

Implementation Program

This section establishes the implementation program for the priority concerns. The implementation program identifies the following:

- Actions to be implemented
- When the action will be accomplished
- Who the responsible agency is to implement the action
- If capital improvement projects are listed, they will include the following:
 - physical components of the project-size, configuration, location
 - purposes of the project and relationship to the objectives
 - proposed schedule for project construction
 - expected federal, state and local costs
 - types of financing proposed-special assessments, valorem taxes, grants
 - sources of local financing proposed

ABBREVIATIONS:

The following abbreviations represent the responsible local unit of government and/or the possible funding source for each action item.

- TF-Lincoln County Water Management Task Force
- WM-Water Management Funds
- SWCD-Soil and Water Conservation District
- NRCS-Natural Resources Conservation Service
- FSA-Farm Service Agency
- EO-Lincoln County Environmental Office
- HD-Lincoln County Highway Department
- Ext.-Lincoln County Extension
- YMRWD-Yellow Medicine River Watershed District
- LPRW-Lincoln-Pipestone Rural Water
- LQP-YBWD-Lac qui Parle-Yellow Bank Watershed District
- RCRCRCA-Redwood-Cottonwood Rivers Control Area
- SWPJPO-Southwest Prairie Joint Powers Organization
- BWSR-Board of Water and Soil Resources
- DNR-Department of Natural Resources
- MDH-Minnesota Department of Health
- MDA-Minnesota Department of Agriculture
- MPCA-Minnesota Pollution Control Agency
- PF-Pheasants Forever
- USFWS-U.S. Fish and Wildlife Service
- SWROC-Southwest Regional Outreach Center
- LID-Lake Improvement District
- CWP-Clean Water Partnership
- EQIP-Environmental Quality Incentive Program
- State C-S-State Cost-Share
- CRP-Conservation Reserve Program
- Watersheds-includes one or more of the following: Yellow Medicine River Watershed District, LqP-Yellow Bank Watershed District and/or the Redwood-Cottonwood Rivers Control Area
- Ag BMP-Ag Best Management Practices Loan Program

ABBREVIATIONS:

The abbreviations in **BOLD** illustrate the lead agency under the specific actions.

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

GOAL: *Protect the public water supply from potential contaminant sources due to land use activities; and Establish and maintain a Wellhead Protection Plan (WHP) continuing public education and information program.*

OBJECTIVE 1: *Encourage property owners to adopt tillage, chemical and nutrient BMP's for cropland within the Drinking Water Supply Management Area (DWSMA).*

ACTIONS:

Contact one feedlot owner per year in the DWSMA area to personally discuss feedlot operations, tillage, chemical/nutrient management, develop an understanding of local drinking water issues/benefits of implementing a wellhead protection plan and the BMP's best suited for them in the DWSMA.

Who: EO, LPRW, SWCD **When:** 2004-2009 **Cost:** \$-0-

OBJECTIVE 2: *Develop educational programs for property owners regarding the need for having complying onsite-sewage treatment systems in the DWSMA.*

ACTIONS:

Develop educational material pertaining to the construction, operation and maintenance of onsite-sewage treatment systems in the DWSMA, creating an awareness of how improper operation and maintenance of onsite-sewage treatment systems can affect the DWSMA.

Who: EO, LPRW, **When:** 2006 **Cost:** \$250 printing costs
Ext., SWCD,

Conduct inspections of septic systems in the DWSMA and implement full compliance with state and county ISTS requirements within the DWSMA to prevent the contamination of the water supply in the DWSMA by non-complying septic systems. Dollars include \$220,000 for 44 systems brought into compliance from 2002 – 2006, and \$110,000 continuation for 22 systems to be brought into compliance 2007 – 2009.

Who: EO, LPRW **When:** 2004-2009 **Cost:** \$330,000 in CWP Loans

Consult with the MPCA to reduce the risk of groundwater contamination associated with development in sensitive areas.

Who: LPRW **When:** 2004-2009 **Cost:** \$-0-

Communicate with and seek guidance from the DNR when considering how to plan for significant water using developments, if they should occur.

