Fillmore Soil and Water Conservation District

Annual Report



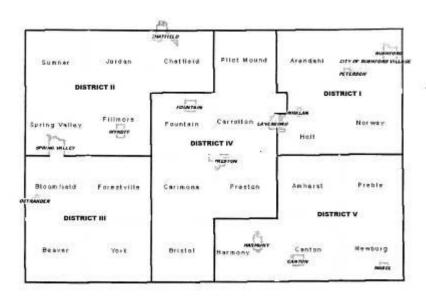
2019

Personnel Resources



Board of Supervisors

Front row: Bob Pickett, Supervisor; Kathy Tesmer, Treasurer; Travis Willford, Chair Back row: Brian Hazel, Vice Chair; Tim Gossman, Secretary



Board Meetings are held the Thursday after the second Monday of each month at 4:30 p.m. at the SWCD office.

District I – Arendahl, Rushford Village, Norway and Holt townships plus the City of Lanesboro District II – Sumner, Jordan, Spring Valley (excluding the City of Spring Valley), and Chatfield

Townships

District III – Fillmore, Bloomfield, Forestville, Beaver and York townships

District IV – Pilot Mound, Fountain, Carrolton (excluding the City of Lanesboro), Carimona, Preston, and Bristol townships

District V – Amherst, Preble, Harmony, Canton and Newburg townships

Soil and Water Conservation District Staff

Donna Rasmussen	District Administrator
Laura Christensen	District Administrator
Doug Keene	Resource Conservation Specialist
Anne Koliha	Engineering Technician
Jeanette Serfling	Administrative Assistant
Susan Wiegrefe	Administrative Assistant
Dean Thomas	Area Soil Health Technician
Caleb Fischer	Water Management Coordinator
Nikki Shaw	Water Management Coordinator
Aaren Mathison	Conservation Technician
Sara West	Nutrient Management Specialist
Willis Goll	Engineering Specialist

Natural Resources Conservation Service Staff

Jessica Bronson	District Conservationist
Keith Marie Feliciano-Cortes	Soil Conservationist
Vacant	Conservation Technician

COOPERATING AGENCIES

Basin Alliance for the Lower Mississippi in Minnesota (BALMM)

Bluff Country Hiking Club/Lost Creek Hiking Trail

Conservation Corps-Minnesota

Eagle Bluff Environmental Learning Center

Fillmore County Cities -- Canton, Chatfield, Fountain, Harmony, Lanesboro, Mabel, Ostrander,

Peterson, Preston, Rushford, Rushford Village, Spring Valley, Whalan

Fillmore County Association of Townships

Fillmore County -- Auditor/Treasurer, Board of Commissioners, Emergency Management, Feedlot

Office, GIS, Highway Department, Public Health, Recorder, Sheriff/Sentence to Serve, Solid

Waste, Zoning

Friends of the Root River

Grazing Lands Conservation Association (GLCA)

Hiawatha Valley Resource Conservation and Development (RC&D)

Land Stewardship Project (LSP)

Minnesota Association of Conservation District Employees (MACDE), SE Area 7

Minnesota Association of Soil and Water Conservation Districts (MASWCD), SE Area 7

Minnesota Board of Water and Soil Resources (BWSR)

Minnesota Department of Agriculture (MDA)

Minnesota Department of Health (MDH)

Minnesota Department of Natural Resources (DNR) - Forestry, Fisheries, Ecological and Water

Resources, Wildlife Divisions

Minnesota Forestry Association (MFA)

Minnesota Pollution Control Agency (MPCA)

National Association of Conservation Districts (NACD)

National Trout Center, Preston, MN

Root River One Watershed, One Plan LGUs

Southeast Minnesota Water Resources Board

Southeast Minnesota Wastewater Initiative

Southeast SWCD Technical Support Joint Powers Board (JPB)

The Nature Conservancy (TNC)

University of Minnesota (U of M): Extension, 4-H

Upper Iowa River Alliance

USDA Farm Service Agency (FSA)

USDA Natural Resources Conservation Service (NRCS)

INTRODUCTION

The Fillmore Soil and Water Conservation District Board of Supervisors hereby submit the Annual Report for the calendar year of January 1, 2019 through December 31, 2019.

In 1940 the first soil and water conservation district was organized in Fillmore County. The District encompassed the eastern half of the county. Two years later, in 1942, the Western District was created. A line running north/south from the town of Preston separated the two Districts. In 1962 the East and West Districts were consolidated into one district by authority of the Minnesota Soil Conservation Committee. It was the opinion of both former boards of supervisors that consolidation would offer more efficient operation.

