Minnesota Board of Water & Soil Resources

DATE: August 18, 2014

TO: Board of Water and Soil Resources' Members, Advisors, and Staff

FROM: John Jaschke, Executive Director

SUBJECT: August 27-28, 2014 – BWSR Board Tour Details and Meeting Notice

The Board of Water and Soil Resources' (BWSR) will tour Anoka and Ramsey Counties in the northern metro region on Wednesday, August 27, 2014. *See attached tour itinerary.* The accommodations for the Board Tour and Meeting will be at the Holiday Inn Express and Jimmy's Conference Center in Vadnais Heights.

Tuesday, August 26th

Sleeping rooms have been reserved at the Holiday Inn Express, 1100 East Co. Rd. E., in Vadnais Heights http://www.ihg.com/holidayinnexpress/hotels/us/en/vadnais-heights/vadhe/hoteldetail/directions on Tuesday and Wednesday evenings, August 26 and 27. *See the attached room reservation list.* Rooms have been direct billed (you do not pay for the room unless noted on the rooming list). Please contact Mary Jo Anderson mary.jo.anderson@state.mn.us immediately if you do not need a sleeping room.

Wednesday, August 28th

A breakfast buffet is included with your room reservation, served from 6:30 AM – 8:00 AM for guests staying at the Holiday Inn Express.

Registration and check-in for the tour will begin at 7:30 AM in the lobby of the Holiday Inn Express. The coach bus will promptly depart from the Holiday Inn Express at 8:00 AM. Introductions and a brief overview of the day will be held at the Oneka Ridge Golf Course, the first stop on the tour.

The tour will consist of a few stops where we will be walking a short distance, wear your comfortable walking shoes, and casual attire. The tour will be held rain or shine, dress accordingly.

The narrated coach bus will travel through Anoka and Ramsey Counties. We will see water a reuse, groundwater recharge project; have a refreshment break at 9:45 AM at Brown's Preserve, then tour the Rum River Regional Park stabilization project. We will have lunch at 12:30 PM, and a presentation on carp at the Coon Rapids Dam Regional Park, Pavilion #3; depart at 1:45 PM, tour a ravine stabilization project and rain gardens. The bus will arrive at the White Bear Lake City Hall at 4:00 PM for an issues forum on aquifer levels in the northeast metro.

We have dinner reservations at 5:15 PM at C.G. Hooks Eatery, 4441 Lake Avenue South, White Bear Lake. Walk across the street after dinner to Tally's Dockside for an evening of leisure activities including a pontoon ride on White Bear Lake, departing between 6:00–6:30 PM; returning about 8:00 PM. Tally's has "Music by the Water" with the band Redpath playing between 6:00–9:00 PM. There will be shuttle service from Tally's to the Holiday Inn Express before and after dinner.

Bemidji	Brainerd	Duluth	Fergus Falls	Mankato	Marshall	New Ulm	Rochester
403 Fourth Street NW Suite 200 Bemidji, MN 56601 (218) 755-2600	1601 Minnesota Drive Brainerd, MN 56401 (218) 828-2383	394 S. Lake Avenue Suite 403 Duluth, MN 55802 (218) 723-4752	1004 Frontier Drive Fergus Falls, MN 56537 (218) 736-5445	12 Civic Center Plaza Suite 3000B Mankato, MN 56001 (507) 344-2821	1400 East Lyon Street Marshall, MN 56258 (507) 537-6060	261 Highway 15 South New Ulm, MN 56073 (507) 359-6074	3555 9th Street NW Suite 350 Rochester, MN 55901 (507) 206-2889

Central Office / Metro Office 520 Lafayette Road North Saint Paul, MN 55155 Phone: (651) 296-3767 Fax: (651) 297-5615

www.bwsr.state.mn.us TTY: (800) 627-3529 An equal opportunity employer

If you will not be present for the Wednesday coach bus tour, do not plan to stay for dinner/pontoon ride; or if you do not need a room reservation on Tuesday or Wednesday evening at the Holiday Inn Express, please contact Mary Jo Anderson immediately, as we need to know the number of people attending. If you have special food needs, please contact Mary Jo as soon as possible. The expenses during the tour (breaks, meals, pontoon ride) are direct billed, you do not pay.

Thursday, August 28th

The Board of Water and Soil Resources' (BWSR) will meet on Thursday, August 28th beginning at 9:00 AM. The meeting will be held at Jimmy Conference Center, the Garden Room, 1132 East County Road E. & Labore Road, in Vadnais Heights http://www.visitjimmys.com/directions.html. Jimmy's Conference Center is adjacent to the Holiday Inn Express, connected by a walkway. Parking is available on Labore Road, entrance is on the right, facing east. The following information pertains to agenda items:

COMMITTEE RECOMMENDATIONS

Metro Committee

1. **Bassett Creek Watershed Management Commission Plan Amendment** - The final draft Amendment to the Bassett Creek Watershed Management Commission Watershed Management Plan was filed with the Board on June 7, 2014. The Amendment proposes to revise the Commission's current implementation program by adding one capital improvement project. The total estimated project cost ranges from $1,319,000 to $1,659,000. The draft Order contains the reviewing agencies' comments and the Commission's response to them. The Metro Region Committee met and recommends approval of the Plan Amendment per the attached draft Order. ***DECISION ITEM***

2. **Washington County Groundwater Plan** – The Washington County Groundwater Plan (Plan) was filed with the Board on June 18, 2014. Development of a county groundwater plan is voluntary under the Metropolitan Surface Water Management Act. The County appointed a Groundwater Advisory Committee and a Technical Advisory Committee to begin developing the Plan in 2012. These committees met several times throughout the 2012 and 2013 planning process. Local and state agencies were actively involved throughout the planning process. The highlights of the Plan and the comment review process are further described in the attached Request for Board Action and the draft Order. The state agencies provided final review. The Plan is in conformance with the requirements of Minnesota Statutes Section 103B.255. The Metro Region Committee unanimously recommends the Plan be approved per the attached draft Order. ***DECISION ITEM***

Northern Region Committee

1. **Cook County Local Water Management Plan** - The current Cook County Local Water Management Plan was extended two years and expires October 26, 2014. Cook County has submitted their updated Local Water Management Plan for BWSR approval. The Northern Region Committee met on July 9, 2014, to review the plan and agency comments and recommends approval of the Cook County Local Water Management Plan for a 10-year period ending August 28, 2024, with the Executive Summary, Goals, Objectives, and Action Items amended by August 28, 2019. ***DECISION ITEM***

2. **City of International Falls Comprehensive Wetland Protection and Management Plan** - The City of International Falls has submitted their first Comprehensive Wetland Protection and Management Plan to BWSR for review and approval. The Northern Region Committee met on July 9, 2014, to review the Plan. Based on the comments received and staff review of the Plan, the Northern Region Committee recommends approval of the International Falls Comprehensive Wetland Protection and Management Plan. ***DECISION ITEM***

3. **Lake County Priority Concerns Scoping Document** – Lake County submitted the Priority Concerns Scoping Document for state review and comment as part of updating their Local Water Management Plan. The Northern Region Committee met July 9, 2014, and recommends approval of the Lake County Priority Concerns Scoping Document. ***DECISION ITEM***

Southern Region Committee

1. **Lincoln County Comprehensive Local Water Management Plan Extension Request** - Lincoln County currently has a Comprehensive Local Water Management Plan that will expire on August 31, 2014. On July 15, 2014, Lincoln County approved and submitted a formal request for an extension of their current Plan. BWSR staff has reviewed this request and recommends approval. This extension request was considered by the BWSR Southern Region Committee, chaired by Kathryn Kelly, at their August 7, 2014 meeting. The Committee's recommendation will be presented to the full Board for review and action. The state's expectations for the extension request must be sent to Lincoln County. ***DECISION ITEM***

2. **Pipestone County Comprehensive Local Water Management Plan Extension Request** - Pipestone County currently has a Comprehensive Local Water Management Plan that will expire on August 25, 2014. On July 22, 2014, Pipestone County approved and submitted a formal request for an extension of their current Plan. BWSR staff has reviewed this request and recommends approval. This extension request was considered by the BWSR Southern Region Committee, chaired by Kathryn Kelly, at their August 7, 2014 meeting. The Committee's recommendation will be presented to the full Board for review and action. The state's expectations for the extension request must be sent to Pipestone County. ***DECISION ITEM***

3. **Rice County Comprehensive Local Water Management Plan Extension Request** - Rice County currently has a Comprehensive Local Water Management Plan that will expire in December 2014. On June 23, 2014, Rice County approved and submitted a formal request for an extension of their current Plan. BWSR staff has reviewed this request and recommends approval. This extension request was considered by the BWSR Southern Region Committee, chaired by Kathryn Kelly, at their August 7, 2014 meeting. The Committee's recommendation will be presented to the full Board for review and action. The state's expectations for the extension request must be sent to Rice County. ***DECISION ITEM***

If you have any questions regarding the agenda, please feel free to call me at 651-296-0878. The meeting will adjourn about noon. I look forward to seeing you on August 27!

BWSR Board Tour Itinerary

August 27, 2014

Holiday Inn Express Hotel
1100 County Road E East, Vadnais Heights, MN 55110

7:30 AM	Check-in at registration table
8:00	Depart via coach bus
8:15	**Tour of Oneka Ridge Golf Course** Welcome & introductions - Brian Napstad and John Jaschke, BWSR **Presenters:** Jon Hatcher, Head Golf Professional, Oneka Ridge Golf Course Kyle Axtell, Water Resource Specialist, Rice Creek Watershed District Pete Willenbring, Water Resources Vice President, WSB and Associates, Inc. **Project Highlights:** Water re-use irrigation and groundwater recharge
9:30	Depart Oneka Golf Course Discussion of drainage ditches and stormwater conveyances en route **Presenters:** Mark Deutschman, Civil Engineer/Vice President, Houston Engineering Al Kean, BWSR
9:45	**Refreshments and Tour of Brown's Preserve/JD-4** **Presenters:** Mark Deutschman, Civil Engineer/Vice President, Houston Engineering Jason Husveth, Principal Ecologist/President, Critical Connections Ecological Services Tom Schmidt, Drainage Inspector, Rice Creek Watershed District **Project Highlights:** Drainage and wetland restoration
10:45	Depart Brown's Preserve Discussion of Stormwater Retrofit Analyses (SRA) en route **Presenters:** Chris Lord, Anoka Conservation District Manager Mitch Haustein, Anoka Conservation District Conservation Specialist **Project Highlights:** Site specific project targeting, water quality modeling, cost-benefit analysis and project ranking, rural compared to urban analyses
11:30	**Tour of Rum River Regional Park Stabilization** **Presenter:** Chris Lord, Anoka Conservation District Manager **Project Highlights:** Multiple techniques employed – rock vanes, root wads, buffers, cedar tree revetments, rip rap; Challenges –invasive species, root wad decay, maintenance inspection and funding, high water during installation – working blind; Multi-Partner Funding – reporting, grant administration, matching funds management and eligible expense disparities

12:00 Depart Rum River Regional Park

12:30 PM **Lunch at Coon Rapids Dam Regional Park**
Carp Presentation
Presenters:
Peter Sorenson, University of Minnesota
Nick Frohnauer, DNR

1:45 Depart Coon Rapids, overview of Oak Glen Creek Stabilization Project en route
Presenter:
Chris Lord, Anoka Conservation District Manager

2:00 **Tour of Oak Glen Creek Stabilization Project**
Presenters:
Jim Kosluchar, Fridley Public Works Director/City Engineer
Ed Matthiesen, Civil Engineer, Wenck Associates
Project Highlights: Multiple techniques employed – cross vanes, rock check dams, vegetated rip rap, brush bundles, cedar revetments, live stakes, erosion control blanket, seeding. Drainage and utility easement acquisition for 21 properties. CWF grant has been secured for upstream project identified in a Stormwater Retrofit Analyses to reduce flow rate and volume and improve water quality.

2:30 Depart Oak Glen Creek, overview of Northdale Pond Modification en route
Presenter:
Tim Kelly, Coon Creek Watershed District Administrator

2:50 **Tour of Northdale Pond Modification**
Presenter:
Tim Kelly, Coon Creek Watershed District Administrator
Project Highlights: Identified through Stormwater Retrofit Analyses process. Simple, inexpensive, cost-effective retrofit of existing stormwater infrastructure to function at a higher level by adding water quality benefits to a rate control pond.

4:00 **Issues Forum – "Aquifer Levels in the Northeast Metro"** White Bear Lake City Hall
Panel: Rep. Peter Fischer, Minnesota House District 43A
Perry Jones, USGS Hydrologist
Paul Putzier, DNR

5:15 **Dinner**, C.G. Hooks Eatery, White Bear Lake...*then walk across the street*

6:00-6:30 Depart from Tally's Dockside for a leisurely pontoon ride on White Bear Lake

6:00-8:30 Enjoy "Music by the Water" at Tally's Dockside with Redpath

8:30 Depart via coach bus for Holiday Inn Express

Participants will exit the bus for a tour stop at the **seven bolded** sites.
There will be shuttle service to the Holiday Inn Express after the Issues Forum and again after dinner.

Holiday Inn Express, Vadnais Heights
651-484-2400

Rooming List for Board of Water and Soil Resources

Tuesday, August 26, 2014

1. Doug Erickson
2. Sandy Hooker
3. Kathryn Kelly
4. Tom Loveall
5. Brian Napstad
6. Neil Peterson
7. Tom Schulz
8. Steve Sunderland
9. Gene Tiedemann
10. Gerald Van Amburg
11. Ian Cunningham**

Wednesday, August 27, 2014

1. Doug Erickson
2. Sandy Hooker
3. Kathryn Kelly
4. Tom Loveall
5. Brian Napstad
6. Neil Peterson
7. Tom Schulz
8. Steve Sunderland
9. Gene Tiedemann
10. Gerald Van Amburg
11. Ian Cunningham**

*** will pay for room upon arrival*

BOARD OF WATER AND SOIL RESOURCES
JIMMY'S CONFERENCE CENTER
3565 LABORE ROAD, GARDEN ROOM
VADNAIS HEIGHTS, MINNESOTA 55110
THURSDAY, AUGUST 28, 2014

PRELIMINARY AGENDA

9:00 AM **CALL MEETING TO ORDER**

PLEDGE OF ALLEGIANCE

ADOPTION OF AGENDA

MINUTES OF JUNE 25, 2014 BOARD MEETING

PUBLIC ACCESS FORUM (10-minute agenda time, two-minute limit/person)

INTRODUCTION OF NEW EMPLOYEE

- Ben Meyer, Wetland Specialist

REPORTS

- Chair & Administrative Advisory Committee – Brian Napstad
- Audit & Oversight Committee – Brian Napstad
- Executive Director – John Jaschke
- Dispute Resolution Committee – Gerald Van Amburg
- Grants Program & Policy Committee – Steve Sunderland
- RIM Reserve & Soil Conservation Committee – Gene Tiedemann
- Water Management & Strategic Planning Committee – Jack Ditmore
- Wetlands & Drainage Committee – Gerald Van Amburg
- Drainage Work Group – Tom Loveall/Al Kean

COMMITTEE RECOMMENDATIONS

Metro Region Committee

1. Bassett Creek Watershed Management Commission Plan Amendment – Steve Christopher – ***DECISION ITEM***

2. Washington County Groundwater Plan – Mary Peterson – ***DECISION ITEM***

Northern Region Committee

1. Cook County Local Water Management Plan – Tom Schulz – ***DECISION ITEM***

2. City of International Falls Comprehensive Wetland Protection and Management Plan – Ron Shelito and Dale Krystosek – ***DECISION ITEM***

3. Lake County Priority Concerns Scoping Document – Ron Shelito – ***DECISION ITEM***

Southern Region Committee

1. Lincoln County Comprehensive Local Water Management Plan Extension Request – Kathryn Kelly - ***DECISION ITEM***

2. Pipestone County Comprehensive Local Water Management Plan Extension Request – Kathryn Kelly – ***DECISION ITEM***

3. Rice County Comprehensive Local Water Management Plan Extension Request – Kathryn Kelly - ***DECISION ITEM***

AGENCY REPORTS

- Minnesota Department of Agriculture – Matthew Wohlman
- Minnesota Department of Health – Chris Elvrum
- Minnesota Department of Natural Resources – Tom Landwehr
- Minnesota Extension Service – Faye Sleeper
- Minnesota Pollution Control Agency – Rebecca Flood

ADVISORY COMMENTS

- Association of Minnesota Counties – Annalee Garletz
- Minnesota Association of Conservation District Employees – Matt Solemsaas
- Minnesota Association of Soil & Water Conservation Districts – LeAnn Buck
- Minnesota Association of Townships – Sandy Hooker
- Minnesota Association of Watershed Districts – Ray Bohn
- Natural Resources Conservation Service – Don Baloun

UPCOMING MEETINGS

- Next BWSR Board Meeting – September 24, 2014

Noon **ADJOURN**

BOARD OF WATER AND SOIL RESOURCES
520 LAFAYETTE ROAD N.
ST. PAUL, MINNESOTA 55155
WEDNESDAY, JUNE 25, 2014

BOARD MEMBERS PRESENT:
Jill Crafton, Jack Ditmore, Chris Elvrum, MDH; Douglas Erickson, Rebecca Flood, MPCA; Christy Jo Fogarty, Sandy Hooker, Kathryn Kelly, Tom Loveall, Brian Napstad, Tom Landwehr, DNR; Tom Schulz, Rob Sip, MDA, Faye Sleeper, MES; Steve Sunderland, Gene Tiedemann, Gerald Van Amburg

BOARD MEMBERS ABSENT:
Joe Collins
Neil Peterson

STAFF PRESENT:
Angie Becker-Kudelka, Tim Dykstal, Tim Fredbo, Travis Germundson, Tim Gillette, Celi Haga, Jeff Hrubes, John Jaschke, Al Kean, Kari Keating, Melissa Lewis, Bill Penning, Sarah Strommen, Doug Thomas, Dave Weirens, Wayne Zellmer

OTHERS PRESENT:
Marcie McLaughlin, MDA
Tom Peterson, CROW
Mary Presnail, DNR

Chair Napstad called the meeting to order at 9:03

PLEDGE OF ALLEGIANCE

** 14-28 **ADOPTION OF AGENDA** – Moved by Kathryn Kelly, seconded by Jill Crafton, to adopt the agenda as amended. *Motion passed on a voice vote.*

** 14-29 **MINUTES OF MAY 28, 2014** – Moved by Jill Crafton, seconded by Gene Tiedemann, to approve the minutes of May 28, 2014, as circulated. *Motion passed on a voice vote.*

CONFLICT OF INTEREST DECLARATION
Tim Dykstal provided training on the Conflict of Interest Declaration. Chair Napstad explained that the conflict of interest declaration process is being used today on many agenda items. He then read the statement: *"A conflict of interest, whether actual, potential, or perceived, occurs when someone in a position of trust has competing professional or personal interests and these competing interests make it difficult to fulfill professional duties impartially. At this time, members are requested to declare conflicts of interest they may have regarding today's business."*

PUBLIC ACCESS FORUM (10-minute agenda time, two-minute limit/person)
Jill Crafton addressed the board.

REPORTS
Chair's Report – Brian Napstad reported that they have completed the Executive Director review. The full summary of the review was provided to the board. A summary of the EQB meeting items was provided.

Audit & Oversight Committee (AAC) – Brian Napstad reported the Audit & Oversight Committee did not meet.

Executive Director's Report – Board tour is in August 27 and 28, 2014 in the metro area and August 11th is the deadline for room reservations. Jaschke also reviewed the materials in the Board member folder and provided updates on: flood response, Farm Bill programs, and drainage.

Drainage Work Group – Tom Loveall and Al Kean reported that the committee met on June 12, 2014; discussion included the LCCMR Project: Conservation-Based Approach for Assessing Public Drainage Benefits; Outcomes of 2014 Legislative Bills involving drainage; upcoming events involving drainage topics; and DWG prioritized discussion topics. The next meeting of the Drainage Work Group is scheduled for July 31, 2014. Discussion followed.

Dispute Resolution Committee – Travis Germundson reported that there are 13 pending appeals and only one new appeal since the last board meeting.

Grants Program & Policy Committee – Steve Sunderland reported that the Grants Program and Policy Committee has a number of recommendations on the agenda later today.

RIM Reserve & Soil Conservation Committee – Gene Tiedemann reported that the RIM Reserve and Soil Conservation Committee has a recommendation on the agenda later today.

Water Management & Strategic Planning Committee – Jack Ditmore reported that the Water Management and Strategic Planning Committee has a recommendation on the agenda later today.

Wetlands & Drainage Committee – Gerald Van Amburg reported that the Wetlands and Drainage Committee has not met. Jaschke mentioned that a policy development message would be forth coming inviting stakeholders to participate.

COMMITTEE RECOMMENDATIONS

RIM Reserve Management & Soil Conservation Committee

1. **Tri-T Farms, Inc. – RIM Easement Alteration** – The RIM Reserve Management & Soil Conservation Committee met on June 12 to review the amendment of RIM easement 14-04-07-01, in Clay County. The alteration has been requested by the landowner of Tri-T Farms, Inc. Bill Penning and Tim Fredbo reported the details of the particular easement. The RIM Reserve Management & Soil Conservation Committee recommends approval of the amendment. There was some discussion regarding CRP contracts and what can be done to remind contract holders that they are still under contract. Moved by Gene Tiedemann, seconded by Kathryn Kelly, to approve the RIM Reserve Management Planning Committee recommendation of the RIM easement alteration. *Motion passed on a voice vote.*

** 14-30

Northern Region Committee

1. **Aitkin County Water Management Plan Extension** – Aitkin County submitted a resolution requesting a two year extension of their County water plan on June 10, 2014. The Aitkin County Local Water Management Plan would expire on August 27, 2014. The Northern Region Committee met on June 11, 2014, and recommends approval of the Aitkin County extension request. Brian Napstad provided some background information. Moved by Tom Landwehr, seconded by Tom Schulz, to approve the recommendation of the Northern Region Committee to approve the extension with the vice chair authorized to sign the order. *Motion passed on a voice vote.*

** 14-31

2. **Bois de Sioux Watershed District Plan Amendment** – The Amendment to the Bois de Sioux Watershed District's Overall Plan (Plan) is intended to clarify the rational, basis and means to achieve the retention goals of the District via impoundments. The Amendment summarizes the District's statutory authority, and planning work performed on a sub watershed basis. Along with the District's property acquisition philosophy, common funding sources, establishment procedure, and means to maintain projects of the District. The Amendment will be inserted in PART V PROJECTS on page 99 of the Plan as C. LAND ACQUISTION; D. PROJECT FUNDING; E. PROCEDURE FOR ESTABLISHING PROJECTS; and F. FUNDING PROJECT MAINTENANCE. Moved by Gerald Van Amburg, seconded by Sandy Hooker to approve the Northern Region Committee's recommendation of the plan amendment per the attached draft Order. *Motion passed on a voice vote.*

** 14-32

3. **Sauk River Watershed District Ten Year Plan Revision** – On May 7, 2014, the Brainerd office received the 10 year plan revision for the Sauk River Watershed District. Regional and State office staff review the plan for content and statutory requirements and found the plan to be ready for review by the Northern Region Committee. The Sauk River Watershed District staff presented their 10 year plan revision before the Northern Region Committee on June 11th. The 10 year plan revision focuses on four primary areas including monitoring, education and outreach, programs and projects, and regulation. In addition, the plan divides

the watershed district into ten management units with the appropriate mechanisms to establish water management districts within each unit to raise additional revenue for enhancing water quality. The plan also includes report cards for each management unit, which will allow the watershed to target best management practices and annually evaluate progress. The Northern Region Committee reviewed the Department of Natural Resources comments, the record from the public hearing, and staff recommendations. Upon consideration of all the information presented, the Committee moved a unanimous recommendation for approval of the ten year plan revision for the Sauk River Watershed

** District. Moved by Gene Tiedemann, seconded by Rob Sip to approve the Northern Region

14-33 Committee recommendation of the plan revision per the attached draft Order. *Motion passed on a voice vote.*

Southern Region Committee

1. **Area II Minnesota River Basins Projects Inc. Biennial Work Plan and Grant** – BWSR oversees the administrative funding related to the efforts of the Area II Minnesota River Basins Project Inc. (Area II). The 2013 Minnesota Legislature appropriated administrative funding for Area II Minnesota River Basins Project Inc., resulting in a fiscal year 2015 grant of $120,000. The overall budget objectives are included in the plan. Staff recommends approval of this plan update and execution of the administrative grant agreement for FY 2015. The Board's Southern Region Committee met on May 28, 2014 to review the Area II Work Plan and

** recommends approval of the plan and execution of the FY 2015 grant. Moved by Steve

14-34 Sunderland, seconded by Tom Loveall, to approve the Southern Water Planning Committee recommendation of the Area II Minnesota River Basins Projects Inc. Biennial Work Plan and Grant. *Motion passed on a voice vote.*

2. **Buffalo Creek Watershed District (BCWD) Watershed Management Plan -** BCWD was established by BWSR Board Order on January 30, 1969. Minnesota Statutes 103D.401 states that a board of watershed district managers must adopt a plan for any or all reasons for which the district may be established. The BCWD has completed the planning process for its proposed ten-year plan: 2014 - 2024. The BCWD distributed its draft Watershed Management Plan as required for final review and comment. Comments received were considered by the BCWD, the plan was revised as needed, and submitted to BWSR for approval. BWSR provided proper Notice of Filing for the plan. This notice provided an invitation to submit written comments or a written request for a hearing if opposed to the plan. Written comments were received by BWSR and a public hearing was scheduled in anticipation of requests for a hearing.

   On March 12, 2014, the Southern Region Committee (Committee) held a public hearing and received comments in opposition to the inclusion of BCWD's policy of a 3/8 inch drainage coefficient in the Plan from Renville County and several watershed residents. At their meeting on March 12, 2014, the Committee tabled action to allow additional comments and revisions to the Plan. A plan revision was drafted to include flexibility to the 3/8 inch drainage coefficient policy and to include additional information on priority subwatersheds and projects. The Committee met again on May 28, 2014. Based on the public hearing record, the Plan meeting the requirements of 103D.405, and BWSR staff recommendation to approve the Plan, the Committee voted to recommend approval of the revised Buffalo Creek Watershed District Watershed Management Plan to the full Board. Discussion

** followed. Moved by Steve Sunderland, seconded by Sandy Hooker, to approve the

14-35 Southern Region Committee recommendation of the Buffalo Creek Watershed District

(BCWD) Watershed Management Plan. Kathryn Kelly abstained from voting. *Motion passed on a voice vote.*

3. **Watonwan County Local Water Management Plan Amendment** - By Board Order, the Board of Water and Soil Resources (Board) approved the Watonwan County 2008 - 2018 Local Water Management Plan (Plan) on December 17, 2008. This Plan contains an implementation section with goals, objectives and actions to address the county's priority concerns. The Board Order required Watonwan County to update the Plan's implementation section by December 31, 2013. Watonwan County followed the amendment process guidelines established by the Board and submitted their 2014 - 2018 Local Water Management Plan Amendment on April 21, 2014. The Board's Southern Region Committee (Committee) met on May 28, 2014 to review the Watonwan County Plan Amendment. The Committee recommends approval of the Watonwan County 2014 - 2018 Local Water Management Plan Amendment. Moved by Steve Sunderland, seconded by Sandy Hooker, to approve the Southern Region Committee recommendation of Watonwan County Local Water Management Plan Amendment. *Motion passed on a voice vote.*

** 14-36

Grants Program & Policy Committee

1. **FY2015 Farm Bill Assistance Grant Awards** – The Farm Bill Assistance Program provides funds to SWCDs to hire staff to accelerate implementation of the Farm Bill as well as other state and federal conservation projects that involve grasslands and wetlands. The FY15 Farm Bill Assistance Program is expected to be funded from several revenue sources, chief among them, the Legislative-Citizens Commission on Minnesota Resources. The Board is being requested to authorize these grants in order to minimize the delay in getting funds to SWCDs following the enactment of a biennial budget. The Grants Program and Policy Committee met on June 12, 2014 to review documents associated with this resolution and recommends Board approval. Moved by Faye Sleeper, seconded by Jill Crafton, to approve the Grants Program & Policy Committee recommendation of the 2015 Farm Bill Assistance Grant allocations. *Motion passed on a voice vote.*

** 14-37

2. **Proposed FY2015 SWCD Programs and Operations Grant Allocations** - The Grants Program & Policy Committee is forwarding their FY2015 allocation recommendations for the Conservation Delivery, Easement Delivery, Non Point Engineering Assistance, and Cost Share Grant Programs. Moved by Sandy Hooker, seconded by Tom Schulz, to approve the Grants Program & Policy Committee recommendation of the proposed FY2015 SWCD Programs and Operations Grant Allocations. *Motion passed on a voice vote.*

** 14-38

3. **Proposed FY2015 Natural Resources Block Grant Allocations** – The Natural Resources Block Grant (NRBG) provides assistance to local governments to implement state natural resource programs. These programs are: Comprehensive Local Water Management, the Wetland Conservation Act, the DNR Shoreland Management, the MPCA County Feedlot, and the MPCA Subsurface Sewage Treatment Systems. The Grants Program & Policy Committee recommends Board approval of the Proposed FY 2015 Natural Resources Block Grant allocations. Moved by Steve Sunderland, seconded by Jack Ditmore, to approve the Grants Program & Policy Committee recommendation of the proposed FY2015 Natural Resources Block Grant Allocations. *Motion passed on a voice vote.*

** 14-39

4. **One Watershed, One Plan Pilot Selection** – Staff was authorized to finalize, distribute and promote a Request for Interest (RFI) for the One Watershed, One Plan Pilot Program at the

December 18, 2013 Board meeting. This nomination period closed on April 21st. Nominations received were reviewed by BWSR staff and the Interagency WRAPS Implementation Team in May and June. Staff ratings, WRAPS Team recommendations, and nomination scores were reviewed by the Senior Management Team (SMT) on May 12th and a recommendation with three options was forwarded to the BWSR Executive Team. The Executive Team considered these options in the development of the final recommendation to select 5 watershed areas for piloting One Watershed, One Plan, using existing appropriations and a funding shift from unspent FY14 CWF SEDLC and Community Partners programs. Requested funding shift is $458,710.

The review process and recommendation were reviewed with the Water Management and Strategic Planning Committee on May 27th. The Committee was not asked for a recommendation but discussion and comments at the Committee meeting supported the recommendation. The process and recommendation were also reviewed with the Grants Program and Policy Committee on June 12th; and recommends the actions to the full Board.

** 14-40 Moved by Sandy Hooker, seconded by Jack Ditmore, to approve the Grants Program and Policy Committee recommendation of the One Watershed, One Plan Pilot Selection; authorizing staff to complete work plans and enter into grant agreements with 5 pilot watersheds; approve the allocation of up to $1,758,710 FY14 Clean Water Funds; and authorizing staff to enter into agreements and/or contracts with the University of Minnesota Extension and the Red River Watershed management Board for the purposes of partner readiness surveys and completion of the Water Quality Decision Support Application. Gene Tiedemann abstained from voting. *Motion passed on a voice vote.*

5. **FY2015 Targeted Watershed Demonstration Program Authorization** - The Targeted Watershed Demonstration Program is proposed to have a solicitation period from July 14 through August 29, 2014. The scoring process will be conducted by staff from the DNR, MDA, MDH, PCA, and BWSR and will operate under the FY2015 Clean Water Fund Policy. The Grants Program and Policy Committee met on June 12, 2014 and reviewed the draft

** 14-41 Request for Interest and recommends Board approval. Moved by Gerald Van Amburg, seconded by Jill Crafton, to approve the Grants Program and Policy Committee recommendation of the FY2015 Targeted Watershed Demonstration Program Authorization. *Motion passed on a voice vote.*

6. **FY2015 Clean Water Fund Competitive Grants Policy and Authorization** - The FY2015 Clean Water Fund Competitive Grants Program includes four BWSR grant programs and Minnesota Department of Agricultural AgBMP loans and is proposed to have an application period from August 18 to September 26. The application scoring process will be conducted by staff from DNR, MDA, MDH, PCA and BWSR as has been the case in previous years. The FY2014 Policy has been amended to ensure it is consistent with the proposed FY2015 appropriations. The Grants Program and Policy Committee met on June 12, 2014 and reviewed the draft Policy and Request for Proposals and recommends Board approval.

