

Benton Soil and Water Conservation District

2011 Annual Plan of Work



Introduction

It is the mission of the Benton Soil and Water Conservation District (SWCD) to protect and enhance Benton County's soil, water, and other natural resources; to nurture a conservation ethic by educating county residents on conservation and environmental issues.

The Benton Soil and Water Conservation District Annual Plan is prepared so that goals can be set to utilize public funds effectively in order to improve water quality, water quantity, control erosion, improve soil condition and wildlife habitat in Benton County, and plan the workload of the staff.

The Benton SWCD has adopted the Comprehensive Local Water Management Plan as the SWCD's Comprehensive Plan. The plan was updated in 2008 and expires in 2018.

Significant events that affect the 2011 work plan include:

- Benton SWCD will continue to coordinate the Comprehensive Local Water Plan activities in 2011.
- The District will continue to provide assistance to the Elk River Watershed Association.
- During the fall of 2010, the District entered into a contract with the MPCA to begin Phase III of the Little Rock Creek TMDL project. Phase III includes subcontracting with a consultant for modeling and the writing of the TMDL for the stream. This project will continue into 2011.
- The Little Rock Lake TMDL study and TMDL studies for Mayhew Lake, Big Elk Lake and the Elk River immediately below Big Elk Lake (Elk River Watershed TMDL's) will be approved by the EPA in 2011. The district will work towards implementation activities in 2011.
- The District will continue assisting the USDA with implementation of Farm Bill conservation programs.
- The District will support five FY10 and FY11 Clean Water Fund grants for water quality projects including:
 - Accelerated nutrient and manure management planning – Contract with Mille Lacs SWCD to prepare nutrient management plans for Mille Lacs County producers enrolled in EQIP.
 - Animal waste management and Irrigation water management – Install low cost feedlot improvements and manure management planning. Promote irrigation water management practices and conversion of high pressure irrigation systems to low pressure systems. Check irrigation uniformity and efficiency of irrigation systems by completing a “catch can test.”
 - Feedlot Water Quality Management – Complete feedlot improvement projects: Bob Schyma, Brian Montag, Greg Novak, Ray Goulet and others to be determined.
 - Little Rock Impaired Waters Kickoff - Assess irrigation systems and irrigation management strategies so that water and nutrients are supplied to crops at an appropriate rate and time. This will be completed in the Little Rock Creek groundwater recharge area in Benton and Morrison Counties. Other practices will

be promoted in the Little Rock Lake and Little Rock Creek watersheds as well. New staff will be hired for this initiative.

- Elk River Watershed Association Pollution Loading Reduction Project – Assist farmers with nutrient management using BMP test plots and complete one wetland creation.
- The water plan committee will amend the local water plan to integrate TMDL study results and emerging local priorities.

Annual Objectives

Feedlot and Manure Management

Goal 1: Reduce or minimize the negative impact of animal manure and fertilizer on surface and groundwater.

Objective 1: Increase adoption of feedlot site Best Management Practices (BMPs)

Action Items:

1. Host field days, meetings, publish written material, etc.
2. Recruit participants through non-traditional methods, i.e., on farm visits
3. Support compliance with MN Rule 7020 and other regulations related to water quality
4. Promote low cost feedlot solutions
5. Demonstrate economic, environmental, and other benefits of BMP adoption
6. Promote and advertise pasture/grazing management planning
7. Identify and work with non-compliant farms to install BMP's

Objective 2: Increase adoption of manure and fertilizer application Best Management Practices (BMPs)

Action Items:

1. Provide basic manure management tools and services, i.e. spreader calibration, manure and soil testing, spreading equipment, etc.
2. Conduct demonstration trial plots and other on farm educational work with producers in cooperation with private/public entities
3. Host field days, meetings, publish written material, etc.
4. Demonstrate economic, environmental, and other benefits of BMP adoption
5. Recruit participants through non-traditional methods, i.e., on farm visits
6. Support compliance with MN Rule 7020 and other regulations related to water quality
7. Promote and advertise pasture/grazing management planning
8. Promote adoption of manure management BMP's targeting efforts on dairy and poultry manure and/or land areas of highest concern

Objective 3: Increase the adoption of improved manure handling, pasture management, and other BMPs related to water quality with small non-traditional hobby/enterprise farm operators

Action Items

1. Partner with other entities who provide programs and services to this audience to adopt BMPs

Development

Goal 1: Balance open space and development in Benton County in such a way as to maintain and/or improve the region's water quality.

