

ANNUAL PLAN
of the
LAC QUI PARLE
SOIL AND WATER
CONSERVATION DISTRICT



122 - 8th Avenue South
Suite 1
Madison, Minnesota 56256

PERIOD COVERED
January 1, 2013 to December 31, 2013

Introduction

The Lac qui Parle Soil and Water Conservation District's vision is ***Lac qui Parle's natural resources wisely managed to provide a healthy environment for life***. The vision encompasses not only the natural environment but also the economic environment for the people of Lac qui Parle County.

The mission of the Soil and Water Conservation District is to take available technical, financial, and educational resources, whatever their source, and focus or coordinate them so that they meet the needs of the local land user.

The purpose of this Annual Plan is to identify resource problems within our soil and water conservation district. In addition to identifying these resource problems, it outlines and specifies goals to be accomplished in solving these resource problems. The Annual Plan breaks down the goals identified in the Lac qui Parle County Water Management Plan and specifies additional goals identified by the Lac qui Parle Soil and Water Conservation District Board of Supervisors for the current year. Educational methods, conservation practice application and projected expenses and income needs for the Lac qui Parle Soil and Water Conservation District are outlined. This Annual Plan needs a degree of flexibility to allow the District to use what resources become available to meet the needs of our local resource users as changing needs arise.

The Lac qui Parle Soil and Water Conservation District Board of Supervisors and staff will review this plan quarterly.

The Soil and Water Conservation District will provide for effective District operation with training for supervisors, regular monthly meetings, supervisor review of policies and memorandums of understanding, and development of annual budget, work plan, annual reports.

The LqP SWCD will provide training to increase the staff's capabilities in engineering, computer, program administration, and related skills necessary to adequately and to efficiently provide assistance to Lac qui Parle landusers.

The LqP SWCD will annually conduct staff evaluations and update job descriptions if appropriate.

The Soil and Water Conservation District will provide services in a non-discriminatory manner.

The Lac qui Parle Soil and Water Conservation District Board of Supervisors have adopted the Lac qui Parle County Local Comprehensive Water Management Plan as the District's long-range plan. Goals and Objectives as defined in the Lac qui Parle County Water Management Plan are:

Education Goal: Collect, Analyze and Provide Important Water Planning Information

- A. Continue to support the various monitoring and information gathering efforts in order to better understand and assess water planning issues.
- B. Raise public awareness on a number of key water-planning issues.

Water Management Goal: Protect and Improve Water Quality and Quantity through Water Management

- A. Identify and properly address flooding and drainage issues and opportunities
- B. Identify priority wetlands for protection, enhancement and restoration activities.

Ground Water Goal: Protect and Improve the Quality of Groundwater in the County

- A. Help all landowners act to protect the County's groundwater quality.
- B. Assist with wellhead protection.
- C. Make good land use decisions regarding groundwater protection.

Priority Pollutant Goal: To Restore, Protect and Maintain the Water Quality, Biodiversity and Natural Beauty of Lac qui Parle County's Water Resources

- A. In cooperation with the MPCA, participate in the development of the TMDLs and subsequent implementation efforts that will help get the waters off the TMDL 303d list of impaired waters (see appendix 1, the 2006 list of Impaired Waters in the County.)
- B. Reduce the impact of activities on surface water quality.

Erosion Goal: To Protect the County's Long-Term Soil Resources.

- A. Address sediment concerns by ensuring that turbidity and total suspended solids levels are low enough to fully support aquatic life and aesthetic/recreational use.

Recreational Values Goals: To Ensure That Lac qui Parle County Continues to Provide a Safe and Clean Environment for Water-Based Activities

- A. Educate, encourage and advertise recreation water values for hunting, fishing, trapping, bird watching and other water-based activities.

