

**YELLOW MEDICINE  
SOIL AND WATER CONSERVATION  
DISTRICT**

**Clarkfield, Minnesota**



**2017 ANNUAL PLAN**

## TABLE OF CONTENTS

<b>Introduction</b> .....	<b>1</b>
Purpose .....	1
Supervisors, Staff and Cooperating Agencies.....	1
Goals (Yellow Medicine One Watershed One Plan and the Yellow Medicine Water Plan) .....	1
Mission Statement .....	1
<b>Services and Programs</b> .....	<b>2</b>
<b>Goals and Objectives</b> .....	<b>3</b>
Goal – Provide for an Efficient District Operation.....	3
Goal – Promote and Educate the Public on the SWCD’s Programs .....	3
<b>Priority Concern #1: Mitigate Altered Hydrology and Minimize Flooding</b>	
Objective 1: Implement BMPs.....	4-5
Objective 2. Capital-Improvement Projects .....	5
Objective 3: Studies, Data Acquisition and Data Management.....	5
<b>Priority Concern #2: Minimize the Transport of Sediment, Excess Nutrients, and Bacteria</b>	
Objective 1: Implement BMPs.....	5
<b>Priority Concern #3: Protect and Preserve Groundwater Quantity and Quality</b>	
Objective 1: Protection of Groundwater.....	6
<b>Operation and Maintenance on Existing or Newly Created BMPs</b> .....	<b>6</b>
<b>Existing Regulatory Controls</b> .....	<b>6</b>
<b>Resource Monitoring</b> .....	<b>6</b>
<b>2017 Budget</b> .....	<b>7-8</b>

# INTRODUCTION

## PURPOSE

The Yellow Medicine Soil and Water Conservation District (SWCD) was duly organized as a governmental subdivision of this State, and a public body corporate and politic on the 17th day of April, 1950. The soil conservation district was organized in order to provide a local organization for farmers and others to work together and with local, state, and federal organizations in solving their land-use problems and maintenance of soil fertility, erosion control, flooding, and drainage problems.

## SUPERVISORS FOR 2017

Darwyn Bach  
Delon Clarksean  
Jerry Nelson  
Tom Remmele  
Hollis Weber

## STAFF

Anita Borg  
Kurt Johnson  
Tyler Knutson  
Ian A. Olson

District Manager  
Administrative Assistant  
District Technician  
Conservation Technician  
Farm Bill Assistant

## COOPERATING AGENCIES

Natural Resources Conservation Service  
Lac qui Parle Watershed District  
Yellow Medicine Watershed District  
Redwood Cottonwood Rivers Control Area (RCRCA)  
Southwest Prairie Technical Service Area  
Department of Natural Resources  
Board of Water & Soil Resources

Yellow Medicine County Commissioners  
Yellow Medicine County Water Planner  
Yellow Medicine County Zoning Office  
Yellow Medicine County Ditch Office  
Farm Service Agency  
US Fish & Wildlife Services

This annual plan is written to implement the Yellow Medicine One Watershed One Plan as well as the Yellow Medicine Comprehensive Local Water Management Plan which the Yellow Medicine Soil and Water Conservation District adopted as their comprehensive plans. The goals as defined in the Yellow Medicine One Watershed One Plan are as follows:

- Mitigate Altered Hydrology and Minimize Flooding
- Minimize the Transport of Sediment, Excess Nutrients, and Bacteria
- Protect and Preserve Groundwater Quantity and Quality

The goals as defined in the Yellow Medicine County Water Management Plan are as follows:

- Promote and Educate the Public on the District's Ongoing Programs.
- Protect and Improve the Soil Resources and Surface Water Quality in the County.  
Reduce erosion & sediment problems to sustainable levels by promoting the use of Best Management Practices.  
Implement the Aquatic Invasive Species Plan for Yellow Medicine County.
- Enhance and Restore the County's Water Quality.  
Reduce priority pollutants to sustainable levels.
- Protect and Improve the Quality and Quantity of Groundwater in the County.  
Assist with wellhead protection planning.  
Support good land use decisions regarding groundwater resources and wellhead protection areas.  
Expand groundwater monitoring.
- Improve Surface Water Management to Decrease Flooding in the County.  
Minimize losses associated with the flooding of agricultural lands.
- Implement Sound Surface Water and Drainage Management Strategies in the County.  
Apply watershed based principles while properly managing drainage systems.
- Protect Surface Water Quality in the County  
Implement Yellow Medicine County Aquatic Invasive Species Plan
- Protect Surface Water Quantity in the County.  
Preserve existing wetlands and restore legally drained wetlands having potential for flood damage reduction, wildlife, recreational and groundwater recharge benefits, where practical.

