

# Fillmore Soil and Water Conservation District

## Annual Report



6<sup>th</sup> Grade Conservation Day at Forestville/Mystery Cave State Park

# 2010

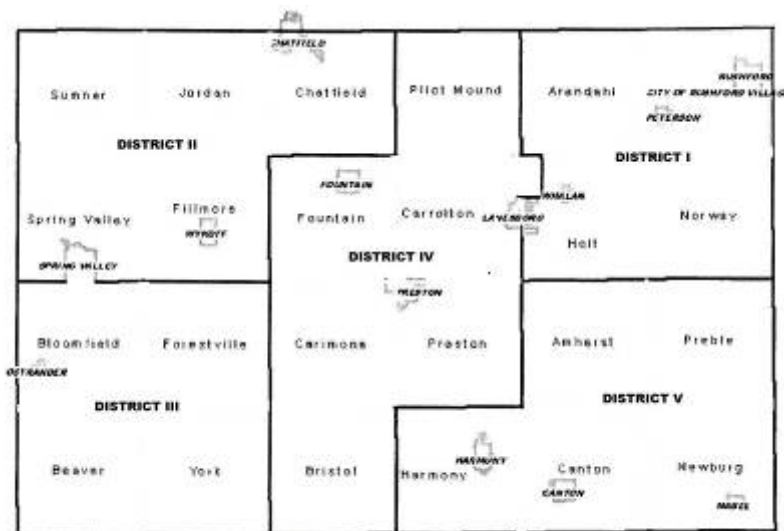
## Personnel Resources



### Board of Supervisors

Back Row: Travis Willford – Secretary; Leonard Leutink, Timothy Gossman – Chair

Front Row: Pamela Mensink – Treasurer; Brian Hazel – Vice Chair



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

District I – Brian Hazel  
District II – Tim Gossman  
District III – Leonard Leutink  
District IV – Pamela Mensink  
District V – Travis Willford

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  
and  
Natural Resources Conservation Service Staff



**Front Row:** Angela White, *NRCS Conservation Technician*; Jackie Byam, *NRCS Soil Conservationist*; Dawn Bernau, *SWCD Nutrient Management Specialist*; Anne Koliha, *SWCD Engineering Technician*; Jennifer Ronnenberg, *SWCD Conservation Technician*; Jeanette Serfling, *SWCD Administrative Assistant*; Donna Rasmussen, *SWCD District Administrator*  
**Back Row:** Steve Erickson, *NRCS Soil Conservation Aide*; Dean Thomas, *SWCD Grazing Management Specialist*; Doug Keene, *SWCD Resource Conservation Technician*; Joe Magee, *SWCD Water Planner/TMDL Coordinator*; Rick Grooters, *SWCD Resource Conservation Technician*; Robert Joachim, *NRCS District Conservationist*



*Rick Grooters and Doug Keene celebrated 25 years of service to the SWCD in 2010. They are pictured here with the SWCD Board at a celebration held in their honor in December. From left to right are Travis Willford, Leonard Leutink, Tim Gossman, Doug Keene, Brian Hazel, Pam Mensink, and Rick Grooters.*

## *COOPERATING AGENCIES*

Basin Alliance for the Lower Mississippi in Minnesota (BALMM)  
City of Chatfield  
City of Lanesboro  
City of Mabel  
City of Preston  
City of Rushford  
City of Rushford Village  
City of Spring Valley  
Conservation Technology Information Center (CTIC)  
Eagle Bluff Environmental Learning Center  
Fillmore County Association of Townships  
Fillmore County Auditor/Treasurer  
Fillmore County Commissioners  
Fillmore County Emergency Management  
Fillmore County Feedlot Office  
Fillmore County GIS  
Fillmore County Highway Department  
Fillmore County Planning and Zoning Commission  
Fillmore County Public Health  
Fillmore County Recorder  
Fillmore County Solid Waste  
Fillmore County Zoning  
Hiawatha Valley Resource Conservation and Development (RC&D)  
Minnesota Association of Conservation District Employees (MACDE)  
Minnesota Association of Soil and Water Conservation Districts (MASWCD)  
Minnesota Board of Water and Soil Resources (BWSR)  
Minnesota Department of Agriculture (MDA)  
Minnesota Department of Health (MDH)  
Minnesota Department of Natural Resources – Forestry Division (DNR)  
Minnesota Department of Natural Resources – Waters Division (DNR)  
Minnesota Department of Natural Resources – Fisheries Division (DNR)  
Minnesota Pollution Control Agency (MPCA)  
National Association of Conservation Districts (NACD)  
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)  
Upper Iowa River Alliance  
USDA Farm Service Agency (FSA)  
USDA Natural Resources Conservation Service (NRCS)  
Winona State University (WSU)

## *INTRODUCTION*

The Fillmore Soil and Water Conservation District Board of Supervisors hereby submit the Annual Report for the calendar year of January 1, 2010 through December 31, 2010.