The additional Goals and Objectives identified by the District Board of Supervisors for the 2013 Annual Plan are:

Tree Planting Goal: To Promote Quality and Quantity of Conservation Tree Plantings

- A: Raise public awareness of the benefits of species diversity and native species in tree plantings
- B: Raise public awareness of the effectiveness of quality tree plantings

Lac qui Parle Comprehensive Local Water Plan Administration Goal: To Effectively Administer the LqP Comprehensive Local Water Plan

- A: Maintain District capacity to effectively administer the LqP Comprehensive Water Plan
- B: Revise/update LqP Comprehensive Local Water Plan
- C: Secure and administer funding for best management practice application/installation
- D: Increase public understanding of water issues

District Visibility Goal: Improve Public Understanding of Who We Are and What We Do

A: Raise public awareness of LqP SWCD

Special Project Grant Administration Goal: To Effectively Deliver the CWF12 Wellpit Retrofit Grant, CWF12 Level 3 Feedlot Inventory Grant, LCCMR Granite Rock Outcrop Easement Program, and CWF13 Targeted Drainage Water Management Program

A: Maintain District capacity to effectively administer, implement, and report Clean Water Fund and other Special Fund Grants

II. Goals, Objectives, Strategy and Actions

Objectives, strategies and action items have been taken directly from the Lac qui Parle County Local Water Management Plan. Additional objectives and actions identified by the Lac qui Parle Soil and Water Conservation District Board of Supervisors have been added. **Administration of the LqP Comprehensive Local Water Plan is included as a goal** with objectives in the SWCD Plan of Work, **but the LqP CLWP 2013 Plan of Work, with action items** taken from the Comprehensive Water Management Plan, **is written as a separate document** approved by the 2013 LqP Resource Commission. (Refer to the Lac qui Parle County Local Comprehensive Water Management Plan for the full scope of action items planned for the County.) The SWCD will partner with other local entities to accomplish other action items. The Goals, Objectives, Strategy and Actions in the Water Management Plan listed here were developed for 2008 – 2013.

Priority Issue: Water Resource Education

EDUCATION GOAL:

COLLECT, ANALYZE AND PROVIDE IMPORTANT WATER PLANNING INFORMATION.

Objective A: Continue to support the various monitoring and information gathering efforts in order to better understand and assess water planning issues.

Actions:

- 1. Proactively work with various state agencies, watersheds and citizens to identify the condition of the County’s water resources, find gaps in the County’s knowledge and understanding of its water resources, find ways to fill those gaps, and learn how to interpret and use the information in the decision-making process.**

Measured by: Participation in decision-making processes with partners and citizens

- 2. Continue Clean Water Partnership water quality monitoring and seek ways to effectively publicize the results, interpret and use them in planning efforts.**

Measured by: TEAM meetings and planning use

- 3. Continue and expand the volunteer Rain Gauge Monitor program.**

Measured by: Data collected and disseminated

4. Monitor water levels in 7 wells in areas of the County near irrigation systems for the DNR.

Measured by: Water levels reported

5. Each year use sub-watershed monitoring efforts to determine where financial and educational assistance is needed most. If possible, target these areas for a specific period of time or until the need is reduced to a satisfactory level.

Measured by: Plans and reports

Objective B: Raise public awareness on a number of key water-planning issues.

Actions:

1. Use the Resource Commission meetings for agencies to update each other on programs, issues and activities.

Measured by: Quarterly meetings

2. Annually develop a public awareness campaign (or implementation strategy) on the County's priority water planning issues using the County Fair, newsletters, news articles, displays, radio, posters, bulletins in city mailings, electronic info (websites, email alerts, etc.) intersection billboards (like used for VFW steak fry), workshops, tours, school events, and seminars.

Measured by: Identified issues and the actions or events used to address those issues

3. Partner to provide environmental education to students using events such as the Southwest Minnesota Environmental Fair, tours, presentations, field days and contests.

Measured by: Events

4. Partner to provide environmental education to adults using events such as tours, presentations, field days, workshops, and displays.

Measured by: Events

5. Increase outreach efforts through the use of SWCD newsletter.

Measured by: Number of newsletters

Priority Issue: Water Management

WATER MANAGEMENT GOAL:

PROTECT AND IMPROVE WATER QUALITY AND QUANTITY THROUGH WATER MANAGEMENT.

Objective A: Identify and properly address flooding and drainage issues and opportunities.

Actions:

1. Identify and promote best management practices that will reduce sedimentation and pollution of water entering ditches and other water bodies such as upland treatment practices, tile drain management, alternative intakes, side inlets and other practices. Make that information available to contractors and producers in brochures, electronic means, radio, demonstrations, tours, and personal contacts.

