PRIORITY CONCERNS SCOPING DOCUMENT

For the Stearns County Local Water Management Plan

Stearns County Environmental Services
Room 343, 705 Courthouse Square
Saint Cloud MN 56303

February 2007

The following Priority Concerns Scoping Document was developed in accordance with the changes to the Comprehensive Local Water Management Act; Statutes: 103B.304-103B.355. This Scoping Document identifies the priority concerns selected by the Stearns County Water Management Advisory Committee, along with a detailed account of how these concerns were identified and chosen.

INTRODUCTION

Stearns County is located in central Minnesota, approximately 65 miles northwest of the Twin Cities. (See attached State/county map.) Surrounding counties are Benton and Sherburne to the east; Wright, Meeker and Kandiyohi to the south; Pope to the west; and Todd and Morrison to the north. The Mississippi and Clearwater Rivers form the border on the east. Stearns is the largest county by area in the southern half of the state (14th in area overall). The total area of the county is 1,394 square miles or 892,160 acres, extending approximately 54 miles east to west and 36 miles north to south.

Stearns County contains 30 cities and 34 townships. The population is concentrated on the east end of the county, in the St. Cloud area. The county seat is Saint Cloud; with a population of approximately 59,000 it is the largest city in the county. Saint Cloud is also at the center of one of Minnesota's fastest growing metropolitan areas.

PHYSICAL FEATURES OF THE COUNTY

The topography of the county in its general form is controlled by its bedrock base. The details of the landscape are due to glaciation, and to a lesser extent, stream erosion. The three major landforms created by the glaciers throughout the county are the hilly lake regions, the rolling till plains, and the relatively flat outwash plains. These features are widespread throughout the county. The hilly lake regions, however, are the most prominent in the northern and east central parts of the county.

The surface of the county's bedrock base has it highest elevation in the northwest corner where it is about 1,300 feet above sea level. It descends irregularly to the east and southeast to less than 935 feet above sea level. The lowest elevation occurs at the mouth of the Clearwater River where it enters the Mississippi River. In general, the eastern part of the county is more rolling and has steeper slopes than the rest of the county. The outwash plains in the western part of the county are nearly level.

The surface water of Stearns County includes lakes, wetlands, rivers and streams. (See attached Surface Water Resources Map.) There are 294 lakes and wetlands within the county that have an area of ten acres or more. In general, lakes situated in the hilly areas are usually deeper and somewhat smaller with more rugged surroundings. Lakes in the till or outwash plains regions, tend to be somewhat shallower with sandier beaches and bottoms and are most likely more irregular in shape. In general, all runoff in the county flows into the Mississippi River.

Tributaries of the Sauk River drain the northwestern and central parts of the county. The North Fork and the Middle Fork of the Crow River drain the southwestern part of the county. The Mississippi River and its tributaries drain the eastern parts of the county. There are four major

watershed units located in Stearns County. From largest to smallest in area they are the Sauk River, Platte-Spunk River, Crow River and the Clearwater River Watersheds.

PRIORITY CONCERNS HISTORY

The Stearns County Local Water Management planning process addressed the priority concerns as follows:

December 20, 2005: The Stearns County Board of Commissioners resolved to update the current Water Management Plan, which was last updated in 2002. The Board also resolved to request a one-year extension to January 31, 2008 so that coordination could be achieved with the update of the County Comprehensive Plan.

April 26, 2006: The Minnesota Board of Water and Soil Resources approved the request for an extension to update to January 31, 2008.

July and August 2006: As part of the process of soliciting public input for the Comprehensive Plan, five cluster meetings for townships and cities were held around the county. Some of the input related to natural resource topics that would be potentially addressed by the Water Management Plan.

October 2006: Three public open houses were held around the county to solicit input from the citizens on what should be in the Comprehensive Plan. Some of the input was on natural resource issues.

October 10, 2006: The Stearns County Environmental Services Department sent a letter indicating intent to update the plan, along with a request for input on priority concerns and a request for a copy of any water and related land resource plan. This letter was sent to all townships, incorporated cities and watershed districts within Stearns County; the adjacent counties; representatives of the MGS, DNR, MPCA, MDA and BWSR; lake associations; local legislators; Stearns County Board of Commissioners; and SWCD board members. Response was requested by November 27, 2006.

October 12, 2006: The Stearns Water Management Advisory Committee, a 12-member body of appointed citizens representing various sectors, voted to appoint an update subcommittee. The update subcommittee is composed of the following persons: Dennis Fuchs (Stearns SWCD), Wayne Cymbaluk (Stearns SWCD), Kay Cook (Stearns Water Management Advisory Committee), Jason Weinerman (BWSR), and Susan McGuire (Stearns County Environmental Services Department). The purpose of the subcommittee is to evaluate the progress which has been made on the goals of the current water plan, to develop a process for obtaining public input, to evaluate the public input, and to give guidance to the Water Management Advisory Committee on the selection of the priority concerns.

October 20, 2006: The subcommittee met and decided that public input for the update of the Water Management Plan will include input that has been gathered in the Comprehensive Plan process (phone survey, five township cluster meetings, three public open houses, Citizen Advisory Committee meeting). Two public meetings will be held for the Water Management

Plan update, one in Melrose and one in St Cloud. An online survey will be posted on the Stearns County website.

October 23, 2006: County Water Planner and two staff from SWCD reviewed the current Water Management Plan to determine which goals had been reached, which are not feasible or no longer important, and which goals should be considered for retention in the updated plan.

October 30 2006: The update of the Comprehensive Plan receives guidance from a Citizen Advisory Committee. On October 30, 2006 the Citizen Advisory Committee addressed natural resource issues. The County Water Planner attended this meeting.

November 28, 2006: Both public meetings were legally noticed in the *Cold Spring Record.*

December 4, 2006: Online survey placed on county website. There is a link on the SWCD website directing people to the survey.

December 11, 2006: A press release was placed in the St. Cloud Times and all the other local newspapers. The press release discussed the update of the Water Management Plan, directed readers to the online survey, and publicized the public meetings. Two radio interviews with the Water Planner were also done on the same subjects. Posters advertising the public meetings were posted in public places around the county.