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**

- Two Conservation Specialists
  - Assist landowners with planning and design of practices, such as grassed waterways, terraces, grade stabilization structures, ponds, windbreaks, etc.
- Feedlot Engineering Technician
  - Assists livestock producers with planning and design of feedlot runoff control practices, such as freshwater diversions, filter strips, picket fences, etc.
- 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
- Grazing Lands Management Specialist
  - Assists livestock producers with developing and implementing prescribed grazing plans that meet NRCS standards, such as fencing, pipeline, and interseeding, as well as helping to find financial assistance for implementing the practices
- Conservation Technician
  - Assists landowners with enrolling in the Conservation Reserve Program (CRP) and similar programs that establish permanent vegetation including conservation buffers
- Wetland Conservation Act Administration
  - Assists landowners with complying with the rules of the Wetland Conservation Act related to filling, excavating or draining of wetlands

## **Financial assistance to landowners for implementing conservation practices**

- State Cost Share Program: provides up to 75% cost share up to a maximum of \$4,000 for grassed waterways, terraces, grade stabilization structures, windbreaks, well sealing and other practices on the state cost share docket
- Feedlot Water Quality Management Cost Share Program and Clean Water Fund Grants: provides 75% cost share for runoff control practices and manure storage for feedlots in riparian areas or within 300 feet of a sensitive feature
- 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 implementing water quality practices, such as ag waste systems, manure handling equipment, septic system upgrades, no till planters, well replacement, and erosion control structures; loans are processed through local lenders

## **Other products and services**

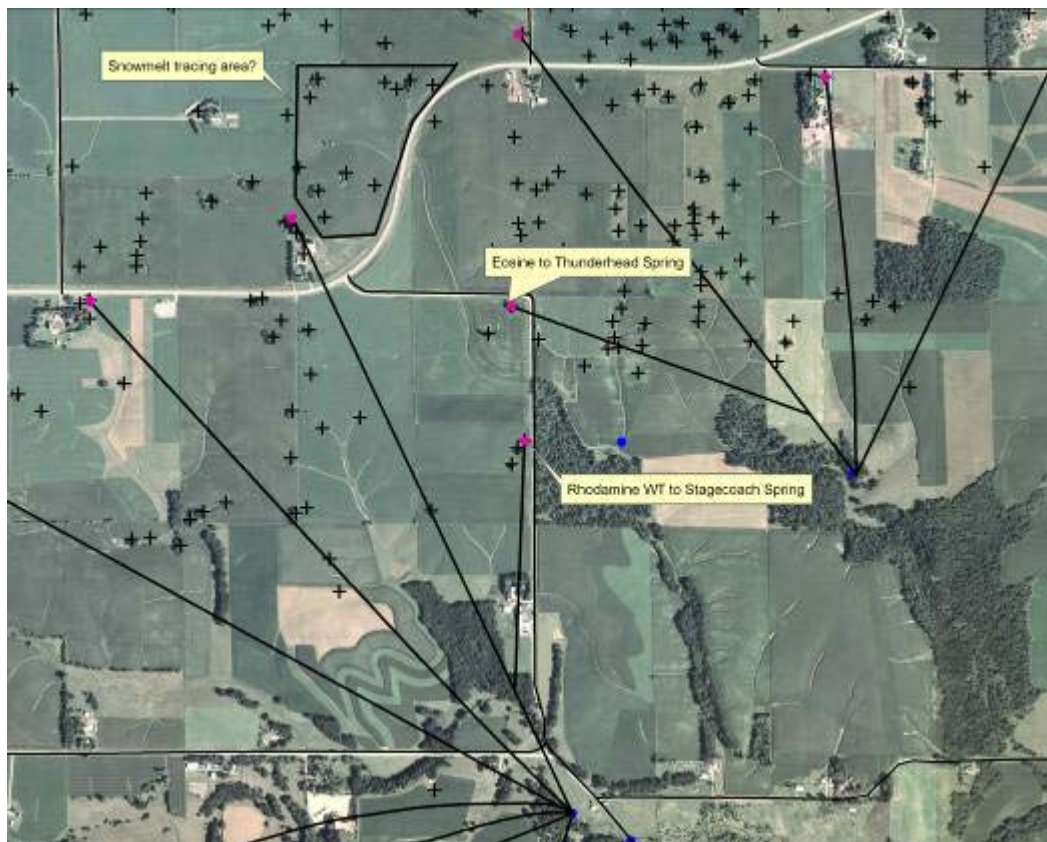
- Trees and tree supplies: potted and bare root stock are available for sale from December to the end of February with proceeds going to support SWCD programs
- Fillmore County Plat books: available for sale for \$20
- Tree planters: two planters are available to rent for \$25/half day (min.) or \$50/day

