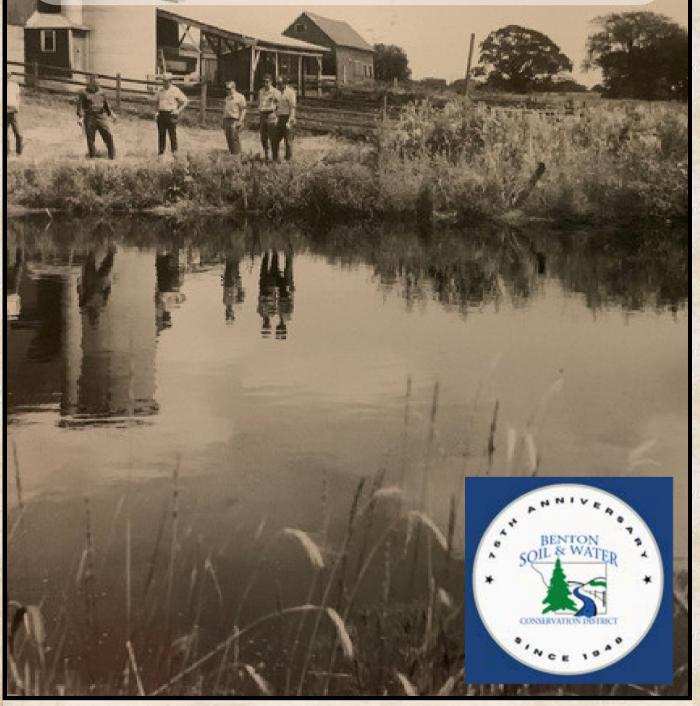
BENTON SOIL AND WATER CONSERVATION DISTRICT

Annual Report

2023



75TH ANNIVERSARY I SERVING BENTON COUNTY SINCE 1948

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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 NathanSanoski
- Admin Assistant Renee
 Thell
- 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.



Gerry Maciej:

- Administration
- Grant Writing
- Program Coordination
- Human Resources

Mike McMillin:

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

SVVCD 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

Renee Thell:

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

Emily Forbord:

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



Foley Fun Days Parade Float.



Foley Fun Days Parade - 75th Anniversary.

14 2nd Ave W Foley MN 56329

Follow Us (clickable links)



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Contact Us:



www.soilandwater.org



320-968-5300 X3







NRCS Staff





Josh Bork - District **Conservationist**



Joey LeBlanc - Civil **Engineering Tech**



Bonnie Haubenschild - USDA-NRCS Contractor General Clerk II



Cover crops.



Bentonite added to the surface of the holding pit.



Full growth oats.



Manure storage pit.

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



Manure storage stacking slab.

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, audiotape, 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



From left to right: Bernie Thole, Wade Bastian, Joe Jordan, Chuck Rau, and Mike Winkelman.

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 Schlangen, 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 2023, \$250,000 was allocated to the SWCD by Benton County to support our conservation efforts. The West Central Technical Services Area 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.

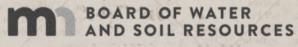




OUR PARTNER AGENCIES













United States Department of Agriculture













Wetcoming You. Wetcoming the Future













MINNESOTA POLLUTION CONTROL AGENCY

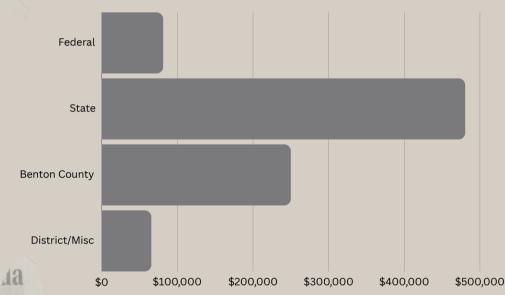


2023 Financial Summary

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.



Operational support in 2023

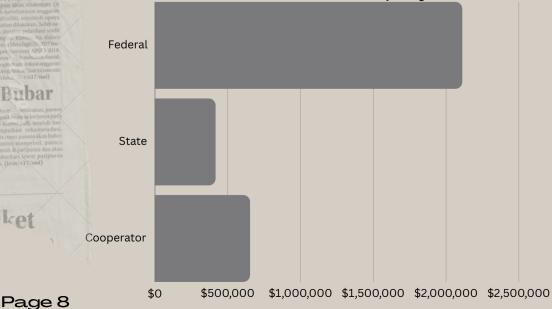


Operations include personnel salaries and benefits, supervisor expenses, computers and information technology (IT), insurance, rent, travel, tree program, environmental education programs and similar expenses.

elum Bubar

\$3,183,203

In contributions for conservation projects in 2023



Tiket

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.

2023 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.

