implemented routine posts to engage its followers and developed unique themes for readers to get a better understanding of the roles of the SWCD Staff and Supervisors.



Le Sueur County SWCD

We were fortunate to get a timely rainfall event but we may be hoping for more rain soon for soils that are not armored from the hot sun! Here are a few pictures of soil temperatures from the same field showing the difference between conventional and no tilled with cover crops soybeans.



Le Sueur County SWCD

One of the jobs of the SWCD is to identify resource concerns around Le Sueur County. One of the sites we recently wrapped up work on was this site within our Jefferson German Lakes Watershed. This project was targeted and as part of our Jefferson German Phosphorus Reduction Project we were able to use Clean Water Funds to install water and sediment control basins to reduce the soil loss.



Le Sueur County SWCD

Cover crops are greening up around the area!
Overwintering cover crops provide a long list of benefits in the spring, here are a few-

- Wind and water erosion protection
- Weed suppression
- Nutrient scavenging
- Breaking up compaction to increase infiltration
- Jump start microbial activity with living roots

High Clearance Broadcast Seeded Cereal Rye 120# per acre Sept 2020



Above: A sample of what the SWCD social media posts looked like in 2021.

Right: Articles written by Sue Prchal, Program Specialist on a series called "SWCD's—A Puzzle?" All articles can be found on the Le Sueur County SWCD Facebook Page.



SWCD's—A PUZZLE?

The Program Specialist

The spotlight for the May Puzzle Piece will focus on the Program Specialist. The Le Sueur County SWCD Program Specialist is Sue Prchal.

When you have put hours of concentration into putting a puzzle together, you hate to see it separated back into individual pieces and placed into its original box. In comes the invention of Mod Podge, the glue and sealer for puzzles. This is basically the job description of the Program Specialist.

Mod Podge glue keeps the puzzle pieces together, just like Sue keeps staff and landowners connected. She informs landowners as to which staff member will best be able to help them and which programs a landowner may be eligible for. Sue has experience with all the programs the District administers, so she is a good resource for landowners when staff are unavailable.

The sealer also protects the puzzle similarly as to how Sue protects the interests of the SWCD. She handles financial responsibilities, organizes board meetings and agendas, coordinates tree sales, and makes day to day office operations run smoothly.

Sue lives in Montgomery with her husband. They built a home on her parents' farm and raised 2 children. Sue grew up feeding calves, scraping mangers and baling hay on her family's dairy farm. Sue graduated from Montgomery-Lonsdale High School and attended Mankato State University before starting her career with the soil and water conservation district. Sue just celebrated her 30th year of service with the Le Sueur County SWCD on April 15, 2021.

Sue's knowledge of programs and warm presence at the front counter help all who enter the Le Sueur County USDA Service Center.

SWCD's—A PUZZLE?

The Ditch Specialist

July Puzzle Piece

This month we will be focusing on the sockets and slots of our puzzle. These are the spaces between the puzzle pieces, where the individual pieces connect but yet form a type of opening. An elongated depression that runs throughout the puzzle with a controlled flow.

These openings resemble our county drainage ditches in our SWCD puzzle. The depression provides controlled drainage that purposely channel water.

Nik Kadel is the Le Sueur County SWCD Drainage Specialist.

Nik began working for the Le Sueur County SWCD in 2016. He began his SWCD career as a Farm Bill Technician and was then hired to administer the county drainage ditch program.

Nik provides assistance to landowners ensuring the county ditches are properly maintained. He also monitors buffers and administers the buffer law for Le Sueur County.

Nik graduated from White Bear Lake High School and attended college at the University of Minnesota – Crookston receiving a degree in Water Resources Management.

He and his family currently live in Montgomery, MN. Outside of the office Nik enjoys cheering on his kids' sporting events, coaching his kids' hockey teams, deer hunting and fishing.



SWCD Programs

Outstanding Conservationist

Francis & Shirley Budin of Montgomery Township were chosen as the 2021 Outstanding Conservationists by the Le Sueur County SWCD Board of Supervisors.

Francis grew up on his family farm where row crops and dairy cows were raised. After graduating high school and serving in the military, he and Shirley got married. They moved to Burnsville where Francis began a 36-year career at Ford Motor Company. In 1976 they purchased the family farm from Francis' dad and rented it out until 1985. Francis and Shirley conventionally farmed the acreage until 2005 when he began enrolling portions of the farm into CRP. Francis and Shirley moved to their current residence in 2009, which is a ½ mile from Francis' childhood home.



Francis and Shirley were recognized for the various conservation practices they have installed on their farm. They have planted over 2200 trees, enrolled 23.5 acres into the State of Minnesota RIM easement program and have enrolled the remainder of their farm into CRP. They have also constructed terraces for erosion control. Francis and Shirley became certified in the Minnesota Ag Water Quality Certification Program in 2017.

