



SWIFT COUNTY

2008-2013 Local Water Management Plan

2008

Addendum



***Prepared by Swift County with assistance from
the MN Board of Water & Soil Resources***

ACKNOWLEDGEMENTS

A special thanks is extended to the following individuals who were involved in the preparation and development of this document. Swift County greatly appreciates their participation!

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Water Plan Task Force

Member	Representing
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Kylene Olson	Chippewa River Watershed
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EXECUTIVE SUMMARY

Overview of the Water Plan

In 2003 Swift County updated its Comprehensive Local Water Plan, in accordance with Minnesota Statutes 103B. The plan, which will remain in effect for a period of ten years (May 28, 2003 to May 28, 2013), was formally approved by the Minnesota Board of Water and Soil Resources (BWSR) on May 28, 2003, and adopted by the Swift County Board of Commissioners on August 19, 2003. The document provides a comprehensive inventory and assessment of the County's water and related land resources, as well as contains a section on plan implementation 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.

Implementation Schedule of Chapter 4

This Addendum contains an updated Five-Year Implementation Plan; the initial Implementation Plan expired May 28, 2008. The County's Water Plan Task Force was delegated with the responsibility of overseeing the development of the new Implementation chapter. The Task Force met during the planning process to identify the priority the priority issues to be addressed in the plan, as well as solicit comments from the public, other local governmental units, the State and Federal agencies. Based upon input from the Task Force, the following goals for the Implementation chapter are:

- Goal 1: Reducing priority pollutants.
- Goal 2: Surface water and drainage management.
- Goal 3: Ground water protection.
- Goal 4: Public education.
- Goal 5: Provide effective administration.

On April 1, 2008, the County held a public hearing regarding the Addendum. This meeting provided stakeholders with an opportunity to present comments on the document. Following the public hearing, the Addendum was adopted by the Swift County Board of Commissioners on Tuesday, April 1, 2008 and approved by BWSR on May 28, 2008 .

Water Plan Accomplishments

Swift County is dedicated to the water plan through Task Force members and Swift County Commissioners. The Task Force which meets quarterly has successfully accomplished its priority concerns in the water plan. Swift County is committed to two watersheds: Chippewa River and Pomme de Terre. We have done extensive water quality monitoring and assessments. This information will identify any issues and opportunities specific to each watershed.

Education & Information

- Advertised on local radio, and in local newspapers to inform citizens of water plan activities and issues. (annually)
- Inform citizens of proper disposal of hazardous waste and informed citizens of the HHW facility in Willmar. (annually)

- Participated in Joint Powers Board for water planning, 5 surrounding counties.
- Participate – Chippewa River Watershed Project.
- Participate – Pomme de Terre River Watershed Project.
- Ambush Park – 600 kids attending an environmental fair/water festival. (annually)

Monitoring & Data Collection

- Provided funding for the Chippewa River Watershed Project for ongoing monitoring and data collection. Information included: precipitation and flow; transparency; total suspended solids; total phosphorous; ortho phosphorous; nitrate nitrite nitrogen; fecal coliform; turbidity.
- Provided funding for the Pomme de Terre River Watershed Project for ongoing monitoring and data collection. Information included: turbidity; total suspended solids; fecal coliform; nitrate nitrite; ammonia; total kjeldahl N; total phosphorous; ortho phosphorous.
- GIS Level II feedlot inventory – ongoing data management.
- Completed a BWSR Challenge Grant – a drainage system inventory was created. Information included: system type, repair history, flow data, inventory of drained wetlands, watershed boundaries and potential restoration opportunities. Data will be continually updated.

