

BIG STONE SOIL & WATER CONSERVATION DISTRICT'S ANNUAL PLAN OF WORK
In Cooperation with Big Stone County Environmental Office, the Natural Resources Conservation Service, and Farm Services Agency

January 1, 2017 to December 31, 2017

I. INTRODUCTION

The purpose of the Big Stone Soil and Water Conservation District's Annual Plan is to provide a mechanism for implementing the comprehensive plan by identifying the actions that need to be performed each year. The annual plan provides specific statements about the actions to be achieved, the implementation of programs for the conservation of soil and water resources and the budget allocated to each program. The Annual Plan serves as a tool for guiding actions during the year and for measuring performance at the appropriate time intervals. The Annual Plan identifies and seeks out land occupiers with high priority erosion problems and encourages their participation in programs to control their erosion problems.

It is the policy of the Big Stone SWCD, FSA and NRCS to provide programs and activities without discrimination on the basis of race, color, nation origin, sex, religion, age, disability, political beliefs, sexual orientation, and marital or family status.

II. OBJECTIVES

- A. Soil Erosion – to bring the amount of water and wind erosion occurring on land within tolerable soil loss limits.

In Big Stone County there are about 495 agricultural producers operating 1821 farm tracts for a total of 231,976 cropland acres. About 10,750 acres of cropland are eroding at a potential rate of 2T or greater.

1. Implement Food Security Act of 2014
 - a. Participate in the 2014 farm program components to promote the best interests of the producers, SWCD, FSA and NRCS offices.
 - b. Develop and/or review conservation plans as required by the 2008/2014 Farm Program.
 - c. Conduct status reviews on selected compliance plans as required.
 - d. Help make HEL/NHEL determinations as requested through 1026's.
 - e. Develop plans on CRP contracts and explore options to re-enroll expiring CRP contracts.
 - f. Help to plan 7500 acres and apply 4000 acres to a Resource Management System.
2. Design, install, and promote conservation practices.
 - a. Promote conservation tillage
 - b. 4 acres of BMP projects per year
 - c. 100 acres of filter strips
 - d. Pasture and range management
 1. Recommend improved grasses and legumes for pasture to encourage maximum production of high quality forage on land that is not suitable for cropland
 2. Work with NRCS to encourage rotational grazing.

3. Promote District Tree Program
 - a. Design and install 5 field windbreak practices, 10 farmstead shelterbelts and 5 wildlife plantings.
 - b. Encourage use of tree fabric and Tubex.
 - c. Maintain contact with 105 landowners.
 - d. Promote living snow fences, utilizing available programs from MNDOT and CRP.
4. Develop a tree maintenance program
 - a. Educate on the effects of well-kept trees through newspaper articles, newsletter and handouts.
 - b. Work with Pheasants Forever and Sportsmans' Groups to provide cost-share for the use of tree fabric for new wildlife plantings.
 - c. Inform past & future users of tree fabric of the importance to "cut-away" and eventually remove the fabric as trees grow larger.
5. Promote use of the District's Equipment and Services
 - a. Provide grass drill service to seed 500 acres.
 - b. Provide seeding service to other lands (alfalfa, tree rows, food plots, cover crops)
 - c. Provide the option to landowners to purchase seed through the District. Assist landowners with seeding designs and recommendations for program requirements.
 - d. Provide rotary mowing services on 200 acres.
 - e. Provide various spraying services to interested landowners.
6. Use available programs to provide assistance to farmers.
 - a. Encumber Local Capacity dollars for high priority projects
 - b. Encumber Buffer money for high priority projects
 - c. Encumber CWF dollars for high priority engineering projects affecting water quality
 - d. Encumber state cost-share monies to high priority areas of the county.
 - e. Utilize EQIP for large, high cost projects and/or where many practices are needed.
 - f. Promote ACEP, WHIP, CRP, GRP and RIM programs.
 - g. Offer alternatives and assistance to landowners whose CRP contracts are expiring.
 - h. Assist DNR in promoting Working Land Initiative projects in the new prairie plan map boundary areas as determined by the Local Technical Team; prepare agreements, handle funding, reimburse landowners with DNR funds.
 - i. Partner with NRCS, Pheasants Forever, BWSR, Big Stone County Water Plan and DNR to provide a FarmBill Technician for Big Stone County.