** 14-42 Moved by Tom Schulz, seconded by Jill Crafton, to approve the Grants Program and Policy Committee recommendation of the FY2015 Clean Water Fund Competitive Grants Policy and Authorization. *Motion passed on a voice vote.*

7. **Supplemental FY2014 Clean Water Fund Grant Awards** - Additional Clean Water Fund dollars were appropriated to the BWSR Clean Water Fund Projects and Practices competitive grant category under the Laws of Minnesota, Chapter 312, Article 14, Section 4.

The Grants Program and Policy Committee met on June 12, 2014 and reviewed staff recommendations for allocating these supplemental funds and is recommending Board approval. Moved by Steve Sunderland, seconded by Kathryn Kelly, to approve the Grants Program and Policy Committee recommendation of the Supplemental FY2014 Clean Water Fund Grant Awards. *Motion passed on a voice vote.*

** 14-43

Grants Program & Policy Committee and RIM Reserve & Soil Conservation Committee

1. **Nonpoint Priority Funding Plan (NPFP)** – Tim Koehler discussed the plan as presented and walked the Board through some highlights. The Board is requested to approve the recommendation of the Grants Program & Policy and RIM Reserve & Soil Conservation Committees to accept the Nonpoint Priority Funding Plan for Clean Water Implementation Funding (NPFP) and to direct staff to post it on BWSR's website by July 1, 2014. Moved by Jill Crafton, seconded by Faye Sleeper, to approve the Grants Program and Policy Committee and RIM Reserve and Soil Conservation Committee recommendation to approve Nonpoint Priority Funding Plan. *Motion passed on a voice vote.*

** 14-44

Water Planning & Strategic Management Committee

1. **One Watershed, One Plan Implementation** – The Board's Water Management & Strategic Planning Committee (WMSP) is charged with assisting in the development of operating procedures and policies that will guide program development and implementation. Over the course of 6 meetings starting in 2013, the Committee has worked on a number of procedures and policies to support the development and implementation of One Watershed, One Plan including the pilot phase. At this time the Committee is advancing two work products for consideration by the Board.

The first item is a policy for managing local water plan extensions in light of the current WRAPS development process and the One Watershed, One Plan Program. Moved by Jack Ditmore, seconded by Tom Schulz, to approve the Water Planning and Strategic Management Committee recommendation to approve the One Watershed One Plan Local Water Plan Extensions. *Motion passed on a voice vote.*

** 14-45

The second item is an operating procedures document which provides both policy and guidance for plan development during the pilot phase of the program for: 1) boundary framework; 2) plan types; 3) participation requirements; 4) formal agreement; and 5) plan development procedures. Moved by Jack Ditmore, seconded by Faye Sleeper, to approve the Water Planning and Strategic Management Committee recommendation to approve the One Watershed, One Plan Operating Procedures for Pilot Watersheds. *Motion passed on a voice vote.*

** 14-46

AGENCY REPORTS

Minnesota Department of Agriculture (MDA) Rob Sip handed out the Minnesota Agriculture Water Quality Certification Program Update and information on Clean Water Research.

UPCOMING MEETINGS

- BWSR Board Tour – August 27, 2014 in the Twin Cities metro area.
- Next BWSR Board Meeting - August 28, 2014.

** 14-47 Moved by Doug Erickson, seconded by Jack Ditmore, to adjourn the meeting at 1:11 pm. *Motion passed on a voice vote.*

Respectfully submitted,

Kari Keating
Recorder

BOARD MEETING AGENDA ITEM

AGENDA ITEM TITLE: Dispute Resolution Committee Report

Meeting Date: August 28, 2014

Agenda Category: ☐ Committee Recommendation ☐ New Business ☐ Old Business

Item Type: ☐ Decision ☐ Discussion X Information

Section/Region: Land and Water Section

Contact: Travis Germundson

Prepared by: Travis Germundson

Reviewed by: _____ Committee(s)

Presented by: Travis Germundson/Gerald Van Amburg

☐ **Audio/Visual Equipment Needed for Agenda Item Presentation**

Attachments: ☐ Resolution ☐ Order ☐ Map X Other Supporting Information

Fiscal/Policy Impact

X None
☐ Amended Policy Requested
☐ New Policy Requested
☐ Other: _____

☐ General Fund Budget
☐ Capital Budget
☐ Outdoor Heritage Fund Budget
☐ Clean Water Fund Budget

ACTION REQUESTED

None.

LINKS TO ADDITIONAL INFORMATION

SUMMARY (*Consider: history, reason for consideration now, alternatives evaluated, basis for recommendation*)

Dispute Resolution Committee Report. The report provides a monthly update on the number of appeals filed with the BWSR.

Dispute Resolution Report
August 15, 2014
By: Travis Germundson

There are presently **14** appeals pending. All of the appeals involve WCA except File 10-10. There has been **1** new appeal filed since the last report (May 28th Board Meeting).

Format note: New appeals that have been filed since last report to the Board.
~~Appeals that have been decided since last report to the Board.~~

File 14-7 (6-23-14) This is an appeal of duplicate restoration orders in Otter Tail County. The appeal regards the alleged drainage alterations to a Type 4 wetland. The petitioners have filed after-the-fact wetland applications for an exemption and no-loss with the LGU concurrently with the petition. *The appeal has been placed in abeyance and the restorations orders stayed until there is a final decision on the wetland applications.*

File 14-6 (5-28-14) This is an appeal of a replacement plan decision by DNR Land and Minerals involving the Hibbing Taconite Mine and Stockpile Progression and Williams Creek Wetland Mitigation. The appeal regards the approval of a wetland replacement plan application for mining related activities. A similar appeal was also filed simultaneously with DNR under procedures required for permit to mine. *The appeal has been placed in abeyance for completion of DNR's contested case proceedings (pre-hearing conference is scheduled for August 21, 2014).*

File 14-5 (5-2-14) This is an appeal of an exemption determination in Kandiyohi County. The appeal regards the denial of a wetland exemption application. At issue is the wetland type determination. The appeal has been remanded for technical work and administrative proceedings.

File 14-4 (4-28-14) This is an appeal of a restoration and replacement order in McLeod County. The appeal regards alleged drainage improvements associated with the excavation of a private drainage system. At issue is a prior exemption determination. *The appeal was placed in abeyance and the restoration and replacement orders stayed for the LGU to make a final decision on the after-the-fact wetland applications.*

File 14-3 (4-17-14) This is an appeal of a restoration order in Murray County. The appeal regards alleged drainage impacts to a wetland confined on a DNR Wildlife Management Area (Degroot). The appeal was placed in abeyance and the Restoration Order stayed for the TEP to produce a revised written report adequately addressing the drainage modifications.

File 14-1 (2-3-14) This is an appeal of a replacement plan decision in Stearns County. The appeal regards the approval of a wetland replacement plan application. Pervious appeals (File 12-19 and File 13-5) were remanded for further technical work and administrative proceedings, and now the current approval is being appealed. The appeal was accepted and a pre-hearing conference took place on June 2, 2014. As a result the pre-hearing conference the appeal proceedings have been placed on hold by mutual agreement for additional survey work and an on-site visit (scheduled for August 19th).

File 13-3 (3-19-13) This is an appeal of a restoration order in Big Stone County. The appeal regards impacts to DNR Public Waters and WCA wetlands on state property associated with an agricultural drainage project. The appeal has been placed in abeyance and the restoration order stayed until there is a final decision on an after-the-fact wetland application.

File 13-1 (1-9-13) This is an appeal of a restoration order in Swift County. The appeal regards drainage impacts to multiple wetlands associated with an agricultural drain tile project. The appeal has been placed in abeyance and the restoration order stayed until there is a final decision on an after-the fact wetland application.

File 12-12 (7-16-12) This is an appeal of an exemption determination in Renville County. The appeal regards the denial of an agricultural drainage exemption associated with a 1.5 acre wetland. At issue is the wetland type determination. A previous appeal (File 12-5) was remanded for further technical evaluation and administrative proceedings, and now the current approval is being appealed. A verbal settlement agreement has since been reached that includes submittal of a replacement plan application. The appeal has been placed in abeyance by mutual agreement to determine the viability of a wetland replacement plan application.

File 11-1 (1-20-11) This is an appeal of a restoration order in Hennepin County. The appeal regards the filling of approximately 1.77 acres of wetland and 0.69 acres of excavation. The appeal has been placed in abeyance and the restoration order stayed until there is a final decision on an after-the-fact wetland application and confirmation of required mitigation.

File 10-10 (6-10-10) This is an appeal filed under Minn. Stat. 103D.535 regarding an order of the managers of the Wild Rice Watershed District not to proceed with the Upper Becker Dam Enhancement Project as proposed. Appeals filed under 103D.535 require that the Board follow the Administrative Procedures Act. The Act requires that the hearing be conducted by an Administrative Laws Judge through the Office of Administrative Hearings. A mediated settlement agreement was reached with the condition that if the watershed district fails to carry out Option D the appeal shall go forward. The appeal has been placed in abeyance.

File 10-7 (2-19-10) This is an appeal of a restoration order in Stearns County. The appeal regards draining and filling impacts to approximately 18.44 acres of Type 2/3 wetland and 3.06 acres of Type 2 wetland. The appeal has been placed in abeyance and the restoration order stayed for submittal of "as built" or project information pertaining to a public drainage system. A portion of the site has been restored and it appears the landowner is committed to restoring the remaining areas.

File 09-10 (7-9-09) This is an appeal of a banking plan application in Aitkin County. The appeal regards the LGU's denial of a banking plan application to restore 427.5 acres of wetlands through the use of exceptional natural resource value. The appeal has been accepted and pre-hearing conferences convened on October 13 and 30, and December 14, 2009. Settlement discussions are on hold while the appellant addresses permitting issues with the Corps of Engineers. The appeal has been placed in abeyance by mutual agreement on determining the viability of a new wetland banking plan application.

File 08-9. (03/06/08) This is an appeal of a replacement order in Pine County. The appeal regards impacts to approximately 11.26 acres of wetland. The replacement order has been stayed and the appeal has been placed in abeyance pending disposition with the U.S. Dept of Justice. A pending verbal settlement agreement is in place as a result of court ordered mediation.

Summary Table

Type of Decision	Total for Calendar Year 2013	Total for Calendar Year 2014
Order in favor of appellant		1
Order not in favor of appellant	2	
Order Modified	1	
Order Remanded	4	1
Order Place Appeal in Abeyance	2	3
Negotiated Settlement	3	
Withdrawn/Dismissed		

COMMITTEE RECOMMENDATIONS

Metro Region Committee

1. Bassett Creek Watershed Management Commission Plan Amendment – Steve Christopher – ***DECISION ITEM***

2. Washington County Groundwater Plan – Mary Peterson – ***DECISION ITEM***

BOARD MEETING AGENDA ITEM

AGENDA ITEM TITLE: Bassett Creek Watershed Management Commission Plan Amendment

Meeting Date: August 28, 2014

Agenda Category: X Committee Recommendation ☐ New Business ☐ Old Business

Item Type: X Decision ☐ Discussion ☐ Information

Section/Region: Metro Region

Contact: Steve Christopher

Prepared by: Steve Christopher

Reviewed by: Metro Region Committee(s)

Presented by: Steve Christopher

☐ **Audio/Visual Equipment Needed for Agenda Item Presentation**

Attachments: ☐ Resolution X Order X Map X Other Supporting Information

Fiscal/Policy Impact

X None
☐ Amended Policy Requested
☐ New Policy Requested
☐ Other:

☐ General Fund Budget
☐ Capital Budget
☐ Outdoor Heritage Fund Budget
☐ Clean Water Fund Budget

ACTION REQUESTED

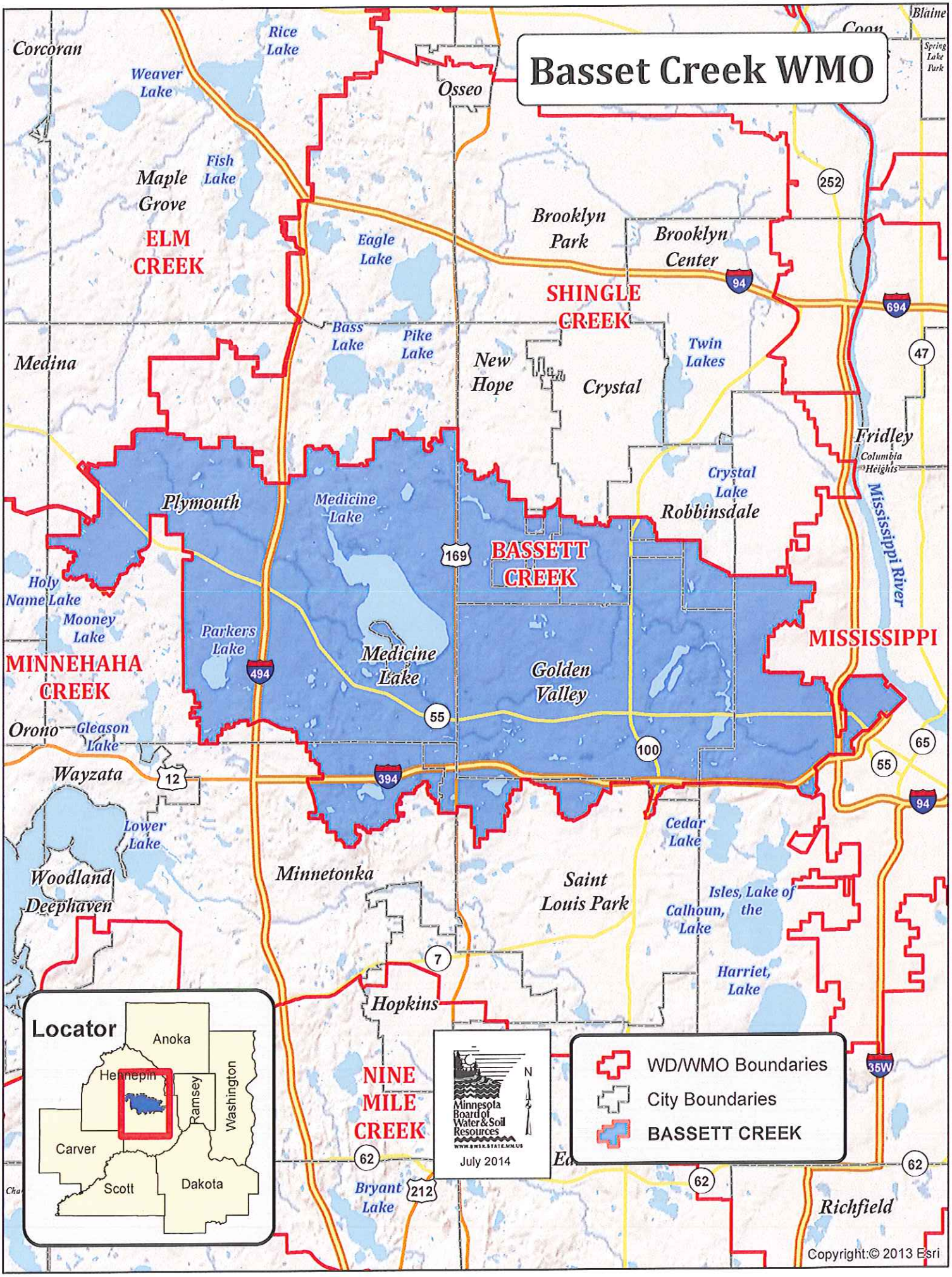
Approval of Plan Amendment to the Bassett Creek Watershed Management Commission Watershed Management Plan

SUMMARY (*Consider: history, reason for consideration now, alternatives evaluated, basis for recommendation*)

Background:
The Bassett Creek Flood Control Commission was formed in 1968 primarily to study flooding issues in the watershed and adopted a watershed management plan in 1972. In 1984, the Bassett Creek Watershed Management Commission was created after revising the Flood Control Commission's joint powers agreement. The Commission prepared its first generation watershed management plan that the Board approved in July 1989.

Amendment Summary:
The Amendment proposes to revise the current implementation program by adding one capital improvement project. The project would restore approximately 1.8 miles of the Main Stem of Bassett Creek. The restoration will take place from 10th Avenue to Duluth Street in the City of Golden Valley. The total estimated project cost ranges from $1,319,000 to $1,659,000.

Recommendation:
The Metro Region Committee met on August 7, 2014 to review the Plan Amendment, comments received and the BWSR staff recommendation. The Metro Region Committee unanimously voted to recommend approval of the Amendment to the full Board per the attached draft Order.


Basset Creek WMO
Corcoran
Rice Lake
Weaver Lake
Osseo
Blaine
Spring Lake Park
Maple Grove
Fish Lake
ELM CREEK
Eagle Lake
Brooklyn Park
Brooklyn Center
252
94
694
SHINGLE CREEK
Bass Lake
Pike Lake
Medina
New Hope
Crystal
Twin Lakes
47
Fridley
Columbia Heights
Crystal Lake
Robbinsdale
Plymouth
Medicine Lake
169
BASSETT CREEK
Mississippi River
Holy Name Lake
Mooney Lake
Parkers Lake
MISSISSIPPI
MINNEHAHA CREEK
494
Medicine Lake
Golden Valley
55
Orono
Gleason Lake
100
65
55
Wayzata
12
394
94
Lower Lake
Cedar Lake
Woodland
Deephaven
Minnetonka
Saint Louis Park
Isles, Lake of the
Calhoun, Lake
7
Harriet, Lake
Hopkins
NINE MILE CREEK
35W
62
Bryant Lake
212
62
Richfield
Locator
Anoka
Hennepin
Ramsey
Washington
Carver
Scott
Dakota
Minnesota Board of Water & Soil Resources
July 2014
WD/WMO Boundaries
City Boundaries
BASSETT CREEK
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Minnesota Board of Water and Soil Resources
520 Lafayette Road North
Saint Paul, Minnesota 55155

In the Matter of the review of the Amendment to the Watershed Management Plan for the **Bassett Creek Watershed Management Commission**, pursuant to Minnesota Statutes Section 103B.231, Subdivision 11.

ORDER APPROVING AMENDMENT TO WATERSHED MANAGEMENT PLAN

Whereas, the Board of Commissioners of the Bassett Creek Watershed Management Commission (Commission) submitted a Watershed Management Plan Amendment (Amendment) dated June 2014 to the Minnesota Board of Water and Soil Resources (Board) pursuant to Minnesota Statutes section 103B.231, subd. 11, and;

Whereas, the Board has completed its review of the Amendment;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions and Order:

FINDINGS OF FACT

1. **WMO Establishment.** The Bassett Creek Flood Control Commission was formed in 1968 primarily to study flooding issues in the watershed and adopted a watershed management plan in 1972. In 1984, the Bassett Creek Watershed Management Commission was created after revising the Flood Control Commission's joint powers agreement. The Commission prepared its first generation watershed management plan that the Board approved in July 1989.

2. **Authority to Plan.** The Metropolitan Surface Water Management Act requires the preparation of a watershed management plan for the subject watershed area which meets the requirements of Minnesota Statutes Sections 103B.201 to 103B.251. The watershed management plan may be amended according to Minnesota Statutes Section 103B.231, Subd. 11. The second generation plan was approved by the Board in August 2004. Subsequently, the Commission completed three major and four minor amendments between 2005 and 2013.

3. **Nature of the Watershed.** The Commission is located in the heart of Hennepin County. It is bound by the Mississippi River WMO to the east, on the south and west by the Minnehaha Creek Watershed District, on the northwest by the Elm Creek WMO, and on the north by Shingle Creek WMO. The watershed encompasses all or part of the following nine cities: Plymouth, Medicine Lake, Golden Valley, Robbinsdale, Crystal, New Hope, Minnetonka, St. Louis Park, and Minneapolis. Bassett Creek discharges into

the Mississippi River in downtown Minneapolis below St. Anthony Falls. The watershed contains five major lakes and three creek branches. The Bassett Creek watershed covers 39.6 square miles and is predominantly fully developed. Scattered areas of redevelopment throughout the watershed are proposed.

4. **Amendment Development and Review.** The draft Amendment was submitted to the Board, other plan review agencies, and local governments for the required 60-day review on February 27, 2014. The Commission held a public hearing on June 19, 2014. No revisions to the Amendment were made as a result of the comments received at the hearing. The final draft Amendment was submitted to the Board and plan review agencies on June 7, 2014 for final review and approval.

4. **Local Review.** The District circulated a copy of the draft Amendment to local units of government for their review pursuant to Minnesota Statutes Section 103B.231, subd. 7. Hennepin County stated that there are no comments on the Amendment.

5. **Metropolitan Council Review.** The Metropolitan Council stated that there are no comments on the Amendment.

6. **Department of Agriculture Review.** The MDA stated that there are no comments on the Amendment.

7. **Department of Health Review.** The MDH did not comment on the Amendment.

8. **Department of Natural Resources Review.** The DNR expressed concern with potential use of highly-engineered, hard-control solutions for streambank stabilization. The Commission responded that where site conditions allow, bio-engineering methods will be used. The DNR also recommended minimizing the areas of disturbance to the greatest degree to preserve tree health. A suggestion to investigate the need for an EAW was also made.

9. **Pollution Control Agency Review.** The MPCA did not comment on the Amendment

10. **Department of Transportation Review.** The DOT did not comment on the Amendment.

11. **Board Review.** Board staff commended the Commission for maintaining a current Plan and had no other comments.

12. **Amendment Summary.** The Amendment proposes to revise the implementation program by adding one new capital improvement project for 2015 to restore approximately 1.8 miles of the Main Stem of Bassett Creek. The restoration will take place from 10th Avenue to Duluth Street in the City of Golden Valley. The total estimated project cost ranges from $1,319,000 to $1,659,000.

13. **Metro Region Committee Meeting.** On August 7, 2014, the Board's Metro Region Committee and staff met in St. Paul to review and discuss the Amendment. Those in attendance from the Board's Committee were Jill Crafton, Jack Ditmore, Christy Jo Fogerty, Faye Sleeper, and Joe Collins, chair. Board staff in attendance were Board Conservationists Steve Christopher and Mary Peterson. Board staff recommended approval of the Amendment. After discussion, the Committee unanimously voted to recommend approval of the Amendment to the full Board.

CONCLUSIONS

1. All relevant substantive and procedural requirements of law and rule have been fulfilled.

2. The Board has proper jurisdiction in the matter of approving an Amendment to the Watershed Management Plan for the Bassett Creek Watershed Management Commission pursuant to Minnesota Statutes Section 103B.231, subd. 11.

3. The Bassett Creek Watershed Management Commission's Amendment attached to this Order defines the need and purpose of the Watershed Management Plan changes and the methods of financing.

4. The attached Amendment is in conformance with the requirements of Minnesota Statutes Sections 103B.201 to 103B.251.

ORDER

The Board hereby approves the attached Amendment dated June 2014 to the Bassett Creek Watershed Management Commission Watershed Management Plan.

Dated at Saint Paul, Minnesota this 28th day of August 2014.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

BY: Brian Napstad, Chair

12.6.6 2014 Major Plan Amendment

In [month] and [month] 2014, BWSR approved and the BCWMC adopted, respectively, a major plan amendment to add the following projects to the BCWMC's 10-year CIP (Table 12-2): Main Stem of Bassett Creek Restoration 10th Avenue to Duluth Street (CR2015).

Main Stem of Bassett Creek Restoration 10th Avenue to Duluth Street, Golden Valley

The BCWMC Plan recognized the need to restore stream reaches damaged by erosion or affected by sedimentation. Section 7.0 of the BCWMC Plan describes the issue, the Commission's policies relating to channel restoration, and the benefit of stream restoration in preserving fisheries habitat and minimizing nutrient and sediment loads to the creek and downstream waters. The Commission established the Creek and Streambank Trunk System Maintenance, Repair and Sediment Removal Fund (the Restoration Fund) to address the issue. The Commission decided to assess the cities in the watershed $25,000 annually to fund channel restoration projects (Restoration Fund). The cities conducted inventories of the channel reaches and the BCWMC Plan identified specific problem areas.

The 2013 Golden Valley Erosion Site Survey identified numerous problem areas along the project area of Bassett Creek within the City of Golden Valley. The problems include a heavy tree canopy of volunteer trees; degraded vegetative diversity; invasive species of trees, vegetation, and shrubs; areas of active streambank erosion; deposition of sediments; and failing infrastructure.

The work to restore the channel in this area has been requested by the City of Golden Valley, which has very little ownership of or easement rights to the property adjacent to the creek. Restoration of the sites along this reach is proposed to be included as a group for design and construction in the BCWMC's 2015 CIP.

The Bassett Creek Golden Valley Main Stem channel restoration project proposed to be added to the CIP will consist of a variety of erosion control measures including:

- Removal of hazard and invasive trees and vegetation
- Reshaping and stabilization of eroded streambanks
- Installation of a variety of stream stabilization measures and flow diversion methods to address erosion problems, including biologs, rock vanes, boulders, riprap, live stakes, and native vegetation and plantings
- Repair of storm sewer outfalls, and other failing infrastructure along the creek
- Establishing native vegetation, trees, and shrubs along the creek

- Removal of miscellaneous debris from within the creek

This project is on the BCWMC CIP starting in 2015 (project CR2015 in Table 12-2 – CIP table) with an estimated cost of $1,659,000 (high end of estimated cost range).

Table 12-2 Water Quality Management and Flood Control 10-Year Capital Improvements Program

	Water Quality Improvement	Capital Cost [1] A (Actual Project (Cost) E (Estimated Project Cost)	Y 2010	2011	2012	2013	2014	2015	2016	2017	2018
Medicine Lake											
ML-1 [2]	Construct wet detention pond for subwatershed BC94B1 (Option 8 in Medicine Lake Plan)	$0									
ML-2 [3]	Reduce Goose Loadings by 75% (Option 17 in Medicine Lake Plan)										
ML-3, ML-4 [4]	Reroute flows from subwatershed BC94 to a larger wet detention pond for BC92 (Option 9a in Medicine Lake Plan) & dredging of accumulated sediment Medicine Lake East Beach wet detention pond for subwatershed BC107 (Option 11 in Medicine Lake Plan) & dredging of accumulated sediment	A $893,000									
ML-5 [5]	Construct wet detention pond for subwatersheds BC98, BC98A and BC98B (Option 10a in Medicine Lake Plan) & dredging of accumulated sediment	$0									
ML-6	Construct wet detention pond for subwatershed BC94B2 (Option 6 in Medicine Lake Plan)	E $14,000									$14,000
ML-7 [6]	In-Lake Herbicide Treatment (Option 18 in Medicine Lake Plan)	A $132,000									
ML-8	Lakeview Park Pond					$196,00					
ML-11 [15]	Medicine Lake Park Pond	E $1,100,000									
Plymouth Creek											
PC-1 [19]	26th Avenue to Medicine Lake	E $965,000	$902,46								
PC-2 [19]	26th Avenue to 37th Avenue	E $559,000							$105,000	$454,000	
Parkers Lake											
PL-6 [14]	Improvements to stormwater basin in PL-A13 near Circle Park (from the City of Plymouth's Parkers Lake Implementation Plan)	E $73,000									
Wirth Lake											
WTH-1 [7]	Dredging subwatershed FR-5 detention pond (Option 2 in Wirth Lake Plan)	A $69,000									
WTH-2 [8]	Highway 55 detention pond (option 3 in Wirth Lake Plan)	E $215,000									
WTH-3 [8]	In-lake alum treatment (Option 1 in Wirth Lake Plan)	E $59,000									
WTH-4	Modify outlet to prevent back-flow (Wirth Lake TMDL Implementation Plan)	$180,000			$180,000						
Sweeney Lake											
SL-3	Schaper Pond Diversion Project	E $612,000					$612,000				
Twin Lake											
TW-1 [9]	Pond expansion (Option 1 in Twin Lake Plan)	E $182,000									
TW-2	Twin Lake In-Lake Alum Treatment	E $163,000					$163,000				
Westwood Lake											
WST-1 [10]	Flag Avenue detention/ skimming facility (Option 1 in Westwood Lake Plan)	A $174,000									
Bassett Creek Park											
	None-see Table 2 Potential future water quality projects										
Northwood Lake											
NL-1 [11]	Construct ponds NB-35A, B, C and NB-29A, B (Option 4 in Northwood Lake Plan)	E $595,000							$595,000		
NL-2 [22]	Four Seasons Mall Area Water Quality Project	E $990,000				$990,00					
~~NL-3~~ [23]	~~Divert Lancaster Lane storm sewer (Option 3 in Northwood Lake Plan)~~										
NL-4 [12]	Construct ponds NB-36A, NB-37A, NB-38A and NB-28A, B (Option 5 in Northwood Lake Plan)	A $153,000									

	Water Quality Improvement	Capital Cost [1] A (Actual Project (Cost) E (Estimated Project Cost)	Y 2010	2011	2012	2013	2014	2015	2016	2017	2018
NL-7 [16]	Construct pond adjacent to creek	E $139,000									
BC-1 [13]	Pond BC 10-3 (Option 4 in Bassett Creek Main Stem Plan)	$0									
Crystal Boundary to Regent Ave [20]	Channel restoration	E $636,000	$34,80	$601,200							
Wisconsin Ave to Crystal Boundary	Channel restoration	E $580,000		$290,000	$290,000						
BC-7	Briarwood/Dawnview Water Quality Improvement Project, Golden Valley	E $250,000					$250,000				
Irving Avenue to Golden Valley	Channel restoration	E $856,000			$856,000						
10th Avenue to Duluth Street	Channel restoration, Golden Valley	E $1,659,000						$1,000,000	$659,000		
Sweeney Lake Branch											
Cortlawn Pond to Turners Crossing [17]	Channel restoration	Bassett Creek Main Stem									
North Branch											
36th Ave to Bassett Creek Park [21]	Channel restoration	E $835,000		$600,000	$235,000						
Grimes, North, & South Rice											
GR-2	Grimes Pond wet detention pond (Option 4 in Rice and Grimes Ponds Plan)	E $104,000									$104,000
Crane Lake											
CL-1	Ramada Inn detention/skimming facility (Option 1 in Crane Lake Plan)	E $116,000									
CL-2 [18]	Joy Lane Wet Detention Pond (Alt. #2)	$0									
Turtle Lake											
	None Proposed										
Lost Lake											
	None Proposed										
		Capital Cost	2	2011	2012	2013	2014	2015	2016	2017	2018
	ANNUAL ESTIMATED COST		$9	$1,491,200	$1,561,000	$1,186,000	$1,025,000	$1,000,000	$1,359,000	$454,000	$118,000

Notes:

1. Capital Cost does not include land acquisition costs, but does include legal, administration, and 25% additional for contingencies.
2. Constructed by City.
3. Periodically completed by City.
4. This project includes dredging of accumulated sediment and was completed in 2006.
5. Mn/DOT sound wall construction in New Hope will require relocation and resizing of storm sewer in this watershed.
6. Treatment completed by the City of Plymouth in 2005, 2006, and 2008.
7. Completed in 2006.
8. Project authorized in 2006. Issues regarding participation by Mn/DOT and future maintenance have delayed construction, no current schedule.
9. Project authorized in 2006. Issues regarding site contamination and right-of-way have delayed construction, no current schedule.
10. Project completed in 2006.
11. The City of New Hope constructed NB-35A, B, C but not to the same degree as proposed in the lake and watershed management plan. NB-29 A and B have not been constructed. These improvements will need to be re-evaluated as part of the feasibility study. Costs shown are for NB-29A and B only. Costs will be added to the CIP to upgrade these ponds if the feasibility study indicates that they should be upgraded.
12. The City of New Hope constructed NB-28A and B. NB-36A, NB-37A and NB-38A were completed in 2006.
13. This project was completed as part of the Boone Ave and Brookview Golf Course improvement projects in 2004.
14. Project approved for construction in 2006, to be completed as part of street repaving project.
15. Minor Plan Amendment approved April 2007. Project to be completed in 2010.
16. Minor Plan Amendment approved September 2007. Project completed in 2009.
17. Minor Plan Amendment approved August 2007. Project completed in 2008.

18. Not feasible per city of Minnetonka in 2008.

19. Minor Plan Amendment approved June 2009. Project PC-1 to be completed in 2011.

20. Minor Plan Amendment approved June 2009.

21. Project construction proposed to start in 2011 using CIP reserve funds.

22. The Four Seasons Mall Area Water Quality Project includes construction of two new water quality treatment ponds and restoration of an eroding stream channel. One of the ponds will be located on the Four Seasons Mall site; the other pond will be located southwest of the mall site, near the intersection of 40th Ave. N. and Pilgrim Lane. The original proposed project (from the 1996 Northwood Lake Watershed and Lake Management Plan) was to dredge and enlarge pond NB-07 to provide additional treatment of stormwater runoff. The 2012 feasibility study for the Four Seasons Mall Area Water Quality Project concluded that it was not feasible to convert pond NB-07 (a wetland) to a stormwater pond. The feasibility study also included two scenarios as alternatives to the proposed dredging. The Commission selected Scenario 1 as their preferred alternative.

