

Fillmore
Soil and Water
Conservation District

Annual Report



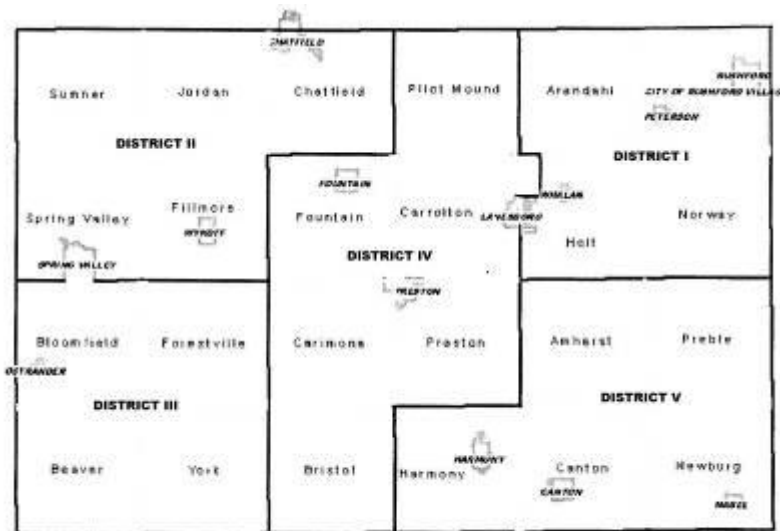
2017

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
Rick Grooters	Resource Conservation Technician
Doug Keene	Resource Conservation Technician
Anne Koliha	Engineering Technician
Jeanette Serfling	Administrative Assistant
Dean Thomas	Area Soil Health Technician
Caleb Fischer	Water Management Coordinator
Aaren Mathison	Conservation Technician
John Boyum	Nutrient Management 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
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 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 Extension (U of M), 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, 2017 through December 31, 2017.

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.

SERVICES AND PROGRAMS

Technical assistance to landowners for the implementation of conservation practices

Three Conservation Technicians

- Assist landowners with planning and design of practices, such as grassed waterways, terraces, grade stabilization structures, ponds, windbreaks, etc.
- Assists 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.
- Assists landowners with complying with the rules of the Wetland Conservation Act related to filling, excavating or draining of wetlands.

Engineering Technician/Conservation Planning Specialist

- Assists livestock producers with planning and design of feedlot runoff control practices, such as freshwater diversions, filter strips, picket fences, etc.
- Assists with implementing conservation practices identified in producers' USDA Conservation Plans to ensure that soil productivity is maintained, eligibility for the farm program is maintained, and landowners and operators are in compliance with the county and state soil erosion laws.

Nutrient Management Specialist

- Assists livestock producers with developing nutrient management plans to meet standards for NRCS and 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.

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.
- 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.
- Local Capacity Grant Cost Share for cover crops and structural conservation practices.

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.
- 2016 and 2017 Fillmore County Plat Books: available for sale for \$25 and \$35 respectively.
- 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: \$25/sample (\$10 for households with a child under 1 year or 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: \$30 for kit; \$50 for assembled rain barrel; 3 sold in 2017
- 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

- 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 SWCD Supervisor Brian Hazel representing the Fillmore SWCD.
- The Conservation Technicians investigate soil erosion complaints made to the SWCD or Zoning Office to determine the extent of the erosion and work with the landowner/operator on how to remediate it. Four complaints were received in 2017 and all were 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.

USDA

- 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.

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.
- MDA 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

- Membership dues are paid annually for engineering support for conservation projects.
- The SWCD is a subcontractor with the JPB for a Clean Water Fund grant for a 0.6 FTE Nutrient Management Specialist position which serves five southeastern counties and another 0.4 FTE for that staff person to coordinate N-BMP outreach in 3 counties funded by MDA.
- 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.
- 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.

SE MN Water Resources Board and Water Resources Advisory Committee

- 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.
- The SWCD is a sub-recipient of grant funds for the Volunteer Nitrate Monitoring Network.

Basin Alliance for the Lower Mississippi in Minnesota

- The SWCD is an active participant in BALMM, a locally led ad hoc organization dedicated to protecting water quality in the Basin; the Administrator serves 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; 2017 dues were paid.