It has been through the work of many supervisors, district employees, partners and landowners that the rich but fragile resources of Fillmore County have been protected.

The ever constant goal of the Fillmore SWCD is to conserve our natural resources.

MISSION STATEMENT

The mission of the Fillmore Soil and Water Conservation District is to promote natural resource stewardship by providing educational, technical and financial assistance.

<u>SERVICES AND PROGRAMS</u>

Technical assistance to landowners for the implementation of conservation practices Resource Conservation Specialist, Conservation Technician, and Engineering Specialist

- Assist landowners with planning and design of practices, such as grassed waterways, terraces, grade stabilization structures, ponds, windbreaks, etc.
- Assist landowners with enrolling in programs that establish permanent vegetation including Reinvest in Minnesota (RIM) and Conservation Reserve Enhancement Program (CREP) and conducts annual status reviews of easements.
- Assist landowners with complying with the rules of the Wetland Conservation Act related to filling, excavating or draining of wetlands.

Engineering Technician

- Assists livestock producers with planning and design of feedlot runoff control practices, such as freshwater diversions, filter strips, picket fences, etc.
- Assists with Buffer Law implementation and compliance.

Nutrient Management Specialist

- Assists livestock producers with developing manure management plans to meet standards for state feedlot rules including annual updates of plans, manure spreader calibrations and other information needed to complete the plans.
- Assists producers with use and evaluation of nutrient management tools (basal stalk nitrate tests, soil N tests, split N applications, etc.) through on-farm demonstration plots.

Area Soil Health Technician

• Assists producers with practices that enhance soil health--managed grazing, cover crops, no-till-including help with financial assistance for implementation using EQIP or local or state funding.

Financial assistance to landowners for implementing conservation practices

- State Cost Share Program: provides up to 75% cost share not to exceed \$6,000 for grassed waterways, terraces, grade stabilization structures, as well as well sealing (50% up to \$1000 maximum) plus other practices on the state cost share docket.
- Local Capacity Grant Cost Share for cover crops and structural conservation practices using the same cost share rates as State Cost Share.
- Low Cost Feedlot Fix Cost Share Grants: provides 50% cost share with the maximum determined by the particular grant program for non-engineered runoff control practices such as rain gutters, freshwater diversions, filter strips, fencing, etc.
- Ag Best Management Practices (BMP) Low Interest Loan Program: provides 3% loans for terms of up to 10 years for implementing water quality practices, such as ag waste systems, manure handling equipment, septic system upgrades, no till planters, well sealing and replacement, variable rate technology, and erosion control structures; loans are processed through local lenders.

Other products and services

- Trees and tree supplies: potted and bare root stock are available for sale from December to the end of February with proceeds going to support SWCD programs.
- 2019 Fillmore County Plat Books: available for sale for \$35.
- Tree planters: two planters are available to rent for \$25/half day (min.) or \$50/day.
- Gopher machine: one available for rent for \$25/half day (min.) or \$50/day.

- Bacteria testing: \$50/sample (\$20 for households with a child under age 1 or a pregnant woman).
- Map sales: GIS maps created and printed; rates are dependent on the size and complexity of the map produced plus any printing costs.
- Survey flags: available for sale at \$.10/each or \$10.00/bundle of 100.
- Conservation Building conference room rent: \$25/half day, \$50/day.
- Decorah Shale site investigation: \$20/hr in office research, \$25/hr out of office research.
- Rain barrels: \$40 for a DIY kit; 4 sold in 2019
- Nutrient Management Plans: \$0.70/acre for a new EQIP plan, \$0.50/acre for a new non-EQIP plan; \$0.35/acre for plan updates.

Partnerships

Fillmore County

- O The SWCD has delegation agreements with the county for the administration of the Wetland Conservation Act and coordination of the Local Water Management Plan. The Water Management Coordinator and Administrator are coordinating the Root River One Watershed, One Plan. The Policy Committee is made up of representatives from 13 LGUs and includes a SWCD Supervisor representing the Fillmore SWCD.
- Investigations of soil erosion complaints made to the SWCD or Zoning Office determine the
 extent of the erosion and work with the landowner/operator on how to remediate it. Follow up
 on one complaint received in 2017 which was resolved.
- The SWCD staff provides assistance to the Zoning Office with wetland determinations in the Decorah Shale Overlay District and with landowner requests related to the county's sinkhole ordinance and industrial mining ordinance. No requests received in 2018.

USDA

o SWCD technical staff provides assistance for planning, designing, and implementing practices funded through federal Farm Bill programs such as EQIP, CSP and CRP.