Land & Water Treatment

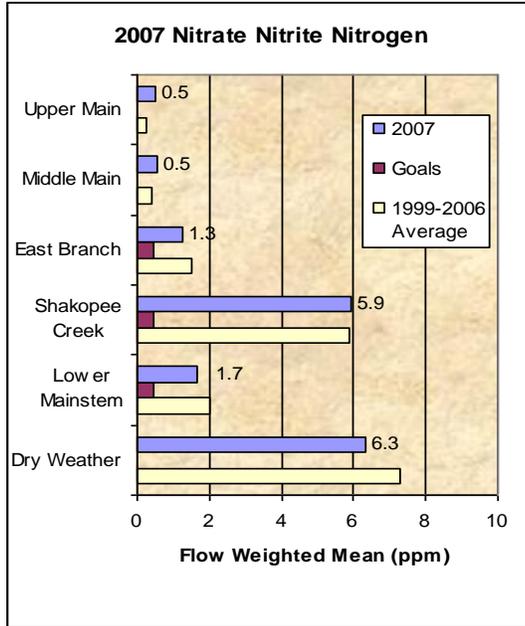
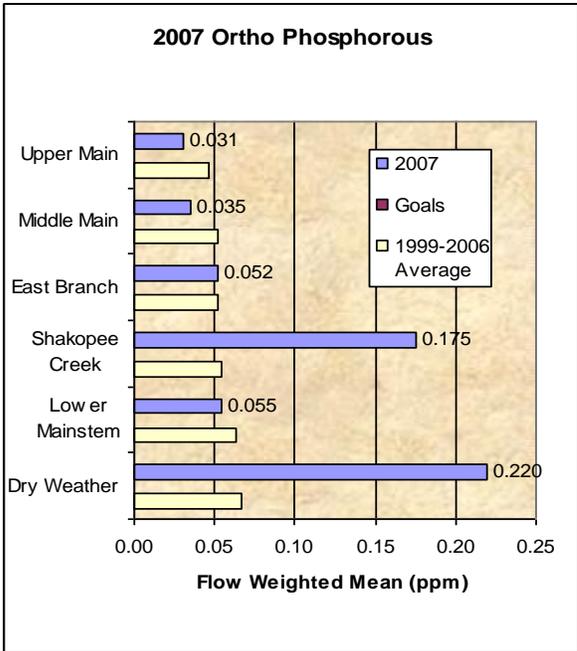
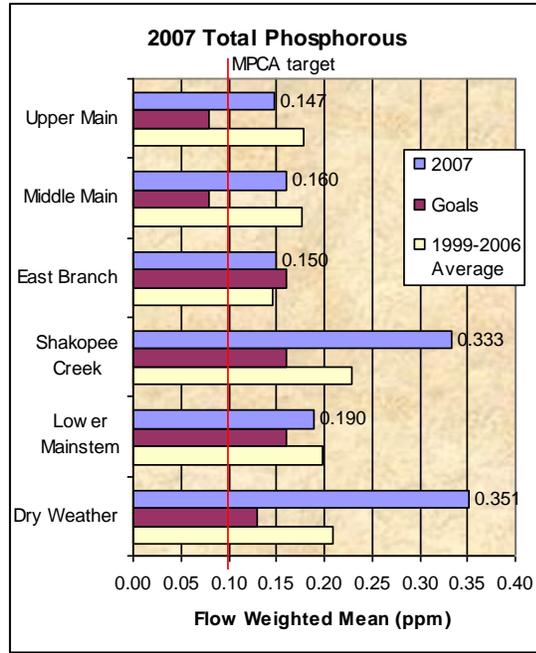
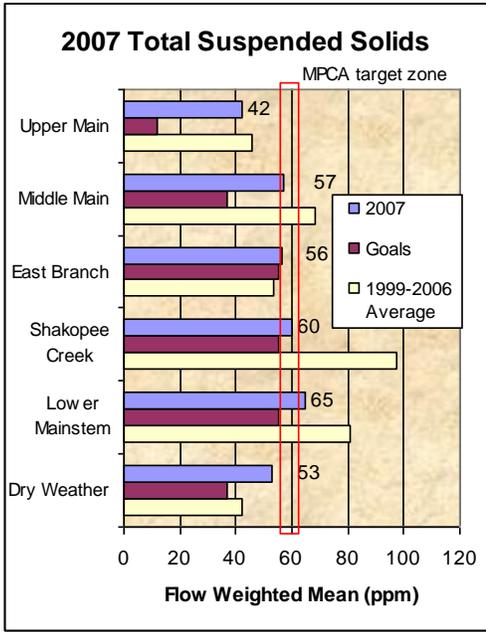
- City of Appleton stream bank stabilization.
- Chippewa River bank stabilization – Big Bend Church cemetery project.
- City of Clontarf sewer since 2005.
- Protected approx. 4500 lineal feet of the Chippewa River (JCD 19 & 4), 7 stream barbs and rock rip rap. Rock rip rap placed on 3 ditch systems where severe erosion and bank sloughing.
- Funding to SWCD to purchase a no-till drill for bmp application.
- Paint exchange and pesticide container recycling.
- Approx. 3500 acres of nutrient mgmt. plans through NRCS.
- Shelterbelt, field windbreak & living snow fence installations.
- Sediment control basins and grass waterways installed.
- 1463 acres of general CRP enrolled.
- 1302 acres of CRP filter/buffer strips enrolled.
- Upgrade 25 ISTS systems annually through the Chippewa River Watershed low interest loans.