## MISSION STATEMENT

The mission of the Yellow Medicine Soil and Water Conservation District (SWCD) is to provide technical, financial, and educational support to the public for the purpose of conserving and protecting soil, water, and other natural resources.

The SWCD prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, family status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program.

## **SERVICES AND PROGRAMS**

- Tree Program – Design, Planting, and Mats
- State Cost-Share Program – Cost Share dollars available for installation of best management practices
- Vegetative Management & Enhancement of Conservation Easements Cost Share Program.
- Reinvest in Minnesota (RIM), Conservation Reserve Enhancement Program (CREP) – Permanent conservation easement programs
- Education Programs
- DNR Well Monitoring - Monitor DNR observation wells throughout the County
- Water Permits - Process and review the DNR water permits
- Annual and Year End Reporting in BWSR Reporting System - Reporting of progress of conservation practices on the SWCD web page
- Wetland Conservation Act
- Ag BMP Loan Program
- Assist with County Local Water Management Plan -See County Website: [yellowmedicine.govoffice.com](http://yellowmedicine.govoffice.com)
- Engineering (survey, design, etc.)
- Walk In Access Program
- Rain Gauge Program
- Clean Water Fund Projects
- Lac qui Parle Watershed Restoration and Projection Project Strategy (WRAPS)
- One Watershed One Plan for Yellow Medicine Watershed
- Aquatic Invasive Species Plan
- Buffer Law
- Soil Loss Law

## GOAL & OBJECTIVES

### ***GOAL: PROVIDE FOR AN EFFICIENT DISTRICT OPERATION – Actions:***

1. Hold regular board meetings the fourth Thursday of each month.
2. Develop a budget, annual plan of work and annual report.
3. Staff a District Manager, District Technician, Conservation Technician, District Administrative Assistant, and Farm Bill Assistant.
4. Hold regular staff meetings
5. Provide and seek training for all personnel in order to carry out the SWCD's programs.
6. Conduct annual employee evaluations and update job descriptions.
7. Review policies and develop priorities.
8. Review various memorandums of understanding.
9. Provide representation to various organizations, such as but not limited to: Yellow Medicine Watershed Advisory Committee, RCRCA, Yellow Medicine County Water Task Force, Lac qui Parle Watershed Advisory Board, Yellow Medicine River Watershed Clean Water Technical Committee, Lac qui Parle Yellow Bank Watershed Clean Water Technical Committee, Southwest Prairie Joint Powers Board, Lac qui Parle WRAPS, Yellow Medicine One Watershed One Plan Committees, etc.
10. Utilize web based reporting system to report progress.
11. Utilize district website to publish annual and other reports.
12. Apply for clean water funds and other sources of funding as they become available.
13. Install all cost share practices according to standards and specifications required by the program.
14. Conduct status reviews as required by various programs.

### ***GOAL: PROMOTE & EDUCATE THE PUBLIC ON THE SWCD'S PROGRAMS – County Wide Action:***

1. Publish newsletters as needed.
2. Select a conservation farmer.
3. Set up displays at the county fair, banks, restaurants, family resource fairs, etc.
4. Co-Sponsor the SWMACDE Environmental Fair to be held in Lyon County.
5. Publish news articles to address conservation issues and concerns.
6. Contact landowners/operators regarding current programs.
7. Meet with County FAC Committee during the year to discuss resource concerns and building issues.
8. Assist the Yellow Medicine River Watershed District, the Lac qui Parle–Yellow Bank Watershed District, the Redwood Cottonwood River Control Area and Area II in their educational efforts.
9. Hold SWCD retreat to discuss goals and objectives.
10. Develop promotional presentations, tours and/or educational activities for local organizations in the county.
11. Continue to maintain the SWCD's website.
12. Meet with other agencies and organizations to prioritize resource concerns, setting goals and objectives.
13. Work with SWCDs, Watersheds, and County officials to develop watershed based planning.
14. Present at the Ag in the Classroom events in the County
15. Promote Aquatic Invasive Species Plan, etc.
16. Hold a Women's Day with FSA and NRCS
17. Conduct an annual meeting with stakeholders and/or Local Work Group to set resource concerns and priority areas for the County.

