

BENTON SOIL AND
WATER CONSERVATION
DISTRICT

Annual Report

2022



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About Us

Soil and Water Conservation Districts (SWCDs) are local units of government that manage and direct natural resource management programs at the local level. Districts work in both urban and rural settings, with landowners and other units of government to carry out a program for conservation purposes, and development of soil, and water related resources.

One of the main purposes for these districts are by providing soil and water conservation services to private land owners. Privately owned lands make up 78% of the land surface in Minnesota. Managing these private lands, whether agricultural, forest, lakes, or urban, is key to Minnesota's quality of life.

Benton SWCD Staff



- District Manager - Gerry Maciej
- District Tech - Mike McMillin
- District Tech - Nathan Sanoski
- Admin Assistant - Renee Thell
- District Tech - Jessica Hohesiel
- Watershed & Outreach - Emily Forbord

Our Mission

To protect & enhance Benton County's soil, water & natural resources; to nurture a conservation ethic by educating county residents on conservation & environmental issues. Serving Benton County since 1948.



Gerry Maciej:

- Administration
- Grant Writing
- Program Coordination

Mike McMillin:

- Feedlot Practices
- Manure Management Test Plots
- Nutrient Management Test Plots



Wetland Restoration – Benton County

SWCP Staff Roles

Nathan Sanoski:

- Ag BMP Low Interest Loan, Conservation Reserve Program (CRP)
- Shelterbelts, Windbreaks, Living Snow Fences, Native Buffer Program
- Shoreline Stabilization, Wetland Restoration/Enhancement
- Wildlife Habitat Planting, Well Sealing Program

Emily Forbord:

- Coordinate One Watershed One Plan
- Outreach/Education
- Stream Monitoring
- WCA/Buffer Laws
- Grant Management/reporting

Jessica Hoheisel:

- Design and installation of conservation projects
- Assist with Education & Outreach
- Nitrate Testing
- Soil Health Initiative

Renee Thell:

- Bookkeeping, Payroll, Finances
- Tree Program, Tree Stewardship
- Customer Service, Communication Prep, Human Resources
- Grant Tracking and Assistance

Contact Us:



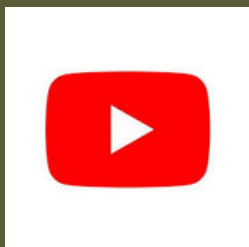
14 2nd Ave W
Foley MN 56329



www.soilandwater.org



Follow Us
(clickable links)



320-968-5300 X3





Josh Bork - District Conservationist



Joey LeBlanc - Civic Engineering Tech



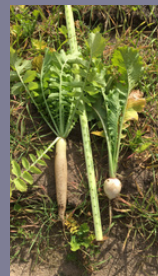
Bonnie Haubenschild - USDA-NRCS Contractor General Clerk II



Beginning growth of cover crops.



Full growth.



Radish and Turnip harvest.



Manure storage facility.

Cover crops, manure storage, and feedlots make up a huge part of the work the NRCS team helps landowners with.
- Josh Bork



Manure storage facility containing livestock.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status.

(Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotope, etc.) should contact USDA's TARGET Center at

202-720-2600 (voice and TDD). USDA is an equal opportunity provider and employer.

SWCD Board of Supervisors



WELCOME!

Mike Winkelman

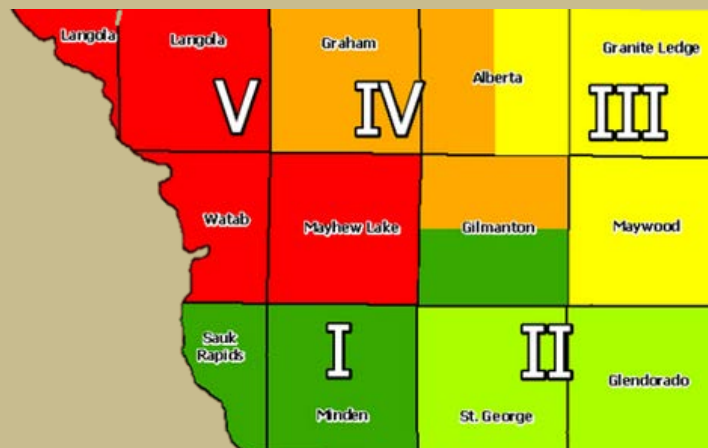
New Area 3 Supervisor

The Benton SWCD's board is made up of five elected supervisors who are elected by nomination districts on the general ballot. Supervisors do not participate in the primaries and their terms are staggered.

Wade Bastian	Area 1
Joseph Jordan	Area 2
Mike Winkelman	Area 3
Bernie Thole	Area 4
Chuck Rau	Area 5

At the local level supervisors play an important role in how the county deals with natural resource management issues.

Serving as a supervisor is a great opportunity for people who want a voice in how we manage our environment.



Our Partners

Thank you to everyone involved including our Benton County Commissioners, state and federal legislators, state conservation agencies, local conservation organizations and our property owners for taking the initiative to improve this community.



