



Stevens County Local Water Management Plan



Pomme de Terre River

Implementation Plan Amendment June 2010 – June 2015

Prepared by the Stevens County Environmental Services
and the Local Water Management Plan Task Force
P.O. Box 530, Morris, MN 56267—Telephone: 320-208-6558

STEVENS COUNTY LOCAL WATER MANAGEMENT PLAN AMENDMENT (2010-2015)

TABLE OF CONTENTS

TABLE OF CONTENTS	1
EXECUTIVE SUMMARY	2-5
OVERVIEW OF THE LOCAL WATER MANAGEMENT PLAN	2
REVISION AND SUMMARY OF THE FIVE-YEAR IMPLEMENTATION PLAN	2
RECENT LOCAL WATER MANAGEMENT PLAN ACCOMPLISHMENTS	3
ONGOING PROGRAMS	5
CHAPTER 3: IMPLEMENTATION PLAN AMENDMENT	6-15
PRIORITY CONCERN: County Administration/Enforcement of SSTS	7
PRIORITY CONCERN: Groundwater / Rural Water / Wellhead Protection	7
PRIORITY CONCERN: Erosion and Sediment Control	8
PRIORITY CONCERN: Stormwater and Drainage Management	11
PRIORITY CONCERN: Land Use / Development Issues	13
SUMMARY OF ESTIMATED COSTS FOR FIVE-YEAR PLAN	15
FIVE-YEAR IMPLEMENTATION PLAN AMENDMENT	

OVERVIEW OF THE LOCAL WATER MANAGEMENT PLAN

In 2005, Stevens County updated its Local Water Management Plan (LWMP), in accordance with Minnesota Statutes 103B. The plan, which will remain in effect for a period of ten years (June 1, 2005 to June 1, 2015), was formally approved by the Minnesota Board of Water and Soil Resources (BWSR) on May 25, 2005 and the County Board on June 7, 2005.

EXECUTIVE SUMMARY

The document serves two purposes: 1.) to identify existing and potential issues and opportunities related to the protection, management and development of water and land resources, and 2.) to outline an implementation program that will guide the County in water resource management. As a part of the implementation component of the plan, the County developed a Five-Year Implementation Plan and Schedule. The Implementation Plan contains only the initiatives that are of highest priority for implementation and must be updated every five years.

REVISION AND SUMMARY OF THE FIVE-YEAR IMPLEMENTATION PLAN

This Addendum contains an updated Five-Year Implementation Plan; the initial Implementation Plan expired June 1, 2010. The County's Water Plan Task Force (TF) was delegated with the responsibility of overseeing the development of the new Implementation Chapter. The original Priority Concerns for the 10-year plan continue to be addressed in this Implementation Plan Amendment. They are listed below with a brief summary and estimated cost of actions proposed to be implemented.

- **County Administration/Enforcement of Subsurface Sewage Treatment Systems (SSTS)** - The county formally adopted Minnesota Rules Chapter 7080 in 2005 and will continue to enforce and administer a county-wide septic system program. Planned actions for the next five years include amendment of the current septic system ordinance to conform to newly amended MPCA Rules, strategies for identifying imminent public health threats, educational efforts for proper maintenance of systems, and continued use and application for low interest loan funds. **Estimated Cost: \$333,000**
- **Ground Water/Rural Water/Wellhead Protection** – The city of Alberta now receives its drinking water supply from the city of Morris. The city of Chokio has upgraded their water supply source by constructing a new water treatment plant. County-wide efforts will continue to provide good water supply to municipalities and rural residents in the county. Actions include assisting cities with wellhead protection planning, well testing and education for rural homeowners, promotion of low-pressure irrigation systems, DNR observation well monitoring, a continued well sealing cost-share program and annual collections of household hazardous waste. **Estimated Cost: \$158,000**
- **Erosion and Sediment Control** – Since approximately 95 percent of the county land area is farmed, efforts will continue to identify areas of agricultural lands for gully erosion and concentrated flows. Best Management Practices (BMP) are proposed to protect soil resources and restore surface water quality. Target areas will be watersheds that have TMDL impairments for fecal coliform and turbidity. Emphasis will be placed on establishment of filter strips along ditches and streams to capture sediment as it leaves agricultural fields, and upgrading of septic systems and feedlots with open lot runoff issues. The County will continue to administer a septic system and county feedlot program for permitting and

EXECUTIVE SUMMARY

enforcement. Ongoing conservation practices will be promoted and implemented by the Soil and Water Conservation District (SWCD), the Natural Resources Conservation Service (NRCS) and the Bois de Sioux Watershed (BdS) such as construction of side inlet pipes and sediment basins, field windbreaks, CRP, RIM, WRP, streambank stabilization, livestock exclusion from water, and feedlot runoff/nutrient management planning.