Measured by: BMP publications, events, personal contacts

- 2. Work with 3-4 landowners to install controlled drainage, biofilters, and/or blind intakes with Clean Water Fund Grant cost-share.**

Measured by: Number of projects and intakes

Objective B: Identify priority wetlands for protection, enhancement and restoration activities.

Actions:

- 1. Provide up-to-date information on the value of wetlands, the need for wetland mitigation, available programs and funding for voluntary restoration and enhancement.**

Measured by: Quality and quantity of information provided to landowners

- 2. Pursue funding for landowners who want to voluntarily restore or enhance wetlands. Work with 3-4 landowners each year.**

Measured by: wetland restoration acres funded

- 3. Seek out and work with 1-2 landowners to create Wetland Banking Credits.**

Measured by: Number of landowners and acres entering the program

Priority Issue: Groundwater Protection

GROUND WATER GOAL:

PROTECT AND IMPROVE THE QUALITY OF GROUNDWATER IN THE COUNTY

Objective A: Help all landowners act to protect the County's groundwater quality..

Actions:

- 1. Work with owners of older wells in well pits to upgrade their water supply system. Target the floodplain areas first.**

Measured by: Promotional efforts, number of systems upgraded

Objective B: Assist with wellhead protection

Actions:

- 1. Provide education to create awareness that every well has a wellhead area that needs to be protected.**

Measured by: Information distributed, news articles

Objective C: Make good land use decisions regarding groundwater protection

Actions:

- 1. Examine ways to incorporate groundwater information into the land use decision-making process. Invite state agencies to assist the County with learning how to interpret data such as the Upper Minnesota River Basin Regional Hydrogeologic Assessment and other key groundwater information, identify sensitive areas, and identify groundwater recharge areas.**

Measured by: Events, information distributed, news articles

**PRIORITY POLLUTANT GOAL:
TO RESTORE, PROTECT AND MAINTAIN THE WATER QUALITY, BIODIVERSITY AND NATURAL BEAUTY OF LAC QUI PARLE
COUNTY'S WATER RESOURCES.**

Objective A: In cooperation with the MPCA, participate in the development of the TMDLs and subsequent implementation efforts that will help get the waters off the TMDL 303d list of impaired waters.

- 1. Participate with partners in the development of the TMDL implementation plan(s) for the Lac qui Parle – Yellow Bank Watershed; help guide and direct BMP selection and placement; demonstrate and promote BMPs and educate citizens on BMPs.**

Measured by: Plans developed and implementation practices installed

- 2. With partners, reference TMDL Implementation Plan and current work plans and seek additional Clean Water Legacy implementation funds.**

Measured by: Projects funded

Objective B: Reduce the impact of activities on surface water quality

Actions:

- 1. Update the County's feedlot inventory to determine the status of feedlots and to better determine where corrective assistance needed.**

Measured by: Current inventory

- 2. Work with existing 1-2 producers each year to bring their feedlots into compliance.**

Measured by: Number of feedlots in compliance

- 3. Assist producers to develop, update and follow their manure management plans. Encourage producers (who currently are not required by law to have plans) to develop plans which will help them better manage their manure resources.**

Measured by: Number of plans developed

- 4. Encourage producers with manure management plans to follow through on maintenance.**

Measured by: Number of outreach efforts

- 5. Review current and ongoing water quality monitoring and promote BMPs appropriate for specific conditions where surface water may be a concern for pollution by agricultural chemical use.**

Measured by: Number of BMPs installed; presence/absence of ag chemicals detected by monitoring

- 6. Seek funding for one demonstration project to remove excess nutrients from a community storm water pond. Make information available to the public through electronic means, radio, newspapers, or demonstrations.**

Measured by: Project funded

**EROSION GOAL:
TO PROTECT THE COUNTY'S LONG-TERM SOIL RESOURCES.**

Objective A: Address sediment concerns by ensuring that turbidity and total suspended solids levels are low enough to fully support aquatic life and aesthetic/recreational use.

