Fillmore Soil and Water Conservation District

2010 ANNUAL PLAN

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.

INTRODUCTION

The purpose of the Fillmore SWCD Annual Plan is to provide direction to and set goals for District staff and supervisors for the year. It serves as a tool to prioritize the workload of the district so those goals can be achieved.

The annual plan is used in conjunction with the Local Water Management Plan to help determine needs for staffing, funding and program priorities to best ensure that the district is able to implement the Local Water Management Plan, which is also the District's Comprehensive Plan.

Development of the annual plan is accomplished through an annual planning meeting conducted by staff, supervisors and other partners where all participants provide input so that the best plan with common goals can be developed.

All programs and activities are subject to funding.

I. GOALS/OBJECTIVES

GOAL 1: Enhance and maintain soil resources by promoting best management practices to reduce erosion and sustain soil productivity. Total Estimated Staff Days needed: 1494

Objective 1
Provide information and education to the public on soils, soil conservation practices and run-off control. Estimated Staff Days: 867

1. Provide information to the public through the media (e.g. newspaper insert), newsletter and website about the impacts of soil erosion.

2. Communicate with state and federal legislators about conservation programs and their effectiveness and continue to lobby for conservation initiatives.

3. Encourage the planting of soil conserving crops, cover crops and crop diversity.

4. Provide financial and technical assistance for grazing studies and educational programs for pasture management through grazing field days and pasture management workshops.

5. Facilitate a No-till Informational Exchange through the implementation of a website, workshops, producer meetings, newspaper articles, video project, and field demonstrations.

6. Provide information regarding access to soil stewardship materials to churches.

7. Promote and target continuous CRP through the coordinated Buffer Strip Initiative for maximum soil and water benefits with emphasis on DNR protected shore land areas.

8. Assist NRCS with the tillage transect survey as needed to provide information to the public on the trends of tillage practices and residue management utilizing current staff.

9. More direct contact with Lanesboro and Chatfield schools, to encourage participation in 6th grade field day and other events or activities.

10. Hold an annual awards event.

11. Continue as the lead agency for the Root River Turbidity TMDL to gather monitoring data to determine sediment loading and sources for better targeting of soil conservation practices.

12. Investigate other land management options for productive lands that consider such things as permaculture and soil quality. Post events related to these topics on the SWCD webpage.

13. Investigate the effectiveness of using winter rye to control erosion in field draws after soybean harvest as an alternative to permanent waterways, and publicize the results, if positive.

14. Partner with MDA on Root River Small Watershed Project to evaluate BMPs and work with farmers to adopt BMPs and measure performance using such things as SCI, PI, and basal stalk nitrate tests.

Objective 2
Provide funding and technical assistance for the implementation of conservation practices and best management practices that reduce soil erosion. Estimated Staff Days: 627

1. Provide assistance to the county for the implementation of the county soil loss ordinance.

2. Facilitate workload derived from the August 2007 flooding events.

3. Promote, administer and provide technical assistance to landowners for the state cost-share program. Utilize status review letters to encourage landowners to consider additional conservation needs.

4. Provide assistance to NRCS in the implementation of the Federal Programs.

5. Administer the Ag BMP low interest loan program to provide funds for conservation practice implementation and the purchase of eligible equipment.

6. Provide technical and financial support and administration of programs for planting cover crops.

7. Pursue funding for setting aside acres to allow for summer construction of conservation practices.

8. Pursue GIS capabilities for using LiDAR data to determine drainage areas for conservation practices and provide information at a Board meeting regarding use of LiDAR.

GOAL 2: Maintain and improve surface and groundwater quality to meet the needs of the public. Total Estimated Staff Days needed: 368

Objective 1
Reduce pollution impacts on surface and groundwater due to non-point source pollution from leaching and run-off from animal feedlots, manure storage facilities and manure applied to the land. Estimated Staff Days: 273

1. Support grant acquisition for feedlot improvements

2. Provide technical assistance for nutrient management planning and manure management.

3. Promote use of Feedlot Base Grant funds for soil testing. .

4. Promote local cost-share programs to provide 50% cost-share up to $5,000 for non-engineered feedlot run-off control practices and odor control (with priority to run-off control) for existing building sites. Funding may come from the feedlot base grant or SE MN Water Resources Board 319 grant funds or other funding sources.

5. Provide the Ag BMP low interest loan program for ag waste management. Promote the program through public informational meetings and presentations.

6. Gather information on existing composting of dead animals, especially neighborhood facilities, and pursue a demonstration site. Provide a fact sheet on composting on the SWCD website.

7. Promote a successful feedlot pollution abatement project as a demonstration site.

Objective 2
Reduce the potential for pollution of surface and groundwater resources due to the karst topography. Estimated Staff Days: 37

1. Cost-share the sealing of abandoned wells using state cost share funds in accordance with the cost share criteria established by the SWCD Board.