- Gopher machine: one available for rent for \$25/half day (min.) or \$50/day
- Bacteria testing: \$20/sample
- 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, \$50.00/day
- Decorah Shale site investigation: \$20/hr in office research, \$25/hr out of office research
- Rain barrels: \$45 for kit; \$75 for assembled rain barrel

## **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
  - Two staff are licensed inspectors who assist the Zoning Office with the inspection of newly installed septic systems
  - The Conservation Specialists provide assistance on soil erosion complaints made to the Zoning Office to determine the extent of the erosion and how to remediate it
- USDA
  - Technical staff provide assistance for planning, designing, and implementing practices funded through federal Farm Bill programs such as EQIP and CRP
  - The SWCD submitted two applications for the Mississippi River Basin Initiative (MRBI) for additional EQIP and WHIP funding in Watson Creek and the Upper South Fork Root River/Wisel Creek watersheds for practices that reduce sediment and nutrient runoff. Up to \$790,000 per year may be available for up to four years.
  - The Conservation Technician is partially funded with a BWSR Farm Bill Assistance grant to assist landowners with completing CRP Conservation Plans; 34 General CRP plans were completed for the 39<sup>th</sup> sign up.
- MN Pollution Control Agency
  - The SWCD is the lead agency for the Root River Turbidity TMDL and the Root River Comprehensive Strategy; the SWCD administers subcontracts for these projects and provides staff for water quality monitoring and equipment maintenance
- SE Technical Support Joint Powers Board
  - Membership dues paid annually in return for engineering support for feedlot projects
- SE MN Water Resources Board and Water Resources Advisory Committee
  - Water Plan Coordinator is the staff liaison to these organizations
- 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 7
  - Membership maintained; Board members and staff attend Area meetings
- Hiawatha Valley Resource Conservation and Development (RC&D)
  - Two Board members assigned as representatives to the RC&D Council
  - Two grants were awarded to the SWCD for planting 225 acres of cover crops and holding a cover crop field day (\$5000) and sponsoring a speaker at Eagle Bluff Environmental Learning Center in 2011 to speak about clean up of the Mississippi River with posters displayed about water-related projects in the Root River watershed

- Root River watershed
  - The SWCD is the lead agency for the Root River Turbidity TMDL and the Root River Comprehensive Strategy
  - The SWCD houses the Grazing Management Specialist who works throughout the watershed
- Upper Iowa watershed
  - SWCD staff assist 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 assist with contacting landowners with sinkholes or springs on their properties where dye trace studies are planned
- The Nature Conservancy
  - A grant of \$5000 was awarded to the SWCD for planting 250 acres of cover crops in the Root River watershed including in the MRBI watersheds



This map shows dye trace results in Watson Creek watershed. The dyes were detected in Thunderhead Spring and Stagecoach Spring. The location of the sinkholes into which the dye was released delineates the springshed boundary.



# **DISTRICT PROGRAMS,** **ACTIVITIES AND ACCOMPLISHMENTS**

## ***State Cost Share Program***

In 2010, a total of \$29,966 in state cost share funds were paid out to install

- 12 grassed waterways totaling 19,562 feet;
- 2 sediment control basins;
- 3 well decommissionings; and
- 3 windbreaks

The SWCD's state cost share allocation was reduced from \$43,432 in FY09 to \$23,281 in FY10 due to state budget cuts. The FY11 allocation is \$23,520.

## ***Wetlands Conservation Act***

The SWCD staff assisted 33 landowners with wetland concerns. Ten no-loss requests were approved, and two ag exemptions were approved impacting 0.8 acres. Three staff attended four WCA trainings offered by BWSR. The staff person with Wetland Delineation Certification resigned in May, so those services are being contracted with Mower SWCD staff in the interim until another staff person can take the training. No meetings were called for the full TEP in 2010. The BWSR Wetland Specialist provided technical assistance requested. Assistance was provided to the Fillmore County Zoning Office on three sites where wetlands were present, two of which were located in the Decorah Shale Overlay District.