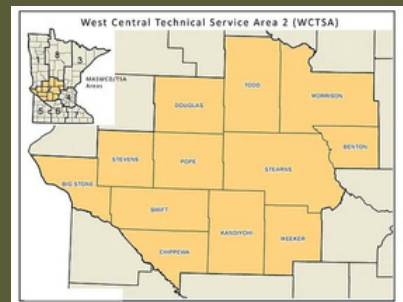
Front Row, Left to Right: Beth Schlagen, Ed Popp
 Back Row, Left to Right: Scott Johnson, Steve Heinen, Jared Gapinski



WCTSA Staff Left to Right: Luke Herkenhoff, Ross Reiffenberger, and Steve Linow. Not Pictured: Mark Greve and Tim Ebnet

We would not be able to operate without the continued support of the Benton County Commissioners. In 2022, \$244,500 was allocated to the SWCD by Benton County to support our conservation efforts.

The WCTSA Staff fills a critical role for the SWCD's by providing engineering and technical assistance for projects that could not be completed with an individual SWCD. TSA Staff also assist us with drone footage of projects.



Our Partner Agencies

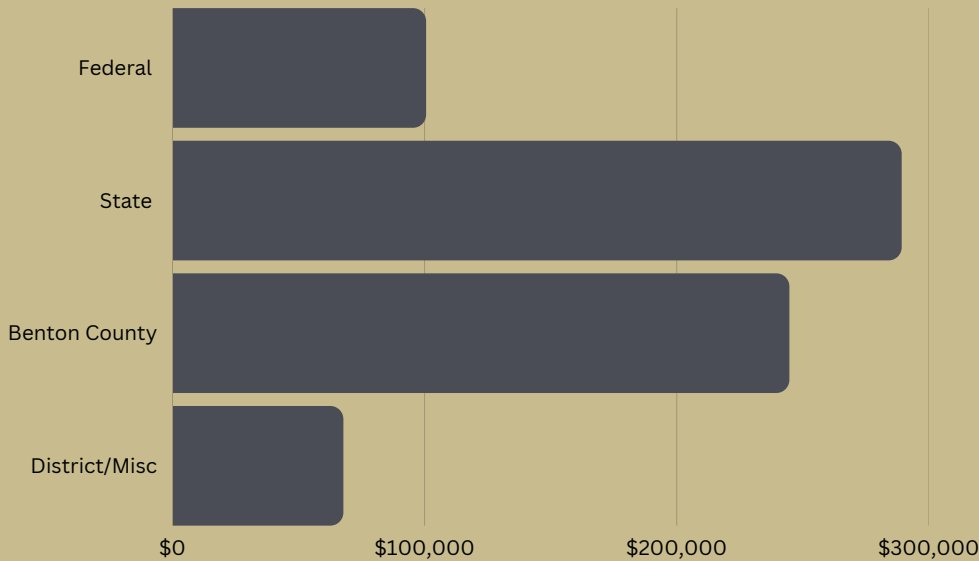


2022 FINANCIAL SUMMARY

Benton SWCD operational revenue sources include federal, state, county, and district funds (tree/product sales and equipment rentals.) We also rely on a variety of financial contributions from cost-share, incentives, program development and annual rental payments.

\$701,559

Operational revenue in 2022

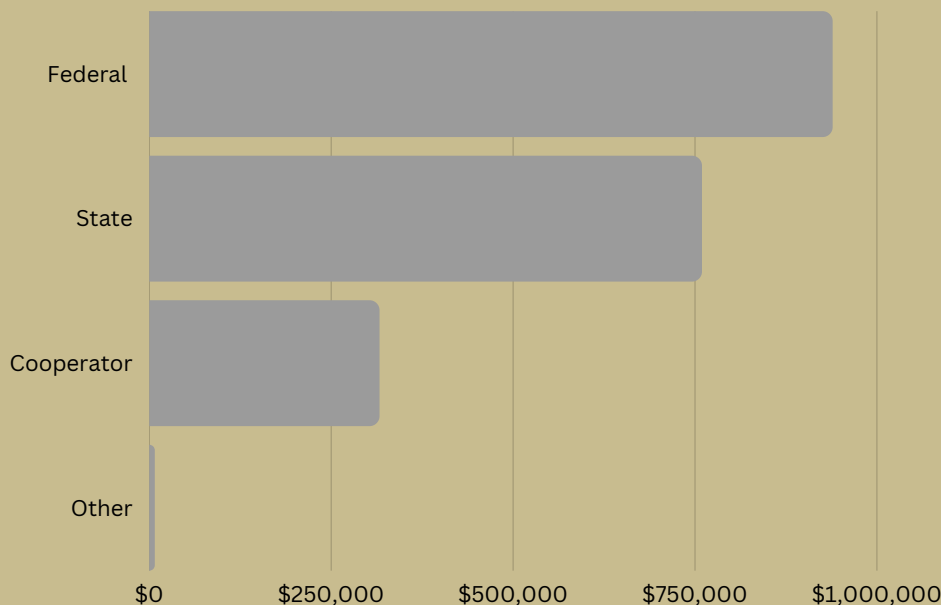


These funds are used for personal salaries and benefits.

Supervisor and Water Resources Advisory Committee member expenses, rent, travel, tree program, environmental education programs and other related expenses.

\$2,067,373

In contributions for conservation projects in 2022

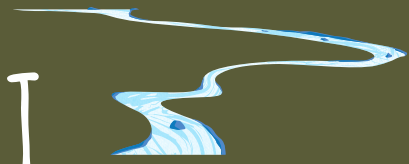


Funds administered through the SWCD, NRCS, FSA, and Benton County Program.

Landowner contributions for federal funded projects are not available so cooperator funds displayed are estimates.