Ordinance Updates

- Floodplain Ordinance
- Wind Energy Ordinance

Accomplishments for the Water Plan in Relation to the Chippewa River Watershed Project

- Chippewa River Watershed Project Monitoring
 - Three sites maintained in Swift County. (Chippewa River-Middle Main near Clontarf, East Branch Chippewa River, NE of Benson, and Shakopee Creek south of Benson). Total of 6 monitoring stations in the watershed
 - Continuous flow data loggers at each site
 - Approximately 20 samples taken at each site per year dependent on hydrograph. Samples analyzed for Total Suspended Solids, Turbidity, Total Phosphorus, Orthophosphorus, Nitrate-Nitrite Nitrogen and E.coli bacteria



- ISTS Loan Money to Swift County through CRWP grant applications (2004-2007)
 - Two allotments \$65,000 and \$135,000
 - Loans made: \$163,624.37 for 27 ISTS upgrades

- Best Management Practices
 - 3 main sub-basins in Swift County: East Branch, Lower Mainstem, and Shakopee Creek
 - 2007 East Branch-25 projects**-22 landowners-\$41,226.49
 - 202.5 acres of filter strips
 - 2 shoreline restorations
 - 1 lake inlet rip-rap
 - 3 manure management plans
 - 2 wetland restorations
 - 2 sediment basins
 - 2007 Lower Main-27 projects**-19 landowners- \$71,879
 - 378 acres of filter strips
 - 5 streambank protections
 - 2 side inlets
 - 2007 Greater Shakopee \$33,721.98-19 projects**-18 landowners
 - 86.4 acres of filter strips
 - 7 side inlets
 - 1 wetland restoration
 - 1 streambank protection
 - 1 shoreline restoration

**Number of projects in sub-basin, not all projects occurring in Swift County

Table Shows the Cost-Share Dollars Spent Over Last 10 Years

Grant	Projects	Benefiting Landowners	Dollars Spent
East Branch	44	34	\$37,094.53
East Branch Cont	31	27	\$53,175.68
Lower Main	44	35	\$96,414.00
Lower Main Cont	14	12	\$15,905.00
Upper Main	42	34	\$76,797.33
Shakopee Creek	53	43	\$111,145.81
Dryweather	8	3	\$6,644.56
Totals	236	188	\$397,176.91

- Education and Information
 - Water Festival at Ambush Park, 5th and 6th grades, 2005-2007, 600 kids,
 - Storm Drain Marking, City of Kerkhoven and an area of Benson, done with CRWP funds by a Boy Scout and 4-H Club.

Ongoing Programs

Swift County continues to administer several programs that are vital to achieving the goals set forth in the Water Plan, including those related to feedlots, floodplain and shoreland management, Individual Sewage Treatment Systems (ISTS), solid waste, Wetland Conservation Act (WCA), and zoning. The Environmental Services Department is responsible for locally administering these programs; the Soil and Water Conservation District (SWCD) assists in WCA administration. Understandably, the continued funding of these programs has been identified as a high priority in the Five-Year Implementation Plan.

Swift County Comprehensive Local Water Plan Five-Year Implementation Plan (2008-2013)

GOAL 1: REDUCING PRIORITY POLLUTANTS: To restore, protect and maintain the water quality, biodiversity and natural beauty of Swift County's water resources.

Objective A: Work with the MPCA to get the following waters off the clean Water Act's TMDL 303rd list of impaired waters.