Estimated Cost: \$3,452,000

- **Stormwater and Drainage Management** – Stormwater and drainage management applies to both agricultural and urban land uses. Action items are proposed to improve surface water management by decreasing runoff, flooding and erosion while maintaining the drainage systems. Efforts will include identifying construction sites in need of NPDES permits, installing practices to reduce the amount of sediment entering watercourses, water retention/storage in the Bois de Sioux Watershed, promotion of WRP and CCRP, gathering data for each drainage system, and educating landowners on keeping buffer strips in place to protect the drainage systems. **Estimated Cost: \$3,115,000**
- **Land Use/Development Issues** – Development of a comprehensive plan would help ensure proper planning and the best land use decisions for the citizens of the county and the environment. Efforts will continue to seek grant funding to hire a consultant to develop the plan which would include updating the current out-of-date zoning ordinance. The reduction of erosion in shoreland areas will also be promoted through continued administration of the county shoreland ordinance. Efforts will focus on well designed shoreline protection practices and encouraging agricultural producers to buffer cropland within the shoreland impact zone. **Estimated Cost: \$117,000**

The TF met twice during the planning process to review and update the goals, objectives and actions addressed in the plan, as well as solicit comments from the public, other local governmental units, and the State and Federal agencies.

RECENT LOCAL WATER MANAGEMENT PLAN ACCOMPLISHMENTS

Stevens County has proven its dedication to the implementation of its LWMP through the supportive actions of the TF, Board of Commissioners and the Stevens SWCD. The TF has utilized the Natural Resources Block Grant (NRBG) funds and in-kind services/funding from the SWCD and the Natural Resources Conservation Service (NRCS) in the last five years to successfully accomplish numerous priorities in the LWMP, including those activities listed on the following pages.

Education & Information

- Mailed a newsletter to residents in the county addressing solid waste disposal issues.
- Provided funding for an Environmental Educator for the Scandia Woods Environmental Learning Lab (SWELL). Approximately 600 students participate annually in outdoor environmental lessons.
- Participated and provided annual funding for the Pope/Stevens Waterfest (275 - 6th graders annually).

EXECUTIVE SUMMARY

- Participated and provided annual funding for Conservation Days at SWELL (200 - 5th graders annually).
- Participated and provided annual funding for Envirothon events (average 25 high school teams annually).
- Conducted and provided annual funding for students involved in environmental service learning projects. Projects included community tree plantings, wetland shoreland restoration plantings, native grass plantings, and water monitoring.
- Purchased ArcGIS and Pictometry aerial photo software to aid in environmental planning and development.
- Continue to maintain an arboretum at the SWCD for resident education/information.
- Constructed a rain garden at the SWCD and erected a sign to identify the project.

Monitoring & Data Collection

- Provided funding to the Pomme de Terre Watershed for surface water quality monitoring.
- Provided \$700 in funding to assist the County HRA in conducting a rural water survey.
- Funded a portion of a consultant fee to complete a TMDL application for the MPCA to seek grant funding to hire a coordinator for the Pomme de Terre Watershed.
- Completion and approval of fecal coliform TMDL from Muddy Creek to Marsh Lake in 2008.
- Completion and approval of fecal coliform TMDL Implementation Plan from Muddy Creek to Marsh Lake in 2008.
- Applied for and received funding through an EPA 319 grant for fecal coliform reduction practices: \$286,000 in 2009.
- Completion and approval of turbidity TMDL from Muddy Creek to Marsh Lake in 2010.
- Began a two year lake assessment project in 2009 monitoring lakes: Hattie, Crystal, North Pomme de Terre and Middle Pomme de Terre.

