

APPENDIX 6: PRIORITY CONCERNS SCOPING DOCUMENT

CWC Priority Concerns Scoping Document



October 23, 2012
Revised January 9, 2013



CROW WING COUNTY
BRAINERD, MINNESOTA 56401

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EXECUTIVE SUMMARY

The Crow Wing County Land Services Department has been delegated authority by the Crow Wing County Board of Commissioners to update and revise the Local Comprehensive Water Management Plan. This update and revision process includes an identification of local priority water resources concerns which will lay the framework for a new comprehensive water plan document on how to achieve protection of these resources. The proposed water plan will be in effect 10 years from the date of its adoption in 2013.

PURPOSE & BACKGROUND

Water planning is a comprehensive analysis of water and related land resources and a recommended series of action strategies designed to achieve maximum water resource use and achieve water management goals. It is used to link many land-use decisions with local goals for surface and groundwater protection and management.

Water management in Minnesota developed as a result of the statewide drought in the late 1970s, which caused the legislature to encourage more effort at the local level to develop and implement local water management plans to better preserve and protect water and related land resources. County water planning efforts began in earnest in the late 1980s as state funding assisted local units of government in developing their water plans. Water planning developed under the legislative authority and mandate of the Comprehensive Local Water Management Act (Minnesota Statutes, Chapter 110B). The purpose of Local Water Planning, by statute, is to:

- Identify existing and potential problems and opportunities for the protection, management, and development of water and related land resources
- Develop objectives and carry out a plan of action to promote sound hydrologic management of water and related land resources, effective environmental protection and efficient management.

The Board of Water & Soil Resources (BWSR) has oversight responsibilities to ensure that local water plans are prepared and coordinated with existing local and state efforts and that plans are implemented effectively. All parts of Minnesota have state-approved and locally adopted plans in place. These local plans focus on priority concerns, defined goals and objectives, and measurable outcomes. BWSR provides financial assistance to LGUs through the Natural Resources Block Grant.

CROW WING COUNTY LAND USE & POPULATION:

Water is Crow Wing County's lifeblood. The county has an area of 740,000 acres and approximately 102,000 acres, or 14%, is covered by over 400 scenic lakes, rivers, and streams. An additional 26% is covered by wetlands as well. The abundance of surface water makes Crow Wing County a destination area. From 1990 to 2000 the population in Crow Wing County has increased by 24.5%, the eleventh fastest growth county of Minnesota's 87. The most recent census shows the population continued to grow another 13.4% from 2000 to 2010 (twelfth fastest).

Developed	4%
Agriculture	4%
Grass/Pasture/Shrub	14%
Forest	38%
Open Water	14%
Wetland	26%

Figure 1. Land Use % (from National Land Cover Dataset, 2006)

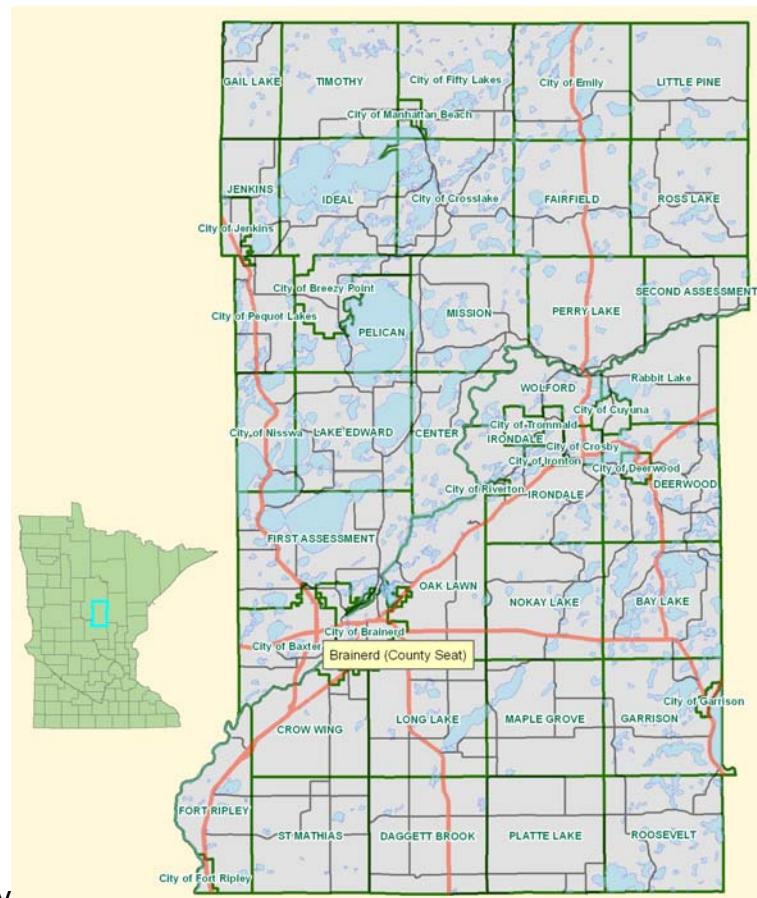


Figure 2. Map of Crow Wing County

WATER PLANNING IN CROW WING COUNTY

LGU Delegation:

As the LGU responsible for the development and implementation of the Local Comprehensive Water Management Plan, the Crow Wing County Land Services Department is committed to protecting, preserving & improving water resources in Crow Wing County by being proactive, efficient, customer focused, organized, and innovative while being good stewards of the county's resources. The Land Services Department is committed to providing excellent customer service while helping landowners make wise choices that protect Crow Wing County's extraordinary natural resources.

Water planning is identifying what works best to protect and enhance Crow Wing County's water resources. In administration of the water plan, Crow Wing County is committed to the following principals of action:

- Providing exceptional customer service that empowers landowners to manage and protect their land and water resources
- Coordinating funding, staff, and grass roots efforts to maximize effectiveness of public dollars and programs
- Managing, enhancing, and expanding the availability of educational materials and a network of resources and contacts
- Identifying existing and potential threats to surface and ground water resources with action plans to minimize them

Plan History:

The first water plan for Crow Wing County was adopted in 1990. Over the years it has been revised several times. The current Crow Wing County Water Plan was adopted in 2008 and is set to expire in August of 2013. 6 priority concerns were identified with the goal to protect the surface and groundwater resources of the County. Under each priority concern are actions steps that specifically lay out tasks to accomplish the goal.

2008 Priority Concerns

1. Establish and maintain an organized countywide surface water quality monitoring program
2. Address stormwater runoff to minimize impacts to water
3. Protect ground water quality
4. Address wastewater needs throughout the County
5. Minimize the adverse effects of development on water quality countywide
6. Coordinate the development and implementation of educational programs on water quality protection

Integration with Land Use Activities:

The groundwork for this water plan update and revision process was laid with the changes to the County Land Use Ordinance in 2011 which sought to integrate many of the existing water plan priority concerns and action steps into the daily operations of the Land Services Department. The 2011 changes to the Crow Wing County Land Use Ordinance are a reflection of many of the 2008 priority concerns and action steps. Some examples of this integration are listed in Appendix 1

PRIORITY CONCERN PUBLIC NOTICE / INPUT:

Timeline:

March 30, 2012 = Press Release announced availability of water plan survey

May 8, 2012 = Crow Wing County Board of Commissioners adopted resolution to update plan

May 12, 2012 = Letter sent out to all riparian property owners with CWC zoning jurisdiction asking for their input on the water plan survey

May – Oct. 2012 = Water plan survey on homepage of CWC website: www.co.crow-wing.mn.us

May 24, 2012 = Appeared on WJJY Radio's "Community Focus" to talk about water planning

June 20, 2012 = Recorded "County Line" TV spot about water planning that aired on local TV

July 9, 2012 = Solicited feedback on water plan priorities at land use workshops in Ideal & Lake Edward Townships

July 13, 2012 = Solicited feedback on water plan priorities at land use workshops in Deerwood & Long Lake Townships

July 31-August 4, 2012 = Solicited feedback on water plan priorities at Crow Wing County Fair (About 100 people responded to the survey)

August 2012 = Sent out notice of intent to revise and update plan to LGUs & stakeholders

August 31, 2012 = Held Open House for priority concerns

Citizen Survey:

In May 2012, a letter was sent to all riparian landowners in Crow Wing County with Crow Wing County Zoning Authority. In addition to Land Use Information, the letter asked respondents to participate in an online survey. Approximately 300 people responded to the survey. In addition, a request was sent to Crow Wing County stakeholder groups, including local, state, federal agencies involved in water management as well as builders, developers, consultants, educators, and landscaping and septic contractors. Approximately 200 people participated in this survey for a total of approximately 500. See Appendix 2 for the riparian landowner letter and Appendix 3 for the survey questions.

Results were very similar between the two survey groups and are summarized below:

Year-round / seasonal

- 60% were year-round residents

Age

- 60% of the year-round residents were over the age of 55
- 45% of the seasonal residents were over the age of 55
- 35% have already retired
- 25% planned to retire within 10 years
- 25% planned to build within 10 years

Length of Ownership

- 50% had owned their property for over 20 years
- 12% of properties were in the family for over 50 years

Use Preference

- Based on survey results, the most common use of our surface water resources in the County is fishing, followed by general boating, swimming, and viewing (in roughly equal amounts).

Shoreline protection

- 60% of landowners reported that a majority of their shoreline was left natural

Stormwater

- 95% were aware that stormwater runoff was a detriment to water quality
- 45% had implemented stormwater best management practices on their property
- 70% were aware that certain land use permits required stormwater management

Septic Maintenance

- 70% have their tanks pumped every 3 years or less

Crow Wing County (CWC) Knowledge

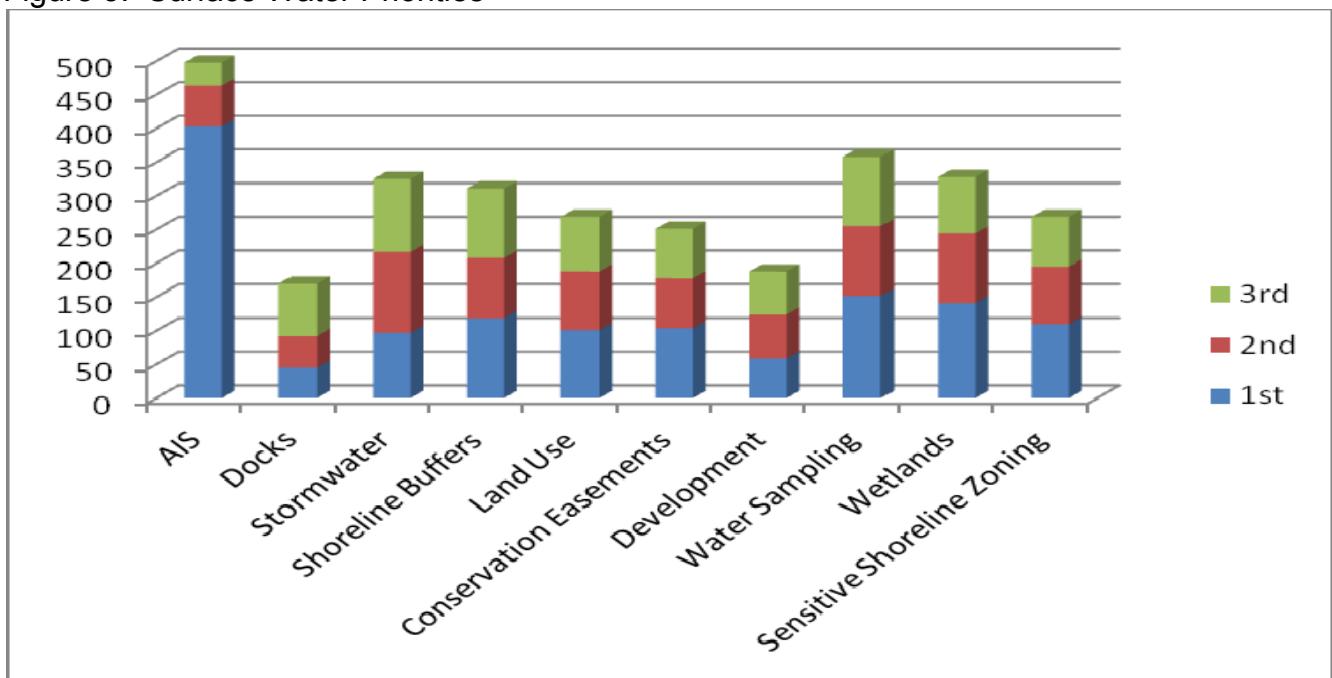
- 68% were aware that CWC had a local comprehensive water plan
- 98% were aware that CWC required building permits
- 89% were aware that CWC required permits for shoreland alterations (dirt moving, landscaping, etc.)
- 64% were aware that CWC Land Service Specialists conduct onsite inspections prior to issuing permits
- 58% were aware that CWC Land Service Specialists meet landowners onsite to answer any questions for free
- 56% were aware that the CWC website provided applications, factsheets, and informational videos
- 53% were aware that the CWC website provided interactive maps & search tools for parcel information
- 49% were aware of whether the water quality of their lake/stream was improving or declining

PRIORITY CONCERN IDENTIFICATION

Survey Responses:

Those that participated in the Water Plan survey were asked to prioritize among 10 potential surface water priority concerns and 5 potential groundwater concerns. The results of the top 3 priorities are summarized below. Results were very similar between those that lived on a lake/stream and those that didn't.