In 2017 the SWCD's Annual Plan will include assisting local partners in implementing both the Yellow Medicine One Watershed One Plan and the Yellow Medicine Water Plan. For exact goals, objectives and actions items of each plan, please see each individual plan. For the purpose of this annual plan priority concerns, objectives and action items were taken from both plans and incorporated together.

## **PRIORITY CONCERN 1: MITIGATE ALTERED HYDROLOGY AND MINIMIZE FLOODING**

**Objective 1: Implement BMPs.** Implement BMPS to mitigate altered hydrology in the Yellow Medicine River Watershed Coteau, Transitional, and Flatland Management Zones. Keep stormwater in place as long as possible while balancing the need to prevent damage to infrastructure and crops.

### **Subwatershed Priority Area: Flatlands Judicial Ditch 24 YM&L**

- Applied for Clean Water Funds to Install 44 projects (50% of concentrated flow practices goal in Yellow Medicine One Watershed One Plan); Water and Sediment Control Basins, Grassed Waterways, Terraces, Grade Stabilizations in the JD24 Subwatershed. If funded, these practices will be installed in both Yellow Medicine and Lyon County.

### **Lac qui Parle River Watershed and/or Redwood River Watershed – annual action items**

- Promote Best Management Practices in the County - Concentrating on the following designated high priority areas: Florida Creek to West Branch Lac qui Parle River, Lazarus Creek to Lac qui Parle River, Lac qui Parle Headwaters to Lazarus Creek, and Lac qui Parle River Lazarus Creek to West Branch Lac qui Parle River.
- Address the smaller flood events such as 2 and 5 year events by restoring 30 acres of wetlands through various programs.
- Target sites, using ACPF tool, LIDAR and terrain analysis, within the Lac qui Parle Watershed to achieve strategic flood storage in conjunction with water quality and wildlife benefits.
- Restore 20 acres of flood prone land along rivers, streams and waterways by using the FEMA Floodplain maps to assess agricultural flooding problem area.
- Implement controlled drainage on row cropland
- Treat cropland with concentrated flow practices by reducing the amount of water erosion to 5 ton or less soil loss per acre on severely eroded acres by installing 5 water & sediment control basins, and 5 acres of grass waterways.
- Increase reduced tillage practice by enrolling 500 acres into residue management practice programs
- Add cover crops to 500 acres

**County Wide:** Promote the Minnesota Agricultural Water Quality Certification Program with news articles, radio ads, one-on-one contacts and other methods which result in five applications per year watershed-wide.

**County Wide:** Implement 15 low-interest loans per year for SSTS and feedlot upgrades, as well as water quality practices (such as conservation tillage equipment and conservation practices) annually.

**County Wide:** Convert 450 acres of row-crop to perennial cover in environmentally sensitive areas annually. First priority will be given to perpetual protection programs.

**County Wide:** Inspect all small dams/ponds previously constructed with federal dollars to determine if they need repairing.

**Objective 2: Capital-Improvement Projects.** Review, determine, and implement capital-improvement projects and studies on projects, including regional wetlands restorations, flood-retention impoundments, culvert modifications at road crossings, land acquisitions of flood-prone areas, and projects that reconnect the floodplain to the rivers. Prevent additional impacts by identifying and implementing projects that provide significant benefits (often on a regional scale, rather than field scale) and requiring feasibility studies before design and construction.

**County Wide:** Review 100% of new ditch, lateral, and improvement projects, during early coordination, for opportunities for large-scale, multipurpose drainage projects that mitigate the impacts of altered hydrology. Determine project identification, feasibility and preliminary designs, and cost estimation.

## **PRIORITY CONCERN 1: MITIGATE ALTERED HYDROLOGY AND MINIMIZE FLOODING**

**Objective 3: Studies, Data Acquisition and Data Management.** Acquire data necessary to gain a greater understanding of the resources, threats, trends and status to better target practices for planning and implementing watershed activities.