MN Pollution Control Agency

- Root River watershed: The SWCD has a contract with the MPCA to conduct water quality monitoring for the Watershed Pollutant Load Monitoring Network.
- Fillmore SWCD is a subcontractor with Olmsted SWCD for a Surface Water Assessment Grant to conduct water quality monitoring for Cycle 2 of Intensive Watershed Monitoring in 2018-2019.

MN Department of Agriculture

- MDA Field to Stream Partnership Monitoring Grant: administration of subcontracts and payments administered by the SWCD, and 2 staff assist with edge-of-field and in-stream monitoring, data management and watershed assessments.
- BWSR Field to Stream Partnership Phase II Implementation Grant (\$804,385) and Targeted Watershed Grant (\$493,233): Two competitive BWSR grants were awarded to implement BMPs in the FSP study watersheds while monitoring continues to evaluate the effectiveness of the BMPs for reducing sediment and nutrient runoff.

SE Technical Support Joint Powers Board (disbanded mid-year)

- o Membership dues are paid annually for engineering support for conservation projects.
- The SWCD is a subcontractor with the JPB for the Area Soil Health Technician who works in the 11-county SE Area 7 promoting soil health practices and assisting producers with implementing those practices. In October 2018, the position funding comes from a NRCS Conservation Collaboration Grant.

The SWCD and Soil Health Technician are partners with the JPB for the LCCMR SE MN Cover Crop and Soil Health Initiative to oversee cover crop demonstration plots in Area 7 which ended in 2018.

SE MN Water Resources Board and Water Resources Advisory Committee

- o The SWCD Water Management Coordinator is the staff liaison to these organizations.
- The SWCD is a sub-recipient of 319 grant funds for feedlot fixes and technical assistance.
- o The SWCD is a sub-recipient of grant funds for the Volunteer Nitrate Monitoring Network.
- o The SWCD is a sub-recipient of grant funds for 0.2 FTE of the Nutrient Management Specialist to coordinate N-BMP outreach in 3 counties funded by MDA.
- o *Disbanded in 2019

Basin Alliance for the Lower Mississippi in Minnesota

o The SWCD is an active participant in BALMM, a locally led ad hoc organization dedicated to protecting water quality in the Basin; the District Administrator served as Chair.

MASWCD State and Area organizations

Membership is maintained; Board members and staff attend Area meetings and the statewide annual meeting.

Hiawatha Valley Resource Conservation and Development (RC&D)

- Two Board members are assigned as representatives to the RC&D Council; 2018 dues were paid.
 Upper Iowa watershed
 - SWCD staff assist Iowa DNR with water quality sampling at three Upper Iowa River sites in Minnesota from April to October.

MN DNR

- Observation Well Network: staff monitor water levels every month in one well in the network
- Dye trace studies: staff assists with placing and collecting charcoal bugs in the springs and with collecting water samples that are analyzed for nitrate concentration and assist with landowner contacts for dye trace studies.
- o Spring flow monitoring was begun in Engle Spring in Camp Creek watershed.

The Nature Conservancy

- Grant funds were provided to the SWCD to purchase prairie cordgrass plugs for stabilization of a Decorah Shale outcrop along County Road 5 in Jordan Township, which used about half the funds. The site is monitored annually.
- o The remaining half of the funds helped purchase plants for the Fillmore County Office Building storm water basin rehabilitation completed in 2016. The site is maintained annually.



As of January 1, 2019, the SWCD is the recipient or sub-recipient of almost \$1.8 million in 12 Clean Water Fund grants active into 2019 with grant periods of 2-4 years ranging from 2016 to 2021. Of those funds, \$827,982 are used for Fillmore SWCD technical staff and grant administration over several years.

<u>DISTRICT PROGRAMS,</u> ACTIVITIES AND ACCOMPLISHMENTS

State Cost Share Program

In 2019, a total of \$19,376.12 in state cost share funds (FY17, FY18, FY19) were paid for:

- 1,975 feet of grassed waterways
- 3 grade stabilization structures
- 1 well sealing

The FY19 cost share grant allocation remains at \$24,289/year.

2019 Outstanding Conservationists

The 2019 Outstanding Conservationists selected by the Fillmore Soil and Water Conservation District (SWCD) was Johnson Rolling Acres of Peterson. They were honored at a luncheon at the Minnesota Association of Soil and Water Conservation District's (MASWCD) annual convention held on December 10 in Bloomington where Outstanding Conservationists from across Minnesota were recognized.