BOARD MEETING AGENDA ITEM

AGENDA ITEM TITLE: Washington County Groundwater Plan – 2014-2024

Meeting Date: August 28, 2014

Agenda Category: X Committee Recommendation ☐ New Business ☐ Old Business

Item Type: X Decision ☐ Discussion ☐ Information

Section/Region: Metro Region

Contact: Mary Peterson

Prepared by: Mary Peterson

Reviewed by: Metro Region Committee(s)

Presented by: Mary Peterson

☐ **Audio/Visual Equipment Needed for Agenda Item Presentation**

Attachments: ☐ Resolution X Order Map X Other Supporting Information

Fiscal/Policy Impact

X None
☐ Amended Policy Requested
☐ New Policy Requested
☐ Other:

☐ General Fund Budget
☐ Capital Budget
☐ Outdoor Heritage Fund Budget
☐ Clean Water Fund Budget

ACTION REQUESTED

Approval of Washington County Groundwater Plan

LINKS TO ADDITIONAL INFORMATION

- Final Review Draft Plan: http://www.bwsr.state.mn.us/boardpackets/water_plans_for_bd_packet/washington_ground_water_plan/Groundwater_Plan_2014-2024_Final_Review_Draft.pdf

SUMMARY (*Consider: history, reason for consideration now, alternatives evaluated, basis for recommendation*)

Washington County (County), in accordance with Minnesota Statutes 103B.255, has submitted a Groundwater Plan to the MN Board of Water and Soil Resources (BWSR) for review and approval. Washington County has stated that the overall goal of this Groundwater Plan (Plan) is to: "Manage the quality and quantity of groundwater in Washington County to protect health and ensure sufficient supplies of clean water to support human uses and natural ecosystems." And further states that the purpose of preparing, adopting, and implementing a Plan is to provide a county-wide structure for the protection and conservation of groundwater resources.

The County appointed a Groundwater Advisory Committee (GWAC) and a Technical Advisory Committee (TAC) to develop the Plan in 2012. These committees met several times throughout the 2012 and 2013 planning process. Local and state agencies were actively involved throughout the planning process. The draft Plan was released to all required entities and individual citizens for 60 day review and comment on October 8, 2013 and submitted to BWSR for final review on June 18, 2014.

Groundwater Plan Summary:
The Plan provides an overview of the groundwater resources, including geology, hydrology, groundwater recharge, and groundwater dependent resources in Chapter 2. It focuses on main issues identified by the stakeholders and includes policies and strategies to address them in Chapters 3-13. These issues include groundwater supply, groundwater and surface water interaction, source water and wellhead protection, existing contaminants such as VOCs and PFCs, nutrients, pesticides, road salt, septic systems, land spreading for beneficial use, hazardous waste, mining, and landfills.

Chapter 14 includes the implementation, funding and measurement details of how the Plan will be implemented. This chapter was added to the draft plan based on comments received from local partners and BWSR. This additional chapter and the referenced Appendices A and B, clearly communicates to partners and the public on the what, who, and when strategies will be implemented. The framework and timeline provide an overall direction for the County and partners, but strategies may be moved up or down in priority depending on timeliness of an issue, willingness of partners, and availability of resources. Washington County has committed to coordinating annual work plan meetings with the intent of looking two to three years out to accommodate budgeting cycles and funding needs. Progress on work plan activities will be monitored and overall plan measures will be evaluated annually using the performance measurement tool as described in Appendix B to ensure they are relevant.

Chapter 15 includes the references used in the Plan, Chapter 16 includes the List of Figures (maps) referenced in the body of the Plan, and Chapter 17 includes the Appendices as noted in the Table of Contents.

Discussion:
BWSR Hydrogeologist Eric Mohring provided a more detailed technical review of the Plan and his comments were incorporated into the BWSR metro region staff 60 day review comment letter to the County. During the 60 day review process, the County received over 100 comments from fifteen LGU and agency partners. The County responded to all these comments and incorporated suggestions into the draft Plan submitted for this final review. One recurring comment theme from local entities and BWSR centered on details of implementation, such as who, when and budgeting of planned strategies. In response to these comments, County and BWSR staff met to discuss coordination of implementation strategies, plan priorities and identifying clear roles and expectations among partners. To address these comments, County staff added Chapter 14 - Plan Implementations, Funding and Measurement, and Appendix A- Implementation Framework to the final draft Plan submitted to BWSR for review.

The state agency comments received during this process are noted in the draft Board Order. All comments have been responded to by the County and incorporated in the draft Plan. BWSR staff has completed the final review of the Washington County Groundwater Plan 2014-2024. The Plan is in conformance with the requirements of Minnesota Statutes Section 103B.255.

Recommendation:
The Metro Region Committee met on August 7, 2014 to review the Plan, comments received and the BWSR staff recommendation. County representatives attended the committee meeting to present highlights of the Plan and answer questions of the committee members. Discussion was held. The Metro Region Committee unanimously voted to recommend approval of the Plan to the full Board per the attached draft Order.

Minnesota Board of Water and Soil Resources
520 Lafayette Road North
Saint Paul, Minnesota 55155

In the Matter of the review of the Groundwater Plan for Washington County pursuant to Minnesota Statues section 103B.255

ORDER APPROVING GROUNDWATER PLAN

Whereas, the Washington County Board of Commissioners submitted a Groundwater Plan (Plan) to the Minnesota Board of Water and Soil Resources (Board) on June 18, 2014 pursuant to Minnesota Statutes section 103B.255, and;

Whereas, the Board has completed its review of the Plan;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions and Order:

FINDINGS OF FACT

1. **Authority to Plan.** The Metropolitan Surface Water Management Act in Minnesota Statutes section 103B.255 authorizes counties in the 7-county metropolitan area to develop and implement groundwater plans. Washington County, through their groundwater planning effort, seeks support from the community in order to protect and conserve this valuable resource now and for future generations.

2. **Nature of Groundwater in County.** Groundwater provides 100 percent of the water supply available for human uses in the county. Recent data shows that increased groundwater pumping for human use is having an impact in the county. This includes a decline in water levels of county lakes, stresses on county streams including trout streams, and more inquiries from county residents wondering why their well is not supplying enough water. The overall goal of the Plan is to: "Manage the quality and quantity of groundwater in Washington County to protect health and ensure sufficient supplies of clean water to support human uses and natural ecosystems."

3. **Local Review.** Washington County circulated a copy of the draft Plan to state review agencies, local government units, and adjacent counties on October 8, 2013 for their review. The initial 60 day comment period ended January 24, 2014 due to a 45 day

extension requested by a local partner. Comments were received from the following local entities: Baytown Township, Brown's Creek WD, Carnelian-Marine-St. Croix WD, Comfort Lake-Forrest Lake WD, City of Grant, City of St. Paul Park, Rice Creek WD, Valley Branch WD, Washington Conservation District and the City of Woodbury. The County provided written responses to all of the comments. The County held a public hearing on March 4, 2014. The County revised the Plan to satisfactorily incorporate suggested changes and additions as a result of the comments.

4. **Metropolitan Council Review.** Agency staff attended and participated in the planning and development of the Plan. No comments were received during the 60 day review period or the final review period.

5. **Department of Agriculture Review.** Comments were submitted to the County during the 60 day review period. The agency recommended that the MDA Ag BMP Handbook be referenced, additional MDA program responsibilities be added to the governance box on page 3, MDA authorities and additional program information be added, include a strategy for wetland restoration or water storage, add discussion about the MDAs Nitrogen Fertilizer Management Plan and strategies, include MDA authorities for source water protection and various program partnering opportunities. The County revised the Plan to satisfactorily incorporate suggested changes and additions as a result of these comments. MDA submitted a few minor edits and program links during the Plan final review period. The County incorporated these comments into the draft Plan.

6. **Department of Health Review.** Agency staff attended meetings and participated during the planning and development of the Plan. During the 60 day review period, the agency submitted the following; "The MN Department of Health appreciated working with Washington County during the plan development. We feel that the plan presents a great opportunity to further public health protection through its proposed actions to protect groundwater, drinking water, and public water supplies". During the final review period, MDH stated all comments had been incorporated into the draft Plan.

7. **Department of Natural Resources Review.** Agency staff attended and participated during the planning and development of the Plan. The agency submitted comments to the County on 8/26/13 and 9/3/13 during the development of the draft Plan. Various technical text additions, deletions and terminology definitions were provided to the County for inclusion. This included updated information on the state's first Groundwater Management Area in the north and east metro and requested support for the County Geologic and Hydrologic Atlas. These comments were satisfactorily incorporated prior to the draft Plan being released for the 60 day review period. DNR submitted comments during the final comment review period relating to technical references, non-supporting evidence for meaning of "overuse" in relation to ground appropriation and sustainable use, the purpose of the "sustainable groundwater management plan", suggestions for strategies for water reuse applications, and noted minor edits/corrections to text. The County responded to all comments and satisfactorily incorporated the suggestions and minor edits into the draft Plan.

8. **Pollution Control Agency Review.** Comments were submitted to the County during the 60 day review period. The agency noted good strategies for sanitary sewer treatment system contamination, suggested removing the strategy that would prohibit land spreading of septage until sufficient research and best management practices have been established, and to consider additional strategies for septage management. Edits were noted for bedrock formation and MPCA monitoring well information. A general question to the County on whether the Metropolitan Council projections of groundwater usage related to population growth in the Metro area and if the effects of increased groundwater withdrawals and lowering of water tables had been considered on surface water flows. County responded that this had been considered and was included in Chapters 3 and 4. The County revised the Plan to satisfactorily incorporate suggested changes and additions as a result of these comments. BWSR received no comments during the final review period.

9. **Board Review.** Comments were submitted to the County during the 60 day review period. The specific comments were more editorial in nature – questions of clarification, style and citing sources, some grammatical corrections and a few suggestions for consideration. Board staff recommended the County summarize the process used to check in with stakeholders and advisory committees, and clarify how they will inform the public about results, priorities and budgeting needs for future work to be performed. Changes were requested to Appendix E: Conflict Analysis and Conflict Resolution to accurately reflect authority as per Minnesota Statutes section 103B.255. In addition, BWSR Hydrogeologist Eric Mohring provided a more detailed technical review of the Plan and suggested edits and changes to achieve a more consistent format for citing information sources. One recurring comment theme from local entities and BWSR centered on details of implementation. In response to these comments, County and BWSR staff met to discuss coordination of implementation strategies, plan priorities and identifying clear roles and expectations among partners. To address these comments the County added Chapter 14 – Plan Implementations, Funding and Measurement, and Appendix A- Implementation Framework, to the final draft Plan.

During the final review period, BWSR staff provided some minor editorial items and suggestions for changes to the Introduction Section of the Plan. The County made these changes to the final draft Plan.

10. **Highlights of the Plan.**

The Plan is a comprehensive document that lays out the technical framework, issues, policies and strategies to address existing and future groundwater related problems.

The Introduction Section clearly defines the Plan's intent. The Plan is meant to:

- Concisely outline the physical nature of groundwater resources, discuss the issues that threaten groundwater, and provide direction and strategies on how to protect groundwater for future generations.

- Provide context and organization for stakeholders and residents to better understand the complex water governance structure.
- Serve as a framework to develop annual work plans for the county and its stakeholders that give specific implementation actions to address the groundwater issues in the plan.
- Compliment and coordinate with other state, regional, county, and local planning efforts.
- Guide collaboration on groundwater initiatives with state, regional, and local partners more efficiently and effectively.
- Be a resource for stakeholders and residents regarding groundwater information pertinent to the county.

The Plan is well organized and inclusive of groundwater resource issues of the County and how those issues interact with surface water management.

11. **Metro Region Committee Meeting.** On August 7, 2014, the Board's Metro Region Committee and staff met with representatives from Washington County to review and discuss the Plan. Those in attendance from the Board's Committee were Jill Crafton, Jack Ditmore, Christy Jo Fogarty, Faye Sleeper and Joe Collins, chair. Board staff in attendance were Board Conservationists Mary Peterson and Steve Christopher. The representatives from Washington County in attendance were Jessica Collin-Pilarski, Lowell Johnson, and Stephanie Souter.

Board staff recommended approval of the Plan.

After discussion, the Committee unanimously voted to recommend approval of the Plan to the full Board.

CONCLUSIONS

1. All relevant substantive and procedural requirements of law and rule have been fulfilled.

2. The Board has proper jurisdiction in the matter of approving a Groundwater Plan for Washington County pursuant to Minnesota Statutes section 103B.255, subd. 10.

3. The Washington County Groundwater Plan attached to this Order defines groundwater and groundwater-related problems within the County, possible solutions thereto, and an implementation program.

4. The attached Plan is in conformance with the requirements of Minnesota Statutes section 103B.255.

ORDER

The Board hereby approves the attached Plan dated August 2014 – 2024 as the Groundwater Plan for Washington County.

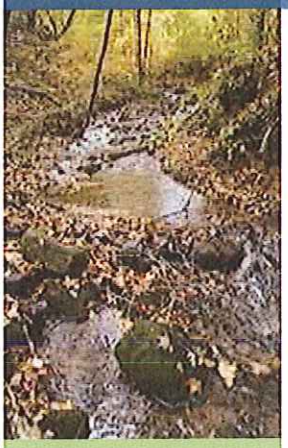
Dated at Saint Paul, Minnesota this 28th day of August, 2014.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Brian Napstad, Chair

1. INTRODUCTION



Groundwater provides 100 percent of the water supply in the county available for human uses.

Groundwater is perhaps Washington County's (county) most valuable natural resource. High quality drinking water, healthy streams and lakes, fish habitat, rare plants and economic vitality all depend on protecting and conserving groundwater resources. The overall goal of the Washington County Groundwater Plan (Plan) is to:

> **"Manage the quality and quantity of groundwater in Washington County to protect health and ensure sufficient supplies of clean water to support human uses and natural ecosystems."**

There are many competing interests for the use of county groundwater. The two main users, as defined in the Plan's goal, are humans and natural ecosystems. Human uses include domestic, commercial, industrial, and irrigation. Natural ecosystems include streams, lakes, wetlands, and fens.

Groundwater provides 100 percent of the water supply in the county available for human uses. Recent data shows that increased groundwater pumping for human use is having an impact in the county. This includes a decline in water levels of county lakes, stresses on county streams including trout streams, and more inquiries from county residents wondering why their well is not supplying enough water.

Additionally the county has known groundwater contamination from Perfluorochemicals, Volatile Organic Compounds, and nitrates. The presence of these contaminants decreases the amount of clean drinking water available.

The purpose of preparing, adopting, and implementing a Plan is to provide a county-wide structure for the protection and conservation of groundwater resources. The Plan is a comprehensive document that lays out the technical framework, issues, policies, and strategies to address existing and future groundwater related problems.

By Minnesota Statute 103B.255, county government is responsible for writing, coordinating, and administering the Plan; however, no one entity has the overall authority to implement all the necessary actions. Through this planning effort, the county seeks support from the community in order to protect and conserve this valuable resource now and for future generations.

The Plan is meant to:

- concisely outline the physical nature of groundwater resources, discuss the issues that threaten groundwater, and provide direction and strategies on how to protect groundwater for future generations;
- provide context and organization for stakeholders and residents to better understand the complex water governance structure;
- serve as a framework to develop annual work plans for the county and its stakeholders that give specific implementation actions to address the groundwater issues in this plan;
- compliment and coordinate with other state, regional, county, and local planning efforts.

- Guide collaboration on groundwater initiatives with state, regional, and local partners more efficiently and effectively.
- Be a resource for stakeholders and residents regarding groundwater information pertinent to the county.

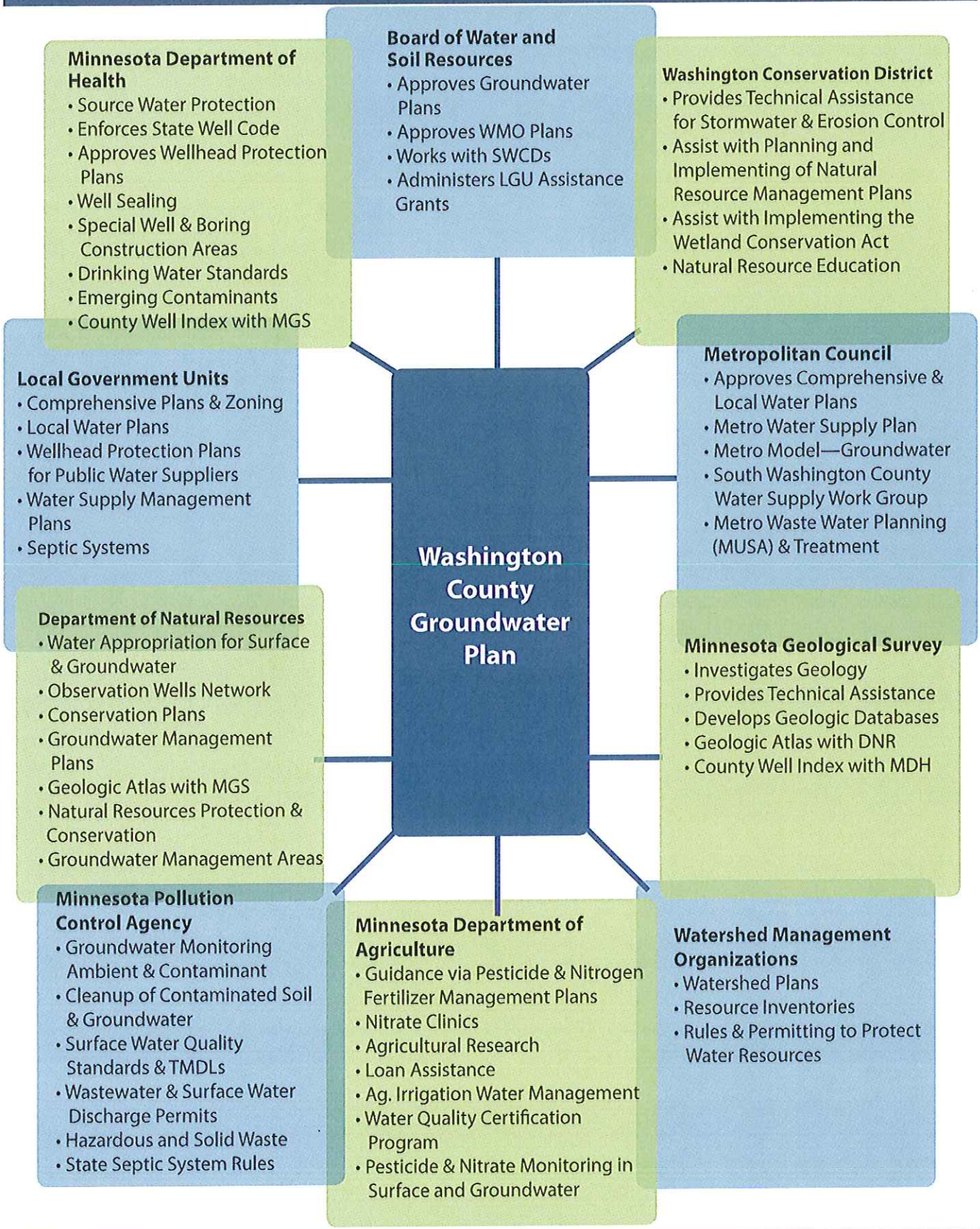
1.1 GOVERNANCE

Water governance in Minnesota is complex, with state and local agencies responsible for different aspects of surface and groundwater management. Both surface and groundwater are managed and regulated by State agencies, watershed organizations, and local governments. Historically, surface water management organizations and agencies have not factored groundwater provisions into their plans, policies and rules. While this is starting to change it will take a coordinated effort between State agencies, the county, watershed organizations and local government to provide more effective overall management of both surface water and groundwater. The county Plan is the link to tie the governance of surface and groundwater together in an effort to focus on researching the level of connection between surface water and groundwater, identifying groundwater recharge and discharge zones, and developing policies and rules to protect and holistically manage water resources.

In recent years, several statewide efforts have engaged stakeholders around water governance, calling for increased coordination of groundwater and surface water management. These efforts will continue to evolve over the life of this Plan. They include:

- The Clean Water Legacy Act of 2006, which established the Clean Water Fund and the Clean Water Council.
- The Clean Water, Land and Legacy Amendment of 2008, [3] which has served as a powerful incentive for state agencies to collaborate and improve the integration of their programs.
- The University of Minnesota Water Sustainability Framework,[46] which provides recommendations for aligning water, land use and energy policies to ensure water sustainability and providing cross-cutting governance.
- The Local Government Roundtable [11] that is led by the Association of Minnesota Counties, the Minnesota Association of Watershed Districts, and the Minnesota Association of Soil and Water Conservation Districts. The roundtable provides consensus recommendations to members and state policy makers on how to deliver water management in Minnesota.
- The Minnesota Pollution Control Agency Water Governance Evaluation,[39] completed in 2013, evaluates water related statutes, rules, and governing structures to streamline, strengthen, and improve sustainable water management.

The overall governance structure for water management in Washington County, along with the responsibilities of each agency is on the following page. Key state agencies include the Board of Water and Soil Resources (BWSR), the Minnesota Department of Natural Resources (DNR), Minnesota Department of Agriculture (MDA), Minnesota Department of Health (MDH), and the Minnesota Pollution Control Agency (MPCA).


Minnesota Department of Health
• Source Water Protection
• Enforces State Well Code
• Approves Wellhead Protection Plans
• Well Sealing
• Special Well & Boring Construction Areas
• Drinking Water Standards
• Emerging Contaminants
• County Well Index with MGS
Board of Water and Soil Resources
• Approves Groundwater Plans
• Approves WMO Plans
• Works with SWCDs
• Administers LGU Assistance Grants
Washington Conservation District
• Provides Technical Assistance for Stormwater & Erosion Control
• Assist with Planning and Implementing of Natural Resource Management Plans
• Assist with Implementing the Wetland Conservation Act
• Natural Resource Education
Local Government Units
• Comprehensive Plans & Zoning
• Local Water Plans
• Wellhead Protection Plans for Public Water Suppliers
• Water Supply Management Plans
• Septic Systems
Metropolitan Council
• Approves Comprehensive & Local Water Plans
• Metro Water Supply Plan
• Metro Model—Groundwater
• South Washington County Water Supply Work Group
• Metro Waste Water Planning (MUSA) & Treatment
Washington County Groundwater Plan
Department of Natural Resources
• Water Appropriation for Surface & Groundwater
• Observation Wells Network
• Conservation Plans
• Groundwater Management Plans
• Geologic Atlas with MGS
• Natural Resources Protection & Conservation
• Groundwater Management Areas
Minnesota Geological Survey
• Investigates Geology
• Provides Technical Assistance
• Develops Geologic Databases
• Geologic Atlas with DNR
• County Well Index with MDH
Minnesota Pollution Control Agency
• Groundwater Monitoring Ambient & Contaminant
• Cleanup of Contaminated Soil & Groundwater
• Surface Water Quality Standards & TMDLs
• Wastewater & Surface Water Discharge Permits
• Hazardous and Solid Waste
• State Septic System Rules
Minnesota Department of Agriculture
• Guidance via Pesticide & Nitrogen Fertilizer Management Plans
• Nitrate Clinics
• Agricultural Research
• Loan Assistance
• Ag. Irrigation Water Management
• Water Quality Certification Program
• Pesticide & Nitrate Monitoring in Surface and Groundwater
Watershed Management Organizations
• Watershed Plans
• Resource Inventories
• Rules & Permitting to Protect Water Resources

From a regional perspective, the Metropolitan Council shares responsibility for water management. At the local level, the county, Washington Conservation District (WCD), Local Government Units (LGUs) and watershed management organizations (WMOs) all have various roles. WMO Boundaries are represented in ***Figure 1***.

Many of these agencies engage in planning efforts with regards to water management. These plans are discussed below and throughout the Plan. There are no known conflicts between the Plan and other county LGUs, WMOs, or neighboring county plans. The county plan is intended to complement these existing plans by filling a gap to identify strategies that guide communities specifically in groundwater management. The county recognized that the majority of regulatory and decision making athority for groundwater lies with our partner agencies and local governments. However, the county values the importance of groundwater for our communities and residences; and therefore chooses to act as a convener to ensure and enable coordination with respect to groundwater needs in the county.

Regional Growth, Land Use and the Urban Service Area

Under state law, the Metropolitan Council is charged with guiding regional development in the twin cities area. The current 2030 Regional Development Framework [13] is a regional growth strategy into the year 2030. It consists of a compilation of policy statements, goals, standards, programs, and maps prescribing orderly, economic, public, and private development. In 2013-2014, Metropolitan Council is updating this planning effort through Thrive MSP 2040,[15] which will require updates for several of the plans discussed below. See their website for more details: Metropolitan Council Thrive MSP 2040. [15]

The Metropolitan Council also plans for the Metropolitan Urban Service Area (MUSA). Centralized sewer and water serves most of the area within the MUSA or the boundary of an urban reserve area. ***Figure 2*** illustrates the location of the MUSA in the county as of 2010, and projected extensions of the MUSA into 2030. Some cities are already completely within the MUSA (Stillwater, Oakdale, Newport, Mahtomedi, Oak Park Heights, and Bayport) while others are partially included in plans for additional expansion (Forest Lake, Hugo, Lake Elmo, Cottage Grove, and Woodbury). If a community wishes to expand the MUSA they make a request that is either approved or denied by the Metropolitan Council. The availability of centralized sewers and the future growth of the MUSA are major factors in determining housing density in the county. Where the MUSA is extended, higher density development will follow. All of the communities along the St. Croix River north of Stillwater and south of Bayport are considered rural residential, or permanent rural, which indicates that the MUSA would not extend into these areas in the foreseeable future. These areas of the county will continue to utilize subsurface sewage treatment systems (SSTS) for sewage treatment.

The Metropolitan Council's decisions to expand the MUSA will need to consider the impact on groundwater resources as higher density development will increase water supply demands. The Metropolitan Council is authorized to do regional water supply planning as discussed in Chapter 5.

County Comprehensive Planning Process and Zoning
In 2010 the County Board of Commissioners adopted its most recent comprehensive plan. The goals and policies in the Washington County 2030 Comprehensive Plan[33] apply to the unincorporated areas of the county. Incorporated cities prepare their own comprehensive plans.

The Washington County 2030 Comprehensive Plan outlines several goals to protect its natural resources while managing growth and development.[48] The elements of the Comprehensive Plan relating most directly to groundwater protection are found in the Land Use and Natural Resources sections. The Comprehensive Plan promotes development in urban areas where urban services can be provided, and encourages open space design of housing in the rural areas. Open space design allows the housing to be clustered on lots that are much smaller than those in conventional subdivisions keeping a substantial percentage of the property as permanently protected open space. The purpose of clustering houses is to provide a more efficient use of the land while preserving good agricultural land, open space, scenic views and natural drainage systems.

With regard to the effect of land use on groundwater the comprehensive plan states: "Washington County will regulate development so that groundwater quality and quantity is protected from degradation and depletion and is maintained in a safe condition for the benefit of all citizens. Pollution prevention will be the top priority. Standards to prevent the contamination of groundwater will be established and enforced. More stringent standards will be adopted to protect areas of significant groundwater recharge." [48]

In the Natural Resources section of the comprehensive plan Goal 6-2 and its strategies are specific to water resources. Goal 6-2 states: "Protect groundwater and surface water resources through coordination and collaboration with state and local water resource organizations."[48]

This plan uses the **County's Comprehensive Plan** [48] as a guide to move forward on its groundwater strategies.

City Comprehensive Planning and Zoning
Incorporated cities develop their own comprehensive plans and zoning ordinances based on an overall direction set by elected officials and planning commissioners. Plans and ordinances are developed working within parameters set by state statutes and on guidelines set by the Metropolitan Council. City Comprehensive Plans are reviewed by the Metropolitan Council and state agencies for adherence to their policies and plans.

Cities across the county are growing at varying rates. Those served by the MUSA are developing at higher residential densities and with greater percentages of commercial and industrial land use. Communities outside the MUSA set growth rates and densities established by regional and local goals, policies, and comprehensive plans developed by local elected officials, but many factors determine the actual rate of growth.

Land use planning and land use decisions have an important role in protecting groundwater resources. It is imperative that groundwater protection strategies are

incorporated into city comprehensive plans to better protect groundwater resources. These strategies should address the siting of commercial and industrial development using hazardous materials, the potential impact of impervious surfaces to groundwater recharge, and the long-term sustainability of groundwater supplies.

Local Government Units
Per Minnesota Statute 103B.235 local governments having land use planning authorities within a watershed shall prepare a local water management plan (LWMP) . If the metropolitan county that the LGU resides in has an approved groundwater plan, the county must be given the opportunity to review and comment on the LWMP. The LWMP provides an effective opportunity for LGUs to incorporate groundwater considerations into their future growth plans.

Land Use and Source Water Protection
Source water protection is the process of protecting the source of drinking water from becoming contaminated. For example a stream, river, lake, or an aquifer can be a source of drinking water. The Minnesota Department of Health (MDH) administers the State's Source Water Protection Program. Part of this program is wellhead protection. Wellhead protection is the process of managing land use in critical zones of groundwater recharge to reduce the risk of contaminating water supplies. Public Water Suppliers (PWSs) are required to write and implement Wellhead Protection Plans that provide a scientific analysis to identify key groundwater recharge area and guidelines for land use and zoning that are protective of groundwater. It is imperative to groundwater protection that county and city land use plans and zoning ordinances incorporate wellhead protection. Chapter 8 discusses source water and wellhead protection in further detail.

Watershed Plans
Watershed Management Organizations are required to complete a watershed plan. Although the Board of Water and Soil Resources encourages integrated water planning, surface water planning and groundwater planning are essentially dealt with separately in the metropolitan area. The required components for watershed plans are defined by statute and include:

- an inventory of the water resources in the watershed;
- an assessment of issues facing the water resources in the watershed.;
- established goals and policies to protect the water resources in the watershed;
- an implementation program and prioritization of activities.

1.2 PLAN IMPLEMENTATION

PHE will provide overall leadership, coordination, and annual review for implementing the Plan but it will take the concerted and coordinated efforts of all stakeholders and residents to effectively carry it out.

Plan implementation, funding and measurement are discussed in greater detail in Chapter 14.

14. PLAN IMPLEMENTATION, FUNDING AND MEASUREMENT

The county will convene partners on an annual basis to evaluate success and plan for the future.

Implementation

The users of this Plan will include state agencies, regional organizations, county and city officials, watershed organizations, and active citizens. PHE will provide overall leadership, coordination, and annual review for implementing the Plan but it will take the concerted and coordinated efforts of all stakeholders and residents to effectively carry it out.

It is not expected that all the strategies identified in this Plan will be initiated at once. As a ten year plan, once adopted and each year after, PHE will develop an annual work plan detailing the next year's activities and measuring the effectiveness of the activities completed the current year. PHE will convene stakeholders in the fall of each year, to plan out strategies for the following year and beyond. Given long term planning for county and WMO budgeting cycles, as well as state and federal funding opportunities, annual workplan meetings may be planning out activities for two or even three years in advance.

The implementation framework located in ***Appendix A*** will guide PHE and stakeholders moving forward. The framework identifies each strategy in the Plan, the status in relation to current activities of PHE (either new or ongoing), likely partners, and an estimated timeframe for initiation and completion. Several strategies considered "ongoing" are expected to last through the duration of the plan. The framework and timeline provide an overall direction for PHE and partners, but strategies may be moved up or down in priority depending on timeliness of an issue, willingness of partners, and availability of resources. For instance, a drought would most likely raise the awareness and magnitude of water conservation. In that situation, there will be a greater public will to implement actions to address water conservation and preserve the water supply.

Funding

Minnesota Statute 103B.255 states: "A metropolitan county may levy amounts necessary to administer and implement an approved and adopted groundwater plan. A county may levy amounts necessary to pay the reasonable increased costs to soil and water conservation districts and watershed management organizations administering and implementing priority programs identified in the county's groundwater plan."
Funding is necessary to coordinate and implement the Plan. These activities include developing an annual groundwater program work plan with stakeholders, implementing Plan strategies, and initiating other related program activities.

