

## Executive Summary

*The Lincoln County Local Water Management Plan will be in effect for 10 years, with a five-year implementation plan.*

This section addresses the following items:

- Version and purpose of the plan;
- Description of the priority concerns that will be addressed;
- A summary of the goals and actions to be taken along with the projected total cost of the implementation program for each of the priority concerns;
- A summary of the consistency of the plan with other pertinent local, state, and regional plans and controls, and where inconsistencies are noted; and
- A summary of recommended amendments to other plans and official controls.

### **Version and Purpose:**

This is the third version of the Lincoln County Water Management Plan, dated September 1, 2004.

The Lincoln County Comprehensive Local Water Plan has two purposes:

- 1) To identify existing and potential problems and opportunities for the protection, management and development of water and related land resources; and*
- 2) To develop objectives and carry out a plan of action to promote sound hydrologic management of water and related land resources and effective environmental protection.*

This Water Management Plan focuses on priority concerns as identified in coordination with other local governments and state agencies (2003 Statutory M.S. 103B.301) and an implementation plan that addresses the priority concerns.

### **Description of Priority Concerns:**

The priority concerns in which the Lincoln County Water Management Task Force will focus on are as follows:

- ***Ground Water Protection for the Verdi Well Field*** – The Verdi Well Field is the main source of water supply for: all of Lincoln County and Pipestone County and parts of 7 other counties: 3,400 rural customers, 29 cities, and 120 rural customers using more than one million gallons per year per customer.
- ***Surface Water Quality Deterioration priorities being Nutrients and Bacteria focusing on two identified TMDL sites: Lake Shaokatan and the South Branch of the Yellow Medicine River.*** – Our primary focus will be on Nutrients and Bacteria in

the TMDL sites listed. Other sites when added to the TMDL list, will be considered in this section of the priority concerns.

- ***Erosion and Sediment Control on agricultural land primarily gully erosion and concentrated flow with several priority areas being the South Branch of the Yellow Medicine River Watershed, Norwegian Creek, Coon Creek, Lake Benton Lake and Dead Coon Lake.*** – Reducing the volume of sedimentation, potential attached pollutants and nutrients reaching County lakes, streams, rivers and wetlands, will improve surface and ground water quality, through implementing Best Management Practices particularly in listed priority areas.
- ***Lake Management Improvement (water quality) and Recreational Opportunities targeting Lake Benton, Lake Shaokatan and Lake Hendricks.*** – Lincoln County has six major lakes having a total water surface area of about 6,480 acres with an average depth ranging from three to twelve feet and many smaller lakes. We will focus on three major Recreational Lakes in Lincoln County, as they represent the greatest potential for additional recreational development including Lake Benton, Lake Shaokatan and Lake Hendricks.
- ***Surface water runoff and Drainage addressing runoff volume and water quality through drainage management*** – In this section, we will focus on the Wetland Conservation Act, Wetland Banking and the Lincoln County Public Drainage Ditch Systems.

Education and outreach are a part of each of the priority concerns.

With the decrease in funding for Water Management Implementation, we will address issues that are doable with the funds we receive. Other implementation items accomplished through other funding sources.

### **Summary of Goals and Actions and Projected Total Cost:**

Summary of goals and actions along with the projected total cost of the implementation program for each priority concern include:

#### **PRIORITY CONCERN: *Groundwater Protection for the Verdi Well Field.***

The goal summary of this priority concern is to protect the public water supply from potential contaminants.

Summary of the actions and costs include:

- Bring feedlots and septic systems into compliance;
- Educate landowners/operators and citizens about the importance of protecting our well fields and the wellhead protection area; and
- Promote and enroll landowners in easement programs (CREP, CRP, CCRP) and implement conservation practices.

Approximate cost: \$200,000 (majority for CRP/CREP); and \$330,000-ISTS Loan Program

**PRIORITY CONCERN: *Surface Water Quality Deterioration being Nutrients and Bacteria focusing on two identified TMDL sites: Lake Shaokatan and the South Branch of the Yellow Medicine River.***

The goal summary of this priority concern is to protect restore, protect and improve the deterioration of surface water quality of the lakes, rivers and streams.

Summary of the actions include:

- Bring into compliance existing septic systems and feedlots and develop nutrient management plans to help regulate nutrients and minimize pollution;
- Work on the TMDL study and implement BMP's for the Lake Shaokatan Project and the South Branch of the Yellow Medicine River;
- Pursue funding for special projects in the four major river watersheds;
- Educate landowners/operators on feedlot pollution, manure management, ISTS's, and BMP's; and
- Educate landowners/operators in the TMDL sites about the impaired water study and the need for implementation of conservation practices.