Upper Iowa watershed

- SWCD staff assist Iowa DNR with water quality sampling at three sites 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.

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.
- 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.



The SWCD is the recipient or sub-recipient of \$3,666,215 in 14 Clean Water Fund grants active in 2017 with grant periods of 2-4 years ranging from 2014 to 2020. Of those funds, \$1,203,999, are used for Fillmore SWCD technical staff and grant administration over several years.

DISTRICT PROGRAMS, ACTIVITIES AND ACCOMPLISHMENTS

State Cost Share Program

In 2017, a total of \$13,950 in state cost share funds (FY16 & FY17) were paid out to install:

- 4,870 feet of grassed waterways
- 700 feet of terraces with 895 feet of tile
- 2 acres of critical area seeding

The FY16/17 cost share grant allocation was \$24,289/year and remains the same for FY18/19.

2017 Outstanding Conservationists

Brothers Kevin and Kris Borgen were selected as the 2017 Fillmore County Outstanding Conservationists. They were honored at the Minnesota Association of Soil and Water Conservation District's (MASWCD) Annual Convention held in Bloomington where Outstanding Conservationists from across Minnesota are recognized.



Their diversified 558-acre farming operation consists of 378 acres of cropland used for alfalfa, corn, and soybeans. An additional 180 acres is utilized as pasture for their dairy and beef herds. All the farmland that the Borgens operate has well maintained grassed waterways, contour hay strips, and ponds. They have no-tilled since 1998 on all acres that don't receive manure in the spring. They plant cover crops on about 30 acres per year following corn silage using triticale, sudan grass, and winter rye. Soil sampling is completed every three to four years by their local co-op.

Keeping the Borgens busy on a daily basis is their 80-cow dairy herd along with 40 beef cows. Feedlot improvements for open lots have been implemented to catch solids and treat runoff. For their own benefit, they work with the SWCD on updating their manure management plan annually. Economic benefits result from following their plan and not buying as much commercial fertilizer. Environmental benefits result from not applying more than the crop needs, thereby reducing leaching and runoff of nutrients. The Borgens have participated in studies to learn more about nitrogen management and have used that information to improve their own operation while sharing that information with others. Participating in a study with the Minnesota Department of Agriculture (MDA) and the University of Minnesota on nitrogen credits from alfalfa, they use no additional nitrogen the first year and credit half of the nitrogen in the second year. Through these studies and keeping their manure management plan updated, they have been able to transition to using slow-release nitrogen and doing a split application of nitrogen on their fields.

They recognize the value in utilizing their marginal land for wildlife habitat, such as along the creek and on their steeper land that has been enrolled into the Conservation Reserve Program (CRP). Through

participation in the Conservation Stewardship program (CSP), they have planted small areas of cropland to pollinator habitat and leave standing crops for wildlife habitat and food through the winter. DNR Fisheries has an easement on Trout Run Creek which runs through the Borgen property. DNR Fisheries and Trout Unlimited have completed trout habitat improvement projects on the creek. While some of the practices that were completed with assistance from the SWCD, Kris and Kevin both recognize the benefits their operation has gained by researching and utilizing new ideas on their own.

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.

2016 Tree Program

The District sells a variety of bare root deciduous trees and shrubs and bare root and potted conifers. 2017 sales included 10,490 bare root stock and 908 potted stock sold to over 190 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. Three windbreaks were installed in 2017 utilizing 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 Conservation Technicians. There was one project for 1.3 acres that used the summer construction set aside funds in 2017.

Wetland Conservation Act (WCA)

There were 45 landowner contacts in 2017, three WCA applications, and one exemption approved. Three potential violations were investigated. Four meetings were held with Wabasha SWCD and Winona SWCD, Winona County and the city of Winona about a WCA shared staff position. Wabasha and Fillmore SWCDs signed an agreement for a shared position to begin January 1, 2018.

Feedlot Water Quality Management

Three projects were funded utilizing 319 grant funds from the SE MN Water Resources Board.