Initiative	Priority Watershed(s)	Proposed Timeframe	Coordinator(s) (*Lead)	Estimated Cost
<p>1a. In cooperation with the MPCA, Chippewa River Watershed and Pomme de Terre Watershed 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 Attachment A).</p> <p>1b. Assist partners in prioritizing the waterbodies/watersheds and advise MPCA on which TMDLs will be addressed next locally. Educate citizens on impaired waters.</p> <p>1c. Participate with partners in the development of the TMDL implementation plan(s) with the CRW and PdT; help guide and direct BMP selection and placement; demonstrate and promote BMPs; educate citizens on BMPs.</p> <p>1d. With partners seek Clean Water Legacy implementation funds.</p> <p>CURRENT EMPHASIS: Lower MN River dissolved oxygen TMDL implementation plan.</p> <p>NEAR FUTURE: Chippewa River Watershed fecal coliform TMDL implementation plan. Pomme de Terre River Watershed fecal coliform TMDL implementation plan.</p> <p>NEXT SEVERAL YEARS: Chippewa River Watershed turbidity TMDL implementation plan. Pomme de Terre River Watershed turbidity TMDL implementation plan.</p>	<p>CRW, PdT</p>	<p>2008-20013</p>	<p>*CRW, PdT, SWCD</p>	<p>Unknown</p>

Objective B: Ensure phosphorous and nitrogen concentrations are low enough to fully support aquatic life and aesthetic/recreational use.

Initiative	Priority Watershed(s)	Proposed Timeframe	Coordinator(s) (*Lead)	Estimated Cost
2. Provide nutrient management planning financial incentives through EQIP and possible watershed incentives. Work with 20 land users.	CRW, PdT	2008-2013	*SWCD, CRW, WPTF, NRCS	\$40,000
3. Implement the following strategy to address feedlot compliance. Continue to manage a GIS layer of level II feedlots registered under current MPCA guidelines.	CRW, PdT	2008-2013	*ES, MPCA, SWCD, NRCS	\$5,000
4. Continually mail to registered feedlot operators information to assist them with contacts for technical questions (compliance, design, manure management and financial incentives.)	CRW, PdT	2008-2013	*ES, MPCA, SWCD, NRCS	\$1,500
5. Identify all noncompliant feedlot operators by 2008. Inspect 10% of all feedlots in Swift County per year.	CRW, PdT	2008-2013	*ES, MPCA, SWCD, NRCS	\$20,000
6. Assist three noncompliant feedlots with financial and technical assistance each year (\$15,000 each year) through EQIP, FWQ State Cost-Share or SRF Loan Funding.	CRW, PdT	2008-2013	*ES, MPCA, SWCD, NRCS	\$225,000
7. Assist five feedlot operators per year into completing the required manure management plans for feedlots with 300 or more animal units.	CRW, PdT	2008-2013	*ES, MPCA	\$12,000

Initiative	Priority Watershed(s)	Proposed Timeframe	Coordinator(s) (*Lead)	Estimated Cost
8. Address two sites with livestock exclusions practices (fencing, alternative water source, rock crossing and rotational grazing).	CRW, PdT	2008-2013	*ES, CRW, SWCD, DA, NRCS	\$20,000
9. Offer cost sharing in completing Manure Management Plans.	CRW, PdT	2008-2013	*ES, CRW, SWCD, DA, NRCS	\$5,000 Per Year
10. Provide funding to the Chippewa River Watershed Project to develop a marketing plan for ISTS.	CRW	2008-2013	*ES, CRW, WP	\$3,000
11. Continue to support the upgrading of Individual Sewage Treatment Systems (ISTS) with the use of low interest loans. Upgrade 25 ISTS systems annually.	CRW, PdT	2008-2013	*ES	\$200,000
12. Promote practices to reduce stream-bank and ditch-channel erosion through developing a strategy identifying priority sites for alternative practices such as willow planting or stream barbs in critical areas. Target three sites per year.	CRW, PdT	2008-2013	*SWCD, NRCS, CRW, PdT, UMR	\$30,000
13. Establish five sites per year to experiment or demonstrate alternatives to open tile intakes (i.e., pattern tile design). Focus sites in the Chippewa River Watershed and the Pomme de Terre watershed.	CRW, PdT	2008-2013	*SWCD, CRW, ES, NRCS	\$12,500

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

Initiative	Priority Watershed(s)	Proposed Timeframe	Coordinator(s) (*Lead)	Estimated Cost
14. Maintain residue levels and seek increase in fields meeting crop residue targets countywide based on tillage transect survey.	CRW, PdT	2008-2013	*SWCD, NRCS, CRW, PdT, UMR	\$5,000
15. Complete a tillage transect survey annually to show county residue results.	CRW, PdT	2008-2013	*SWCD, NRCS	\$10,000
16. Establish 10,000 feet of field windbreaks, 50 shelter belts, 10 wildlife habitat plantings.	CRW, PdT	2008-2013	*SWCD, NRCS	\$150,000
17. Construct 15 sediment control basins.	CRW, PdT	2008-2013	*SWCD, CRW, PdT, UMR, NRCS	\$50,000
18. Establish 20 acres of waterways.	CRW, PdT	2008-2013	*SWCD, CRW, PdT, UMR, NRCS	\$35,000
19. Control gully erosion through the use of side inlet pipes on drainage systems. Target 15 in total.	CRW, PdT	2008-2013	*DA, WP, CRW, PdT, SWCD	\$15,000