Who: LPRW **When:** 2004-2009 **Cost:** \$-0-

OBJECTIVE 3: *Inventory and prioritize areas within the DWSMA for adoption of set-a-side and buffer easement programs.*

ACTIONS:

Contact property owners in the WHP area to encourage enrollment in easement programs (such as CRP, CREP) and adoption of buffer strips. Increase acres of easement programs by 25 acres per year. Contact all landowners in this area for the CREP initiative.

Who: SWCD, FSA, LPRW **When:** 2004-2009 **Cost:** CRP/CREP Funding

Increase conservation tillage practices in the DWSMA, reducing sedimentation in the surface waters recharging the ground water. Promote Ag BMP Loans for upgrading conservation tillage equipment to reduce erosion and runoff by targeting one landowner per year.

Who: NRCS, SWCD **When:** 2004-ongoing **Cost:** Ag BMP 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.*

GOAL: *To restore, protect and improve the deterioration of surface water quality of Lincoln County's lakes, rivers and streams.*

OBJECTIVE 1: *Protect surface water quality from contamination caused by point and non-point source pollution and properly treat both human and animal waste.*

ACTIONS:

Bring into compliance approximately 25 septic systems/year (75-total). \$375,000 in CWP-Revolving Loan Program in the Yellow Medicine River Watershed (the Redwood River and the Verdi DWSMA are under other sections of the Implementation Plan).

Who: EO **When:** 2004 - 2007 **Cost:** \$375,000/year CWP-Revolving Loan Program

Work with 4-5 producers per year with high priority feedlots. Priority based on the size of the operation and their proximity to water. Work with engineers to survey problem feedlots and supply the producer with 2-3 options to fix the pollution problem (cost-estimate included). Work with the SWCD/NRCS on possible cost-share availability.

Who: EO, SWPJPO, SWCD, NRCS **When:** 2004 - 2009 **Cost:** EQIP, State C-S Feedlot Dollars - \$50,000-\$150,000/yr

Reduce feedlot pollution by working with 3-feedlot producers on developing nutrient management plans on 750 acres. Priority given to feedlot producers with 300+ animal units and producers in spreading manure in sensitive areas.

Who: EO, NRCS, SWCD **When:** 2004 - 2009 **Cost:** \$3,000/yr-EQIP

Work with and seek guidance from the MPCA to reduce the risk of groundwater contamination associated with development in sensitive areas.

Who: LPRW, EO, SWCD **When:** 2004 - 2009 **Cost:** \$-0-

OBJECTIVE 2: *Protect and improve existing surface water quality by addressing nutrient and bacteria issues.*

ACTIONS:

Pursue funds for watershed based activities and practices for the Yellow Medicine River Watershed, Lac qui Parle-Yellow Bank Watershed, Redwood Cottonwood Rivers Control Area and the Big Sioux Watershed, by addressing the nutrient and bacteria issues.

Who: YMRWD, LQP-YBWD, **When:** 2004 - 2009 **Cost:** CWP, EQIP, BWSR, RCRCA, SWCD, NRCS Ag BMP-\$50,000-\$250,000/yr

Work with the MPCA on a Total Maximum Daily Load (TMDL) Study in the Lake Shaokatan Watershed. Through the MPCA, Lake Shaokatan has been declared impaired by the nutrient Phosphorus. This study will determine the loads in which are going into the Lake and the TMDL strategy to meet the classification of an eco-region lake to sustain lake water quality.

Who: YMRWD, SWCD, **When:** 2004 - 2006 **Cost:** MPCA Funding NRCS, EO

Identify and implement BMP's in the Lake Shaokatan Watershed and the South Branch of the Yellow Medicine Rive to help reduce Phosphorus.

Who: YMRWD, SWCD, **When:** 2006- 2009 **Cost:** Apply for funding; EQIP NRCS, EO State C-S

OBJECTIVE 3: *Educate property owners, land owners/operators on the importance of protecting our surface waters from deterioration.*

ACTIONS:

Educate land owners/operators on feedlot pollution and the importance of proper manure management, ISTS's and on the need for BMP's in order to reduce the nutrients and bacteria in surface water quality, accomplished through newsletters and one-on-one contacts.