Most recently, they worked with Joint Ditch #63 creating a 5-acre retention pond. This storage project will help to offset flooding

impacts identified due to increased drainage demands. The retention pond will help the condition of the ditch for the future and is the first ditch storage project completed in Le Sueur County.

The Budins were honored in December 2021 at the Minnesota Association of Soil and Water District's convention held in Bloomington. The Farmer magazine presented them and other counties' outstanding conservationists with a certificate for their dedication to conservation.





SWCD Programs

SWCD Drill Programs

The SWCD has 2 seeders available for rent, a Dew Drop Seeder and a Truax No-Till Drill. The Dew Drop seeder is used for seeding small areas and can easily be used with an ATV, UTV or small tractor. It has an electric lift so no hydraulics are necessary to operate the seeder. Rent is \$60 per day. In 2021, the dew drop was used 3 times for a total of 4 acres.

The Truax No-Till Drill is used for planting larger areas. It can be used to plant cover crops, small grains and native seed mixes. The drill has a seeding width of 8 ft. The drill is available to rent for a minimum charge of \$120, or \$12 per acre. The rental charge includes delivery to your farm, calibration/set up and pickup of the drill when the seeding is completed. In 2021, 25 producers rented the drill totaling 250 acres.



Above: Le Sueur County resident using the Dew Drop Seeder to plant a small food plot to Sorghum. Below that is a photo of the inside of the small seedbox on the Dew Drop Seeder.



Left: Le Sueur County producer seeding Native Grasses with the Truax Drill



SWCD Programs

One Watershed One Plan, Cannon River

In 2021, The Cannon River Watershed Joint Powers Board kicks off implementation

Over the past few years, local representatives from county governments, cities, soil and water conservation districts, non-profit organizations, and concerned citizens have met to develop a comprehensive watershed management plan for the Cannon River. Stakeholders used the process of One Watershed One Plan developed by the Minnesota Board of Water and Soil Resources (BWSR) to develop the plan.

BWSR officially approved the Cannon River Comprehensive Watershed Management Plan (CRCWMP) on June 24th, 2020. In addition to the plan, the Cannon River Watershed Joint Powers Board was also created to assist with goals of implementing the CRCWMP.

The CRWMP identifies high priority areas based on watershed concerns of the Cannon River and provides conservation practices to implement with the goal of improving water quality. However, the implementation of conservation practices is not limited to only these areas. Conservation across the watershed is important to the health of the Cannon River Watershed.



Fall Sunrise over the Cannon River

Le Sueur County holds 9.6 percent of the watershed area of the Cannon River, 5th most of the counties located in the watershed. The CRCWMP prioritizes treatment in the watersheds of lakes and streams. Le Sueur County is home to two of the seven lakes identified as high priority lakes (Roemhildts and Fish). These lakes and their watersheds will be targeted for non-structural practices in the next two years.

By implementing conservation practices in priority areas and across the watershed, Le Sueur County can improve the water quality of the Cannon River Watershed by reducing sedimentation and nutrient loading of our local lakes and streams.

Staff from the Le Sueur SWCD will work with landowners and farmers to implement conservation practices. Four different categories will be focused on during the implementation phase of the plan.

The first category is cost-share projects including structural and nonstructural practices. Structural practices will be constructed in the high priority stream watersheds and include projects like waterways and sediment basins. Non-structural practices, including reduced tillage and cover crops, will be implemented in both high priority lake and stream watersheds.



SWCD Programs

One Watershed One Plan, Cannon River

The second category focuses on developing resource concern inventories across the watershed. In Le Sueur County, natural shoreline inventories will be developed on Roemhildts, Fish, Dora, Mabel, Diamond, Sabre, and Tustin and will focus on ways to preserve the shorelines. Septic inventories will also be conducted.

The third category will focus on plan development and tracking progress. Activities in this category will include surveying cover crops and completing terrain analysis for the entire watershed to track progress of the completed projects. Every other year there will be a field day to show locally elected officials and other stakeholders the progress of the plan.

The final category will concentrate on education & outreach across the watershed. This will include soil health events, individual letters to landowners on the health of their land, and the development of a plan to further educate the public on the state of the Cannon River Watershed.



A Late Summer afternoon on Lake Volney



Overall, there is a lot that can be done in Le Sueur County to help the health of the Cannon River Watershed. This will be a slow process, but over time the implementation of conservation practices will make large noticeable changes. In 2021, approximately 20% of our current Watershed Based Implementation Grant has been utilized. Work has been slow for Le Sueur County as its current Tier 1 and 2 priority areas are small and landowner interest is currently low. Over time, more opportunities will be available.