Each year, the state's SWCDs recognize individuals and organizations for outstanding accomplishments in implementing conservation practices and improving Minnesota's natural resources. The award program is conducted with support from The Farmer magazine.

Johnson Rolling Acres is a 3rd generation family farming operation which includes a large dairy operation milking around 1,200 cows with additional heifers and calves raised at other facilities and raise 4,000 head of swine finishers. The operation farms about 3,00 acres that is a rotation of corn for silage and grain and grass/alfalfa. The Johnson's drag line direct inject all manure from the dairy and hog facilities and drill in cover crops each year on the corn silage ground.

Since 2009 Johnson Rolling Acres has been an edge of field cooperator for the Root River Field to Stream Partnership (RRFSP) water quality project and served on the advisory team. They have hosted numerous RRFSP educational field days over the past 10 years at their edge of field runoff monitoring station and dairy facility. One example of a recent field day was hosting a low disturbance manure injection demonstration on their farm in the fall of 2018.

As a result of the field walkover process in the Bridge Creek Watershed, 17,850 feet of new and rehabilitated grassed waterways were installed on land they operate withing just 2 years along with installation of contour buffer strip. They continue to maintain a 6 acre CRP roadside windbreak along State Highway 43.

If keeping busy with the daily farm items members of the Johnson Rolling Acres are also involved with local groups such as Township, Planning Commission, Diary Association and Ag Partners Coop to mention a few. The Fillmore SWCD congratulates Johnson Rolling Acres on their conservation efforts.

MASWCD, with support from *The Farmer* magazine, sponsors the Outstanding Conservationist Award program. The SWCD hosts a local recognition event in January to honor the recipients.

2018 Tree Program

The District sells a variety of bare root deciduous trees and shrubs and bare root and potted conifers. 2019 sales included 11,760 bare root stock and 1,205 potted stock sold to 185 individuals, municipalities, and organizations in and around Fillmore County.



SWCD Windbreak Program

For many years, windbreaks were eligible for state cost share funding, but in 2013 windbreaks were removed from the list of eligible practices except in wind erosion counties. Fillmore County does not meet the state's requirements to be a wind erosion county. However, the SWCD Board has long recognized the importance of trees on the land, especially on the steep and rolling landscape found in most of the county, so the SWCD continues to offer cost share for windbreaks utilizing its local funds. Up to 50 percent of the cost of the trees for a farmstead windbreak designed by the SWCD staff will be paid to the landowner. Tree cost is based on current potted stock prices offered by the SWCD. Eight windbreaks were installed in 2019 totaling 8,180 feet utilizing \$4,818.50 from the SWCD cost share funds.

SWCD Summer Construction Set Aside Program

The SWCD Board established this program in 2011 to pay \$163/acre on up to 10 acres following the critical area seeding practice in the EQIP docket for use with the summer construction of waterways and other practices as recommended by the SWCD technicians. No projects utilized these funds in 2019.

Wetland Conservation Act (WCA)

There were 56 landowner contacts in 2019. Three WCA applications for boundary type (2) and no loss (1) were approved. Three potential violations were investigated. Fillmore SWCD began contracting with Wabasha SWCD in 2018 for shared WCA services. Monthly meetings were held with the Wabasha SWCD Ecological Technician either in person or by phone, and also with TEP members when needed. A meeting to review county road and bridge projects was held in December with DNR and County Highway Department staff.

Feedlot Water Quality Management

No projects were funded utilizing 319 grant funds from the SE MN Water Resources Board/Goodhue SWCD. Funding is available for projects into 2020.

Nutrient Management

The Nutrient Management Specialist serves within the Root River Watershed as well as other areas in SE MN on a per requested basis. Roughly 0.8 FTE of this position is funded through Root River 1W1P Watershed-Based grant. A small fee is charged per acre for the new or updated nutrient management plans, and the funds are used for other program-related activities.

Funding for the other 0.2 FTE for this position comes from MDA through a Joint Powers Agreement between the SE MN Water Resources Board and MDA for Nitrogen BMP Outreach to set up on-farm N comparison plots. Four plots were set up and monitored in 2019 plus four Advanced Plots monitored by U of M Extension. Soil nitrogen samples, plant population counts, pre-side-dress nitrogen testing, basal stalk nitrate samples, whole plant samples and SPAD readings along with yields provide the data from the plots.