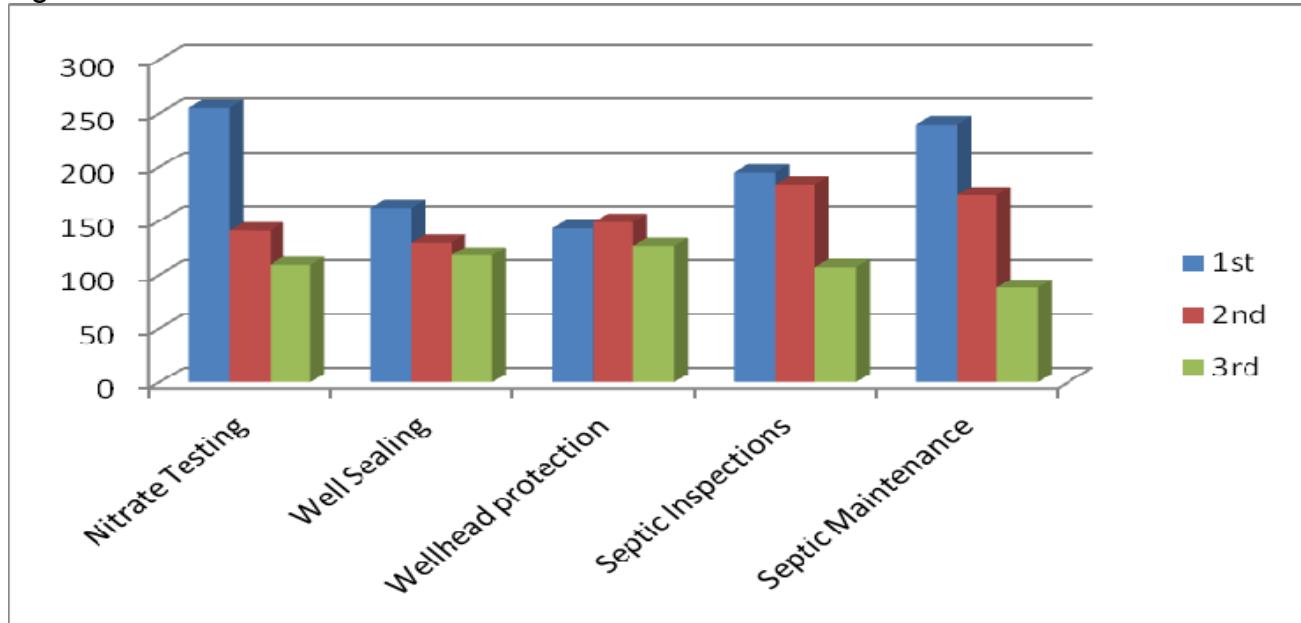
Figure 3. Surface Water Priorities



Surface Water Observations:

- Aquatic Invasive Species (AIS) was clearly the top concern for all those surveyed. Over the past several years, the County has seen an ever-increasing demand from citizens and lake associations to become an active participant in the fight against AIS.
- Water sampling and wetland protection had the next highest number of votes.
- Although stormwater management didn't receive a high number of first place votes, it had the highest number of second-place votes (by far) and had the 4th highest total overall.
- Shoreline buffers was the 5th highest concern.
- There were a number of land use and development concerns that also scored well.

Figure 4. Groundwater Priorities



Groundwater Observations:

- Water testing for nitrates and other contaminants was the top groundwater concern overall. However, it was the 2nd priority among riparian landowners (behind septic maintenance).
- Septic maintenance / inspection were the next two top concerns, with septic maintenance being a slightly higher concern (especially for riparian property owners).
- Well sealing and wellhead protection were also high concerns.

List of Priority Concerns:

Based on all of the public input received, Crow Wing County proposes the following Priority Concerns along with Priority Resources (in no particular order):

Priority Concerns:

1. Priority Concern: Aquatic Invasive Species

- Lake Improvement District (LID) management
- Lake association coordination
- Watercraft access management

2. Priority Concern: Surface Water

- Stormwater management (including temporary erosion and sediment control)
- Shoreline buffers
- Wetland protection
- Land use and development
 - Ordinance development
 - Conservation easements
 - Identifying sensitive shorelines
 - Public and private forest management / protection
- Water sampling / data gathering

3. Priority Concern: Ground Water

- Septic system maintenance and inspection
- Testing for nitrates and other contaminants
- Wellhead and drinking water source protection
- Well sealing of unused / abandoned wells
- Solid and hazardous waste disposal

Priority Resources:

A number of recent studies have been conducted on specific water resources in Crow Wing County over the past several years (or are ongoing) and have identified areas needing more attention. These specific areas will be the target of many of the priority concerns listed above. There will be coordination with the DNR, MPCA, and others over the next several months to determine what each agency has for priority resources, but below are some examples of possible priority resources that the water plan will focus on:

Surface Water:

- Lakes
 - Large, deep, cold-water lakes that are major fisheries & recreational resources
 - Typically > 500 acres in size
 - Includes several border lakes
 - Includes a focus on the Shoreland Zone
 - Shallow, wild rice lakes
- Rivers
 - Mississippi
 - Nokasippi
 - Pine
 - Trout streams
- Impaired waters
 - Jail L.
 - Kego L.
 - Platte L.
 - Crow Wing L.
 - Sibley / Mayo Lakes.
 - Little Buffalo Creek
- Waters with a declining water quality trend
- Waters with high impervious surface coverage
- Disturbed watersheds or watersheds with impaired waters
- Existing high quality watersheds to continue protection efforts in

Ground Water:

- Wellhead and drinking water source protection areas
- Shallow, surficial sandy aquifers
- Septic systems
- Agricultural / forested areas

Stakeholder Priorities (via Priority Concern Input Form):

Concerns in bold are included in the proposed list of priority concerns. Items underlined are included as proposed action steps and items in italics are priority resources or strategies the water plan will likely focus on. See Appendices 4 & 5 for specific comments and CWC staff response.

- Don Crust, Upper South Long Lake Citizen
Priority Concern: **Invasive Species**
- Minnesota Pollution Control Agency, submitted by Ron Shelito
Priority Concern 1: *Impaired Waters/Total Maximum Daily Load Studies*
Priority Concern 2: *Watershed Restoration and Protection Approach*
- Crow Wing County Lakes & Rivers Alliance, submitted by Phil Hunsicker
Concern 1: **Septic System Performance**
Concern 2: *Watershed Management*
Concern 3: Citizen Participation
- Minnesota Department of Health, submitted by Mark Wettlaufer
Concern 1: **Protect ground water-based drinking water sources within CWC**
Concern 2: Sealing unused, unsealed wells
Concern 3: Develop a local groundwater quality database
- Natural Resources Conservation Service (NRCS), submitted by Jessica Weis
Concern 1: *Agricultural Lands*
- Crow Wing Soil & Water Conservation District (SWCD), submitted by Melissa Barrick
Concern 1: *Protect CWC Surface and ground water*
Concern 2: *Enhance CWC Surface and subsurface water*
Concern 3: *Restore CWC Surface and subsurface water*
- Board of Water & Soil Resources (BWSR), submitted by Dan Steward
Concern 1: *Minor Watershed GIS Data – Foundation for Updating*
Concern 2: **Erosion & Sediment Control on Developing Areas throughout CWC**
Concern 3: **Forest Land Conversion and Water Quality Impacts**

The above concerns epitomize the immense breadth of water protection and water planning concerns. Overall, the priority concerns identification did not reveal many surprises. Although everyone is beginning to understand the threat from AIS, landowners also are realizing that they can have an impact on protecting on surface water by implementing stormwater management and maintaining or restoring a natural shoreline as well as the importance of septic system health. As much as possible, Crow Wing County Land Services is committed to integrating as many water protection strategies into the daily operational system of the Department while working to coordinate efforts with other organizations, agencies, and stakeholders who are experts in their respective fields.

Priority Concerns Not Included:

Of the concerns submitted that were not included, most were focused on strategies or specific locations to focus on. However, all of the information provided is helpful and will be a valuable asset as the final plan is developed in the months ahead.

APPENDIX 1

2008 Water Plan Priorities Integrated into 2011 CWC Land Use Ordinance Revision

Priority Concern 2: Address Stormwater Runoff to Minimize Impacts to Water:

Action 1: Educate riparian and non-riparian property owners on stormwater issues and support best management practices (BMPS) to prevent/correct stormwater runoff and erosion. (e.g. rain gardens, shoreland re-vegetation, vegetative swales, etc.)

Action 7: Provide education for contractors, developers, realtors, the business community, and local officials on stormwater management.

Along with the extended 60 day public comment period, a number of public hearings, meetings with stakeholders, radio and newspaper spots were about the proposed Ordinance. Crow Wing County held workshops in the spring of 2011 & 2012 related to stormwater management and shoreline protection. In addition, all County field staff is certified as erosion and stormwater installers.

Action 2: Encourage LGUs to require stormwater management plans for all riparian development and redevelopment before issuing permits.

Crow Wing County Land Use Ordinance Article 11.5 requires performance standards in conjunction with the issuance of any permit in the Shoreland Protection Zone (within 500 ft of a lake). Depending on the project, this ranges from simple best management practices (BMPs) to development and implementation of a plan to treat stormwater runoff from a 1" storm event.

Action 3: Encourage LGUs to require shoreland mitigation for all variances on riparian properties.

Crow Wing County Land Use Ordinance Article 7.4 requires that when evaluating a project, the planning commission and board of adjustment must make sure that erosion control and stormwater are provided. In addition, according to Article 7.5, a shoreline vegetative buffer may be required as a condition of approval.

Action 5: Encourage LGUs to monitor and ensure compliance with the best management practices or other requirements of stormwater management plans and pursue appropriate enforcement measures for violations of the permit.

Crow Wing County Land Use Ordinance Article 41.2 requires that Crow Wing County Environmental Services staff is required to inspect stormwater management systems in the field after construction. Field staff also review permits and pursue enforcement actions as warranted.

Action 6: Encourage and support innovative stormwater management techniques.

Prior to a permit being issued, field staff meets onsite with the landowner to discuss the project, including stormwater management techniques that might apply.

Priority Concern 4: Address Wastewater needs throughout the County:

Action 1: Ensure all Subsurface Sewage Treatment Systems (SSTS) have certificates of compliance as required by Minnesota Statute 7080 and system upgrades are completed when noncompliance is identified.

Crow Wing County Land Use Ordinance Article 37.10 requires a current compliance inspection to be on file when applying for a permit. Article 37.11 requires compliance inspections also be conducted for sales or transfers of property. Article 37.7 requires that failed systems be upgraded or replaced in compliance with MN Rules 7080.0060.

Action 2: Ensure that LGUs maintain current records of SSTS compliance that are tied to real estate parcel records.

Crow Wing County Land Use Ordinance Article 37.15 requires that the County maintain septic records.

Action 4: Educate property owners on SSTS compliance requirements and promote education on proper system maintenance and operation.

Crow Wing County recently completed a septic assessment program to help residents better understand how to better manage their system and also to determine if their tanks need pumping.

Priority Concern 5: Minimize the adverse effects of development on water quality countywide:

Action 1: Identify sensitive shorelands countywide using DNR criteria.

Action 2: Develop new regulatory tools to protect water quality, including the establishment of special protection zones for sensitive shorelands and wetland setbacks.

Crow Wing County Land Use Ordinance Article 4.3 states that the County Board may assign a sensitive shoreland (SS) district classification to the shoreland district adjacent to a bay of a lake, or to a clearly defined portion of the shoreline of a lake. The area considered for such classification must have a DNR Sensitive Lakeshore Survey Report.

Action 8: Enforce the Wetland Conservation Act.

Article 39.1 makes it clear that Crow Wing County is now the local government unit for administration of the wetland conservation act where County zoning is being administered.

Shoreline Buffers

In addition to the above action steps, page 18 of the water plan states that “buffer strips of natural vegetation in the shore impact zone, use of pervious surfaces, and application of phosphorus free fertilizer should continue to be promoted and supported to reduce stormwater runoff from individual properties. Maintaining lawns down to the water’s edge can allow 5 to 10 times the amount of runoff to reach surface waters compared to a forested shoreline or vegetated shoreline.”

Crow Wing County Land Use Ordinance Article 27.6 requires a no maintenance shoreline buffer as a condition of a permit for lots with impervious surface coverage of between 20% and 25% as well as for any variance and conditional use permit. Article 27 identifies the shoreline vegetation standards that must be followed.



APPENDIX 2
Riparian Landowner Letter

Land Services Department

Mark B. Liedl.....Land Services Director
Environmental Services
Christopher Pence.....Land Services Supervisor
Douglas R. Morris.....Solid Waste Coordinator
David Landecker, PLS.....Survey Coordinator
Property Valuation and Classification
Gary Griffin.....Land Services Supervisor
Public Land Management
Kirk Titus.....Land Services Supervisor

Office of Environmental Services

Land Services Building

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environmental.services@crowwing.us



CROW WING COUNTY

BRAINERD, MINNESOTA 56401

TO: Lake Shore Property Owners
FR: Land Services Department
DT: May 12, 2012
RE: Recent Land Use Ordinance Changes

We value your input. Please follow this link to a survey about future management of Crow Wing County's lakes and streams:

<http://tinyurl.com/water-plan-survey>

Crow Wing County has recently updated its County Land Use Ordinance. The changes were designed to achieve better protection of our lakes; eliminate ambiguities, inconsistencies and repetition in the ordinance, and do away with unnecessary and ineffective provisions. The new ordinance is 79 pages shorter than before and much easier to navigate. You can find the complete ordinance at www.co.crow-wing.mn.us, search for "Ordinance & Policy".