**County Wide:** Designate staff hours to assist with the future development of a Hydrologic and Hydraulic Model

**County Wide:** Designate staff hours to assist with the future development of a Comprehensive GIS and Map Development.

## **PRIORITY CONCERN 2: MINIMIZE THE TRANSPORT OF SEDIMENT, EXCESS NUTRIENTS, AND BACTERIA**

**Objective 1: Implement BMPs.** BMPs minimize the transport of sediment, nutrients, and bacteria in the Coteau, Transitional and Flatlands management zones. The associated pollutants and contaminants that are contained in the runoff from stormwater and snowmelt contribute to downstream pollution, decrease hydraulic capacity, and diminish stream and lake habitat. Holding water on the land, providing infiltration, and allowing for solids to settle are strategies to help meet this priority concern.

### **Subwatershed Priority Area: Flatlands Judicial Ditch 24 YM&L**

- Applied for Clean Water Funds to replace 71 open intakes (100% of Yellow Medicine One Watershed One Plan goal) with dense tile. If funded, these practices will be installed in both Yellow Medicine and Lyon County.

### **Lac qui Parle River Watershed and/or Redwood River Watershed – annual action items**

- Develop nutrient and pesticide management plans, targeting 1,000
- Replace 5 open tile intakes with Alternative Tile Intakes that promote efficient trapping of sediments and nutrients that enter drainable systems.
- Convert 50 acres of cropland to perennial cover. First priority will be given to perpetual protection programs.
- Assist Yellow Medicine county communities in reducing storm water runoff and decreasing movement of sediment and nutrients through bio-retention and rain garden BMPS.
- Establish 100 linear feet of saturated buffers.

**County Wide:** Upgrade 7 Subsurface Sewage Treatment Systems (SSTS), utilizing any available grant funds and/or low interest loans if landowners meeting the qualifications.

**County Wide:** Expend 100% of funding available through the Working Lands Initiative/Prairie Coteau and MN River Valley Local Technical Teams to protect and restore prairie grasslands and wetlands in the Prairie Core, Corridor areas and other priority areas.

**County Wide:** Reduce soil erosion caused by wind through SWCD tree programs, living snow fences, field windbreaks, and farmstead shelterbelts by installing 15,000 feet per year including weed control, matting, and preparation.

**County Wide:** Work with landowners to achieve 100% compliance on the Buffer Law. Estimate 3,850 buffer-acres will treat 308,029 upland acres in the nonpriority subwatersheds.

**County Wide:** Work with landowners to buffer 250 acres along watercourses locally identified as “Other Waters” through voluntary participation in easement programs and other measures when funds become available such as CREP, CRP, and RIM.

**County Wide:** Work with the Minnesota Pollution Control Agency and the watersheds to develop TMDL plans that will help meet the goal of getting the waters off the TMDL 303D list of impaired waters.

### **PRIORITY CONCERN 3: PROTECT AND PRESERVE GROUNDWATER QUANTITY AND QUALITY**

**Objective 1: Protection of Groundwater.** Ensure long-term quality and quantity of groundwater supplies by protecting groundwater supplies, encouraging recharge, and maintaining base flow contributions to groundwater-dependent natural resources. Encourage installation of best management practices which recharge groundwater.

**County Wide:** Promote cost-share programs to seal 25 unused wells, promoting \$500 cost-share per well sealed

**County Wide:** For townships with 10% of wells failing to meet 10 mg/L nitrate level, plan partners will coordinate with MDA to achieve adoption of the Nitrogen Fertilizer Management Plan.

**County Wide:** Review all groundwater appropriation permits for potential negative impacts to surface water, natural resources, and nearby wells.

**County Wide:** Participate in the preparation and implement of wellhead protection plans for public water suppliers by attending meetings.

### **OPERATION AND MAINTENANCE ON EXISTING OR NEWLY CREATED BMPS**

**County Wide:** Develop O&M Plans for each BMP

**County Wide:** Inspect all cost-shared BMPs for O&M compliance during years 1, 3, and 9 and communicate findings with the landowner

**County Wide:** Inspect easements for the first 5 years, then once every 3 years. Inspect approximately 100 status reviews in 2017.

### **EXISTING REGULATORY CONTROLS**

**County Wide:** Implement Wetland Conservation Act (WCA)

**County Wide:** Implement Aquatic Invasive Species Program

**County Wide:** Develop and Implement Soil Erosion Law

**County Wide:** Implement Buffer Law - Work with landowners to achieve 100% compliance on the Buffer Law. Maintain an inventory of buffer strips along watercourses in the County that are in compliance and those not in compliance.