Land & Water Treatment

- Continued unused well sealing cost-share program sealing 31 wells.
- Conducted four household hazardous waste collections annually (72,260 lbs collected).
- Conducted annual empty pesticide container collections (25,000 lbs. collected).
- Administered the AgBMP low interest loan program funding 10 septic system upgrades, 7 pieces of conservation tillage equipment, 1 feedlot upgrade and 1 field windbreak.
- Provided cost-share funding (\$500 each) for five septic system upgrades in the Pomme de Terre River Watershed.
- Installed four stream barbs along a 350' stretch of the Pomme de Terre River to eliminate bank erosion. The Water Plan provided 25% (\$1,500) of the project cost.
- Enrolled and implemented upland and wetland restorations on approximately 5,400 acres of marginal cropland with the Wetlands Reserve Program.
- Enrolled and implemented upland and wetland restorations on approximately 6,200 acres of marginal cropland with the Conservation Reserve Program.
- Provided cost share and incentive payments for 68.5 acres of pasture establishment, fencing and watering facilities with Environmental Quality Incentive Program (EQIP).

EXECUTIVE SUMMARY

- Provided cost share and technical assistance for 1 grassed waterway and 6 water and sediment control basins with EQIP.
- Provided cost share for a 113 acre low pressure conversion (center pivot irrigation system) with EQIP.
- Nutrient Management planned and implemented on 1,154.6 acres via EQIP.
- NRCS provided in kind technical assistance to 3 landowners with feedlot runoff problems.

Technical Assistance

- Provided \$1,000 annually to support the Farm Bill Technician position.
- Provided \$13,145 annually to support the Pomme de Terre Watershed Coordinator position. The funding was for a three year period 2008, 2009, and 2010.

Ordinance Updates

- Officially adopted MN Rules Chapter 7080 to administer and enforce a county-wide septic system ordinance in 2005.
- Updated the county shoreland ordinance to comply with MN Rules Chapter 6120 in 2007.

ONGOING PROGRAMS

Stevens County continues to administer several programs that are vital to achieving the goals set forth in the LWMP, including those related to county-wide zoning, floodplain and shoreland management, solid waste management, subsurface sewage treatment systems, county feedlot program, and the Wetland Conservation Act (WCA). The Environmental Services Department is responsible for locally administering these programs; the Stevens SWCD helps co-administer the WCA. Annual reports are completed for the above programs that provide grant funding through the Natural Resources Block Grant. Understandably, the continued funding of these programs has been identified as a high priority in the Five-Year Implementation Plan.

The NRCS and Stevens SWCD continue to work as a partnership to control erosion, improve water quality and wildlife habitat in Stevens County. These efforts and achievements are possible due to good working relations and by implementing such conservation programs as: CRP, CSP, EQIP, RIM and WRP.

CHAPTER 3: IMPLEMENTATION PLAN AMENDMENT

GOALS, OBJECTIVES, & ACTIONS

This Chapter establishes the Implementation of Goals, Objectives and Action for each of the County's high priority concerns identified in Chapter 2 of the 2005-2015 Water Plan. The development of the Goals and Objectives define broad directions to restore, protect and preserve County land and water resources. Action items describe specific measures that the County intends to implement, with assistance from appropriate state and federal agencies, to achieve the Goals and Objectives. Goals may have one or more objectives.

In review, the County's five priority concerns are:

- I. County Administration/Enforcement of Subsurface Sewage Treatment Systems (SSTS).**
- II. Ground Water/Rural Water/Wellhead Protection.**
- III. Erosion and Sediment Control concentrating on identified areas of agricultural lands for gully erosion and concentrated flows.**
- IV. Stormwater and Drainage Management focusing on wetland restorations and flood control.**
- V. Land Use/Development Issues – develop a Comprehensive Plan including updating the County Zoning Ordinance and Shoreland Standards.**

Each of the action steps contained in this Chapter identifies who is responsible for its implementation, when the action step should occur, and an estimate of how much it will cost. For the purposes of this Chapter, the following abbreviations are used. The abbreviations in **BOLD** illustrate the lead agency under the specific actions.