Objective 1: Develop a natural resources inventory that identifies rare/critical/vulnerable resources relating to water quality.

Action Items:

1. Continue to assist in the development of a geologic atlas (final phase).
2. Continue to promote the use of the new digital web soil survey as it relates to development.
3. Support the Mississippi River Coordinator (Stearns SWCD employee) provide technical and coordination expertise in the Mississippi River Renaissance area in order to protect this vital stretch of the Mississippi River through conservation and development projects.

Goal 2: Encourage Benton County local government units to adopt development related ordinances and policies to maintain and enhance the region's water resources.

Objective 2: Utilize plat process/policy to implement urban best management practices

a. Create & promote incentives to establish and maintain low impact development

Action Items:

1. Explore method to make low impact development techniques standard
2. Identify and define low impact development techniques
3. Educate developers, citizens, landowners about Low Impact Developments (LIDs) using newsletter, i.e. Solid Waste Newsletter
4. Promote distribution of educational materials for lawn/yard best management practices
5. Support the Mississippi River Coordinator (Stearns SWCD employee) provide technical and coordination expertise in the Mississippi River Renaissance area in order to protect this vital stretch of the Mississippi River through conservation and development projects.

Groundwater

Goal 1: Protect and maintain groundwater quality resources

Objective 1: Maintain/promote existing cooperative partnerships that monitor groundwater

Action Items:

1. Support Department of Agriculture Central Sands Monitoring Network
2. Continue to offer free nitrate testing.

3. Work with the Department of Agriculture and Department of Health to identify additional groundwater monitoring needs in Benton County.

Objective 2: Develop and implement Wellhead Protection Plans (WHPA) for all public/community water supplies in County

1. Work with partners to educate landowners within the WHPA (BMPs)
2. Promote federal and state programs (EQIP, State Cost Share, MDA Low Interest Loan Program, Etc.) to install BMP's (irrigation water management, abandoned well sealing, septic system upgrades, etc.) in WPA's

Objective 3: Develop plan to eliminate unused wells

Action Items:

1. Promote and utilize cost share programs to seal unused wells

Goal 2: Protect and maintain groundwater quantity resources

Objective 1: Establish relationships between Benton County Local Government Units (LGUs) for water resource sharing and protection

Action Items:

1. Continue to monitor groundwater levels.
2. Work with municipalities and agricultural community to conserve water use & implement BMP's (Irrigation Water Management grant)

Objective 2: Assist in the development of the County Geologic Atlas

Action Item:

1. Work with appropriate entities to identify aquifer thresholds to maintain adequate water supply for consumptive use
2. Maintain surface water resources (i.e. lakes, rivers, wetlands)
3. Host a follow up meeting to educate potential users of capabilities of the Geological Atlas.

Ongoing Activities

Goal 1: Provide support to the Elk River Watershed Association

Action Items:

1. Participate in board meetings
2. Assist with administration of the BWSR Clean Water Fund grant program. Educate landowners about available programs and assist with the installation of BMP's (manure/nutrient management, wetland creation)
3. Assist with TMDL development and the Major Watershed Project.

4. Provide support to the Watershed Coordinator employee.

Goal 2: Little Rock Creek TMDL – Phase III

Action Items:

1. The District will be responsible for the following tasks in the work plan:
 - a. General project administration, coordination and outreach
 - b. Coordinate Technical Advisory Committee meetings
 - c. Coordinate Stakeholder meetings
 - d. Developing and reviewing the draft TMDL report
 - e. Assist the Consultant in developing the watershed implementation plan with guidance from the Little Rock Stakeholder Committee

Goal 3: Complete the Little Rock Lake TMDL study

Action Items:

1. Provide general administration and coordination
2. Coordinate Technical Advisory Committee meetings
3. Develop the watershed implementation plan with guidance from the Little Rock Stakeholder Committee

Goal 4: Provide Environmental Education

Action Items:

1. Provide environmental education as identified by the education committee in 2009
2. Administer the poster, essay and mural contest for 5th and 6th grade students in Benton County
3. Administer coloring (Kindergarten – 4th grade) and photo (Divisions: under age 18 and over age 18) contests
4. Participate in the Sherburne Environmental Education Days for Benton County students at the Sherburne National Wildlife Refuge.
5. Promote participation in the Envirothon

Goal 5: Support the Wetland Conservation Act

Action Items:

1. Provide technical support for the Wetland Conservation Act. Serve as a member of the Technical Evaluation Panel, complete plans for restoration/replacement orders; assist in wildlife habitat improvement exemptions.