December 11, 2006: Subcommittee met and reviewed the priority concern input that had been received to date and brought forth their ideas on what should be a priority.

December 18, 2006: A public meeting was held in Melrose and was attended by 17 people. A brief presentation on the Water Management Plan was given, followed by open discussion of the natural resource issues in the county. Representatives from a number of lake associations, the SWCD, the Water Management Advisory Committee and the BWSR attended.

December 19, 2006: A public meeting was held in St Cloud and was attended by 14 people. The same format as the December 18 meeting was followed. Attendance included a representative from the Stearns County Board of Commissioners, the County Planning Commission, St. Cloud Area Environmental Council, the BWSR, the Audubon Society and lake association members.

January 8, 2007: The update subcommittee met and reviewed the priority concern input and ranked the priority concerns to be presented to the Water Management Advisory Committee.

February 8, 2007: The Water Management Advisory Committee met and reviewed the draft Priority Concerns Scoping Document. A few minor revisions were suggested and subsequently incorporated.

February 14, 2007: Priority Concerns Scoping Document submitted to Stearns County Board of Commissioners for review.

OUTCOMES

The following are the issues and concerns identified by the public input process.

Agency Feedback

Albany Area Schools

First priority concern is public education on all water issues, i.e., watersheds, runoff, stormwater, etc. Use website, news letters and workshops. Second priority concern is native habitat restoration, particularly wetlands. Third priority concern is promotion of more educational water festivals.

Benton County Soil and Water Conservation District

First priority concern is to protect and enhance the quality of the shoreland along the Mississippi River. Actions needed are more restrictive zoning ordinances and purchasing of additional properties along river to set aside as natural areas.

Second priority concern is drinking water – Mississippi River. Actions needed are working together with all affected municipalities within the emergency response area to increase public education. Areas of high priority are Watab and Sauk Rapids Townships.

Third priority concern is groundwater quality and quantity. Actions needed are that new development should pay its own way by being required to purchase and retire existing water rights in exchange for permission to build.

City of Albany

Priority concern is flooding on the golf course by the South Two River. Construction of a retention pond south of Interstate 94 would help this problem. Also, North Lake has experienced large amounts of weed growth the past few years. Education of property owners on using zero phosphorus fertilizer may help.

Clearwater River Watershed District

First priority concern is inadequate wastewater treatment as a potential threat to lakes. Actions needed are education and community systems. Second priority concern is buffers along surface water. Actions needed are education and incentives. Third priority concern is rough fish migration and removal through migration barriers and removal of rough fish. Area of high priority is the Clearwater River watershed.

Environmental Quality Board, Department of Administration

The designated JOBZones appear to be located in areas sensitive to groundwater contamination. Suggestion was to check with MPCA, SWCD and local watershed districts on how to reduce the risk of ground water contamination associated with development in sensitive areas. Suggested that MPCA be consulted on how to plan for developments contemplated in or near impaired waters. Suggested that the DNR be consulted on planning for significant ground water using developments.

Minnesota Board of Water and Soil Resources

First priority concern is moderating the impact of new and existing urban/suburban development in high growth areas on surface and ground water resources. Some of the actions needed are identification of critical resource areas located in the outer fringe of high growth communities and development of mechanisms to protect critical water resources and maintain the ecological integrity of features such as wetlands and riparian areas. Seek methods to keep impervious surfaces to under a specified limit.

Second concern is the facility management of livestock producers to minimize the amount of waste and other materials entering the county's surface water resources. Actions needed are to identify producers in critical water resource areas and offer incentives to improve feedlot management, switch from surface water to ground water and to establish buffers between pasture areas and surface water.

Third priority concern is installation or restoration of buffers around critical water resources such as community wells, ditches and other surface water.

Minnesota Department of Agriculture

Top three concerns were 1) preservation of agricultural land, particularly in the western 2/3 of the county and addressing the CRP contracts that are expiring, 2) management of surface and groundwater through enactment of provisions to protect groundwater in DWSMA's, hiring a county limnologist and fulltime water management planner, and buffers along ditches in shoreland, and 3) wetland management through a comprehensive wetland management plan.

Minnesota Department of Health

Primary concern is source water protection.

Minnesota Department of Natural Resources

First priority is shoreland management – incorporation of new DNR Alternative Shoreland Standards. Second priority concern is stormwater management. Urban development near surface waters is a concern. Action needed is continuation of NPDES Phase II pilot. Third priority concern is nutrient management. Continued efforts with nutrient and runoff management are needed, particularly in agricultural areas near shoreland. The fourth priority concern is groundwater supply management. Continued efforts are necessary to define and identify groundwater management areas throughout the county. DNR Waters has included Stearns County for an upgraded version of the Geologic Atlas that will better define what actions are needed.

Minnesota Pollution Control Agency

The first priority concern is Impaired Waters/Total Maximum Daily Loads. The MPCA encourages counties to identify the priority the County places on addressing impaired waters and how the County plans to participate in the development or implementation of TMDL projects; identify the pollutants causing the impairment; address the commitment of the County to submit any data it collects to MPCA and provide plans, if any, for monitoring as yet unmonitored waters; describe actions and timing the County intends to take to reduce the pollutants(s) causing the impairments.

The second priority concern is with feedlots. Recommended actions are education of producers regarding feedlot permit requirements and benefit of manure management plans;

promotion of the proper use and abandonment of manure pits; proper land application of manure; proper open lot runoff management; and importance of BMP's to protect surface waters. Areas of high priority are within watersheds of impaired waters.

The third priority is stormwater. Recommended actions are education of contractors/developers on stormwater permit requirements, on effective BMP's for the control and mitigation of stormwater on sites during and after construction and on new discharges to impaired waters; requiring operation and maintenance plans for permanent stormwater ponds; and requiring Stormwater Pollution Prevention Plans prior to final plat approval. High priority areas are those that have potential to impact surface or ground water.