Nutrient Management

The Nutrient Management Specialist works in five counties, and 0.6 FTE is funded by a FY2015 Clean Water Fund grant awarded to the SE SWCD Technical Support Joint Powers Board. Fees charged for

the nutrient management plans help to meet match requirements for the Clean Water Fund grant. Funding for the other 0.4 FTE for that position comes from MDA through a Joint Powers Agreement between the SE SWCD JPB and MDA for N BMP Outreach to set up on-farm N comparison plots.

The Nutrient Management Specialist completed and payments were received for 40 Manure Management Plans covering 28,857 acres including two plan updates completed for EQIP contracts which were very time-consuming. He provided planning assistance to an additional 11 producers. He worked with one producer to complete a spreader calibration. He assisted one producer with completing his MPCA Annual Report. He attended the U of M Extension Winter Crop meeting, the Vita Terra Cover Crop meeting in Lanesboro, U of M Extension Cover Crop meeting in St. Charles, and met with MDA regarding the Field to Stream Partnership project. He assisted with completing the 2016 annual grant report in January. He attended the NRCS Soil Health Field Day training in June along with completing the required webinars, the Land Stewardship Project Soil Health Field Day in July, the weeklong NRCS Conservation Planning Course and associated webinars and AgLearn modules in August, the MN Forage Association field day in August, the Black Earth Fertilizer Meeting in August, and the Iowa State University Integrated Crop Management Conference in Ames, Iowa, in November.



Soil Health

2017 Activities:

- The Area Soil Health Technician completed Grassland CRP contracts in three counties: (5 in Fillmore, 1 in Olmsted, 5 in Wabasha)
- He assisted with SWCD program cover crop contracts (6 in Freeborn, 9 in Wabasha, 8 in Fillmore).
- He coordinated LCCMR cover crop demonstration sites (16 sites in 7 counties totaling 1049 acres) for planting, practice checkout and payment. He attended meetings and teleconferences re: project updates, soil sampling and reviewing soil tests with the farmers. He provided information to BWSR for the grant reports.
- He assisted with four Root River Field to Stream cover crop contracts.
- EQIP grazing plan contract implementation and practice checks were completed: (5 in Fillmore, 3 in Freeborn, 2 in Goodhue, 5 in Wabasha, 2 in Winona).
- EQIP cover crop contract implementation and practice checks were completed: (4 contracts in Fillmore and 411 acres total checked, 1 in Dodge, 11 in Mower and 4726 acres checked, 2 in Olmsted, Wabasha 1734 acres checked, 1 in Winona). No new FY17 cover crop contracts were approved out of the 42 applications prepared for about 4800 acres in Fillmore, Olmsted, Winona, Mower, Freeborn, Goodhue and Wabasha counties. Over 10,000 acres of cover crops were checked for existing EQIP contracts.
- He provided assistance with CSP: 5 producers with five cover crop seeding plans in Wabasha and 2 grazing plans in Winona.
- He attended 4 meetings with soil health teams in Fillmore, Mower and Freeborn counties and assisted the Fillmore team with updating their brochure.
- He participated in monthly teleconferences with the NRCS State Soil Health Team.
- He participated in monthly teleconferences with the NRCS Grazing Specialists.
- He participated in four GLCA teleconferences.

- He did 19 presentations at workshops, field days, etc. including:
 - Field Days
 - Fillmore Soil Health Field Day, March 30
 - Goodhue Field Day, June 13
 - LCCMR field days (2), April and May
 - Freeborn County, August 9
 - Cow Calf Days, Oronoco, January
 - Midwest Forage Association, February
 - Cover crop meetings in Lanesboro, Zumbrota, Area 6 MASWCD, Master Gardeners-Red Wing, and Plowville
 - Rain simulator presentations with Dan Nath (NRCS Soil Scientist)
 - Fillmore cover crop field day,
 - Wabasha Dairy Night on the Farm,
 - Fillmore 75th anniversary,
 - Sustainable Farming Association (2),
 - Freeborn County cover crop field day,
 - Area 6 soil health training,
 - Dodge County field day, and
 - FFA soils competition practice day in Lanesboro
 - Envirothon
 - Grazing School in Grand Rapids, September 8 and 9
- He serves as a member of Area Training Team and helped organize and present the Area Soil Health Training on June 19, 2017. He has also been working with individual staff in several counties on cover crop training.
- Six issues of the Grazing Gazette were published and distributed to over 1300 recipients. He arranges sponsorship for each issue to cover postage costs.
- He assisted with U of M cover crop/tillage transect survey in Fillmore County.
- He conducted fall site visits with the U of M beef team.
- He assisted NRCS with installing 5 temperature dataloggers to measure soil temperature in cover crop fields, downloaded data and created data tables.
- He completed the NRCS Conservation Planning Course and all online prerequisites.