The primary source of funding is from the county environmental charge (CEC). The CEC is a service charge for managing waste to avoid contaminating groundwater. It is collected by haulers as a percentage of the garbage bill. The CEC is used for the management of solid waste, hazardous waste, recycling, resource recovery, and groundwater work. The county is mandated by the Waste Management Act to develop and implement a Solid Waste Master Plan. The purpose of a county solid waste plan is to coordinate the implementation of an integrated waste management system in order to protect public health and the environment. The work from the county's solid waste and groundwater plans complement each other in the protection of groundwater.

Additional supportive funding comes from the county Solid Waste Management special assessment, BWSR Natural Resources Block Grant, the county water testing program, the water and sewer portion of the Food, Beverage, and Lodging licenses, other grants for specific initiatives, and partnerships. Collaborative initiatives such as groundwater related research projects, rule and policy development, education and technical assistance programs, and capital improvement projects will be funded based on the specific goals and benefits of the participating or benefiting partners. To the greatest extent possible, state and federal grants will be sought to fund projects. Efforts will be made to develop cooperative, joint funding of projects from local government and watershed organizations. The annual workplanning meetings will help guide this budgeting process, with the intention that PHE and some partners will be planning up to two or even three years out, to accommodate budgeting cycles. The county will provide overall coordination of grant funding efforts, including cost-sharing. As part of implementation, financial assistance may also be available to individual homeowners through cost-share grants or low interest loans available from the county, the WCD, or other organizations.

The primary work of groundwater protection for the county is carried out by PHE in the groundwater program, the solid and hazardous waste programs, and the septic programs. In addition, other county departments lend support at varying levels, including Administration, Information Technology (Geographic Information Systems), Public Works, and the County Attorney's Office. The WCD is also an important partner in providing base technical services.

Measurement

PHE is committed to integrating performance management and continuous improvement into its environmental programs and services. Performance management provides a framework for the regular collection, analysis and reporting of performance measures that track resources used, work produced, and specific results achieved. The information and knowledge gained from this process informs continuous improvement activities to address gaps between the present condition and the desired future condition. The performance measures presented in the plan were developed using a process called Results Based Accountability,[9] that took both population and performance accountability into consideration.

Population accountability is about the well-being of whole populations; it refers to the results or quality of life conditions that we want to exist for our whole population: clean and sustainable groundwater for all Washington County residents. For each groundwater issue, ***Appendix B*** provides a definition of the quality of life result that the plan addresses, why it is important, and the causes and forces contributing to the current state of the county's groundwater quality and quantity.

Performance accountability refers to the county groundwater program's accountability to partners and stakeholders for the performance of the program. The principle distinction between the two types of accountability is between ends and means. Results addressed in the population accountability component are about the "ends" we want for residents, while performance measures are about the "means" to get there by measuring

how well programs are working. The measures represent the activities that need to take place in order to "turn the curve" on our current state- that is, what it would take to do better and each partner's contribution.

Performance Measurement Tool		
	Quantity	**Quality**
Effort	**How much did we do (#)?** What did we do? How much service did we deliver?	**How well did we do it (%)?** How well did we deliver service?
Effect	**Is anyone better off (#)/(%)?** How much change for the better did we produce #/%? What quality of change for the better fdif we produce (%)?	

Headline Performance Measures Those measures you would use to present or explain your program's perform ance to policy makers or the public.
Secondary Measures All other measures for which you now have data. These measures will be used to help manage the program.
Data Development Agenda Measures you would like to have, listed in priority order.

*Measures were not developed at this time for land spreading, mining and landfills but will be developed as strategies are implemented in annual work plans.

In order to effectively use the performance measures, progress on achieving results will be continuously monitored and evaluated. This tool will be used as strategies are implemented, on a project-by-project basis, and will be reviewed by PHE and partners through annual work plan meetings. Progress on work plan activities will be monitored and overall plan measures will be evaluated annually to ensure they are relevant.

Strategy		Partners	Status	Timeline										
				2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
3.2.1	Develop a county wide groundwater information database, informed by the work of the DNR and the Metropolitan Council, which the county and LGUs canuse to determine: (please refer to page 33 of the plan for the rest of the strategy)	WCPHE DNR LGUs Met Council MDH MGS USGS WCD WMOs	New			X	X							
3.2.2	Using the information from the groundwater information database, develop a tiered approach alert system for aquifer levels.	WCPHE DNR LGUs Met Council MGS WCD WMOs					X	X						
3.2.3	Analyze the DNR observation well data to determine which wells closely follow patterns of precipitation, high capacity pumping, or a combination of both.	WCPHE DNR Met Council MGS			X	X								
3.2.4	Using the information in strategies 1,2, and 3 above, partner with stakeholders to develop a sustainable groundwater management plan.	WCPHE DNR EMWREP Met Council WCD							X	X				
3.2.5	Develop an annual forum for the DNR and the Metropolitan Council to share and update the Washington County Water Consortium with groundwater supply information. Stakeholders will use this information, along with the Metropolitan Council's Metropolitan Area Groundwater Flow Model (Metro Model), to develop implementation actions for the Groundwater Plan Work Plans.	WCPHE DNR Met Council WCD WMOs		X	X									

Strategy		Partners	Status	Timeline										
				2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
3.2.6	Develop a county wide water conservation plan for new development and retrofits, in partnership with LGUs , the WCD, EMWREP, WMOs, and state agencies, informed by Strategy 1 above, that: (please refer to page 33 and 34 of the plan for the rest of the strategy)	WCPHE DNR EMWREP LGUs MDH DOLI MPCA WCD WMOs	New		X	X	X	X	X					
3.2.7	Partner with the WCD, WMOs, and the commercial and industrial businesses in the county to collaborate on ways to reduce water use and increase water reuse.	WCPHE WCD WMOs	New	X	X	X	X	X	X	X	X	X	X	X
4.2.1	Promote and encourage research related to better understanding the regional infiltration system and the specific relationships between groundwater aquifers and surface water bodies. This Includes: (refer to page 38 for the rest of this strategy.)	WCPHE DNR LGUs Met Council MDH MGS USGS WCD WMOs	New	X	X	X	X	X	X	X	X	X	X	X
4.2.2	Stay engaged in the DNRs process of developing a groundwater management area for the north and east metro to ensure the counties needs are represented in the process.	WCPHE	Ongoing	X	X									
4.2.3	Develop a county wide groundwater information database, informed by the work of the DNR and the Metropolitan	WCPHE DNR MDH MGS	Ongoing	X	X	X	X	X						
4.2.4	Build on previous groundwater and surface water studies, along with other available data, to inventory and rank groundwater recharge areas (including wetlands, lakes, streams, and fields) in the county. Include contamination potential, and distance to bedrock as part of the ranking criteria.	WCPHE DNR LGUs Met Council MDH MGS USGS WCD WMOs	New	X	X	X								

Strategy		Partners	Status	Timeline										
				2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
4.2.5	Partner with the WCD and watershed management organizations (WMOs) to develop, through the Washington County Water Consortium, a county-wide groundwater monitoring plan and a data tracking and mapping system.	WCPHE DNR LGUs Met Council MDH MGS USGS WCD WMOs	New	X	X	X								
4.2.6	Collaborate with LGUs , the WCD, and WMOs to identify and preserve regional recharge areas. Encourage WMOs and LGUs to incorporate protection of recharge areas into plan, rule, and ordinance updates.	WCPHE DNR LGUs Met Council WCD WMOs	New		X	X	X	X						
4.2.7	Develop and implement an expanded education program for citizens and public officials on the interaction between groundwater and surface water, the value of and need to protect groundwater recharge areas... (refer to page 38 for the rest of this strategy)	WCPHE DNR LGUs Met Council MDH WCD WMOs	Ongoing											
4.2.8	Encourage the development of design standards for low impact storm water management tools, including infiltration, that evaluate proposed locations of practices, specifically: (refer to page 38 and 39 for the rest of this strategy)	WCPHE DNR LGUs Met Council WCD WMOs	Ongoing											
4.2.9	Encourage the use of low impact storm water management tools, including infiltration, in areas where practices can be safely placed in accordance with Strategy 4.2.8.	WCPHE DNR LGUs Met Council MDH WCD WMOs	Ongoing	X	X	X	X	X	X	X	X	X	X	X

Strategy		Partners	Status	Timeline										
				2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
4.2.10	Collaborate with LGUs, state agencies, and MGS to collect and map baseline data of the recommended chemicals in groundwater to evaluate how groundwater conditions change with time and land use changes.	WCPHE DNR LGUs Met Council MDH MGS USGS WCD WMOs	New											
4.2.11	Work with LGUs, the WCD, and WMOs to utilize the county wide water conservation plan, from Chapter 3 Strategy 3.2.5, to implement water conservation practices as a tool to help steady the water balance between surface water and groundwater.	WCPHE DNR LGUs Met Council MDH MGS USGS WCD WMOs	New			X	X	X	X	X	X	X	X	X
4.2.12	The county will monitor the outcome of the White Bear Lake Restoration Association's lawsuit against the DNR regarding White Bear Lake… (refer to page 39 for the rest of this strategy)	WCPHE DNR LGUs Met Council	Ongoing	X	X	X								
5.2.1	The county will assist in the development and implementation of source water protection and wellhead protection activities. When requested the county will facilitate wellhead protection steering committees when protection areas cross jurisdictional boundaries.	WCPHE DNR LGUs Met Council MDH WCD WMOs	Ongoing	X	X	X	X	X	X	X	X	X	X	X
5.2.2	Develop a forum for PWSs to meet annually to share information and hear updates from MDH. The information from these meetings will be used to develop implementation actions for the Groundwater Plan Work Plans.	WCPHE DNR LGUs Met Council MDH WCD WMOs	New		X	X								

Strategy		Partners	Status	Timeline										
				2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
5.2.3	Work with PWSs, EMWREP, the WCD, and WMOs to strengthen education efforts, and develop and distribute materials needed to inform home owners on where they get their water from, what source water protection is, and the efforts they can make to ensure they do not contaminate their drinking water.	WCPHE DNR LGUs Met Council MDH MGS USGS WCD WMOs	Ongoing	X	X	X	X	X	X	X	X	X	X	X
5.2.4	As appropriate, the county will consider Source Water Protection Areas and Drinking Water Supply Management Areas when making land use decisions, and encourage LGUs to do so as well.	WCPHE DNR LGUs Met Council MDH MGS USGS WCD WMOs	Ongoing	X	X	X	X	X	X	X	X	X	X	X
5.2.5	The county will continue a well sealing program for residents who wish to voluntarily seal wells. This includes: ...(refer to page 43 for the rest of this strategy)	WCPHE DNR LGUs Met Council MDH MGS USGS WCD WMOs	Ongoing	X	X	X	X	X	X	X	X	X	X	X
6.2.1	The county will continue to work with MDH and Baytown and West Lakeland Townships (as requested by the townships) with testing private homes for VOCs in accordance with their ordinances.	WCPHE DNR LGUs Met Council MDH MGS USGS WCD WMOs	Ongoing	X	X	X	X	X	X	X	X	X	X	X

Strategy		Partners	Status	Timeline										
				2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
6.2.2	The county will assist MDH and LGUs as requested with education and outreach related to groundwater contamination, including bio-exposure and accumulation as with PFCs.	WCPHE DNR LGUs Met Council MDH MGS USGS WCD WMOs	Ongoing	X	X	X	X	X	X	X	X	X	X	X
6.2.3	Develop an intergovernmental communication plan for Conditional Use Permits and other development projects that may impact or be impacted by existing groundwater contamination.	WCPHE DNR LGUs Met Council MDH WCD WMOs	New		X	X	X							
6.2.4	The County Epidemiologist will continue to represent Washington County residents by serving on the MDH Environmental Health Tracking and Biomonitoring Advisory Panel.	WCPHE	Ongoing	X	X	X	X	X	X	X	X	X	X	X
6.2.5	The county will support continued legislative advocacy for the MDH Environmental Health Tracking and Biomonitoring Program.	WCPHE MDH	Ongoing	X	X	X	X	X	X	X	X	X	X	X
7.2.1	Re-evaluate the Cottage Grove Nitrate Study and expand to Afton, Grey Cloud Island, Denmark Township, and other communities as needed. Work with MDA and the communities to develop (refer to page 54 for the rest of this strategy)	WCPHE LGUs MDH MDA WCD WMOs	New	X	X									
7.2.2	Partner with MDA and the WCD to map well testing data from the county testing program, including data from community and county nitrate clinics.	WCPHE LGUs Met Council MDH MDA WCD	New		X	X	X							

Strategy		Partners	Status	Timeline										
				2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
7.2.3	Continue to operate and promote a resident private well testing program.	WCPHE	Ongoing	X	X	X	X	X	X	X	X	X	X	X
7.2.4	Partner with MDA and the WCD to develop education materials that direct private well owners where to access drinking water testing for pesticides. Investigate options to offer pesticide testing of groundwater to private well owners	WCPHE LGUs MDH MDA WCD	New	X	X									
7.2.5	Partner with MDA and the WCD to develop a program that identifies long term monitoring stations for nitrates and pesticides. Analyze data for trends in levels of these contaminants.	WCPHE LGUs MDA WCD	New		X	X	X							
7.2.6	Identify available partnerships and funding opportunities to address Agricultural Nutrient Management...(refer to page 54 for the rest of the strategy	WCPHE LGUs MDA WCD WMOs	New	X										
8.2.1	Track and monitor emerging contaminants research at both the state and federal levels. This includes the MDH Contaminants of Emerging Concern program (the nomination and evaluation of new contaminants), the... (refer to page 58 for the rest of this strategy.)	WCPHE LGUs MDH MPCA	New	X	X	X	X	X	X	X	X	X	X	X
8.2.2	Develop and promote education and outreach related to emerging contaminants, for the general public, elected officials, and PWSs. Continue to promote the county's unused medication drop box. The county may seek financial assistance...(refer to page 58 for the rest of this strategy)	WCPHE DNR LGUs Met Council MDH WCD WMOs	Ongoing	X	X	X	X	X	X	X	X	X	X	X

Strategy		Partners	Status	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
9.2.1	Develop a county wide assessment that utilizes geologic data, nitrate testing/ mapping, housing stock data, and a community approach to determine risk levels... (refer to page 61 for the rest of this strategy.)	WCPHE LGUs Met Council MDH WCD WMOs	New			X	X	X						
9.2.2	Strengthen education efforts and develop materials to inform home owners on the impact a failing SSTS can have on groundwater and surface water resources. Include education on proper use and maintenance of SSTS to ensure functionality of the system.	WCPHE LGUs WCD WMOs	New		X	X								
9.2.3	Define a method and develop materials to educate realtors and title companies on SSTS rules and requirements during property transfers.	WCPHE LGUs WCD WMOs	Ongoing	X	X	X	X	X	X	X	X	X	X	X
9.2.4	Define a method to verify SSTS compliance inspections occur during property transfers.	WCPHE LGUs	New		X	X								
9.2.5	Research and develop financing options, including the possibility of a cost share, grant, or loan program for SSTS system replacement.	WCPHE WCD WMOs	Ongoing	X										
9.2.6	Utilize approved nutrient and bacterial TMDLs as a tool to identify areas for potential septic system maintenance and management.	WCPHE DNR LGUs Met Council WCD WMOs	New	X										
10.2.1	For the land application of lime sludge and other wastes as approved by the state and county, the county encourages watershed management organizations to identify sensitive water features and appropriate setbacks for... (refer to page 64 for the rest of this strategy.)	WCPHE DNR LGUs Met Council WCD WMOs	Ongoing	X	X	X	X	X	X	X	X	X	X	X

Strategy		Partners	Status	Timeline										
				2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
10.2.2	This plan recommends the county board be cautious with regard to allowing the land application of septage. If the county allows land application of septage this plan strongly recommends the county develop and implement a... (refer to page 64 for the rest of this strategy.)	WCPHE DNR LGUs Met Council MDH WCD WMOs	Ongoing		X	X	X							
10.2.3	Develop and implement an educational program for citizens regarding land spreading of septage.	WCPHE DNR LGUs	New				X	X						
11.2.1	The county will work to ensure that groundwater protection is an integral part of State, county, and local rules and permitting programs that regulate hazardous waste storage, transportation, disposal, clean up, and emergency response structures.	WCPHE DNR LGUs Met Council MDH MPCA	Ongoing	X	X	X	X	X	X	X	X	X	X	X
11.2.2	Explore options to encourage BMPs at new and existing salvage yards in the county, to promote proper management of waste and prevent groundwater contamination.	WCPHE DNR LGUs Met Council	New			X	X							
11.2.3	Continue to strengthen outreach and education on household hazardous waste disposal options through the use of the county environmental center and other household hazardous waste facilities that are available.	WCPHE MPCA LGUs Met Council WCD WMOs	Ongoing	X	X	X	X	X	X	X	X	X	X	X
11.2.4	Develop education materials and an outreach plan for hazardous waste generators that explains their potential groundwater impact.	WCPHE WCD WMOs	New		X	X								

Strategy		Partners	Status	Timeline										
				2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
12.2.1	The county will continue to review and provide comments on any proposed mining operations within the county, including frac sand mining, in order to protect... (refer to page 71 for the rest of this strategy)	WCPHE DNR LGUs MPCA	Ongoing	X	X	X	X	X	X	X	X	X	X	X
12.2.2	The county will review and comment on any proposed ordinance or rule changes from municipalities and other LGUs, with regards to mining operations, in order to protect groundwater.	WCPHE DNR LGUs	Ongoing	X	X	X	X	X	X	X	X	X	X	X
12.2.3	The county will review the current county mining ordinance, in the context of frac sand mining, to ensure protection… (refer to page 71)	WCPHE LGUs	New		X	X	X							
12.2.4	Given that the county is home to multiple large mining operations it will look for opportunities to partner with them to find possible water reuse applications.	WCPHE WCD WMOs	New	X	X	X	X	X	X	X	X	X	X	X
13.2.1	The county supports Minnesota Rule 7001.3111 "Additional Siting Requirements for Certain Landfills that have not Received a Permit before Jan. 1, 2011."	WCPHE MPCA LGUs	Ongoing	X	X	X	X	X	X	X	X	X	X	X
13.2.2	The county will continue to review and provide comments on any proposed landfill operations within the county in order to protect groundwater.	WCPHE MPCA LGUs Met Council	Ongoing	X	X	X	X	X	X	X	X	X	X	X
13.2.3	The county will review and comment on any proposed statute or rule changes from the state with regards to landfill operations in order to protect groundwater.	WCPHE DNR LGUs Met Council MDH	Ongoing	X	X	X	X	X	X	X	X	X	X	X
13.2.4	The County Groundwater Plan supports the work of the Washington County Waste Management Master Plan 2012-2030.	WCPHE LGUs	Ongoing	X	X	X	X	X	X	X	X	X	X	X

POPULATION ACCOUNTABILTY

Quality of Life Result: Clean and sustainable groundwater for all Washington County residents

Why is this important?

Groundwater is one of Washington County's most valuable natural resources. Safe drinking water, healthy lakes and streams, and economic vitality all depend on protecting and conserving this resource. Protecting groundwater resources is one of the most central roles of public health and a fundamental component to a safe and healthy society.

How are we doing?

Quality: The county has known areas of groundwater contamination including VOC contamination in eight communities and PFC contamination in four communities. Nitrate levels in the southern region of the county are also elevated. Combined with the threat of emerging contaminants, there is strong evidence that the quality of the county's groundwater is compromised which in turn reduces quantity.

Quantity: Recent history is starting to indicate that the previously held notion that there is an overabundance of groundwater supply is false. Increasingly, residents are being forced to lower their pumps, and for those surface water bodies connected to aquifers, levels are dropping. Both of these circumstances indicate a drop in aquifer levels.

At the residential level, the county currently monitors data on well water testing and well sealing activities. The rate of water testing has been relatively low due to limited resources available for marketing and education. Well-sealing rates have remained constant over the past few years and increased slightly in 2012 due to available funding.

What will it take to do better?

Collaboration: Effective collaboration with key state and local agencies is a cornerstone to the success of the Washington County Groundwater Program. Due to a lack of statutory authority, the county's primary role is to promote and facilitate collaboration around the prevention, treatment and monitoring of groundwater quality and quantity.

The partners who have a role to play in improving the quality and quantity of the county's groundwater include the following state and local agencies: Department of Natural Resources, Department of Health, Pollution Control Agency, Department of Agriculture, Metropolitan Council, Board of Water and Soil Resources, municipalities, watersheds, and residents. Many of these partners have sometimes conflicting priorities. Our role as the county is to bring them together on common issues and help them recognize their role and stake in the implementation of strategies that address groundwater issues.

Education and Outreach: Focused, coordinated education and outreach to the public about groundwater quality and quantity issues is a key element to groundwater protection.

Initiatives: Initiatives focused on instilling a sense of urgency among residents and LGUs around groundwater quality and quantity are critical to sustaining achievements in disease reduction and increased longevity that we frequently take for granted.

Groundwater Supply Performance Measures		
	Quantity	**Quality**
Effort	**How much did we do (#)?** **Customers:** # of local government units **Activities:** # of water bodies identified and maintained in a groundwater information database # of local government units invited to attend annual forum	**How well did we do it (%)?** % of water bodies in database with known surface water and groundwater interaction % of local government representation at open forum
Effect	**Is anyone better off (#)/(%)?** How much change for the better did we produce (#)/(%)? What quality of change for the better did we produce (%)?	

Headline Performance Measures & Data Development Agenda

% of local government units that update ordinances to reflect best practices
$ per capita water use for municipal systems
% of water bodies in database with known surface water and groundwater interaction
% of local government representation at open forum

Groundwater/Surface Water Interaction Performance Measures		
	Quantity	**Quality**
Effort	**How much did we do (#)?** **Customers:** # of local government units # watershed management organizations **Activities:** # of recharge areas identified, inventoried and ranked # of best management practice guidelines developed	**How well did we do it (%)?** % of county with recharge areas identified % of watershed management organizations and local government units that incorporate protection of recharge into plan updates
Effect	**Is anyone better off (#)/(%)?** (#)/(%) of regional recharge areas established (#)/(%) of watershed management organizations and local government units that implement best management practices and low-impact development and redevelopment strategies	

Headline Performance Measures & Data Development Agenda

% of regional recharge areas established
% of watershed management organizations and local government units that implement best management practices and low-impact development and redevelopment strategies
% of county with recharge areas identified

Groundwater/Surface Water Interaction Performance Measures		
	Quantity	**Quality**
Effort	**How much did we do (#)?** **Customers:** # of local government units # of public water suppliers # of homeowners with private wells **Activities:** # of abandoned wells identified # of outside funding opportunities identified for abandoned well sealing # of local government units invited to attend annual forum	**How well did we do it (%)?** % of wells identified in high priority areas % of funds available for abandoned well sealing % of local government unit representation at forum
Effect	**Is anyone better off (#)/(%)?** (#)/(%) of total abandoned wells sealed (#)/(%) of abandoned wells sealed in high priority areas (#)/(%) of Wellhead Protection Plans undated to reflect collaborative strategies on water supply issues	

Headline Performance Measures
% of total abandoned wells sealed % of abandoned wells sealed in high priority areas
Secondary Measures
# of abandoned wells identified # of total abandoned wells sealed # of abandoned wells sealed in high priority areas
Data Development Agenda
% of Wellhead Protection Plans undated to reflect collaborative strategies on water supply issues

Groundwater Contamination Performance Measures Existing VOC and PFC contamination		
	Quantity	**Quality**
Effort	**How much did we do (#)?** **Customers:** # of local government units # of public water suppliers # of residents **Activities:** # of homeowners identified # of homeowners contacted	**How well did we do it (%)?** % of homeowners contacted that test water supply
Effect	**Is anyone better off (#)/(%)?** (#)/(%) of customers implementing best management practices in areas of known contamination	

Headline Performance Measures & Data Development Agenda
% of customers implementing best management practices in areas of known contamination
Secondary Measures
% of homeowners that test water supply

Groundwater Contamination Performance Measures Nutrients - General		
	Quantity	**Quality**
Effort	**How much did we do (#)?** **Customers:** # of local government units # of public water suppliers # of residents **Activities:** # of studies conducted in high-risk communities # of well testing data mapped # of long-term monitoring stations for nitrates and pesticides identified	**How well did we do it (%)?** % of studies completed for high-risk communities % of county that is mapped % of samples collected % of long-term stations for nitrates and pesticides monitored
Effect	**Is anyone better off (#)/(%)?** (#)/(%) of customers implementing best management practices in areas of known contamination	

Headline Performance Measures & Data Development Agenda
% of customers implementing best management practices in areas of known contamination
Secondary Measures
# of studies conducted in high-risk communities # of long-term monitoring stations for nitrates and pesticides identified

Groundwater Contamination Performance Measures Nutrients - Urban		
	Quantity	**Quality**
Effort	**How much did we do (#)?** **Customers:** # of public water suppliers # of businesses # of residents **Activities:** # of highly sensitive areas identified	**How well did we do it (%)?** % of highly sensitive areas that receive outreach and education
Effect	**Is anyone better off (#)/(%)?** (#)/(%) of customers that adopt or implement best management practices	

Headline Performance Measures & Data Development Agenda
% of customers that adopt or implement new practices

Groundwater Contamination Performance Measures Nutrients - Agricultural		
	Quantity	**Quality**
Effort	**How much did we do (#)?** **Customers:** # of animal holding facilities # of crop farmers **Activities:** # of customers identified	**How well did we do it (%)?** % of customers that receive outreach education
Effect	**Is anyone better off (#)/(%)?** (#)/(%) of customers that adopt or implement best management practices	

Headline Performance Measures & Data Development Agenda
% of customers that adopt or implement new practices

Groundwater Contamination Performance Measures Emerging Contaminants		
	Quantity	**Quality**
Effort	**How much did we do (#)?** **Customers:** # of local government units # of public water suppliers # of residents **Activities:** # of areas or wells identified	**How well did we do it (%)?** % of areas or wells identified that are monitored % of areas or wells with known contamination and risk levels
Effect	**Is anyone better off (#)/(%)?** (#)/(%) of areas or wells with identified risk levels that implement best management practices (#)/(%) of areas or wells with identified risk levels that implement remediation strategies	

Headline Performance Measures & Data Development Agenda

% of areas or wells with identified risk levels that implement best management practices
% of areas or wells with identified risk levels that implement remediation strategies

Septic Systems Performance Measures		
	Quantity	**Quality**
Effort	**How much did we do (#)?** **Customers:** # of homeowners with a septic system # realtors and title companies **Activities:** # compliance inspections completed # of areas of concern for failing systems identified # of trainings offered to realtors and title companies	**How well did we do it (%)?** % of compliance inspections completed during the time of a property transfer % of areas of concern with known risk level % of realtor and title company attendees that are satisfied with training and plan to share information
Effect	**Is anyone better off (#)/(%)?** (#)/(%) of failing systems replaced (#)/(%) of attendees representing realtors and title companies who have increased knowledge of the impact a failing system can have on groundwater and surface water resources	

Headline Performance Measures
% of failing systems replaced
Secondary Measures
compliance inspections completed # of failing systems replaced
Data Development Agenda
and location of failing systems

Hazardous Waste Performance Measures

	Quantity	Quality
Effort	**How much did we do (#)?** **Customers:** # of hazardous waste generators # of residents **Activities:** # of salvage yards identified # of types of materials collected at WCEC and remote events	**How well did we do it (%)?** % of salvage yards inspected % of residential participants at the county environmental center and collection events
Effect	**Is anyone better off (#)/(%)?** (#)/(%) of salvage yards implementing best management practices (#)/(%) of residential household hazardous waste collected	

Headline Performance Measures & Data Development Agenda

% of salvage yards implementing best management practices
% of residential household hazardous waste collected

Secondary Measures

# of types of materials collected at WCEC and remote events
% of residential participants at the county environmental center and collection events
(#)/(%) of residential household hazardous waste collected

COMMITTEE RECOMMENDATIONS

Northern Region Committee

1. Cook County Local Water Management Plan – Tom Schulz – ***DECISION ITEM***

2. City of International Falls Comprehensive Wetland Protection and Management Plan – Ron Shelito and Dale Krystosek – ***DECISION ITEM***

3. Lake County Priority Concerns Scoping Document – Ron Shelito – ***DECISION ITEM***

BOARD MEETING AGENDA ITEM

AGENDA ITEM TITLE: Cook County Local Water Management Plan Update

Meeting Date: August 28, 2014

Agenda Category: ☒ Committee Recommendation ☐ New Business ☐ Old Business

Item Type: ☒ Decision ☐ Discussion ☐ Information

Section/Region: Northern Region

Contact: Ryan Hughes

Prepared by: Ryan Hughes

Reviewed by: Northern Committee(s)

Presented by: Tom Schulz/Ron Shelito

☐ **Audio/Visual Equipment Needed for Agenda Item Presentation**

Attachments: ☐ Resolution ☒ Order ☒ Map ☒ Other Supporting Information

Fiscal/Policy Impact

☒ None
☐ Amended Policy Requested
☐ New Policy Requested
☐ Other:

☐ General Fund Budget
☐ Capital Budget
☐ Outdoor Heritage Fund Budget
☐ Clean Water Fund Budget

ACTION REQUESTED

Approval of the Cook County Local Water Management Plan update.

LINKS TO ADDITIONAL INFORMATION

Link to full plan:
http://www.co.cook.mn.us/images/stories/Soil_Water/Cook%20County%20Water%20Plan%202014-2024.pdf

SUMMARY (*Consider: history, reason for consideration now, alternatives evaluated, basis for recommendation*)

The current Cook County Local Water Management Plan expires October 26, 2014. The expiration date was extended two years on June 22, 2011. The Cook County Priority Concerns Scoping Document (PCSD) was approved by the full BWSR board September 26, 2012.

The Cook County Local Water Management Plan is consistent with the PCSD approved by the BWSR Board, satisfies the requirements of M.S. 103B.314 and BWSR policy therefore the BWSR North Region Committee at their July 9, 2014 meeting recommended approval of the Cook County Local Water Management Plan update by the full BWSR board.

Minnesota Board of Water and Soil Resources
520 Lafayette Road North
St. Paul, Minnesota 55155

In the Matter of Reviewing the Local Water Management Plan Update for Cook County (Minnesota Statutes, Section 103B.311, Subdivision 4 and Section 103B.315, Subdivision 5.)

ORDER APPROVING LOCAL WATER MANAGEMENT PLAN UPDATE

Whereas, the Cook County Board of Commissioners submitted a Local Water Management Plan Update (Plan Update) to the Board on April 9, 2014, pursuant to M.S. Section 103B.315, Subd. 5, and

Whereas, the Board has completed its review of the Plan Update;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions, and Order:

FINDINGS OF FACT

1) On July 20, 2012, the Minnesota Board of Water and Soil Resources (BWSR) received a Priority Concerns Scoping Document from Cook County, pursuant to M.S. Section 103B.312.

2) On September 12, 2012, the BWSR Northern Committee met with representatives of Cook County to review the Priority Concerns Scoping Document.

3) On September 26, 2012, the Board of Water and Soil Resources approved official comments on the Cook County Priority Concerns Scoping Document, which were mailed to the county on September 26, 2012.

4) The priority concerns, in no particular order of importance, the local water management plan addresses include:

   - Sub-surface Sewer Treatment Systems (SSTS)
   - Land Use and Development Impacts on Watersheds
   - Surface and Groundwater Monitoring
   - Education
   - Impaired Water Restoration

5) On April 9, 2014, BWSR received the Cook County Local Water Management Plan Update, for final State review pursuant to M.S. Section 103B.315, Subd. 5.

6) On July 9, 2014, the Northern Committee of BWSR reviewed the recommendations of the state review agencies regarding final approval of the Cook County Local Water Management Plan Update. Recommendations of the state review agencies were:

A) Minnesota Pollution Control Agency: recommended approval;
B) Minnesota Department of Natural Resources: recommend approval;
C) Minnesota Department of Agriculture: recommended approval;
D) Minnesota Environmental Quality Board: no comments;
E) Minnesota Board of Water and Soil Resources staff: recommended approval;
F) BWSR North Region Committee: recommended approval.

7) This update will be in effect for a ten year period until August 28, 2024, with the Executive Summary, Goals, Objectives and Action Items amended by August 28, 2019.

CONCLUSIONS

1. All relevant requirements of law have been fulfilled. The Board has proper jurisdiction in the matter of approving a Local Water Management Plan Update of Cook County pursuant to Minnesota Statutes, 103B.315, Subd. 5.

2. The Cook County Plan Update attached to this Order states water and water-related problems within the county; possible solutions; general goals, objectives, and actions of the county; and an implementation program. The attached Plan Update is in conformance with the requirements of M.S. Section 103B.301.

