

**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, 2019 to December 31, 2019

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 2018
 - a. Participate in the 2018 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. Develop plans on CRP contracts and explore options to re-enroll expiring CRP contracts.
2. Design, install, and promote conservation practices.
 - a. Promote Soil Health and other Best Management Practices
 - i. Soil Health – promote 200 acres, and design and apply 500 acres BMPs
 - ii. Engineering – install 4 engineered projects
 - b. 300 acres of BMP projects per year
 - c. 20 acres of filter strips
 - d. Pasture and range management
 - i. Recommend improved grasses and legumes for pasture to encourage maximum production of high quality forage on land that is not suitable for cropland
 - ii. Work with NRCS to encourage rotational grazing.
 - e. Promote the implementation of cover crops and conservation tillage.

3. Promote District Tree Service
 - a. Design and install 1 field windbreak practice, 4 farmstead shelterbelts, 3 wildlife plantings, 1 living snow fence, and 1 riparian flood plain buffer
 - b. Encourage use of tree fabric and tree tubes.
 - c. Promote the conservation tree program to county 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 Sportsmen's 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 noxious weed spraying services to interested landowners.
6. Use available programs to provide assistance to landowners.
 - a. Encumber Local Capacity dollars for high priority projects
 - b. Utilize buffer cost share funds already encumbered 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, CRP, CREP, and RIM programs.
 - g. Offer alternatives and assistance to landowners whose CRP contracts are expiring.
 - h. Dependent on available funding, assist DNR in promoting Working Land Initiative projects in the prairie plan map boundary areas as determined by the Local Technical Team
 - i. Partner with Pheasants Forever, BWSR, Big Stone County Water Plan and DNR to provide funding for a FarmBill Technician for Big Stone County.
 - j. Promote and assist landowners with the Walk In Access Program
 - k. Utilize other grants such as Dept. of Agriculture funds received to assist with water test kits, or managing noxious weed infestations.
 - i. Partner with other agencies such as the Dept. of Natural Resources on potential projects that involve improving erosion as well as wildlife through the Conservation Partners Legacy grant
 - j. Crop Consulting
 - k. MN Ag Water Quality Certification Program

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.
 - c. Provide staff to attend One Watershed One Plan meetings.

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.
 - i. Complete 6 well decommissionings.
 - ii. Utilize EQIP & CLWP money for well-sealing when possible.
 - b. Read and record DNR observation wells in Big Stone County on a monthly basis, April through November.
 - c. Work with cities as they develop their wellhead protection plans.
 - i. 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. Assist with applying plans for feedlot runoff control systems, as needed.
 - i. Work with feedlot office to utilize local funds or Watershed funds to apply practices such as Ag Waste Pit Closures.
 - c. Encourage nutrient management plans and pest management plans.
 - d. Information
 - i. Comment on all LGU water drainage permits.
 - ii. Educate the landowners to the importance of filter strips along ditches and bodies of water.
 - iii. 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.
 - c. Promote shoreline restorations and rain gardens to treat erosion and runoff in the County. Promote CRP CLEAN initiative for saturated buffers and 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.
 - d. Assist the TEP with wetland banking opportunities

2. Buffer Law implementation
 - a. Assist landowners with maintaining compliance
 - b. Work with county LGU on compliance reporting and tracking.
 - c. Provide cost share for buffers and alternative practices.

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. Assist in the restoration and protection 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: 200 acres of restored wetlands
 - ii: 40 acres of filter strips
 - iii: 100 acres of upland habitats
 - iv: 1 tree planting
 - b. Engage as a partner with DNR and USFWS on programs & issues on their lands in the county.
 - i. Conservation Partners Legacy grant may be a great start.
 - c. Work with Pheasants Forever and other sportsmen's groups on money spent locally.
 - i: Seek funding for cost-share for wildlife tree plantings or grass seeding upgrades.
 - d. Work with DNR and USFWS on available programs 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 500 acres of wildlife habitat management (prescribed burning, native grass seeding, food-plots, invasive tree removal, wildlife tree plantings, weed control)

E. Public Outreach

1. Marketing

- 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. Information Collection

- a. Monitor rainfall monthly
- b. Conduct a tillage transect survey as requested.
- c. Assist landowners in sealing unused wells.
- d. Continue hosting a courier service with RMB environmental labs for landowners to send in water test kits of common contaminants in groundwater.

3. Education

- 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 a booth and promotional displays at the Sports & Leisure Show in Ortonville.
 - i. Promote the weed management program with brochures, booth displays, radio spots, newspaper articles, and landowner meetings.
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. MASWCD Legislative Days
 - a. All staff are encouraged to attend.
 7. Cooperation
 - a. NRCS for technical assistance and related programs
 - b. WCTSA 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 work on buffers, shorelines, hydrology, and fisheries.
 - g. USFWS wildlife interests
 - h. Big Stone County Environmental Office for WCA, Water Plan, Feedlot projects, and Shoreline Restorations.
 - i. BWSR for WCA and state program assistance including many of the grants administered out of the SWCD here.
 8. Website
 - a. Maintain a website to keep all information on programs and data as current as possible along with appropriate social media.

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 2019, and their impact on landowners, land users 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.

Nonstructural Land Management Practices Implementation considers the impaired waters that are listed with the WRAPS (Watershed Restoration and Protection Strategy), from the Upper Minnesota River Watershed District report, as high priority areas.

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, terraces, cover crops, and nutrient management.

- 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, 2018, there were 53 registered feedlots in Big Stone County, according to the County Environmental Office records.

Big Stone County has 405 water basins and 37 water courses within its 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.

- D. Cost-Share Fiscal Year 2019 (Nonstructural Land Management Practices Implementation)
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 receives \$6,550.00 for the state cost-share program each year. 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, well decommissionings, cover crops, conservation tillage, and nutrient management. The District intends to request additional state cost share funds for projects. Local Capacity grant funds are also applied, as available, for cost share projects.

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, Tammy Neubauer - SWCD, TSA staff, and the contracted TSP 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 that prioritize, target and measure projects in the Big Stone Lake, Marsh Lake Watershed area, Stony Run Watershed area and/or other priority areas.
2. The Local Technical Team will continue engagement with native prairie landowners to provide cost share funds for projects that enhance conservation.
3. The District anticipates using Big Stone Chapter of Pheasants Forever funds to performance enhancement activities on conservation lands within Big Stone County.
4. Partner with Local DNR Fisheries department to re-construct a failing dam with a fish passage archway utilizing a Conservation Partners Legacy grant.
5. Continue partnership with Centrol Crop Consulting to assist our landowners who sign up for soil health practices.

F. Comprehensive Water Plan Programs

The District plans to use the Clean Water Funds, as well as 319 funds, through the Mustinka (Bois de Sioux) Watershed, Pomme de Terre River Association, and Upper Minnesota River Watershed to promote BMPs. These plans will soon be updated, and state funds may become available for use to landowner projects.

IV. ADDITIONAL PROGRAMS

A. Minnesota Buffer Law

The District will continue to promote, educate and target landowners in need of complying with the 2015 Buffer Law as well as notify the Big Stone County Environmental office of violations.

B. Ag. Water Quality Certification Program

The District plans to continue working with current applicants of the program and promote the program again in 2019, through the use of newspaper, radio, and landowner workshops.

C. Local Capacity Funds

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