2022 ECONOMIC IMPACT



Our projects bring outside resources into Benton County and encourages citizens to invest in their local watersheds. Local contractors and services are used in many of our projects.

\$2,067,373

TOTAL SPENT ON CONSERVATION PRACTICES DURING 2022 IN BENTON COUNTY



\$983,581

SPENT FROM FEDERAL COST-SHARE FUNDS



\$785,966

SPENT FROM STATE COST-SHARE FUNDS



\$315,854

SPENT FROM LANDOWNER CONTRIBUTIONS/COST-SHARE



\$7,000

RICE AND SAUK RAPIDS SPORTSMEN'S CLUBS



\$1,000,000

LOCAL FUNDS RECIRCULATED IN BENTON COUNTY

ASSUMING 50% OF TOTAL FUNDS ARE USED LOCALLY





EDUCATION & OUTREACH



2022 Education Outreach Highlights

- 2022 SWCD Tour Practices in person event
- Benton SWCD's Outstanding Conservationist 2022
- Coloring, essay, and poster contest
- Project time-lapse videos/drone footage
- Sold 19,385 trees/shrubs in our 2022 tree program
- Weekly Facebook posts
- Sauk Rapids Herald and Benton County News interviews and articles
- Teaching 8th graders at Foley Middle School
- Farm Fest - Held at the St. Cloud Convention Center
- Envirothon
- Little Rock Creek Monitoring Videos - Linked to Youtube
- Irrigators Association of Minnesota & Upper Mississippi Irrigators Association meeting attendance
- National Corn Growers Association meeting attendance
- BWSR Academy Drone Presentation
- Scholarships for U of M - Soil Management Summit
- Grazing Field Day
- Photo Contest - 2022
- Little Rock Lake Association Pizza Party

Little Rock Lake Winners



Photo Contest Winner



Benton County News

Little Rock Lake Conditions improving after drawdown



SWCD lake biology is responding

BY JAMES KOUNDEL
STAFF WRITER

quality, said Kendra Sommerfeld, Benton SWCD water plan technician. After lowering the water by about 2 feet, she said approximately 40,000 aquatic plants were installed along exposed shoreline areas.

"It takes a few years for plants to come back and for the fish community and bog community to change, and the big thing they would start seeing results in a matter of years."

Now, about three years later, conditions at Little Rock Lake in Rice are improving - both from a data and anecdotal perspective. The drawdown, where the lake's water level was intentionally decreased, took place from August to mid-September 2019.

The drawdown included native planting, which is an important part of improving water

project," Macey said. "That's the big headline. We're starting to see a response in the biology of the lake."

Eric Ahrens, a DNR area fisheries manager and resident of the lake, is excited about the numbers, and he agreed significant progress has been made. He has been tracking the fish community in the lake for years, as well as the condition that make the lake amenable to a healthy fish population.

Since the draw-down, Ahrens said, levels of seasonal phosphorus in the lake have decreased by about 30%. There has been significant plant growth along shoreline areas and mud flats, water clarity has increased from less than a foot to more than 6 feet deep, and fish habitat has significantly improved.

It seems like we can say, more definitively, that the plant community and fish community has responded to the drawdown.

Little Rock Lake page 3



BWSR Drone Presentation



Grazing Field Day

OUTSTANDING CONSERVATIONIST

2022

Each year, the state's SWCDs recognize individuals and organizations for outstanding accomplishments in implementing conservation practices and improving Minnesota's natural resources.



Mark and Shelley Czech were recognized for a variety of practices and achievements awarded by Benton SWCD. They added an Ag-Waste Storage System to reduce feedlot runoff and provide storage to avoid winter manure spreading. In 2017 they installed a Water and Sediment Control Basin that resulted in pollution reductions of 110.25 tons per year of sediment and 127 pounds of phosphorous per year in the watershed, as well as completing a Livestock Environmental Quality Assurance Program Assessment for their farm.





Grant Programs and Project Highlights of 2022

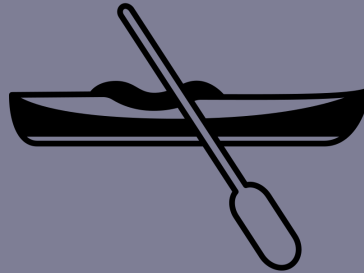


Clean Water, Land and Legacy Amendment

(Clean Water Funds)

The Minnesota Legislature appropriated \$256.792 million from the Clean Water Fund to water resource activities for 2022-2023. Clean Water Fund dollars come from the Clean Water, Land and Legacy Amendment.

Many of Benton SWCD's programs, projects, and activities are funded through the Clean Water Funds and Clean Water, Land and Legacy Amendment.



Approximately 33% of those funds are dedicated to the Clean Water Fund to protect, enhance, and restore water quality in lakes, rivers, streams and groundwater in Minnesota.



These funds are very important for protecting and improving our water quality in Benton County.

One Watershed, One Plan

BWSR allocates funds from the Clean Water Fund (CWF) for the acceleration of implementing the One Watershed, One Plan program.



Water resource management has shifted to being managed by watershed boundaries rather than county boundaries. The One Watershed, One Plan (1W1P) program emphasizes forming stronger partnerships between local governments and upstream and downstream neighbors to develop a more prioritized, targeted, and measurable implementation plan.