Fourth priority concern is protection of groundwater/drinking water sources. Water from the county drains into the Mississippi River, which provides drinking water to the Twin Cities. Also, areas of high density development have the potential to impact local groundwater/drinking water sources as many of these developments rely on individual wells and individual sewage treatment systems. Recommended actions are assessment of priority areas of concern; review development plans for future impacts; educate public and landowners on dangers of high nitrate levels in drinking water; provide well water screening opportunities. The entire county is an area of high priority.

Sauk River Watershed District

First priority concern is water quality education; examples given are a program for stormwater management targeted towards developers. Second priority concern is a surface water inventory. This includes quantifying storm drain discharge locations as well as determining the water quality of each discharge and developing a restoration plan. Third priority concern is storm water management, particularly regarding snow melt and spring rains. Education on manure spreading over frozen soil, sand and salt from streets, etc. All of county is priority.

Stearns County Soil and Water Conservation District

One set of concerns primarily centered on the results of development. Focused on the need to 1) address storm water pond infiltration in relation to ground water sensitivity, 2) the consideration of low impact development strategies on all projects by focusing on reducing the amount of impervious surfaces created and minimization of soil compaction around building sites, 3) conduct a Natural Resources Inventory, 4) track wetland impacts, violations, exemptions, and creation through GIS, 5) create a method on proper procedure for the long term maintenance of storm water infrastructure, 6) better utilization of the Stearns County MS4 permit requirements with the Water Management Plan and other MS4 communities to reduce duplication of efforts, 7) set better design standards for projects requiring storm water calculations and 8) change zoning ordinance language so that retaining walls can be used only as a last resort for erosion control.

Second set of priority concerns has wetland restoration/preservation as first concern. All of county is of high importance. Second priority concern is stormwater runoff and buffers. Actions needed are better education, regulations, tax breaks and incentives. The third priority concern is an organized approach to preservation of natural areas and open space. The eastern half of the county is high priority now and the western half will be soon.

Other Parties

Citizens Advisory Committee (advisory to Comprehensive Plan update)

Concerns cited were 1) stormwater management across the board – farms, lake lots, municipalities, etc., 2) floodplains, floodways and trout streams, 3) preservation of significant, unique or sensitive natural resources, 4) preservation of natural habitat for wildlife, 5) wetland restoration.

Dairy Advisory Committee

First priority concern is that BMP's be followed regarding manure management; both application and storage. The DAC supports continuing education on these BMP's. The second priority concern is that those landowners who have restored wetlands, created buffer strips or filter strips, enrolled in CRP, etc., should continue to be reimbursed for costs and loss of production.

Greg Bechtold, Environmental Services Specialist

Priority concerns are 1) erosion control – wind and water from farmland- through minimum till/no-till, 2) buffers for tile inlets/ditches/wetland and lakes, rivers and streams, 3) stormwater and NPDES enforcement, 4) stormwater treatment, 5) preservation of natural areas such as wetlands, woods and grasslands, and 6) septic system and municipal treatment plant upgrades.

Dave Knafla, Environmental Services Specialist

Trout streams.

Lake Associations

Kings Lake Association: First priority concern is runoff. Action needed is to monitor to find the source. Second priority concern is erosion. Actions needed are funding, grants and education. Third concern is to promote clustered septic systems.

Koronis Lake Association: First concern is that any new building or development should have stringent controls on water runoff containment. The plan would be needed for any large rainfall (2-3"). Second concern is that rather than just fine someone who violates an environmental protection law, the infraction or damage or illegal construction must be removed or fixed.

Lake Maria Association: Priority concern is the pipe running from farm fields to ditch on eastside of County Road 11. Ditch feeds creek to Sauk River.

North Browns Lake Association: First priority concern is to improve water quality. Actions needed are creation of buffers, berms and holding ponds to filter runoff from agricultural operations; test septic systems on lakes and rivers for compliance; increase awareness of human impact on water resources. The area of concern is the Sauk River watershed.

Rossier/Watab Lake: First priority concern is shoreland erosion. Action needed is to eliminate high horse power boats/jet skis near shore. Second priority concern is to enforce

current zoning regulations. Action needed is to critique variance/easement requests and educate elected officials and board members. Third priority concern is conservation practices – lakescaping, conservation buffers, and riparian buffers. All of county is high priority.

The Nature Conservancy

First priority concern is pattern tiling systems. These systems affect ground water recharge, change the soil profile, and increase water downstream. Actions needed are to prevent water drained from additional tiling to negatively impact location down stream. Research is needed to study the effects of drainage on the biodiversity of the soil profile. The North Fork of the Crow watershed and Sauk River watersheds are priority areas.

The second priority concern is ditch drainage systems being converted to large diameter tile systems. Large diameter tile systems are replacing small ditch systems that typically did not flow except under major rain events or snow melt. The large diameter tile systems do not have the vegetation that trapped the sediment in the ditches. Research is needed to see if these tile systems result in poorer water quality and/or faster rates of flow.

Online Survey

There were 76 responses to the online survey. Each response included ranking the top four problems/opportunities in the county. The number in parentheses indicates the number of votes received.