Goal 6: Strengthen conservation partnerships with other LGU's, agencies and groups.

Action Items:

1. Assist the DNR Waters with the Water Appropriation Permit Review Program
2. Collect DNR Observation well data for Groundwater Monitoring Program
3. Develop and distribute a quarterly e-newsletter to area Sportsmen's Clubs, Little Rock Lake Association, and other local clubs

4. Assist NRCS in the promotion and administration of USDA's programs
5. Assist Little Rock Lake Association in addressing their resource needs
6. Assist the State Climatologist in gathering precipitation data for the Rainfall Monitoring Program
7. Cooperate with the cities in Benton County in implementing their Wellhead Protection Programs
8. Assist US Fish and Wildlife Service to implement wetland restoration projects

Staffing Needs

SWCD Staff

Staff	Title	Primary Responsibilities	Area of Emphasis	
			Technical	Admin.
Katie Winkelman	Water Plan Technician	Local Water Plan, WCA, Little Rock TMDL's	0.3	0.7
Sherburne SWCD Staff	Administrative Assistant (via agreement)	Administrative, Clerical	0.0	0.5
Gerry Maciej	Manager	Administrative, BMP's	0.1	0.9
Mike McMillin	Technician	BMP's; Feedlots, Manure and Nutrient Management	1.0	0.0
Nathan Sanoski	Technician	BMP's; Wetlands, Soil Erosion, Pasture Mgt.	1.0	0.0
New Employee	Watershed Technician	Irrigation Management, Little Rock BMP's	0.8	0.0
Staff Years		5.3 Available	3.2	2.1

NRCS Staff

Staff	Title	Primary Responsibilities	Area of Emphasis	
			Technical	Admin.
Pat Gehling	District Conservationist	NRCS Program Admin., BMP's	0.5	0.5
Barb Zeroth	Soil Conservation Technician	BMP's	1.0	0.0
Staff Years		2.0 Available	1.5	0.5

Other Staff

Staff	Title	Primary Responsibilities	Area of Emphasis
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			Technical	Admin.
Tiffany Determan	Watershed Coordinator	Elk River Watershed TMDL's, Miss. River – St. Cloud Watershed project	0	0.5
Ross Reiffenberger	TSA 2 Professional Engineer	Conservation practice survey and design	0.15	0.0
Nathan Hylla	TSA 2 Technician	Conservation practice survey and design	0.1	0.0
Kimberly Theilen-Cremers	Mississippi River Coordinator	Mississippi River Renaissance project	0.2	0.2
Staff Years		1.15 Available	0.45	0.7

State Cost-Share Program Requirements

A. High Priority erosion & water quality problems

"High priority erosion problems" means areas where erosion from wind or water is occurring:

- equal to or in excess of 2 x T tons per acre per year or
- is occurring on any area that exhibits active gully erosion or
- is riparian in location or
- is identified as high priority in the comprehensive local water plan.

"High priority water quality problems" means areas where sediment, nutrients, chemicals, or other pollutants discharge to DNR designated protected waters or to any high priority waters as identified in a comprehensive local water management plan or ground water. Little Rock, Mayhew and Big Elk lakes have been identified as impaired due to excessive nutrients therefore practices in these watersheds are considered a high priority. Little Rock and Mayhew Creeks are impaired for biota therefore practices in these watersheds are considered a high priority. All identified wellhead protection areas are considered a high priority.

The Benton SWCD will continue to utilize its scoring template to assist in prioritizing projects for these limited funds.

The Benton SWCD will dedicate fiscal year 2011 State Cost Share dollars (minus technical and administrative assistance) towards these projects in Benton County.

B. Special Projects

Installing native buffers will continue to be a special project for 2011. Projects located in the Little Rock Lake watershed have been given higher priority.

2011 Budget

Revenue

Charges For Services	\$35,412
County (including pass through grant dollars)	\$175,304
State	\$489,553
Federal	\$0
Miscellaneous	\$8,100
Total Revenue	\$708,369

Expenses

Personnel Expenses	\$279,453
Other Services and Charges	\$75,018
Capital	\$15,000
Project Expenses	\$335,499
Total Expenses	\$704,970