ORDER

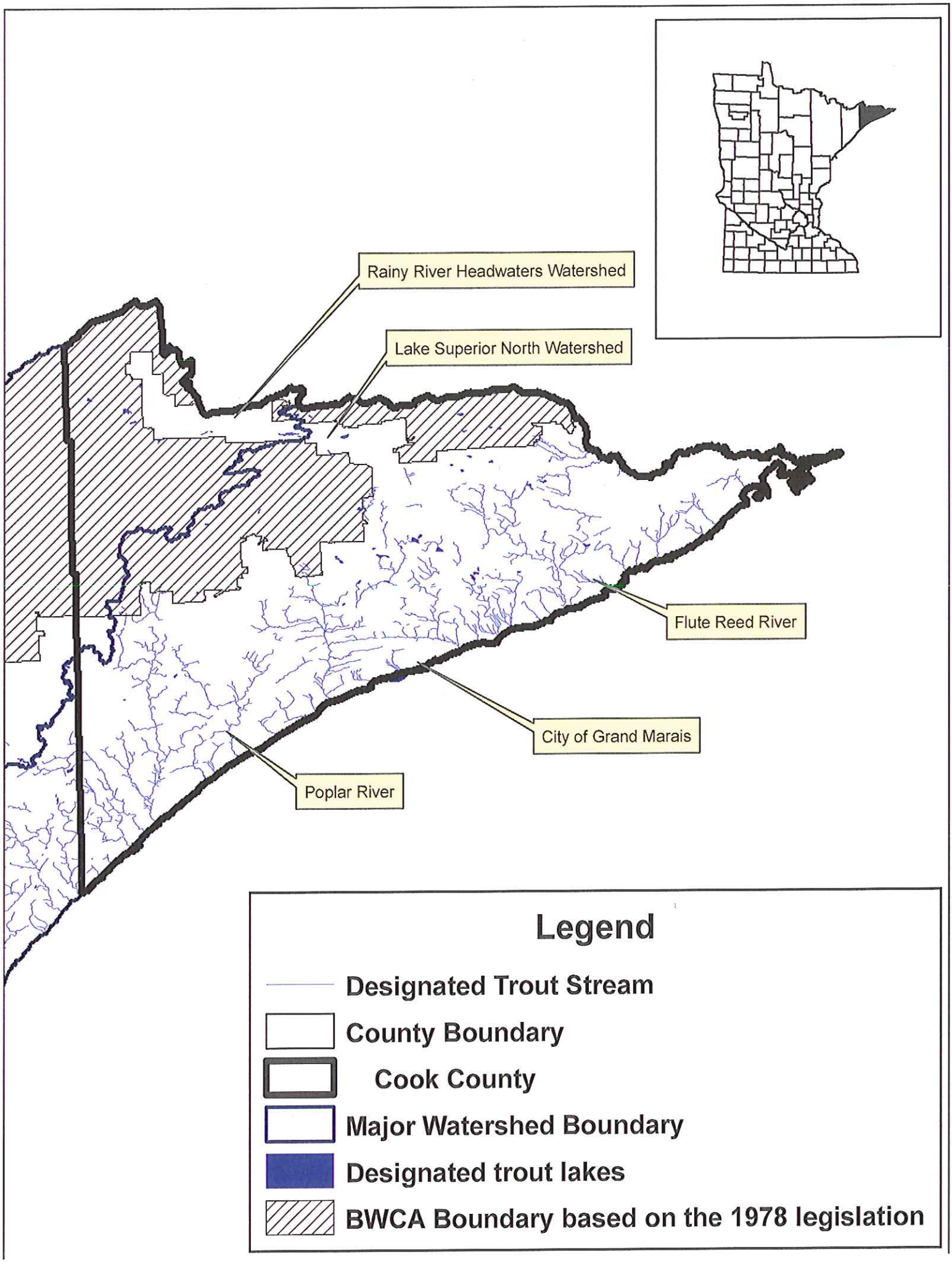
The Board hereby approves the attached update of the Cook County Local Water Management Plan – August 28, 2014 to August 28, 2024, with the Executive Summary, Goals, Objectives and Action Items amended by August 28, 2019.

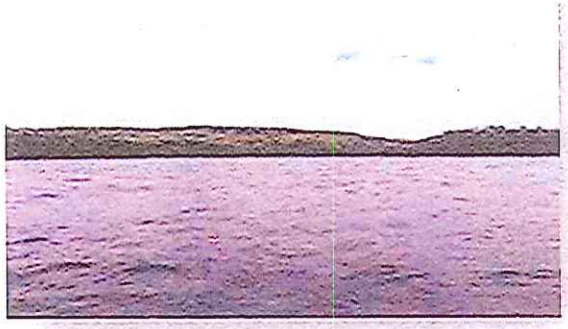
Dated at _____, Minnesota, this 28th day of August 2014.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Brian Napstad, Chair


Rainy River Headwaters Watershed
Lake Superior North Watershed
Flute Reed River
City of Grand Marais
Poplar River
Legend
Designated Trout Stream
County Boundary
Cook County
Major Watershed Boundary
Designated trout lakes
BWCA Boundary based on the 1978 legislation



Cook County Comprehensive Local Water Management Plan

2014-2024

Acknowledgements

Cook County Commissioners

Jan Hall- Chair
Sue Hakes
Bruce Martinson
Heidi Doo-Kirk
Garry Gamble

Cook County Soil and Water Conservation Board

Don Goodell – Chair
Jim Hall
Joan Farnam
David Berglund
Jerry Hiniker

BWSR Board Conservationist

Ryan Hughes

Cook County Local Water Plan Advisory Committee

Active members:
Garry Gamble - County Commissioner-Chair
Don Goodell - SWCD Board Supervisor
Dick Betz - Citizen at large - Hovland Area
Don Lease - Citizen at large - Road Lake
Gary Maciejewski - Citizen at large - Tait Lake
Chuck Futterer - Citizen at large - Devil Track Lake
Neil Hansen - Citizen at large - Area of Grand Marais
Stan Tull - Citizen at large - Deeryard Lake

Previous member contributors:
Jim Johnson - Former Cook County Commissioner
Eleanor Lease - Citizen at large - Road Lake
Tom Freedeen - Citizen at large - Caribou Lake
Biz Clark - Citizen at large - Poplar Lake

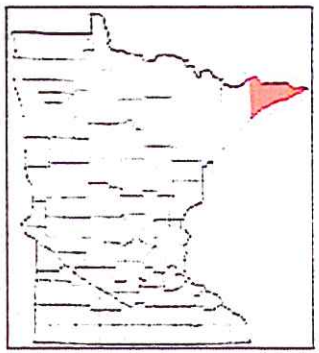
Additional Committee Members for revision of the Plan:
David Demmer - Cook County Planning and Zoning
Greg Gastecki - Contractor and Citizen at large

Cook County Water Plan Coordinator:
Ilena Berg
Cook County SWCD
411 West 2nd Street
Grand Marais, MN 555604

Additional Assistance:
Kyle Oberg - Cook County GIS Analyst

The plan is available online at: www.cookswcd.org

Executive Summary



Cook County Soil and Water Conservation District is the local government unit responsible for the local water management plan in Cook County. The intent of this plan is to provide strategies to address water related issues, both protection and restoration in Cook County. The issues were identified during a systematic, regional-wide scoping process performed between June 2011- July 2012. During this time, citizens, local government officials, agency representatives and local interest groups were invited to provide input about water related issues and identify which issues they feel are most critical. Since June 2011, the Water Plan Advisory Committee met monthly identifying and prioritizing concerns, goals, objectives, and actions for the water plan. The five priority concerns identified are Sub-surface Sewage Treatment Systems, Land use and Development Impact on Watersheds, Surface and Groundwater Monitoring, Education, and Impaired Water Restoration (see Implementation Schedule (Priority Concerns) for projected costs).

Introduction to Cook County

Cook County is located in northeastern Minnesota. It shares a boundary with Lake Superior, Canada, and Lake County. The City of Grand Marais is the county seat. Cook County is comprised of three townships (Schroeder, Tofte, Lutsen) and two cities (Grand Marais, Grand Portage). Grand Portage is located within tribal land on the Grand Portage Reservation.

Cook County covers a total area of 3,339.72 square miles; 1,450.60 square miles of the area is land and 1,889.12 square miles of the area is water. Cook County is part of the Lake Superior North Basin and the Rainy River Basin. The dominant land use is public forest management by federal, tribal or state management. Approximately 9% of the land base is in private ownership.

The 2010 United States Census reported a county population of 5,176 people, a 0.2% increase in population over 10 years. The population of Cook County is not predicted to change much in the future. The long-term population projections for Cook County suggest stable to possibly slightly declining for year-round residents and increases are predicted for seasonal or part-time residents.

Plan History and Purpose

A water management program was adopted by Cook County on January 1, 1994. The plan was revised in 1998 and the revision was adopted on July 13, 1999. During 2004, the Local Water Plan Committee met and revised the water plan which expired December 31, 2005. The plan was completed and revised for 2006-2011. As the plan expired, there was a staff change over and an extension was granted until October 26, 2014, for the update of the plan.

A Priority Concerns Scoping Document was developed and approved after public input, monthly meetings by the Water Plan Advisory Committee and the selection of priority concerns for the plan. With the approval of the scoping document, the committee has developed the plan for ten years with assessment at five years for revision. The plan has been developed in accordance with Minnesota State Statues 103B.301 – 103B.355.

The purpose of the plan is to protect water resources by identifying water related issues and/or problems and to provide strategies to address them. The plan is countywide with an emphasis on watersheds at the basin level HUC 8 to the sub watershed HUC 12. Local priorities have determined the direction of the plan and actions to be accomplished by the plan. These priorities are identified occurring on land, surface water and in groundwater.

Previous Water Plan Accomplishments

The revision and update of this plan reflects and builds upon work accomplished by previous water plans in Cook County. The following list highlights some of work accomplished under former water plans. (Some of the work accomplished is ongoing and will be restated under Implementation Schedule (Ongoing Activities)).

- Assist Flute Reed River Partnership to work with landowners to implement projects to reduce sedimentation into the river.
- Created a wetland mitigation bank.
- Increased consequences for county ordinance and MN statute/regulation violations.
- Monitoring water quality has or is taking place on over 51 lakes and 8 streams.
- Assist Poplar River Management Board with accomplishing work necessary for the TMDL of the Poplar River.
- Monitoring of beaches of Lake Superior for e-coli.
- Provide continued support to Lake Associations.
- Provide educational outreach to communicate the linkage of land use and water quality and quantity.
- Developed a culvert inventory of specific areas in the County.
- Improve platted road plan submissions and reviews.
- Assist landowners with erosion control issues.
- Assist landowners with flood damaged property.
- Promote and assist with storm water controls – rain gardens, drainage ditch.
- Replacement of culverts for sediment reduction and fish passage.

Consistency with Other Plans

The Cook County Comprehensive Water Management Plan is consistent with existing local and state plans reviewed. The plans reviewed include the Cook County Comprehensive Land Use Plan, Lake County Comprehensive Water Management Plan, St. Louis County Comprehensive Water Plan, Caribou Lake Area: Alternative Urban Area-Wild Review (AUAR), Lower Poplar River Watershed AUAR, Grand Portage Trust Lands and Resources Water Plan, City of Grand Marais Source Water Assessment, the Poplar River Implementation Plan, Cook County Stormwater Ordinance, Cook County Zoning Ordinance, Cook County Septic Ordinance, Cook County Subdivision Ordinance, Superior National Forest Land and Resource Management Plan (2004), and Minnesota Wetland Conservation Act.

Recommendations to Other Plans and Official Controls

No official controls or recommended amendments to other plans have been included in this plan unless so noted. Following M.S. 103B.325, Cook County, Cook County SWCD Board of Supervisors or Cook County Water Plan Advisory Committee reserve the right to make recommendations as necessary for the duration of the plan.

Priority Concerns

Description of Priority Concerns

The Water Advisory Committee selected the priority concerns addressed in this plan. Input to these concerns was provided by the public through surveys and direct solicitation from local interest groups and local and state government agencies. Concerns were selected from the information provided from the input process. The history of the process is located in the Cook County Local Water Management Plan Scoping Document. After the creation of the scoping document and the original selection of the priority concerns, the committee re-prioritized the original eight priority concerns down to five concerns. Three concerns were subsequently grouped with other priority concerns to make the plan more cohesive. A summary of the five priority concerns selected is given below.

Priority Concerns Summary

Priority Concern #1: *Sub-surface Sewer Treatment Systems (SSTS)*

Improvement of wastewater management is a priority in the county. Citizen surveys ranked sub-surface sewer treatments systems as their number one concern for natural resources in the county. As noted by the MN DNR, increased nutrient flows from septic systems threaten lakes by increasing the probability that shallow lakes will winter kill, and that deeper lakes will lose their hypolimnetic oxygen, essential to maintaining trout over the summer. Lakes in the county have a trend of being low-productivity waters, with phosphorus as a limiting factor. Cook County has shallow soil profiles, high development around surface water, and a varied landscape. Both surface water and groundwater can be impacted by non-compliant systems, due to increases in nutrients not being treated properly. The priority concern includes the following goals, objectives and actions to address this issue:

Goal: Minimize nutrient and pathogen loading of surface waters.
Objective: Achieve 70% compliance of shoreline lake property inspections.
Action:
1. Complete lake inspections.

Objective: Support and procure financial assistance opportunities for property owners to upgrade or replace non-compliant or failing SSTS.
Actions:
1. Complete SSTS inventory to identify non-compliant, failing and/or imminent public health threat systems.
2. Pursue financial assistance for property owners to upgrade or replace non-compliant or failing SSTS.
3. Complete upgrades or replacement of non-compliant or failing SSTS.

Goal: Implement and enforce the local SSTS ordinance.
Objective: Promote best management practices through implementation and enforcement of the local SSTS ordinance.
Actions:
1. Develop and maintain a pumping schedule for shoreland properties.
2. Support and procure funding to provide additional staffing for increased workloads to implement and enforce the local SSTS ordinance and system inspections.

3. Investigate and support alternative sub-surface sewer treatment systems in compliance with the local SSTS ordinance.
4. Develop and support a database that encompasses water quality, surface drinking water, the septic system compliance inventory program, compliance of systems, and other data sets as they become available.

Priority Concern #2: ***Land Use and Development Impact on Watersheds***

The county has a limited amount of private land. Understanding the connection between land use and water quality, the Water Plan Committee placed land use as a priority concern. The public also identified the concern as its second priority. Because wetlands and stormwater impact water quality and are effected by land use, they were placed under this priority concern.

Goal: Promote proactive land use practices that maintain or improve water quality within the watershed.
Objective: Maintain and improve water quality through best management land use practices.
Actions:
1. Provide assistance to land owners with less than 20 acres for reforestation, re-vegetation, and land management plans.
2. Maintain boat landings to minimize erosion, nutrient loading and sedimentation.
3. Review local ordinances, permitted and conditional uses to readdress terrain issues, subdivisions, storm water issues, and shoreland issues.
4. Develop an ecological analysis for watershed properties of School Trust Lands and assess the environmental impact of development of this land.
5. Evaluate the Cook County comprehensive land use management plan for best management practices.
6. Monitor and evaluate land use changes and the impacts of the changes on water quality.

Goal: Support the implementation and enforcement of the shoreland management standards.
Objective: Encourage landowners to use best management practices.
Actions:
1. Periodically review and update shoreland management standards for consistency.
2. Through collaboration secure funding and support Lake Associations with their Comprehensive Management Plans.

Wetlands
Goal: Preserve and restore high quality wetland resources.
Objective: Support a wetland management program with a balanced approach towards development and wetland resources.
Actions:
1. Promote coordination between governmental agencies, non-profits, local groups and citizens to support high quality wetland resources.
2. Support preservation and restoration projects of high value wetland resources.
3. Develop, support, and maintain a wetland banks program.
4. Support and pursue financial assistance for a Cook County wetland inventory of private land.
5. Initiate potential collaborative efforts among regional jurisdictions of local communities to promote a potential Special Area Management Plan for water and wetland resources along the Lake Superior North Shore.
6. Continue efforts to procure funding to develop and implement a Local Wetland Management Plan.

7. Support the implementation of a wetland ordinance.
8. Identify, preserve and restore coastal wetlands along Lake Superior.

Stormwater

Goal: Reduce sedimentation and nutrient loading into ground and surface water through stormwater management practices.
Objective: Protect ground and surface water.
Actions:

1. Collaboration with the City of Grand Marais, Cook County, Cook SWCD and other entities as necessary on projects related to stormwater.
2. Secure funding and develop a countywide stormwater plan to complete the work identified to improve water quality, reduce flooding, erosion, and sedimentation deposition. Included in the plan will be plans for ditches and gravel roads.
3. Identify and inventory work on projects such as the Village Ditch/Nature Boy Creek to improve water quality, reduce flooding, erosion, and sedimentation deposition. Procure funding, engineering to replace the culverts on 7th Avenue East and 4th Avenue East to reduce sediment and erosion of Village Ditch/Nature Boy Creek.
4. Procure funding for the implementation and maintenance of stormwater treatment structures.

Priority Concern #3: *Surface and Groundwater Monitoring*

Groundwater and surface water are connected to each other both in quantity and quality. Due to this interaction and the value in protecting both resources, they were placed together as a priority concern. The committee identified the goals and actions as ways to help protect and restore water quality and quantity.

Goal: Protect surface and groundwater quality.
Objective: Monitor surface water.
Actions:

1. Continue to support and secure financial assistance to sustain water monitoring volunteers and Lake and Homeowner Associations in their water monitoring efforts.
2. Secure funding to support water quality monitoring of lakes and streams.
3. Support and complete at least three years of non-point source pollution monitoring and analysis for the City of Grand Marais and Hovland.
4. Secure funding for studies, evaluating surface water recreation use on lakes in relation to lake size, lake depth, noise pollution, and ecological disturbances.
5. Secure funding for sensitive lakeshore identification studies to enhance protection of shoreland environments.
6. Continue to support and maintain a database of Cook County lake and stream monitoring data, resources, and volunteers.
7. Secure funding to evaluate water usage of lakes and streams from water diversion or from use by volume of both commercial and private property.

Goal: Protect groundwater based drinking water sources within Cook County.
Objective: Accomplish water quality information of groundwater.
Actions:

1. Develop a well monitoring program, in collaboration with the Minnesota Department of Health and Minnesota Geological Survey.
2. Collaborate with Minnesota Department of Health to secure funding to integrate additional water quality testing and data into the countywide well index.
3. Provide support and resources to encourage well sealing of unused or abandoned wells, where appropriate, in land use decisions.
4. Secure funding and partners to develop a geological atlas.

Priority #4: *Education*

Providing education with a more local and regional focus will be beneficial in providing landowners with a better understanding of the environment immediately surrounding them. This understanding will aid the landowner in making an informed decision on best management practices. Education areas to be developed and promoted are:

Goal: Support a healthy watershed and clean water through education.
Objective: Provide learning opportunities for a better understanding of our natural resources.
Actions:

1. Develop educational brochures and media outreach about drinking water and wildfire systems using surface water.
2. Educate the public of the impacts to water quality, aquatic habitat, and public health due to nutrient and pathogen loading in lakes and rivers.
3. Educate landowners and contractors of the importance of wetland, wetland types and wetland regulations.
4. Promote best management practices of subsurface sewage treatment systems and the value of these practices through workshops and brochures.
5. Educate landowners and contractors about private road maintenance, ditching, and development impact on hydrology and water quality.
6. Develop educational workshops and resources on local and regional topics to include but not limited to aquatic and terrestrial invasive species, land use changes, climate change, and watersheds.
7. Educate landowners of forestry, reforestation and re-vegetation as it relates to a healthy watershed.
8. Educate landowners and contractors on well maintenance and well testing.
9. Educate landowners and contractors on shoreland best management practices.
10. Educate landowners of small site development stormwater best management practices.

Priority #5: *Impaired Water Restoration*

Many lakes are impaired for mercury in the county. Two streams are impaired for sediment. With completion of the Watershed Restoration and Protection Strategies project by the MPCA it is expected more impairments will be identified. To work towards restoring these impairments, the following has been identified:

Goal: Improve water quality through targeting land use within the watershed with best management practices.
Objective: Restore riparian and aquatic habitat and water quality of impaired waters.
Actions:

1. Secure funding and support water monitoring and studies of areas with previously implemented best management practices.
2. Procure funding and support for continued improvement of impaired waters via the TMDL Implementation Plan.
3. Minimize stressors and restore impairments via the Watershed Restoration and Protection Strategies.
4. Implement land use evaluation practices.

BOARD MEETING AGENDA ITEM

AGENDA ITEM TITLE: City of International Falls Wetland Plan

Meeting Date:

Agenda Category: ☒ Committee Recommendation ☐ New Business ☐ Old Business

Item Type: ☒ Decision ☐ Discussion ☐ Information

Section/Region: North Region

Contact: Dale Krystosek

Prepared by: Dale Krystosek

Reviewed by: Northern Committee(s)

Presented by: Ron Shelito/ Dale Krystosek

☐ **Audio/Visual Equipment Needed for Agenda Item Presentation**

Attachments: ☐ Resolution ☒ Order ☐ Map ☐ Other Supporting Information

Fiscal/Policy Impact

☒ None
☐ Amended Policy Requested
☐ New Policy Requested
☐ Other:

☐ General Fund Budget
☐ Capital Budget
☐ Outdoor Heritage Fund Budget
☐ Clean Water Fund Budget

ACTION REQUESTED

Approval of the City of International Falls Comprehensive Wetland Protection and Management Plan.

LINKS TO ADDITIONAL INFORMATION

SUMMARY (*Consider: history, reason for consideration now, alternatives evaluated, basis for recommendation*)

The International Falls Wetland Protection and Management Plan was the result of a recommendation to the City by BWSR staff and the U.S. Army Corps of Engineers who provided financial and technical assistance to the city to prepare a technical report for development of the plan.

The purpose of the plan is to improve coordination and timeliness of permitting for wetland management within the city which had been frustrating due to the vast wetland resources within the city and surrounding Koochiching County, which has the highest percentage of wetlands in Minnesota. The plan provides an improved process for permitting using a project proposal short form which will allow agencies basic information to improve responsiveness for permits and approvals. The plan relies on the technical report developed by BWSR and the Corps to set up zones within the city to allow for a more cost effective way to determine wetland mitigation needs. The plan expands the 10,000 square foot de minimis amount to all wetland types within the city, except for the shoreland protection zone along the Rainy River. The city will offset this additional flexibility by preserving other wetland within the city.

The plan also utilizes and "environmental corridor concept" to target areas for preservation to be used for wetland mitigation. Finally, the plan incorporates some of the wetland mitigation recommendations of the recently completed "Siting of Wetland Mitigation in Northeast Minnesota" report and incorporates some water quality protection initiatives that are outlined in the Koochiching County Comprehensive Water Plan. The Northern Committee met on July 9th, 2014, and had a presentation on highlights of the plan from City staff David Serrano. After review of information, the Committee decided with a unanimous vote to recommend approval of the Plan by the Board per the attached draft Order.

Minnesota Board of Water and Soil Resources
520 Lafayette Road North
St. Paul, Minnesota 55155

In the Matter of the review of the Comprehensive Wetland Management Plan for the **City of International Falls,** pursuant to Minnesota Statues Section 103G.2242, Subdivision 1 (c)

ORDER APPROVING COMPREHENSIVE WETLAND PROTECTION AND MANAGEMENT PLAN

Whereas, the City of International Falls (City) submitted a Comprehensive Wetland Protection and Management Plan (Plan) dated June 30, 2014 to the Minnesota Board of Water and Soil Resources (Board) pursuant to Minnesota Statutes Section 103G.2242, Subd. 1 (c), and;

Whereas, the Board has completed its review of the Plan;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions and Order:

FINDINGS OF FACT

1. **Authority to Plan.** Minnesota Statutes Section 103G.2242, Subd. 1 (c) and Minnesota Rules Chapter 8420.0830 allow the Board to approve a Comprehensive Wetland Protection and Management Plan developed by a local government unit, provided it is implemented through the local government unit's official controls.

   The purpose of the plan is to improve coordination and timeliness of permitting for wetland management within the city which had been difficult due to the vast wetland resources within the city and surrounding Koochiching County, which has the highest percentage of wetlands in Minnesota. The plan provides an improved process for permitting using a project proposal short form which will allow agencies basic information to improve responsiveness for permits and approvals. The plan relies on the technical report developed by BWSR and the Corps to set up zones within the city to allow for a more cost effective way to determine wetland mitigation needs. The plan expands the 10,000 square foot de minimis amount to all wetland types within the city, except for the shoreland protection zone along the Rainy River. The city will offset this additional flexibility by preserving other wetland within the city. The plan also utilizes an "environmental corridor concept" to target areas for preservation to be used for wetland mitigation. Finally, the plan incorporates some of the wetland mitigation recommendations of the recently completed "Siting of Wetland Mitigation in Northeast Minnesota" report and incorporates some water quality protection initiatives that are outlined in the Koochiching County Comprehensive Water Plan.

2. **Nature of the Plan Area.** International Falls is an international community located in Koochiching County and situated immediately across the Rainy River from the Ontario community of Fort Frances. The combined population of the two communities according to the 2010 census is nearly 15,500. Paper manufacturing is the most important industry which employs 17 percent of the population. The City also has an international airport that serves as a staging area for hunting and fishing trips into the Canadian wilderness. In 2008, the most recent year of record, aircraft operations averaged 109 per day (40,000 annual) with 50 percent of that traffic consisting of itinerant (i.e. private, non-local) operations. The airport is the fourth busiest in the state. The City also is the second busiest rail port of entry in the country. International Falls is also the gateway to Voyageurs National Park, 218,000 acres in size and Minnesota's only national park. The landform of the city is predominantly flat characterized by lake-modified till with thin ground moraine over bedrock. Vegetation is a mix of aspen-birch forest with pockets of lowland willow and alder as well as white cedar and black spruce. Some of the disturbed areas in the City are open and grassy. Just a short distance to the east past the community of Rainer, the landscape abruptly changes to a formation of rocky outcrops.

3. **Local Review.** The Plan was developed, reviewed, and revised in consultation with the state agencies, the technical evaluation panel, citizens, and local governments. The plan development process included numerous drafts and opportunities for comment. The Plan has an attached Rule that will be officially adopted by the District to implement the Plan.

4. **Highlights of the Plan.** The plan includes a wetland inventory, classification, and a functional assessment utilizing Minnesota Routine Assessment Method for Evaluating Wetland Function (MnRAM). The inventory was based on the "International Falls Comprehensive Wetland Management Plan Technical Report" developed by BWSR, the Corps and Koochiching SWCD. Field verification of select areas was conducted by TEP members and Corps staff to assess the accuracy of the functional assessment data. Results from the TEP field verification were integrated into the functional assessment analysis and results. The plan and proposed rule does not formally vary the application of WCA sequencing standards, but it does provide for a more streamlined evaluation process for projects within certain zones where wetland functions are low to medium. The City of International Falls incorporates into the wetland plan the following wetland mitigation concepts listed in the "Siting of Wetland Mitigation in Northeast Minnesota – Issues, Recommendations and Alternatives from the Interagency Northeast Mitigation Siting Team", dated March 7, 2014. These mitigation options will be considered for mitigating wetland losses within the City of International Falls, provided with concurrence of the technical evaluation panel and the Corps of Engineers Project Manager. These actions eligible for credit include *Expanded Use of Preservation, Restoration and/or Protection of Riparian Corridors and Streams, Stabilization of Natural Hydrology, Peatland Hydrology Restoration, Approved Watershed Plan Implementation Projects.*

5. **Northern Committee Meeting.** On July 9, 2014, the Board's Northern Committee and staff met in Grand Rapids with a representative from the City to review and discuss the Plan. Those in attendance from the Board's Committee were Brian Napstad, Gene Tiedemann, Keith Mykleseth, Rob Sip, Neil Peterson, Gerry Van Amburg and Tom

Schulz as chair. Board staff in attendance was North Region Supervisor Ron Shelito and Wetland Special Project Lead Dale Krystosek. The representative from the City was Wetland Conservation Act staff David Serrano. Board staff recommended approval of the Plan. After discussion, the Committee unanimously voted to recommend approval of the Plan to the full Board.

CONCLUSIONS

1. All relevant substantive and procedural requirements of law and rule have been fulfilled.

2. The Board has proper jurisdiction in the matter of approving a Comprehensive Wetland Protection and Management Plan for the City of International Falls pursuant to Minnesota Statutes Section 103G.2242, Subd. 1 (c).

3. The City of International Falls Comprehensive Wetland Protection and Management Plan attached to this Order provides a functional assessment framework for all wetlands within the City, management strategies based on this assessment, and an implementation program.

4. The attached Plan is in conformance with the requirements of Minnesota Statutes Sections 103G.221 to 103G.2373 and Minnesota Rules Chapter 8420.

ORDER

The Board hereby approves the attached Comprehensive Wetland Protection and Management Plan, dated July 1, 2014 for City of International Falls, Koochiching County, Minnesota.

Dated at Vadnais Heights, Minnesota this 28th day of August, 2014.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Brian Napstad, Chair

Local Comprehensive Wetland Protection and Management Plans (CWPMP) Checklist of Requirements & Options

The following summarizes how the City of International Falls Comprehensive Wetland Protection and Management Plan is consistent with the minimum CWPMP requirements for >80% areas, as described in 8420.0830 and how it utilizes and incorporates different plan options.

Requirements for CWPMP's:

1. Notice provided to BWSR, DNR, PCA, MDA, Koochiching County, and local citizens to participate in the plan development.

> *The initial notice of the International Falls CWPMP process was sent out by the city in September 2008. The plan development process was very active from 2008 through 2011 with completion of the "International Falls Comprehensive Wetland Management Plan Technical Report" in 2011. The planning effort then went idle due to staff turnover within the city and SWCD. The planning effort was revived in 2013 and resulted in the production of numerous drafts and opportunities for comment. The city staff and city council were consulted in the preparation of the plan, and additionally, a public hearing was held on July 7, 2014 where members of the public were invited to comment on the draft plan and rule.*

2. The technical evaluation panel must be consulted in all components of the plan and ordinance development.

> *Approximately twenty (20) TEP meetings were conducted during the development of this CWPMP. In addition, a 2 day interagency field exercise was conducted to collect, analyze and verify the data for the MnRAM (Minnesota Routine Assessment Methodology for Assessing Wetland Functions) wetland functional assessment. This field work included BWSR staff, Corps of Engineers, Koochiching SWCD, the City of International Falls and the city's consultant.*

3. Plans should be developed as part of, or in coordination with, other relevant local or regional plans and requirements and the plan area should be, to the extent practical and feasible, based on watershed boundaries.

> *The International Falls CWPMP was prepared in recognition of the City's land use plans. In addition the planning effort reviewed the Koochiching County Wetland Flexibility plan and references implementation options outlined in the Koochiching County Comprehensive Water plan.*

4. Plan is implemented by ordinance.

The draft City ordinance was provided for review along with the plan. The City of International Falls plans to adopt this implementing Rule following plan approval.

5. Documentation provided demonstrating knowledgeable and trained staff to manage and implement the plan.

The City has contracted with the Koochiching Soil and Water Conservation District and has a full-time engineering consulting firm on retainer to assist in implementation of the plan.

6. The Plan must include the establishment of watershed goals based on an analysis of the existing ecological conditions of the plan and the development of corresponding goals for maintaining and improving these conditions.

The goals for the CWPMP were established for the City of International Falls. These goals were primarily based on existing ecological conditions within the city, and existing ecological conditions in the adjacent and surrounding areas within the Rainy River Watershed. These goals include preserving forested wetlands, improving water quality within the Rainy River, improving wetland management, and maintaining, enhancing, and improving the quality, quantity and biological diversity of wetland resources within the plan boundary.

7. The Plan must include an inventory and prioritization of replacement sites based on an analysis of the types and locations of replacement projects that will provide desired wetland functions, benefit the watershed from a landscape perspective, and best offset losses of public value caused by approved impacts.

An inventory of wetland resources as well as a landscape-level wetland functional analysis was conducted with the assistance of the Board of Water and Soil Resources, the U.S. Army Corps of Engineers and the Koochiching SWCD. This effort resulted in development of a technical report which included analysis and mapping of MnRAM results, development of a wetland probability map based on LiDAR and soils data and mapping of environmental corridors. This provided the basis for establishing management zones and identifying wetland preservation areas. Additionally, the permanent preservation of existing wetland resources is identified as a priority.