2. Assist County with subsurface sewage treatment systems (SSTS) inspections by training existing staff.

3. Assist public water suppliers with identifying potential contaminant sources in wellhead protection areas as requested.

4. Support dye trace studies and other ground water research in the Root River watershed.

5. Promote sinkhole and shoreline site protection by use of buffers.

6. Assist with the administration of the Decorah Shale Ordinance.

7. Facilitate meetings on ground and surface water protection to targeted audience, such as community education classes.

8. Provide education in cooperation with Extension and MDA to producers regarding nutrient management in areas with karst and other sensitive features.

Objective 3
Protect surface and groundwater from contamination from agricultural and non-agricultural use of fertilizers and pesticides. Estimated Staff Days: 24

1. Educate producers and landowners on the effects of over application of fertilizer and build-up of nutrients, and disseminate information on available technical and financial assistance. Promote and help recruit cooperators for additional research in nutrient management in the county for such programs as the Nutrient Management Initiative. Participate in the Conservation Technology Information Center initiative for southern Minnesota.

2. Promote no fall application of nitrogen via anhydrous ammonia, urea and 28% fertilizer focusing efforts on producers and commercial suppliers, and work with MDA on their compliance with this recommendation.

3. Expand the citizen MPCA Citizen Stream Monitoring Program and publicize it in the newsletter and local newspapers.

4. Cooperate with MPCA and MDA in establishing additional surface water monitoring sites and parameters.

5. Conduct storm drain stenciling, a rain garden and/or rain barrel demonstration, or other storm water BMPs in at least one town in cooperation with a volunteer group.

6. Provide information on the SWCD website regarding a waste pesticide disposal options for county residents.

7. Participate in the Mississippi River Basin Healthy Watersheds Initiative for the Root River.

Objective 4
Provide education and information about drinking water quality and ways to protect drinking water supplies. Estimated Staff Days: 16

1. Provide training to local officials and others about existing tools for land management and develop a list of resource people to contact for various resource issues as requested.

2. Provide testing services for the testing of wells for fecal coliform bacteria, E. coli, and nitrates. Pursue funding for equipment maintenance and certification for bacteria testing program.

3. Conduct at least two water-testing clinics.

4. Participate in regional ground water monitoring efforts, including the Volunteer Nitrate Monitoring Network.

Objective 5
Reduce contaminants from sewage and wastewater in surface and groundwater by ensuring that all residences have access to adequate water treatment. Estimated Staff Days: 10

1. Provide Ag BMP low interest loan funds for the replacement of failing individual sewage treatment systems.

2. Develop a county financial assistance program for SSTS and well upgrades and water treatment systems.

4. Assist with regional 319 grants for wastewater.

Objective 6
Protect surface and groundwater from contamination due to improper solid and hazardous waste disposal. Estimated Staff Days: 6

1. Pursue funding to clean-up at least one illegal dump site and/or a sinkhole dump.

2. Participate in Household Hazardous Waste collection.

Objective 7
Reduce the risks to public health and impacts on surface and groundwater from petroleum products, chemicals and other potentially hazardous materials from storage tank leaks and overfills. Estimated Staff Days: 2

1. Provide education and pursue funding for on farm tank spill containment and automatic shutoff nozzles.

2. Work with the county to develop fuel storage ordinances and set-backs.

GOAL 3: Promote the wise use of natural resources to sustain productivity while promoting stewardship of plant and animal communities. Total Estimated Staff Days needed: 101

Objective 1
Promote the establishment of permanent vegetative cover to provide habitat for wildlife species and protect water quality and soil erosion. Estimated Staff Days: 60

1. Continue to administer the district tree program including tree sales and design of farmstead windbreaks. Include productive trees, such as hazelnuts, and pollinator species on the tree order list.

2. Provide technical assistance for developing grazing management plans and for the implementation of those plans.

3. Research and promote the sale of a seed mixture for rain and/or butterfly gardens and for CSP/EQIP pollinator species and prepare a list of available vendors for customers.

4. Promote and provide funding for the Forest Stewardship Program, including buckthorn control.

5. Promote and provide technical assistance to landowners for the RIM program through direct mailings, news articles and radio ads.

6. Promote re-vegetation of native species through programs including CCRP, the BWSR Native Buffer Program and other similar programs.

7. Encourage the use of cover crops through a District education program.

8. Encourage the use of perennial crops.

9. Provide information about invasive species control on private and public lands.

10. Promote the Living Snow Fence Program and offer species on the tree sales list that are recommended for living snow fences.

11. Develop staff capacity for writing and approving conservation plans for Rural Preserve Program applicants, and develop a fee schedule with incentives for implementing enhancement practices.