We are sending you this note to summarize the major provisions in the new ordinance, so you may have a better understanding of what the law requires. Our restructured, leaner Land Services Department is dedicated to excellent customer service and proactive communication so we can all work more effectively together to protect our land and water resources for future generations. We know that conscientious property owners want to do the right thing to protect our lakes, so we see our job as helping you do that. Knowing what the rules are and giving guidance on common sense land stewardship practices is an important element of our shared mission.

The primary change in the law is the creation of performance standards for lake lots that need to be adhered to as a condition for receiving land use permits from the County. These site-based performance standards apply practical approaches based on the actual characteristics of a property and are designed to achieve measurable results in achieving the goal of keeping our lakes healthy. Site specific performance standards such as stormwater management, vegetated buffers and septic system maintenance are part of the new ordinance. These may be required to some extent, depending on the particular characteristics of your property.

Although stormwater management may seem technical and expensive, it is a simple concept that is easily implemented through landscaping and is the single-most important thing a landowner can do to help protect the lake. It means providing a way for water runoff, particularly from impervious surfaces like driveways and roofs, and phosphorus rich lawns or gardens, to naturally filter into the ground rather than running directly into the lake. For most sites, this involves simple landscaping practices to redirect water flow. Water that runs off impervious surfaces often contributes chemicals and nutrients to the body of water it flows towards. Stormwater management helps mother nature filter that water into the ground instead of going directly into the lake. It is a common sense approach and good conservation practice.

Statistical models show that approximately $\frac{1}{4}$ pound of phosphorus is prevented from reaching the lake by a simple stormwater sloping plan (1 pound of phosphorous equals to about 300-500 lbs of algae per year). One of our goals is to measurably reduce phosphorous – and other chemicals – from going into our lakes and streams through inexpensive, common sense stormwater practices. Our office is ready, willing and able to provide you the information you need to develop a stormwater plan for your property. In addition, four landowner information sessions will be conducted this summer at various sites around the County. Please stop by our office in the Land Services Building behind the Historic Courthouse in Brainerd or check our website www.co.crow-wing.mn.us for more information.

Another change to the ordinance was setting a “sunset date” for the one-time expansion of a non-conforming structure. Effective January 1, 2013, it will no longer be permitted to expand a non-conforming structure without a variance. If you would like to take advantage of the current ordinance provision that allows a one-time 50% expansion of a non-conforming structure without the need for a variance, you must obtain a permit from the County prior to January 1, 2013. Approved permits are valid for 2 years, so the permitted work would need to be completed within 2 years of the date of the approved permit.

Below are highlights of other significant changes to the new Land Use Ordinance:

<p><u>Land Use (Zoning) Classification Changes</u></p> <ul style="list-style-type: none">• Created one Shoreland Zone for areas 1000' from lakes, 300' from rivers, and 500' from the Mississippi River.• Rural residential (RR) districts 1, 10, & 20 were added to the existing 2.5 & 5 acre districts.• Greenspace zoning eliminated (Interim zoning for Greenspace parcels: RR20).	<p><u>Setback changes</u></p> <ul style="list-style-type: none">• Natural Environment Lake (from 200' to 150').• Wetland (from 16.5' to 15').• Bluff (now 30' from top, toe, and sides vs. just the top).• DNR approved harbors (now: 1/2 of the building setback from the lake).
<p>Impervious surface coverage limit set at 25% for all zoning districts.</p>	<p>Shoreland Alteration Permit: \$150 fee for a wide variety of activities near the lake including:</p> <ul style="list-style-type: none">• Stairways, retaining walls, patios, beaches (<i>sand blankets</i>), ice ridge & vegetation removal.
<p>Stormwater management required on all permits for lots where impervious surfaces exceed 15%. This applies to all lots within 500' of a lake or stream.</p>	<p>Guest cabins are now allowed (up to 700 sq. ft.).</p>
<p>Shoreline buffer assessment as required on all permits for riparian lots where impervious surfaces exceed 20%.</p>	<p>120 sq. ft. water-oriented accessory structure (shed) allowed by shoreline (must be 20' from lake).</p>
<p>Footing location inspection may be required to verify that newly constructed buildings meet lake/river setbacks in the shoreland area.</p>	<p>Home businesses allowed in all zoning districts with a conditional use permit.</p>
<p>Building on a non-conforming lot now allowed without a variance provided setbacks and impervious limits are met and a septic can be installed on the property.</p>	<p>Allowances for more resort expansion and rebuilding of resort cabins.</p>
<p>160 sq. ft. shed allowed without a building permit provided it meets all setbacks. Two sheds totaling 160 sq. ft. is allowed (One Time).</p>	<p>Travel trailers allowed as a year-round structure with a permit.</p>

Please contact the Land Services Department with any land use questions you may have prior to beginning projects by calling (218) 824-1125 or environmental.services@crowwing.us. We also invite you to participate in the following anonymous on-line survey <http://tinyurl.com/water-plan-survey> which will help us understand your values and concerns about your lake and provide direction for future water planning activities. Please refer to our website www.co.crow-wing.mn.us for more information, and to see the ordinance in its entirety. We look forward to working with you!



APPENDIX 3
Water Plan Survey Questions

[Exit this survey](#)

Land Services 2012 Riparian Landowner Survey

The following questions are about how you use and value your water resource. All responses are anonymous unless you choose to request specific information from Crow Wing County at the end of the survey. The information will be summarized and used to help us with future water planning initiatives.

We want to thank you for your participation.

1. Which best describes who uses your residence?

- Seasonal user(s) with the majority of residents age 55+
- Year-round user(s) with the majority of residents age 55+
- Seasonal user(s) with all residents between the ages of 20-55
- Year-round user(s) with all residents between the ages of 20-55
- Seasonal user(s) with a mixture of ages
- Year-round user(s) with a mixture of ages

2. Are you planning to build or retire here?

- Yes, build or remodel within 5 years
- Yes, build or remodel within 10 years
- Yes, build or remodel in greater than 10 years
- Yes, retire within 5 years (no additional building planned)
- Yes, retire within 10 years (no additional building planned)
- Yes, retire in greater than 10 years (no additional building planned)
- Not sure
- No

Other (please specify)

3. How long have you owned your property?

- 0-3 years
- 3-5 years

- 5-10 years
- 10-15 years
- Over 20 years
- Over 50 years (owned or in the family)

4. What are the top 2 things you use the water for?

- Fishing
- Swimming
- General boating
- Water skiing/Personal watercraft
- Canoeing/Kayaking
- Viewing/Scenic qualities
- Hunting

Other (please specify)

5. Describe your % of natural shoreline (not mowed or maintained) from the water landward 15-20 ft. What best describes your lot?

- 0-25% of lot width is naturally vegetated
- 25-50% of lot width is naturally vegetated
- 50-75% of lot width is naturally vegetated
- 75-100% of lot width is naturally vegetated

6. Which of the below apply to your knowledge of stormwater best management practices (BMPs) before reading the letter? Check all that apply.

- Aware that stormwater “runoff” from impervious surfaces and lawn areas can contribute nutrients and sediment to a lake that could reduce water quality
- Aware that temporary BMPs such as silt fence or erosion control blankets are helpful during construction to prevent erosion and sediment from entering the lake
- Aware of permanent stormwater BMPs such as rain gardens, berms, or rain barrels
- Have Implemented stormwater BMPs on my property
- Aware that certain land use activities may require a stormwater plan
- Aware of resources that will assist you in development of a stormwater plan

7. What is the biggest obstacle to implementing stormwater management or a shoreline buffer? Check all that apply.

- Lack of funds
- Lack of knowledge / technical expertise
- Terrain/physical limitations
- Already in place
- Not interested

Other (please specify)

8. If you have a septic system on your property, how often do you have the tank pumped?

- Every year
- 2-3 years
- 4-5 years
- 6-10 years
- >10 years
- Don't know
- No septic on property

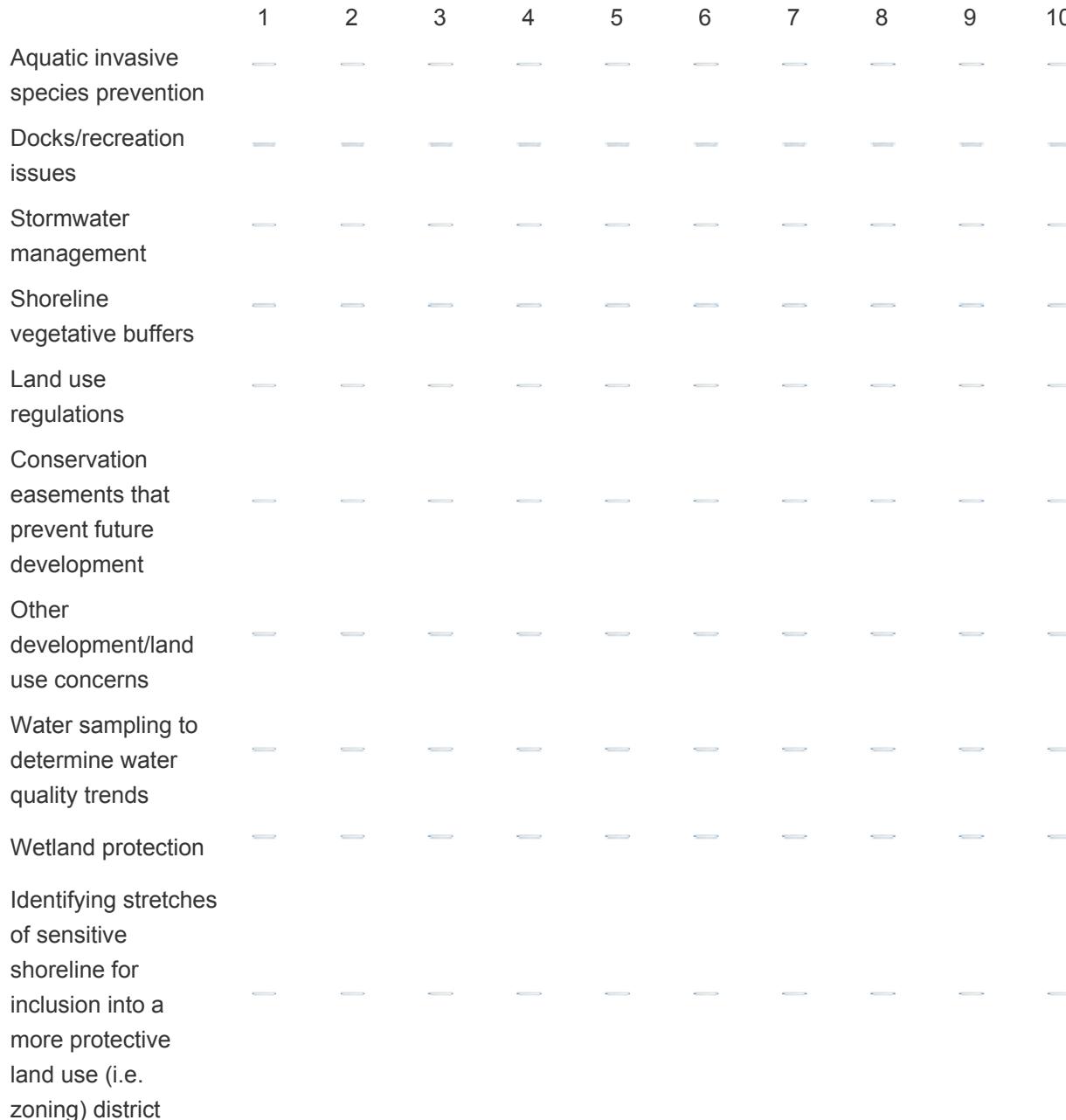
9. Before today, were you aware of the following? Check all that apply.

- That Crow Wing County has a local comprehensive water plan
- That Crow Wing County requires building permits
- That Crow Wing County requires permits for shoreland alterations (dirt moving, landscaping, etc.)
- That Crow Wing County Land Service Specialists conduct onsite inspections prior to issuing permits
- That Crow Wing County Land Service Specialists will meet a landowner onsite to answer any questions for free
- That the Crow Wing County website provided applications, factsheets, and information videos
- That the Crow Wing County website provided interactive maps & search tools for specific parcel information
- Whether the water quality of your lake/stream is improving or declining

10. Crow Wing County will be revising its water plan in 2012-2013. Of all the current regulations and activities devoted to surface water & ground water, please rank the

following in terms of what you think are the most important topics to focus additional efforts on in each category (Surface Water and Ground Water):

Surface Water - "1 is most important and 10 is least important"



11. Ground Water - "1 is most important and 5 is least important"



	1	2	3	4	5
Sealing of unused wells	<input type="radio"/>				
Well head protection	<input type="radio"/>				
Septic system inspections	<input type="radio"/>				
Septic system maintenance	<input type="radio"/>				

12. Please provide any additional comments or suggestions that you might have.**13. Optional: If you would like to be added to CWC's quarterly water plan e-newsletter and receive periodic updates, please provide your email in the space below:****14. Optional: Also, please indicate if you would like more information about the following. In order to receive this information, please make sure that you have provided your e-mail address in Question 13. Check all that apply.**

- Lake assessment/trend data
- Building permits
- Septic systems
- Shoreland alterations/ landscaping
- Water-oriented accessory structures
- Impervious surface calculations
- Stormwater management
- Shoreline restoration/buffers
- Wetlands
- Well sealing/testing
- Water planning
- Land development
- Land surveying

Conservation easements

Done

[Exit this survey](#)

Land Services 2012 Water Plan Survey

The following questions are about how you use and value your water resource. All responses are anonymous unless you choose to request specific information from Crow Wing County at the end of the survey. The information will be summarized and used to help with future water planning initiatives.

We want to thank you for your participation.