## ***Flood Relief Cost Share Program***

Flood recovery from the August 2007 floods continues in the county. In 2010, 13 projects were completed using flood relief funds to do such things as repair terraces and waterways, build grade stabilization structures and clean out ponds. In cooperation with the Root River SWCD, a contract to use funds from the Fillmore SWCD allocation was approved for a project in Houston County.

A storm water retention study was completed on four sites, two upstream of Mabel and two in Wisel Creek watershed, through a contract with Bonestroo and Associates. Four culvert sites were identified with the help of the County Highway Department and Bonestroo Engineering as potential storm water attenuation sites. Funding was approved by BWSR to use flood relief funds to study these sites. The results from that study showed that two of the crossings would provide enough short term storage to have a noticeable impact on the peak discharges out of their watersheds. However, the available storage was less than 1% of the entire tributary watershed, so therefore would not produce a significant impact on the retention time or volume. At the other two sites, the amount of available storage was so small that there would not be significant changes to runoff rates, attenuation time or volume of peak discharges. A more comprehensive

watershed assessment is needed to identify and implement cost-effective and sustainable measure that protect infrastructure from flood impacts, improve water quality, and enhance the natural environment. This would include identifying sites upstream of the study sites that would be available for ponding in even smaller watersheds.

Total cost for all flood relief projects completed in 2010 was \$42,341. The city of Rushford completed sealing the private wells that were found after the floods. A total of 110 private wells were sealed in the city from 2007 to 2010 at a cost of \$45,212.50. The SWCD Board approved paying 100% of the cost of sealing the wells due to the financial hardships caused by the floods.

### ***Feedlot Water Quality Management***

State cost share was among several funding sources used to fix 18 open feedlots in the county in 2010. Three projects were completed using \$136,500 in state Feedlot Water Quality Management funds from FY09. Two projects were completed with FY10 Clean Water Fund grants totaling \$149,880. Other funding sources used for the other projects were 319 grant funds of \$30,613 from the SE MN Water Resources Board, \$24,488 from Fillmore County Feedlot Base Grant funds, plus \$330,000 in Ag BMP Loans. One project also used \$37,500 of federal EQIP funds. An application for FY11 Clean Water Fund Grant was approved for \$561,593 for seven projects, all of which should be completed in 2011.



### ***Ag Best Management Practices Loan Program***

A total of \$584,816 in loans were paid in 2010 with \$504,816 in loans going through multiple local lenders and \$80,000 through the revolving loan fund at Associated Bank in Lanesboro. A break down of the types of loans made is in the table below:

Septic System Upgrades	13 loans	\$ 112,115.77
Ag Waste - feedlot fixes	7 loans	\$ 366,000.00
Ag Waste - manure handling equipment	1 loans	\$ 36,000.00
Conservation Tillage Equipment	2 loans	\$ 50,000.00
Well Replacement	1 loan	\$ 20,700.00

## ***Nutrient Management***

The Nutrient Management Specialist works in five counties and is funded by Clean Water Legacy/Fund grants awarded to the SE Technical Support Joint Powers Board. She has 149 contacts covering 51,851 acres in new and updated plans. In 2010, 24 plans were completed for 2011, 52 plans were completed for 2010, 37 plans were updated, and 13 new plans are in progress for 2011. The service was provided free of charge to producers in 2010. As of January 1, 2011, there is a charge for the plans--\$300 for a new plan and \$100 for an updated plan. The fees help to meet match requirements for the Clean Water Fund grant that was awarded to continue the Nutrient Management position until the end of 2012.

Presentations were made at two “What Is Manure Worth?” workshops held in Preston and Caledonia in January, an RTK field day in August near Spring Valley, and for a tour with the MPCA Assistant Commissioner in November. Cooperators interested in the Nutrient Management Initiative are being referred to the MDA.

The SWCD received a \$5000 grant to study the nutrient content in solid pack manure from the Southern Minnesota Nutrient Efficiency Coalition, which is a project funded through an EPA hypoxia grant to the Conservation Technology Information Center (CTIC). The coalition is made up of representatives from farm producer organizations, commodity groups, watershed organizations, agri-business, crop consultants, and federal, state and local agencies. A conference called “Nutrients in Our Environment: Past, Present and Future” which was held in Mankato on February 18, 2010. SWCD staff assisted with planning the conference.