Abbreviations

- BA – Board of Adjustment
- BdS - Bois de Sioux Watershed
- BWSR – Board of Water & Soil Resources
- CB - County Board
- CC – County Cities
- CHD – County Highway Department
- DA – Ditch Authority
- DNR – Department of Natural Resources
- ES – Environmental Services
- Fed/St – Federal/State
- MDA – Minnesota Department of Agriculture
- MDH – Minnesota Department of Health
- MPCA – Minnesota Pollution Control Agency
- NRCS – Natural Resource Conservation Service
- SWCD – Soil & Water Conservation District
- TF – Water Plan Task Force
- PF – Pheasants Forever
- PC – Planning Commission
- P/Z – Planning/Zoning
- PdT – Pomme de Terre Watershed
- UMES – University of MN Extension

CHAPTER 3: IMPLEMENTATION PLAN AMENDMENT

10.) Contact the Minnesota Department of Health for an updated list of priority wells in the county.

Who: ES, CC

When: 2010-2015

Cost: Staff Time

III. PRIORITY CONCERN: Erosion and Sediment Control concentrating on identified areas of agricultural lands for gully erosion and concentrated flows.
--

GOAL: Protect the County's Soil Resources and Restore Surface Water Quality

OBJECTIVE A: Reduce erosion and sedimentation by applying Best Management Practices (BMP) on identified agricultural lands. Priority watersheds will be the Pomme de Terre, Chippewa and Mustinka.

ACTIONS:

1.) Seek a 10% increase in fields meeting crop residue targets countywide based on tillage transect results (Current five year average 2002 - 2007 was 22%).

Who: SWCD, NRCS

When: 2010-2015

Cost: \$5,000

2.) Complete a tillage transect survey bi-annually to show county residue data and inform the public of the results.

Who: SWCD

When: 2010-2015

Cost: \$5,000

3.) Continue to fund a CCRP position at SWCD to promote and target sensitive areas for filter strips and wetland restorations in watersheds with TMDL Implementation Plans.

Who: SWCD, TF, PF

When: 2010-2015

Cost: \$140,000

4.) Establish 2,000 new acres of filter/buffer strips along ditches and streams to capture sediment as it leaves agricultural fields. Enforce the minimum one-rod grassed area as it applies to MN Statute §103E, drainage law, and a 50-foot buffer around protected waters. TMDL impaired watersheds will be a priority.

Who: DA, P/Z, PdT, CRW

When: 2010-2015

Cost: \$600,000 **BdS,** SWCD, NRCS

5.) Establish 20 acres of grass waterways.

Who: SWCD, NRCS

When: 2010-2015

Cost: \$24,000

6.) Construct 50 water and sediment control basins.

Who: SWCD

When: 2010-2015

Cost: \$150,000

7.) Continue to promote and provide tree and grass planting services through the SWCD at a competitive price to landowners. Establish 25,000 feet of field windbreaks and 3,000 acres of native grass plantings.

Cost:

CHAPTER 3: IMPLEMENTATION PLAN AMENDMENT

Who: SWCD, NRCS, BdS **When:** 2010-2015 **Cost:** \$1,000,000

8.) Encourage five participants to install rock inlet/french drains for field draitile.

Who: SWCD **When:** 2010-2015 **Cost:** \$2,000

9.) Continue to promote and administer the Ag BMP low interest loan program to help fund eligible conservation tillage equipment through the MN Department of Agriculture.

Who: ES, MDA **When:** Ongoing **Cost:** \$500,000

10.) Utilize LIDAR elevation information to identify gully erosion and prioritize the promotion of new inlet locations.

Who: SWCD, NRCS **When:** 2010-2015 **Cost:** Unknown

11.) Control gully erosion through the use of side inlet pipes on drainage systems. Target 15 or more (depending upon available funding).

Who: SWCD, NRCS, BdS, DA **When:** 2010-2015 **Cost:** \$65,000

12.) Seed 500 acres of the most highly erodible cropland to appropriate vegetative cover through existing programs (i.e., CRP & RIM). Focus efforts in the Muddy Creek/ Dry Wood Creek Sub-Watersheds. and Mustinka Watershed.

Who: SWCD, PdT, BdS **When:** 2010-2015 **Cost:** \$150,000

13.) Utilize Working Lands Initiative funds to provide cash incentive for enrollment of land into CRP or land retirement programs in the high priority areas.