1. Do you own property on a lake or stream in Crow Wing County?

- Yes, lakeshore property
- Yes, stream property
- No, if you answered 'no', please skip ahead to Question 4

2. What are the top 2 things you use the water for?

<input type="checkbox"/> Fishing	<input type="checkbox"/> Canoeing/Kayaking
<input type="checkbox"/> Swimming	<input type="checkbox"/> Viewing/Scenic qualities
<input type="checkbox"/> General boating	<input type="checkbox"/> Hunting
<input type="checkbox"/> Water skiing/Personal watercraft	
<input type="checkbox"/> Other (please specify)	<input type="text"/>

3. Describe your % of natural shoreline (not mowed or maintained) from the water landward 15-20 ft. What best describes your lot?

- 0-25% of lot width is naturally vegetated
- 25%-50% of lot width is naturally vegetated
- 50%-75% of lot width is naturally vegetated
- 75%-100% of lot width is naturally vegetated

4. Are you planning to build or retire here?

- Yes, build or remodel within 5 years
- Yes, build or remodel within 10 years

- Yes, build or remodel in greater than 10 years
- Yes, retire within 5 years (no additional building planned)
- Yes, retire within 10 years (no additional building planned)
- Yes, retire in greater than 10 years (no additional building planned)
- Not sure
- No

Other (please specify)

5. How long have you owned your property?

- < 3 years
- 10-15 years
- 3 -5 years
- Over 20 years
- 5-10 years
- Over 50 years (owned or in the family)

6. If you have a septic system on your property, how often do you have the tank pumped?

- Every year
- >10 years
- 2-3 years
- Don't know
- 4-5 years
- No septic on property
- 6-10 years

7. Before today, were you aware of the following? Check all that apply.

- That Crow Wing County has a local comprehensive water plan
- That Crow Wing County requires building permits
- That Crow Wing County requires permits for shoreland alterations (dirt moving, landscaping, etc.)
- That Crow Wing County Land Service Specialists conduct onsite inspections prior to issuing permits
- That Crow Wing County Land Service Specialists will meet a landowner onsite to answer any questions for free
- That the Crow Wing County website provided applications, factsheets, and information videos
- That the Crow Wing County website provided interactive maps & search tools for specific parcel information
- Whether the water quality of your lake/stream is improving or declining

8. Crow Wing County will be revising its water plan in 2012-2013. Of all the current regulations and activities devoted to surface water & ground water, please rank the following in terms of what you think are the most important topics to focus additional efforts on in each category (Surface Water and Ground Water):

Surface Water - "1 is most important and 10 is least important"

	1	2	3	4	5	6	7	8	9	10
Aquatic invasive species prevention	—	—	—	—	—	—	—	—	—	—
Docks/recreation issues	—	—	—	—	—	—	—	—	—	—
Stormwater management	—	—	—	—	—	—	—	—	—	—
Shoreline vegetative buffers	—	—	—	—	—	—	—	—	—	—
Land use regulations	—	—	—	—	—	—	—	—	—	—
Conservation easements that prevent future development	—	—	—	—	—	—	—	—	—	—
Other development/land use concerns	—	—	—	—	—	—	—	—	—	—
Water sampling to determine water quality trends	—	—	—	—	—	—	—	—	—	—
Wetland protection	—	—	—	—	—	—	—	—	—	—
Identifying stretches of sensitive shoreline for inclusion into a more protective land use (i.e. zoning) district	—	—	—	—	—	—	—	—	—	—

9. Ground Water - "1 is most important and 5 is least important"

	1	2	3	4	5
Well water testing for nitrates and other contaminants	—	—	—	—	—
Sealing of unused wells	—	—	—	—	—
Well head protection	—	—	—	—	—
Septic system inspections	—	—	—	—	—
Septic system maintenance	—	—	—	—	—

10. Which of the below apply to your knowledge of stormwater best management practices (BMPs). Check all that apply.

- Aware that stormwater “runoff” from impervious surfaces and lawn areas can contribute nutrients and sediment to a lake that could reduce water quality
- Aware that temporary BMPs such as silt fence or erosion control blankets are helpful during construction to prevent erosion and sediment from entering the lake
- Aware of permanent stormwater BMPs such as rain gardens, berms, or rain barrels
- Have Implemented stormwater BMPs on my property
- Aware that certain land use activities may require a stormwater plan
- Aware of resources that will assist you in development of a stormwater plan

11. What is the biggest obstacle to implementing stormwater management or a shoreline buffer on your property? Check all that apply.

- Lack of funds
- Already in place
- Lack of knowledge / technical expertise
- Not interested
- Terrain/physical limitations

Other (please specify)

12. Please provide any additional comments or suggestions that you might have.

13. Optional: If you would like to be added to CWC's quarterly water plan e-newsletter and receive periodic updates, please provide your email in the space below:

14. Optional: Also, please indicate if you would like more information about the following. Check all that apply. In order to receive this information, please make sure that you have provided your email address in the above question.

<input type="checkbox"/> Lake assessment/trend data	<input type="checkbox"/> Shoreline restoration/buffers
<input type="checkbox"/> Building permits	<input type="checkbox"/> Wetlands
<input type="checkbox"/> Septic systems	<input type="checkbox"/> Well sealing/testing
<input type="checkbox"/> Shoreland alterations/ landscaping	<input type="checkbox"/> Water planning
<input type="checkbox"/> Water-oriented accessory structures	<input type="checkbox"/> Land development
<input type="checkbox"/> Impervious surface calculations	<input type="checkbox"/> Land surveying
<input type="checkbox"/> Stormwater management	<input type="checkbox"/> Conservation easements



APPENDIX 4
Stakeholder Priority Concerns Summary w/ CWC response

Priority Concerns Scoping Document - Comments Received

Date	Name	Comments	Response
Aug. 20, 2012	Don Crust, Upper South Long Lake	<p>Priority Concern 1: Invasive Species. Complete cooperative total effort needed among DNR, lake improvement districts, lake associations, watersheds, county, state, and individuals. All players must work together with a single objective. Neither the County nor the DNR has been able to provide the leadership necessary to accomplish what must be done.</p>	Crow Wing County plans to add "invasive species" as a priority concern.
Sept. 25, 2012	MN Pollution Control Agency (MPCA), submitted by Ron Shelito	<p>Priority Concern 1: Impaired Waters/Total Maximum Daily Load Studies. The federal Clean Water Act requires states to adopt water quality standards to protect the nation's waters. These standards define how much of a pollutant can be in a surface and/or ground water while still allowing it to meet its designated uses, such as for drinking water, fishing, swimming, irrigation or industrial purposes. Many of Minnesota's water resources cannot currently meet their designated uses because of pollution problems from a combination of point and nonpoint sources. Addressing impaired waters in LWM Plans is voluntary. However, the MPCA strongly encourages counties to consider how their LWM plans address impaired waters. It is suggested the LWM Plan: 1. Identify the priority the County places on addressing impaired waters, and how the County plans to participate in the development of total maximum daily load (TMDL) pollutant allocations and implementation of TMDLs for impaired waters; 2. Include a list of impaired waters and types of impairment(s); 3. Identify the pollutant(s) causing the impairment; 4. Address the commitment of the County to submit any data it collects to MPCA for use in identifying waters, provided plans, if any, for monitoring as yet unmonitored waters for a more comprehensive assessment of waters in the County; and 5. Describe actions and timing the County intends to take to reduce the pollutant(s) causing the impairment, including those actions that are part of an approved implementation plan for TMDLs. Regional TMDL reports for Mercury have been approved by the U.S. Environmental Protection Agency (EPA). Therefore, MPCA recommends counties address waters listed for pollutants/stressors other than mercury in their LWM plans. TMDL list enclosed. The County should continue participating with other units of government to develop and implement TMDL Implementation Plans once TMDL studies receive final approval from the EPA. Grant funding applications for TMDL impaired water implementation projects request citations from local water plans identifying water bodies as a County priorities. This documented commitment by a county may improve an application ranking and ultimately the County's ability to secure implementation funding.</p> <p>Priority Concern 2: Watershed Restoration and Protection Approach. Since 2007, the MPCA has been assessing waters by the process known as the Watershed Approach. The Watershed Approach process begins with the Intensive Watershed Monitoring and Assessment. The Watershed Approach project area is at the 8 digit hydrologic scale referred to as the Major Watershed Restoration & Protection Projects (WRAP). The Watershed Approach is a 10-year rotation for addressing waters of the state on the level of Minnesota's major watersheds. Since 2007, the MPCA and its partners have begun implementing this approach, as recommended by the Clean Water Council and directed by the Minnesota legislature. The Watershed Approach focuses on the watershed's condition as the starting point for water quality assessment, planning, implementation, and measurement of results. This approach may be modified to meet local conditions, based on factors such as watershed size, landscape diversity, and geographic complexity (e.g. Twin Cities Metro Area). This Watershed Approach will ultimately lead to a more comprehensive list of impaired and non-impaired waters. This list will be used to develop TMDLs and restoration strategies for impaired waters as well as protection strategies for non-impaired waters. The development of strategies will rely greatly on county participation and counties will likely be asked to provide priority areas to target restoration and protection activities. Targeted priorities will be an important step toward receiving funding for implementation activities. Communication and coordination between counties located in WRAP watersheds will be essential to develop a comprehensive and effective implementation plan. Recommended actions include: 1. Monitor & gather data and information; 2. Assess the data; 3. Establish implementation strategies to meet standards; 4. Implement water quality activities. Areas of the County that should be considered priority waters are the impaired water bodies and reaches of impaired water bodies on the Clean Water Act 303 [d] TMDL list. It is recommended the County consider impaired waters as a top priority for discussion in the LWM plan. The MPCA would like to acknowledge the steps Crow Wing County has taken to address water concerns thus far: 1. Updating shoreland regulations. The County has worked hard to create regulations that protect water resources and has also taken the time to effectively explain to citizens in the County the importance for doing so. 2. The County has also been cooperative in working with the local SWCD as well as the MPCA on water protection and restoration efforts. We continue to look forward to working with the County on these combined efforts.</p>	Crow Wing County agrees that impaired waters should be a focus, but as much or more focus should be placed on protecting non-impaired lakes. Fortunately, there are only a handful of lakes and one stream that are impaired. In addition to the water quality data collected by SWCD, MPCA, and others, Crow Wing County is actively tracking impervious surface coverage on all permits issued to determine if performance standards (such as stormwater management and shoreline buffers) are required for lots with high impervious surface coverage or to see if lakes with high impervious coverage have a declining water quality trend. Crow Wing County plans to continue to work with the SWCD and MPCA to integrate the latest available water quality data into its planning efforts.
Sept. 25, 2012	MN Dept. of Agriculture, submitted by Rob Sip	The Minnesota Department of Agriculture (MDA) has developed the following Water Plan website to discuss and illustrate MDA priority concerns and recommended courses of action for local county water plans. So, instead of a lengthy letter of recommendations and priority concerns, please go to the new website for MDA's information and guidance: www.mda.state.mn.us/protecting/waterprotection/waterplanning.aspx The MDA realizes that Crow Wing County does not have high levels of traditional crop and livestock production compared to central, northwest and southern Minnesota. However, some of the MDA comments regarding drainage, and targeting BMPs may have some potential relevance. Please share this weblink with other relevant water planning staff in Crow Wing County. If you have any comments or suggestions on the new website, please let me know what your thoughts are on the website. Your feedback will be helpful and is useful as the MDA further refines its recommendations and priority concerns in the future.	Comments Noted.