B. Comprehensive Water Management – carry out duties specified in the Big Stone County Comprehensive Local Water Plan (CLWP).

Big Stone County has over 50,740 acres of water bodies/wetlands. The priority management of these lakes and wetlands insure the water quality of these areas is maintained or improved.

1. Work with Big Stone County and cooperating agencies to implement the CLWP including personnel from the Upper Minnesota River Watershed District, Bois de Sioux Watershed District and Pomme de Terre River Association.
 - a. Provide reports, land use data, soils information, etc. to the proper agencies.
 - b. Provide personnel to collect data and evaluate information as staff time/funding allows.
2. Protect ground water resources in Big Stone County by administering available programs and

working with cooperating agencies.

a. Promote and administer the well-sealing program when funding sources become available.

1. Complete 6 well decommissioning
2. Utilize EQIP & CLWP money for well-sealing when possible.

b. Read and record DNR observation wells in Big Stone County on a monthly basis.

c. Work with cities as they develop their wellhead protection plans.

1. Provide data from our office to city planners for assistance in plan development.

3. Improve and protect surface water quality by controlling runoff from feedlots with a high priority pollution hazard and controlling runoff from fields to limit the amount of sediment, nutrients, and pesticides leaving the field.

a. Work with MPCA and Big Stone County/NRCS/TSA II to assist landowners to comply with feedlot regulations.

b. Help plan feedlot runoff control systems as needed. Apply 7000 acres of nutrient management plans and 7000 acres of pest management plans.

c. Information

1. Comment on DNR water permits.
2. Educate the landowners to the importance of filter strips along ditches and bodies of water.
3. Promote awareness of technical and financial help through the local water plan.

4. Improve and maintain the water quality of all water bodies in the county; mainly Big Stone Lake.

a. Work with other organizations and government agencies (Upper MN River Watershed District, Citizens for Big Stone Lake, EPA, MPCA, MN DNR, Big Stone FSA COS, etc.) to coordinate programs and activities.

b. Promote shoreline restorations and rain gardens to treat erosion and runoff in 4 locations on or near Big Stone Lake.

c. Promote CRP CLEAN initiative, goal 2 each year.

1. Saturated Buffers
2. Bioreactors

C. Wetlands and Regulatory Programs

1. Preserve and restore wetlands with regard to the Wetlands Conservation Act of 1991

a. Provide assistance to landowners for information as requested.

b. Provide a member to the technical review committee who is trained in wetland delineation.

c. Assist the County Engineer's Office with wetland delineation adjacent to county road projects.

2. Buffer Law implementation

a. Assist landowners with obtaining compliance

b. Work with county LGU on compliance reporting and tracking.

D. Recreation, Fish and Wildlife Habitat

1. Reduce sedimentation and pollution of our lakes and streams while providing upland habitat benefits to wildlife such as; deer, pheasants, turkey, songbirds, pollinator insects, and others.

a. Restore and protect 800 acres of wetlands and uplands using ACEP, USFWS easements, RIM, NPB, TNC easements, MN Land Trust and/or available program.

2. Develop or improve wildlife habitat.

a. Utilize CRP program sign-ups to take marginal land out of production and establish cover.

i: 120 acres of restored wetlands

ii: 80 acres of filter strips

iii: 100 acres of upland habitats

iv: 4 tree plantings

- b. Engage as a partner with DNR and USFWS on programs & issues of their lands in the county.
- c. Work with Pheasants Forever and other sportsmen's groups on local spent money.
 - I: Seek funding for cost-share for wildlife tree plantings.
- d. Work with DNR and USFWS on programs they have available to improve or protect wildlife habitat (pheasant and duck stamp funds, easement programs, etc.)
- e. Encourage wildlife enhancements on non-cropped idle lands.
- f. Apply 1,000 acres of wildlife habitat management (prescribed burning, native grass seeding, Food-plots, invasive tree removal, wildlife tree plantings, weed control)

E. Education-Provide information and assistance to the public.

1. Information

- a. Utilize newspaper, radio, & social media to inform land users of conservation and regulatory programs.
- b. Utilize SWCD website and a joint newsletter with Big Stone County Environmental Office, NRCS and UMRWD for public information as news and funding allows.
- c. Write at least 20 news articles for Big Stone County newspapers.
- d. Utilize radio monthly for program promotion through "Conservation Connection".