8. The Plan must include a provision for periodic assessment of the effectiveness of the plan, and the local government unit's implementation of it, in achieving plan goals.

The plan will be assessed by tracking wetland impacts and associated wetland replacement. Yearly results will be provided to BWSR as required by WCA rule.

9. The Plan must specify the period covered by the plan.

As indicated in the Plan, it shall cover a period of 10 years from the date of board approval.

Optional Plan Contents (MR 8420.0830 Subp 4, 5B, 5D,):

1. Classification of wetlands based on an inventory, assessment of wetland functions, and public values.

The plan includes a wetland inventory, classification, and a functional assessment utilizing Minnesota Routine Assessment Method for Evaluating Wetland Function (MnRAM). The inventory was based on the "International Falls Comprehensive Wetland Management Plan Technical Report" developed by BWSR, the Corps and Koochiching SWCD. Field verification of select areas was conducted by TEP members and Corps staff to assess the accuracy of the functional assessment data. Results from the TEP field verification were integrated into the functional assessment analysis and results.

2. Vary application of sequencing standards based on classification of wetlands.

The plan and proposed rule does not formally vary the application of WCA sequencing standards, but it does provide for a more streamlined evaluation process for projects within certain zones where wetland functions are low to medium.

3. Vary the replacement standards of part 8420.0522 subparts 3 to 9 and the actions eligible for credit under 8420.0526, based on the classification and criteria in the plan.

The plan incorporates some of the wetland mitigation recommendations of the recently completed "Siting of Wetland Mitigation in Northeast Minnesota" report and incorporates some water quality protection initiatives that are outlined in the Koochiching County Comprehensive Water Plan. These actions include:

1. *Expanded Use of Preservation. Clarify for applicants and staff that preservation is a viable and accepted mitigation option in the Rainy River Basin and expand eligibility criteria to allow credit for larger amounts of upland areas that provide habitat connections and/or water quality benefits to aquatic resources.*
2. *Restoration and/or Protection of Riparian Corridors and Streams. Allow mitigation credit for the preservation or restoration of buffers adjacent to trout streams and other sensitive northeast streams, and for stream restoration projects that include such*

actions as re-meandering lost channels, stream bank stabilization, and day-lighting buried/piped streams.

3. *Hydrology Stabilization. Restoring and stabilizing the natural hydrologic regime of altered waterways can restore the functionality of adjacent or nearby wetlands.*
4. *Peatland Hydrology Restoration. The hydrologic restoration of partially drained peatlands through strategic ditch blocks can improve the affected peatland and provide downstream water quality and quantity benefits.*
5. *Approved Watershed Plan Implementation Projects. Allow wetland mitigation credit for the completion of certain approved watershed plan implementation projects as a means to address water quality within NE Minnesota.*

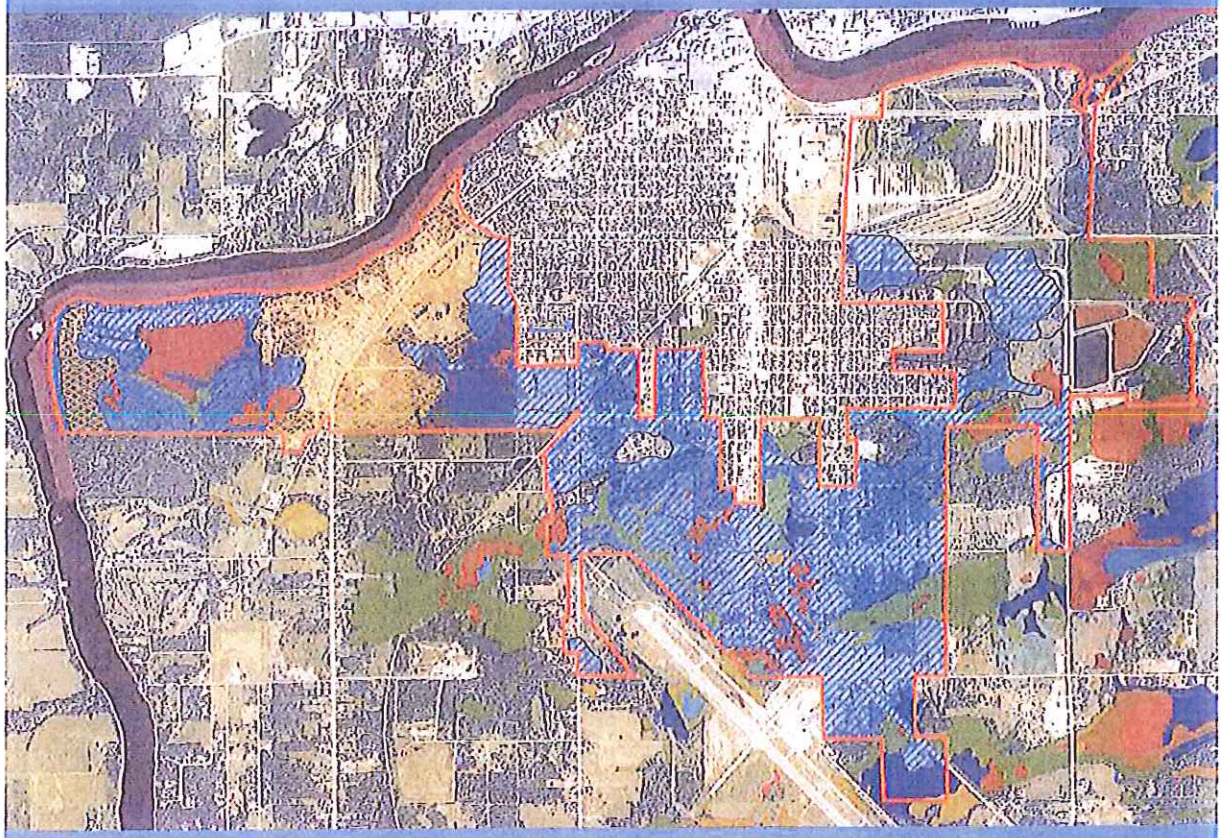
4. Prescribe size and location replacement wetland standards via type, size/ratio, functional quality, location requirements and wetland mitigation fee in lieu of direct replacement.

The plan does not vary the standard minimum WCA wetland replacement ratios, however, the plan allows for a reduced assessment of wetland impact area for significantly degraded wetland areas consistent with U.S Army Corps of Engineers St. Paul District policy.

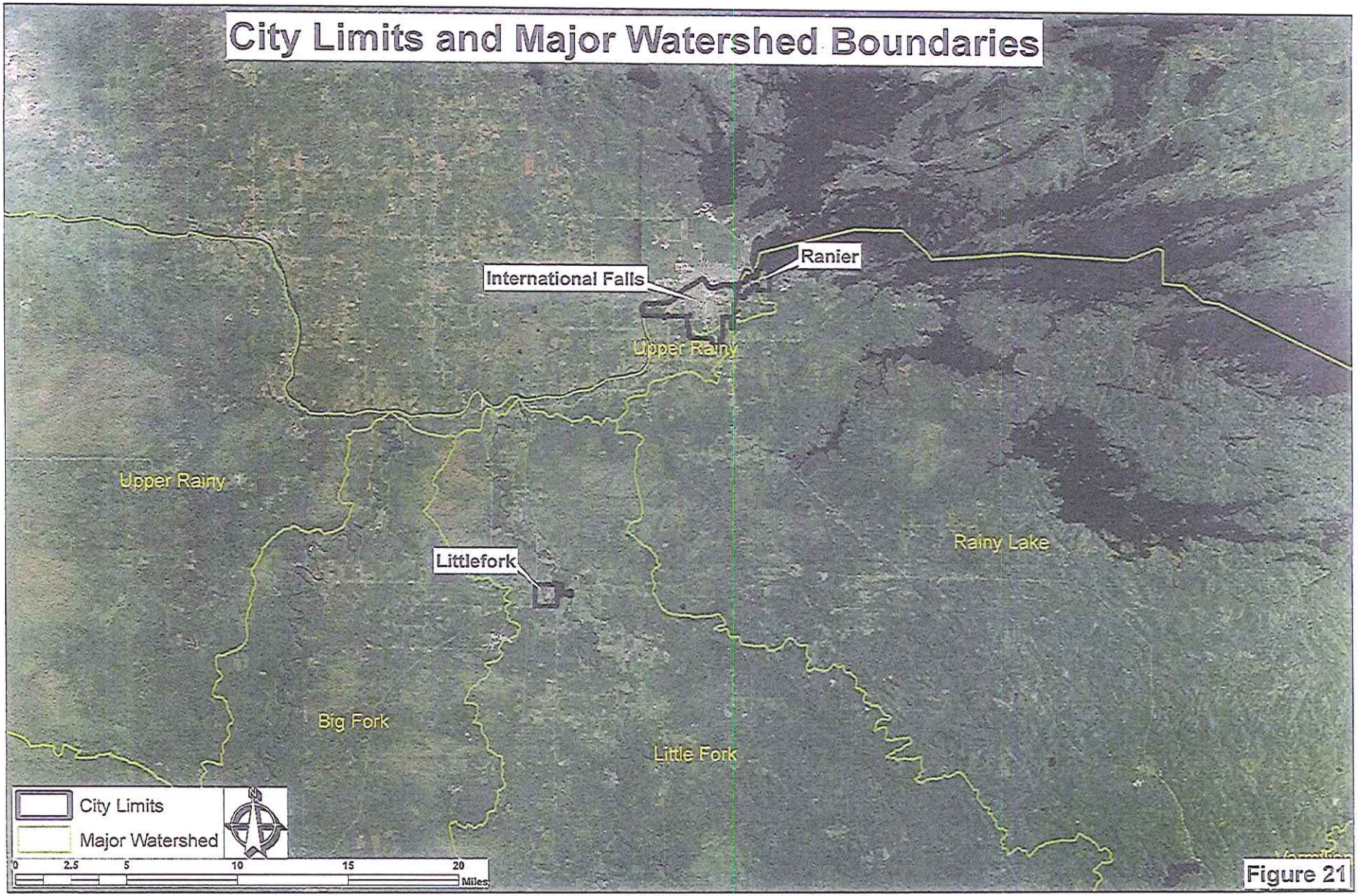
5. Allow exemptions based on ordinance or rule standards, eligibility criteria and processes based on wetland classifications as defined in the plan.

The plan proposes to expand the 10,000 square foot de minimis amount to all wetland types within the city, except for the shoreland protection zone along the Rainy River. The city will offset this additional flexibility by preserving other wetlands within the city.

CITY OF INTERNATIONAL FALLS, MINNESOTA



COMPREHENSIVE WETLAND PROTECTION AND MANAGEMENT PLAN


City Limits and Major Watershed Boundaries
International Falls
Ranier
Upper Rainy
Upper Rainy
Littlefork
Rainy Lake
Big Fork
Little Fork
City Limits
Major Watershed
0
2.5
5
10
15
20
Miles
Figure 21

Executive Summary

The International Falls Comprehensive Wetland Protection and Management Plan (CWPMP) is written to guide the City of International Falls, MN in the utilization of its land base which encompasses 6.4 square miles of a complex mosaic of wetland depressions intermingled with slight topographic upland rises. This complex landscape makes land use development decisions difficult when virtually every project results in wetland impacts that must be identified and impacted wetlands replaced. The CWPMP will guide the City in its wetland management decisions for the next 10 years at which time it will be reviewed and renewed.

The CWPMP is divided into the following sections:

- Introduction
- Purpose and Objectives
- Data Collection and Inventory
- Results and Analysis
- Wetland Plan Strategy

A summary of each section follows.

Introduction

International Falls is an international community located in Koochiching County and situated immediately across the Rainy River from the Ontario community of Fort Frances. The combined population of the two communities according to the 2010 census is nearly 15,500. Paper manufacturing is the most important industry which employs 17 percent of the population. The City also has an international airport that serves as a staging area for hunting and fishing trips into the Canadian wilderness. In 2008, the most recent year of record, aircraft operations averaged 109 per day (40,000 annual) with 50 percent of that traffic consisting of itinerant (i.e. private, non-local) operations. The airport is the fourth busiest in the state. The City also is the second busiest rail port of entry in the country. International Falls is also the gateway to Voyageurs National Park, 218,000 acres in size and Minnesota's only national park. The landform of the city is predominantly flat characterized by lake-modified till with thin ground moraine over bedrock. Vegetation is a mix of aspen-birch forest with pockets of lowland willow and alder as well as white cedar and black spruce. Some of the disturbed areas in the City are open and grassy. Just a short distance to the east past the community of Rainer, the landscape abruptly changes to a formation of rocky outcrops.

Purpose and Objectives

A large amount of undeveloped land remains within the City. With its international stature that is the result of a combination of manufacturing, recreation and rail, air and highway transportation, the City needs to have a land use plan in place that identifies potential future growth areas along with the infrastructure needed to serve that growth. The complex mosaic of upland/wetland leads to complicated permitting decision processes which the CWPMP serves to address and provide guidance to.

The CWPMP is designed to be a user-friendly, citizen based document that minimizes the degree of uncertainty as to the development potential of areas of land within the City. The Plan identifies areas that have the highest potential for future development based on in-place and future infrastructure, minimal or manageable wetland limitations, and identifies areas for future wetland preservation as well as areas for mitigation. The implementing mechanism of the CWPMP is a Wetland Ordinance.

Data Collection and Inventory

The area of the City remaining to be developed was examined for the presence of wetlands using as an initial guide the National Wetland Inventory completed by the Fish and Wildlife Service in the early 1980s. Aerial photos, with the NWI wetlands outlined, were used as a guide to assist the field ecologists in locating the previously mapped wetland areas and also to serve as a pattern to identify other possible wetlands. Previously completed wetland delineations also aided in identifying wetland areas. While these aids were useful, the complex landscape mosaic suggested the need for a tool that permitted a more accurate definition of wetland areas over the extent of the City. BWSR and the COE provided funding to create a predictive model that combined landscape topography and soil type to better determine the extent to which, on an area basis, wetland might be present.

Once wetlands were identified, a representative selection of wetlands by type were evaluated using MnRAM, a tool that identifies and ranks the functions and values of the subject wetland. Forty-four sample areas were evaluated. The results serve to classify wetland areas according to quality – Develop, Manage and Protect.

A City Land Use Map was also prepared that identified areas within the City served by existing infrastructure, areas easily served by future infrastructure expansion within 5 years and areas where significant infrastructure expansion is not likely to occur within a 10-year period. These three Wetland Management Areas combined with the three wetland quality zones are the basis for the implementation of the CWPMP.

Results and Analysis

The predominant wetland type identified by the NWI was forested wetland (803 acres) followed by emergent wetland (139 acres). The CWPMP field inventory identified 344 acres of forested wetland and 322 acres of scrub shrub wetland. Only 73 acres of emergent wetland were identified. The results of the BWSR/COE wetland analysis model presented wetland results by percentage and the actual wetland acres cannot be measured with this technique however the method is more practical on a broad scale in a complex wetland mosaic such as that which is present in International Falls.

Wetland Plan

Implementation of the CWPMP would integrate the Wetland Classification Zones and the Wetland Management Areas to guide future growth and development. Each Wetland Management Area would have a Wetland Classification Overlay to guide the intensity of development permissible by the wetland quality. Impacts less than 10,000 square feet (except in the Protect Classification) would not require a LGU permit but would require a COE Pre-Construction Notification. Projects over the minimum threshold would require an LGU permit as

well as a COE permit. Wetland impacts would be replaced by the purchase of wetland credits preferably within the same COE Bank Service Area. A City Wetland Ordinance will govern and implement the provisions of the CWPMP.

Acknowledgements

The City of International Falls wishes to acknowledge the Minnesota Board of Water and Soil Resources and its staff for the time and financial contributions made toward the preparation of this plan. John Jaschke, Executive Director, and his staff have worked diligently with City staff in bringing this plan to a successful conclusion. BWSR staff provided valuable expertise and input into the data collection and plan preparation process.

The City also acknowledges the time and financial participation by the US Army Corps of Engineers. Tamara Cameron, Regulatory Branch Chief authorized COE staff, along with BWSR personnel, to assist in the preparation of a hydrological water model that assessed potential wetland areas within the City on the basis of hydric soils and landscape drainage position. This model made the identification of potential wetland basins more efficient without the expenditure of a great deal of field time. COE staff participated in field review of the MnRAM data collection process as well as participating in meetings and planning strategy.

Koochiching Soil and Water Conservation District provided staff to collect additional MnRAM field data along with preparing and compiling GIS data for MnRAM analysis.

Other participants in the plan included elected City of International Falls officials, City staff and local residents along with representatives from the DNR, PCA and Koochiching County who volunteered to serve on the Wetland Technical Advisory Committee. Through the efforts of each of these individuals, preparation of the Plan has been made possible.

Introduction

City History and Statistics

The City of International Falls, being located on the Rainy River in north central Koochiching County, was known to trappers and explorers during the 17th century but only became established as a community in 1895 receiving the name "Koochiching" by L. A. Ogaard who originally platted the community. In 1903, two years after incorporation as a village, it was named International Falls in recognition of its close connection to the Ontario community of Fort Frances and for the falls on the Rainy River. International Falls incorporated as a city in 1909. The city encompasses an area of 6.4 square miles of which 6.3 is land and 0.1 is water. A large percentage of the population has Scandinavian roots.

The city is widely known as the "Icebox of the Nation" and takes fierce pride in that designation. In combination with Fort Frances, it also bears the name "Frostbite Falls" in the widely syndicated and still playing television series "Rocky and Bullwinkle".

According to the 2010 Census, the population of International Falls stands at 6,464. Along with its neighbor, Fort Frances, with a population of 9,000 the total population of the area is nearly 15,500.

International Falls has one AM radio station, 5 FM stations and is served by 3 TV repeater broadcast stations. It is also served by The Journal, a bi-weekly newspaper published in International Falls that has a circulation of over 3400 readers.

There are one community college, a high school and 3 elementary/middle schools located in the community as well as a regional hospital.

The City also has an international airport that serves as a staging area for hunting and fishing flights into the Canadian wilderness. Almost 40,000 operations were recorded for 2008, the most recent year of record, consisting of 2,300 commercial, 2,500 air taxi, 20,000 itinerant, 15,000 local and 100 military operations for an average of 109 operations per day.

The most common industry is paper manufacturing which employs 17 percent of the population, educational services employs 11 percent and health care, 9.5 percent. Average commute time to work is 9.9 minutes which ranks 13th of the Top 100 Cities with the shortest commute time.

The City of International Falls is an international city and has the second busiest rail port of entry in the country and the International Falls Airport is the 4th busiest in the state of Minnesota. International Falls is also a gateway to Voyageurs National Park, established by congressional action in 1975, which is 218,000 acres in size and is Minnesota's only national park.

Ecologically, the City is located approximately on the transition line between the Border Lakes and Littlefork-Vermillion Uplands Subsections according to the Minnesota Department of Natural Resources Landscape Ecosystem mapping process.

The Border Lakes subsection is characterized by glacially scoured granitic and basaltic bedrock knobs and lakes. Original pre-settlement vegetation was dominated by jackpine forest with white pine-red pine forests and hardwood-conifer forests dominated by balsam fir, with white spruce, paper birch and trembling aspen also occurring. Present vegetation continues to be similar in species representation with the predominant land use being timber production.

The Littlefork-Vermillion Uplands are transitional between extensive peatlands to the west and the bedrock dominated landscape to the east. The landscape subsection is characterized by lake-modified till and thin ground moraine over bedrock. Pre-settlement vegetation consisted of aspen-birch forest on the lake-modified till in the western half of the subsection while conifer swamp occurred in depressions on the till plain. At the east edge of the subsection, where soils are the thinnest, jackpine and aspen-birch forests were common. Present day vegetation is similar to the pre-settlement communities. Some areas of high quality forest are present in this subsection such as white cedar swamp, black spruce swamp, spruce-fir forest and white pine forest. Present day land use is for timber production.

The components of the two subsections are evident in and around the City of International Falls although the predominant landscape would be best represented by the Littlefork-Vermillion landscape description with the rocky outcrop formations more dominant toward Ranier and eastward.

Purpose and Objectives

The City of International Falls has a large amount of undeveloped area within the boundaries of the City and has the potential for future growth given its mix of recreational advantages, international airport, health facilities, a solid school system at the elementary, secondary and post-secondary levels, established manufacturing base, well-developed rail service system, excellent highway access, proximity to Canada and a large amount of undeveloped land. It is challenged by an abundance of wetland areas within the City limits on the undeveloped land base. The wetland inventory completed as part of the planning process indicates a mix of wetlands of varying quality ranging from exceptional to degraded. The intention of the International Falls Comprehensive Wetland Protection and Management Plan (CWPMP) is to create a guidance document and mechanism that balances the need for economic growth with a strategy for preserving those wetlands in need of preservation, enhancing those that would provide added wetland functional benefits and values and utilizing other areas for economic development which would provide long term economic benefits and values for local residents. The final CWPMP needs to address the requirements of the Minnesota Wetland Conservation Act and its implementing Rules (MN Rule 8420) as well as the wetland protection provisions articulated in the Federal Clean Water Act as administered by the US Environmental Protection Agency (EPA) and the US Army Corps of Engineers (COE). Other agencies involved to a lesser extent include the Minnesota Pollution Control Agency (PCA) and the Minnesota Department of Natural Resources (DNR).

The CWPMP is designed to be a user-friendly, citizen based document that minimizes the degree of uncertainty as to the development potential of areas of land within the City. The Plan identifies areas that have the highest potential for future development based on in-place and future infrastructure, minimal or manageable wetland limitations, and identifies areas for future wetland preservation as well as areas for mitigation. Mitigation ratios and strategies are identified in the CWPMP. Some mitigation areas may be pre-acquired by the City to serve as a "mitigation bank". It is not the purpose of the Plan to create non-developable areas but rather guide development into those areas least restricted by natural and physical constraints such as soils with low structural capability, excessive wetness and lacking development infrastructure such as sewer, water, utilities and good road access.

The implementing mechanism of the CWPMP will be a Wetland Ordinance adopted by the International Falls City Council. The Plan is based on a 10-year life cycle extending from 2014 to 2024. This Plan covers all existing lands within the present City limits as well as any lands annexed by the City during the life cycle of this Plan.

Regulatory Framework

The existing wetland regulatory framework in Minnesota involves a number of federal, state, and local agencies including the US Army Corps of Engineers (COE), Department of Natural Resources (DNR), Pollution Control Agency (PCA), and Local Government Units (LGU) operating under the provisions of the Wetland Conservation Act and overseen by the Minnesota Board of Water and Soil Resources (BWSR). A brief discussion of the role of each wetland regulatory agency is included in this section.

Integration with City of International Falls Infrastructure
Combining the analysis results of the Wetness/Hydric Soil wetland probability score and the stressed wetland functional ratings with the presence of the City in-place and planned infrastructure expansion, future growth should be directed to those areas indicated in Figure 5.

Depending on the scale of the proposed development, wetland replacement may occur on the basis of wetland probability. For example, for a smaller project where an individual would choose not to have a delineation in an area with a WPS of 2, the estimated presence of wetlands would be 50 percent based on the presence of hydric soils (Percent of Hydric Soils by Watershed Assessment Zone) and the wetland presence subject to replacement would be 50 percent of the total impacted area. If a delineation were performed, than the actual amount of wetland area identified and later impacted would be the basis for wetland replacement.

Implementation Actions

City Wetland Management Areas
As illustrated on the City's 2013 Land Use Plan – Wetland Management Areas, the City is subdivided into four management areas as described below. All projects will require a review by the City TEP. A permit application based on the City's Wetland Application Form will be required with a 15 day comment period. Comments will be solicited from the DNR, COE and BWSR. In a subsequent section, the Plan describes the permitting process required for wetland alteration in the development of land by an applicant.

Urban Core: The Urban Core (UC) is the fully developed portion of the city and was developed prior to the Wetland Conservation Act or the Clean Water Act. It is largely platted and fully serviced by sewer, water, electricity, natural gas, cable, telephone and a developed road system. Due to the density of urban development in this area, it was omitted from the Technical Study.

Developed Area 1: Developed Area 1(DA-1) is a developed area where density of development is less than in the adjacent UC. DA-1 also takes into consideration the extent of wetlands present and wetland quality. DA-1 is fully serviced by sewer, water, electricity, natural gas, cable, telephone and a road system making vacant property within DA-1 highly desirable for development. DA-1 is fully served by a variety of infra-structure services and development of this area is consistent with the City's Land Use Plan and related goals and policies.

Under Developed Area 2: Under Developed Area 2 (DA-2) is the area which has minimal development currently but is suitable for development within the next 5 years. In outlining DA-2, the City also considered the extent of wetlands present and wetland quality. While not completely serviced by in-place infrastructure, this area has ready access to sewer, water, electricity, natural gas, cable, telephone and the existing road system. Expanded development into this area is an appropriate goal for the City as it takes advantage of access to either on-site or nearby utility infrastructure.

Future Development Area 3: Future Development Area 3 (DA-3) has minimal development and is unlikely to have significant development occurring within the next 10 years but its location proximate to areas currently under development make it the logical location for future

development. In outlining DA-3, the City also considered the extent of wetlands present and wetland quality. While DA-3's location close to existing development indicates likelihood of development in the future, significant investment of utilities and infrastructure is needed to service future development in DA-3.

Preservation of existing wetlands: Areas DA-1, DA-2, and DA-3 were all included in the Technical Study and considerable information is available regarding existing wetlands. The City of International Falls recognizes the desirability of preserving existing wetlands including wetlands within areas of future development. To encourage preservation of existing wetlands, wetlands in DA-1, DA-2, or DA-3 may be used for mitigation credits on a project specific basis for development projects in DA-1, DA-2, or DA-3 at the replacement value of 12.5 percent of an acre upon approval of the City TEP.

While many of the undeveloped areas within the City are forested, these areas are typically early successional stage hardwoods dominated by aspen and birch. Such early successional stage or "pioneer" forests are common throughout Koochiching County and northeastern Minnesota in general. However, some of the forested areas in the City are lowland conifers with spruce, balsam fir and white cedar as a minor or dominant component. It is the intent of the City, consistent with both state and regional forest management and preservation policies to preserve and protect these communities within the framework of this plan. To the extent that some of these areas ranked Low or Medium with regard to the Stressor Index, such areas will be given a higher level of review if or when a proposal to develop such areas is brought forth. Such areas that are under public or private ownership within the City would receive favorable consideration as mitigation sites for other projects within the City or for enrollment in a wetland bank.

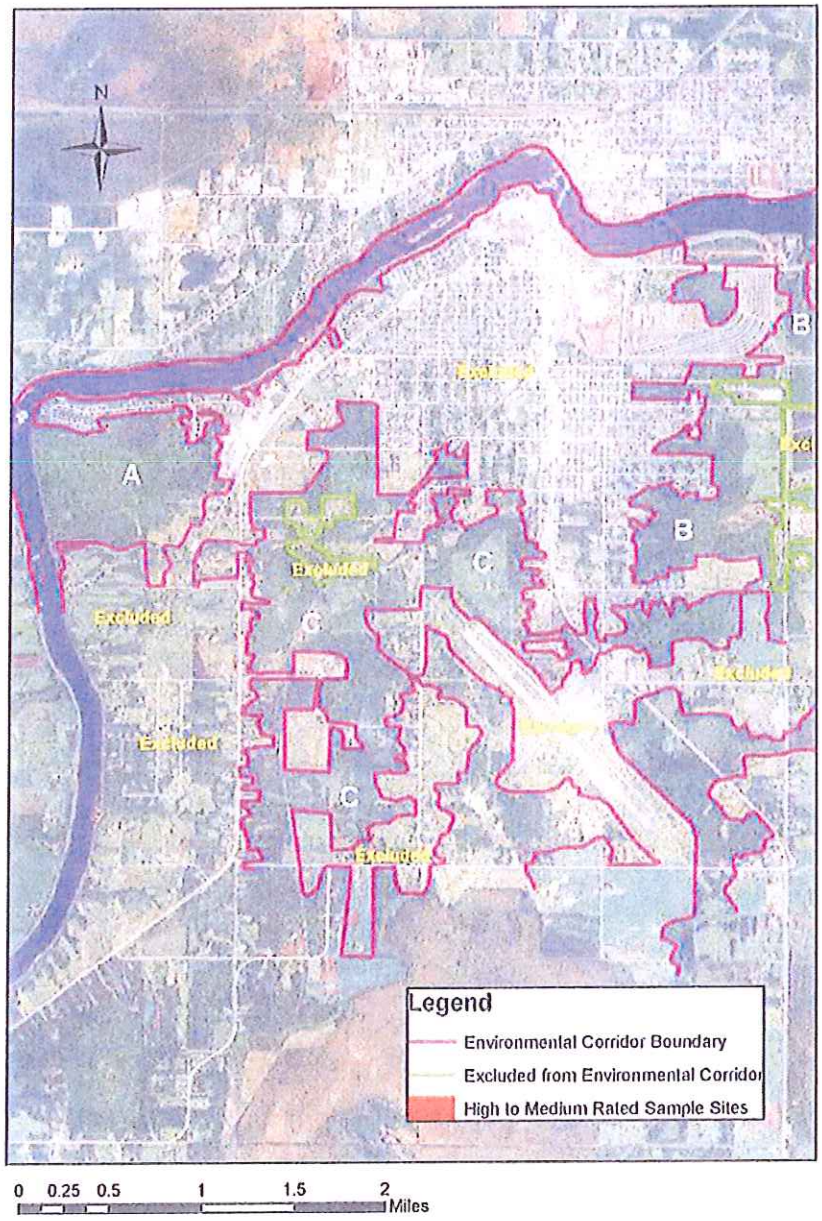
Environmental Corridors

In considering development proposals for the WMA's and the sequencing level required, the City would attempt to the extent possible to develop an interconnectedness of wetlands utilizing an environmental corridor concept. Figure 17, the Wetland Functional Land Use map, shows the wetland functional rating of the various wetland areas within the City based on the combination of vegetative quality and urban stressor levels. Areas that are rated as Medium and High within DA-3 would be considered priority areas to be part of an Environmental Corridor. An environmental corridor may consist of public open space, trails, roadways with an adjoining trail, naturally vegetated, areas, wetlands and wetland fringes, and upland areas. Areas ranked High or Medium in the MnRAM Assessment Final Score Matrix would be given a priority consideration as part of the environmental corridor selection process. Environmental corridors may consist of a combination of land tracts that range in size and shape and to the extent possible would form an interconnected network throughout the City. The purpose of the environmental corridor process would be to provide travel lanes, cover and habitat for wildlife and also a network of connected public open space for use by residents and visitors to International Falls.