Oct. 2, 2012	Crow Wing Lakes & Rivers Alliance (LARA)	<p>Concern 1: Septic System Performance. Studies show that approximately 20% of individual septic systems in the county may not be in compliance. This poses potential health impacts for both surface and subsurface waters. Right now, the only way to have individual septic systems inspected and fixed is through the application of a building permit or the transfer of a property. We are also beginning to see potential negative impacts of water softener chlorides, which pass through the septic drainfield and leach into nearby lakes and rivers. The county needs to take the lead in a county-wide plan to get all individual septic systems inspected on a regular basis. This could first be set up as an incentive program rather than a strict enforcement process, but eventually, the county should lay the groundwork for a mandatory inspection program since public waters and public health could be in jeopardy. If inspections show a faulty system that needs to be repaired, the county should work with the property owner to identify low-interest loans or grants to allow them to upgrade the system. Available resource: Clean Water Fund dollars. Several years ago, the county pursued an initiative to require mandatory septic inspections, so some of the work has already been done, but this effort was abandoned after much public process and stakeholder investment. LARA believes this initiative remains relevant and should be revisited. Also, Alan Cibuzar has been doing some infrared flyovers on Pelican Lake to look at heat generation, which might be connected to faulty septic systems. If this method proves to provide good data on potential "hot spots," aerial surveys could be done county-wide.</p> <p>Concern 2: Watershed Management. The county water plan needs a broader watershed approach that considers activities both in the shoreland district and beyond that affect water quality, which means that the plan must promote better land use practices and water management within the county as well as look at the quality of water that enters or leaves our county. A comprehensive watershed management plan and coordinated implementation with adjacent counties that share our watersheds (incoming and outflowing) and coordination with MPCA Watershed Assessments of the three watersheds that fall within county borders. Implementation plans must include education and awareness of hydrologic boundaries and systems along with an emphasis on stewardship actions (both individually and community-wise). Available resources: The Minnesota Association of Soil and Water Conservation Districts (MASWCD) has endorsed the idea that county water planning be conducted on a watershed basis instead of county jurisdictional boundaries. BWSR supports this approach.</p> <p>Concern 3: Citizen Participation. Citizens feel like their input has been greatly marginalized over these past years, while political opinions have been greatly increased and have become more influential when it comes to creating and managing the county water plan. Many of our citizens know more about water quality than our elected leaders and they are critical in implementing water management strategies and actions. The county needs to embrace that knowledge rather than relegate it to after-the-fact commentary. Create a citizen-driven plan that continues to be citizen-driven once the plan is put into action. Mitch Brinks is a great addition to the county staff, but Mitch's job should be more about working with citizens and helping their voices and their actions to have positive impacts on water quality. LARA, WAPOA, and any of the county's active lake associations should be part of the citizen's advisory committee since 25% of the surface area of this county is water and over 70% of the tax base is collected from shoreland properties.</p>	<p>Since Crow Wing County began tracking compliance inspections in 2009, we have found that over 96% are in compliance with MN Rules Chapter 7080. Failing systems are upgraded within 10 months to a compliant system. Crow Wing County also conducted a septic assessment on nearly 1000 systems in the County from 2007-2010 and found similar results. Crow Wing County recently received a grant to help low-income landowners upgrade failing systems. The County is concerned about any septic systems that pose an imminent threat to public health and safety or are discharging into a surface water. However, nearly all of the hot-spots investigated by County staff to date have resulted in false-positives and none have resulted in a notice of non-compliance. Should a failing system be found via a hotspot or any other means, the County will pursue upgrading that system per MN Rules 7080. Managing wastewater was a priority in the 2008 water plan and is again proposed for the 2013-2023 plan. Crow Wing County recognizes that water management must cross political boundaries to be effective and will work with local and state partners to better protect and enhance our water resources. Water planning discussions with neighboring counties has already begun and an emphasis will likely be placed on border lakes in the upcoming water plan revision. Crow Wing County also recognizes the hard work of local lake associations, Crow Wing SWCD, the DNR, and MPCA to collect water samples for better information on watershed trends and stressors. The large-lake assessments completed in 2012 on lakes > 500 acres will be included in the water plan revision. This information and the intensive watershed monitoring coordinated by the MPCA is vital to ongoing water planning efforts. Since 2009, Crow Wing County has been dedicated to have an open, transparent public input process for all changes to policy or Ordinance. This has allowed all stakeholders to have their voices heard and have resulted in many positive changes. This process has been recognized by the Minnesota Association of Counties (AMC) and the National Association of Counties (NaCo) as worthy of awards.</p>
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Oct. 3, 2012	<p>MN Dept of Health, submitted by Mark Wettlaufer</p> <p>Concern 1: Protect ground water-based drinking water sources within Crow Wing County. All of Crow Wing County's citizens depend on ground water for drinking water. Wellhead protection efforts will result in public water suppliers developing and implementing wellhead protection plans. All public water suppliers within the county should be listed within the county management plan (see the below referenced web address for a complete listing of public water suppliers in Crow Wing County). Private wells also need protection from potential contaminant sources. This can be accomplished by maintaining proper setbacks to potential contaminant sources and related land use educational efforts. Protecting the drinking water for the majority of citizens within Crow Wing County is a wise and relatively inexpensive investment in the community's future. Additional information regarding drinking water supplies can be found at: www.health.state.mn.us/divs/eh/water/swp/swa/index.htm Actions needed: Acknowledgement and support of public water supply wellhead protection areas within the county. Work with community and noncommunity public water suppliers in development and implementation of wellhead protection activities. Consider wellhead protection areas when making land use decisions. When requested by a public water supplier, provide aid in efforts to locate wells for ground water modeling efforts undertaken in wellhead protection. Resources available: State, County and other local units of government or public water supplier staff time to provide input into development and implementation of wellhead protection plans and county-wide land use planning. Presently, the MDH through the Clean Water, Land & Legacy Amendment are making source water protection grants available to assist public water suppliers address drinking water protection issues. Grants program information is available at: http://www.health.state.mn.us/divs/eh/water/swp/grants/index.html As community and noncommunity nontransient public water suppliers complete wellhead protection plans there will be designated "drinking water supply management areas". As these areas are approved by the MDH they are posted on the above listed website. All noncommunity transient public water suppliers have a 200 foot radius surrounding the well that is designated as the wellhead protection area.</p> <p>Concern 2: Sealing unused, unsealed wells. Proper well abandonment is an effective means of protecting groundwater from potential contaminants that may be carried into an aquifer. Also, unused, unsealed wells can pose a safety hazard to children or animals and a potential liability to the well owner. Actions needed: Inventory where unused, unsealed wells may be located. Develop or continue a cost share program to aid property owners in sealing unused, unsealed wells. Available Resources: Local units of government staff for inventory purposes. Planning and zoning awareness to encourage well sealing where appropriate in land use decisions. Consider county board action to establish and fund a well sealing program and / or pursue State and Federal programs that fund well sealing. Priority Areas: Wellhead protection areas. Based upon detail of inventory, unused, unsealed wells that reach or penetrate to the same aquifer used by a public water supply system should be sealed first.</p> <p>Concern 3: Develop a local groundwater quality database. There is a need to better understand local ground water quality. Crow Wing County should consider developing water quality data bases for private wells that are compatible with the County Well Index and can be used in a geographic information system (GIS) format. The water quality data base can be used (1) to show the distribution of water quality problems, (2) characterize aquifers of concern, and (3) identify factors contributing to water quality problems. This can lead to better understanding of drinking water issues such as nitrate contamination or areas of arsenic in the county and the ability to track these contaminants. Currently, there is limited data available. Evaluate the possibility of establishing a ground water data base using local data. The Minnesota Department of Health will provide (1) the expertise to help the county develop their water quality data base and software for storing and retrieving water quality data. The entire county could benefit from this effort but areas of concern would include areas that currently are known to be impacted by nitrates and/or arsenic.</p> <p>Other comments: Here are some further thoughts or activities you may wish to consider or include as you revise the plan:</p> <ol style="list-style-type: none"> 1 – Host / coordinate a WHP "Summit" meeting every other year for communities implementing WHP Plans to discuss plan implementation issues or opportunities, how the county, MDH or other resource partners might be able to support or assist with WHP implementation. Discussions might include further help or consideration of well sealing as a priority in WHP areas in the county, assistance in promoting drinking water protection and awareness among residents, applying for SWP Grants, coordinating a web site or place to obtain drinking water protection information in Crow Wing County, etc. MDH would help / assist the county in planning and organizing this activity. 2 – Include WHP DWSMA maps as exhibits in the County Water Plan. (You can download them from the MDH SWP website or I can send you pdf maps if you are interested.) 3 - Explore with Environmental Services staff how the WHP DWSMA maps could be included or incorporated with the County Comprehensive Plan and Zoning Maps so WHP areas are considered in land use planning decisions in areas controlled by the county. Also, help / support the WHP communities advocate the inclusion of this information & maps where townships are doing their own planning and zoning. 4 – Support / assist communities to further understand or address potential contaminant threats to the aquifer used as a source of drinking water. Encourage PWS to apply for MDH SWP Grants or other grants to accomplish this. 5 – Continue to assist and support communities developing WHP Plans. 6 – Participate in MDH pilot projects or grants to assist small public water supplier's development and implement WHP Plans. 7 – Explore the use of the crow wing county geologic atlas in land use planning and overall drinking water protection in the county. 	<p>Crow Wing County plans to include wellhead protection maps in the upcoming water plan rewrite and plans to continue to work with local communities as part of their wellhead protection plan update process. Crow Wing County plans to list "well sealing" as an action step under the proposed priority concern of drinking water protection. In addition, the County currently has cost-share assistance to help seal private wells. Crow Wing County plans to meet with Mark to further explore the possibility of a groundwater quality database.</p>
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Oct. 4, 2012	Natural Resources Conservation Service (NRCS), submitted by Jessica Weis	<p>Concern 1: Agricultural Lands. Water quality and soil quality are two resource concerns in the county. A large portion of agricultural land is found in the southern part of the county. The Mississippi River and Nokasippi River flows through these areas. We need to address these concerns at the forefront and do our part by providing healthier waters to the public. Technical and financial assistance should be offered to folks with agricultural lands so they can do their part in helping the environment, in partnership with the NRCS. Priority Area: Agricultural lands south of the Mississippi River. Ag concerns include residue management, cover crops, nutrient management, ag runoff, grazing, especially along streams, forestry BMPs.</p>	<p>Crow Wing County plans to continue to work with the NRCS to help farmers implement conservation activities. In addition, groundwater monitoring for nitrates in agricultural areas is a proposed priority in the water plan revision.</p>
Oct. 5, 2012	Crow Wing Soil & Water Conservation District (SWCD), submitted by Melissa Barrick	<p>Concern 1: Protect CWC Surface and ground water. Increase population growth; change in landuse from forest to urban and from forest to cropland. Protection will maintain high property values, county revenues, and tourism. Protection is most cost effective way to protect good water quality areas of the county than to enhance or restore the water quality. Identify sensitive shoreline and aquatic resources for protection. Create specific ordinances for sensitive shoreline areas identified. Continue to support citizen monitoring programs and collection of water quality data. Identify specific best management practices (BMPs) for protection strategies: i.e. conservation easements, support private landowner forest management, wellhead protection plan and implementation, and agriculture land management. Enforce current county ordinances. Educate and encourage contractors and landowners to complete BMPs on public and private lands including; businesses, landowners, and Local Government Units (LGUs). Educate and promote the stop of spread of AIS and Terrestrial Invasive Species practices for non-invested water bodies. Available Resources: DNR, MPCA, CWC, NRCS, SWCD, TLWD, LID's, LGU's, Lake Associations, Conservation clubs, Schools, Non-profits, CWC businesses. Priority Areas: Cold water fisheries lakes (Tullibee & Trout), Wild Rice Lakes, Bay, Crooked, Hanks, Lower Mission, North Long (East Bay), Smith, Clearwater, Sugar Bay, Ossawinamakee, Pelican, Portage, Rabbit (East & West Bay), Roosevelt (South Bay), Nokasippi River, Pine River south of Crosslake, Daggett Brook, and Mississippi River. CWC prioritized groundwater based off CWC Atlas, Wellhead Protection Plans, and the City of Brainerd and Baxter high vulnerability areas. Lakes with no water quality trends: Edward, Hubert, Red Sand, Roosevelt (North Bay), and Round. Subwatersheds that contain than less 25 percent disturbed land or developed land (MN DNR Fisheries Protection Study).</p> <p>Concern 2: Enhance CWC Surface and subsurface water. Large Lake Assessments and MPCA Watershed project indicate declining water quality trends in area lakes and rives. Water resources are the number one economical value of CWC. Support and continue citizen monitoring program, lake screening process, and MPCA watershed approach. Utilize advanced technologies to target BMPs based off subwatersheds i.e stormwater retrofit analysis, MinnFarm model, P8 model, LiDara data, and other models. Maintain and support all LGU requirements for riparian development and re-development. Utilize lake associations, nonprofits, schools, and other community leaders to encourage and provide incentives for LGU's, landowners, and businesses to complete: stormwater management, stormwater landscape, agricultural, forestry, industrial, and SSTS BMPs. Available Resources: DNR, MPCA, CWC, NRCS, SWCD, TLWD, LGU's, LID's, Lake Associations, Conservation clubs, Schools, Non-profits, CWC businesses. Priority Areas: Waterbodies with declining trend in water quality: Upper Hay Creek, Little Pine River (north whitefish chain), Mississippi, Big Trout, Gull, North Long (West Bay), Serpent, Whitefish (Lower), North Long (Main Bay), Emily, Lower Cullen, Rush, and Upper Mission. Lakes with no trends: Camp, Cross, Gilbert, Lower Hay, South Long, Upper South Long. Lakes invested with AIS or areas county invested with terrestrial invasives.</p> <p>Concern 3: Restore CWC Surface and subsurface water. Large Lake Assessments and MPCA Watershed project indicate CWC lakes and rivers are not meeting state standards for water quality. Water resources are the number one economical value of CWC. Impaired waters are required to be restored. Support and continue citizen monitoring program and MPCA watershed approach. Utilize advanced technologies to target BMPs based on subwatersheds i.e stormwater retrofit analysis, MinnFarm model, P8 model, LiDara data, wellhead protection high vulnerabilities studies and other models. Utilize lake associations, nonprofits, schools, and other community leaders to help complete BMPs to reduce nonpoint pollution: stormwater, agricultural, forestry, industrial, and SSTS. Collaborate with LGU's, citizens, nonprofits, and others to support Total Maximum Daily Load Studies and implementation plans. Available Resources: MPCA, CWC, NRCS, SWCD, TLWD, LID's, LGU's, Lake Associations, Conservation clubs, Schools, Non-profits, CWC businesses. Priority Areas: Waterbodies that are below state water quality standards: Little Buffalo Creek, Whisky Creek, Mississippi River, Upper Hay, Upper Whitefish, Sibley, Crow Wing, Serpent, Platte, Kego, and Mayo. Lakes that have a high ration of Total Lakeshed to Lake Ratio. Subwatersheds that contain greater than 25 % disturbed or developed (MN DNR Fisheries protection study). Lakes invested with AIS or areas county invested with terrestrial invasives.</p>	<p>Crow Wing County is blessed to have many watersheds where protection strategies can be achieved (vs. restoration). Many of the strategies and priority areas mentioned will be incorporated into the water plan revision.</p>