Left: TSA Area 6 Engineer Ryan Jones and Le Sueur SWCD District Technician Joe Jirik survey a newly formed ravine for a grade stabilization project near Middle Jefferson Lake



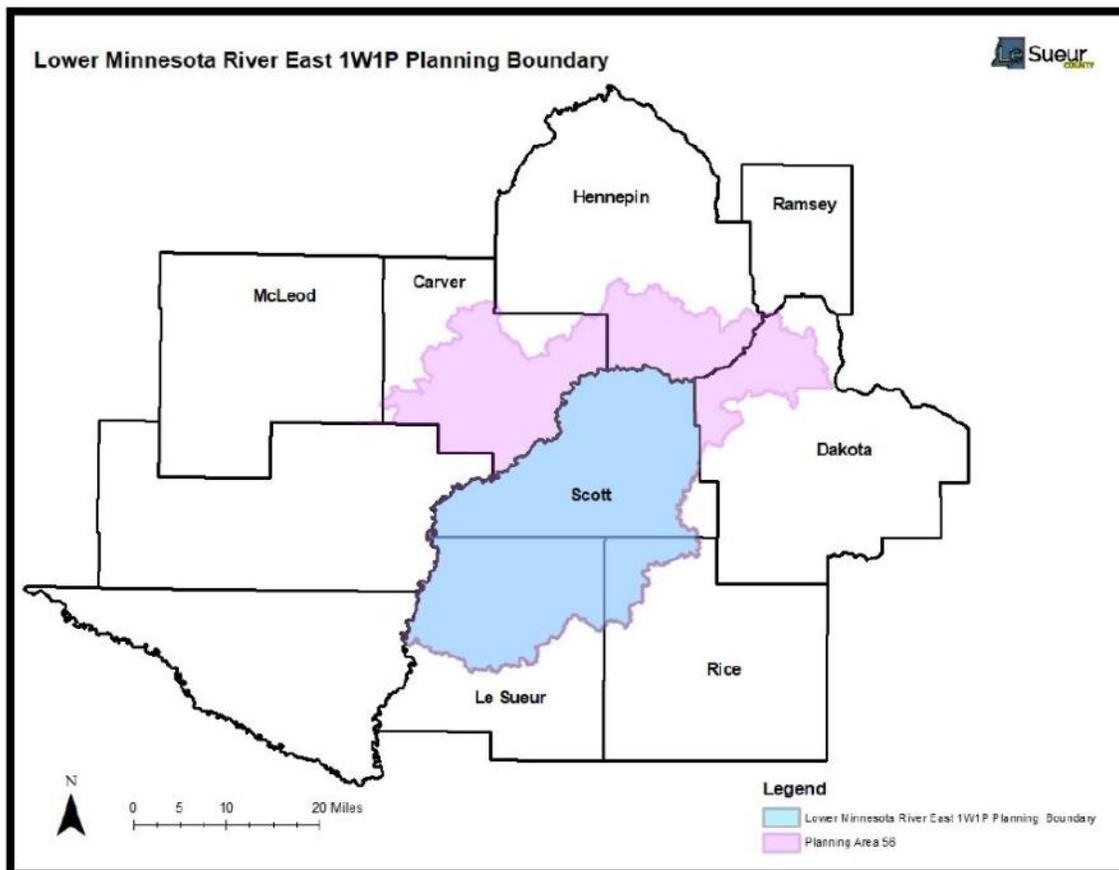
SWCD Programs

One Watershed One Plan, Lower Minnesota East

Le Sueur County and the Le Sueur SWCD in partnership with Rice County, Rice SWCD, Scott County, Scott Watershed Management Organization, Scott SWCD, and the Lower Minnesota River Watershed District applied for a planning grant to start the Lower Minnesota River East One Watershed One Plan (1W1P). The Minnesota Board of Water and Soil Resources (BWSR) board met in August to determine which proposals would be funded. The Lower Minnesota River East 1W1P proposal was approved.

Over the next few years, counties, soil and water conservations districts, water management organizations, watershed districts, municipalities, state agencies, and other stakeholder groups will be working together to develop a 10-year plan for this watershed to help improve, protect, and restore resources. The Lower Minnesota River Watershed was divided into multiple planning areas due to the size of the watershed, the different land use activities, and the physical characteristics of the watershed.

The image below is the anticipated planning boundary for the Lower Minnesota River East 1W1P. We are still in the early stages of planning efforts, but stay tuned for more updates!





SWCD Programs

Wetland Conservation Act

Le Sueur SWCD is the Local Government Unit that oversees the Wetland Conservation Act (WCA) on behalf of Le Sueur County. 2021 was a busy year for wetland inquiries as WCA workload returned to its pre-pandemic state.



A WCA violation site where a landowner dug a ditch through a wetland.

- 67 landowners consulted the SWCD on WCA issues
- 16 WCA applications were approved
- 1 WCA application was rescinded
- 22 potential WCA Violations were investigated
- 3 Wildlife Pond Requests

Minnesota Agriculture Water Quality Certification Program

The MN Ag Water Quality Certification Program's goal is to protect and enhance water quality within Minnesota's agricultural lands by working with farmers and landowners to promote stewardship.