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. In anticipation of watershed-based funding, a work plan and budget were developed by the Planning Work Group after meeting with the Advisory Committee. A summary of the plan was also developed for use with the general public. In December 2017, BWSR approved \$851,301 for implementation of the Root River 1W1P. The work plan and budget were approved by the Policy Committee in January 2018, and by BWSR in March 2018. The Winona SWCD is the fiscal agent for the grant, and the Fillmore SWCD is the day-to-day contact.

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 is 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 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. 2017 marked the eighth year for collecting water quality data. As BMPs are implemented, changes in water quality will be 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.

An amendment to the agreement with MDA continues funding for the monitoring project to June 30, 2019. The funds continue to be used to administer the subcontract with Mower SWCD and 0.7 FTE in the Fillmore SWCD to collect samples, maintain equipment and manage the data.

FY18 is the last year for special EQIP funding available through the Mississippi River Basin Initiative (MRBI) from USDA-NRCS. The Lower South Fork of the Root (which includes Bridge Creek) and Willow Creek (which includes Crystal Creek) are among five sub-watersheds in Minnesota that were awarded funding for FY15 to FY18. The headwaters watershed in Mower County was also approved for MRBI funding in late 2015. A Clean Water Fund grant application was submitted to BWSR to leverage the federal MRBI-EQIP funds. The application for \$804,395 was approved for funding in December 2015. A Targeted Watershed Grant application for \$493,233 was approved by BWSR in March 2016 for additional BMP implementation particularly in the Headwaters where the walkovers were completed in the spring of 2016.

Several practices were installed in 2017 utilizing \$299,033 in project dollars from BWSR Clean Water Fund grants. Fillmore, Mower and Root River SWCD technicians completed 4 grassed waterway projects totaling 14,956 feet, four grade stabilization structures, one ag waste system and one roof structure, two milkhouse waste systems, 2.5 acres of critical area planting. They worked with three cooperators on seeding cover crops on 75 acres. Almost 20,000 cubic yards of sediment were removed



from the E-3 flood control structure in Crystal Creek watersheds (see photo at left with the landowners). Technicians are continuing to communicate with additional cooperators regarding potential projects. In the Headwaters, the Mower SWCD technician completed two waterway projects totaling 3911 feet. Planning was completed for three waterway projects for EQIP applications. Fillmore SWCD acts as the fiscal agent for both grants processing payments and tracking grant funds.

Clean Water Fund Soil Erosion Grant

Implementing conservation plans is continuing with funding from a FY14 Clean Water Fund Grant for \$145,000, which was extended to June 30, 2018. This grant funds approximately 0.25 FTE to assist landowners with implementing practices in their plans. Assistance was provided on 29 grassed waterways, two terraces with tile, two critical area plantings, and one grade stabilization structure cleanout. Conservation needs were assessed with ten landowners for waterways, structures, and terraces. Assistance was provided with surveying seven waterways for future construction; also assisted 14 landowners with soil maps and conservation planning questions.

Fillmore County Office Building Rain Garden

A partnership opportunity between the Fillmore SWCD, Fillmore County, the Conservation Corps of MN, and the Fillmore County Sentence to Serve crew gave some local storm water structures a much needed facelift. Two existing water retention basins at the Fillmore County Office Building in Preston were renovated in November 2016 into rain gardens to provide more function and beauty to the neighborhood and less maintenance for County staff. Repairs to one basin are needed, and plans are in place for those to be done in 2018.