1. Declining Water Clarity (36)
2. Development Pressures/Impacts (35)
3. Over-application of fertilizers (33)
4. Contaminated Runoff (32)
5. Natural Habitat Destruction (23)
6. Stormwater Drainage/Management (22)
7. Destruction of wetland (21)
8. Failing Septic Systems (21)
9. Erosion (16)
10. Groundwater Contamination (16)
11. Lack of Environmental Education (12)
12. Lack of Regulation (10)
12. Other comments, Suggestions, Problems
    - Buffers around wetlands
    - Excessive ag manure application
    - Fluoride added to drinking water
    - Buffers along ditches and fields
    - Pesticides
    - Weeds

The most threatened resources and number of votes are:

- Lakes (26)
- Rivers (20)
- Wetland (20)

Groundwater (10)

General comments from the online survey are:

More buffers around lakes. More retention ponds to reduce flooding. Two River Lake full of algae.
Horrible algae blooms in lakes. Caused by runoff from ag and shoreline management.
More enforcement of current laws.
Too much development in formerly open land. Wetlands affected.
Much property tax paid by lake owners. Better lake water quality raises values and tax payments.
There are a large # of septics failing or directly discharging into farm drainage tile systems.
Farmers should get financial credit for establishing buffers on waterways, wetland and drain tile inlets.
Houses built right next to wetlands. Need buffers
Drain tiling is disrupting the wetlands. Farm waste is going into wetland and streams, then into lakes.
Even as little as 20' strip along any moving water that ends up in a lake can be important.
Too much fertilizer from farmers and general public. Gw contamination from the fertilizer
Conversion of Ag land to residential near lakes.
Second tier development on lakes.
Fluoride in water.
High nitrate levels. Our area is worse than 15 years ago.
Ensure farm runoff (manure, soil erosion) is managed. Find a way so there is economic benefit for farmers to manage runoff.
Want stricter regulations with more penalties for not following rules. Rules against water craft that churn up the bottom.
More strict enforcement of manure mgmt rules
Runoff from farms and feedlots with minimal barriers along water

Public Meetings

Attendees suggested the following items. Each attendee had three "stickies" to put behind the items they felt were most important. The number indicates the number of stickies received.

Nutrient Management Plans 8
Education 6
Shoreland buffers 5
Wetland buffers 5
Restrict development on granite bedrock -- to high water tables and general sensitivity 4
Stormwater runoff 3
Low impact development 3
Adoption of DNR Alternative Shoreland Standards 3
Financial incentives for Low Impact Development practices 3
Manure Application runoff 2
Check septic systems in shoreland 2

Manure near tile inlets 1
Development runoff 1
Inactive quarries and the water quality in the quarries 1
Holding ponds should be created so that they function as natural wetlands 1
Shoreland wetland restoration
Mandatory natural vegetation buffers around all wetlands
More protection of Type I and Type II wetlands
Required natural resource education for all Planning Commission, County Board and City Council members
Seminar on water quality issues to be held in central Minnesota
Areas of high sensitivity to ground water pollution are those with coarse soils, particularly in SW part of county and along the Sauk River
Help Sand Lake
Require county to notice all property owners on lake of request for shoreland alteration permits 1
Put more lake association people on Water Management Advisory Committee
Better enforcement of current laws
All areas of county should be in a watershed district
No more contradiction between law and agency actions (no shoreland alterations permitted)
Keep environmental/natural resource connection, i.e., wildlife corridors and contiguous woodland areas
Cluster septic systems
Groundwater protection

PRIORITY CONCERNS FOR THE STEARNS COUNTY LOCAL WATER MANAGEMENT PLAN UPDATE

Many water resource concerns and management recommendations were forwarded. After discussion and evaluation by the Water Management update subcommittee, the following priority concerns were identified to be presented to the Water Management Advisory Committee as a whole. Most of the issues that have been raised by the public input process can be addressed under the three following Priority Concerns:

- Impaired Waters
- Source Water Protection
- Development Pressures/Impacts

These priorities are appropriate for Stearns County based on the following:

- There are 23 lakes in the county that are on the 2006 Impaired Waters List, thirteen of which are impaired due to excess nutrients. Twenty-two reaches of streams and rivers have been identified as impaired, due to a combination of conditions. (See attached TMDL Map and TMDL List). The majority of the surface water in the county has not been monitored in such a way that it would be possible to determine if the water is

impaired or not. Selection of Impaired Waters as a priority concern includes monitoring of surface waters and identification of impairments, determination of the source of the pollutant, actions to bring the water out of impaired status, and evaluation of the water quality to determine when the water is no longer impaired.

- Land values are affected by the water clarity as proven by the recent Bemidji State University Study, "Lakeshore Property Values and Water Quality". Decreases in land values would potentially harm the county's economy. Prioritization of TMDL efforts may take into consideration those areas that have high economic value to the county.

- It is essential for Stearns County to retain a healthy agricultural community while also protecting and/or restoring the county's water resources. There are approximately 2, 800 animal feedlots in the county. In 2005 Stearns was first in the State of Minnesota in total cash farm receipts, with 77 percent of this total being from livestock production, according to data from the Minnesota Agricultural Statistics Service.

- Significant efforts to restore/improve our water resources require funding. The bulk of State funding is being directed towards those areas within a TMDL project area.

- The City of St. Cloud draws its drinking water from the Mississippi River. The rest of the county uses groundwater for it drinking water; glacial aquifers are the primary source of groundwater in Stearns County. Source water protection in Stearns County includes both the surface water draining from the Sauk River and Platte-Spunke watersheds, and groundwater, much of which is being drawn from vulnerable aquifers.

- Significant land subdivision and platting continues around the county's lakes and streams. There were 982 construction site permits issued in 2006 by the county, 269 of which were issued in shoreland. This does not include those areas within municipal boundaries, which also are experiencing significant development in shoreland areas.

- There were 74 plats reviewed by the County Planning Commission in 2005. The amount of development within the municipalities is comparable to that which is outside the municipalities.

- The population of Stearns County, as determined by the 2000 census, is 133,166. The Minnesota Planning State Demographic Center projects that by 2030 the population will be 177,370, a 33% increase. This will accelerate development pressures.

Many of the suggested priority concerns will be included as elements of the above three identified concerns. Education of the general public, developers, contractors, and agricultural producers will be addressed as elements of all three identified concerns. Inventory of surface water inlets will be done as part of the TMDL process. Establishment of buffers around surface waters will be part of all three priority concerns. Efforts to control and mitigate the effects of storm water will be included under Development Pressures/Impacts.

The following items are issues that are recognized as valid concerns for the Local Water Management Plan. Though important, they will not be addressed in this updated version.

Some of the suggested priority concerns, such as zoning changes, preservation of natural areas and preservation of agricultural land are more appropriately addressed by the updated County Comprehensive Plan.