Who: SWCD, NRCS, EO **When:** 2004 - 2009 **Cost:** \$250/yr YMRWD, RCRCA, LQP-YBWD

Educate land owners/operators in the Lake Shaokatan Watershed and the South Branch of the Yellow Medicine River on the TMDL Study and the need for implementation of conservation practices, accomplished through newsletters and one on one contacts.

Who: YMRWD, SWCD, NRCS **When:** 2004 - 2009 **Cost:** \$250/yr

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.*

GOAL: *To protect and preserve Lincoln County's long-term valuable soil resources.*

OBJECTIVE 1: *Protect and improve existing surface and ground water quality, by addressing and reducing soil erosion, sedimentation and potential attached pollutants.*

ACTIONS:

In the Yellow Medicine River Watershed, accelerate the implementation of filter strips, sediment basins and waterways through the Clean Water Partnership Program.

Who: YMRWD, SWCD, NRCS **When:** 2004 - 2009 **Cost:** \$10,000–\$15,000/yr in CWP & EQIP; State C-S

Reduce water erosion to 5-ton or less soil loss per acre on cropland. Implement BMP's such as but not limited to (approximate footage – per year when listed):

- Terraces-2,000 feet,
- Water & Sediment Control Basin's-70 each,
- Waterways-8 acres,
- Conservation Tillage, and,
- Increase the number of acres for buffers, filter strips and Critical Area Plantings by 25 new sites (125 acres) per year through CRP and CCRP. The entire county is a concern with priority given to areas deemed necessary by the Technical Groups in each of the watersheds

Who: SWCD, NRCS, FSA **When:** 2004 - 2009 **Cost:** \$100,000–\$250,000/yr EQIP, St C-S

Reduce wind erosion to 5-ton or less soil loss per acre on cropland selling 50,000 trees per year by implementing the following (approximately footage – per year when listed): 3 miles-Field Windbreaks/Living Snow Fences, 10 acres-Farmstead Shelterbelts, and 40 acres-Wildlife Tree Plantings, depending on programs available.

Who: SWCD, NRCS, FSA **When:** 2004 - 2009 **Cost:** \$100,000–\$150,000/yr CRP, BWSR, DNR, PF

Provide a Conserving Use Acres Contract to landowners where the Water Management Task Force pays \$599.00 for planting 10 acres or more of small grain in order to do earthwork construction from August 10 to September 30.

Who: SWCD, TF **When:** 2004-2009 **Cost:** \$3,600/yr-WM Funds

Provide cost-share dollars (75% not to exceed \$250/well) to 30-40 landowners per year for sealing their abandoned well(s).

Who: SWCD, TF **When:** 2004-2009 **Cost:** WM Funds-\$7,500-\$10,000/yr.

OBJECTIVE 2: *Reduce the volume of sedimentation reaching County lakes, streams, rivers and wetlands.*

ACTIONS:

Increase conservation tillage on 5,000 acres with high residue. Dollars for conservation tillage equipment will be through the Ag BMP Loan Program

Who: SWCD, NRCS **When:** 2004 - 2009 **Cost:** Ag BMP Revolving \$'s

Implement CREP in the Big Sioux River Basin, primarily in the Verdi DWSMA. Contact every landowner through direct mailings. Establish a goal of 750 acres enrolled.

Who: SWCD, NRCS **When:** 2004 - 2009 **Cost:** CREP/CRP Programs

OBJECTIVE 3: *Implement Best Management Practices in the Redwood River Watershed-Clean Water Partnership Project area. Implementation will be dependant on the success of the Extension of the CWP for the Redwood River Watershed, from 2005 through 2007.*

ACTIONS:

There are 115 suspected residences with non-conforming septic systems on and around Lake Benton and 162 residences that have suspected non-conforming septic systems that generate a portion of their income from agriculture. The objective in this section is to bring 146 of these non-conforming septic systems into compliance; along with reducing the amount of fecal coliform bacteria in Lake Benton and Coon Creek to achieve TMDL levels; and, to monitor/evaluate the projects progress on Lake Benton, Coon Creek and its effect on the Redwood River. The septic system upgrades started in 2001. Bring into compliance 146 non-conforming septic systems¹ (designated eminent health threats) of residences in the project area. Lincoln County estimates suggest that 50% of the suspected septic systems listed above, discharge to surface water via tile. By targeting 146 systems that have a direct discharge to surface water, a reduction of 2,398,050 lbs. of aquatic plants could be realized annually. Loading reductions of these direct pollutant sources will have a significant effect on improving the water quality of Lake Benton and upper Coon Creek. Over 30 years, a reduction of 71,941,500 lbs. of aquatic plant production could be realized.