\$3,183,203

TOTAL SPENT ON CONSERVATION PRACTICES
DURING 2023 IN BENTON COUNTY

\$2,111,475

SPENT FROM FEDERAL COST-SHARE FUNDS

\$416,502

SPENT FROM STATE COST-SHARE FUNDS

\$653,203

SPENT FROM LANDOWNER

CONTRIBUTIONS/COST-SHARE



\$2,028,000



ESTIMATING \$0.46 TO \$0.83 OF EACH GRANT DOLLAR BUYS MATERIALS AND SERVICES LOCALLY











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EDUCATION & OUTREACH





2023 Education and Outreach Highlights

- 2023 SWCD Tour Practices in-person event
- Benton SWCD's Outstanding Conservationist 2023
- Coloring, essay, and poster contests
- Farm Show at the convention center
- Women In Agriculture Meeting
- Watab Township Annual Meeting
- Foley Fun Days Parade Float
- Teaching 8th graders at Foley Middle School
- Frozen Fest St. Ben's University
- Irrigators Association of Minnesota & Upper Mississippi Irrigators Association meeting attendance
- National Corn Growers Association meeting attendance
- BWSR Training Academy
- SPARK SCSU
- We Are Water-Mississippi St. Cloud
- Scholarships for U of M Soil Management Summit
- Agriculture Field Day Kaschmitter's Farm
- Central Minnesota Watershed Alliance (CMWEA)
- Soil Health Team Meetings





Women in Agriculture



We Are Water



Tour of Practices



Benton County News

Butstanding Conservationist 2023

THE PETRON **FAMILY**

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





Nutrient management.

Jason and Michelle Petron operate two chicken barns and have 80 acres full of conservation practices. They started partnering with the SWCD in 2002 by installing a shelterbelt. Since then, they have worked with our SWCD and NRCS office to install a variety of conservation practices from a wetland restoration to pollinator plantings. They most recently put up a stacking slab to keep manure off the ground and from leaching into the soil.

Jason and his family love sitting on the porch watching the wildlife utilize their enhancements. Jason is passionate about his projects and stated, "there is no such thing as a waste of property, all of my land is either enhanced for wildlife or in other programs".



Wetland restoration.





Grant Programs and Project Highlights of 2023









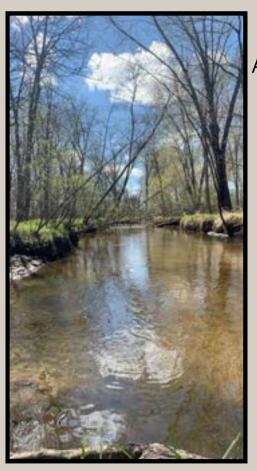
Clean Water, Land and Legacy Amendment

Clean Water Funds

The Minnesota Legislature appropriated millions of dollars from the Clean Water Fund to water resource activities from 2010-present. Clean Water Funds 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

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.

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

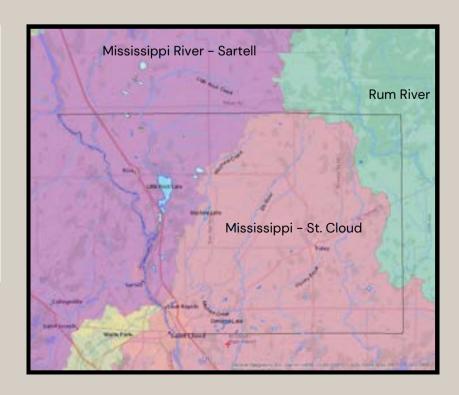






1W1P Timeline

- Rum River
 2018-2022 Plan Development
 2023 Implementation
- Mississippi St. Cloud
 2021–2024 Plan Development
- Mississippi Sartell Starting in 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.



Rum River Comprehensive Watershed Management Plan

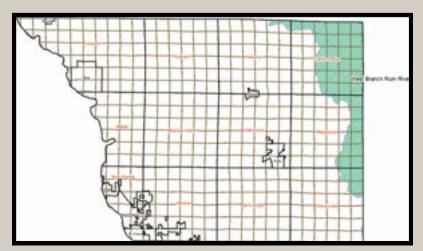
CWMP Link

The Rum River 1W1P 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 started in 2023 and will continue for the next 10 years.

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

The Level B priority goals of the CWMP to have a no net increase in discharge from each management zone, decrease the risk of nitrate contamination in groundwater and decrease the risk of groundwater contamination from septic systems. For Natural resources protection,

management and restoration, the goals are to increase upland habitat acreage quality, as well as resilience to changing precipitation patterns, and define, identify, and rank high value areas.





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 began and the
Comprehensive
Management Plan (CWMP)
will be done by 2025.





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.



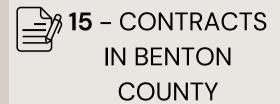




BOARD OF WATER
AND SOIL RESOURCES

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.