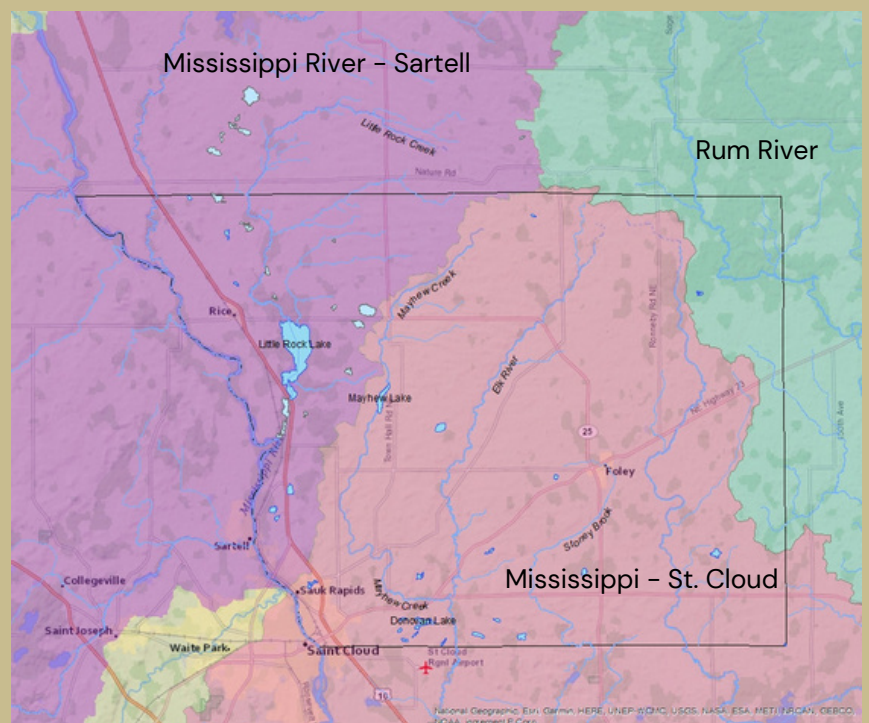


These comprehensive watershed management plans address water quality and quantity, groundwater, drinking water, habitat, recreation, and other issues. Once the comprehensive water management plans are completed, each watershed will be provided funding by the state to implement the highest priority projects.



1W1P TIMELINE

- **Rum River**
2018–2025 Plan Development & Implementation Planning
- **Mississippi - St. Cloud**
2021–2024 Plan Development
- **Mississippi - Sartell**
Starting in 2023–2024

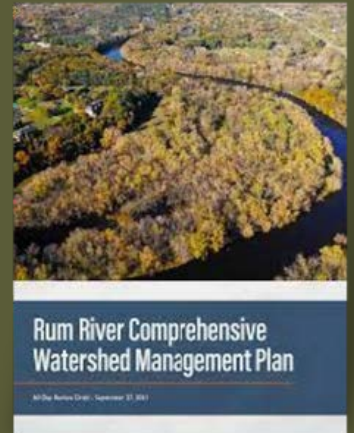


One Watershed, One Plan



Rum River Watershed

The Rum River Watershed boundary covers 1,013,760 acres of the Upper Mississippi River Basin in central Minnesota, stretching from Mille Lacs Lake in the north to the confluence with the Mississippi River in the city of Anoka.



[CWMP Link](#)

The Rum River 1WIP planning process began in late 2018 and continued through 2022. The Watershed Based Implementation Funding (WBIF) Grant was received at the end of the year in 2022. The implementation grant process will start in 2023 and end in 2025.



The Level A priority goal of the Comprehensive Watershed Management Plan (CWMP) is to engage and outreach with those within the watershed, restore surface water, and protect surface water.

- **Outreach & Engagement**

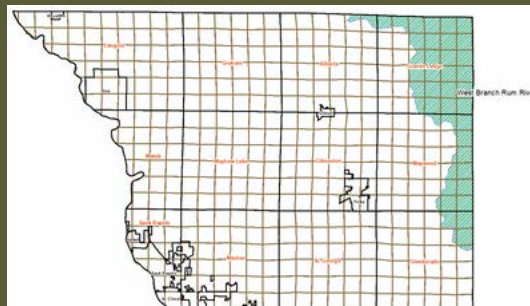
- Goal: Increased awareness of watershed issues, a greater sense of community support, and expanded technical resources will translate to more active stewardship.

- **Surface Water – Restore**

- Goal: Improve water quality of impaired lakes and streams.

- **Surface Water – Protect**

- Goal: Maintain or enhance watershed-based ecosystems to maintain water quality and to keep lakes and streams healthy.



One Watershed, One Plan

Mississippi River - St. Cloud

In 2021, The Mississippi River - St. Cloud watershed partnership was established to submit an application to BWSR for the One Watershed, One Plan grant. The partnership received funding to start the planning process in 2021. The planning process has begun and the Comprehensive Management Plan (CWMP) will be done by 2024.



The Mississippi River - St. Cloud watershed contains a large area in Benton County. Total watershed is 691,200 acres and includes Benton County, Meeker County, Mille Lacs County, Morrison County, Stearns County, Sherburne County, and Wright County. The watershed has 907 total river miles, and has 374 lakes with a total acreage covering 23,728 acres. The Mississippi River serves a multitude of uses. St. Cloud is the first city along the Mississippi River to obtain its drinking water from this resource. The river is also used by two of Minnesota's most important power plants (Becker and Monticello) as a non-contact cooling water source.



m BOARD OF WATER
AND SOIL RESOURCES

Reinvest in Minnesota (RIM)

West Branch Rum River

In 2021 the Minnesota legislature approved an additional \$2.5 million for Reinvest in Minnesota (RIM) to make permanent easements an option for willing landowners within the nine-county watershed, which includes Benton County.