Who: EO, RCRCA **When:** 2004 - 2007 **Cost:** \$880,000 for 6-yr in CWP-Revolving Loan Program

Bring into compliance an additional 21 non-conforming septic systems through the 319 Program-Loan Dollars.

Who: EO, RCRCA **When:** 2004 - 2007 **Cost:** \$130,000-319 Funds

Implement 10-grassed waterways, 10-terraces, 17-sediment control basins, 6-livestock exclusions and CRP/CCRP to reduce external loading from surface runoff.

Who: RCRCA, EO, NRCS, SWCD **When:** 2004 - 2009 **Cost:** \$200,000-319 Grant, EQIP; CRP/CCRP; Feedlot \$'s Possible CWP Extension \$'s

Bring into compliance 4-non-permitted feedlots through BWSR and EQIP feedlot grants.

Who: RCRCA, EO **When:** 2005 - 2007 **Cost:** EQIP; Possible CWP-

¹Eminent Health Threat designation refers to a direct surface water discharge or an above ground discharge.

Extension; Feedlot Grant \$'s

Establish 6-base flow monitoring sites to evaluate progress on Lake Benton, Coon Creek and its effect on the Redwood River, by RCRCA.

Who: RCRCA, EO **When:** 2004 - 2009 **Cost:** RCRCA

OBJECTIVE 4: *Increase and protect wildlife habitat.*

ACTIONS:

Increase the number of wildlife-habitat management areas, wildlife plantings and restore 18 acres of wetland restorations per year making the opportunity for wildlife enhancement and hunting opportunities greater.

Who: SWCD, NRCS, DNR **When:** 2004 - 2009 **Cost:** DNR, PF, BWSR C-S
USFWS

OBJECTIVE 5: *Compile information regarding surface water quality and quantity.*

ACTIONS:

Monitor the water quality sites throughout Lincoln County once over the next five-years to continue with the bench mark on sites previously tested.

Who: SWCD, TF **When:** 2004 - 2009 **Cost:** \$5,500-WM Funds

OBJECTIVE 6: *Educate landowners/operators about erosion and sediment control, the importance of installing conservation practices and encourage conservation programs that help protect wildlife and recreational benefits in Lincoln County.*

ACTIONS:

Provide information and options about BMP's to reduce sediment and nutrients to land users experiencing the most severe soil erosion through newsletters, news releases and individual contacts.

Who: SWCD, NRCS, YMRWD, **When:** 2004 - 2009 **Cost:** \$250/yr
LQP-YBWD, RCRCA

Increase the awareness of buffer programs: CRP, CCRP, RIM, CREP, critical area plantings, filter strips, etc. through newsletters, news releases and individual contacts.

Who: SWCD, NRCS, FSA **When:** 2004 - 2009 **Cost:** \$250/yr
YMRWD, LQP-YBWD, RCRCA

Promote implementation of field windbreaks, living snow fences, farmstead shelterbelts, and wildlife tree plantings through newsletters, news releases and individual contacts.

Who: SWCD, NRCS **When:** 2004 - 2009 **Cost:** \$100/yr

Educate landowners/operators on an individual basis and through newsletters about protecting the wildlife-habitat management areas, restored wetlands, and wildlife tree plantings for better wildlife enhancement and recreation opportunities.

Who: SWCD, NRCS, DNR **When:** 2004 - 2009 **Cost:** \$100/yr
USFWS, PF

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

GOAL: *Increase recreational opportunities by improving the water quality and quantity of Lincoln County's lakes.*

OBJECTIVE 1: *Reduce the curly-leaf pondweed in Lake Benton, which has been detrimental to the use and enjoyment of Lake Benton. Work to improve tourism, economic growth and revive the recreational activities that were once abundant in Lake Benton.*

ACTIONS:

The Lake Improvement District formed in 2004, will provide a means by which property owners can meet and deal with specific needs relating to the quality/management of Lake Benton and seeking an LCMR grant estimated at \$750,000. The grant would help pay for fluridone treatments and help restore native plants.