Who: DNR, SWCD, NRCS **When:** 2010-2015 **Cost:** \$250,000

Cost:

CHAPTER 3: IMPLEMENTATION PLAN AMENDMENT

OBJECTIVE B: Reduce run-off pollutants, focusing on sediment, pathogens, nitrogen, and phosphorous.

ACTIONS:

- 1.) Work with the Minnesota Pollution Control Agency to complete TMDL studies of the impaired waters on the 303d list. Develop implementation plans to restore the impaired waters to their designated use.

Clean Water Act 303d List of Impaired Waters for Stevens County (2010)

Reach	Assessment ID	Designated Use	Pollutants/Stressors
Pomme de Terre Lake to Muddy Creek	07020002-502	Aquatic life Aquatic consumption	Fish bioassessments Mercury in fish tissue
Muddy Creek to MN River (Marsh Lake)	07020002-501	Aquatic life Aquatic recreation Aquatic consumption	Turbidity Fecal coliform Mercury in fish tissue
Drywood Creek (Drywood Lake to PdT River)	07020002-556	Aquatic life Aquatic recreation	Turbidity <i>E. coli</i>
Perkins Lake	75-0075-00	Aquatic recreation	Nutrients/eutrophication Biological indicators
Unnamed wetland	75-0175-00	Aquatic life	Aquatic macro invertebrate bioassessment Aquatic plant bioassessment
Unnamed wetland	75-375-00	Aquatic life	Aquatic macro invertebrate bioassessment Aquatic plant bioassessment
Chippewa River (headwaters to Little Chippewa)	070200005-503	Aquatic life Aquatic recreation Aquatic consumption	Turbidity Fecal coliform Mercury in fish tissue

Who: PdT, CRW, BdS,
MPCA, SWCD

When: 2010-2015

Cost: Unknown

- 2.) Work cooperatively with the MPCA and Pomme de Terre Watershed Association Joint Powers Board in applying strategies and management measures identified in the Pomme de Terre Watershed TMDL Fecal Coliform Implementation Plan. The Implementation Plan can be found at:

<http://www.pca.state.mn.us/publications/wq-iw7-08c.pdf>.

Who: PDT, MPCA, SWCD,
ES, NRCS

When: 2010-2015

Cost: Unknown

CHAPTER 3: IMPLEMENTATION PLAN AMENDMENT

- 3.) Seek CWP 319 or other grant funding to focus on reduction of non-point source loading of the impaired stretches of the Pomme de Terre, Chippewa and Mustinka River Watersheds in Stevens County.
Who: PdT, CRW, BdS, SWCD **When:** 2010-2015 **Cost:** \$25,000
- 4.) Promote nutrient management throughout the County and target 500 acres per year.
Who: SWCD, NRCS **When:** 2010-2015 **Cost:** \$7,500
- 5.) Target 5000 feet of bank stabilization and promote practices that reduce stream-bank and ditch-channel erosion such as willow planting or stream barbs in critical areas.
Who: SWCD, PdT, BdS **When:** 2010-2015 **Cost:** \$83,500
- 6.) Continue to locally administer the County Feedlot Program and inspect 7% (approximately 10/yr) of registered feedlots annually. Submit annual work plans and reports to the MPCA.
Who: ES, NRCS, MPCA **When:** 2010-2015 **Cost:** \$75,000
- 7.) Assist 15 non-compliant feedlots with completing proper MPCA permits and manure management plans on feedlots with 300+ animal units.
Who: ES, MPCA **When:** 2010-2015 **Cost:** \$15,000
- 8.) Address two sites with livestock exclusion practices (fencing, alternative water source, rock crossing and rotational grazing) in the Muddy Creek and Dry Wood Creek SubWatersheds.
Who: ES, SWCD/NRCS, PDT **When:** 2010 –2015 **Cost:** \$75,000
- 9.) Assist two non-compliant feedlots with financial and technical assistance each year through EQIP or other funding.
Who: ES, SWCD/NRCS, **When:** 2010-2015 **Cost:** \$150,000
- 10.) Identify and encourage upgrades of failing septic systems throughout the County with priority focus on Muddy Creek and Dry Wood Creek Sub-Watersheds.
Who: ES, TF, PdT **When:** 2010-2015 **Cost:** \$5,000
- 11.) Continue to support upgrading of septic systems with the use of AgBMP low interest loans. Consider reimbursing up to \$5,000 in incentive dollars per system in the Muddy Creek and Dry Wood Creek Sub-Watersheds. Target 5 systems annually (\$25,000).
Who: ES, PdT, MDA **When:** 2011-2015 **Cost:** \$125,000