The first \$3 million of easement funding was committed to just over 3,000 acres in about one year, leaving over 1,100 acres on a waiting list. The second round of funding aims to protect at least 1,750 acres.

Soil and water conservation districts and partners like The Nature Conservancy and Pheasants Forever promote the RIM easement program to the most ecologically valuable lands.



6.35 Miles

of shoreline protected in Benton County



513.2 Total Acres

protected in Benton County



\$505,556

paid to landowners



8 Total Easements

in Benton County



Minnesota Agriculture Water Quality Certification (MAWQCP)

A voluntary program for farmers and landowners that helps protect Minnesota's water resources. MAWQCP recognizes producers for their work in promoting water quality. It puts farmers in touch with local conservation district experts to identify and mitigate any risks their farm poses to water quality laws and regulations for 10 years. Farmers can use their certification status to promote and market their operations as water quality protectors.

Highlights of 2022

- Three farms certified for a combined total of 1,062 acres.
- West Central Minnesota Area is at 253 farms certified on 176,831 acres of the 800,915 acres Statewide.



10,624
Total
Acres
Certified

16
Farms
Certified



Minnesota Agricultural
Water Quality
Certification Program



Environmental Quality Incentive Program (EQIP)

EQIP provides federal funds to address local resource concerns. It provides financial assistance, either to off-set the cost of implementation or as an incentive, to assist crop, livestock, and other operations.



11 – contracts in Benton County for 2022



\$757,382 – in contracts in 2022



Erosion Control



Cover Crops on text



Nutrient management – Feedlot



Well Sealing

Conservation Reserve Program (CRP) & (CCRP)



CRP – aims to re-establish valuable land cover to help improve water quality, prevent soil erosion and reduce loss of wildlife habitat. It's become one of the largest private-lands conservation programs in the U.S.

CCRP – is a voluntary program that focuses on using grasses and trees to protect and improve soil, air, water, and enhance fish and wildlife habitat using various conservation practices.

10 CRP
Contracts in
Benton County
in 2022

4 CCRP
Contracts in
Benton County
in 2022

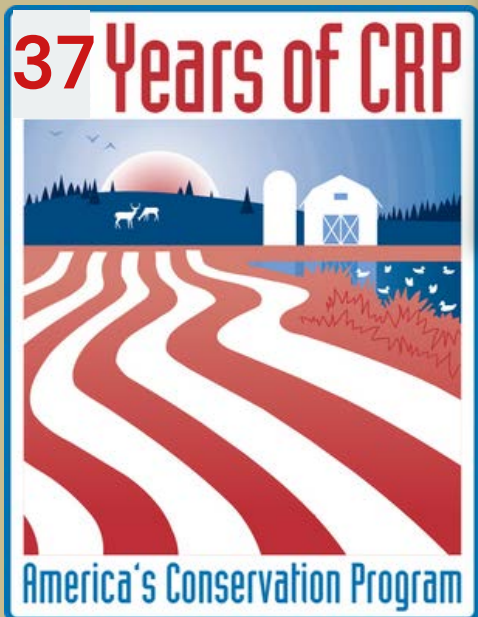
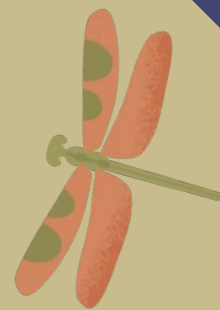
Total Active
Contracts = 275

Total Active Acres =
2,627.09

Total Annual
Payments = \$190,053

137.83 acres of
CRP enrolled in
Benton County
2022

30.44 acres of
CCRP enrolled
in Benton
County in 2022



Pharmaceutical Waste Collection



Program

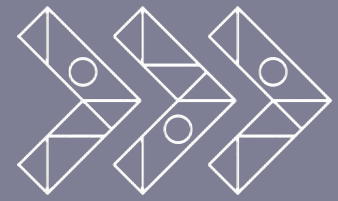
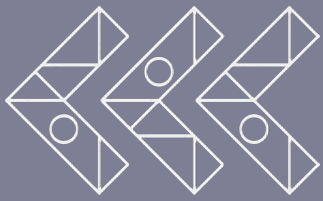


Minnesota Pollution Control Agency (MPCA) provides Benton County with funds from SCORE (Select Committee on Recycling and the Environment). Benton SWCD in partnership with Benton County Sheriff's Office, Sauk Rapids Police Department, and City of Rice Police Department started a pharmaceutical waste collection program to utilize some of these funds.

This program is designed to accept unused medication from citizens and prevent pharmaceutical pollution in our water. The Environmental Protection Agency (EPA) partners with the MPCA to conduct lake and stream surveys every five years looking for Pharmaceuticals and Personal Care Products (PPCPs), Endocrine Active Components (EACs), and other chemicals. The PPCPs and EACs can cause male fish to have endocrine system abnormalities, indicated by their production of vitellogenin, a protein normally produced only by female fish in egg development.