Le Sueur County SWCD partnered with the MN Department of Ag and began administering this program in 2019. Currently 15 landowners in Le Sueur County have been certified or are working towards certification.

Certified farms receive a 10 year exemption from any new water quality regulations and can obtain financial assistance to implement practices that promote water quality. They also receive a sign to display their accomplishment and may promote their business as a MN Ag Water Quality Certified business.





SWCD Programs

Tree Program

In 2021 over 6000 new trees and shrubs were planted in Le Sueur County as a result of the annual SWCD tree program. A variety of bare root and potted evergreens, hardwoods such as oaks, maples, aspen and birch to shrubs like lilac, dogwood and plum were available for purchase. In 2020 due to pandemic uncertainty, the SWCD started delivering purchased trees to Le Sueur County Residents. The SWCD has decided to deliver trees moving forward. Both the SWCD and the landowners liked the new routine.



Food Plots

In partnership with the Le Sueur County Pheasants Forever Chapter, the SWCD gave out 34 acres worth of food plot corn, 8 acres of Soybeans and 8 acres of Sorghum to 17 landowners. The Le Sueur SWCD has been in partnership with the local PF Chapter since the 1990s.



Le Sueur County Food Plot In September with Seed from Le Sueur County Pheasants Forever



SWCD Programs

State Cost Share Program

SWCD staff had consistent work throughout 2021 with 4 State Cost-Share construction projects dispersing **\$43,000** in project funds.

- 6 Water and Sediment Control Basins Installed
- 1 Well Sealing



Photos are construction in process over 3 different project sites.





SWCD Programs

Jefferson German Watershed Phosphorus Reduction Project

In 2021 the Le Sueur SWCD in partnership with Le Sueur County completed the \$484,000 Jefferson German Phosphorus Reduction Project. The project was awarded a 2018 Clean Water Fund Grant in the amount of \$387,100. Match contributions came from the Greater Jefferson German Lake Association in the amount of \$12,000, Le Sueur County \$34,000, Le Sueur SWCD \$10,000 and remaining dollars from landowners.



The Phosphorus Reduction Project Completed the following:

- 15 Water and Sediment Control Basins
- 7 Grade Stabilization Structures
- 1 Shore-land Protection Project
- 1 Critical Area Planting
- 1 Storm-water Pond
- 1 Wetland Restoration
- 1 Drainage Outlet Repair
- 4 Cover Crop Contract for 200 Acres
- Enrolled 38 Acres into CREP

Below: A collage of cover crops, grade stabilization, storm-water treatment, wetland restoration and drainage outlet projects all completed as part of the Phosphorus Reduction project.



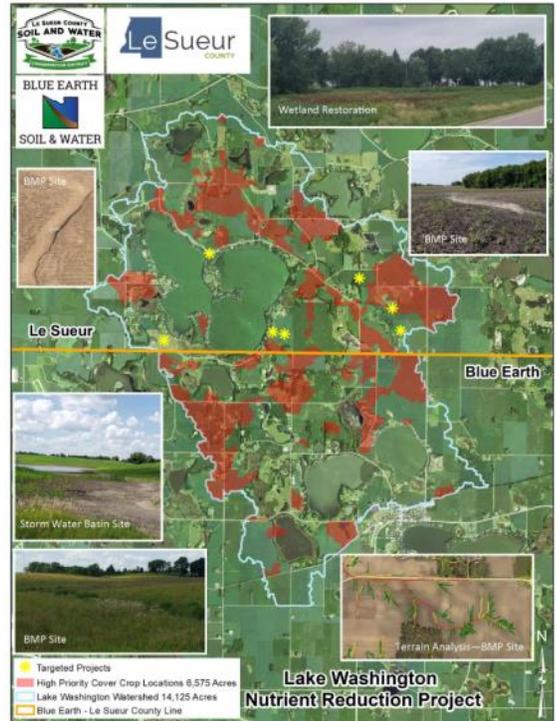


SWCD Programs

Lake Washington Nutrient Reduction Project

In 2020 the Le Sueur County SWCD was awarded \$310,250 from the Minnesota Board of Water and Soil Resources to address resource concerns in the Lake Washington watershed. These resource concerns were targeted in partnership with Le Sueur County and the Blue Earth SWCD. The Lake Washington Improvement Association has pledged to pay all of the matching funds needed for the grant in the amount of \$77,563. They have provided much needed support of the project and partnership. In 2021, one project was completed. This project included 6 water and sediment control basins in the eastern part of the watershed. A total of \$37,300 was spent in the Lake Washington Watershed.