Oct. 16, 2012	Board of Water & Soil Resources (BWSR), submitted by Dan Steward	<p>Concern 1: Minor Watershed GIS Data - Foundation for Updating. Since the last update of the Crow Wing County Water Plan, the county helped initiate the large lake screening process. This effort which focused first on lakes over 1,000 acres, and then in phase II lakes over 500 acres, used existing data to place large lakes into one of four distinct categories. The decisions were data based and resulted in lakes being either of increasing water quality, stable water quality, declining water quality or not enough data to determine water quality trend. This simple process has been recognized as a useful tool for counties to review lake conditions or trends and defend priorities.</p> <p>In the past year the Mississippi Headwaters Board has begun a similar process focused on the minor watersheds along the first four hundred miles of the river. It is based on the same concepts that guided the large lake screening process. The idea is to start to differentiate between minor watersheds with the use of existing data. Some watersheds are of more concern from a water quality perspective than others. Many watersheds are heavily forested, and are not a high priority for management. During the 2012 session, the legislature gave BWSR new discretion to work with local units of government to help move water plans into more of a watershed focus. Given that Crow Wing County is already helping lead with two minor watershed oriented planning processes, it might be a good time to bring this concept into the water plan update. By utilizing existing data, the county can help move the water planning process towards water plans that are more specific, more data driven, better identify priority resources, and fully watershed based. The county could organize its water plan update by major watershed units, and then the minor watersheds within each major. By selecting key GIS layers as indicators of watershed condition, the county could build a much more specific plan, without additional cost. The county would then be in position to draw conclusions and priorities based on data. Geographic Information Systems and existing information layers such as land cover, land ownership, topography and hydrology are available on a statewide basis.</p> <p>Concern 2: Erosion and Sediment Control on Developing Areas Throughout Crow Wing County. In addition to development in shoreland or riparian areas, development in the non-shoreland areas of the county can also deliver nutrients and sediment to Crow Wing County's high value surface waters. What actions are needed? Vigilant inspection of sites where disturbance is occurring. Continue to participate in the MPCA pilot stormwater permitting project, continue to train realtors, developers, contractors, and local officials to the need for stormwater management. What resources may be available to accomplish the actions? Erosion control training for contractors and local officials, SWCD board and staff, various grant programs. What area(s) of the county is high priority? Tributary watersheds of recreational lakes.</p> <p>Concern 3: Forest Land Conversion and Water Quality Impacts. Crow Wing County's forest cover has long protected water quality in the adjacent lakes and streams. Annual Phosphorus discharge from forested landscapes are very low. Forest landscapes are now under increasing pressure for conversion to residential or commercial land uses. These more developed land uses have "harder" surfaces that result in increased runoff. Individual lakes vary considerably in the size of their watersheds and the amount of forest conversion they can tolerate before water quality declines. What actions are needed? A comprehensive forest land protection plan. The water plan could set the stage for such a plan. Work with agencies and non-profits to protect forestland. Provide private landowners with technical information to encourage retention of forestland. What resources may be available to accomplish the actions? Forest legacy program, forest stewardship program, SWCD forest technical assistance. What area(s) of the county is high priority? Large blocks of private forestland adjacent to major recreational lakes.</p>	<p>Crow Wing County is fortunate to have a large amount of data available to base the water plan update on. Large lake assessments & impervious surface studies have been (or are being) completed for all lakes greater than 500 acres in size. In addition, the DNR, MPCA, and others have developed priority resources to focus on that are based on fisheries, wildlife, or impaired criteria. The Mississippi Headwaters Board is working on an assessment of the Mississippi River and it's adjacent minor watersheds. By breaking the County into smaller, more manageable watershed units for the basis of analysis while utilizing this available data, as Dan suggests, makes a lot of sense. Erosion and sediment control are already included (along with stormwater management) as a priority.</p>
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APPENDIX 5
Stakeholder Priority Concerns Input

Priority Concerns Input
Crow Wing County Local Water Management Plan
Update

Agency/organization Crow Wing County Land Services

Submitted by **Don Crust**

Submission deadline: October 5, 2012

Priority Concern 1:

Regarding this concern please answer the following:

***Why is it important the plan focus on this concern
(include or cite relevant data)? Invasive Species
issues***

***What actions are needed? Complete cooperative total
effort among DNR, lake districts, lake associations, watersheds,
county and state and individuals.***

***What resources may be available to accomplish the
actions? All players must work together with a single objective.
Neither the county nor the DNR has been able to provide the
leadership necessary to accomplish what must be done soon.***

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

***What area(s) of the county is high priority? Obviously, our
lake: Upper South Long.....***

Priority Concern 2:

Regarding this concern please answer the following:

***Why is it important the plan focus on this concern
(include or cite relevant data)?***

What actions are needed?

***What resources may be available to accomplish the
actions?***

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What area(s) of the county is high priority?

Priority Concern 3:

Regarding this concern please answer the following:

***Why is it important the plan focus on this concern
(include or cite relevant data)?***

What actions are needed?

What resources may be available to accomplish the actions?

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What area(s) of the county is high priority?



Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | 651-282-5332 TTY | www.pca.state.mn.us | Equal Opportunity Employer

September 25, 2012

Mr. Ron Shelito, Northern Regional Supervisor
Board of Water and Soil Resources
1601 Minnesota Drive
Brainerd, MN 56401

RE: Crow Wing County Priority Concerns
Local Water Management Program

Dear Mr. Shelito:

The Minnesota Pollution Control Agency (MPCA) is pleased to provide priority concerns for consideration in Crow Wing County (County) Local Water Management (LWM) planning efforts. We trust these priority concerns will be helpful with developing the forthcoming Priority Concerns Scoping Document (PCSD) and LWM plan.

1. Impaired Waters/Total Maximum Daily Load Studies

The federal Clean Water Act requires states to adopt water quality standards to protect the nation's waters. These standards define how much of a pollutant can be in a surface and/or ground water while still allowing it to meet its designated uses, such as for drinking water, fishing, swimming, irrigation or industrial purposes. Many of Minnesota's water resources cannot currently meet their designated uses because of pollution problems from a combination of point and nonpoint sources.

Addressing impaired waters in LWM Plans is voluntary. However, the MPCA strongly encourages counties to consider how their LWM Plans address impaired waters, as identified on the "Final List of Impaired Waters" available on MPCA's website at:

<http://www.pca.state.mn.us/water/tmdl/tmdl-303dlist.html#finallist>

It is suggested the LWM Plan:

- identify the priority the County places on addressing impaired waters, and how the County plans to participate in the development of total maximum daily load (TMDL) pollutant allocations and implementation of TMDLs for impaired waters;
- include a list of impaired waters and types of impairment(s) (see table below);
- identify the pollutant(s) causing the impairment (see MPCA website);
- address the commitment of the County to submit any data it collects to MPCA for use in identifying impaired waters, provide plans, if any, for monitoring as yet unmonitored waters for a more comprehensive assessment of waters in the County; and
- describe actions and timing the County intends to take to reduce the pollutant(s) causing the impairment, including those actions that are part of an approved implementation plan for TMDLs.

Regional TMDL reports for mercury have been approved by the U.S. Environmental Protection Agency (EPA). Therefore, MPCA recommends counties address waters listed for pollutants/stressors other than mercury in their LWM plans.

The 2010 List of Impaired Waters in the County, as well as the draft 2012 impairments identified in the Crow Wing Watershed Restoration and Protection Project (WRAP) are provided in the table below.

Clean Water Act Section 303 [d] List of Impaired Waters in the County.

Reach

Assessment Unit	ID	Impaired Use	Impairment Cause	Impairment Status
Buffalo Creek (Little Buffalo Creek): Headwaters to Mississippi R	07010104-523	AqLife	Fishes Bioassessments	TMDL Required
Buffalo Creek (Little Buffalo Creek): Headwaters to Mississippi R	07010104-523	AqLife	Aquatic Macroinvertebrate Bioassessments	TMDL Required
Crow Wing River: Gull R to Mississippi R	07010106-501	AqCons	Mercury in Fish Tissue	TMDL Approved
Mississippi River: Brainerd Dam to Crow Wing R	07010104-516	AqCons	Mercury in Fish Tissue	TMDL Approved
Mississippi River: Crow Wing R to Nokasippi R	07010104-515	AqCons	Mercury in Fish Tissue	TMDL Approved
Mississippi River: Little Willow R to Pine R	07010104-517	AqCons	Mercury in Fish Tissue	TMDL Approved
Mississippi River: Nokasippi R to Crow Wing/Morrison County border	07010104-576	AqCons	Mercury in Fish Tissue	TMDL Approved
Mississippi River: Pine R to Brainerd Dam	07010104-501	AqLife	Oxygen, Dissolved	Removal From Inventory Proposed to USEPA
Mississippi River: Pine R to Brainerd Dam	07010104-501	AqCons	Mercury In Fish Tissue	TMDL Approved

Lakes

Assessment Unit	ID	Impaired Use	Impairment Cause	Impairment Status
Crow Wing	18-0155-00	AqRec	Nutrient/Eutrophication Biological Indicators	TMDL Required
Platte	18-0088-00	AqRec	Nutrient/Eutrophication Biological Indicators	TMDL Required
Kego	18-0293-00	AqRec	Nutrient/Eutrophication Biological Indicators	TMDL Required
Sibley	18-0404-00	AqRec	Nutrient/Eutrophication Biological Indicators	TMDL Required
Mayo	18-0408-00	AqRec	Nutrient/Eutrophication Biological Indicators	TMDL Required
Cedar: West Bay	01-0209-03	AqCons	Mercury In Fish Tissue	TMDL Approved
Moulton	01-0212-00	AqCons	Mercury In Fish Tissue	TMDL Required
Borden	18-0020-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Bay	18-0034-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Clearwater	18-0038-00	AqCons	Mercury In Fish Tissue	TMDL Approved
Platte	18-0088-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Serpent	18-0090-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Rabbit: East Portion	18-0093-01	AqCons	Mercury In Fish Tissue	TMDL Approved
Rabbit: West Portion	18-0093-02	AqCons	Mercury In Fish Tissue	TMDL Approved
Nokay	18-0104-00	AqCons	Mercury in Fish Tissue	TMDL Approved

Assessment Unit	ID	Impaired Use	Impairment Cause	Impairment Status
Black Hoof	18-0117-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Rice	18-0145-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Sebie	18-0161-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Ruth	18-0212-00	AqCons	Mercury in Fish Tissue	TMDL Approved
West Fox	18-0297-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Edward	18-0305-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Pelican	18-0308-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Whitefish	18-0310-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Cross Lake Reservoir	18-0312-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Ossawinnamakee	18-0352-00	AqCons	Mercury in Fish Tissue	TMDL Required
North Long	18-0372-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Round	18-0373-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Red Sand	18-0386-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Lower Cullen	18-0403-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Upper Hay	18-0412-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Cedar: Main Basin	01-0209-01	AqCons	Mercury in Fish Tissue	TMDL Approved
Gull	11-0305-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Mille Lacs	48-0002-00	AqCons	Mercury in Fish Tissue	TMDL Approved
Round	01-0204-00	AqCons	Mercury in Fish Tissue	TMDL Approved

Draft/public noticed TMDL studies and approved TMDLs and implementation plans can be viewed on MPCA's website at: <http://www.pca.state.mn.us/index.php/water/water-types-and-programs/minnesotas-impaired-waters-and-tmdl/tmdl-projects/tmdl-projects-and-staff-contacts.html>

The County should continue participating with other units of government to develop and implement TMDL Implementation Plans once TMDL studies receive final approval from the EPA. Grant funding applications for TMDL impaired water implementation projects may request citations from local water plans identifying water bodies as County priorities. This documented commitment by a county may improve an applications ranking and ultimately the County's ability to secure implementation funding.

2. Watershed Restoration and Protection Approach

Since 2007, the MPCA has been assessing waters by the process known as the Watershed Approach (<http://www.pca.state.mn.us/index.php/water/water-types-and-programs/surface-water/watershed-approach/watershed-approach.html>). The Watershed Approach process begins with the Intensive Watershed Monitoring and Assessment. The Watershed Approach project area is at the 8 digit hydrologic scale referred to as the Major Watershed Restoration & Protection Projects (WRAP).

The Watershed Approach is a 10-year rotation for addressing waters of the state on the level of Minnesota's major watersheds. Since 2007, the MPCA and its partners have begun implementing this approach, as recommended by the Clean Water Council <http://www.pca.state.mn.us/index.php/view-document.html?gid=6125> and directed by the Minnesota Legislature.

The Watershed Approach focuses on the watershed's condition as the starting point for water quality assessment, planning, implementation, and measurement of results. This approach may be modified to meet local conditions, based on factors such as watershed size, landscape diversity, and geographic complexity (e.g., Twin Cities Metro Area). This Watershed Approach will ultimately lead to a more comprehensive list of impaired and non-impaired waters. This list will be used to develop TMDLs and restoration strategies for impaired waters as well as protection strategies for non-impaired waters. The development of strategies will rely greatly on county participation and counties will likely be asked to provide priority areas to target restoration and protection activities. Targeted priorities will be an important step toward receiving funding for implementation activities. Communication and coordination between counties located in WRAP watersheds will be essential to develop a comprehensive and effective implementation plan.

