YELLOW MEDICINE
COUNTY WATER PLAN
EXECUTIVE SUMMARY

Based upon the recently revised Board on Water and Soil Resource's Local Water Management Plan Guidelines, the Yellow Medicine 2005–2014 Water Plan is divided into the following four components:

- **Executive Summary.** This section includes the purpose of the local water management plan, description of the priority issues that are addressed in the plan, a summary of the Goals and Actions along with estimated total project costs. In addition, the executive summary contains a Yellow Medicine County general profile and a list of Yellow Medicine County's Water Plan Committee members.

- **Chapter One: Assessment of Priority Concerns**. This Chapter provides data regarding each of Yellow Medicine County's five priority concerns: Groundwater Protection; Erosion and Sediment Control; Reducing Priority Pollutants; Manage Flooding; and Surface Water and Drainage Management.

- **Chapter Two: Implementation Schedule**. This Chapter establishes Yellow Medicine County's Goals, Objectives and Action Steps. These are based on each of the high priority water planning issues identified in the County's Water Plan Scoping Document and assessed in Chapter One. Yellow Medicine County will implement the Goals and Objectives between 2005 and 2009. In addition, this Chapter contains a description of Yellow Medicine County's ongoing water plan-related activities.

- **Chapter Three: Plan Administration**. This Chapter contains information on plan administration, including plan coordination, implementation, schedule, the role of the County in implementation and the role of other agencies, resolving intergovernmental conflicts and amendments to the Water Plan.

Section A:
The Purpose of the Yellow Medicine County Water Plan

The Comprehensive Local Water Management Act (Minnesota Statutes Chapter 103B) encourages counties to develop and implement a comprehensive water plan. Pursuant to the requirements of the law, this Plan:

- Covers the entire area of the county;

- Addresses water problems in the context of watershed units and groundwater systems;

- Is based upon principles of sound hydrologic management of water, effective environmental protection and efficient management;

- Is consistent with comprehensive water plans prepared by counties and watershed management organizations wholly or partially within a single watershed unit or groundwater system; and

- Must specify the duration of the plan not to be less than five years nor more than ten years. This Water Plan is a third generation plan that covers a ten-year period (2005–2014) with a five-year implementation plan (2005-2009).

Section B:
Yellow Medicine County's
Priority Water Plan Concerns

Yellow Medicine County's Water Plan Scoping Document (found in Appendix A) explains the process used to identify the County's priority concerns. The process began in November 2002, and ended nearly a year later with the official submittal of the County's Scoping Document. Within those 13 months, the County solicited comments from various local and state agencies, all of Yellow Medicine County's cities and townships, and a survey sent to every resident in the County. Finally, a number of public meetings were held to discuss water planning issues.

The Yellow Medicine County Water Plan Committee reviewed all of the comments received and grouped them into the following five categories:

1. **Groundwater Protection**: aiding public water suppliers with the development of wellhead protection plans and by providing assistance to help manage vulnerable areas from potential contamination sources.

2. **Erosion and Sediment Control** on agricultural lands located in the Yellow Medicine and Lac qui Parle Watersheds.

3. **Reducing Priority Pollutants**, nutrients and bacteria, related to feedlots and non-conforming individual sewage treatment systems.

4. **Manage Flooding** and its' effects minimizing losses associated with the flooding of agricultural lands.

5. **Surface Water and Drainage Management** by addressing runoff volume and water quality deterioration due to excessive runoff.

Section C:
Summary of the Goals & Actions

The five priority issues identified in Section B served as the focus in the creation of the Goals, Objectives and Action Steps. Each of the five corresponding goals along with a number of sample action steps are summarized below. As Chapter Two explains, each action step includes information on who is responsible for implementation, when it should take place and how much it is

expected to cost (note that may State and Federal programs would need to be used in order to reach the estimated costs).

Groundwater Protection Goal:

"To Protect and Improve the Quality of Groundwater in the County"

Key Action Steps:

- ✓ Prioritize Wellhead Protection Areas for cost-share and other land use incentive programs
- ✓ Establish baseline groundwater quality by testing 20 private wells
- ✓ Cost-share the sealing of 20 abandoned wells each year
- **$** *The 14 groundwater actions steps identified in this Plan are estimated to cost nearly $50,000 over the next five years*

Erosion and Sediment Control Goal:

"To Protect and Improve the Soil Resources and Surface Water in the County"

Key Action Steps:

- ✓ Plan BMPs for 20,000 cropland acres
- ✓ Establish 800 new acres of filter strips / buffers along ditches and streams
- ✓ Enroll 500 acres of cropland subject to severe erosion into existing programs
- ✓ Enroll 200 acres of pasture into prescribed grazing systems
- ✓ Restore 50 acres of wetlands into conservation programs
- **$** *The 11 erosion and sediment control actions steps identified in this Plan are estimated to cost nearly $1.5 million over the next five years (State and Federal Programs will also be used)*

Reducing Priority Pollutants Goal:

"To Enhance the County's Water Resources"

Key Action Steps:

- ✓ Develop nutrient and pesticide management plans, targeting 12,000 acres countywide
- ✓ Upgrade 50 Individual Sewage Treatment Systems per year
- ✓ Create a GIS layer of all septic systems installed in the County
- **$** *The nine reducing priority pollutants actions steps identified in the Plan are estimated to cost nearly $1.75 million over the next five years (State and Federal Programs will also be used)*

Managing Flooding Goal:

"To Implement Sound Flood Management Strategies"

Key Action Steps:

- ✓ Address the smaller flood events (such as two- and five-year events) by restoring 75 acres of wetlands through various conservation programs
- ✓ Take flood prone land out of crop production by encouraging enrollment into land retirement programs
- ✓ Update the County's Floodplain Ordinance to reflect changes made to the program and the official maps
- **$** *The six manage flooding actions steps identified in this Plan are estimated to cost nearly $350,000 over the next five years*

Surface Water and Drainage Management Goal:

"To Implement Sound Surface Water and Drainage Management"

Key Action Steps:

- ✓ GPS all County and Judicial ditches and identify existing filter strips
- ✓ Gather data, create and maintain a database for each drainage system
- ✓ Seek funds to repair two or three small dams in the County
- ✓ A blind intake cost share program will be offered to landowners to replace 20 open intakes
- **$** *The seven surface water and drainage management actions steps identified in this Plan are estimated to cost nearly $200,000 over the next five years*

General County Profile

Yellow Medicine County is located in West Central Minnesota along the South Dakota border. The County has nine cities and twenty-one townships (see Map 1). According to the 2000 Census, the County had 11,080 residents. The County has an area of 752 square miles, which amounts to 485,120 acres of land. Hammer-shaped, the County is 54 miles long from east to west, and from 12 miles north and south at the west end to 21 miles at the eastern boundary. The eastern boundary follows the Minnesota River and extends into the hammer shape, narrowing down to a twelve-mile dimension north and south running westward for thirty miles to the South Dakota border. Outside of the County's nine communities, the countryside is primarily dominated by agricultural land uses.

The elevation is 1,714 feet in the southwest corner of the county, 1,380 feet in the northwest corner, 920 feet in the northeast tip of the county and 1,059 feet in the southeast corner. The highest point,

which is near the southwest corner, is 1,739 feet. The lowest point, which is where the Minnesota River flows out of the county, is about 860 feet. All of the county drains into the Minnesota River by way of the Yellow Medicine River, the Lac Qui Parle River, and small streams and ditches, which rise in the Coteau des Prairies, a long range of hills running from west of Lake Traverse in the north to the Iowa line in the south. The Lac Qui Parle River flows from southwest to northeast through the county, entering Lac Qui Parle County before discharging into the Minnesota River.

Yellow Medicine County
Water Plan Committee Members

The following Yellow Medicine County Water Plan Committee members are recognized for their contributions to this Water Plan:

Lou Ann Nagel, Yellow Medicine SWCD
Willis Beecher, LQP - Yellow Bank Watershed District
Terry Renken, Yellow Medicine River Watershed District
Leonard Swenson, Lincoln Pipestone Rural Water System
Gene Eilers, Municipalities Representative
Alan Saltee, Township Representative
Gary Johnson, County Commissioner
Lewis Miller, Citizen
Delmar Mamer, Citizen
Randy Jacobson, Zoning Administrator
Jolene Johnson, Water Plan Coordinator

Ex-Officio Members

John Johnson, YMC Highway Department
David Sill, BWSR

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Yellow Medicine County

Cities, Townships & Major Watersheds

N
W MCP E
S
Midwest Community Planning, LLC

Minnesota River

Granite Falls

Clarkfield

Hazel Run

Hanley Falls

Canby

St. Leo

Porter

Wood Lake

Echo

Redwood River Watershed

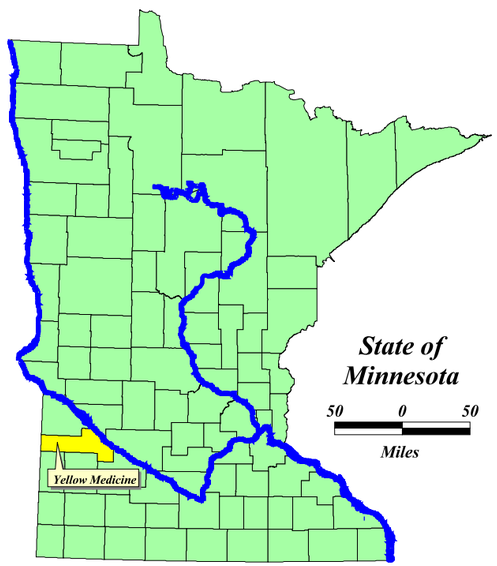
MN River Watershed

Yellow Medicine Watershed

Lac Qui Parle River Watershed

Lisbon
Stony Run
Tyro
Minnesota Falls
Friendship
Hazel Run
Florida
Hammer
Oshkosh
Omro
Fortier
Norman
Wergeland
Burton
Swede Prairie
Normania
Sandnes
Wood Lake
Sioux Agency
Posen
Echo

59
67
75
68
23
274



Major Watersheds

- Lac qui Parle
- MN River - Granite Falls
- Redwood River
- Minnesota River

Cities

Townships

Minnesota River

Major Watershed

Major Road

5 0 5 Miles

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