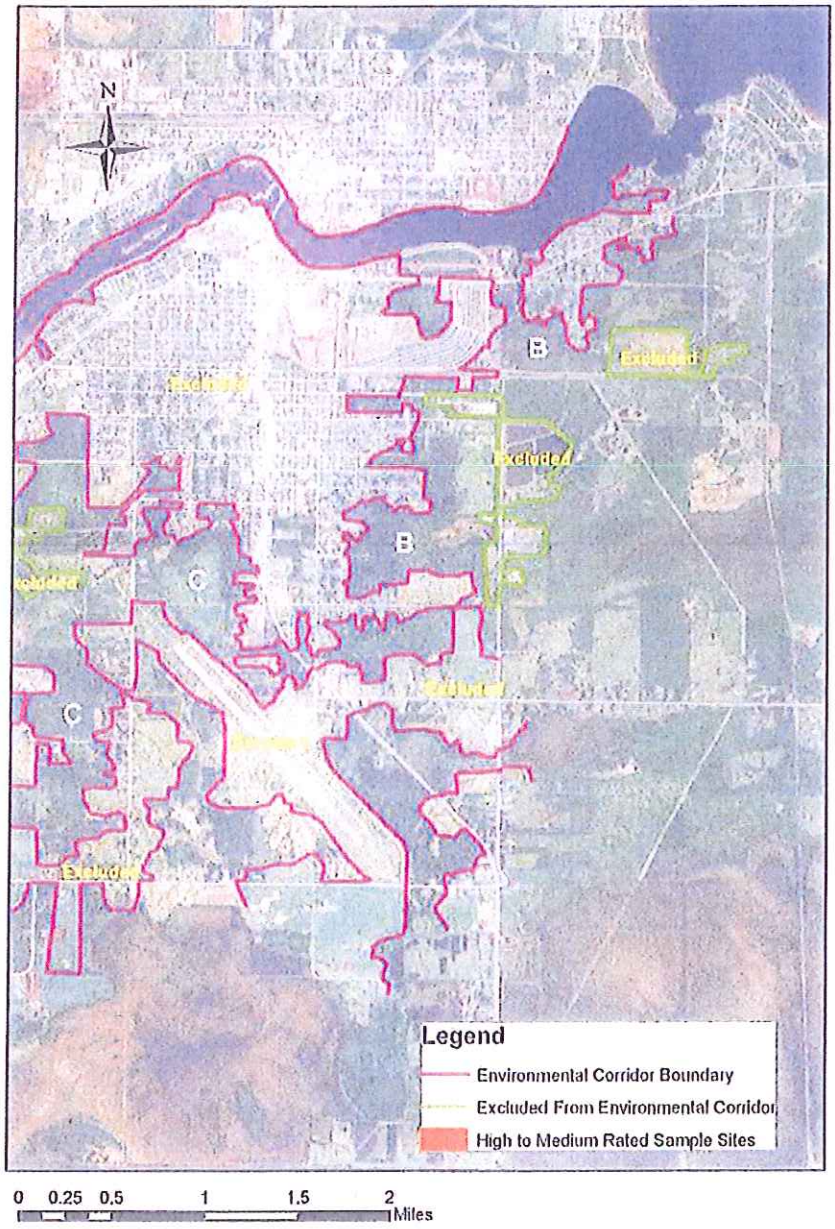
Function and Values Management Classifications

As described earlier in the Plan, MnRAM data was collected at a variety of wetland locations throughout the City. These locations represented a range of wetland types and conditions. The technical report prepared by BWSR and the COE ranked the quality of wetlands by combining the MnRAM results along with land condition. The result of this was a Stressor Score that

Environmental Corridor Concept



Environmental Corridor Concept



resulted in ranking the sampled wetlands as Low, Medium or High in quality based on vegetative condition and the effect of land use on the vegetative condition. Thirteen wetlands rated High, 22, rated medium and 9 rated low. The results of this analysis were extrapolated to create three management classification areas which are superimposed over the Wetland Management Areas. The Wetland Functional map (Figure 17) shows the areas in the City with the MnRAM Functional Assessment ratings that combine vegetative quality and urban stressor levels along with the City's proposed short and long range development intentions.

The following wetland classification categories have been developed based on the MnRAM and Stressor ranking results. These zones are overlays to the City Land Use Plan Management Areas.

> ***Low Functioning Wetland*** – The Low category is based on the combination of 9 MnRAM vegetation sample points, 26 land use stressor evaluations, the City's land use plan and the Environmental Corridor Concept defined in the BWSR/COE Technical Report. These points are used to establish the extent of the Low overlay to the Wetland Management Areas (Developed Areas 1, 2 and 3). This area typically has the lowest plant community quality and the highest development related disturbance associated with existing land use. These areas would qualify for future development with the lowest level of mitigation required (if any) along with impact sequencing flexibility.
>
> ***Medium Functioning Wetland*** –There are 22 locations ranked Medium in the Stressor ranking which would qualify for the Medium classification. The results are based on 14 Medium MnRAM vegetation scores and 42 land use stressor evaluations. The combination of the vegetation score and the land use score suggests that these areas are suited for a combination of development along with, where appropriate, some vegetative management but not always, wetland restoration. Twenty-one of the areas ranked high vegetatively but of those 8 experienced a medium level of land use stress.
>
> ***High Functioning Wetland*** – Thirteen locations ranked High with the combination of the Vegetative and Stressor scores applied. Vegetatively, 21 sample locations ranked High but of those, 8 had a Medium level of land use stress which reduced the overall community quality. Alternatively, these areas could also be considered as possible wetland preservation mitigation sites which would qualify as wetland mitigation bank areas or project specific mitigation.

Compensatory Mitigation

Approved wetland impacts may be offset by a process called Compensatory Mitigation. Mitigation can consist of wetland restoration, enhancement of hydrology and vegetation, creation (least favored) and protection of existing high quality wetland areas under potential threat of loss. Mitigation can take place either at the site of wetland alteration or on other nearby property owned or controlled by the project proposer (project specific mitigation) or through the purchase of pre-existing credits from a wetland bank.

Under the provisions of this CWPMP, the City prefers utilization of credits from an existing wetland bank preferably within Bank Service Area 2 (if credits are available). The reasons for this are that the wetland has already been established and has demonstrated effective functional

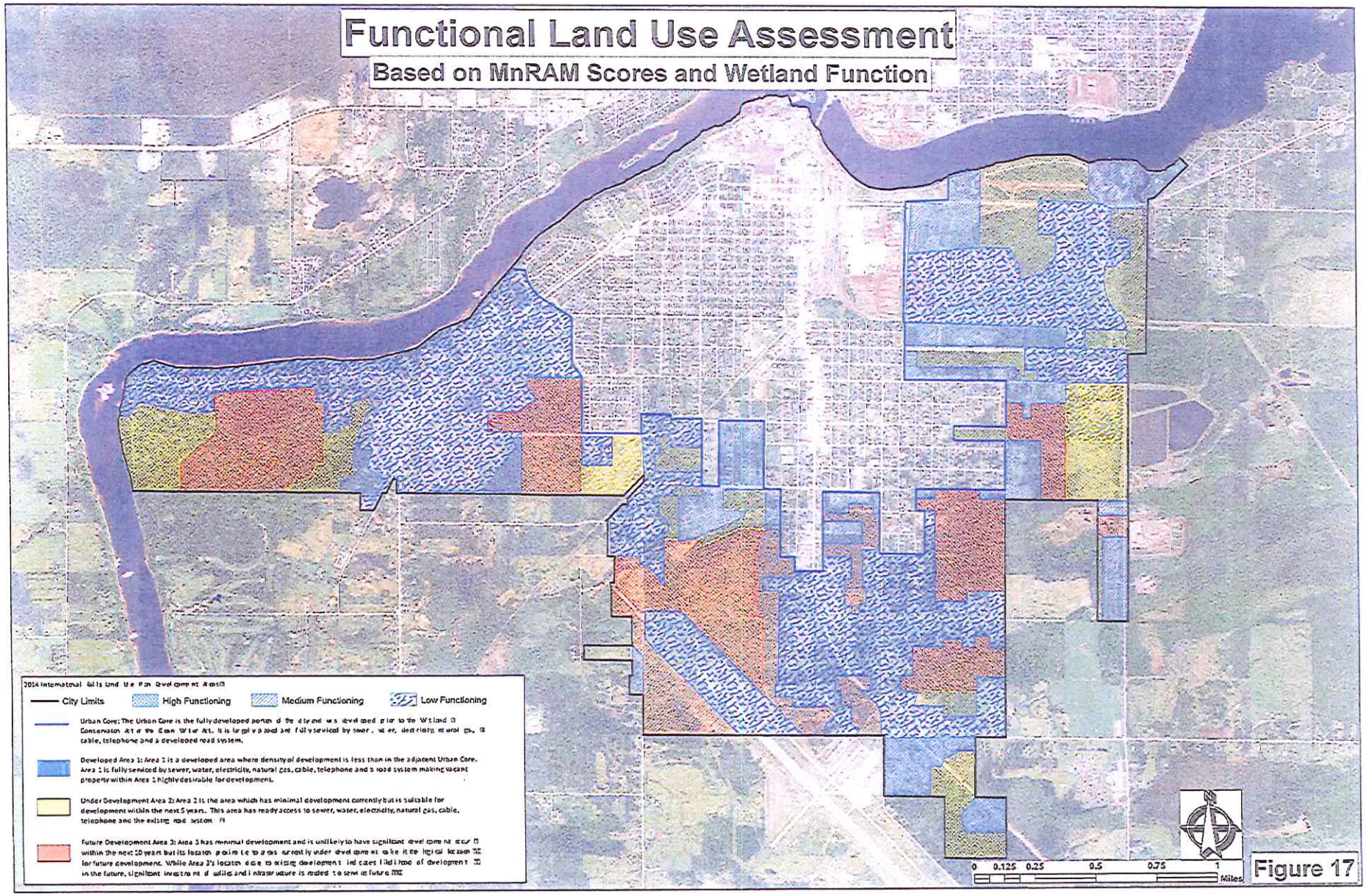

Functional Land Use Assessment
Based on MnRAM Scores and Wetland Function
2014 International Falls Land Use Plan Development Areas
City Limits
High Functioning
Medium Functioning
Low Functioning
Urban Core: The Urban Core is the fully developed portion of the city and was developed prior to the Wetland Conservation Act of the Clean Water Act. It is largely platted and fully serviced by sewer, water, electricity, natural gas, cable, telephone and a developed road system.
Developed Area 1: Area 1 is a developed area where density of development is less than in the adjacent Urban Core. Area 1 is fully serviced by sewer, water, electricity, natural gas, cable, telephone and a road system making vacant property within Area 1 highly desirable for development.
Under Development Area 2: Area 2 is the area which has minimal development currently but is suitable for development within the next 5 years. This area has ready access to sewer, water, electricity, natural gas, cable, telephone and the existing road system.
Future Development Area 3: Area 3 has minimal development and is unlikely to have significant development occur within the next 10 years but its location proximate to areas currently under development make it the logical location for future development. While Area 3's location close to existing development indicates likelihood of development in the future, significant investments in utilities and infrastructure is needed to serve as future
0 0.125 0.25 0.5 0.75 1
Miles

Figure 17

performance; there is no lag time (temporal loss of wetland functionality) between the time of wetland impact and adequate establishment of wetland functions which may take several years to occur.

Purchase of wetland bank credits
As an alternative to the establishment of a wetland using the project specific approach, an applicant may elect to purchase wetland credits from an approved COE/BWSR wetland bank. Wetlands that have been banked have achieved functional performance and there is no delay in a wetland getting "up to speed" functionally therefore there can be flexibility in the amount of wetland replacement required. The regulatory agencies would prefer mitigation through the use of purchased bank credits within the same Bank Service Area, in the case of International Falls, from Bank Service Area 2. Credits may be purchased from an adjoining BSA as long as they are in kind and in advance of the project impact. In such a case, a higher credit ratio may be imposed at the discretion of the LGU subject to the mitigation requirements imposed on the project by the COE.

The COE and BWSR have agreed on a concept of wetland Bank Service Areas (BSA). A BSA spans several counties and is based on the aggregation of multiple watersheds within which wetland banks exist. Purchase of wetland credits is preferred from within the BSA where the project occurs. However, in the case of northern and northeastern Minnesota where the landscape is dominated by wetlands in many cases, it may be difficult to find a qualifying wetland bank from which to purchase credits. This CWPMP allows for the purchase of credits outside of the BSA subject to the approval of the TEP.

Project specific on-site or off-site replacement
Project specific replacement occurs when a project proposer impacts wetlands with a project that exceeds the WCA *de minimus* threshold and/or the COE RGP allowable fill limit. Establishment of a mitigation wetland or wetlands occurs on land owned or controlled by the project proposer before, at, or just after wetland impacts occur. Wetland establishment can consist of expansion of an existing wetland where suitable conditions exist, restoration of vegetation and hydrology of a drained wetland, or enhancement of a degraded wetland plant community. Mitigation can also occur on property owned by the project proposer through the dedication of a high quality wetland that is at risk of loss by development or other alteration (demonstrable threat). Such mitigation is achieved through the use of a protective easement. Wetlands that are established by some type of land manipulation must be monitored for a period of up to five years (or more if the wetland fails to achieve satisfactory functional performance) and must be approved by the TEP.

Wetlands that are restored, enhanced or created can generate credits between 1:1 to 1:4 (i.e. 1 wetland credit for 4 acres of land) depending on the degree of wetland recovery and type of wetland restoration or enhancement that occurs.

Mitigation Ratios
Wetland replacement for wetland impacts both under WCA and CWA Section 404 must not result in any loss of wetland functions. In order to achieve this, in areas where wetland loss over the decades has resulted in the loss of over twenty percent of the wetlands, wetland replacement ratios typically are at 2:1 or higher for approved impacts. Koochiching County and the City are in an area where wetland loss has been less than 20 percent and therefore wetland replacement

may occur at a ratio of 1:1 for project impacts.

Establishing Extent of Wetland Impacts

The BWSR/COE Technical Report discussed previously in this Plan presented an analysis that combined the percentage of hydric soils on the landscape with the micro-depressional areas present (CTI or Compound Topographical Index). The results were presented as index values in a figure called "Wetland Probability Zones". The data was presented on a scale ranging from 1 to 10 with an area labeled with a 1 had the lowest probability of wetland presence and 10 had the highest. The values were determined by a normalization process. The table below re-establishes the percentage of CTI and hydric soil and converts the values back to an average percentage. The purpose of doing this is to have some general idea, by percentage, how much of the WPZ may be wetland versus upland. While the result isn't perfectly exact, it serves as a tool to be used in alternatives to individual delineations of all properties within the City that are proposed for development at one level or another.

Landowners have the option of either having a delineation completed based on the 1987 Federal Manual and the Midwest Regional Supplement or they may accept the WPZ percentage and mitigate accordingly. Once a City Wetland Application is received, a Routine Wetland Determination will be conducted by a TEP representative to verify the absence of wetlands or if any are present, the nature and extent of the wetland. This determination will be completed by using any previously available data along with any data collected during a mandatory site visit. If it is a complex, the value for the WPZ may be used in lieu of a wetland delineation. For example, a property located within WPZ 1a (Figure 14) would be required to replace 44 percent of the total area of alteration as wetland impact. Table 6 presents the calculated percent of wetland for each WPZ.

Table 6 - Percent of wetland in WPZ based on percent CTI and hydric soils

WPZ	% CTI	% Hydric	% Avg Combined
1a	31	57	44
1b	34	55	44.5
2	43	50	46.5
3a	44	52	48
3b	37	59	48
6a	45	63	54
6b	42	69	55.5
7	40	73	56.5
10	52	73	62.5

Wetland Plan Strategy

Implementing the wetland protection and management plan is based on the integration of the

following data analysis results:

City Land Use Plan
Functions and Values Analysis
Wetland Probability Zones
MNRAM Assessment Final Score Matrix (Technical Report, pg 34)

Combining the various results allows for the establishment of permitting processes, level of development and mitigation requirements.
Each of the following subsections discusses the following topics:

Permitting – Exemption and permit thresholds
Permit Processes
Permissible Impacts
Mitigation Requirements

Table 7 is a Permit Process Matrix that illustrates the alternatives analysis process required in each of the WMA's according to sequencing level. The sequencing levels and WMA's have been described previously in this Plan. The type of alternatives analysis required for each cell in the matrix is described below. Two types of alternatives analysis exist and the matrix indicates if one or both of the analyses are required.

Alternatives Analysis

Both the WCA and CWA Section 404 require the applicant to consider alternatives to avoid and minimize impacts to wetlands on a site as a result of a proposed project. Alternatives consist of off-site considerations and on-site considerations. In order for the COE to issue a CWA Section 404 permit, the COE must ensure, among other things, that the activity complies with the EPA 404(b)(1) guidelines. The considerations are described in the following paragraphs.

Off-site Alternatives

An off-site alternative is one in which the proposed project may occur at another location which may have less or no wetland impacts. In order to qualify as an alternative project location, the evaluation shall consider project purpose and need, ownership and/or feasibility of acquisition of property by the project proposer, cost considerations of acquisition (cheaper land due to the presence of wetlands is not adequate justification for selecting a specific site), adequate in-place infrastructure or degree of difficulty to access such infrastructure, relationship of proposed use to existing infrastructure or essential natural resource features, relationship to surrounding existing or proposed development, consistency with zoning and the City Land Use Plan, size, extent and configuration of the property required to achieve the intended project need and purpose, and/or other factors which may be determined to be relevant by the LGU. Off-site alternatives are to be considered in areas where future development is not likely to occur according to the City's Land Use Plan for 5 to 10 years and occur in areas that are forested by lowland conifers.

On-site Alternatives

On-site alternatives apply to all project proposals that have wetlands present within the property boundaries. A wetland or wetlands may occupy only a part of the property or may be distributed across the entire property as a mosaic of upland and wetland in varying percentages. On-site alternatives involve the way a project is configured on the parcel or parcels involved. The

preferred development configuration is to minimize the extent of impact to the wetland or wetlands on the property by varying site access, building size and configuration, and other requirements as defined by City code. Almost invariably there are conflicts between project purpose and consideration of the project function and design, City code requirements pertaining to public health, safety and welfare such as street or highway access, fire safety, building setbacks, access to required utilities, including utility capacity to meet a specific use, and the presence of wetlands.

The following matrix, Table 7 summarizes the sequencing requirements for the combination of sequencing levels and City WMA's.

Table 7 – Permitting Processing Matrix

Land Use Plan Wetland Management Areas	Low Functioning Wetland	Medium Functioning Wetland	High Functioning Wetland
Developed Area 1 - (DA-1)	Zone A	Zone B	Zone C
Under Developed Area 2 - (DA-2)	Zone D	Zone E	Zone F
Future Development Area 3 - (DA-3)	Zone G	Zone H	Zone I

Table 8 is a listing of qualifying WCA *De minimus* exemptions that apply to all of the WMA's as described below. These requirements supersede the 10,000 square foot threshold throughout the City or the 400 square foot threshold in the Shoreland Management Zone. A WCA *De minimus* exemption is a threshold amount established in Mn Rule 8420.0420 Subp. 8. Under a WCA *De minimus* exemption, wetland replacement is not required if certain conditions in the Rule are met.

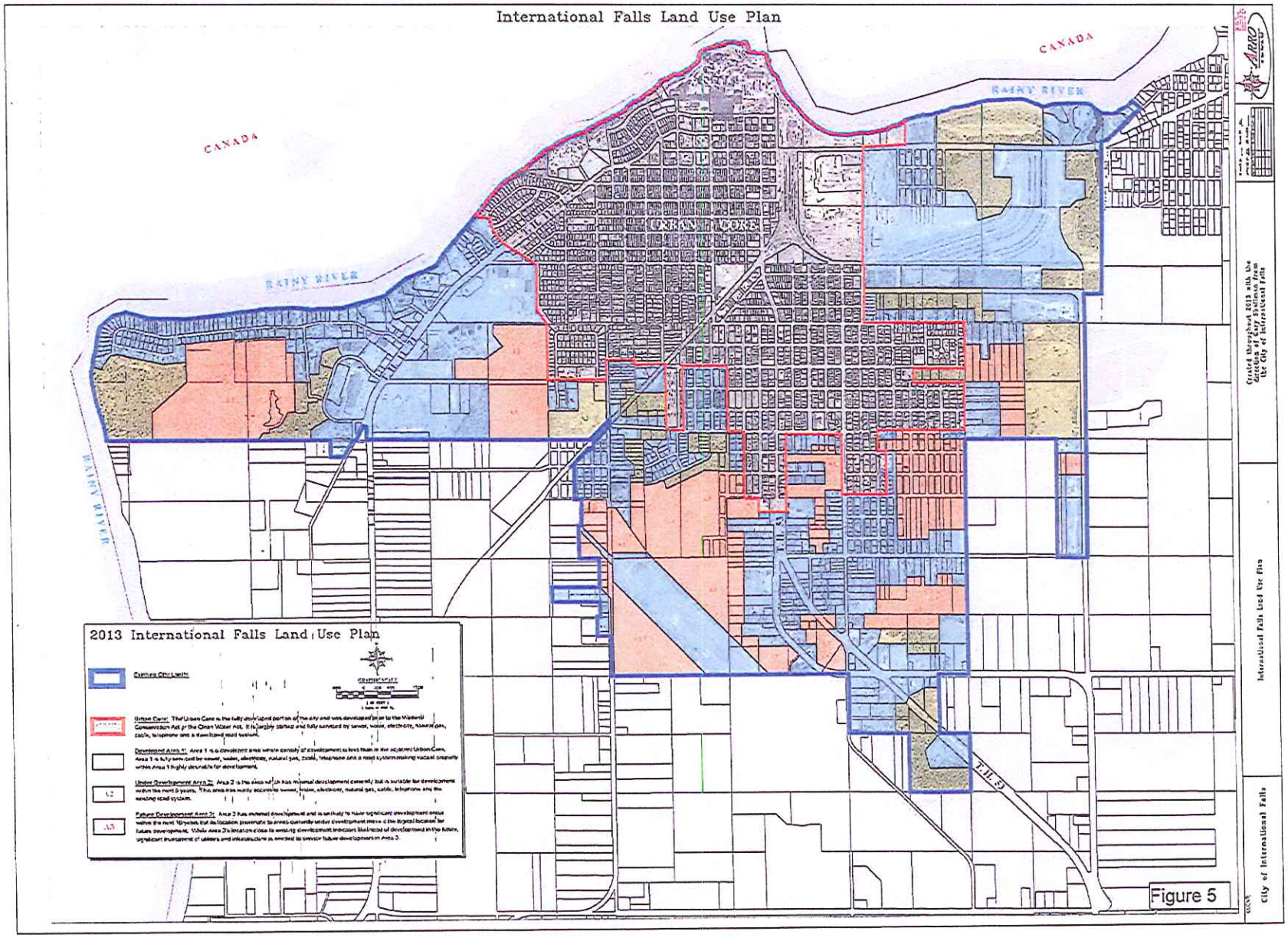

International Falls Land Use Plan
CANADA
RAINY RIVER
CANADA
RAINY RIVER
URBAN CORE
RAINY RIVER
2013 International Falls Land Use Plan
Existing City Limits
Urban Core
Development Area #1
Under Development Area #2
U2
Future Development Area #3
A3
Figure 5
City of International Falls
International Falls Land Use Plan
Created throughout 2013 with the direction of City Staff and the City of International Falls

Table 8 – WCA De minimus Exemption *(Minnesota Rule 8420.0420, subpart 8)*

Area(s)	Wetland Types	Shoreland Zone	Conditions	De minimus Amounts
>80%	1, 2, 6 or 7	Outside	Not White Cedar & Tamarack	10,000 sq. ft.
		Inside	Not White Cedar & Tamarack Outside Bldg. Setback Zone	400 sq. ft. (LGU may increase to 1,000 if no surficial connection)
			Inside Bldg. Setback Zone	20 sq. ft.
	3, 4, 5, 8 (and White Cedar & Tamarack)		Outside Bldg. Setback Zone	100 sq. ft.
			Inside Bldg. Setback Zone	20 sq. ft.

- *The above applies if the landowner owns the entire wetland basin.*
- *If the landowner does not own the entire basin, the landowner's De minimus is based on 5% of the wetland area owned*
- *This exemption may not be combined with another exemption on the project*
- *Property may not be subdivided solely to increase the amounts listed in A*

Permitting

In general, as part of the site evaluation procedure as specified below, a modified Routine Wetland Determination following the guidance in the 1987 Manual, and the 2010 Midwest Regional Supplement and any future amendments would be applied in the pre-evaluation of a project proposal. The Routine Determination should be completed by an LGU representative or otherwise qualified delineator. Typically the determination would consist of a review of a recent aerial photo of the site, an examination of the NWI map, review of the hydric soils map for the area, review of the technical data and figures in the CWPMP, and an examination of recent precipitation trends using the Minnesota Climatology Working Group website (http://climate.umn.edu/gridded_data/precip/wetland/wetland.asp) or other approved source of reliable weather data. During the site visit requirement as specified below, a currently approved BWSR/COE wetland data sheet would be completed based on a visual examination of the site recording information pertaining to vegetation and hydrology. Soils data may or may not be collected at the discretion of the field investigator. The data sheet would be kept in the applicant file along with the City Wetland Application Form.

The COE has agreed that the City's Wetland Application Form satisfies the requirements of a PCN therefore a completed City Wetland Application Form will serve as the COE PCN. Any reference to the COE PCN in the following sections is for cross reference clarification purposes in the description of the process.

Urban Core

The area is highly urbanized and few if any unmanipulated waterbodies are present. Any projects proposed for this area would be required to complete the City's Wetland Application Form. An

LGU representative would verify project location and examine a recent aerial photo to determine the possible presence of any wetlands on the site. A site visit by an LGU representative is required.

The site visit would be made to verify the absence of wetlands or if any are present, the nature and extent of the wetland areas. If part or all of the area does meet wetland criteria as defined by state and federal procedures and in this CWPMP, it would be subject to the permitting procedures described for Wetland Zones A & B.

WETLAND ZONES A & B
The following procedures are in effect for Wetland Zones A & B: The City Wetland Application Form must be filed, which would satisfy the mandatory State application requirement as well as the federal PCN requirements.

Excluding the Shoreland Management Zone where the *de minimus* exemption is specified in Table 8 (WCA), wetland impacts of 10,000 square feet or less will not require wetland mitigation under WCA, however the information contained within the City Wetland Application form would determine if the project qualifies for a COE General Permit.

Expansion of the *de minimus* exemption within the city limits will be offset by the City providing permanent protection of 41.4 acres of wetland by placing deed restrictions preventing future development of these areas. The City will provide annual summaries to BWSR of the wetland areas lost as a result of the expansion of the *de minimus* exemption beyond the amount allowed under the Wetland Conservation Act Rule.

If impacts exceed 10,000 square feet outside the Shoreland Management Zone, or exceed figures specified in Table 8 (WCA) within the Shoreland Management Zone, mitigation for the total amount of impact is required by WCA and the COE. The LGU will provide a list of activities that are exempt by WCA or activities previously approved under the provisions of the CWA throughout the life cycle of the CWPMP. The Interagency Water Resource Application Form will not be required with these impacts however; an Agency notice requesting comments will be issued to BWSR, COE, DNR and PCA. The comment period will be for 15 working days. If no Agency comments are received within that time period, the application will be determined to be approved.

Wetland impacts would be determined either by a wetland delineation or by using the one of the pre-determined wetland ratios listed in Table 6. Delineations need to be completed by a state Certified Wetland Professional or by an individual with a minimum of 5 years of applied wetland field experience including soils and plant identification skills or by the Koochiching SWCD technical evaluation panel member who has successfully completed a University of Minnesota Wetland Delineator Certification Program wetland delineation week long course.

Purchase of wetland bank credits is the preferred mitigation method. If onsite replacement is chosen by the applicant, the Rules and procedures pertaining to onsite replacement as described in MN Rules 8420 will prevail. Wetland replacement would be required at a ratio of 1:1.

WETLAND ZONES D & E
The permitting process for Wetland Zones D & E is the same as Wetland Zones A & B however an Interagency Water Resource Application Form will also be required if wetland impacts exceed 10,000 sq.ft.

WETLAND ZONES C, F, G, H & I
The permitting process for Wetland Zones C, F, G, H & I is the same as Wetland Zones D & E however, regardless of wetland impact size, all projects in these zones must complete both an on-site as well as an off-site alternatives siting analysis.

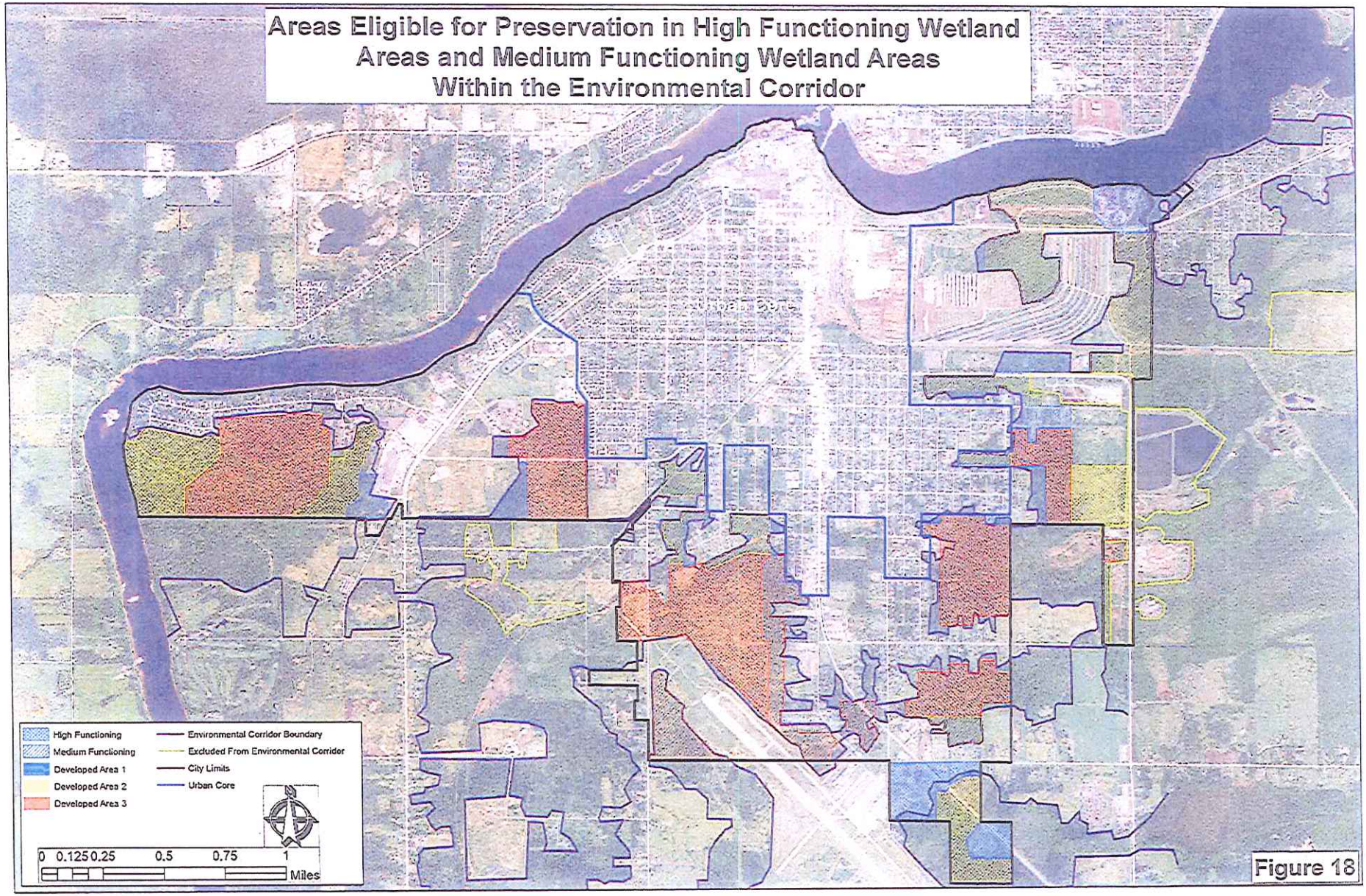
Permitting Procedures in the Shoreland Management Zone
The Shoreland Management Zone is a 300' wide band extending from the top of bank along the Rainy River as well as any bays, lakes or open water bodies directly connected to or directly part of the Rainy River and as established by MN Statutes Chapter 103F. Permitting procedures are as described above.

Alternative Options for Compensatory Mitigation within NE Minnesota Watersheds.
The City of International Falls incorporates into the wetland plan the following wetland mitigation concepts listed in the ***"Siting of Wetland Mitigation in Northeast Minnesota – Issues, Recommendations and Alternatives from the Interagency Northeast Mitigation Siting Team"***, dated March 7, 2014. These mitigation options will be considered for mitigating wetland losses within the City of International Falls, provided projects have the concurrence of the Technical Evaluation Panel and the Corps of Engineers Project Manager.

"While there are many opportunities for wetland restoration on a statewide basis, NE Minnesota is somewhat constrained because this region has experienced less drainage compared to other portions of the State. There are some areas in the northeast where large scale drainage efforts were attempted, but these areas were only partially drained (at best) and still meet the wetland criteria established in the Corps manual and regional supplement. The limited number of drainage systems that are relatively effective typically involve drainage rights conferred under Minnesota Drainage Law (MN Stat. § 103E), which often reduces the likelihood that restoration is achievable. In addition, much of NE Minnesota is currently in public ownership, where existing wetlands already have some level of protection. There simply are not many opportunities for wetland restoration at the scale or credit potential required to offset the potential impacts of anticipated projects.

Expanded Use of Preservation.
The preservation of important wetlands in NE Minnesota for mitigation credit is currently allowed under both WCA and the St. Paul District mitigation policy. However, preservation is not commonly thought of as a "traditional" mitigation option and is often looked upon as the least preferable alternative. Given the fact that relatively few good restoration opportunities exist in the northeast and that many important, diverse, and even pristine wetlands exist, preservation is an appropriate and important mitigation option.