## ***Grazing Management***



The Grazing Specialist provides free assistance to livestock producers in the five counties in the Root River watershed. The position is funded through Clean Water Legacy grants awarded to the Fillmore SWCD with support from the other counties in the watershed. The specialist who was hired in March 2007 resigned in January 2009, leaving the position open until it was filled in April 2009. To date, over 60 plans have been written on more than 4,000 acres. In 2010, 36 producers received assistance with installing fence, pipeline and heavy use area protection. Those 36 farms cover 3,215 acres and have \$798,047 in EQIP contracts. There were 16 new plans either completed or in progress in 2010. Twelve existing EQIP plans began implementation. The Grazing Specialist also participated, helped organize, and spoke at four pasture walks sponsored by Hiawatha Valley RC&D, U of M Extension office and NRCS and SE MN Graze Fest held in September. He spoke and provided handouts at the U of M Extension Cattle Feeder Days in December in Rochester. He completed work on a MDA Sustainable Ag Grant studying the use of cover crops and delayed haying for grazing purposes. Forage and soil samples were collected in the fall for analysis. The final report can be found in the 2010 Greenbook. He attended an Area 7 meeting with NRCS Engineers about pipeline and heavy

usage protection for lanes and water tanks. He attended two Grazing Land Conservation Association meetings in St. Cloud and also attended MN Forage days in Rochester. He helped organize and attended 2 cover crop meetings. He completed training with NRCS Area Office Engineers on Tool Kit, GPS equipment, pipeline and heavy usage for stationary water tanks and cattle lanes. He attended six meetings or teleconferences with NRCS staff to discuss program procedures for documenting progress on grazing plans.

### ***2010 Tree Program***

The District sells a variety of bare root trees and shrubs and bare root and potted conifers. In 2010, 14,450 bare root stock and 1,380 potted stock were sold to approximately 200 individuals, municipalities, and organizations in and around Fillmore County.

### ***SWCD Cover Crop Program***

Fifteen cooperators received an incentive payment of \$20 per acre to plant cover crops following corn silage or soybean harvest. Funding for the incentive payment came from the Hiawatha Valley RC&D (\$4500) and The Nature Conservancy (\$5000) on a total of 474.3 acres. Of the total, 98 acres were in the MRBI watersheds. All of these acres were seeded by drilling. An additional 66 acres were seeded for the Minnesota Department of Ag Sustainable Grant project with 33.7 of those acres aeri ally seeded. The picture to the right shows cows grazing in November on some of the soybean acres that were aeri ally seeded on September 2. A field day highlighting the use of cover crops is planned for April 2011, which will be co-sponsored by the RC&D.



### ***Volunteer Nitrate Monitoring Grant***

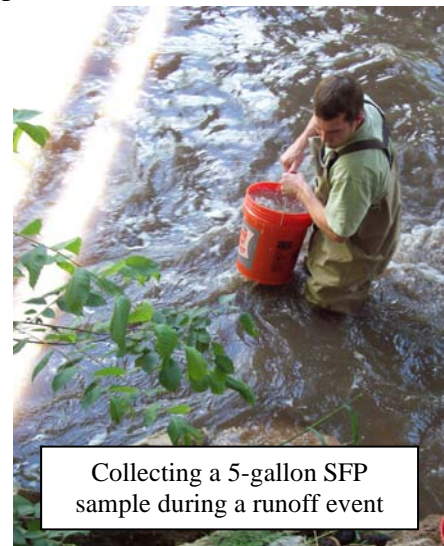
A network of volunteers was established to monitor nitrate in drinking water wells in Fillmore County and eight other southeast Minnesota counties. The network of 675 wells includes 96 in Fillmore County. Samples were collected by the volunteers in August 2010 and sent to the SWCD office for analysis. MDA provides Hach spectrophotometers to analyze the samples. Of the 83 samples returned, 12 samples (15%) had nitrate levels above 10 parts per million, which is the safe drinking water standard. All twelve wells were pre-code wells. The project was funded initially for two years from a 319 grant to the SE MN Water Resources Board. A Clean Water Partnership grant was awarded to the Water Resources Board to continue the project for another three years.



## ***Root River Turbidity TMDL Project***

The Fillmore SWCD is the lead agency for the Root River Turbidity TMDL project. The three-year study is funded by a \$300,000 grant from the MPCA. The third and final year of water quality monitoring was completed in 2010. The final report is scheduled for completion in 2011. The goals of the project are to calculate the amount of sediment being transported in the impaired reaches in the watershed and to determine the sources of the sediment.