Initiative	Priority Watershed(s)	Proposed Timeframe	Coordinator(s) (*Lead)	Estimated Cost
<p>21. Seek 2,000 new acres of riparian filters/buffers along ditches and streams. Enforce a one-rod buffer as it applies to drainage policy (encourage 100-foot buffers through incentives). Accelerate filter strip implementation along county drainage systems with existing programs using a direct letter campaign, endorsement and information from the Swift County Parks, and Drainage Office and the Swift County Board. Accelerate continuous CRP and RIM riparian filter/buffer enrollment in the Chippewa River Watershed and the Pomme de Terre Watershed.</p>	<p>CRW, PdT</p>	<p>2008-2013</p>	<p>*SWCD, CRW, PdT, UMR, NRCS</p>	<p>\$400,000</p>

GOAL 2: SURFACE WATER AND DRAINAGE MANAGEMENT: Maintain the drainage system while sustaining agricultural productivity as well as recognizing that drainage is part of the larger tributary system.

Objective A: Apply watershed-based principles in properly managing drainage systems.

Initiative	Priority Watershed(s)	Proposed Timeframe	Coordinator(s) (*Lead)	Estimated Cost
<p>1. Recognize drainage systems as tributaries (part of the larger surface water system). Commit to working with resource partners both up and down stream from Swift County. (See Attachments)</p>	<p>CRW, PdT</p>	<p>2008-2013</p>	<p>*CB, DA, ES, WPTF</p>	<p>\$1,000</p>
<p>2. Continue to update data for each drainage system and create a GIS database (include the following: name, size, outlets, date established, system type, repair history, flow data, demonstration capacity, monitoring data available, etc.). Regularly update the database as needed. Assess the database to assist with water planning activities (identify highly erodible areas, flooding problem areas, storage potential, etc.).</p>	<p>CRW, PdT</p>	<p>2008-2013</p>	<p>*CB, RDC, WPTF, ES, DA</p>	<p>\$35,000</p>
<p>3. Work with various resource partners to seek water retention/storage opportunities with willing landowners on a watershed, sub-watershed or ditch-shed basis. Drainage systems such as Judicial Ditch's 18 and 19.</p>	<p>CRW, PdT</p>	<p>2008-2013</p>	<p>*CB, SWCD, NRCS, DNR, FWS, CRW, PdT, UMR, DA</p>	<p>\$5,000</p>

Initiative	Priority Watershed(s)	Proposed Timeframe	Coordinator(s) (*Lead)	Estimated Cost
4. Use the created water management plan (for drainage systems) identifying financial incentives for landowners to improve drainage management throughout the County. The plan would, among other items, assess water storage opportunities, erosion and sedimentation problems, drainage system enhancements, and win-win opportunities for improving the County's overall drainage system with an emphasis on reducing the County flooding potential.	CRW, PdT	By 2010	*CB, SWCD, NRCS, DNR, FWS, CRW, PdT, UMR, DA	\$7,500
5. Use the U.S. Fish and Wildlife inventory and other hydrology data information for the Chippewa River Watershed to help target wetland restoration opportunities.	CRW, PdT	2008-2013	*CB, SWCD, NRCS, DNR, FWS, CRW, PdT, UMR, DA	\$7,500
6. Be an active participant as the DNR develops a Management Plan for Marsh Lake.	PdT	2008-2013	*CB, DNR, FWS, DA, SWCD	\$1,000
7. Educate regarding the opportunity to incrementally install buffers and side inlet pipes along the public drainage system.	CRW, PdT	2008-2013	*DA, CB	\$2,000
8. Pursue wetland banking in the county.	CRW, PdT	2008-2013	*DA, CB, SWCD	\$3,000

GOAL 3: GROUND WATER PROTECTION: Protect and improve the quality of ground water in the County.

Objective A: Assist with wellhead protection and planning.