Completion of a county-wide Natural Resource Inventory was identified as a potential priority concern; funding for this will be explored but it will not be included as a priority concern.

Septic system evaluations and subsequent upgrading were identified by the public input. It is important for the health of the county's water resources to have sewage treatment that is compliant with current regulations. The county has enacted a point-of-sale septic certification requirement and will continue to work with interested lake associations and watershed districts that wish to pursue this project. Septic system evaluation will be an element of the three identified priority concerns, but not a priority concern on its own.

The adoption of the DNR Alternative Shoreland Standards is important but not appropriate as a priority concern.

Some of the suggested concerns are currently being addressed by water resource agencies and will continue to be addressed, even though not listed specifically as a priority concern. Examples of this are establishment of buffers, lakescaping, nutrient and runoff management, feedlot permitting and management.

Ground water quality and quantity were identified by public input as potential concerns. Review of new plats within the county now utilizes the Nitrate-Nitrogen Probability Map, developed by MDH, and the Sensitivity of Ground Water Systems to Pollution Map, created by the MN DNR. New plats are required to drill test wells at the rate of one for each ten lots and the nitrate-nitrogen levels must be below 5 mg/l. The upgraded version of the County Geologic Atlas, currently being developed by the MN DNR, will be a valuable tool. At this point in time there have been only a few instances in the county in which ground water quality or quantity has been a problem. This concern will be re-examined for higher prioritization at the next plan update.

Utilization of GIS to track wetland impacts, violations, exemptions, and creation can be accomplished with the current county resources and will be explored.

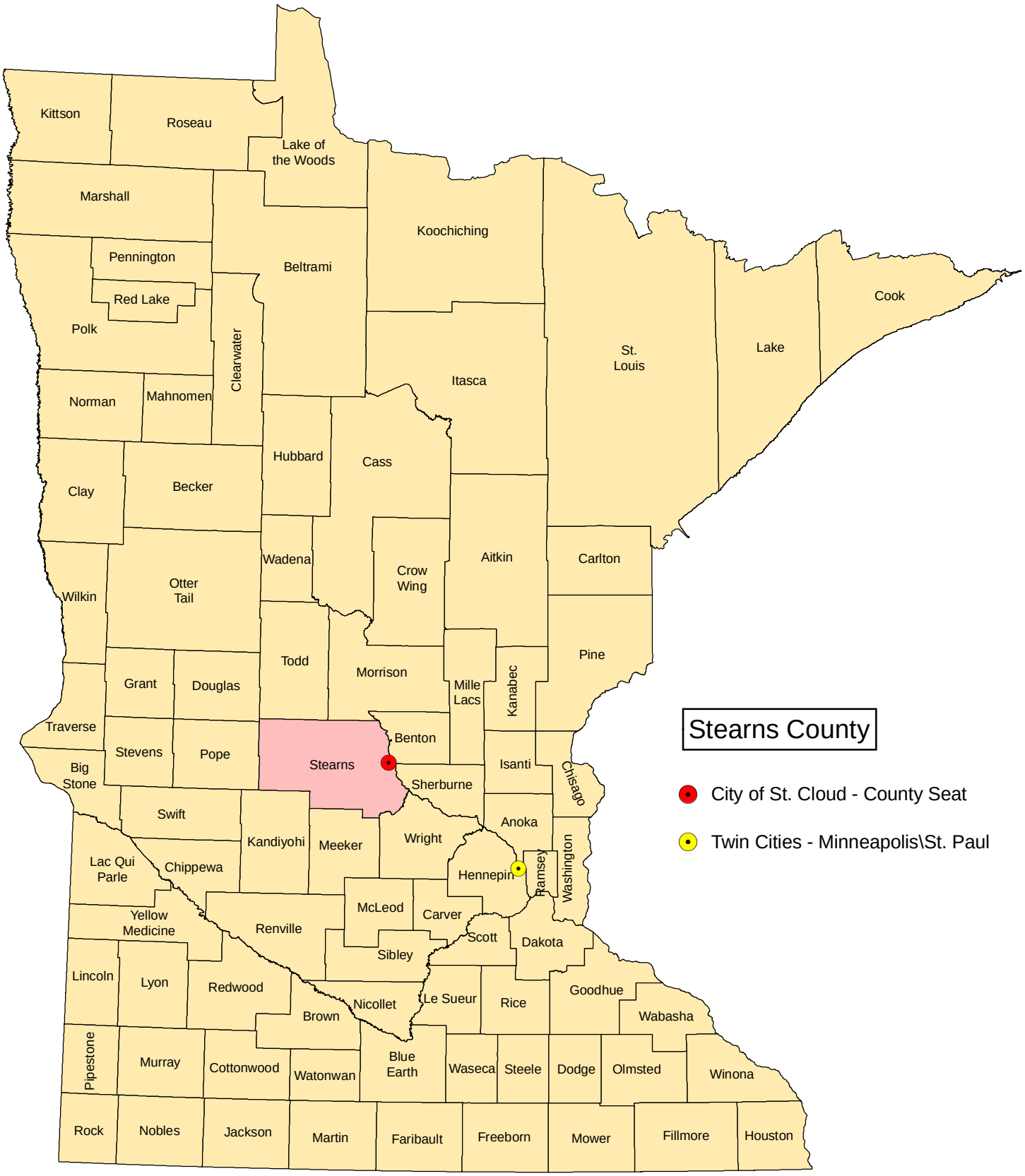
Some of the suggested priority concerns are more appropriate to other entities, such as lake associations or watershed districts. Examples of this include installation of rough fish migration barriers and removal of rough fish and remediation of flooding problems. Similarly, control of high-speed boats is an item that would need to be addressed by a different agency.

The establishment of pattern tiling systems and conversion of ditch drainage systems to large diameter tile systems are issues that are seen as important but will not be addressed by the Water Management Plan due to budget constraints.