In 2019 the Nutrient Management Specialist attended the Nitrogen Smart Training in Rochester, MN as well as the Nutrient Management Training in Oronoco, MN. She also helped host the Manure Management Training at Winona Technical College educating 22 attendees. She sent out two bulk mailings to all registered feedlots over 300 animal units totaling over 300 landowners in Mower, Houston, Winona, and Fillmore Counties. By year's end, 28 Manure Management Plans covering over 17,000 acres were completed.

Soil Health

In 2019 the Area Soil Health Technician completed seven cover crop plans, eight grazing management plans, and 17 contract status reviews. He partook in two workshops and made 79 visits to producers. This work was done in Dodge, Fillmore, Freeborn Goodhue, Houston, Mower, Olmsted, Wabasha, and Winona counties. The Area Soil Health Technician helped deliver the Tech Note 31 training held in March in Oronoco, Marshal, Detroit Lakes, and Waite Park. There were approximately 180 participants (SWCD, NRCS and various other partners staff) in this event. He also helped coordinate the NEDS course which was held for two weeks in June. Approximately 210 conservation staff



participated in this event which was held in the Blooming Prairie, Marshall, Mora, and Detroit Lakes areas. The Area Soil Health Technician also helped hold a week long Grazing School in July in which 42 conservation staff participated. Lastly, he helped put on a Cover Crop Training in Morris in which 38 people participated.

In October 2018, a NRCS Conservation Collaboration Grant began funding approximately 85% of the position for support to NRCS with soil health activities. The remaining 15% of the position is funded from the BWSR Root River Watershed-Based grant, BWSR Drinking Water Protection in SE MN grant, and also from funds from the SE MN Technical Support JPB for soil health assistance on local and state programs with each of the 11 southeast Minnesota SWCDs that are members of the JPB.

Root River One Watershed, One Plan Pilot Project

The Root River watershed was selected on June 25, 2014, as one of five projects around the state for BWSR's One Watershed, One Plan Pilot Program. The Policy Committee gave final approval of the plan on December 19, 2016, after approval by the MN Board of Water and Soil Resources. All 13 LGUs represented on the Policy Committee approved the Joint Powers Agreement for governance during implementation of the plan. A BWSR Watershed-based Grant (\$851,301) was received in May 2018, and activities began using the work plan and budget developed by the Planning Work Group after meeting with the Advisory Committee which was then approved by the Policy Committee. The Winona SWCD is the fiscal agent for the grant, and the Fillmore SWCD is the day-to-day contact.

Fillmore SWCD staff completed three grassed waterways and seven grade stabilizations utilizing Root River One Watershed One Plan Implementation dollars piggybacked with RCPP funds. A civic engagement plan was completed with partnership of the University of Minnesota Extension. A contract was established with St. Mary's University for GIS assistance to complete PTMApp, a tool which aims to help prioritize conservation efforts.

MPCA Watershed Pollutant Load Monitoring Network

A contract with MPCA provides funding for staff to monitor five sites on the main stem and the major tributaries of the Root River to obtain spatial and long-term pollutant loading information. The contract deliverables include collecting 23 grab samples (plus 2 duplicates) per year at each site during runoff and base flow conditions for a total of about 125 samples per year. Samples are analyzed for Nitrate + Nitrite-Total Nitrogen, Total Phosphorus, Dissolved Orthophosphate Phosphorus and Total Suspended Solids. Staff also calculated annual loads using the FLUX32 model and managed photo files. In field measurements are now recorded using the Canvas program on a mobile device.

MDA "Field to Stream Partnership"

The MDA Field to Stream Partnership project began in 2010. Three edge-of-field monitoring sites are established in Fillmore County, and a fourth is in Mower County. The sites in Fillmore County are located in Crystal Creek watershed southwest of Preston and in Bridge Creek watershed near Bratsberg. The monitoring stations have automated samplers which collect runoff from fields where detailed information has been collected about management of the fields draining to the station. Samples are analyzed for total suspended solids (TSS), turbidity, total phosphorus (TP), phosphate (PO4), pesticides, and nitrate-nitrogen. An in-stream monitoring station is located downstream from each of the fields with edge-of-field sites. Grab samples are also collected at the in-stream sites. In-field observations are recorded at all sites. Equipment and site maintenance are major tasks for the water monitoring staff. 2019 marked the tenth year for collecting water quality data. As BMPs are implemented, changes in water quality are being monitored.

Crystal Creek watershed has many sinkholes and springs, so dye trace studies have been conducted there to better understand the interaction between surface water and ground water. Nitrate samples are collected and analyzed from the springs. Lysimeters have also been installed to evaluate nitrate movement below the root zone. Spring monitoring equipment is installed at Engle Spring in neighboring Willow Creek in cooperation with DNR and MPCA. Staff assisted with contacting landowners, setting up the equipment and recording data.