Fillmore SWCD staff, with assistance from MPCA staff, collected grab samples and sediment fingerprinting (SFP) samples on 31 days. Grab samples were collected at 15 sites and SFP samples at 5 sites. SFP samples are being analyzed by staff from Utah State University for Lead 210 and Beryllium 10 to determine the sources of the sediment. It takes about four five-gallon pails of water to get one SFP sample. When all the bottles collected at each site as well as the SFP samples are counted, there were approximately 960 samples collected, and even more if each 5-gallon pail collected for the SFP samples is considered. Samples were collected four times in March, twice in April, twice in May, seven times in June, four times in July, three times in August, eight times in September, once in October, and once in November. The samples are analyzed at the Minnesota Department of Health (MDH) for Total Suspended Solids (TSS), Total Volatile Solids (TVS), Turbidity, Total Nitrite-Nitrate Nitrogen, and Total Phosphorus (TP). Winona State University (WSU) also ran tests for Suspended Sediment Concentration (SSC). Flow data were collected by the Department of Natural Resources (DNR)--Divisions of Waters and Fisheries, and MPCA staff. The SFP samples were shipped to the St. Croix Watershed Research Station for initial analysis, and eventually sent to Penn State and Purdue to finish the analysis. Flow data was collected by the Department of Natural Resources (DNR) and MPCA. Field measurements were continued at each site and included tape down, wire weight, staff gauge, and transparency tube. Temperature and pH readings were taken when possible. The majority of the downloading responsibilities are handled by the DNR – Division of Fisheries.



Collecting a 5-gallon SFP sample during a runoff event

As the third and final monitoring season for the TMDL, all of the equipment was removed from each site except those at which monitoring will continue after the completion of this project. Equipment removed included DTS-12 turbidity probes, SR-50s, pressure transducers, data loggers, solar panels, rain gages, data logger enclosures, fence posts, conduit, and batteries. Data analysis and management is an ongoing process of which many agencies are involved. MPCA, DNR – Fisheries and DNR- Waters, MDA, Eagle Bluff, and Fillmore SWCD all have a role in this process. Technical Advisory Group (TAG) meetings were held May 17 and October 6<sup>th</sup> with 22 and 20 people in attendance, respectively. On April 24<sup>th</sup>, a poster for the Root River Turbidity TMDL was displayed at an Earth Day Celebration at Sylvan Park in Lanesboro. There was also a poster on display at the Nutrients in Our Environment Conference in Mankato in February. Information on this study was presented at the Annual Township meeting for Fillmore County on April 6<sup>th</sup>, and continuous updates are given to the Local Water Management Citizens'

Advisory and Technical Advisory Committees of Fillmore County. A Root River Turbidity TMDL Newsletter was sent to the Stakeholder Advisory Group during the winter.

The contract with MPCA for the Root River Comprehensive Strategy has been signed by the Fillmore SWCD. The contract includes funding for staff to do water quality monitoring and administration of subcontracts.

### ***MN Department of Agriculture Sustainable Ag Grant***

The SWCD received a grant from the MDA for \$18,176 to study the economics and effectiveness of using cover crops and unharvested hay fields for grazing. One cooperators is aerially seeding winter rye into corn silage and soybean acres and grazing those areas in the spring to allow his permanent pasture to become better established before the cattle are allowed into the permanent rotationally grazed paddocks (see cover crop section). The second cooperators is not harvesting his last crop of hay which is used for grazing in the fall to allow his permanent rotationally grazed paddocks to recover for earlier grazing in the spring. Forage samples are being analyzed for feed value, and soil samples will be taken to evaluate soil tilth and organic matter. A field day was held at the cover crop site in April 2010. The final report was submitted and published in the MN Greenbook.

### ***MDA “From Field to Watershed” Monitoring Project***

The MDA has established two of its three edge-of-field monitoring sites in Fillmore County. The third is in Mower County. The sites in Fillmore County are located in Crystal Creek southwest of Preston and Bridge Creek 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 TSS, turbidity, TP, PO<sub>4</sub>, and nitrate-N. An in-stream monitoring station is also located downstream from each of the edge-of-field sites. Grab samples and sediment fingerprinting samples are collected at the in-stream sites and at the edge-of-field sites, whenever possible. Once baseline data is established for the sites, various conservation practices will be implemented and any changes to water quality will be monitored. The Crystal Creek site is in an area with many sinkholes and streams,

so dye trace studies are being conducted there to better understand the interaction between surface water and ground water. Nitrate samples are collected and analyzed from the springs.