Objective 2
Enhance the benefits of wetlands, floodplains and shorelands. Estimated Staff Days: 41

1. Administer the Minnesota Wetland Conservation Act and promote Wetland Preservation Areas.

2. Cooperate with conservation groups and other government agencies to promote the use of rotational grazing in shoreland areas.

3. Assist with wetland restoration projects as requested by landowners.

GOAL 4: Carry out the duties of the soil and water conservation district in the most efficient and professional manner. Total Estimated Staff Days needed: 405

Objective 1
Support activities that will allow staff and board members to increase the capacity of the SWCD. Estimated Staff Days: 256

1. Seek funding and activities to enhance District capacity.

2. Provide funding for employee and supervisor training and development as budgeted.

3. Conduct annual performance evaluations, plus more frequent (quarterly or semi-annual) informal reviews while keeping the personnel policy handbook up to date with current policies.

4. Annually review and approve the District By-Laws.

5. Coordinate the activities and/or provide representation for Local Watershed Projects.

6. Encourage supervisor and staff attendance at area and state meetings.

7. Support of the Minnesota Association of Soil and Water Conservation Districts (MASWCD) and the Area VII MASWCD, State MACDE and SE MACDE (MN Assoc. of Conservation District Employees).

8. Provide board member and/or staff attendance at the Hiawatha Valley RC&D, Area VII MASWCD, SE MN Technical Joint Powers Board, and SE MN Water Resources Board meetings.

9. Participate in regional initiatives that enhance the mission statement, including BALMM and the Driftless Area Initiative.

10. Participate in EQIP local workgroup.

11. Investigate publishing a plat book in the near future.

12. Participate on the steering committee for the National Trout Learning Center in Preston,

Objective 2
Conduct educational activities that promote and carry out the mission and goals of the SWCD. Estimated Staff Days: 149

1. Coordinate efforts with other conservation organizations to carry out the goals of the SWCD (e.g. Project Get Outdoors, DNR prescribed burning training, RC&D grazing workshops)

2. Conduct joint meeting with County Commissioners annually to review District programs.

3. Hold 3-6 meetings with the Local Water Management technical committee and Citizens' Advisory Committee.

4. Update and maintain the SWCD web page.

5. Investigate alternatives to publishing the Conservation Chronicles two times per year.

6. Publish monthly newspaper columns submitted by a staff person assigned to each month.

7. Conduct radio ads and public service announcements to promote the goals of the SWCD.

8. Carry out the DNR Well Monitoring Program.

9. Conduct the County Rain Gauge Monitoring Program.

10. Continue to hold a 6th grade field day with a goal of all schools participating. Invite home schooled students to the event.

11. Support and assist with the Area VII Envirothon.

12. Promote and provide two $500 scholarships, one to a graduating high school senior entering an agricultural or natural resource related field and one to a returning college student continuing education in an agricultural or natural resource related field limiting scholarships to one per individual.

12. Provide scholarships or other incentives to attend local educational events that are consistent with the SWCD's mission.

13. Provide information on natural resources conservation and renewable energy at the county fair as well as countywide throughout the year.

14. Select and promote a county Outstanding Conservationist (from District 2 in 2010) to be recognized at the annual MASWCD Convention, as well as other possible award candidates in other categories.

15. Promote District Accomplishments.

16. Participate in the FFA and 4H organizations to promote soil conservation and to provide information about careers, forestry, water testing, etc.

17. Participate in Ag in the Classroom, Earth Day and other activities in the schools and contact the schools twice a year to encourage them to utilize SWCD staff as presenters.

18. Contact schools and home schooled students regarding participation in the MASWCD poster, mural and video contests.

19. Consider hiring an intern to develop information for the SWCD website about the use of no-till and cover crops.

20. Participate in the Adopt-A-Highway Program.

21. Schedule a canoe trip for board and staff on the Root River to view areas of special interest for the turbidity TMDL and other studies.

GOAL 5: Maximize efficiency in GIS implementation by providing current training to SWCD staff. Total Estimated Staff Days needed: 36

Objective 1
Technical support of ongoing programs and practices. Estimated Staff Days: 36

1. Train SWCD staff in "Toolkit", RUSLE, general map development, and other applicable GIS based software.

2. Attend various local and regional software training sessions to keep abreast of technology.

3. Perform mapping services in support of nutrient management plan development and the buffer initiative.

4. Maintain GIS database of soil and water conservation practices within the County and continue to add older practices as time allows.

5. Continue involvement in the Fillmore County Technology Committee.

Fillmore Soil and Water Conservation District
Comprehensive Plan Addendum-State Cost Share

High Priority Erosion Problems

The rolling and often steep topography of the county creates erosion problems if proper precautions are not taken. The Fillmore SWCD has targeted and will continue to target the majority of its state cost-share funds to the construction of grassed waterways that will minimize gully erosion. The remainder of the funds will continue to be used for such practices as terraces and gully control structures. Priority for these projects will be given to projects that have upland treatment of cropland that maintains soil loss to T or less as determined by NRCS RUSLE2 calculations. The Root River Turbidity TMDL study will help to identify areas for prioritization.