2. Update Information

- a. Monitor rainfall monthly
- b. Conduct a tillage transect survey as requested.

3. Promotion

- a. Promote use of the educational facilities through Bonanza Educational Center.
- b. Be available at request to speak at meetings, give presentations at schools.
- c. Promote attendance at educational opportunities in Area II.
- d. Big Stone County will continue to offer its educational and conservation promotional activities including Beautiful Farmstead Award, Conservation Awards, etc.
- e. Promote Arbor Day by giving the 4th Graders in Big Stone County a tree to plant.
- f. Have displays at the Big Stone County Fair.
- g. Attend Bonanza Conservation Day in spring
- h. Have booth and promotional displays at the Sports & Leisure Show in Ortonville.
- i. Promote CWMA with brochures, booth displays, radio spots, newspaper articles, and landowner meetings.
- j. Promote the MN Walk-In Access Program as funds are available.

4. MASWCD State Convention

- a. Promote the State Convention and encourage supervisor and staff attendance.

5. BWSR academy

- a. All staff are encouraged to attend.

6. Cooperation

- a. NRCS for technical assistance and related programs
- b. TSA II for technical assistance
- c. FSA on related programs
- d. Extension Agency for education
- e. UMRWD, Pomme de Terre, and Bois de Sioux Watersheds for related programs.
- f. DNR wildlife interests and protected water/WCA issues
- g. USFWS wildlife interests
- h. Big Stone County Environmental Office on WCA & CLWP
- i. BWSR for WCA and state program assistance.

6. Website

- a. Maintain a website to keep all information on programs and data as current as possible.

The annual objectives for the Big Stone Soil and Water Conservation, FSA and NRCS are important because they are statements of what the District plans to do in the fiscal year 2017, and their impact on landowners, landusers and all county residents.

III. COST-SHARE PROGRAM REQUIREMENTS

- A. High Priority Water Quality Problems – High priority water quality problems means areas where sediment, nutrients, chemicals, or other pollutants discharge to Department of Natural Resources designated protected waters or to any high priority waters as identified in our comprehensive plan, or discharge to a sinkhole or groundwater. The pollutant delivery rate to the water source is in amounts that will impair the quality or usefulness of the water resource. High priority sediment areas are shown on the Critical Sedimentation Map. Big Stone County has 35,000 acres of land in high priority sedimentation areas.

Stony Run has been added to the impaired waters list. This area is considered a high priority.

Practices that will alleviate sedimentation are streambank and shoreline stabilization, critical area seeding, conservation tillage, sediment control structures, dams, grassed waterways, diversions, CREP, filter strips, CRP and terraces.

- B. High Priority Erosion – High priority erosion problems means areas where erosion from wind or water is occurring equal to, or in excess of, 2 tons per acre per year or is occurring on any area that exhibits active gully erosion or is identified as high priority in the comprehensive plan. Cropland in Big Stone County which is eroding at a rate of 2T per acre per year or over 2T per acre per year within 1000 feet of a water body or 300 feet of a stream is shown on the high priority erosion area map. There are 405 water basins and 37 watercourses designated as protected waters by DNR in Big Stone County.

There are about 112,000 acres in Big Stone County that are subject to combined wind and water erosion at rates higher than 2T and about 35,000 acres subject to combined wind and water erosion at rates of 2T or more and near streams and lakes.

Practices that are used to control erosion are field windbreaks, grassed waterways, terraces, conservation tillage, water and sediment control basins, and cover crops.

- C. High Priority Feedlots – High priority feedlots are defined as: “Those feedlots where the pollution potential rating (from the ag waste model) is greater than or equal to one and is discharging pollutants to DNR designated protected water or wetlands; to a sinkhole; to shallow soils overlying fractured or cavernous bedrock; or within 100 feet of a water well.”