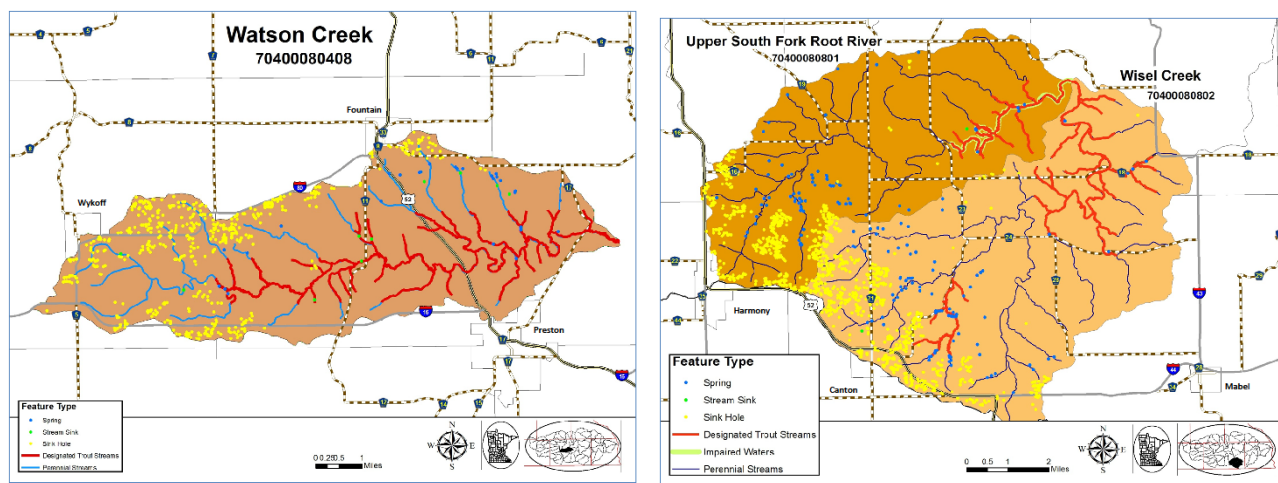
The project is funded for three years. The SWCD has a contract with MDA to fund one part-time person to collect samples and maintain equipment and one part-time person to work one-on-one with the farmers in the watershed. In addition, the SWCD administers subcontracts for additional work on the project, such as digital terrain analysis by Winona State University.

## ***Bacteria Testing***

In May 2009, the SWCD became a certified lab to test drinking water for total coliform and *E. coli* and 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. Two staff are trained to analyze samples. There were 174 samples analyzed in 2010. Of those, 73 were from stream sites in the Whitewater Watershed. The SWCD contracted with the watershed project to collect and analyze the samples. Of the 101 drinking water samples analyzed, 30 tested positive for total coliform bacteria and ten tested positive for *E. coli*.

## ***Mississippi River Basin Initiative***

The Fillmore SWCD submitted MRBI applications for two subwatersheds in the Root River watershed: Watson Creek and the Upper South Fork Root River/Wisel Creek. Priority practices in these watersheds are ag waste storage for dairy and beef producers, nutrient management for operations utilizing manure, and grazing management. These priorities utilize the existing technical staff already housed in the SWCD office and benefit livestock production, which is crucial to maintaining hay and pasture acres in the steep terrain of the Root River watershed.



The MRBI proposals requested funding from EQIP and WHIP to install the practices mentioned above, as well as management practices such as cover crops and no till/strip till, and structural practices, such as streambank protection, grade stabilization structures and water and sediment basins. The 2010 allocation to Watson Creek was \$362,100 and to the Upper South Fork

\$427,920. Additional funds committed from Trout Unlimited and The Nature Conservancy are helping to implement streambank protection projects and cover crops. In Watson Creek, five producers signed 2010 EQIP contracts totaling \$507,488 for two ag waste systems and five nutrient management plans on 1,384 acres. (Unused funds from another watershed were transferred to cover the amount over what was allocated to Watson Creek.) In the Upper South Fork, one contract for an ag waste system was signed for \$300,000.

Rush-Pine Creek watershed also received MRBI funding. About 13,000 acres of the watershed lies in Fillmore County. Most of the 86,000-acre watershed lies in Winona County. One EQIP contract for nutrient management on 220.6 acres was signed in 2010 in Fillmore County. The project sponsor for the MRBI application is Hiawatha Valley RC&D with the staff from Winona SWCD and NRCS doing the promotion and providing technical assistance.