A new contract agreement between Fillmore SWCD and MDA began on August 1, 2019. The funds continue to be used to administer the subcontract with Mower SWCD and Fillmore SWCD to collect samples, maintain equipment and manage the data.

An application for \$804,395 in a Clean Water Fund Grant was approved in December 2015. A Targeted Watershed Grant application for \$493,233 was approved by BWSR in March 2016 for additional BMP implementation in the Headwaters plus rehabilitation of the E-3 flood control structure in Crystal Creek.

In 2019, four grassed waterways were installed totaling approximately 5,400 feet. Two of these water ways are located in Bridge Creek, one in Crystal Creek and one in Headwaters. Three contour buffer strips were implemented; two in Headwaters and one in Bridge Creek. One structure repair was completed in Crystal Creek and one feedlot roof structure was installed in Bridge Creek.

Rain Gardens

Maintenance is still needed on the two water retention basins at the Fillmore County Office Building in Preston which were renovated in November 2016 as rain gardens to provide more function and beauty to the neighborhood and less maintenance for County staff. Due to the very wet conditions throughout 2018, little work could be completed. The Harmony Gardens rain garden is also in need of maintenance. Initial discussions with city staff are underway to decide the best plan of action with the site changes that have occurred. The 2019 Prairie Walk is tentatively planned for this location.

Ag BMP Loan Program

The SWCD administers the Ag BMP Loan Program which is funded by the MDA. Loans are available to farmers, rural landowners and farm supply businesses for loans to restore or protect water quality, whether on a farm, a rural home site, or in an unsewered community. Eligible practices include: feedlot improvements, manure storage basins and spreading equipment; no till equipment; terraces, waterways, sediment basins or other soil conservation practices; septic system upgrades; Variable Rate Technology (VRT); well relocation and sealing; secondary fuel containment; or other projects that improve water quality. In 2019, 26 loan applications were approved for \$825,666; 17 were completed for \$635,241. Those included four manure equipment, one feedlot fix, six septic systems, four no till equipment, and two well replacements.

Buffer Grant

Stream buffers are an effective practice for protecting water quality, especially when combined with other upland practices. The 2015/2016 buffer law requires perennial vegetation buffers of an average width of 50 feet (minimum of 30 feet) along DNR public waters to help filter phosphorus, nitrogen, and sediment.

The law appropriated Clean Water Fund (CWF) funds to the Board of Water and Soil Resources (BWSR) for grants to local units of government to assist landowners with compliance with riparian buffer or alternative practice requirements. The funds were used by Fillmore SWCD to provide technical assistance to landowners to identify where buffers may be needed along public waters in Fillmore County and to assist with requests for installing the buffers. Financial assistance information was also provided to landowners for those who wish to enroll eligible acres into the Conservation Reserve Program (CRP) or other programs. BWSR cost share funds were available, but no requests were received for funding so funding was returned to BWSR in 2018. Advice regarding appropriate seeding mixes, maintenance and other technical assistance is being provided as needed.

In 2019, staff conducted status reviews as outlined in the Monitoring Plan. Staff continued to update the in-house database and BuffCAT as needed with notes and compliance status. A news article was published in the annual SWCD newspaper insert. There was correspondence with DNR Fisheries on specific parcels and follow up on concerns from citizens. Staff continues to work with the county on non-compliance parcels as necessary.

Minnesota Ag Water Quality Certification Program

The Minnesota Agricultural Water Quality Certification Program (MAWQCP) is a voluntary opportunity for farmers and agricultural landowners to take the lead in implementing conservation practices that protect our water. Those who implement and maintain approved farm management practices will be certified and in turn obtain regulatory certainty for a period of ten years.

Through this program, certified producers receive:

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

Through this program, the public receives:

Assurance that certified producers are using conservation practices to protect Minnesota's lakes, rivers and streams

The Minnesota Department of Agriculture (MDA) transferred to the Board of Water and Soil Resources (BWSR) Clean Water Fund (CWF) funds appropriated to the agency to implement the Minnesota Agricultural Water Quality Certification Program statewide. Fillmore SWCD staff applied for funds to promote the program. The program was promoted in the annual SWCD newspaper insert. District staff worked with certified MDA MAWQCP staff to gather producer information.