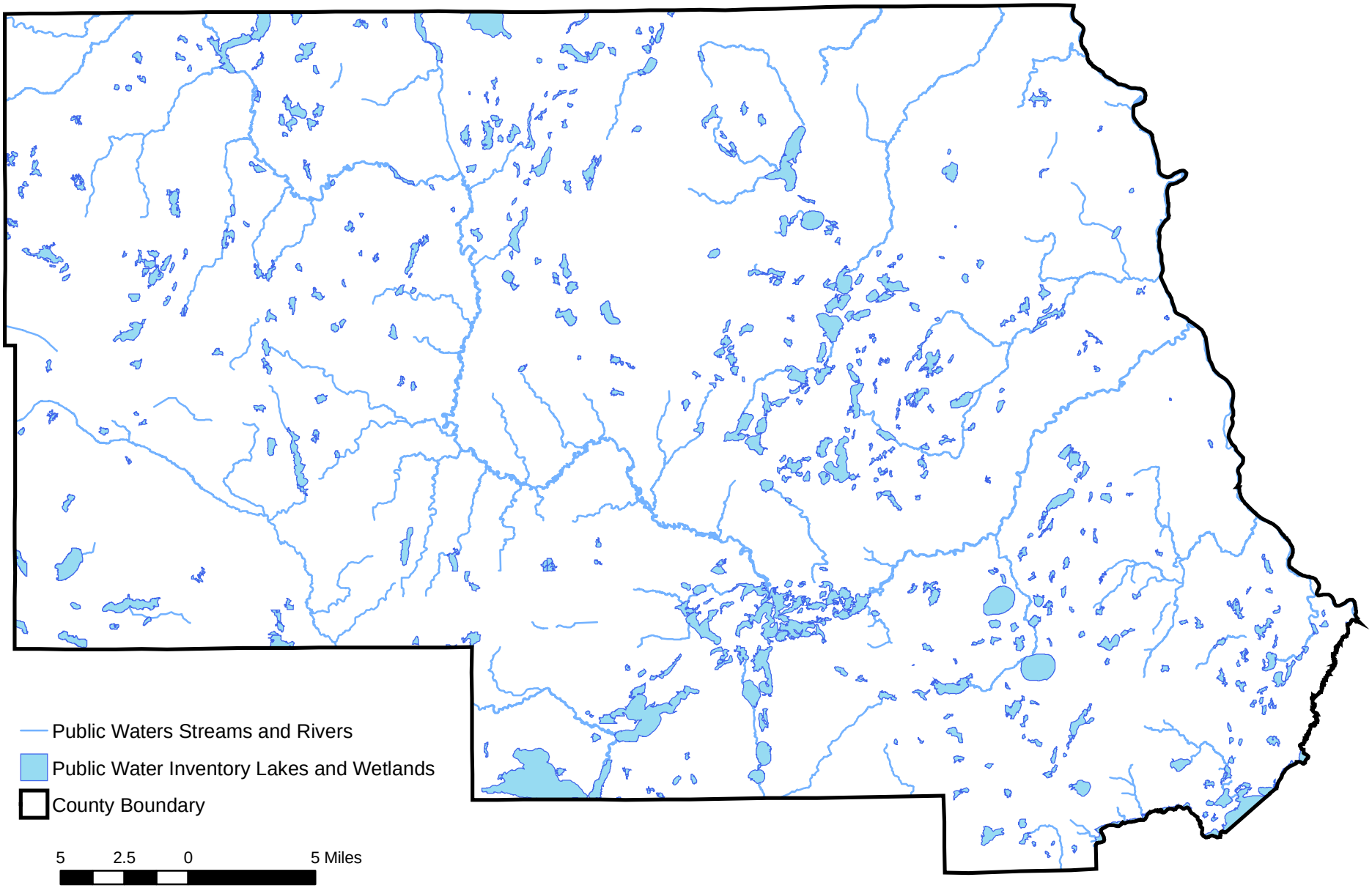
Monitoring of trout streams will continue to be promoted.

Other concerns will be re-examined for higher prioritization at the next plan update or addressed as unforeseen opportunities arise.

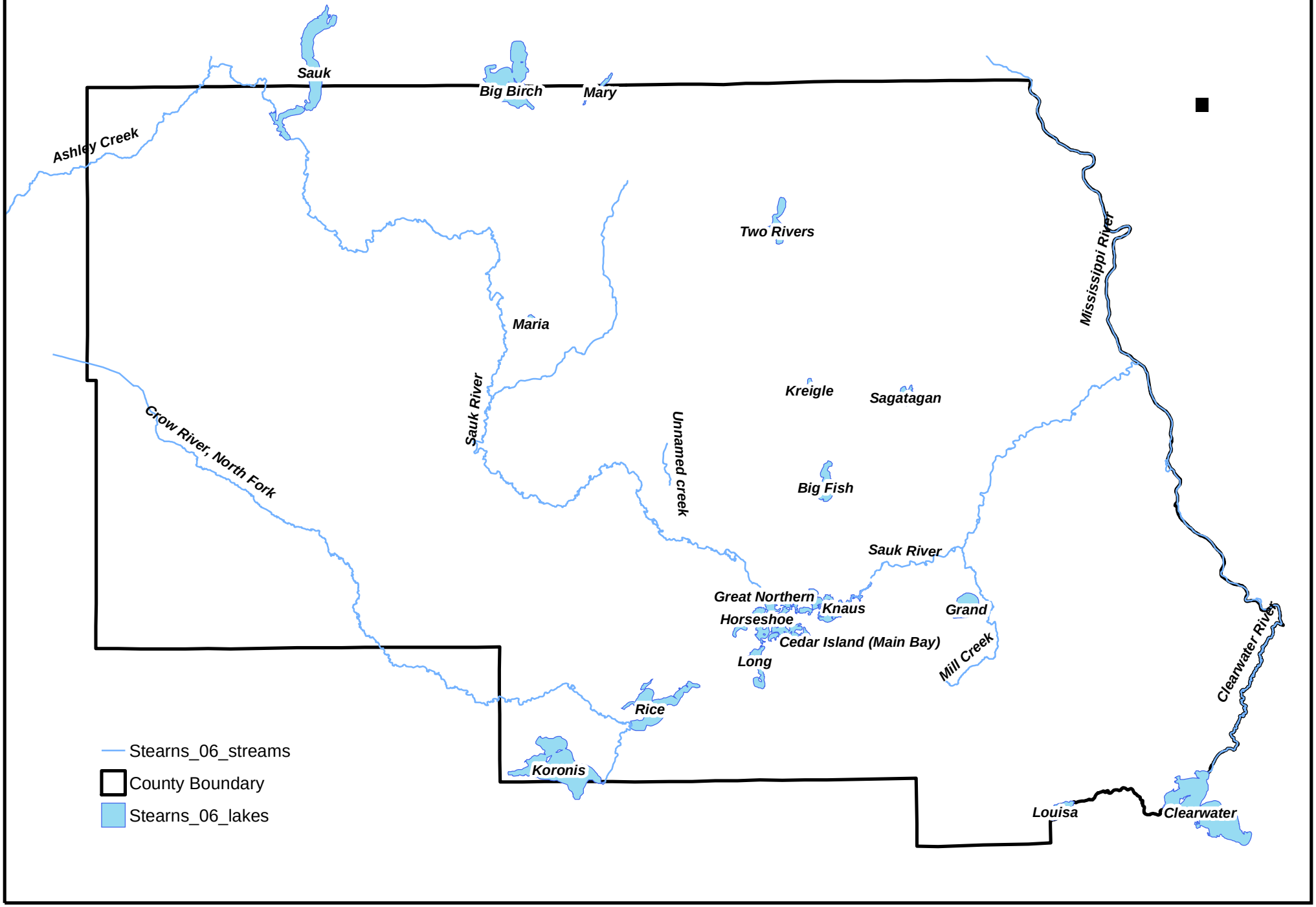
Attachments: State/county Map
Surface Water Resources Map
TMDL Map
TMDL List
Water Management Advisory Committee members