Below: Two sites that SWCD District Technician Joe Jirik is currently working on with our SWCD Technical Service Area staff. Construction of grassed waterways, water and sediment control basins, grade stabilization structures and wetland restorations is planned for 2022.





SWCD Programs

Multipurpose Drainage Management Grant CD 61

In 2020 the Le Sueur SWCD in partnership with Le Sueur County received a \$215,541 Multipurpose Drainage Management Grant through the Minnesota Board of Water and Soil Resources' Clean Water Funds Grant. The project is a County Drainage Improvement Storage and Treatment Wetland. Landowners on the ditch system filed a petition to improve the ditch that included the storage and treatment site. The landowners on the system agreed that the County Ditch is no longer functioning the way it was originally designed and something needed to be done to reduce maintenance costs and improve drainage benefits. The project had been identified as a priority in numerous plans. This includes the CD 61 Final Engineer's Report and the 2014 CD 61 Drainage Inspection Plan. Both plans identified that storage is needed to keep the ditch functioning efficiently into the future.



One of the petitioners offered his land in the upper watershed as a storage and treatment basin. The site is 31.1 acres in size. Of that 31.1 acres 15.4 acres will be the restored wetland and 15.7 acres will be an upland buffer planted to native vegetation.

Construction on the project started in the Late Summer/Fall of 2021 and will be wrapped up in the spring of 2022. The project will provide 76.56 T/yr of sediment reduction, 52.55 T/yr of estimated soil savings, and 170.02 lbs/yr of estimated phosphorus reduction which will help address the sediment and nutrient reduction needed for Scotch Lake located downstream. A calculated 17.2 acre/feet of water will be stored by the 15.4-acre wetland restoration and will treat the 535 acre watershed.



CD 61 storage and treatment wetland weir structure shortly after the forms have been removed.



SWCD Programs

Cover Crops

2021 SWCD Cover Crop Program

- 1227 Total Acres Seeded
- 424 Acres Applied by High Clearance Seeder
- 125 Aerial Applied Acres
- 678 Acres Drilled or Broadcasted after Harvest
- 5 Producers Planted Green into Standing Rye

Soil Health Meetings

- 2 Staff attended a soil health meeting in Iowa seeing speakers Mitch Hora and Rick Clark



Le Sueur County SWCD Supervisor in No-Till soybeans planted into Cereal Rye



Cows Grazing a Cover Crop after corn silage

High Clearance Applied Cover Crops into Standing Corn

Drilled Cover Crop After Hybrid Rye Harvest



SWCD Programs

Conservation Partners Legacy Grant MN DNR

In the spring of 2021 the SWCD was awarded a \$34,903 Conservation Partners Legacy (CPL) Grant through the Minnesota Department of Natural Resources. The Le Sueur County Pheasants Forever Chapter and the U.S. Fish and Wildlife Service provided a combined \$3,886 match for the grant. The funds acquired will be used to restore a wetland and the surrounding vegetation on 23 acres of the Murphy Wildlife Management Area (WMA). The Murphy WMA is located in Waterville Township section 5. To establish native grasses and forbs trees were removed this past summer. The next steps include farming the 23 acres in 2022 & 2023. Farming the acres for the next 2 years will help ensure the eradication of the smooth brome and other volunteer species that have dominated the landscape for many decades. In the fall of 2023 wetland construction will be completed along with the native seeding.



Red: CPL Project Area Purple: Murphy WMA



Surface drainage ditch that drains the 2 acre wetland



Existing Cover of Smooth Brome and trees (Spring 2021)



SWCD Programs



Walk-In Access

Walk-In Access (WIA) is a voluntary program that compensates landowners to allow public access for hunting on their land from September 1st through May 31st. With the number of hunters diminishing in the past decades, largely due to the lack of quality hunting land, the WIA program is more important than ever. A decrease in hunters means less support for wildlife and habitat; which in turn will have a negative effect on local wildlife populations. The WIA program will help sustain future generations of hunters while creating more local hunting opportunities. Le Sueur County currently has 3 parcels enrolled in the Walk-In Access program. Le Sueur County SWCD works with landowners to enroll land in the program.