Bacteria Testing

In May 2009, the SWCD became a certified lab to test drinking water for total coliform and E. coli and to test surface water for E. coli. The equipment was purchased with flood relief grant funds from Fillmore County Public Health to assist well owners who have had their wells flooded. The lab also offers nitrate screening at no charge to the client using MDA nitrate testing equipment. These are not certified lab results. Two staff are trained to analyze samples. An internal audit and external audit were completed for the lab in 2019. All findings from the external audit were addressed and approved and entered into ELDO along with updates to manuals and forms. There were 112 private well samples analyzed for bacteria in 2019, of which 47 had Total Coliform bacteria present, and three of those had E. coli present.

Education and Promotion Projects

Scholarships: The Fillmore Soil and Water Conservation District sponsors a \$500.00 scholarship for a graduating Fillmore County high school student pursuing a degree in Natural Resources, Agriculture or related field. Madilyn Smith from Fillmore Central High School is the 2019 High School Scholarship recipient. The District also offers a \$500.00 scholarship for Fillmore County college students who will be returning to school in the fall. To be eligible, students must be a returning college sophomore, junior or senior, pursuing a degree in Natural Resources, Agriculture, or a related field, enrolled in classes for fall, and not a prior scholarship recipient. Taylor Ruen was the 2019 Returning College Student Scholarship recipient.

Forestry Field Day: Summer interns hired in 2010-2019 have helped organize landowner field days in July utilizing lists of landowners in three counties from the MN Forest Resources Council. Approximately 60 people attended the field day in 2019 held July 24th at Bailey Brothers outside of Chatfield. The theme was "Create your Forest. Create your Legacy.". The presenters took the group for an interpretive walk through the Bailey Brothers woods. The MN Forestry Association, the American Tree Farm Association and Highpoint Realty were co-sponsors.

<u>Prairie Walk:</u> The annual Prairie Walk was held in August at the Tim and Susan Gossman farm west of Chatfield. Approximately 30 people were in attendance. The main topic was how to collect native seed along with information about identifying native plants and programs to assist landowners with establishing native plantings.

6th Grade Field Day: The 2019 6th Grade Field Day was held at Forestville State Park on September 18th. About 120 students attended from two schools.

Decorah Shale Protection Project: The SWCD was contacted by a landowner whose property has a Decorah Shale outcrop along County Road 5 southwest of Chatfield. The sidehill had been slumping into the road ditch ever since the road was widened in the 1970s. Each time the County Highway Department would clean out the ditch, the area would slump again requiring the landowner to repair the fence several times. In an effort to break this cycle, the SWCD and landowner came up with a plan with the Highway Department and The Nature Conservancy to document the use of deep-rooted prairie cordgrass to stabilize the hillside. Prairie cordgrass does extremely well on wet sites that can be seasonally dry just as Decorah Shale seeps can be. The landowners fenced the cattle out of the area and paid for half the cost of prairie cordgrass plugs (~\$800) that were planted in the spring of 2015. The Nature Conservancy provided the other half of the funding for the grass plugs. The landowners have also been taking pictures of the site on a regular basis to document any changes. The Highway Dept. is refraining from cleaning out the ditch until after the grasses get established (unless a safety issue arises). The area was also seeded with other native grasses using seed collected locally by the landowners and the SWCD Board member. The SWCD has measured elevations in 2014, 2015, 2016 and 2017 and will do so periodically for further documentation of any movement of the hillside. Staff took measurements in 2019 to record any further slumping of hillside and noted there is still slight movement occurring. County Highway Department contacted the landowner and decided to re-slope the hillside, removing a portion of the hillside. With this action, no further measurements will be taken.

<u>Farm Safety Day Camp</u>: One staff person assisted with Extension's Farm Safety Day Camp in May which is attended by approximately 600 fifth-grade students from two counties.

<u>Area and State Envirothon:</u> A staff member from the SWCD assisted with planning and staffing the 2019 Area Envirothon, which was held in May.

<u>Fillmore County Fair Display:</u> The SWCD booth at the 2019 Fillmore County Fair in July featured a stream table to demonstrate how streams behave under various conditions, and it was a great attraction for the kids. Other kids' activities were offered about soil erosion and groundwater, all of which were presented by the District apprentice. The SWCD purchased air time on the local radio station during the fair to promote current SWCD programs.

Nitrate Clinics:

Three nitrate clinics were held in 2019 at Preston Equipment, the National Trout Center, and at the Simple Living Farmers' Market in Mabel. Samples are analyzed using MDA equipment.

"Conservation Chronicles" Newsletter: On February 10, 2019, the Conservation Chronicles newsletter was published in the *Fillmore County Journal* a free newspaper that goes to over 16,000 residences in Fillmore County and surrounding counties. The *Journal* sold advertising to offset the cost of the insert. Many positive comments were received about this publication.