Initiative	Priority Watershed(s)	Proposed Timeframe	Coordinator(s) (*Lead)	Estimated Cost
<p>1. Participate on wellhead/source water protection teams when invited by the local public water suppliers. Participate in both the development and implementation of Wellhead Protection Plans. Benson and Appleton are completed. (See Attachment B)</p>	<p>CRW, PdT</p>	<p>2008-2013</p>	<p>*WP, MDH, SWCD, Local Communities</p>	<p>\$2,000</p>
<p>2. Create a County Zoning Map showing wellhead Protection Areas. Periodically update the map as needed.</p>	<p>CRW, PdT</p>	<p>2011</p>	<p>*WP, MDH, RDC</p>	<p>\$7,000</p>
<p>3a. Establish the identified Wellhead Protection Areas as priority areas for cost-share and other land use incentive programs (i.e., sealing abandoned wells, upgrading septic systems, installing buffers, etc.). Vulnerable Drinking Water Supply Management Areas (DWSMA's) will be given priority as well as a 200' radius surrounding all public water supply wells.</p> <p>3b. Protect private wells from potential contaminate sources. Provide land use education on proper set backs from potential contaminate sources.</p>	<p>CRW, PdT</p>	<p>2008-2013</p>	<p>*WP, MDH, RDC</p>	<p>\$6,000</p>
<p>4. Develop a cost share program to aid property owners in sealing unused, unsealed wells.</p>	<p>CRW, PdT</p>	<p>2008-2013</p>	<p>*ES, WP</p>	<p>\$2,500</p>

Objective B: Support good land use decisions regarding groundwater protection.

Initiative	Priority Watershed(s)	Proposed Timeframe	Coordinator(s) (*Lead)	Estimated Cost
<p>5. Examine ways to incorporate ground water information into the land use decision-making process. Invite state agencies to assist the County with learning how to interpret data and identify sensitive areas needing additional management and protection. Use the Upper Minnesota River Basin Regional Hydrologic Assessment and other ground water information as informational sources regarding safe yield and groundwater availability.</p>	<p>CRW, PdT</p>	<p>2008-2013</p>	<p>*ES, CB, MGS, DNR, MDH</p>	<p>\$1,500</p>
<p>6. Work with the Minnesota Department of Health on developing criteria to identify sensitive ground water recharge areas. In addition, work with these agencies on developing land use incentives and possibly a protection strategy that can be incorporated in the County Zoning and Subdivision Ordinance.</p>	<p>CRW, PdT</p>	<p>2008-2013</p>	<p>*ES, WPTF, CB, MGS, MDH</p>	<p>\$2,000</p>
<p>7. Evaluate establishing a ground water quality database using local data.</p>	<p>CRW, PdT</p>	<p>2008-2013</p>	<p>*ES, MDH</p>	<p>\$500</p>
<p>8. Monitor ground water levels in 32 wells monthly. (Nine months per year.)</p>	<p>CRW, PdT</p>	<p>2008-2013</p>	<p>*SWCD, DNR</p>	<p>\$4,000</p>

GOAL 4: PUBLIC EDUCATION

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

Initiative	Priority Watershed(s)	Proposed Timeframe	Coordinator(s) (*Lead)	Estimated Cost
<p>1. Focus education and outreach efforts on water planning issues each year. Integrate those efforts with watershed's educational goals. Identify the priority issues each year. Annual topics chosen will be promoted through the use of the following sources: newspaper articles, radio ads, posters, displays, field days, speakers, classes, etc.</p>	<p>CRW, PdT</p>	<p>2008-2013</p>	<p>*WPFT, SWCD, CRW, PdT, UMR, UMES</p>	<p>\$18,000</p>
<p>2. Distribute a brochure to promote how to handle chemical, manure and fuel spills, listing contacts and phone numbers (the State Duty Officer at 1-800-422-0798).</p>	<p>CRW, PdT</p>	<p>2010</p>	<p>*WP, MPCA</p>	<p>\$500</p>
<p>3. Raise public awareness on storm water pollution and ways to prevent and/or minimize it. In cooperation with cities, address common storm water issues and assess the need to be more proactive in promoting storm water management through both public education and improved land use ordinances.</p>	<p>CRW, PdT</p>	<p>2008-2013</p>	<p>*ES, WPTF, Cities</p>	<p>\$1,000</p>
<p>4. Continue to support watershed planning and implementation activities by providing financial and technical assistance to the Chippewa River Watershed and the Pomme de Terre Watershed. Annually review monitoring data and implementation accomplishments to coordinate future implementation steps.</p>	<p>CRW, PdT</p>	<p>2008-2013</p>	<p>*WP, CB, ES</p>	<p>\$20,000</p>

Objective B: Continue to support the watershed monitoring and information gathering efforts in order to better understand, assess, and identify gaps related to the condition of the County's water resources.