The pharmaceutical disposal boxes are located at Benton County Sheriff's Office in Foley, Sauk Rapids Police Department located in the City of Sauk Rapids Government Center, and Rice City Hall/Police Department.





Clean Water Fund

Well Sealing Program

This program is funded under the Clean Water Fund. The goal is to seal unused, abandoned wells in Benton County to protect groundwater quality, human health, and safety.



An unused well is an open access point straight to our groundwater, allowing surface water runoff, contaminated water, pollutants, or any waste material to have a direct link to our drinking water sources. This threatens the quality and safety of everyone's water – a neighbor's water, your water, and even surrounding water.



\$24,000 coming in 2023

2022

- 5 Wells Sealed
- Landowner cost \$8,417



2020-2022

- 17 Contracts
- 20 Wells Sealed
- \$21,904 in Cost-share



Clean Water Fund

Septic System Upgrade Program



The MPCA offer grants to counties for SSTS programs and to assist low-income home owners with needed SSTS upgrades. The SSTS base grant is \$18,600 per county that administer the SSTS program.

In 2022, there was a total of \$1.6 million available to counties. Funds were distributed to counties through the Board of Water and Soil Resources (BWSR) Natural Resources Block Grants (NRBG).

- **3 SEPTIC SYSTEMS** -FIXED IN 2022
- **\$ 18,600** -AWARDED TO BENTON COUNTY IN 2022



Little Rock Lake Update

In the fall of 2022 a crew went out and planted seed in Little Rock Lake. The seed mixture consisted of Giant Bur-Reed, Softstem Bulrush, Sweet Flag, Reed Mannagrass, American Sloughgrass, River Bulrush, and Common Spikerush. There were three different areas of the lake that got seeded. The goal of this seeding is to increase vegetation along the shoreline to increase nutrient retention.



Softstem Bulrush



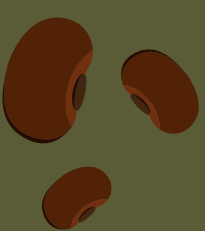
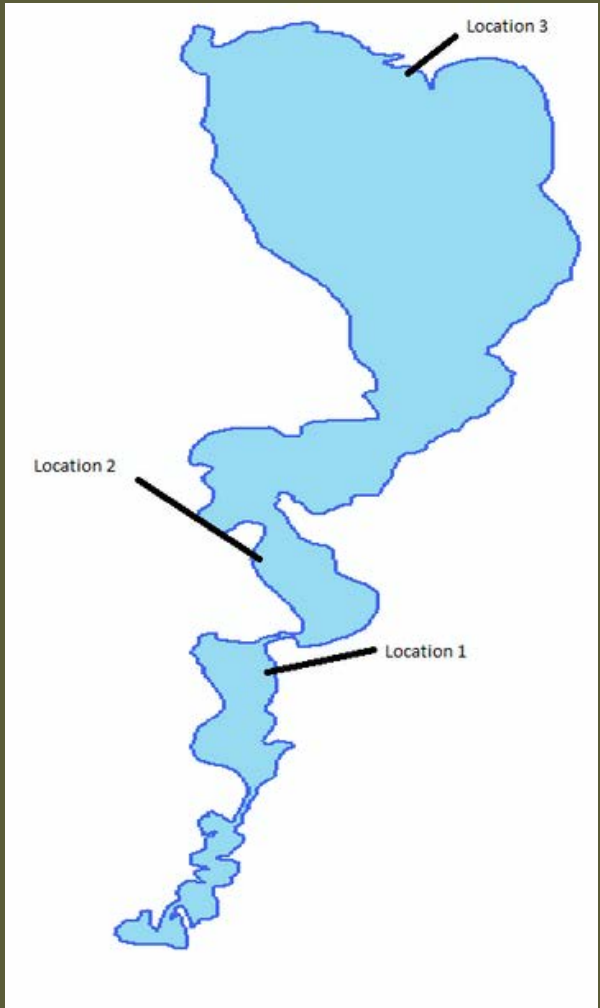
Sweet Flag



Common Spikerush



River Bulrush



Reed Mannagrass



American Sloughgrass



Giant Bur Reed

Little Rock Lake Watershed *Stream Monitoring*

Benton SWCD with the help of the MPCA and MNDNR have been monitoring Little Rock Creek, Bunker Hill Creek, and Sucker Creek since 2016 in order to evaluate the effectiveness of the best management practices (BMPs) implemented. These BMP's work towards achieving water quality goals. Analysis is with the help of the MPCA. Thank you to the MPCA and MNDNR for your continued support and resources.

Good water quality is especially important in these streams because they are draining into the Mississippi River just upstream of the St. Cloud Drinking Water Treatment Plant. The Water Treatment Plant is what provides drinking water to the City of St. Cloud and surrounding areas.



12 WATER SAMPLES

FROM LITTLE ROCK CREEK IN 2022



4 WATER SAMPLES

FROM SUCKER CREEK IN 2022



12 WATER SAMPLES

FROM BUNKER HILL CREEK IN 2022



Elk River Watershed

Grant Program Highlight

Benton SWCD has installed BMPs since 2016 in this watershed with two Clean Water Fund grants totaling \$500,000. This 613-square-mile-watershed spans across Benton and Sherburne County.

This grant will aid in reducing the frequency and severity of the algae blooms and enhance aquatic life and recreation for users of both Mayhew Lake and Big Elk Lake. Recent monitoring data shows decreasing trends in bacteria levels, phosphorus and chlorophyll- a levels.