DNR Healthy Forests for Healthy Water Grant

Clean Water Fund Grants from the DNR (\$78,000) and BWSR (\$50,000) provided funding for two forestry consultants to work with landowners in each of two Root River subwatersheds identified as having habitat of significant importance on lands adjacent to public lands with high quality native vegetation: Riceford Creek and Rush-Pine Creek watersheds. The DNR grant ended May 31, 2017, and a final report was submitted to DNR for reimbursement of funds. From the DNR cost share funds, four projects were completed and paid which included a pond cleanout (1) and 1,120 acres of forest stewardship plans (5). BWSR grant funds must be spent by December 31, 2018. In 2017, ten cost share contracts were approved by the SWCD Board for nine practices plus one forest stewardship plan. Four projects were completed and paid: 21.6 acres of invasive species management (1), pond cleanout (1) and 5,340 feet of forest road improvement (2). As of the end of 2017, the balance in the BWSR cost share grant is \$6,417.50 remaining to be encumbered.

Farm Bill Assistance

The Fillmore SWCD had staff (~0.5 FTE) funded by a Farm Bill Assistance (FBA) Grant from BWSR to promote the federal Conservation Reserve Program (CRP) and to assist landowners enrolled in CRP with completing their plans. Staff completed 2 contracts for 102.57 acres until staffing changes occurred in 2017. New staff are training on RIM and CREP. A new FBA funding proposal was not submitted in 2017 due to decreased workload from NRCS.

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 2017, the SWCD approved one loan for manure management equipment (\$68,000), one loan for a feedlot fix (\$51,558), two no till equipment loans (\$83,000), one well replacement loan (\$14,300), and eight loans for septic system upgrades (\$79,553).

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 are being used by Fillmore SWCD to provide technical assistance to landowners to identify where buffers may be needed along public waters in Fillmore County. Financial assistance information is 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. Advice regarding appropriate seeding mixes, maintenance and other technical assistance is being provided as needed.

“Other Waters” resolutions were passed by both the SWCD Board and County Board in 2017. As of the end of 2017, 94% of the county's public waters are in compliance with the law, and 99% will be in compliance once those with waivers are seeded. About 12 landowners still needed to submit plans for seeding buffer areas, and they are slowly contacting the SWCD with their plans. All data are being entered into the BWSR Buffcat database.

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 in 2018.

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. Three staff are trained to analyze samples (one still in training). An internal audit was completed for the lab in 2017. Arrangements for an external audit were confirmed in coordination with two other southeast Minnesota labs for January 2018. There were 112 private well samples analyzed for bacteria in 2017.

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. Jared Troendle from Lanesboro High School is the 2017 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. Madeline Snyder of Lanesboro is the 2017 Returning College Student Scholarship Award recipient.

The SWCD provides scholarships or incentives to attend local or regional educational events that are consistent with the SWCD's mission. The Rush-Pine Farmer Led Council sponsored a trip to South Dakota to the Hefty Brothers' Ag PhD Field and to the Dakota Lakes Research Farm July 27-28. Two farmers from Fillmore County attended, and each received a \$100 scholarship. Each submitted a report about their trip and what they learned.

Forestry Field Day: Summer interns hired in 2010-2017 have helped organize landowner field days in July utilizing lists of landowners in three counties from the MN Forest Resources Council. About 50-60 people attended the field day in 2017 held July 26th at the Forestville State Park. The theme was “Using Fire for Vegetation Management (without calling 911!)”. The presenters took the group along the horse trail in the park where areas that had been burned could be compared to areas that had had no fire management. The MN Forestry Association, the American Tree Farm Association and Highpoint Realty were co-sponsors.

6th Grade Field Day: The 2017 6th Grade Field Day was held at Forestville State Park on September 20. About 180 students attended from three 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 is providing the other half of the funding for the grass plugs. The landowners are also taking pictures of the site on a monthly 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. The 2017 measurements were taken in May and showed some movement of the hillside due to heavy rain storms in September of 2016 that saturated the area. Some slumping was observed into the road ditch, but it is unknown if it required the county to clean it out. The hillside was burned by the landowners and volunteers in 2017.

Farm Safety Day Camp: Two staff assisted with Extension's Farm Safety Day Camp in May. The SWCD provided native seed packets and pencils for the student bags.

Area and State Envirothon: A staff member from the SWCD assisted with planning and staffing the 2017 Area Envirothon, which was held in May.