High Priority Water Quality Problems

High priority water quality problems outlined in the Local Water Management plan are:
Fecal coliform bacteria in streams and groundwater: This will be addressed by the SWCD through the implementation of feedlot water quality projects funded by the Board of Water and Soil Resources. The SWCD is also working with Fillmore County Zoning using local funding to implement low cost feedlot run-off control projects and a nutrient management assistance program. Both locally funded projects are meant to address fecal coliform bacteria entering the surface and ground water of Fillmore County. High priority feedlot projects in Fillmore County are defined as feedlots within 300 feet of a stream, river, or sinkhole. With the importance of livestock in Fillmore County, filter strips are an important tool to minimize livestock damage to streambanks and reduce fecal coliform bacteria loading into the water body. Programs such as Continuous CRP and RIM will be promoted to encourage installation of filter strips along streams and around sinkholes. Technical assistance for development and implementation of nutrient management plans and grazing management plans will also help to reduce the transport of manure and bacteria to rivers and streams. District staff will continue to assist the county with inspecting new septic system installations.
Nitrates in groundwater: The SWCD provides state cost-share funds for sealing wells that meet the guidelines set by the SWCD Board with 50% cost-share not to exceed $1,000. Technical assistance is available for nutrient management plans which help producers reduce their nutrient use and costs. Nitrates are also addressed by reducing pollution from high priority feedlots and malfunctioning septic systems. Nitrate clinics and the Volunteer Nitrate Monitoring Network will educate the public about nitrates in ground water and help to gather information about nitrate levels in drinking water wells.
Pesticides in streams: Monitoring is being conducted in conjunction with the MDA to identify areas of concern, but adequate data is not available to provide detailed information for mapping purposes. Some TMDL monitoring stations are co-located with MDA pesticide monitoring sites. Assistance will be given to landowners for practices that address pesticides running off into streams, such as filter strips.
Turbidity in surface waters: The Root River Turbidity TMDL study (2008-2011) will provide more comprehensive data on turbidity and sediment loading in the impaired segments of the river and its tributaries. Watershed modeling and sediment fingerprinting will help to identify areas for implementing BMPs and to predict reductions in sediment in the river. Preliminary work will begin on the final report and implementation plan in 2010.

Special Projects

The Fillmore SWCD has several ongoing special projects that will continue to be implemented over the next several years. Administering the Flood Relief Cost Share Grants for the 2007 flood damages will continue in 2010. There will be follow up on sealing about 300 private sandpoint wells in the City of Rushford found after the flood. All flood relief funds must be encumbered by December 31, 2010.

The Fillmore SWCD continues to provide assistance o create farmstead windbreaks for future energy conservation and offers state cost-share funds to provide 75% not to exceed established cost-share rates on file at the SWCD.

The Cover Crop program will continue in 2010 funded with District funds or funding from a regional Clean Water Legacy grant for cover crops. In addition, the use of cover crops for extending the grazing season will be studied with funding from a MDA Sustainable Ag Grant received in 2008.

The MDA Root River Small Watershed Project will begin in 2010 to evaluate the effectiveness of BMPs. Two part-time staff will be funded in the SWCD. One will work with farmers on the adoption of BMPs and measuring their effectiveness. The other will conduct water quality monitoring to evaluate how well the practices reduce pollutant transport. Cost share funds will be available to the producers in the watersheds for implementation of practices.

The SWCD has designated District funds to assist NRCS with developing a no-till website to share information from producers who have adopted no-till. About a half dozen producers have been interviewed along with pictures of their practices. Those will be posted on a webpage, as well as published in local newspapers.

The Fillmore SWCD will be an active participant in the Mississippi River Basin Healthy Watersheds Initiative for the Root River which will provide additional funding through NRCS for the EQIP, CSP, WHIP, WREP, and Conservation Innovations Grant programs.

Fillmore SWCD is a member of the steering committee for a nutrient efficiency coalition created with the help of the Conservation Technology Information Center funded by an EPA hypoxia grant. A conference is being organized for February 18th in Mankato for ag consultants and cooperatives about the current and future status of nutrients in the environment.

In 2004, the Fillmore SWCD began assisting the county on an “as needed” basis with conducting on-site inspections of new and upgraded ISTS systems. In addition, the District administers the Ag BMP loan program to assist homeowners with upgrading systems that are failing. AgBMP loans are also available to landowners to assist in implementation of conservation practices and BMP’s, such as manure management, feedlot fixes, and no till planters.