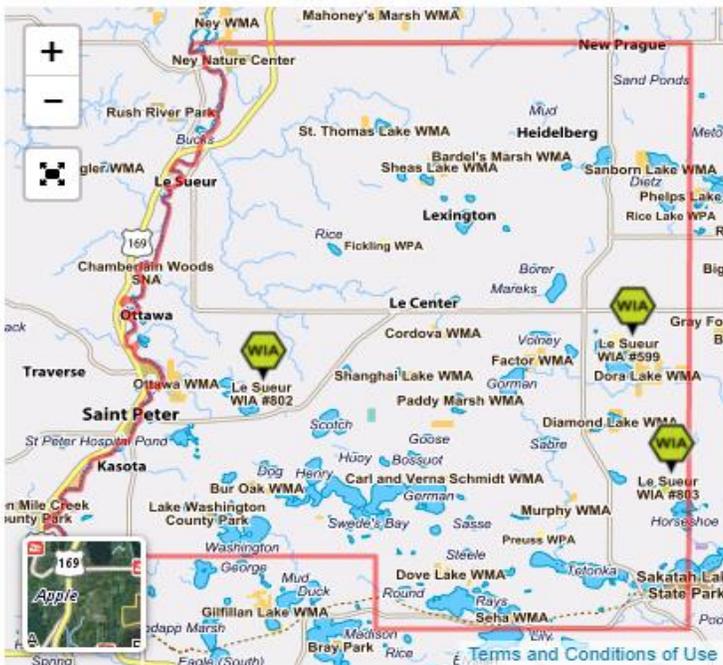
103.04 acres located in Cleveland Township



110.7 acres located in Kilkenny Township



69.05 acres located in Kilkenny Township



Yellow: Locations of WIA sites in Le Sueur County

[Terms and Conditions of Use](#)



SWCD Programs



Conservation Reserve Enhancement Program (CREP)



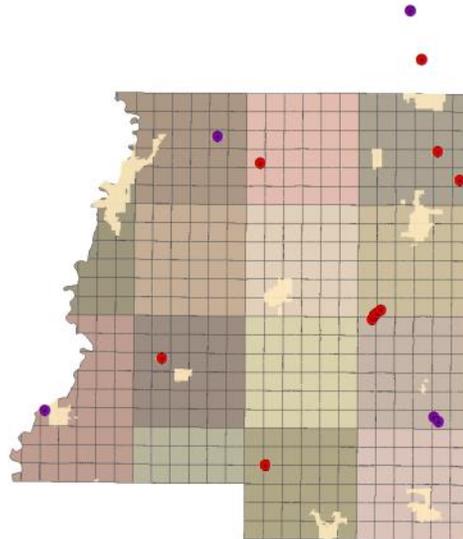
Left: 140.07 acre wetland restoration located in Helena Township section 9.



Above: 36.41 acre wetland restoration located in Kilkenny Township section 35.



Above: 15.41 acre wetland restoration located in Tyrone Township section 14.



Above: 32.45 acre wetland restoration located in Kilkenny Township section 35



Left: 91.74 acre wetland restoration located in Kasota Township sections 32.



Left: 52.45 acre wetland restoration located in Derrynane Township section 19

Above in **Red**: In 2021 the Le Sueur County SWCD recorded 1 CREP easement, totaling 52.45 acres. These acres included 1 wetland restorations.

Above in **Purple**: Currently 5 CREP easements are in the process of being recorded, totaling 316.08 acres. These projects include 5 wetland restorations .

Beginning in April 2022 there will be another CREP sign up period. Landowners in Le Sueur County continue to show interest in the program and the Soil & Water office expects to submit more applications this coming spring.



2021 Completed Projects

CREP Wetland Restorations

In 2021 three CREP wetland restorations were completed. A total of 215 acres of wetland habitat were restored, including 8 wetland basins. Construction consisted of scrapes, tile breaks, ditch reroutes, berms, and rock weir structures.

Photographs below are from all three projects completed.



Scrape



Berm with rock rodent trench



Tile break



Rock weir



Ditch Inspector

Drainage Ditches

The ditch systems had another busy year completing roughly 30 projects. Projects included: ditch cleanings, repairing bank sloughs, replacing culverts, repairing farm crossings, trapping beavers and removing beaver dams. Trappers caught 29 beavers between 10 ditch systems.

In 2021 the ditch system continued the process of spraying and mowing 1/3 of the county ditches. The program helps to alleviate woody and noxious weeds in the



CD65 Ditch cleaning and bank repair located in Cleveland Township.



JD54 one of the many beaver dams located in Lanesburgh Township.

ditch buffer. Between 2019 and 2021 the County has sprayed and mowed every ditch system in the County.

In 2021 the Le Sueur County Drainage Authority spent \$3,994,000 throughout the drainage systems on improvements and engineered repairs, while the Ditch Inspector oversaw \$251,000 of construction work. All drainage systems incurred costs from repairs, engineer reports, correction of records, redetermination of benefits, ditch spraying/mowing, general inspections and labor. Some ditch system expenses were supplemented by grants and federal funds.



County Ditches/ Buffer Compliance

FEMA Projects for County Ditches

Due to the 2019 rain/flood events, Le Sueur County was designated as a state of emergency by the Federal Government. Flooding events took place between the dates of March 12th and April 23rd. FEMA allocated \$402,499.98 to repair 22 damaged sites on the ditch system. In 2021 all projects were completed and final payments were issued by FEMA.



JD54 Box culvert replacement from the flooding of 2019 located in Lanesburgh Township.