Kittson
Roseau
Lake of the Woods
Marshall
Koochiching
Pennington
Beltrami
Red Lake
Polk
Clearwater
St. Louis
Lake
Cook
Itasca
Norman
Mahnomen
Hubbard
Cass
Clay
Becker
Wadena
Crow Wing
Aitkin
Carlton
Wilkin
Otter Tail
Todd
Morrison
Mille Lacs
Kanabec
Pine
Grant
Douglas
Traverse
Benton
Stevens
Pope
Stearns
Isanti
Chisago
Big Stone
Sherburne
Swift
Anoka
Kandiyohi
Meeker
Wright
Lac Qui Parle
Chippewa
Hennepin
Ramsey
Washington
McLeod
Carver
Yellow Medicine
Renville
Scott
Dakota
Sibley
Lincoln
Lyon
Redwood
Nicollet
Le Sueur
Rice
Goodhue
Brown
Wabasha
Pipestone
Murray
Cottonwood
Watonwan
Blue Earth
Waseca
Steele
Dodge
Olmsted
Winona
Rock
Nobles
Jackson
Martin
Faribault
Freeborn
Mower
Fillmore
Houston
Stearns County
City of St. Cloud - County Seat
Twin Cities - Minneapolis\St. Paul

PUBLIC WATERS OF STEARNS COUNTY



IMPAIRED WATERS: 2006 FINAL TMDL LIST



Reach	Description	Yr[12]	River ID#[9]	Prev ID#[13]	Lake ID#[10]	Affected use	Pollutant or stressor[3]	Target start[7]	Target completion[7]	Cate-gory[14]
UPPER MISSISSIPPI RIVER BASIN, Upper Portion										
Ashley Creek	Headwaters to Sauk Lk	98	07010202-503			Aquatic life	Low Oxygen[2,5]	2006	2010	5C
Clearwater River	Clearwater Lk to Mississippi R	06	07010203-511			Aquatic life	Low Oxygen[2,5]	2008	2011	5C
Crow River, North Fork	Headwaters (Grove Lk) to Lk Koronis	06	07010204-508			Aquatic consumption	Mercury[1]FCA	2006	2021	5C
Getchell Creek (County Ditch 2)	Unnamed Cr to Sauk R	06	07010202-562			Aquatic life	Invertebrate IBI	2011	2021	5C
Mill Creek	Headwaters to Sauk R	06	07010202-537			Aquatic recreation	Fecal coliform	2006	2009	5C
Mississippi River	End HUC (07010104 below Swan R) to Two R	98	07010201-501			Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Mississippi River	Two R to Spunk Cr	98	07010201-509			Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Mississippi River	Spunk Cr to Platte R	98	07010201-508			Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Mississippi River	Platte R to Little Rock Cr	98	07010201-505			Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Mississippi River	Little Rock Cr to Sartell Dam	98	07010201-513			Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Mississippi River	Sartell Dam to Watab R	98	07010201-514			Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Mississippi River	Watab R to Sauk R	98	07010201-502			Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Mississippi River	Sauk R to CSAH 7 in St Cloud	98	07010203-574	501		Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Mississippi River	CSAH 7 in St Cloud to St Cloud Dam	98	07010203-575	501		Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Mississippi River	St Cloud Dam to Clearwater R	98	07010203-513			Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Sauk River	Sauk Lk to Melrose Dam	98	07010202-507			Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Sauk River	Melrose Dam to Adley Cr	06	07010202-506			Aquatic life	Invertebrate IBI	2011	2021	5A
Sauk River	Melrose Dam to Adley Cr	98	07010202-506			Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Sauk River	Adley Cr to Getchell Cr	98	07010202-505			Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Sauk River	Getchell Cr to State Hwy 23	98	07010202-508			Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Sauk River	State Hwy 23 to Horseshoe Lk	06	07010202-557			Aquatic consumption	Mercury[1]FCA	2006	2021	5C
Sauk River	Knaus Lk to Cold Spring Dam	98	07010202-517			Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Sauk River	Cold Spring Dam to Cold Spring WWTP	98	07010202-519			Aquatic consumption	Mercury[1]FCA	1999	2011	5A
Sauk River	Cold Spring Dam to Cold Spring WWTP	02	07010202-519			Aquatic consumption	PCB FCA	2002	2015	5A
Sauk River	Cold Spring WWTP to Mill Cr	98	07010202-520			Aquatic consumption	Mercury[1]FCA	1999	2011	5A
Sauk River	Cold Spring WWTP to Mill Cr	02	07010202-520			Aquatic consumption	PCB FCA	2002	2015	5A
Sauk River	Mill Cr to Mississippi R	94	07010202-501			Aquatic recreation	Fecal coliform	2004	2009	5A
Sauk River	Mill Cr to Mississippi R	98	07010202-501			Aquatic consumption	Mercury[1]FCA	1999	2011	5A
Sauk River	Mill Cr to Mississippi R	02	07010202-501			Aquatic consumption	PCB FCA	2002	2015	5A
Unnamed Creek	Unnamed Cr to Unnamed Cr	06	07010202-554			Aquatic life	Invertebrate IBI	2011	2021	5C
Grand	Lake or Reservoir	02			73-0055-00	Aquatic consumption	Mercury[1]FCA	2002	2015	5C
Schneider	Lake or Reservoir	04			73-0082-00	Aquatic recreation	Excess nutrients	2004	2010	5C
Great Northern	Lake or Reservoir	04			73-0083-00	Aquatic recreation	Excess nutrients	2004	2010	5C
Knaus	Lake or Reservoir	04			73-0086-00	Aquatic recreation	Excess nutrients	2004	2010	5C
Krays	Lake or Reservoir	04			73-0087-00	Aquatic recreation	Excess nutrients	2004	2010	5C
Bolting	Lake or Reservoir	04			73-0088-00	Aquatic recreation	Excess nutrients	2004	2010	5C
Zumwalde	Lake or Reservoir	04			73-0089-00	Aquatic recreation	Excess nutrients	2004	2010	5C
Sagatagan	Lake or Reservoir	02			73-0092-00	Aquatic consumption	Mercury[1]FCA	2002	2015	5C
Kreigle	Lake or Reservoir	02			73-0097-00	Aquatic consumption	Mercury[1]FCA	2002	2015	5C
Big Fish	Lake or Reservoir	98			73-0106-00	Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Cedar Island	Lake or Reservoir	04			73-0133-01	Aquatic recreation	Excess nutrients	2004	2010	5A
Cedar Island (Main)	Lake or Reservoir	06			73-0133-01	Aquatic consumption	Mercury[1]FCA	2006	2021	5A