As of December 31, 2016, there were 39 registered feedlots in Big Stone County.

Big Stone County has 405 waterbasins and 37 water courses within it boundaries as designated by the Minnesota Department of Natural Resources (DNR). Some of the bodies of water affected by feedlot and/or pesticide and nutrient runoff in the county include: Big Stone Lake, Artichoke Lake, Long Tom Lake, Toqua Lake, Otrey Lake, and Marsh Lake, along with a portion of the Minnesota River and the Mustinka River.

The practices needed to help solve ag waste pollution include: holding ponds, diversions, waste storage and disposal systems, holding tanks and pits, roof structures, animal and manure composting structures.

Since most animal waste systems are rather expensive and the SWCD's cost-share allotment is limited, the SWCD Board has specified that no state cost-share dollars will be used for feedlot projects. Animal waste cost-share requests will be directed to other funding sources, such as EQIP, CWF.

D. Cost-Share Fiscal Year 2017

The Big Stone Soil and Water Conservation District only considers high priority projects for cost-share. The District cost-shares **up to a maximum of 75%** of the total cost of a project. The District received \$6,550.00 for the state cost-share program. Of the \$6,550.00, \$1,310.00, or 20%, can be used for technical & administrative costs.

The money to be encumbered will be for high priority projects (including but not limited to): erosion control structures, storm water control systems, terraces, field windbreaks, critical area stabilization, water and sediment control basins, grass waterways, riparian buffer strips and well decommissioning's.

It is the responsibility of the Big Stone SWCD to administer the State Cost-Share Program to establish sound conservation practices that eliminate, or greatly reduce, an erosion or water quality problem during their effective life. According to their approval authority, Blayne Johnson, SWCD; Tammy Neubauer, SWCD, and TSA staff have been appointed as the technical representatives for the State Cost Share Program.

E. Special Projects.

1. The District anticipates applying for Clean Water Funds targeting Big Stone Lake, Marsh Lake Watershed area, Stony Run Watershed area and/or other priority areas.
2. The District anticipates using Working Lands Initiative funds to enhance conservation as contracted in 2016
3. The District anticipates using Big Stone Chapter of Pheasants Forever funds to performance enhancement activities on conservation lands within Big Stone County.

F. Comprehensive Water Plan Programs

The District plans to use the Clean Water Funds through the Mustinka (Bois de Sioux) Watershed and the Pomme de Terre River Association to promote BMPs.

G. Minnesota Buffer Law

The District plans to promote, educate and target landowners in need of complying with the 2015 buffer law.

H. Ag. Water Quality Certification Program

The District plans to promote this program again in 2017 through the use of newspaper, radio, and landowner workshops.

I. Local Capacity Funds

The District plans to utilize these funds on a priority basis to further enhance the District's operating capacity, upgrade office needs as they arise, and support funding highly valued BMP conservation practices.

BIG STONE SOIL AND WATER CONSERVATION DISTRICT
ORTONVILLE MINNESOTA
2017

WORKLOAD ANALYSIS WORKSHEET

OBJECTIVES	MAN YEARS		
	ADMINISTER	TECHNICAL	RECORD
Engineering	.15	.35	.30
Soil Erosion	.65	.215	.11
Comprehensive Water Mgmt	0	.05	0
Wetlands	.30	.30	.05
Recreation, Fish, Wildlife & Beautification	.40	.92	.41
Education	.40	.315	.08
TOTAL TIME NEEDED	1.90	2.15	.95
EQUAL 5.0 MAN YEARS FOR 2017			
<u>PERSONNEL AVAILABLE</u>			
<u>District</u>			
Admin. Asst.	.70	.05	.25
Technician	.30	.60	.10
Farmbill Technician	.30	.60	.10
<u>NRCS</u>			
Conservationist	.60	.30	.10
Technician	.10	.50	.40
TIME AVAILABLE	2.00	2.05	.95
EQUAL 5.0 MAN YEARS FOR 2017			