The 2020 Big Elk and Mayhew Lakes Phosphorus Reduction Program grant of \$350,000, helped complete projects in 2020 and 2021. Another grant was awarded in late 2021 to continue this work.

2022 Highlights

- Cost-share: \$122,073
- Landowner: \$46,303
- Federal: \$17,497

2022 Projects

- 2 Erosion Control
- 1 Stream Bank Protection
- 7 Wetland Restorations
- 9 Cover Crops

2022 Reductions

- Phosphorus Reduction: 145 lbs
- Sediment Reduction: 49.7 Tons



Rye & Oats



Tile Installation



Stream Bank Stabilization

Wetland Restoration

The SWCD partnered with the U.S. Fish and Wildlife Service to complete many wetland restorations throughout Benton County during 2022. Some of the benefits wetland restorations have are Nitrogen/Phosphorus reduction, floodwater retention, groundwater replenishment, and increasing wildlife habitat.



13 Landowners



27 Wetland Basins



\$ 21,917.00 In Cost-share



Completed Wetland Restoration



Wetland Construction



Completed Wetland Restoration

Erosion Control

This landowner had eroding sections of their field and used EQIP funding to have a diversion and grassed waterway put in. The importance of these practices are to reduce sediment and nutrients from entering a nearby waterbody and to help the landowner achieve maximum crop yield.



8.5 TONS REDUCED
OF SEDIMENT/PHOSPHORUS A YEAR



\$ 5,662.00 TOTAL
COST



Eroded Field



Grassed Waterway



Diversion to Grassed Waterway

Irrigation

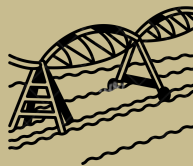
Irrigation Water Management is utilizing several tools and processes to help improve irrigation water use efficiency, minimize soil erosion, protect surface and ground water quality, and improve plant productivity and health. This is done through uniformity (catch can) tests conducted in the field with measured cups after 0.6" of an irrigation event is ran. It looks at the consistency and efficacy of the sprinkler nozzles along with the overall pivot system condition. Soil moisture sensors and an irrigation scheduling checkbook record are also used to assist the landowner in decision making with when and how much to irrigate their fields. Soil moisture sensors give an updated in field reading of the current water holding capacity of their soils. The scheduling checkbook records predict when it may be necessary to irrigate based on the soil moisture levels, rainfall amounts, and predicted weather forecast- to name a few. Benton SWCD offers the free use of the Irrigation Management Assistant (IMA tool). This can be found online at www.ima.repec.com For more information on how Benton SWCD can assist you with soil moisture sensors, a catch can test, or expanding your irrigation water management please contact Jessica at 320-968-5300 ext. 3.



Center Pivot Irrigation



6 IRRIGATION UNIFORMITY TESTS
(CATCH CANS)



5 IRRIGATION WATER
MANAGEMENT CONTRACTS



914 TOTAL ACRES OF IWM
CONTRACTS



Irrigation Catch Cans

Agriculture Best Management Practices Loan

In order to be eligible for this low interest loan the practices have to improve or protect water quality. The loans are 3% interest, have a 10 year maximum term, a maximum loan amount of \$200,000, and is only available to rural landowners in Benton County. Thanks to the Minnesota Department of Agriculture for all the funding.

Ag BMP Low Interest Loan Program

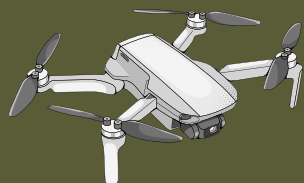
- 2018 Total \$212,490
- 2019 Total \$380,836
- 2020 Total \$269,135
- 2021 Total \$181,500
- 2022 Total \$412,585

Grand Total \$1,456,546



Items Bought with Low Interest Loan

- 11 Manure Spreaders
- 6 Conservation Equipment
- 4 Failing Septic Systems
- 4 Feedlot Improvements
- 1 Drone for Cover Crops



Eligible Practices for Low Interest Loans

- Animal Waste Storage Facilities (manure pits)
- Conservation Tillage Equipment (minimum of 30% residue)
- Manure Application Equipment (capable of immediate incorporation or application at agronomic rates)
- Septic Systems (to replace a failing system)
- Well Sealing – if it enhances water quality
- Installation of Runoff Controls to prevent fertilizers/chemicals in ground/surface water
- Installation of vegetative buffers along lakes, rivers, ditches, and wetlands

National Association of Conservation District (NACD)

Benton SWCD was awarded funding from the National Association of Conservation Districts (NACD) Technical Assistance Grant. We use these funds to plan conservation activities with farmers.

Farmers and agriculture landowners in Benton County have shown a very high interest in conservation, especially over the last several years. Benton SWCD technicians are able to conduct one-on-one consultations and planning with these landowners through this grant.