An offshoot of the MRBI projects is support from the Midwest Natural Resources Group (MNRG) which has representatives from the Midwest regional offices of 14 federal agencies. MNRG has committed support to the MRBI watersheds from the member agencies to enhance efforts in those watersheds to improve water quality. Among the requests to MNRG are: 1) more technical and engineering assistance to promote and implement practices, especially streambank protection, 2) coordination of long-term monitoring, and 3) modifications to the Conservation Reserve Program to allow limited haying and grazing.

### ***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 in 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 Monitor Program***

The District has ten precipitation monitor participants, two of which have been monitoring rainfall for 32 years. Participants forward their rainfall information to the SWCD office which is recorded and sent on to the State Climatology Office in St. Paul.

### ***Education and Promotion Projects***

“What Is Manure Worth?” Workshops: Two workshops were held in January in Preston and Caledonia in cooperation with U of M Extension and the MN Dept. of Ag. The farmers who attended were taught how to use an Excel spreadsheet that calculates the nutrient content and value of their manure. The sessions were limited to 15 attendees, and both were full.

Area and State Envirothon: Staff from the SWCD assisted with planning and staffing the 2010 Area 7 Envirothon, which was held at Chester Woods near Rochester on May 5<sup>th</sup>.

6<sup>th</sup> Grade Field Day: About 180 students from four schools participated in the annual 6<sup>th</sup> Grade Field Day at Forestville/Mystery Cave State Park. Presenters were Alex Watson and Amy Funk,



Park staff; Brad Pecinosky, Tri-County REC; John Grabco, MN Historical Society; Jim Edgar, DNR Forestry; and LaVerne Paulson, Fillmore County Recycling Education Coordinator.

Fillmore County Fair Display: One forestry display was used for the 2010 Fair display. The display came from USDA National Agroforestry Center and provided information about the value of forests to wildlife. Four posters were also displayed which were obtained from the



Minnesota Pollution Control Agency focusing on recycling. Various posters providing information about SWCD programs and projects are also displayed. Information about secondary containment for fuel tanks was available with a local distributor providing a concrete containment structure for display along with a fuel tank donated by a former Board member. The SWCD also purchases one

half hour of air time on the local radio station during the fair to interview staff and Board members about current SWCD programs.

“Conservation Chronicles” Newsletter: The SWCD newsletter was distributed by mail to over 4,500 Fillmore County landowners in June, 2010. Due to increasing printing and postage costs, a second newsletter was posted on the SWCD website in December. An E-mail notice of the posting was sent to those landowners providing their e-mail addresses. 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: The Water Plan Coordinator taught a Community Education class on drinking water at Kingsland in February. He also served as a judge for the 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> grade Science Fair at Kingsland in March. In April, a presentation was given at Mabel-Canton for 33 5<sup>th</sup> and 6<sup>th</sup> grade students. Ag in the Classroom presentations were given in April in Chatfield and Kingsland for over 100 3<sup>rd</sup> and 4<sup>th</sup> grade students. The SWCD had a display and gave away tree seedlings at the Root River Valley Earth Day celebration in Lanesboro in April. Water testing was offered at the Fillmore County Health and Wellness Fair in May. The Water Plan Coordinator conducted a class for Project Get Outdoors in Chatfield for 25 2<sup>nd</sup>-4<sup>th</sup> graders in June.

## ***District Website***

The district’s first website was created in July, 1999. A new site was created in 2007, was revamped in 2010 and 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. A No-till Technology Information site has also been added.

## ***2010 Outstanding Conservationists***

The Minnesota Association of Soil and Water Conservation Districts (MASWCD) along with *The Farmer* magazine honored Bill and Steve Bailey of Chatfield as **2010 Outstanding Conservationists** from the Fillmore Soil and Water Conservation District at their annual meeting held in December, 2010.

The Bailey's operate 1,350 acres of crop ground in a corn-bean-hay rotation and pasture 250 head of beef cows and calves, finishing out 120 head and selling the rest as feeders.

Almost all their cropland acres are either no tilled or zone tilled, except the acres where the cows are overwintered. Working with their co-op and consultant, they apply manure based on nutrient needs and apply variable rate fertilizer as recommended.

The Bailey's have 83.6 acres in CRP, some of which is on HEL land that borders woodlands, some buffer sinkholes and some that is in food plots. Over the years they have installed 5,485 feet of grassed waterways and several dry ponds to help control erosion and have a DNR approved Forest Stewardship Plan on 308 acres.

Bill and his wife, Mary, maintain and monitor sixty bluebird boxes on their property and are active in the Bluebird Recovery Program of Minnesota. Their home site has been a dedicated wildlife sanctuary for 18 years and managed for preservation and increased biodiversity, featuring different types of wetlands and over four miles of trails.