Initiative	Priority Watershed(s)	Proposed Timeframe	Coordinator(s) (*Lead)	Estimated Cost
5. Use the County's Geographic Information System (GIS) to track water plan accomplishments and maintain current and past inventories.	CRW, PdT	2008-2013	*LRM	\$4,500
6. Contribute funding to county environmental school education days.	CRW, PdT	2008-2013	*ES, SWCD, CRW	\$2,500

GOAL 5: PROVIDE EFFECTIVE ADMINISTRATION

Objective A: Maintain adequate staffing and an active Water Planning Task Force.

Initiative	Priority Watershed(s)	Proposed Timeframe	Coordinator(s) (*Lead)	Estimated Cost
1. Local Water Management Coordinator. Maintain the County's Local Water Management Coordinator position.	CRW, PdT	2008-2013	*ES	\$2,000 Per Year
2. Water Planning Task Force Meetings. Hold two Water Planning Task Force meetings per year to discuss issues and review funding requests.	CRW, PdT	2008-2013	*ES	\$2,000 Per Year

Objective B: Implement the County's land use controls.

Initiative	Priority Watershed(s)	Proposed Timeframe	Coordinator(s) (*Lead)	Estimated Cost
1. Land Use Controls. Continue to implement the County's adopted land use controls, including the floodplain, ISTS, shoreland, and solid waste ordinances.	CRW, PdT	2008-2013	*ES, DNR, MPCA, SWCD	\$250,000 Per Year

Objective C: Review and update the Water Plan.

Initiative	Priority Watershed(s)	Proposed Timeframe	Coordinator(s) (*Lead)	Estimated Cost
1. Annual Plan Review. Hold an annual meeting of the Water Planning Task Force to review progress in achieving Water Plan initiatives and identify emerging issues that should be incorporated into the Water Plan through the amendment process.	CRW, PdT	2008-2013	*ES	\$1,000 Per Year
2. Plan Revision. Revise the Water Plan prior to its expiration.	CRW, PdT	2013	*ES	\$30,000

2006
Swift County Impaired Waters
(Attachment A)

<u>Reach</u>	<u>Assessment Unit ID #</u>	<u>Affected Use</u>	<u>Pollutants/Stressors</u>
Minnesota R Marsh Lake to Lac Qui Parle Lake	07020001-516	Aquatic consumption	Mercury FCA ¹
Minnesota R Lac Qui Parle Lake (above Emily Cr)	07020001-501	Aquatic life	Ammonia
Minnesota R Marsh Lake to Lac Qui Parle Lake	07020001-516	Aquatic consumption	Mercury FCA ¹
Pomme de Terre R Muddy Cr to MN R (Marsh Lake)	07020002-501	Aquatic recreation	Fecal coliform
Pomme de Terre R Muddy Cr to MN R (Marsh Lake)	07020002-501	Aquatic consumption	Mercury FCA ¹
Pomme de Terre R Muddy Cr to MN R (Marsh Lake)	07020002-501	Aquatic Life	Turbidity
Chippewa R Unnamed Cr to E Br Chippewa R	07020005-505	Aquatic recreation	Fecal coliform
Chippewa R Unnamed Cr to E Br Chippewa R	07020005-505	Aquatic life	Fish IBI ²
Chippewa R Unnamed Cr to E Br Chippewa R	07020005-505	Aquatic consumption	Mercury FCA ¹
Chippewa R Unnamed Cr to E Br Chippewa R	07020005-505	Aquatic life	Turbidity