IV. PRIORITY CONCERN: Stormwater and Drainage Management focusing on wetland restorations and flood control.

CHAPTER 3: IMPLEMENTATION PLAN AMENDMENT

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

OBJECTIVE A: Improve stormwater runoff quality by increased utilization of stormwater management practices throughout the County.

ACTIONS:

- 1.) Assist the MPCA on identifying construction sites in need of a NPDES permit and provide educational materials to builders on the Stormwater Program.

Who: MPCA, CC, P/Z, ES **When:** 2010-2015 **Cost:** Staff Time

- 2.) Promote the use of erosion and sediment control and other best management practices to reduce the amount of sediment and nutrients entering watercourses from commercial and residential areas.

Who: SWCD, CC, P/Z, ES **When:** Ongoing **Cost:** Staff Time

OBJECTIVE B: Apply watershed-based principles in properly managing the drainage systems in Stevens County including legal drainage systems as defined in MN Statute §103E.

ACTIONS:

- 1.) Coordinate with the Bois de Sioux Watershed District to seek water retention/storage in the East Branch Twelve Mile Creek. Goal is to create an additional 30,000 acre-feet of storage.

Who: BdS, SWCD, NRCS, CB **When:** Ongoing **Cost:** Staff Time

- 2.) Cooperate and assist the Bois de Sioux Watershed District resolve the Stevens/Traverse county line dispute.

Who: BdS, CB SWCD, NRCS **When:** Ongoing **Cost:** Staff Time

- 3.) Participate in project team in the Stevens County portion of the Bois de Sioux.

Who: SWCD, NRCS, CB, ES **When:** Ongoing **Cost:** Staff Time

- 4.) Work countywide in each watershed to implement best management practices to reduce flooding, erosion and sedimentation.

Who: SWCD, NRCS **When:** Ongoing **Cost:** Staff Time

- 5.) Work countywide in each watershed to promote and restore 1,000 acres per year of wetlands and associated upland.

Who: NRCS, SWCD **When:** 2010 -2015 **Cost:** 3,000,000

CHAPTER 3: IMPLEMENTATION PLAN AMENDMENT

GOAL: Prepare and adopt a countywide comprehensive plan to emphasize the importance of proper planning and ensure decisions are best for the citizens of Stevens County as well as the environment.

OBJECTIVE A: Coordinate with the County Board to start a process for developing a comprehensive plan that includes updating the County Zoning Ordinance and Shoreland Standards.

ACTIONS:

- 1.) Seek grant funding sources to assist the County in hiring a consultant for promotion and development of a County comprehensive plan.
- 2.) Persuade the County Board to appoint a task force to undertake a strategy in developing a comprehensive plan. The task force should include representatives from County cities, townships, state and local resource agencies, organizations and private citizens.
- 3.) Develop a process and engage people in the County to participate throughout the planning process.
 - Establish a shared understanding of the most important issues about economics, environmental and social implications.
 - Identify future needs and desires, and develop the vision, goals, policies and progress indicators that reflect them.
 - Develop alternative strategies for addressing the County’s vision, goals and policies.
 - Understand relationships between possible plan strategies, accounting for their long-term costs and benefits, and choosing those that best fit a community.
- 4.) Select plan monitoring indicators, and complete and adopt the plan.
- 5.) Implement the plan, tracking the progress and changing the plan in future years as needed.

Who: CB, PC, BA, P/Z

When: 2010-2015

Cost: \$50,000

OBJECTIVE B: Reduce erosion in shoreland areas.

ACTIONS:

- 1.) Continue to administer and enforce the County Shoreland Ordinance and submit an annual report to the DNR.