Actions:

- 1. Set up tours in County to show land users current applied practices. Promote & share with all agencies.**
Measured by: Tours set up and numbers of participants
- 2. Target absentee landowners to promote erosion control practices and enhance incentives by one newsletter/year to producers and owners and by a direct one-to-one contact with 10 individuals/year.**
Measured by: Number of contacts and number of contracts
- 3. Work with contractors and others to educate the public on ditch and streambank management – buffers – side inlets – stabilization – and cause and effect of erosion.**
Measured by: Mailings, brochures on best management practices, and radio announcements
- 4. Repair and/or install side inlets where needed – 50 each year.**
Measured by: Number of units repaired and/or installed
- 5. Install 100 acres of buffers each year. Target landowners along reaches of the Lac qui Parle and YellowBank Rivers on MPCA list as impaired for turbidity and bacteria.**
Measured by: Acre numbers from agency reports
- 6. Promote benefits of appropriate set-backs on ditches.**
Measured by: Application of set-backs
- 7. Work with land users to install engineered practices to control erosion in concentrated flow areas which will address bacteria and turbidity impairments in reaches of the Lac qui Parle River identified with those impairments.
10 sediment control basins each year
1 acre waterway each year**
Measured by: Agency reports
- 8. Work with land owners to install 1,300 feet of field windbreaks or grass strips each year to reduce wind erosion.**
Measured by: Agency reports
- 9. Protect 150 acres of highly erodible cropland each year by getting them seeded to grasses.**
Measured by: Agency reports
- 10. Work with operators to plan grazing systems on 200 acres of pastureland each year for 1,000 acres net.**
Measured by: Agency reports

RECREATIONAL VALUES GOAL:

TO ENSURE THAT LAC QUI PARLE COUNTY CONTINUES TO PROVIDE A SAFE AND CLEAN ENVIRONMENT FOR WATER-BASED ACTIVITIES.

Objective A: Educate, encourage and advertise recreation water values for hunting, fishing, trapping, bird watching and other water-based activities.

Actions:

- 1. Promote recreational opportunities and potentials in Lac qui Parle County with 1 activity featuring special features of the County's natural resources.**
Measured by: Events
- 2. Use Walk-in Hunting Pilot Program to promote hunting opportunities and relationship to good water quality.**
Measured by: number of promotional activities

The additional Goals and Objectives identified by the District Board of Supervisors for the 2013 LqP SWCD Annual Plan are:

TREE PLANTING GOAL:

TO PROMOTE QUALITY AND QUANTITY OF CONSERVATION TREE PLANTINGS

Objective A: Raise public awareness of the benefits of species diversity and native species in tree plantings

Actions:

- 1. Present information on benefits of species diversity and native species to landowners planning farmstead shelterbelts, wildlife habitat, and any other tree/shrub plantings.**
Measured by: Number of plans
- 2. Distribute native species tree or shrub to all kindergarten students in Lac qui Parle County schools including native species information to share with parents.**
Measured by: Distribution activity
- 3. Make information on species diversity and/or native species available to the public through electronic means, radio, newspapers, or demonstrations.**
Measured by: Publications or events

Objective B: Raise public awareness of the effectiveness of quality tree plantings

Actions:

- 1. Make information on energy savings provided by effective tree plantings available to the public through electronic means, radio, newspapers, or demonstrations.**
Measured by: Publications or events

- 2. Promote living snow fences on township roads at Township Officers meeting; install on 1 site.**
Measured by: Township officials reached and number of living snow fences installed

**LAC QUI PARLE COMPREHENSIVE LOCAL WATER PLAN ADMINISTRATION GOAL:
TO EFFECTIVELY ADMINISTER THE LQP COMPREHENSIVE WATER PLAN**

Objective A: Maintain District capacity to effectively administer the LqP Comprehensive Water Plan

Actions:

- **Fund necessary staff to provide effective administration and ensure staff capabilities through training.**

Measured by: Staff and training attended

Objective B: Update the LqP Comprehensive Local Water Plan

Actions:

- **Work with contracted water plan consultant and ensure each step of procedure is followed.**

Measured by: Timely completion of updated Water Plan

- **Work with contracted water plan consultant and Resource Commission to develop viable actions to address priority concerns.**

Measured by: Actions contained in updated Water Plan

Objective C: Secure and administer funding for best management practice installation

Actions:

- **Administer Water Plan cost share funds to decommission wells.**

Measured by: Number of wells sealed

- **Administer the Ag Best Management Loan Program.**

Measured by: Funds secured and utilized

Objective D: Raise public understanding of water issues

Actions:

- **Use Resource Commission to identify current resource needs within the county and ways to address those needs. Publicize results.**

Measured by: Number of publications or radio spots or publicity events

SPECIAL PROJECT GRANT ADMINISTRATION GOAL:

EFFECTIVELY DELIVER THE CWF12 WELLPIT RETROFIT GRANT, CWF12 FEEDLOT INVENTORY GRANT, CWF12 DRAINAGE WATER MANAGEMENT GRANT, AND LCCMR GRANITE ROCK OUTCROP EASEMENT PROGRAM

Objective A: Maintain District capacity to effectively administer, implement, and report Clean Water Fund and other special fund grants

Actions:

- **Fund necessary staff to provide effective administration, implementation, and reporting**
Measured by: Staff, project numbers, reports
- **Ensure staff staff administrative and implementation capabilities through training.**
Measured by: Training attended

DISTRICT VISIBILITY GOAL:

IMPROVE PUBLIC UNDERSTANDING OF WHO WE ARE AND WHAT WE DO

Objective A: Raise public awareness of LqP SWCD

Actions:

- **Reinstate published newsletter**
Measured by: Quarterly newsletter mailing
- **Investigate revision of LqP SWCD logo**
Measured by: Board action regarding logo change
- **Post “entering/leaving LqP SWCD” signs on state and county roads**
Measured by: Installation of signs
- **Post signage at District’s native prairie planting; use site to promote native prairie**
Measured by: Signs and promotion activity

III. Budget Requirements

FUNDS NEEDED TO INSTALL PRACTICES TO CONTROL HIGH PRIORITY EROSION PROBLEMS

(January 1, 2013, to December 31, 2013)

Total Anticipated Allocation		<u>\$ 26,677</u>
Administrative and Technical Allowance		5,335
Amount for Cost-Share Work		21,342
To be spent as follows:		
Engineered Practices	15,342	
Tree Plantings	6,000	

The major additional funding for engineered best management practices is the Environmental Quality Incentives Program (EQIP). The SWCD will use some of its cost-share dollars to supplement EQIP cost-share to equal no more than 65% of eligible costs.

The Conservation Reserve Program, Continuous Conservation Reserve Program, and EQIP can provide funding for additional best management practice applications such as grassed waterways, buffers, tree establishment, and nutrient management plans. RIM/WRP provides funds for wetland restoration. Other state and federal programs including the Wildlife Habitat Incentive Program, the Grazing Lands Program, the Conservation Stewardship Program, the MN Department of Ag Best Management Practices Loan Program, the Vegetative Management & Enhancement of Conservation Easement Lands program, the LCCMR Granite Rock Outcrop Easement Program, and Drainage Water Management for LqP & Yellow Medicine (2013 Clean Water Fund) are more limited but also provide funds to assist landowners with best management practices that protect their natural resources.

The technical representative for the state cost-share program in Lac qui Parle has been delegated to the District Engineering Technician, Curtis Nordaune, with support from the Natural Resource Conservation Service Area Support Office and the Southwest Prairie Technical Service Area Joint Powers engineering staff. The District Technician is designated as technical representative on vegetative plantings.

IV. Cost-Share Program Requirements

The District will continue to focus on high priority erosion and sedimentation problems in 2013 and will supplement the EQIP program on engineered practices. The following information is from the County Water Management Plan.

A. High Priority Erosion Problems (Chapter 2, Page 12)

“High priority erosion problems” means areas where erosion from wind or water is occurring equal to, or in excess of, 2 x T 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 local water plan or the conservation district’s comprehensive plan.

“T” value, or soil loss tolerance, assigned to each soil map unit, is the average annual erosion rate (tons/acre/year) that will permit a high level of crop productivity to be sustained economically and indefinitely. While T varies from soil type to soil type, the average T value for Lac qui Parle soils is 5 tons per acre. (A regular sized pickup truck can hold about 1 – 2 tons, and an acre is about the size of a football field.)

B. High Priority Water Quality Problems (Chapter 2, Page 12)

“High priority water quality problems” means areas where sediment, nutrients, chemicals, or other pollutants discharge to Department of Natural Resources (DNR) designated protected waters or to any high priority waters as identified in a comprehensive local water plan or the conservation district’s comprehensive plan or discharge to a sinkhole or ground water. The pollutant delivery rate to the water source is in amounts that will impair the quality or usefulness of the water resource.