<u>Reach</u>	<u>Assessment Unit ID #</u>	<u>Affected Use</u>	<u>Pollutants/Stressors</u>
Chippewa R E Br Chippewa R to Shakopee Cr	07020005-506	Aquatic consumption	Mercury FCA ¹
Chippewa R Shakopee Cr to Cottonwood Cr	07020005-507	Aquatic consumption	Mercury FCA ¹
Chippewa R, E Branch Mud Cr to Chippewa R	07020005-514	Aquatic recreation	Fecal coliform
Chippewa R, E Branch Mud Cr to Chippewa R	07020005-514	Aquatic life	Turbidity
Judicial Ditch 8 Unnamed Cr to Unnamed Ditch	07020005-546	Aquatic life	Fish IBI ²
Shakopee Cr Shakopee Lake to Chippewa R	07020005-559	Aquatic recreation	Fecal coliform
Shakopee Cr Shakopee Lake to Chippewa R	07020005-559	Aquatic life	Fish IBI ²
Shakopee Cr Shakopee Lake to Chippewa R	07020005-559	Aquatic life	Turbidity
Unnamed Cr Headwaters to T120 R37W S6, West line	07020005-561	Aquatic recreation	Fecal coliform
Unnamed Cr Headwaters to T120 R37W S6, West line	07020005-561	Aquatic life	Low oxygen
Unnamed Cr Unnamed Cr to Unnamed Ditch	07020005-574	Aquatic life	Turbidity

<u>Lakes</u>	<u>Lake ID #</u>	<u>Affected Use</u>	<u>Pollutants/Stressors</u>
Marsh	06-0001-00	Aquatic consumption	Mercury
Artichoke	06-0002-00	Aquatic consumption	Mercury
Lac Qui Parle	37-0046-00	Aquatic consumption	Mercury
Oliver	76-0146-00	Aquatic consumption	Mercury

¹ Fish Consumption Advisory (FCA)

² Index of Biological Diversity (IBI)

³ Polychlorinated Biphenyls

SWIFT COUNTY
Source Water Assessment
(Attachment B)

Click on the **GW** or **SW** below to get the Source Water Assessment.

PWS Name	ID	Surface/Ground Water Assessment	Address	City	County
Agralite Electric Cooperative	5760061	GW	320 East Highway 12	Benson	Swift
Ambush Park	5760081	GW	West Highway 9	Benson	Swift
Appleton	1760001	GW	323 West Schlieman Avenue	Appleton	Swift
Appleton Airport	5760052	GW	150 North Herring	Appleton	Swift
Ascheman Oil Company	5760059	GW	895 Highway 12 SW	Danvers	Swift
Benson	1760008	GW	1411 Pacific Avenue	Benson	Swift
Benson Municipal Airport	5760058	GW	340 - 20th Street NW	Benson	Swift
Bethesda Lutheran Church	5760079	GW	1185 - 30th Street SE	Murdock	Swift
Bonanza Valley Aviation, Inc.	5760062	GW	330 - 20th Street NW	Benson	Swift
Chippewa Valley Ethanol Company	5760078	GW	270 - 20th Street NW	Benson	Swift
Clontarf Community Cafe	5760021	GW		Clontarf	Swift
Danvers Municipal Liquor Store	5760068	GW	305 Marysland Avenue	Danvers	Swift
DeGraff	1760004	GW	City Hall	DeGraff	Swift
Falls Bar and Grill	5760083	GW	203 Danelz Avenue	Swift Falls	Swift
Fibrominn	5760085	GW	900 Industry Drive	Benson	Swift

Good Shepherd Lutheran Church	5760057	GW	Rural Route	Appleton	Swift
Holloway	1760005	GW	City Hall	Holloway	Swift
Kerkhoven	1760006	GW		Kerkhoven	Swift
Lorenz Manufacturing Company	5760035	GW	East Highway 12	Benson	Swift
Monson Lake State Park	5760063	GW	1690 - 15th Street NE	Sunburg	Swift
Murdock	1760007	GW		Murdock	Swift
Outdoors/Inn	5760084	GW	215 Highway 12 SW	Benson	Swift
PB & J's Bar and Grill	5760002	GW	390 - 180th Street	Sunburg	Swift
Prairie Pub	5760022	GW	Box 277	Clontarf	Swift
Redball, Inc.	5760060	GW	140 - 30th Avenue SE	Benson	Swift
Shepherd of the Hills Lutheran Church	5760067	GW	201 Falcon Avenue	Benson	Swift
St. John's Lutheran Church	5760069	GW	145 - 50th Avenue SW	Holloway	Swift
Swift Falls Park	5760066	GW	County Highway 26 and 95th Ave NE	Swift Falls	Swift
Trinity Lutheran Church	5760006	GW	1746 - 30th Street NW	Holloway	Swift
Web Cafe	5760076	GW	West Highway 9	Benson	Swift
Number of PWS selected	30				