Who: P/Z, ES, DNR

When: 2010-2015

Cost: \$35,000

CHAPTER 3: IMPLEMENTATION PLAN AMENDMENT

- 2.) Promote well designed shoreline protection practices along the shorelines of developed lakes in the county.
Who: P/Z, DNR, SWCD, PdT When: 2010-2015 Cost: \$5,000

- 3.) Alert property owners about the consequences of vegetation removal in shoreland areas.
Who: P/Z, DNR, SWCD, PdT When: 2010-2015 Cost: \$2,000

- 4.) Work with agricultural producers to buffer cropland within the shore impact zone.
Who: SWCD, P/Z, PdT When: 2010-2015 Cost: \$20,000

- 5.) Meet with property owners who are planning shoreland projects to ensure sound stormwater construction practices at the point of permit application.

Who: P/Z, ES, PdT, DNR When: 2010-2015 Cost: \$5,000

SUMMARY OF ESTIMATED COSTS FOR FIVE-YEAR PLAN IMPLEMENTATION

The table below lists a five-year estimated cost for implementing Goals and Objectives addressed previously, potential funding sources, funding needed and funding secured. The “Funding Secured” column anticipates continued annual funding from the county and NRBG. The “Funding Needed” column anticipates other potential sources such as SWCD/NRCS program funding, TMDL grants, AgBMP loans, and any other undetermined financial source.

GOALS/OBJECTIVES	Funding Sources	Funding Needed	Funding Secured
------------------	-----------------	----------------	-----------------

CHAPTER 3: IMPLEMENTATION PLAN AMENDMENT

<p><u>GOAL: To protect surface and groundwater quality in the County.</u></p> <p>Objective A: Amend current SSTS ordinance to conform to new MPCA rules and continue to administer and enforce a county-wide septic system program.</p>	<p align="center">NRBG, County, AgBMP</p>	<p align="center">\$258,000</p>	<p align="center">\$75,000</p>
<p><u>GOAL: To provide good quality water supply to county cities and rural residents.</u></p> <p>Objective A: Assist with Wellhead Protection Planning.</p>	<p align="center">NRBG, County, Cities</p>	<p align="center">\$43,000</p>	<p align="center">\$115,000</p>
<p><u>GOAL: Protect the County’s soil resources and restore surface water quality.</u></p> <p>Objective A: Reduce erosion and sedimentation by applying Best Management Practices (BMP) on identified agricultural lands. Priority Watersheds will be the Pomme de Terre, Chippewa and Mustinka.</p> <p>Objective B: Reduce run-off pollutants, focusing on sediment, pathogens, nitrogen, and phosphorous.</p>	<p align="center">Fed/St, NRBG, BdS SWCD/NRCS</p> <p align="center">Fed/St, NRBG, SWCD/NRCS</p>	<p align="center">\$2,826,000</p> <p align="center">\$361,000</p>	<p align="center">\$65,000</p> <p align="center">\$200,000</p>
<p><u>GOAL: Improve surface water management by decreasing runoff, flooding and erosion while maintaining the drainage systems already in place to sustain agricultural productivity.</u></p> <p>Objective A: Improve stormwater runoff quality by increased utilization of stormwater management practices throughout the County.</p> <p>Objective B: Apply watershed-based principles in properly managing the drainage systems in Stevens County including legal drainage systems as defined in MN Statute §103E.</p>	<p align="center">County, Cities</p> <p align="center">Fed/St, SWCD County/NRBG,</p>	<p align="center">Staff-Time</p> <p align="center">\$3,015,000</p>	<p align="center">Staff-Time</p> <p align="center">\$100,000</p>
<p><u>GOAL: Prepare and adopt a countywide comprehensive plan to emphasize the importance of proper planning and ensure decisions are best for the citizens of Stevens County as well as the environment.</u></p> <p>Objective A: Coordinate with the County Board to start a process for developing a comprehensive plan that includes updating the County Zoning Ordinance.</p> <p>Objective B: Reduce erosion in shoreland areas.</p>	<p align="center">Planning Grant</p> <p align="center">NRBG, County, SWCD</p>	<p align="center">\$50,000</p> <p align="center">\$32,000</p>	<p align="center">Staff-Time</p> <p align="center">\$35,000</p>
<p>TOTALS</p>		<p align="center">\$6,585,000</p>	<p align="center">\$590,000</p>