Approximate cost: \$1,117,500; and \$375,000-ISTS Loan Program

**PRIORITY CONCERN: *Erosion and Sediment Control on agricultural land primarily gully erosion and concentrated flow with several priority areas being the South Branch of the Yellow Medicine River Watershed, Norwegian Creek, Coon Creek, Lake Benton Lake and Dead Coon Lake.***

The goal of this priority concern is to protect and preserve Lincoln County's long-term valuable soil resources.

Summary of the actions include:

- Implement filter strips and BMP's on the three branches of the Yellow Medicine River;
- Reduce wind and water erosion and sediment by implementing conservation practices in the various watersheds. Practices include water and sediment control basins, terraces, waterways, conservation tillage, CRP, CCRP, CREP, critical area plantings, filter strips, field windbreaks, farmstead shelterbelts, wildlife tree plantings, etc.;
- Provide conserving use acre contracts to individuals planting small grain for earthwork construction from August 10-September 30;
- Provide cost-share dollars for sealing abandoned wells;
- Promote conservation tillage and prevent soil erosion by implementing buffer strips;
- In the Redwood River Watershed Area, bring non-conforming ISTS's into compliance along with feedlots, implement CRP, CCRP, waterways, terraces, sediment control basins and establish base flow monitoring sties to evaluate progress;
- Increase wildlife habitat, restored wetlands, restoration of wetlands and wildlife tree plantings;
- Monitor water quality sites; and
- Educate landowners/operators about implementing BMP's; conservation tillage; buffer programs-CRP, CCRP, CREP; protecting wildlife habitat areas, restored wetlands, tree plantings; etc.

Approximate costs: \$2,449,000; 1,350,000-CREP; and \$1,010,000- ISTS Loan Program-Redwood River Watershed area

**PRIORITY CONCERN:** *Lake Management Improvement (water quality) and Recreational Opportunities targeting Lake Benton, Lake Shaokatan and Lake Hendricks.*

The goal summary of this priority concern is increase recreational opportunities of Lincoln counties lakes.

Summary of the actions and costs include:

- Reduce curly-leaf pondweed in Lake Benton by working with the Lake Improvement District, seek LCMR funding, and work with DNR on fluridone herbicide treatments;
- Implement BMP's for water quality in Lake Shaokatan and the watershed;
- Construction of a new Waste Water Treatment Facility in the City of Hendricks for the water quality of Lake Hendricks; and
- Educate the residents, owners and operators in these three lakes on the importance of protecting the recreational benefits of the lakes in Lincoln County.

Approximate cost: \$850,000 and \$1.9 Million-Hendricks Waste Water Treatment Facility

**PRIORITY CONCERN:** *Surface Water Runoff and Drainage addressing runoff volume and water quality through drainage management.*

The goal summary of this priority concern is improve surface water management by decreasing runoff and flooding and maintaining the drainage systems in the county.

Summary of the actions and costs include:

- Reduce flooding by restoring wetlands and increase filter strips;
- Repair an existing dam every three years;
- Administer the WCA Program;
- Develop a wetland banking program;
- Enroll landowners in the CCRP;
- Apply for grant dollars to inventory buffers along our public drainage system; and
- Educate landowners/operators on buffers and the WCA.

Approximate cost: \$721,250

### **Summary of Consistency/Inconsistency of the Plan with other Plans:**

Summary of the consistency of the Lincoln County Water Management Plan with other pertinent local, state, and regional plans and controls include:

- The Water Management Plan is also the plan in which the Lincoln Soil and Water Conservation District uses as their Comprehensive Plan.
- It is the intent of the Environmental Office to incorporate this plan within the Overall Lincoln County Comprehensive Sustainability Development Plan, which includes the Land Use Plan, Recreation and Natural Resources, etc.

Parts of the following plans are incorporated in the Water Management Plan:

- Lincoln-Pipestone Rural Water System-Verdi Wellhead Protection Plan;
- The Yellow Medicine River Watershed District Plan and/or products of the Yellow Medicine River Watershed District;
- The Lac qui Parle-Yellow Bank Watershed District Plan (erosion control section and implementation actions) and other sources of information for sections pertaining to Lake Hendricks and the Lac qui Parle Watershed;
- Products prepared by the Redwood-Cottonwood Rivers Control Area (RCRCA); and
- Other state and local reports, information, etc.

There are no inconsistencies that we are aware of with other plans.

### **Summary of Recommended Amendments to other Plans/Controls:**

The Lincoln County Water Management Plan does not have any recommended amendments to other plans/controls.