Covered stacking slab.



Erosion control.



Nutrient management - Feedlot.



Intake and erosion control.



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 privatelands 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.

17 CRP Contracts in Benton County in 2023

Total Active
Contracts = 20

Total Annual Payments = \$186,542

Benton County

Cost-share: \$1,998

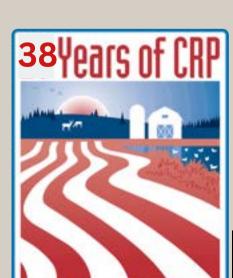
Mille Lacs County

Cost-share: \$1,039

Benton County

Total Annual Payments = \$44,229

Mille Lacs County



America's Conservation Program





3 CRP

Contracts

in Mille

Lacs

County in

2023

Pharmaceutical Waste Collection Program

Waste collected in 2023: 560 pounds

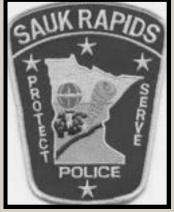
Minnesota Pollution Control Agency (MPCA) provides Benton County with funds from SCORE (Select Committee on Recycling and the Environment). Benton SWCD in partnership with Benton County Sheriff's Office, Sauk Rapids Police Department, and City of Rice Police Department started a pharmaceutical waste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

<u>2023</u>

- 8 Contracts
- 10 Wells Sealed
- \$11,907 in Costshare











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 2023, 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).

Eligibility Requirements

- Issued a Notice of Non-Compliance.
 Current system must be deemed noncompliant as imminent threat to public health or safety OR failing to protect groundwater.
- Must be a homesteaded singlefamily home with a SSTS located entirely within Benton County.

- Property must not be currently or imminently subject to repossession, forfeiture or foreclosure.
- Income limits apply and are dependent upon family size within the household. *See application.

Applications are available on our website: soilandwater.org or stop by our office to get a copy. For more information on this program call (320)–968–5300 ext. 3.

Taxes must be current.

2 SEPTIC SYSTEMS FIXED IN 2023







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 done with the help of the MCPA. 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, surrounding areas and flows to the twin cities who also get their drinking water from the Mississippi River.







Due to drought conditions this last summer, there were less water samples taken from Bunker Hill Creek and Sucker Creek. Little Rock Creek has a groundwater influence, so it keeps flowing year-round.



Bunker Hill Creek was dry August 14th, 2023.



Sucker Creek was dry July 10th, 2023.



Little Rock Creek June 26th, 2023.

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.

2023 Highlights

• Cost-share: \$144,896

Landowner: \$106,540

• Federal: \$25,171

2023 Projects

- 2 Erosion Control
- 8 Wetland Restorations
- 12 Cover Crops

2023 Reductions

- Phosphorus Reduction:
 697 lbs
- TSS Reduction: 158.7 Tons
- Soil reduction: 315.4 tons
- Nitrogen reduction: 3,411.3
 lbs







Wetland Restorations

The SWCD partnered with the U.S. Fish and Wildlife Service to complete many wetland restorations throughout Benton County during 2023. Some of the benefits of wetland restorations are nitrogen and phosphorus reduction, floodwater retention, groundwater replenishment, and increasing wildlife habitat.





11 Landowners



24 Wetland Basins



47.1 acres restored



- \$92,360 Clean Water
 Fund cost-share
- \$7,264 Federal costshare
- \$3,056 MAWQCP



Completed Wetland Restoration.



Fish barrier construction.



Wetland construction.

Soil Health

Soil health has been an up and coming initiative that Benton SWCD has been working to improve upon with landowners in the county.

The importance of Soil Health is the continued capacity of soil to function as a essential living ecosystem that sustains plants, animals and humans. Healthy soil gives us clean air and water, abundant crops and forests, productive grazing lands, and diverse wildlife.

The five principles we are working to include are: Soil Cover, Minimizing Soil Disturbance, Plant Diversity, Living Roots, and Livestock Integration.



457 ACRES

OF COVER CROPS WITH COST-SHARE.





Rainfall simulator soil samples.



Soil health assessments.



Cover crops.

Irrigation Water Management

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 us at 320-968-5300 ext. 3.



Center pivot irrigation with catch cans.

2023



7 IRRIGATION WATER MANAGEMENT CONTRACTS



914 TOTAL ACRES OF IWM CONTRACTS



Water measurement.

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
- 2023 Total \$744,250

Grand Total \$2,200,796





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 2023



180 LANDOWNERS ASSISTED



6,531 ACRES BENEFITED



13 NEW CONTRACTS



\$21,218 IN COST SHARE







2024 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 2024 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.



~ 14 2nd Ave W Foley MN 56329 ~ (320)-968-5300



www.soilandwater.org