Recommended actions include:

- **Monitor and gather data and information.** The MPCA employs an intensive watershed monitoring schedule that will provide comprehensive assessments of all of the major watersheds on a 10-year cycle. This schedule provides intensive monitoring of streams and lakes within each major watershed to determine overall health of the water resources, to identify impaired waters, and to identify those waters in need of additional protection to prevent future impairments. It is suggested that the LWM Plan address Surface Water Assessment Grants (SWAGs) and additional county monitoring that may be used in the WRAP areas.
- **Assess the data.** Based on results of intensive watershed monitoring in step one, MPCA staff and its partners conduct a rigorous process to determine whether or not water resources meet water quality standards and designated uses. Waters that do not meet water quality standards are listed as impaired waters. It is suggested that the LWM Plan address data submittal and representation to participate in the assessment process for use in the WRAP. The MPCA uses a system called EQuIS (Environmental Quality Information System) to store water quality data from more than 17,000 sampling locations across the state. EQuIS contains information from Minnesota streams and lakes dating back to 1926. EQuIS replaces an older system, STORET, which was in use until September 2009. All data previously housed in STORET has been moved to EQuIS.
- **Establish implementation strategies to meet standards.** Based on the watershed assessments, a TMDL study with restoration and/or protection strategy is completed. Existing local water plans and water body studies are incorporated into the planning process. It is suggested that the LWM Plan address participation in development of restoration and protection strategies developed through the WRAP area as well as priority management zones.
- **Implement water quality activities.** Included in this step are all traditional permitting activities, in addition to programs and actions directed at nonpoint sources. Partnerships with state agencies and various local units of government, including watershed districts, municipalities, and Soil and Water Conservation Districts, will be necessary to implement these water quality activities. It is suggested that the LWM Plan address implementation of restoration and protection strategies once developed through the WRAP project.

Financial resources for coordination and communication between counties could include, but not be limited to, grants from the Clean Water Fund, Clean Water Partnership, Surface Water Assessment Grants, Legislative Citizens Commission on Minnesota Resources and Section 319. Technical assistance could be sought from an advisory group of local and state agency staff, local decision makers, and landowners.

Areas of the County that should be considered priority waters are the impaired water bodies and reaches of impaired water bodies on the Clean Water Act 303 [d] TMDL List. It is recommended the County consider impaired waters as a top priority for discussion in the LWM Plan.

There are several lakes (listed below) that are near the levels for impairments for excess nutrients. These lakes should also be a priority to prevent them from becoming impaired.

NEAR OR EXCEEDS THRESHOLD					
18-0341-00	CRYSTAL	NA	IF	Of concern	TP, Chl-a, Secchi
18-0304-00	PERCH	IF	FS	Of concern	Secchi, data limited?
18-0329-00	GARDEN	NA	FS	Of concern	Secchi, depth limited?
18-0373-00	ROUND	FS	FS	Of concern	Chl-a
18-0376-00	UPPER CULLEN	FS	FS	Of concern	TP, Chl-a, Secchi
18-0399-00	NISSWA	NA	FS	Of concern	Chl-a, Secchi

MPCA Environmental Data Access System

The water quality section of MPCA's Environmental Data Access (EDA) system allows visitors to find and download data from surface water monitoring sites located throughout the state. Where available, conditions of lakes, rivers or streams that have been assessed can be viewed. We encourage the County to visit this site for water quality monitoring data which may be useful with LWM planning efforts:
<http://www.pca.state.mn.us/data/edaWater/index.cfm>

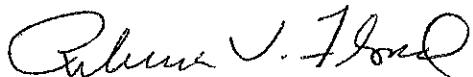
The MPCA would like to acknowledge the steps Crow Wing County has taken to address water concerns thus far.

- Updating shoreland regulations. The County has worked hard to create regulations that protect water resources and has also taken the time to effectively explain to citizens in the County the importance for doing so.
- The County has also been cooperative in working with the local Soil and Water Conservation District as well as the MPCA on water protection and restoration efforts. We continue to look forward in working with the County on these combined efforts.

If we may be of further assistance, please contact Bonnie Finnerty in the Brainerd Regional Office at 218-316-3897 or Dave L. Johnson in the St. Paul Office at 651-757-2470.

Thank you and we look forward to reviewing the forthcoming PCSD and LWM Plan.

Sincerely,



Rebecca J. Flood
Assistant Commissioner

RJF/DLJ:kb:bt

cc: Mitch Brinks, Crow Wing County

Priority Concerns Input
Crow Wing County Local Water Management Plan Update

Agency/organization Crow Wing County Land Services

Submitted by Crow Wing County Lakes and Rivers Alliance (LARA)

Submission deadline: October 5, 2012

Priority Concern 1:Septic System Performance

Regarding this concern please answer the following:

Why is it important the plan focus on this concern (include or cite relevant data)? Studies show that approximately 20% of individual septic systems in the county may not be in compliance. This poses potential health impacts for both surface and subsurface waters. Right now, the only way to have individual septic systems inspected and fixed is through the application of a building permit or the transfer of a property. We are also beginning to see potential negative impacts of water softener chlorides, which pass through the septic drainfield and leach into nearby lakes and rivers.

What actions are needed? The county needs to take the lead in a county-wide plan to get all individual septic systems inspected on a regular basis. This could first be set up as an incentive program rather than a strict enforcement process, but eventually, the county should lay the groundwork for a mandatory inspection program since public waters and public health could be in jeopardy. If inspections show a faulty system that needs to be repaired, the county should work with the property owner to identify low-interest loans or grants to allow them to upgrade the system.

What resources may be available to accomplish the actions? Clean Water Fund dollars. Several years ago, the county pursued an initiative to require mandatory septic inspections, so some of the work has already been done, but this effort was abandoned after much public process and stakeholder investment. LARA believes this initiative remains relevant and should be revisited. Also, Alan Cibuzar has been doing some infrared flyovers on Pelican Lake to look at heat generation, which might be connected to faulty septic systems. If this method proves to provide good data on potential "hot spots," aerial surveys could be done county-wide.

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What area(s) of the county is high priority? The whole county

Priority Concern 2:Watershed Management

Regarding this concern please answer the following:

Why is it important the plan focus on this concern (include or cite relevant data)? The county water plan needs a broader watershed approach that considers activities both in the shoreland district and beyond that affect water quality, which means that the plan must promote better land use practices and water management within the county as well as look at the quality of water that enters or leaves our county.

What actions are needed? A comprehensive watershed management plan and coordinated implementation with adjacent counties that share our watersheds (incoming and outflowing) and coordination with MPCA Watershed Assessments of the three watersheds that fall within county borders.

Implementation plans must include education and awareness of hydrologic boundaries and systems along with an emphasis on stewardship actions (both individually and community-wise).

What resources may be available to accomplish the actions? The Minnesota Association of Soil and Water Conservation Districts (MASWCD) has endorsed the idea that county water planning be conducted on a watershed basis instead of county jurisdictional boundaries. BWSR supports this approach.

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What area(s) of the county is high priority? The whole county

Priority Concern 3: Citizen Participation in the Management of the Plan

Regarding this concern please answer the following:

Why is it important the plan focus on this concern (include or cite relevant data)? Citizens feel like their input has been greatly marginalized over these past years, while political opinions have been greatly increased and have become more influential when it comes to creating and managing the county water plan. Many of our citizens know more about water quality than our elected leaders and they are critical in implementing water management strategies and actions. The county needs to embrace that knowledge rather than relegate it to after-the-fact commentary.

What actions are needed? Create a citizen-driven plan that continues to be citizen-driven once the plan is put into action. Mitch Brinks is a great addition to the county staff, but Mitch's job should be more about working with citizens and helping their voices and their actions to have positive impacts on water quality.

What resources may be available to accomplish the actions? LARA, WAPOA, and any of the county's active lake associations should be part of the citizen's advisory committee since 25% of the surface area of this county is water and over 70% of the tax base is collected from shoreland properties.

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What area(s) of the county is high priority? The whole county.

Priority Concerns & Actions Input
Crow Wing County Local Water Management Plan Update

Agency/organization: Minnesota Department of Health

Submitted by: **Mark Wettlaufer, Source Water Protection Unit, St. Cloud**

Submission deadline: October 5, 2012

Priority Concern 1:

Protect ground water-based drinking water sources within Crow Wing County

Regarding this concern please answer the following:

Why is it important the plan focus on this concern (include or cite relevant data)?

All of Crow Wing County's citizens depend on ground water for drinking water. Wellhead protection efforts will result in public water suppliers developing and implementing wellhead protection plans. All public water suppliers within the county should be listed within the county management plan (see the below referenced web address for a complete listing of public water suppliers in Crow Wing County). Private wells also need protection from potential contaminant sources. This can be accomplished by maintaining proper setbacks to potential contaminant sources and related land use educational efforts.

Protecting the drinking water for the majority of citizens within Crow Wing County is a wise and relatively inexpensive investment in the community's future. Additional information regarding drinking water supplies can be found at:

www.health.state.mn.us/divs/eh/water/swp/swa/index.htm

What actions are needed?

Acknowledgement and support of public water supply wellhead protection areas within the county. Work with community and noncommunity public water suppliers in development and implementation of wellhead protection activities. Consider wellhead protection areas when making land use decisions. When requested by a public water supplier, provide aid in efforts to locate wells for ground water modeling efforts undertaken in wellhead protection.

What resources may be available to accomplish the actions?

State, County and other local units of government or public water supplier staff time to provide input into development and implementation of wellhead protection plans and county-wide land use planning. Presently, the MDH through the Clean Water, Land & Legacy Amendment are making source water protection grants available to assist public water suppliers address drinking water protection issues. Grants program information is available at:

<http://www.health.state.mn.us/divs/eh/water/swp/grants/index.html>

What area(s) of the county is high priority?

As community and noncommunity nontransient public water suppliers complete wellhead protection plans there will be designated "drinking water supply management areas". As these areas are approved by the MDH they are posted on the above listed website. All noncommunity transient public water suppliers have a 200 foot radius surrounding the well that is designated as the wellhead protection area.

Priority Concern 2:

Sealing unused, unsealed wells

Regarding this concern please answer the following:

Why is it important the plan focus on this concern (include or cite relevant data)?

Proper well abandonment is an effective means of protecting groundwater from potential contaminants that may be carried into an aquifer. Also, unused, unsealed wells can pose a safety hazard to children or animals and a potential liability to the well owner.

What actions are needed?

Inventory where unused, unsealed wells may be located. Develop or continue a cost share program to aid property owners in sealing unused, unsealed wells.

What resources may be available to accomplish the actions?

Local units of government staff for inventory purposes. Planning and zoning awareness to encourage well sealing where appropriate in land use decisions. Consider county board action to establish and fund a well sealing program and / or pursue State and Federal programs that fund well sealing.

What area(s) of the county is high priority?

Wellhead protection areas. Based upon detail of inventory, unused, unsealed wells that reach or penetrate to the same aquifer used by a public water supply system should be sealed first.

Priority Concern 3:

Develop a local ground-water quality data base.

Regarding this concern please answer the following:

Why is it important the plan focus on this concern (include or cite relevant data)?

There is a need to better understand local ground water quality. Crow Wing County should consider developing water quality data bases for private wells that are compatible with the County Well Index and can be used in a geographic information system (GIS) format. The water quality data base can be used (1) to show the distribution of water quality problems, (2) characterize aquifers of concern, and (3) identify factors contributing to water quality problems. This can lead to better understanding of drinking water issues such as nitrate contamination or areas of arsenic in the county and the ability to track these contaminants. Currently, there is limited data available.

What actions are needed?

Evaluate the possibility of establishing a ground water data base using local data.

What resources may be available to accomplish the actions?

The Minnesota Department of Health will provide (1) the expertise to help the county develop their water quality data base and software for storing and retrieving water quality data.

What area(s) of the county is high priority?

The entire county could benefit from this effort but areas of concern would include areas that currently are known to be impacted by nitrates and/or arsenic.

Priority Concerns Input
Crow Wing County Local Water Management Plan Update

Agency/organization Crow Wing County Land Services

Submitted by Jessica Weis, District Conservationist, USDA-Natural Resources Conservation Service (NRCS)

Submission deadline: October 5, 2012

Priority Concern 1:Agricultural Lands

Regarding this concern please answer the following:

Why is it important the plan focus on this concern (include or cite relevant data)? Water quality and soil quality are two resource concerns in the county. A large portion of agricultural land is found in the southern part of the county. The Mississippi River and Nokasippi River flows through these areas. We need to address these concerns at the forefront and do our part by providing healthier waters to the public.

What actions are needed? Technical and financial assistance should be offered to folks with agricultural lands so they can do their part in helping the environment.

What resources may be available to accomplish the actions? Partnership with the USDA-NRCS (include contact names, funding sources, partnerships, citizen volunteers, etc.)

What area(s) of the county is high priority? Agricultural lands south of the Mississippi River.

Priority Concern 2:_____

Regarding this concern please answer the following:

Why is it important the plan focus on this concern (include or cite relevant data)?

What actions are needed?

What resources may be available to accomplish the actions?

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What area(s) of the county is high priority?

Priority Concern 3:_____

Regarding this concern please answer the following:

Why is it important the plan focus on this concern (include or cite relevant data)?

What actions are needed?

What resources may be available to accomplish the actions?

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What area(s) of the county is high priority?

Priority Concerns Input

Crow Wing County Local Water Management Plan Update

Agency/organization Crow Wing County Land Services

Submitted by Crow Wing SWCD

Submission deadline: 10-05-12

Priority Concern 1:Protect CWC surface and groundwater.

Regarding this concern please answer the following:

Why is it important the plan focus on this concern (include or cite relevant data)? Increase population growth; change in landuse from forest to urban and from forest to cropland. Protection will maintain high property values, county revenues, and tourism. Protection is most cost effective way to protect good water quality areas of the county than to enhance or restore the water quality.

What actions are needed? Identify sensitive shoreline and aquatic resources for protection.

Create specific ordinances for sensitive shoreline areas identified. Continue to support citizen monitoring programs and collection of water quality data. Indentify specific best management practices (BMPs) for protection strategies: i.e. conservation easements, support private landowner forest management, wellhead protection plan and implementation, and agriculture land management. Enforce current county ordinances. Educate and encourage contractors and landowners to complete BMPs on public and private lands including; businesses, landowners, and Local Government Units (LGUs). Educate and promote the stop of spread of AIS and Terrestrial Invasive Species practices for non-invested waterbodies.