Reach	Description	Yr[12]	River ID#[9]	Prev ID#[13]	Lake ID#[10]	Affected use	Pollutant or stressor[3]	Target start[7]	Target completion[7]	Cate-gory[14]
Cedar Island (Mud Lake)	Lake or Reservoir	06			73-0133-02	Aquatic consumption	Mercury[1]FCA	2006	2021	5C
Koetter	Lake or Reservoir	04			73-0133-03	Aquatic recreation	Excess nutrients	2004	2010	5A
Cedar Island (Koetter Lake)	Lake or Reservoir	06			73-0133-03	Aquatic consumption	Mercury[1]FCA	2006	2021	5A
Cedar Island (East Lake)	Lake or Reservoir	06			73-0133-04	Aquatic consumption	Mercury[1]FCA	2006	2021	5C
Two Rivers	Lake or Reservoir	98			73-0138-00	Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Long	Lake or Reservoir	04			73-0139-00	Aquatic recreation	Excess nutrients	2004	2010	5C
Horseshoe	Lake or Reservoir	04			73-0157-00	Aquatic recreation	Excess nutrients	2004	2010	5A
Horseshoe	Lake or Reservoir	98			73-0157-00	Aquatic consumption	Mercury[1]FCA	1999	2011	5A
Rice	Lake or Reservoir	98			73-0196-00	Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Koronis	Lake or Reservoir	98			73-0200-00	Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Maria	Lake or Reservoir	06			73-0215-00	Aquatic recreation	Excess nutrients	2015	2019	5C
Mary	Lake or Reservoir	02			77-0019-00	Aquatic consumption	Mercury[1]FCA	2002	2015	5C
Big Birch	Lake or Reservoir	98			77-0084-00	Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Sauk	Lake or Reservoir	04			77-0150-00	Aquatic recreation	Excess nutrients	2004	2008	5A
Sauk	Lake or Reservoir	98			77-0150-00	Aquatic consumption	Mercury[1]FCA	1999	2011	5A
Clearwater	Lake or Reservoir	98			86-0252-00	Aquatic consumption	Mercury[1]FCA	1999	2011	5C
Louisa	Lake or Reservoir	02			86-0282-00	Aquatic recreation	Excess nutrients	2004	2009	5C

WATER MANAGEMENT ADVISORY COMMITTEE

VOTING MEMBERS:

Pat Shea
City of St. Cloud
400 Second Street South
St. Cloud, MN 56301
(City of St. Cloud)

Chuck Uphoff
35319 315th Av
Melrose MN 56352
(SWCD)

Dennis Ritter
41696 County Road 168
Melrose, MN 56352
(Farmers\Irrigators)

Kay Cook
20783 Eastway Ct
Richmond MN 56368
(Lake Associations)

Merle Anderson
Clearwater River
Watershed District
3147 South 15Th Avenue
St. Cloud, MN 56301
(Watershed Districts)

Jim Rothstein
286 Park Ave
St. Martin, MN 56376
(Municipal League)

Vince Schaefer
Po Box 66
Rockville, MN 56369
(County Board)

Jane Bennett
4146 Pine Point Road
Sartell MN 56377
(Interested Citizen)

Dean Loidolt
7711 322nd Street
St Joseph, MN 56374
(Planning Commission)

Anne Ackerman
18418 Eaglewood Rd
Clearwater MN 55320
(Townships)

Scott Daninger
701 1st Avenue
Albany, MN 56307
(Education)

Bud Heidgerken
316 2nd Av NE
Box 116
Freeport MN 56331
(Higher Ed/Local Legislator)