The Lac qui Parle – Yellow Bank Watershed Clean Water Partnership through Phase I monitoring identified three priority areas based upon water quality.

- ❖ The entire watersheds for fecal coliform
- ❖ The Ten Mile Creek watershed for high nitrates
- ❖ The main stem of Lac qui Parle River for suspended solids

The Minnesota Pollution Control Agency’s 2006 Impaired Waters List (see map) includes

- ❖ Emily Creek (Fish IBI)
- ❖ Yellow Bank River, North Fork (Fecal Coliform)
- ❖ Yellow Bank River, South Fork (Fecal Coliform)
- ❖ Lac qui Parle River (low Dissolved Oxygen Fecal Coliform, Turbidity)
- ❖ Lac qui Parle River Fecal Coliform, Turbidity)
- ❖ Lac qui Parle River West Branch (low Disolved Oxygen, Fecal Coliform)
- ❖ Lac qui Parle River West Branch (Fecal Coliform)
- ❖ Tenmile Creek (Fish IBI, Fecal Coliform)
- ❖ Lazarus Creek (Fecal Coliform, Turbidity)
- ❖ Florida Creek (Fish IBI, Fecal Coliform, Turbidity)

The Board of Water and Soil Resources’ cost share policy has been updated and will go into effect for FY14 cost share. This change may affect existing language of the LqP SWCD cost share policy. The 2013-2023 LqP Comprehensive Water Plan will be completed in spring of 2013, and will likely include changes to existing geographic and resource priorities.

Special Implementation Projects for the District are:

Floodplain Wellpit Retrofit & Groundwater Protection Grant

LqP SWCD applied for and will receive a FY 2012 BWSR Clean Water Fund Competitive Grant in the amount of \$53,533. These funds will provide 75% cost share to retrofit 35 well pits with a pitless unit, fill the well pit, move the pressure tank indoors, and allow the homeowner to continue using a serviceable well while safeguarding the source of their drinking water.

LqP Level 3 Feedlot Inventory Grant

LqP SWCD applied for and will receive a FY 2012 BWSR Clean Water Fund Accelerated Implementation Grant in the amount of \$30,894. This grant will provide a temporary part time staff person to complete a Level 3 Feedlot Inventory for the County. When completed, this inventory will serve as a tool for targeting outreach efforts and financial assistance that will improve and protect both impaired and unimpaired surface waters of the county.

LCCMR Granite Rock Outcrop Easements

Lac qui Parle SWCD along with Yellow Medicine, Renville and Redwood SWCDs are protecting fragile Minnesota Valley Granite Outcrop rock ecosystems, among the oldest rock formations in the world, with grant funding from Legislative Citizens Committee on Minnesota Resources. Three easements protect 103 acres of unique granite outcrops and their specialized plants and associated wetlands. The 2013 application for new funds will include remnant prairie areas.

Drainage Water Management for LqP & Yellow Medicine Counties

Yellow Medicine SWCD serves as the fiscal agent for this \$60,000 2013 Clean Water Fund Grant that provides up to 75% cost share for Drainage Water Management Plans, replacing open tile intakes with alternative inlets, and installation of control drainage structures and denitrifying bioreactors.

V. Staffing Needs

These staff years include two full-time SWCD staff members, one full-time SWCD/Farm Bill, one part-time SWCD, two full-time and two part-time NRCS, and one full-time Pheasants Forever. It also includes one temporary staff person to conduct the Level 3 Feedlot Inventory for the Accelerated Implementation Grant.

GOAL/OBJECTIVE	STAFF YEARS	
	Administrative	Technical
Education	.75	.3
Protect/Improve Water Quality and Quantity	.25	2.0
Protect/Improve the Quality of Groundwater	.1	.15
Priority Pollutants	.25	.75
Erosion	.25	.7
Recreational Values	.1	
Tree Planting	.1	.25
LqP Water Plan Administration	.4	
Accelerated Implementation Grant	.02	.6
Visibility	.1	.2
Grant Delivery	.2	.5
TOTAL STAFF YEARS	2.52	5.45