State Buffer Law & Compliance

In 2015 Minnesota established a State Buffer Law that requires perennial vegetative buffers of 50 feet along lakes, rivers, streams and buffers of 16.5 feet along county ditches. These buffers help filter out phosphorus, nitrogen and sediment. The deadline for implementation of buffers on public waters was November 1, 2017. The deadline for public ditches was November 1, 2018

As of 2021 The Le Sueur County SWCD has been doing field checks and staking non-compliance parcels in an effort to get to 100% compliance with the Minnesota Buffer Law. The SWCD will be monitoring the public water and county ditch buffers at least once every three years. Le Sueur County is currently 99% compliant on public waters and 94% compliant the County Ditches.



Established Ditch Buffer in Le Sueur County



2021 County Ditches Projects

In 2021 the County Drainage Authority had two repair projects and two improvement projects. These types of projects take a few years to complete. They require many meetings with landowners, engineers and the Ditch Authority. The two repair projects included County Ditch 43 and Joint Ditch 54 with Rice County. The two Ditch Improvement projects were on County Ditch 41 and County Ditch 61.

Joint Ditch 54



JD54 Lanesburgh Township tree removal and bank repair.

Joint Ditch 54 with Rice County located in Lanesburgh Township has been our biggest repair project to date. The project was 7.6 miles long and took \$1.2 million to repair. Trees were removed on both sides of the County Ditch. In total 9 acres of trees were removed. The project also consisted of fixing the sloughs, cleaning out the ditch and replacing multiple culverts and tile.



2021 County Ditches Projects

County Ditch 41

One of the two improvement projects completed in 2021 was on CD41 located in Lexington Township. The Ditch Improvement included deepening the ditch, upsizing and replacing the tile and adding a 0.6 acre water storage pond which will store 7.8 acre/feet of water.



Above: CD41 Deepened and seeded



Above: CD41 Storage Pond Construction





2021 County Ditches Projects

County Ditch 61

Our second improvement project was on County Ditch 61. This ditch consists of 4,505 feet of open ditch and 7,430 feet of drainage tile. The CD61 improvement project consisted of deepening the ditch, repairing sloughs, and deepening and upsizing the tile. A \$215,541 Multi-Purpose Drainage Management (MDM)

grant was secured for a wetland restoration. Funding came from a BWSR CWF grant.



Left: Located in Cordova Township. Construction of CD61 Improvement. Storage and Treatment Pond overview area

County Ditch 43

On CD43 there is an on going repair project that started in the fall of 2021. This project includes a ditch cleaning, slough repairs, vegetation removal from Tyler's Lake, three culvert replacements, a Hog-Slat structure approved by the DNR at the outlet of Tyler's Lake and a dam replacement on the outlet of Clear Lake. The repairs will be completed in 2022.



CD43 hog-slat structure located in Lexington Township at the outlet of Tyler's Lake.