NACD Grant 2022



130 Landowners Assisted



8 Conservation Plans



3,977 Acres Benefitted



138 EQIP Contracts



\$60,000 Awarded for Grant



United States
Department of
Agriculture

Groundwater Research

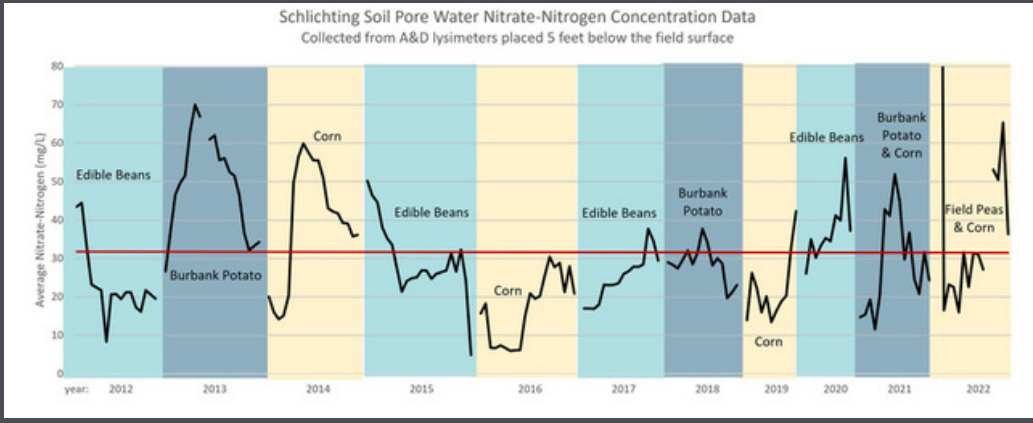
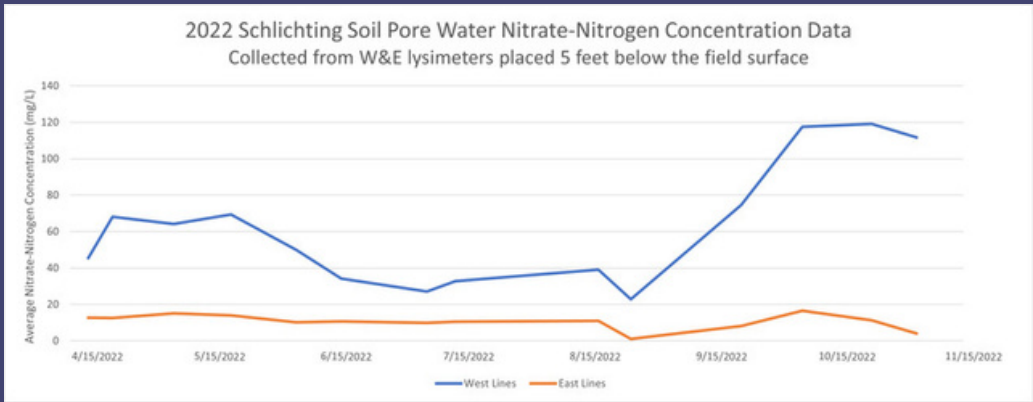
The Schlichting Farms partnered with the Minnesota Department of Agriculture (MDA) and the Benton Soil and Water Conservation District (SWCD) in 2011 for the installation of 12 Suction Lysimeters which holds water for nitrate analysis. This study looks at the amounts of nitrates found 5 feet below the soil. These nitrates can come from the nitrogen management above ground but also occur naturally within the soils. Nitrates move through the soil profile and could potentially leach into groundwater. There was an expansion in the fall of 2021 with updates and an install of new lysimeters. There is now a total of 16 lysimeters in the monitoring project. Lysimeters are placed with the tops 3 feet below the field surface and collecting water in the ceramic porous tip at 5 feet below ground. This depth is to protect the lines from farm field tillage.

Water samples are collected bi-weekly and analyzed for nitrate levels by the Benton SWCD staff. Water samples are collected during the growing season which can vary in length from year to year. Typically, it begins in April and ends around freeze up in early November. This demonstration site shows how nitrate levels may leach through the soil profile in real farm applications. It also shows how different crops, weather, and cover crops with operational management can reduce the available nitrate levels within the soil profile.



Lysimeter pump

Thank you Schlichting farms for partnering with us to do this research and make changes as necessary.



Field with lysimeters underneath



2023 GOALS

Benton SWCD will continue to make sure that assisting landowners with conservation practices is their number one priority. This includes professional advice for the BMPs for their land type(s), securing funding to assist with costs of these practices, and the installation of the projects.

We will continue to implement BMPs in the Little Rock Lake Watershed, Elk River Watershed, and Mayhew Lake to improve water quality. The Rum River Watershed will be receiving funding for BMPs to protect and restore those waters through One Watershed, One Plan. The Mississippi River – St. Cloud Watershed is at the beginning stages of creating the Comprehensive Watershed Management Plan and should be done by 2024. Increasing public input and involvement through education and outreach to protect and enhance our natural resources will continue to be a goal of Benton SWCD. Soil Health Initiatives and Cover Crop grants will be available as well.

Soil Health has been the hot topic lately and will continue to be. Having a healthy, functioning soil is important for the best environmental and economic impact. Technical assistance and cost-share, geared towards improving our soils are available in 2023 and upcoming years. Site visits and assistance will be looking at what is happening within the soils and take a holistic approach to manage soil erosion, nutrient and sediment loss, and enhance water quality. If you are interested in adoption of cover crops, transitioning to a reduced till/ no till system, or integrating livestock into your operation please stop in or call our office today. There are several best management practices that could be implemented and what is referenced is just the beginning. The best approach is a site visit, soil testing, and determining what your goals are for your fields and operation. The staff at Benton SWCD look forward to working with you to find your soil improvement path.

Thank you for your continued support of
Benton Soil and Water Conservation District.



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