Who: LID, RCRC, EO **When:** 2004 - 2009 **Cost:** \$-0- to apply for grant

DNR will initiate a multi-year series of fluridone herbicide treatments into Lake Benton, beginning the spring of 2005 with a whole-lake treatment and follow up with another in 2006, depending on the success of the 2005 application. DNR will propose a three- to five-year control program to reduce the curly-leaf pondweed and develop a treatment plan to guide treatments in future years.

Who: DNR, LID, EO **When:** 2005 - 2009 **Cost:** \$100,000-\$150,000/yr-
LCMR/Taxing Authority

DNR will work to ensure the "presence of a more diverse plant community" to reduce the adverse effects of Lake Benton.

Who: DNR, LID, EO **When:** 2005 - 2009 **Cost:** \$100,000 over 5-yr
LCMR Grant

OBJECTIVE 2: *Reduce the blue-green algae in Lake Shaokatan to improve the economic and recreational activities in the lake.*

ACTIONS:

Implement BMPs for water quality in Lake Shaokatan in the watershed above the lake.

Who: YMRWD, SWCD, NRCS, EO **When:** 2004 - 2009 **Cost:** Cost shown under
Erosion Control Section

OBJECTIVE 3: *Work with the MPCA to construct a new Waste Water Treatment Facility to improve Lake Hendricks water quality.*

ACTIONS:

The City of Hendricks will construct a new Waste Water Treatment Facility including the construction of a new primary lagoon cell, and an addition to the sewer collection system. There are 35 homes in the North Shore (NS) area of Lake Hendricks, which will be

served by a portion of the proposed new sewer collection system (have room for 44 hookups on the North Shore and 22 hookups on Camara Beach (CB)-South Dakota).

Who: City of Hendricks **When:** 2004 - 2006 **Cost:** \$1.9 Million-Total
Lake Hendricks (CB) Sanitary Sewer in South Dakota,
Lake Hendricks (NS) Sanitary Sewer District in MN, EO

OBJECTIVE 4: *Educate the residents, owners and operators of the three main lakes on the importance of protecting the recreational benefits of the lakes in Lincoln County.*

ACTIONS:

Educate lake/city residents and landowners/operators around their priority lakes, on protecting the lake water quality, through the various watershed districts, Environmental Office, SWCD, NRCS, Cities, by meetings, one-on-one contacts, and newsletters.

Who: EO, LID, Cities, RCRCA, **When:** 2004 - 2009 **Cost:** See specific ed. actions
YMRWD, LQP-YBWD, SWCD, throughout implementation
NRCS, DNR plan

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

GOAL: *Improve surface water management by decreasing runoff, flooding and erosion while maintaining the drainage systems already in place to sustain agricultural productivity.*

OBJECTIVE 1: *Apply watershed-based principles in properly managing drainage systems and wetlands and repair small dams in the county.*

ACTIONS:

Reduce flooding potential by restoring wetlands by 90 acres over five years and increasing the number of filter strips through CRP, etc.

Who: SWCD, NRCS, DNR **When:** 2004 - 2009 **Cost:** \$200,000–\$500,000
USFWS, EO USFWS; BWSR, CRP

Repair an existing small dam used for flood control and water storage that are located in the county (repair one dam every three years-or as funds are available).

Who: Area II, SWCD, NRCS **When:** 2004 - 2009 **Cost:** \$10,000–\$20,000

Administer the Wetland Conservation Act (WCA). Administration will come from the Local Governmental Unit-Lincoln Soil and Water Conservation District.

Who: SWCD, BWSR, EO, HD **When:** 2004 - 2009 **Cost:** \$10,000/yr–BWSR;
\$10,000/yr–SWCD In-kind

OBJECTIVE 2: *Incorporate flood control benefits into future road and bridge replacements.*