Due to increasing printing and postage costs, the summer and winter newsletters are now posted on the SWCD website. An email notice of the posting is sent to those landowners providing their e-mail addresses (~100). Information about programs, upcoming events, tree sales, and other topics are submitted by the staff from SWCD and NRCS as well as other agencies when needed. In 2019, one online newsletter was completed in the summer.

Community and School Presentations and Education: Activities in 2019 included:

- Events: National Trout Center Water Quality Day in February (nitrate testing), County Fair in July (kids' activities for three days), 6th Grade Conservation Day Sept. 18 attended by 120 students, Kingsland Fish and Waters Class in October (2 presentations), Prairie Walk August 28 (30 participants), Lanesboro Vo-Ag classes in the Spring. Outreach to Vo-Ag teachers to encourage Envirothon participation; assisted with the Area Envirothon.
- Newspaper and radio ads for Beef, Dairy and Pork Months, Fair activities, Forestry Field Day, and Prairie Walk.

<u>Conservation Intern</u>: The District hired an intern in 2019. He helped with water quality monitoring activities, the forestry field day, data management, the Fillmore County Integrated Roadside Management project, and other tasks.

<u>Lost Creek Hiking Trail Forestry Education:</u> No activities in 2019.

Fillmore County Integrated Roadside Management Project: In 2019, the Fillmore County Highway Department and Fillmore Soil and Water Conservation District (SWCD) worked together to continue implementing the no spray policy to reduce the costs of noxious weed spraying in the roadside ditches of Fillmore County highways and to offer landowners/renters who own land along county highways an alternative to spraying. For those who complete a "No Spray" request form and submit it to the Fillmore County Highway Department, the County will not spray that section of county road, and the landowners/renters agree to control and/or remove the noxious weeds and brush within the "No Spray Zone" signs. This is an annual contract that needs to be renewed each year. In 2019, the option to sign a longer term agreement was implemented. The Fillmore County Highway Department has signs available for purchase at their office. It is the property owner's responsibility to install and maintain the signs at the proper location.

Another aspect of the project is to evaluate the effectiveness of alternative control methods for wild parsnip in small areas. Demonstration plots were set up north of Preston along County Road 17 in November with assistance from Extension staff. Two alternative control methods are being tested: interseeding of native plants to outcompete wild parsnip and use of corn gluten to prohibit germination of wild parsnip seed. A frost seeding was completed in November with the seed mix donated by Prairie Moon Nursery. Corn gluten application will be done in spring 2019.

Observation Well Network

The SWCD measures water levels in a well near Chatfield as part of the DNR's Observation Well Network. The water level is measured once a month from June to December plus two more times during the three-month period of March to May. No readings are taken in January or February.

Precipitation Monitoring Program

The District has 11 precipitation monitoring volunteers, two who have been monitoring rainfall for 40 years, one for 27 years, and four for more than ten years. Participants forward their rainfall information to the SWCD office which is recorded and sent on to the State Climatology Office in St. Paul. Volunteers who are celebrating anniversaries of five-year increments are recognized at the Annual Recognition Dinner in January.

BWSR Local Capacity Grant

In 2015, the state legislature appropriated \$22 million of Clean Water Funds for the FY2016-2017 biennium for Local Capacity Grants to all the SWCDs in Minnesota. Another allocation was made for 2018-2019. FY16 funds were used for education and outreach expenses in 2018. FY17 funds were used for structural practice implementation (two grade stabilization structures and one 2110' grassed waterway) and technical/engineering assistance for implementation of those and other practices. A policy was developed for use of FY18 funds for three-year cover crop contracts; two contracts were approved and paid for 52 acres in their second year of implementation. Funds remain for additional practices. FY18 funds were also used for education/outreach expenses (see above) as well as for technical/engineering assistance. FY19 funds were distributed between technology expenditures (\$4,000), technical assistance (\$56,000) and cost-share projects (\$40,000). Cost-share projects funded in 2019 included 2 grassed waterways, 4 grade stabilizations, 2 cover crop projects (52 acres).

District Website (www.fillmoreswcd.org) and Facebook Page

The district's first website was created in July, 1999. A new site was created in 2007, then revamped in 2010. It receives regular updates with information regarding our services and programs, tree ordering, and current events as well as information about our supervisors and staff. Board meeting agendas and minutes are added monthly. All reports required to be posted by BWSR are on the website.

A Facebook page was set up for the SWCD in 2015. The Administrative Assistant maintains the page and posts new information.