Fillmore County Fair Display: The SWCD booth at the 2017 Fillmore County Fair in July featured a stream table from the MPCA to demonstrate how streams behave under various conditions, and it was a great attraction for the kids. Historical pictures were displayed as part of the 75th Anniversary year celebration. The SWCD purchases one half hour of air time on the local radio station during the fair for interviews with staff and Board members about current SWCD programs. The July SWCD board meeting was also held during the fair to commemorate the 75th anniversary.

Nitrate Clinics:

Three nitrate clinics were held in 2017 at implement open houses in Chatfield, Rushford, and Spring Valley. Samples are analyzed using MDA equipment.

“Conservation Chronicles” Newsletter: On February 6, 2017, the Conservation Chronicles was published as an insert in the *Fillmore County Journal*, a free newspaper that goes to over 13,000 residences in the county. 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.

Community and School Presentations and Education: In recognition of the Fillmore SWCD’s 75th anniversary, several special activities were added in 2017. Lilac seedlings were presented by SWCD staff to over 200 fifth grade students in five schools for Arbor Day/Earth Day in April. Four schools also planted a tree on their grounds with help from the SWCD staff. FFA students attended the March Soil Health Field Day, and staff presented information on groundwater and water quality monitoring to two classes from Kingsland High School. The BWSR rain simulator was demonstrated at the FFA soils competition preparation event in Lanesboro in November. A large display of historic pictures about the SWCD was on view at the Fillmore County Courthouse (May and November), Dairy Night at the Farm, Cattlemen's Steak Fry, Harmony Visitor Center, the county fair, and the June 27th anniversary conservation tour and banquet. Native seed packets, pens and pencils, Fillmore County Geologic Atlases, NRCS Soil History books and other materials were also available with the display at various locations. Soil Stewardship materials and information were emailed to about 30 churches in Fillmore County for Soil Stewardship Week April 30-May 7. Staff participated in 11 parades at various celebrations around the county, driving the SWCD pickup with an anniversary sign and handing out candy. News releases and/or ads were submitted to local papers throughout the year: scholarship deadline and World Water Day in March; National Drinking Water Week, National Trails Day and Beef month in May; Dairy month in June; National Honey Bee Day in August; and World Food Day and Pork month in October. The SWCD hosted a Spring Wildflower Walk May 6th at the Choice Wildlife Management Area and a Prairie Walk August 8th at Chatfield’s Savanna Spring Nature Area. The highlight of the year was the 75th Anniversary Conservation Tour and Meal on June 27th. There were 43 attendees for the tour which featured projects in the Willow Creek watershed, both historic and current, and 57 attendees for the meal, which also featured a panel of current and former SWCD and NRCS employees who shared their thoughts about how conservation has changed in the last few decades.

Conservation Corps Minnesota Apprenticeship Program: A Conservation Corps apprentice was placed with the SWCD in 2017. She helped with water quality monitoring activities, the forestry field day, data management, the MDA township nitrate testing program, and other tasks.

Lost Creek Hiking Trail Forestry Education: The brochure for the Lost Creek Hiking Trail was updated in 2017 to include new information about additional sites along the trail. The website information was also updated.

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 39 years, one for 26 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. An initial allocation of \$100,000 was supplemented by a second allocation based on the county's support of the SWCD, which for the Fillmore SWCD amounted to \$30,337. The SWCD Board divided those funds between cover crop cost share, technology and vehicle updates, staff time for pre-implementation activities for the watershed plan and storm water projects, and education and outreach. FY16 cover crop program funds resulted in six contracts for 334.33 acres. FY16 funds were also used to pay for staff time for new technical staff in training, education and outreach expenses for the SWCD's 75th anniversary, technical staff time for practice implementation, staff time for preparations for watershed plan implementation, and purchase of new electronic survey equipment (Trimble TSC3 and R8s receiver and accessories; SurfacePro computer for water quality monitoring data collection). FY17 funds were used to purchase a 2017 Jeep for field work. FY17 funds will also be used for structural practice implementation and TA for implementation. A policy was developed for use of FY18 funds for three-year cover crop contracts; two contracts were approved and paid for 52 acres. FY18 funds will also be used for practice implementation and TA.

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.