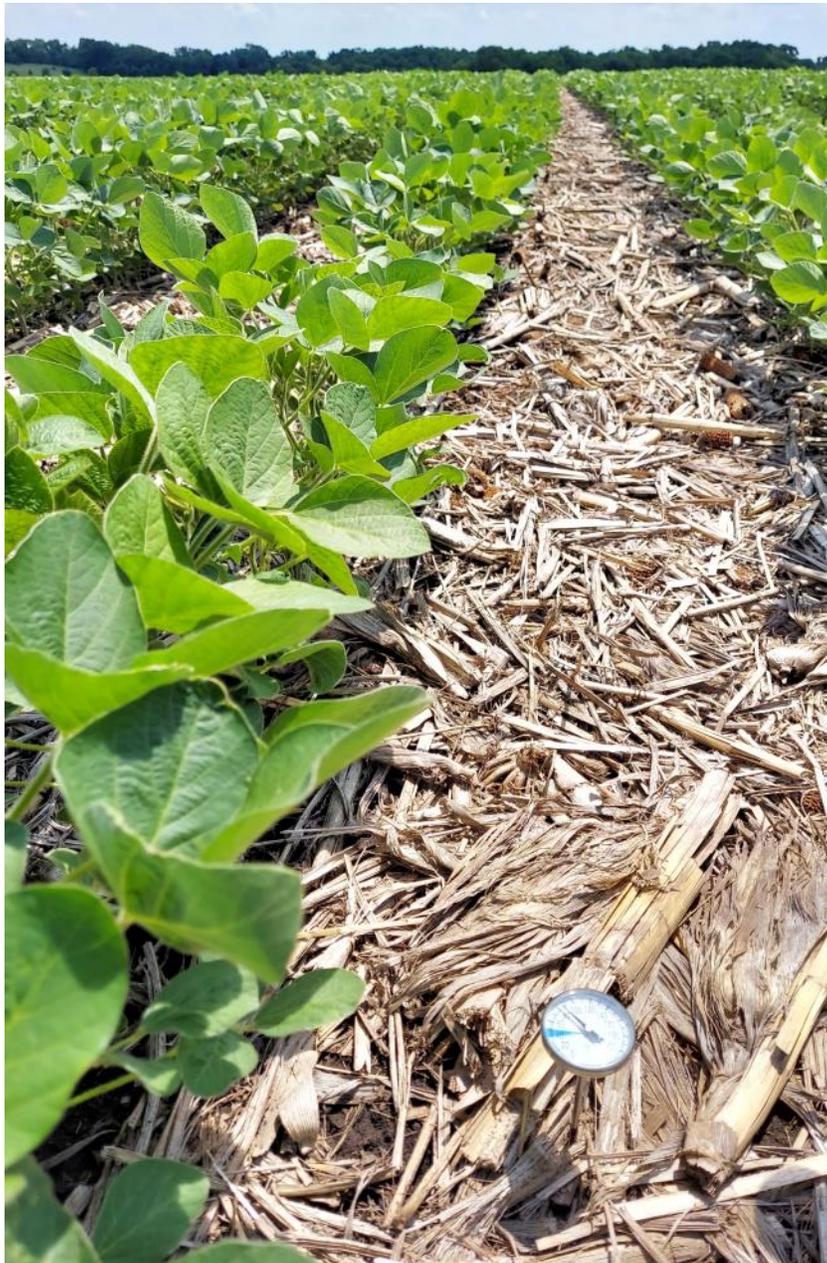


SWCD Projects

Below: No-tilled soybeans into cereal rye in June. The SWCD was out checking soil temperatures of different tillage practices. Soil temperatures were noted to be 20 degrees cooler in no-tilled fields than conventional tillage fields in late June.

Top Right: Hackett Construction installing dual wall tile for an erosion control project.

Bottom Right: Newly constructed WASCOB

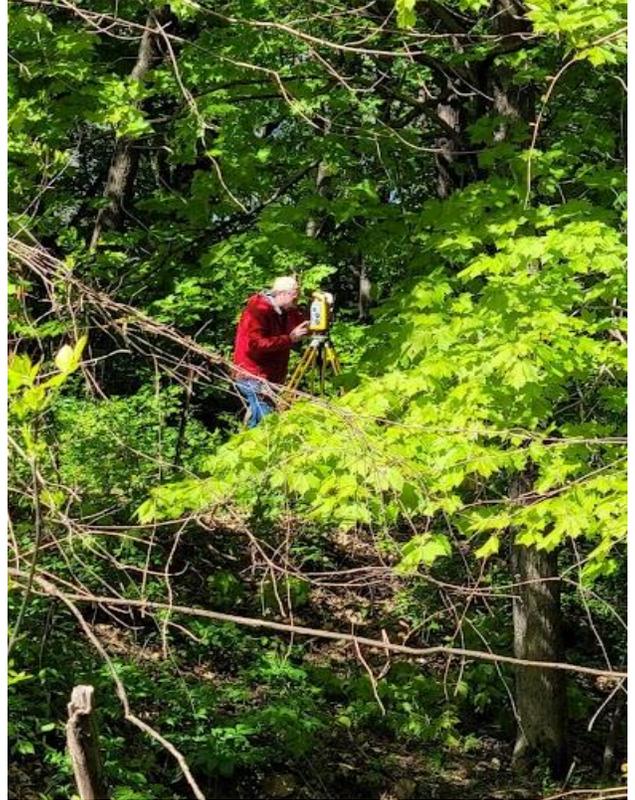




SWCD Projects



Cover crop growing in a harvested bean field– Applied by High Clearance in August



TSA Engineering Technician Greg Schemmel surveying a project in the German/Jefferson Watershed



Year 4 of Aerial Application of Cover Crops Partnering with Scott County



Strip tilled bean stubble after Aerial Application of Cereal Rye into standing beans in August



SWCD Office

Le Sueur SWCD Supervisors



Left to Right:
Jim Struck (District 5),
Cletus Gregor (District 4),
Greg Entinger (District 1),
Earl Traxler (District 2),
Glendon Braun (District3).



Le Sueur SWCD Supervisor's Districts

Le Sueur SWCD Staff



Michael Schultz, District Manager



Sue Prchal, Program Specialist



Joe Jirik, District Technician



Karl Schmidtko, Resource Technician



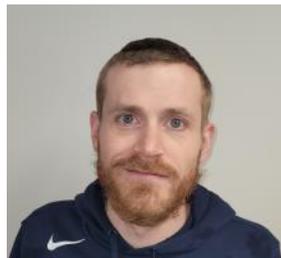
Nik Kadel, Ditch Specialist



Le Sueur Natural Resource Conservation Service



Steve Breaker,
District Conservationist



Geoff Popken,
Soil Conservation Technician



Collin Williams,
Civil Engineering Technician