### **RESOURCE MONITORING**

**County Wide:** Participate and/or administer the following programs:

- State Rain Gage Monitoring Program
- Tillage Transect Survey
- DNR Observation Well Program
- Continue to participate in developing the Lac qui Parle River Watershed Restoration Protection Strategies (WRAPS)



<b><u>EXPENDITURES</u></b>	Budget
District Operation – Personal Service-	
Supervisor’s Compensation	\$8,400.00
Employee Salary	\$222,899.00
Employer Contributions (FICA)	\$14,313.00
Employer Contributions (PERA)	\$16,794.00
Health, Dental & Life Ins.	\$50,322.00
Employer Contribution Medicare	\$3,348.00
Workman’s Compensation	\$2,052.00
Errors/Omissions & General Liability	\$2,351.00
Employer Contr. Supervisor PERA/DCP	\$80.00
<b>Total District Operations – Personal Services</b>	<b>\$320,559.00</b>
<b>District Operation – Other Services and Charges</b>	
Supervisor Expense	\$5,000.00
Electricity	\$240.00
Training	\$3,000.00
Employee Expenses	\$2,000.00
Office Maintenance	\$1,200.00
Building Maintenance	\$600.00
Professional Services	\$4,000.00
Fees and Dues	\$4,750.00
Gasoline	\$3,600.00
Vehicle Maintenance & Repair	\$1,500.00
Education and Promotion	\$25,000.00
Insurance	\$2,103.00
Rent	\$200.00
Misc. Other Services & Charges	\$200.00
<b>Total District Operation Other Services &amp; Charges</b>	<b>\$53,393.00</b>
District Operations – Supplies – Office Supplies	\$8,000.00
Postage	\$1,000.00
Field Supplies	\$1,000.00
<b>Total District Operations – Supplies</b>	<b>\$10,000.00</b>
<b>District Operations – Capital Outlay</b>	<b>\$35,000.00</b>
<b>AIS Grant – Project Expenses</b>	
Project Expenses - State Cost Share Projects	\$38,189.00
<b>Total Project Expenses – State</b>	<b>\$38,189.00</b>
<b>District Expenses</b>	
Tree Tubes/Shelters	\$3,200.00
Tree Expenses	\$10,000.00
Tree Building Expense	\$50.00
Tree Mat Expenses	\$7,400.00
Misc. Tree Expense	\$650.00
Misc. Tree Mat Expense	\$250.00
Misc. Project Expenses	\$0.00
<b>Total District Expenses</b>	<b>\$21,550.00</b>
<b>TOTAL EXPENDITURES</b>	<b>\$478,691.00</b>

**2017 BUDGET (Continued)**

	<b>Budget</b>
<b><u>REVENUES</u></b>	
<b>Intergovernmental Revenue</b>	
State	
BWSR Buffer Grant	\$35,000.00
BWSR Local Capacity Grant	\$118,000.00
BWSR State Cost Share Base Grant	\$30,056.00
BWSR Conservation Delivery Grant	\$19,263.00
SWCD Farm Bill Assistant Grant	\$43,875.00
Other State Grants	\$7,790.00
Easement Delivery Grant	\$9,181.00
<b>Total State Grants</b>	<b>\$263,165.00</b>
Local Government Revenues	
County Grant	\$130,398.00
AIS Grant	\$30,000.00
WCA Grant	\$8,778.00
Local Pheasants Forever – Farm Bill Position	\$0.00
Local Technical & Administrative Dollars	\$300.00
<b>Total Local Government Revenue</b>	<b>\$169,476.00</b>
Federal Grants	<b>\$0.00</b>
<b>Total Intergovernmental Revenue</b>	<b>\$432,641.00</b>
<b>Charges for Services</b>	
Tree Tubes	\$3,300.00
Tree Sales	\$20,000.00
Planting Charges	\$2,700.00
Finance Charges	\$50.00
Tree Mat Sales	\$17,500.00
Other Services and Charges	\$0.00
<b>Total Charges for Services</b>	<b>\$43,550.00</b>
<b>Interest Earnings</b>	<b>\$500.00</b>
<b>Other Miscellaneous Revenues</b>	<b>\$2,000.00</b>
<b>TOTAL REVENUES</b>	<b>\$478,691.00</b>