What resources may be available to accomplish the actions? DNR, MPCA, CWC, NRCS, SWCD, TLWD, LID's, LGU's, Lake Associations, Conservation clubs, Schools, Non-profits, CWC businesses.

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What area(s) of the county is high priority? Cold water fisheries lakes (Tullibee & Trout), Wild Rice Lakes, Bay, Crooked, Hanks, Lower Mission, North Long (East Bay), Smith, Clearwater, Sugar Bay, Ossawinamakee, Pelican, Portage, Rabbit (East & West Bay), Roosevelt (South Bay), Nokasippi River, Pine River south of Crosslake, Daggett Brook, and Mississippi River. CWC prioritized groundwater based off CWC Atlas, Wellhead Protection Plans, and the City of Brainerd and Baxter high vulnerability areas. Lakes with no water quality trends: Edward, Hubert, Red Sand, Roosevelt (North Bay), and Round. Subwatersheds that contain than less 25 percent disturbed land or developed land (MN DNR Fisheries Protection Study).

Priority Concern 2:Enhance CWC surface and subsurface waters.

Regarding this concern please answer the following:

Why is it important the plan focus on this concern (include or cite relevant data)? Large Lake Assessments and MPCA Watershed project indicate declining water quality trends in area lakes and rivers. Water resources are the number one economical value of CWC.

What actions are needed? Support and continue citizen monitoring program, lake screening process, and MPCA watershed approach. Utilize advanced technologies to target BMPs based off subwatersheds i.e stormwater retrofit analysis, MinnFarm model, P8 model, LiDara data, and other models. Maintain and support all LGU requirements for riparian development and re-development. Utilize lake associations, nonprofits, schools, and other community leaders to encourage and provide incentives for LGU's, landowners, and businesses to complete: stormwater management, stormwater landscape, agricultural, forestry, industrial, and SSTS BMPs.

What resources may be available to accomplish the actions? DNR, MPCA, CWC, NRCS, SWCD, TLWD, LGU's, LID's, Lake Associations, Conservation clubs, Schools, Non-profits, CWC businesses.

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What area(s) of the county is high priority? Watersbodies with declining trend in water quality:

Upper Hay Creek, Little Pine River (north whitefish chain), Mississippi, Big Trout, Gull, North Long (West Bay), Serpent, Whitefish (Lower), North Long (Main Bay), Emily, Lower Cullen, Rush, and Upper Mission. Lakes with no trends: Camp, Cross, Gilbert, Lower Hay, South Long, Upper South Long. Lakes invested with AIS or areas county invested with terrestrial invasives.

Priority Concern 3: Restore CWC surface and subsurface waters.

Regarding this concern please answer the following:

Why is it important the plan focus on this concern (include or cite relevant data)? Large Lake

Assesments and MPCA Watershed project indicate CWC lakes and rivers are not meeting state standards for water quality. Water resources are the number one economical value of CWC. Impaired waters are required to be restored.

What actions are needed? Support and continue citizen monitoring program and MPCA watershed approach. Utilize advanced technologies to target BMPs based on subwatersheds i.e stormwater retrofit analysis, MinnFarm model, P8 model, LiDar data, wellhead protection high vulnerabilities studies and other models. Utilize lake associations, nonprofits, schools, and other community leaders to help complete BMPs to reduce nonpoint pollution: stormwater, agricultural, forestry, industrial, and SSTS. Collaborate with LGU's, citizens, nonprofits, and others to support Total Maximum Daily Load Studies and implementation plans.

What resources may be available to accomplish the actions? MPCA, CWC, NRCS, SWCD, TLWD, LID's, LGU's, Lake Associations, Conservation clubs, Schools, Non-profits, CWC businesses.

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What area(s) of the county is high priority? Waterbodies that are below state water quality standards: Little Buffalo Creek, Whisky Creek, Mississippi River, Upper Hay, Upper Whitefish, Sibley, Crow Wing, Serpent, Platte, Kego, and Mayo. Lakes that have a high ration of Total Lakeshed to Lake Ratio. Subwatersheds that contain greater than 25 % disturbed or developed (MN DNR Fisheries protection study). Lakes invested with AIS or areas county invested with terrestrial invasives.

Priority Concerns Input
Crow Wing County Local Water Management Plan Update

Agency/organization Board of Water and Soil Resources

Submitted by Dan Steward

Submission deadline: October 16, 2012

Priority Concern 1: Minor Watershed GIS Data – Foundation For Updating

Regarding this concern please answer the following:

Why is it important the plan focus on this concern (include or cite relevant data)? Since the last update of the Crow Wing County Water Plan, the county helped initiate the large lake screening process. This effort which focused first on lakes over 1,000 acres, and then in phase II lakes over 500 acres, used existing data to place large lakes into one of four distinct categories. The decisions were data based and resulted in lakes being either of increasing water quality, stable water quality, declining water quality or not enough data to determine water quality trend. This simple process has been recognized as a useful tool for counties to review lake conditions or trends and defend priorities.

In the past year the Mississippi Headwaters Board has begun a similar process focused on the minor watersheds along the first four hundred miles of the river. It is based on the same concepts that guided the large lake screening process. The idea is to start to differentiate between minor watersheds with the use of existing data. Some watersheds are of more concern from a water quality perspective than others. Many watersheds are heavily forested, and are not a high priority for management.

During the 2012 session, the legislature gave BWSR new discretion to work with local units of government to help move water plans into more of a watershed focus. Given that Crow Wing County is already helping lead with two minor watershed oriented planning processes, it might be a good time to bring this concept into the water plan update. By utilizing existing data, the county can help move the water planning process towards water plans that are more specific, more data driven, better identify priority resources, and fully watershed based.

What actions are needed? The county could organize its water plan update by major watershed units, and then the minor watersheds within each major. By selecting key GIS layers as indicators of watershed condition, the county could build a much more specific plan, without additional cost. The county would then be in position to draw conclusions and priorities based on data.

What resources may be available to accomplish the actions? Geographic Information Systems and existing information layers such as land cover, land ownership, topography and hydrology are available on a statewide basis.

Priority Concern 2: Erosion and Sediment Control on Developing Areas Throughout Crow Wing County.

Regarding this concern please answer the following:

Why is it important the plan focus on this concern (include or cite relevant data)? In addition to development in shoreland or riparian areas, development in the non-shoreland areas of the county can also deliver nutrients and sediment to Crow Wing County's high value surface waters.

What actions are needed? Vigilant inspection of sites where disturbance is occurring. Continue to participate in the MPCA pilot stormwater permitting project, continue to train realtors, developers, contractors, and local officials to the need for stormwater management.

What resources may be available to accomplish the actions? Erosion control training for contractors and local officials, SWCD board and staff, various grant programs.

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What area(s) of the county is high priority? Tributary watersheds of recreational lakes.

Priority Concern 3: Forest Land Conversion and Water Quality Impacts

Regarding this concern please answer the following:

Why is it important the plan focus on this concern (include or cite relevant data)? Crow Wing County's forest cover has long protected water quality in the adjacent lakes and streams. Annual Phosphorus discharge from forested landscapes are very low. Forest landscapes are now under increasing pressure for conversion to residential or commercial land uses. These more developed land uses have "harder" surfaces that result in increased runoff. Individual lakes vary considerably in the size of their watersheds and the amount of forest conversion they can tolerate before water quality declines.

What actions are needed? A comprehensive forest land protection plan. The water plan could set the stage for such a plan. Work with agencies and non-profits to protect forestland. Provide private landowners with technical information to encourage retention of forestland.

What resources may be available to accomplish the actions? Forest legacy program, forest stewardship program, SWCD forest technical assistance.

(include contact names, funding sources, partnerships, citizen volunteers, etc.)

What area(s) of the county is high priority? Large blocks of private forestland adjacent to major recreational lakes.



APPENDIX 6
Final Agency Comments on PCSD



Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | 651-282-5332 TTY | www.pca.state.mn.us | Equal Opportunity Employer

November 27, 2012

Mr. Ron Shelito
Board of Water and Soil Resources
1601 Minnesota Drive
Brainerd, MN 56401

RE: Crow Wing County Priority Concerns Scoping Document
Local Water Management Program

Dear Mr. Shelito:

The Minnesota Pollution Control Agency (MPCA) has reviewed the Priority Concerns Scoping Document (PCSD) for Crow Wing County (County).

The following is submitted for consideration regarding the priority concerns selected:

- The MPCA concurs with the priority concerns identified.
- The MPCA believes the process to identify the priority concerns was adequate.
- The MPCA would like to offer the following comments to be considered when drafting the Local Water Management (LWM) Plan.

Environmental Data Access System

The water quality section of MPCA's Environmental Data Access System allows visitors to find and download data from surface water monitoring sites located throughout the state. Where available, conditions of lakes, rivers or streams that have been assessed can be viewed. We encourage the County to visit this site for water quality monitoring data which may be useful with LWM planning efforts:
<http://www.pca.state.mn.us/index.php/topics/environmental-data/eda-environmental-data-access/eda-environmental-data-access-home.html>

We look forward to reviewing the forthcoming LWM Plan. If we may be of assistance with developing or implementing the LWM Plan, please contact Bonnie Finnerty in the Brainerd Office at 218-316-3897 or Dave L. Johnson in the St. Paul Office at 651-757-2470.

Sincerely,

Rebecca J. Flood
Assistant Commissioner

RJF/DLJ:kb

cc: Mitch Brinks Crow Wing County
Bonnie Finnerty MPCA Brainerd Regional Office

Priority Concerns Scoping Document
Crow Wing County Local Water Management Plan Update

Agency/organization **MN Department of Agriculture**

Submitted by (name) :Robert Sip (phone) 651-201-6487 (email) rob.sip@state.mn.us

Submission deadline: December 6, 2012

1. The MN Department of Agriculture has reviewed the Priority Concerns Scoping Document for Crow Wing county. The following is submitted for the Board's consideration regarding the priority concerns selected:

- The agency **concurs** with the priority concerns identified.
- The agency strongly **recommends** the following revision to the priority concerns identified, but does not require the revision: (*clearly identify the revision and provide an explanation of why it is recommended*) _____
- The agency **does not recommend** the board approve the final plan unless the following concern (s) are identified in the water management plan: (*clearly identify the revision and provide an explanation of why it is recommended*) _____

2. The MN Department of Agriculture feels the process to identify the priority concerns was:

- Commendable
- Adequate
- Inadequate. Please explain: _____

3. The MN Department of Agriculture would like to offer the following comments to be considered when drafting the local water management plan:

See Next Page:

The Minnesota Department of Agriculture (MDA) has developed the following Water Plan website to discuss and illustrate MDA Priority Concerns (PCs) and recommended courses of action for local county water plans. So, instead of a lengthy letter of recommendations and PCs, counties are directed to the new website for MDAs information and guidance.

The 5 items below are the PCs that the MDA has developed and consolidated into the website. Crow Wing County is encouraged to review the website and to implement relevant sections of the PCs outlined by the MDA. The MDA also realizes that not all recommendations will be considered or implemented based on financial and staff resources at the county level.

MDA Water Planning Assistance Website:

<http://www.mda.state.mn.us/en/protecting/waterprotection/waterplanning.aspx>

MDA Priority Concerns:

- 1. Agricultural Drainage, Wetlands and Water Retention**
- 2. Groundwater and Surface Water Protection: Agricultural Chemicals and Nutrients/Water Use/Land Management in Wellhead Protection Areas**
- 3. Manure Management and Livestock Issues**
- 4. Agricultural Land Management**
- 5. Targeting of BMPs, Aligning Local Plans and Engaging Agriculture**

Also, one other item of interest that is not highlighted in the weblink above is the issue of water conservation in all sectors of the local economy in light of the current drought situation. There is discussion about irrigation management but the MDA recommends additional consideration given towards other non-agricultural areas that can reduce water usage.

Lastly, the MDA recommends that Crow Wing County review its drainage policy if one exists. Crow Wing County may also consider developing a drainage policy (if relevant/feasible) that utilizes the approaches discussed within the MDA water planning assistance drainage weblink below. Incentives currently exist for landowners to implement a variety of drainage BMPs. The MDA encourages Crow Wing County to work with the local SWCD and NRCS offices on outreach regarding the implementation of drainage BMPs.

MDA Drainage Website for Local Water Plans

<http://www.mda.state.mn.us/en/protecting/waterprotection/waterplanning/agdrainage.aspx>

Final Draft
Crow Wing County Local Water Management Plan Update

Agency/organization MN Dept. of Health
Submitted by: Mark Wettlaufer, Ph.: (320) 223-7342
Email: mark.wettlaufer@state.mn.us

Submission deadline: December 6, 2012

1. The Minnesota Department of Health has reviewed the final draft of the water management plan for Crow Wing County. The following is submitted for the Board's consideration regarding the priority concerns selected:

The plan does not violate any statutory or rule requirements administered by our agency.

The plan violates M.S. _____ administered by our agency. *Explanation of statute violation:* _____

The plan violates M.R. _____ administered by our agency. *Explanation of rule violation:* _____

2. The Minnesota Department of Health recommends the board:

Approve the entire plan as submitted

Disapprove the entire plan as submitted

Disapprove parts of the plan as cited: _____

3. The Minnesota Department of Health would like to offer the following comments for the board's consideration when reviewing and acting on this local water plan update:

The Minnesota Dept. of Health would like to commend Crow Wing County for continued recognition and identification of activities that help protect local groundwater and drinking water resources in their County. Crow Wing County continues to assist communities on wellhead protection planning and implementation activities. We look forward to continued efforts working with them on groundwater and drinking water protection issues.