Upland areas adjacent or connected to wetlands and other water resources are also vital to maintaining the habitat and water quality functions of those resources. Allowing mitigation


Areas Eligible for Preservation in High Functioning Wetland Areas and Medium Functioning Wetland Areas Within the Environmental Corridor
High Functioning
Medium Functioning
Developed Area 1
Developed Area 2
Developed Area 3
Environmental Corridor Boundary
Excluded From Environmental Corridor
City Limits
Urban Core
0 0.125 0.25 0.5 0.75 1
Miles
Figure 18

credit for the preservation of both important wetlands and upland is an essential part of protecting the long-term health of watersheds in the northeast. Priority areas for protection include the upstream reaches of watersheds and riparian areas where a demonstrable threat has been identified.

For example, there is a demonstrable threat to some lake and river fringe wetlands in the northeast from riparian development. Unregulated activities occurring on adjacent upland areas negatively affect wetlands and other aquatic resources, without providing compensatory mitigation. Protecting some of these quality shorelines or adjacent wetland habitats through easement or acquisition should be a priority. Mitigation credit should be allowed for such activities.

Note that the recommendations contained in this section pertain to expanding the use and applicability of preservation, not the amount of credit allocated. Credit allocation for preservation is necessarily low to ensure the long term replacement of wetland function and to minimize the loss of wetland area.

Restoration and/or Protection of Riparian Corridors and Streams.
Similar to the rationale for preservation outlined above, buffers adjacent to streams provide wildlife and fisheries habitat, reduce thermal pollution, protect water quality, and improve long-term sustainability of the stream resource. The establishment and/or preservation of buffers adjacent to important streams and their tributaries should be allowed wetland mitigation credit, even when they are not directly associated with a wetland restoration project.

In addition, many natural streams have been straightened and channelized, altering the hydrologic and habitat characteristics of the stream itself and adjacent areas, including wetlands. Such altered stream channels are also typically more "flashy" and less stable, affecting the water quality and fluctuation of downstream aquatic resources. Restoring these altered streams back to a natural condition can provide multiple benefits to the watershed, including restoration of the natural hydrologic regime to existing wetlands adjacent to the stream channel.

Stabilization of Natural Hydrology.
In some cases, the hydrology of existing wetlands and streams can be indirectly impacted by other activities. For example, ditching, stream channelization, or other hydrologic modifications can change the hydrologic regime of adjacent or nearby wetlands in addition to the resource directly affected. As a result, aquatic systems often experience more dramatic water level fluctuations or reduced hydrologic persistence. Restoration of the natural hydrologic regime can restore functionality and stabilize the hydrology of existing nearby wetlands. In such instances, compensatory mitigation credits may be generated through the stabilization of natural hydrology. It is important to be clear that the intent of this recommendation is not to build dams and impoundments or to change natural hydrology fluctuations of non-degraded wetlands, but rather to restore and stabilize unnatural fluctuations in degraded wetlands caused by human activities.

Stabilization of hydrology alone best fits "enhancement" as a type of compensation credit under

the Clean Water Act. The Corps' St. Paul District Mitigation Policy defines enhancement as activities that heighten, intensify, or improve a specific function of an existing wetland. Generally, up to 3:1 (33%) wetland credit can be earned from enhancement activities, with the actual amount of credit allocated based on the extent of functional gain to the existing wetland. Under the Wetland Conservation Act, stabilization of hydrology could fit the "restoration of partially drained or filled wetland areas" action eligible for credit, which typically allows credit for up to 50% of the wetland area restored. According to the current WCA Rule, replacement credit can be allocated for activities that restore both the natural hydrology regime and native, noninvasive vegetation of wetlands that have been degraded by prior drainage, filling, or a diversion of the natural watershed. In some instances, stabilization of hydrology could potentially also be allocated credit under the "restoration and protection of exceptional natural resource value" (ENRV) action. See BWSR ENRV Guidance at www.bwsr.state.mn/wetlands. Portions of enhancement projects sometimes include areas that have been drained, such as the margins of a wetland where the outlet has been lowered. Under both federal and state rules, up to 1:1 (100%) credit can be allocated for the restoration of areas that have been completely drained. The stabilization of hydrology could potentially be one component of a larger restoration project. Projects comprised of one or more means of compensation credit are common and the resultant credit amount is based on the types of credit and their respective contribution to overall improvement of wetland function.

While credit may be allocated for the stabilization of natural hydrology as described above, it may not be commonly understood among agency staff and project proponents. In addition, such projects would tend be complex and appropriate credit allocation difficult.

Peatland Hydrology Restoration.

Significant regions of Minnesota's vast peatland wetlands in northern MN, typically bog type peatlands, were ditched late in the nineteenth and early twentieth centuries, mostly in an attempt to convert these areas to agricultural uses. In part, due to the absorbent and high moisture retentive characteristics of peat, drainage was typically not successful and resulted in minimal drainage effectiveness. Today, the majority of the partially drained peatlands are still wetland. Primarily due to the relative ineffectiveness of these past drainage efforts, peatland restoration is typically not thought of as a traditional wetland mitigation opportunity. However, though past ditching did not effectively convert these peatlands to non-wetland, it is likely the drainage had significant effects on peat quality, water quality, and peatland hydrology in many instances. Past drainage also may have affected the carbon sequestration function of many peatlands. The restoration of peatland hydrology through strategic ditch blocks can improve the affected peatland and provide downstream water quality and quantity benefits.

Similar to the stabilization of hydrology described above, peatland hydrology restoration best fits "enhancement" as a type of compensation credit under the Clean Water Act, and the "restoration of partially drained or filled wetland areas" or "Exceptional Natural Resource Value" actions eligible for credit are the most fitting under WCA. However, due to the ineffectiveness of past drainage efforts and the general state of disrepair of the remaining drainage systems, the hydrologic effects on peatlands can be subtle and even unrecognizable without detailed study. As such, peatland restoration is not often thought of in the context of generating compensatory wetland mitigation credits.

As with other actions eligible for credit, the amount of credit allocated must match the functional benefits gained from the action. In the case of peatland restoration, the effectiveness of the drainage system and its influence on adjacent peatlands should be considered in the agencies' determination of appropriate credit allocation amounts. In addition, agencies and project proponents should be aware that land ownership (often State), the existence of public drainage systems (MN Stat. 103E), and other factors can often complicate peatland restoration options.

Approved Watershed Plan Implementation Projects.
The ultimate goal of the watershed approach is to maintain and improve the quality and quantity of aquatic resources within watersheds through strategic selection of compensatory mitigation options and sites. In cases where an approved watershed plan is available, the agencies will determine whether implementation of the plan, or select components of the plan, is appropriate for use in meeting mitigation requirements for authorized impacts. The plan must have been developed to strategically address management of aquatic resources within a defined watershed area and must also identify specific implementation projects that benefit the overall ecological functioning of aquatic resources. Plans that contain only general statements about watershed needs and opportunities will be of limited value when formulating mitigation plans in a permitting framework.

Examples of potentially acceptable watershed plans developed by regulatory and non-regulatory programs include Total Maximum Daily Load (TMDL) implementation plans, Watershed Restoration and Protection Strategies, resource management plans, basin plans, local water plans, and habitat conservation or improvement plans that identify specific implementation activities to improve the quantity and/or quality of aquatic resources. Actions that may not be specifically contained in the plan, but have been identified by the government entity responsible for implementing the plan as consistent with the plan's goals and objectives can be considered as well. Watershed plan implementation actions receiving wetland mitigation credit must be completed entirely with non-public funds"

The City of International Falls incorporates into the wetland plan the following water quality protection concepts listed in the *"Koochiching County Local Water Management Plan, December 2012 Update"*.

Protection of Water Quality
Goal: Ensure the quality of water in the Koochiching County portion of the Rainy River Basin is maintained or improved.
Water Quality Mitigation Projects:

a. *Implement projects that provide for the retention or planting of native vegetation along the shoreline to protect wildlife habitat and to discourage lawns, impermeable materials, and others with the intent to improve the quality of Rainy basin waters.*
b. *Implement stormwater runoff treatment projects protecting the water quality in the stream and rivers tributaries of the within the Rainey River basin.*

These mitigation options will be considered with concurrence of the Technical Evaluation Panel and the Corps of Engineers Project Manager required for approval.

Wetland Preservation Areas

Figure 18 shows areas within the City that will be eligible for wetland preservation credit and enrollment in a wetland bank. Alternatively, qualifying areas within the City limits would be eligible for project specific mitigation for projects located within the City limits. The areas designated on the figure for eligibility for wetland mitigation credit by wetland preservation have a Medium or High wetland function score and are located within an environmental corridor *(The environmental corridors were identified in the International Falls Comprehensive Wetland Management Technical Report, 5/20/2011 developed by the U.S. Army Corps of Engineers, Minnesota Board of Water and Soil Resources and the Koochiching County Soil and Water Conservation District)*. The Wetland Plan is intended to provide incentives for preservation of Medium and High quality functioning wetlands in the designated areas. Figure 19 illustrates the potential areas on a parcel specific basis.

Wetlands near the Airport

Open water wetlands near airports are attractants to waterfowl and gulls which pose a hazard to aviation. A wetland delineation report completed by SEH in 2004 (SEH Technical Memorandum, December 15, 2004) identified several wetland complexes surrounding the airport most of which were wooded or shrub wetland types 6, 7 and 8. However, at the southeast end of Runway 31 there are several Type 3 wetlands of various sizes which serve as wildlife attractants. The WHA identified Canada geese, mallards, ring-billed and herring gulls as being present within the airport property. These four species are present during the breeding season.

Gulls were responsible for 4 reported strike incidents between 1994 and 2000 as reported to the National Bird Strike Database.

A Wildlife Hazard Assessment (WHA) was completed between October 2000 and October 2001 with the results published in a Wildlife Hazard Assessment Report in February 2002. This report indicates that mallards were frequently observed in, around and moving from one wetland to another at the wetlands located at the southeast end of the runway (WHA pg 22).

A Wildlife Hazard Management Plan (WHMP) was completed for the Airport in 2009. The WHMP recommends the control of wetland vegetation on airport property to minimize attractiveness to wildlife.

The CWPMP recommends against any wetland creation, restoration or enhancement in any areas affected by airport operations.

Tax Forfeited Land

Figure 20 shows tax forfeit land parcels within the City that will be protected. The City, as needed would be allowed to cross the property with public and private utilities.

Watershed Context

Figure 21 shows the relationship of the City of International Falls to other major watersheds in the vicinity. The majority of the City of International Falls lies within the Upper Rainy River Watershed with a small part of the southeastern City in the Rainy Lake Watershed. Other major watersheds include Big Fork and Little Fork.

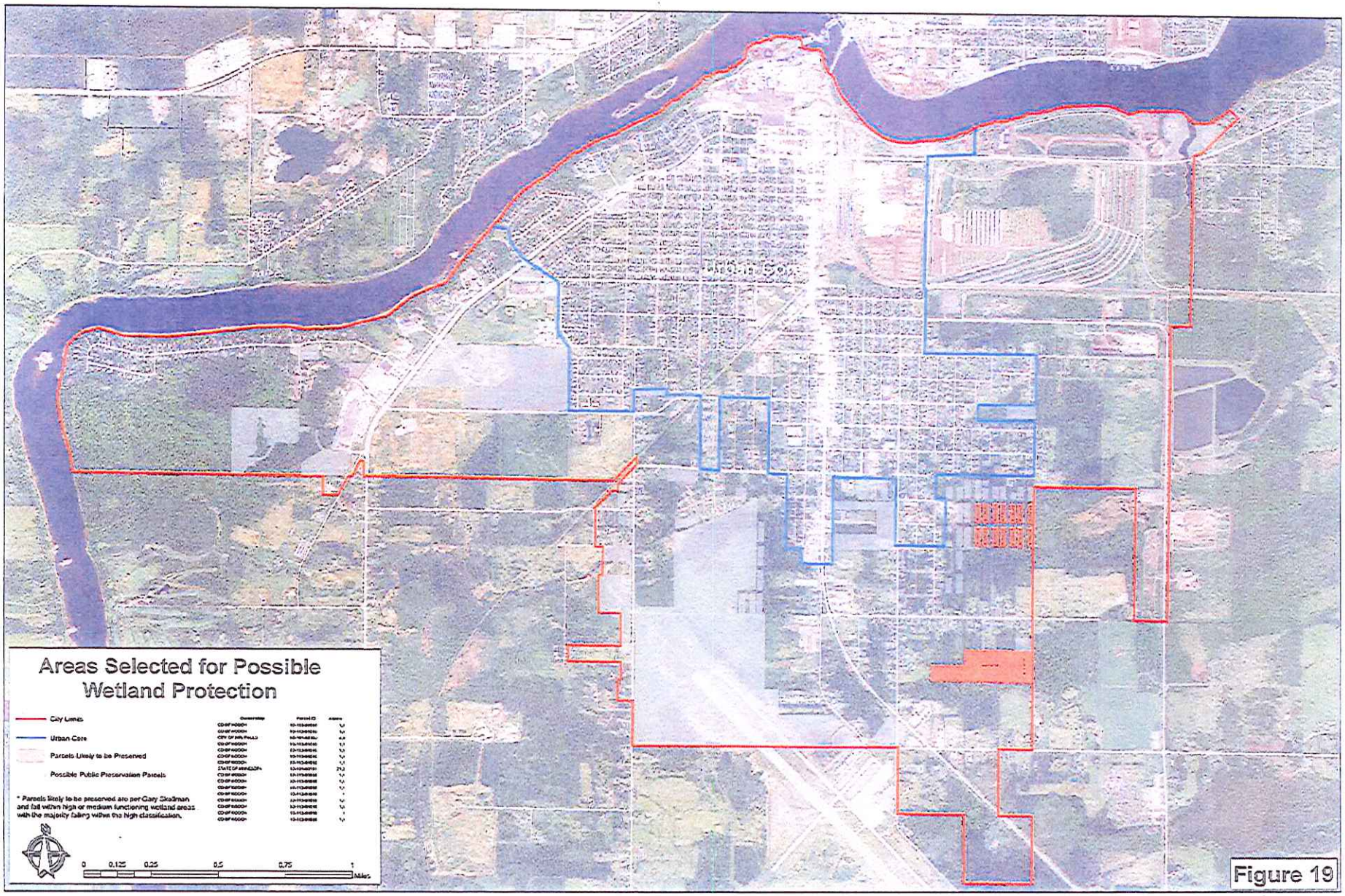

Areas Selected for Possible Wetland Protection
City Limits
Urban Core
Parcels Likely to be Preserved
Possible Public Preservation Parcels
* Parcels likely to be preserved are per Gary Stadtman and fall within high or medium functioning wetland areas with the majority falling within the high classification.
0
0.125
0.25
0.5
0.75
1
Miles

Figure 19

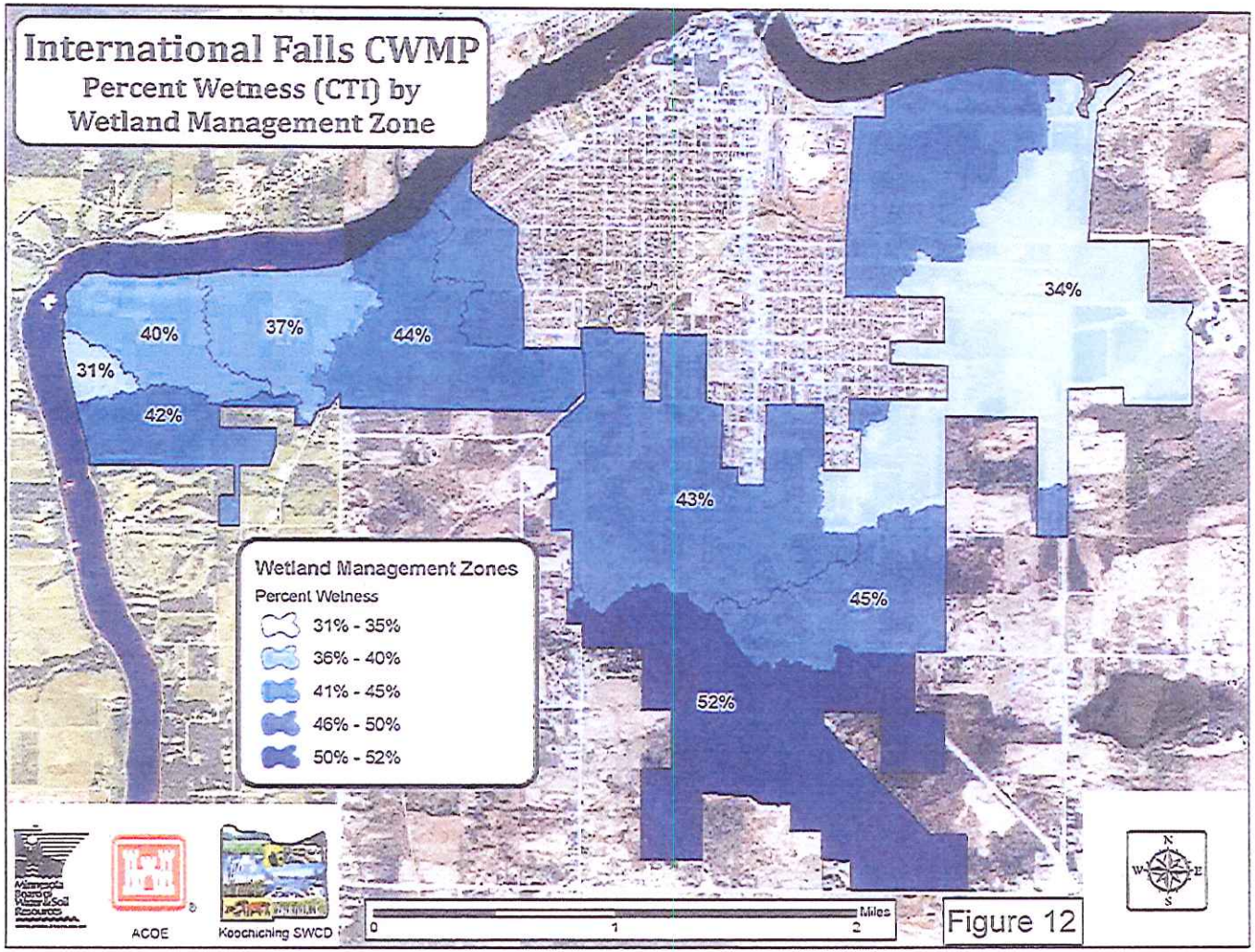

International Falls CWMP
Percent Wetness (CTI) by
Wetland Management Zone
40%
37%
44%
31%
42%
34%
43%
45%
52%
Wetland Management Zones
Percent Wetness
31% - 35%
36% - 40%
41% - 45%
46% - 50%
50% - 52%
ACOE
Koochiching SWCD
0
1
2
Miles
N
W
E
S

Figure 12

BOARD MEETING AGENDA ITEM

AGENDA ITEM TITLE: Lake County Priority Concerns Scoping Document

Meeting Date: August 28, 2014

Agenda Category: ☒ Committee Recommendation ☐ New Business ☐ Old Business

Item Type: ☒ Decision ☐ Discussion ☐ Information

Section/Region: Northeast

Contact: Ryan Hughes

Prepared by: Ryan Hughes

Reviewed by: Northern Committee(s)

Presented by: Ron Shelito

☐ **Audio/Visual Equipment Needed for Agenda Item Presentation**

Attachments: ☐ Resolution ☐ Order ☒ Map ☒ Other Supporting Information

Fiscal/Policy Impact

☒ None
☐ Amended Policy Requested
☐ New Policy Requested
☐ Other:

☐ General Fund Budget
☐ Capital Budget
☐ Outdoor Heritage Fund Budget
☐ Clean Water Fund Budget

ACTION REQUESTED

Approval of Lake County's Local Water Mangement Plan Priority Concerns Scoping Document

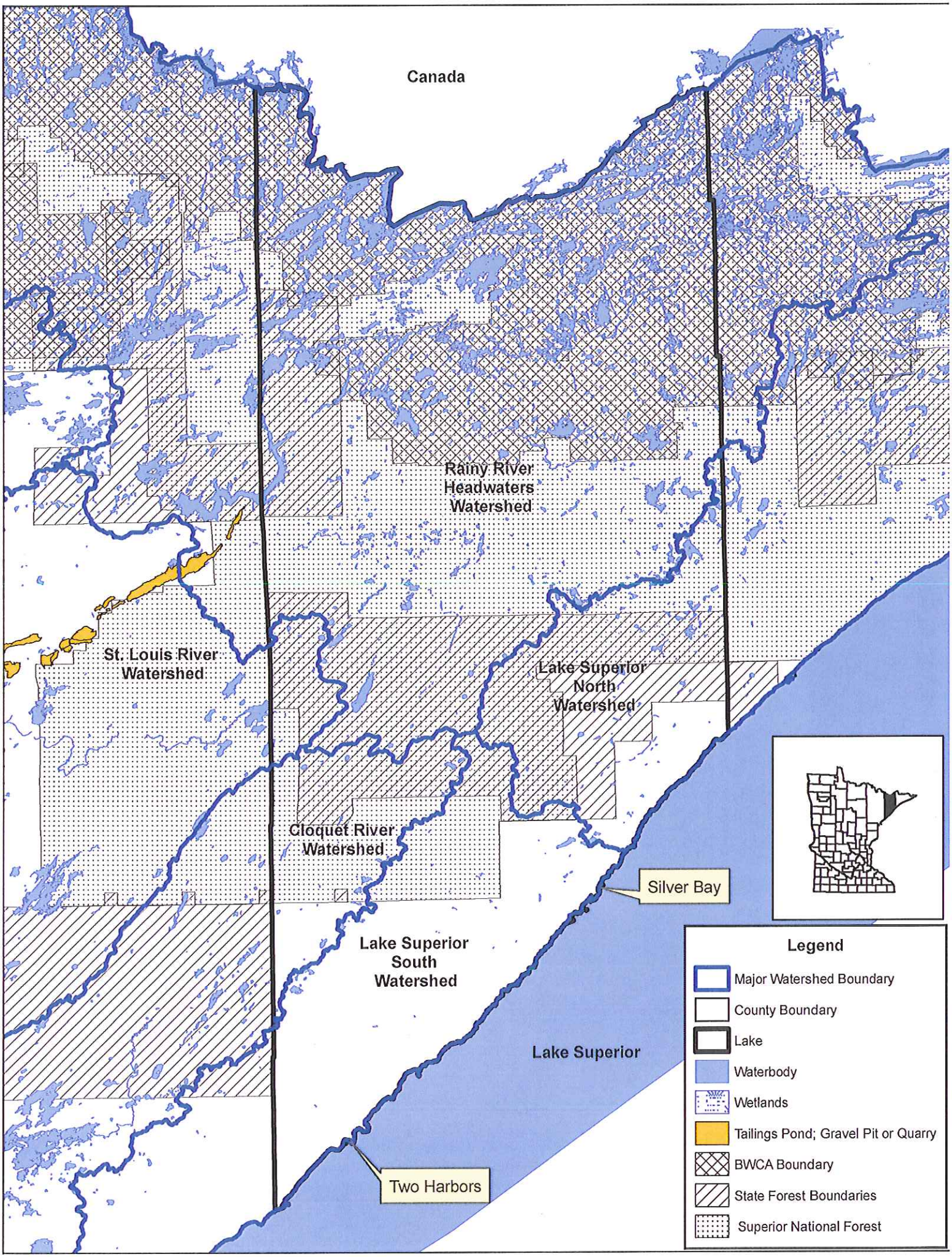
LINKS TO ADDITIONAL INFORMATION

Full document available at:
http://www.co.lake.mn.us/vertical/sites/%7BA88D6CA0-192C-4EBE-8698-70C44B114E79%7D/uploads/Lake_County_PCSD.pdf

SUMMARY (*Consider: history, reason for consideration now, alternatives evaluated, basis for recommendation*)

The Lake County Local Water Management Plan will expire on October 26, 2015. The County passed a resolution to begin the plan update process on May 14, 2013. The Priority Concerns Scoping Document was routed to the state review agencies on July 24, 2013.

The Northern Committee met on July 9, 2014, to review the Priority Concerns Scoping Document and review agency comments. The BWSR Northern Committee concurred with the Lake County priority concerns and recommended approval of the Lake County Priority Concerns Scoping Document by the full BWSR board.


Canada
Rainy River Headwaters Watershed
St. Louis River Watershed
Lake Superior North Watershed
Cloquet River Watershed
Lake Superior South Watershed
Lake Superior
Silver Bay
Two Harbors
Legend
Major Watershed Boundary
County Boundary
Lake
Waterbody
Wetlands
Tailings Pond; Gravel Pit or Quarry
BWCA Boundary
State Forest Boundaries
Superior National Forest

PRIORITY CONCERNS SCOPING DOCUMENT

Lake County Local Water Management Plan

Anticipated effective dates: Jan. 2015 – Dec. 2024

Lake County Soil and Water Conservation District
616 3rd Avenue
Two Harbors, MN 55616
February, 2014

Lake County Soil & Water Conservation District

The following Priority Concerns Scoping Document was developed in accordance with changes to the Comprehensive Local Water Management Act; Statutes: 103B.301-103B.355. This Scoping Document identifies the priority concerns selected by the Lake County Water Plan Advisory Committee, along with a detailed account of how these concerns were identified and prioritized.

1. INTRODUCTION

Lake County is located in the middle of the northeast Minnesota Arrowhead region, bordered on the east by Cook County and on the west by St. Louis County. Lake County is the fourth largest county in Minnesota, with a total area of 2,132 square miles or 1,364,480 acres, extending approximately 36 miles east to west and 87 miles north to south along the western border with St. Louis County. The 2012 total population of Lake County was 10,818 permanent residents, slightly down (-0.4%) from the 2010 population of 10,866 residents. According to the Minnesota State Demographic Center, the population of Lake County is projected to increase slightly between 2015 and 2040, with a projected range of growth between 0 and 10%.

Lake County contains several small cities and towns, the most developed of which include Two Harbors, Silver Bay, Beaver Bay, Knife River, Finland, and Isabella. The population is concentrated in the southern area of the county along the North Shore of Lake Superior. Much of the northern third of the county lies in the Boundary Waters Canoe Area Wilderness. With a 2012 population of 3,692, Two Harbors is the largest city in the County and serves as the County seat.

2. PHYSICAL FEATURES OF LAKE COUNTY

Lake County has approximately 55 miles of Lake Superior shoreline and straddles the Laurentian divide, which separates two major watersheds. North of the Laurentian Divide, water flows through the Rainy River headwaters to Hudson Bay. South of the Laurentian Divide, water flows to the Atlantic Ocean through the Great Lakes. Approximately 25% of Lake County is classified

as "wetlands" and Lake County has approximately 98% of pre-settlement wetland area intact. Lake County is 83% publicly owned, including 58% Federal, 13% State, and 12% County tax-forfeit land. Primary large-scale land uses are logging and wood product industries. Other industries in the county include shipping, manufacturing, gravel mining, and tourism. Non-ferrous mining activities in the Stony River Township of Lake County are currently being pursued by the Twin Metals, LLC mining company. If approved, the Twin Metals mining project would introduce land use changes to the Stony River Township. These land use changes would have the potential to affect the water resources of Lake County. Other land use trends in the county are expected to remain relatively constant.

The highest point in the County is 2,067 feet above sea level, while the shores of Lake Superior are located at 602 feet above sea level. The County has 841 lakes and 418 streams, many of which are designated trout streams. There are five major HUC-8 level watersheds located in Lake County. From largest to smallest in area they are the Rainy River headwaters, South Lake Superior, North Lake Superior, Cloquet River, and St. Louis River watersheds.

3. PLAN INFORMATION

The Lake County Soil and Water Conservation District (Lake SWCD) is the local government unit (LGU) responsible for coordinating the Lake County Local Water Management Plan (Water Plan), and has filled this role since 1995. The current Water Plan, in effect from 2005 to 2015, has identified seven priority concerns, including:

1. Increased Development Pressures – Erosion Control on Construction Sites, Road Management, Cumulative Impacts, Shoreline Erosion Control
2. Enforcement of Existing Land Use Laws and Use of Best Management Practices in Development Activities and Forest Management Activities
3. Storm Water Management
4. Wastewater Management - Non-Conforming Sewage Treatment Systems, Surface and Groundwater Contamination, Drinking Water Quality
5. Natural Resources Education on Water/Land Issues
6. Lake and Stream Water Quality, Water Quantity and Biological Integrity
7. Supportive of Total Maximum Daily Load (TMDL) research project efforts on north shore streams.

This 2005 – 2015 Water Plan continued to endorse the overall goal established during 1993 water planning activities to "Maintain and improve both surface and groundwater quality and quantity through sound ecosystem management." In 2010, the 2005 – 2015 Water Plan was amended to define and include high priority watersheds in Lake County in which proposed

action items would take precedence. These included the Beaver, Kawishiwi, Knife, and Stewart Rivers, as well as Skunk Creek. Additionally, the 2010 amendment process included the addition of several relevant plans and controls that were added for reference purposes, as well as updates to the implementation and work plan included in the Water Plan.

In 2012, additional amendments were made including the addition of Lake Superior as a high priority watershed and the decision to invite representatives from all townships and municipalities within Lake County to participate on the Water Plan Advisory Committee. The current Water Plan is due to expire December 31, 2014, and the 2015-2025 Water Plan will be in place and operational by January 1, 2015.

4. SELECTED PRIORITY CONCERNS

On October 23, 2013, the Water Plan Advisory Committee met to discuss collected priority concern input and select priority concerns to be included in the 2015 – 2025 Water Plan. During the meeting, the following four priority concerns were identified that will guide the goals, objectives, and action items as the Committee works on water planning activities in Lake County over the next 12 months. These priority concerns include:

1) Surface Water
2) Ground Water
3) Subsurface Sewage Treatment System (SSTS)
4) Aquatic Invasive Species (AIS)

5. PRIORITY CONCERNS HISTORY

The Lake County Water Planning process has completed the following steps to identify the priority concerns that will be in the Lake County Water Plan.

May 14, 2013: The Lake County Board of Commissioners resolved to update the current Local Water Management Plan, which was last updated in July, 2005 and amended in June, 2010 and November, 2012.

July, 2013: Request for input into the Lake County Water Plan process sent to Louisiana Pacific Building Products, Cliffs North Shore Mining, the Minnesota Deer Hunters Association, Minnesota chapter of Trout Unlimited, the Coldwater Coalition, the Advocates for the Knife River Watershed, Sugarloaf Natural Area, the White Iron Chain of Lake Association, Wolf Ridge Environmental Learning Center, the Cities of Two Harbors, Beaver Bay, and Silver Bay,

all Lake County townships, the North Shore Forest Collaborative, and all state review agencies (BWSR, DNR, MPCA, EQB, MDH, and MDA).

Members of the Lake County Water Plan Advisory Committee visit about water quality issues in Lake County at the July 15, 2013 kickoff meeting in Two Harbors, MN.

July 15, 2013: The kickoff meeting for the Lake County Water Plan revision process was held at the Two Harbors Law Enforcement Center from 9:00 am – 11:00 am. 16 participants were in attendance. This meeting introduced the Water Planning process, established the Water Plan advisory committee, presented the history of water planning in Lake County, highlighted aspects of contemporary water plans, and began the process of soliciting public and organizational input into the water planning process. A list of the initial priority concerns for Lake County identified at the July 15, 2013 kickoff meeting can be found in Appendix One.

July 20, 2013: Citizen input survey posted on the Lake County SWCD webpage and Facebook page, circulated through the White Iron Chain of Lakes and Advocates for the Knife River Watershed citizen groups. Survey also promoted through the various channels available to Water Plan Advisory Committee members.

July 26-28, 2013: Lake County SWCD hosted a table at the Blueberry Festival in Ely, Minnesota to disperse citizen input surveys and update the general public on the water planning document and process.

August 8-11, 2013: Lake County SWCD hosted a table at the Lake County fair to disperse citizen input surveys and update the general public on the water planning document and process.

August 14, 2013: Presentation to group assembled for rain garden planting in Knife River on the Water Planning process and the importance of citizen involvement in the process. Citizen surveys dispersed to participants.

August 20, 2013: Presentation to Silver Creek Township on the Water Plan process and the importance of township input into the process.

August 22, 2013: Article submitted to Trout Unlimited for inclusion in their newsletter to Stewart River watershed constituents to update public in the Lake County water planning process and request citizen participation in water plan input surveys.

October 23, 2013: Water Plan Advisory Committee meeting to identify priority concerns for Lake County at the Two Harbors Law Enforcement Center from 9:00 am – 11:00 am. Priority concerns were identified and selected based on citizen, agency, and advisory input collected via

surveys and completed priority concern input forms submitted to the Advisory Committee. This submitted information was reviewed with the Advisory Committee, and a discussion ensued on how the concerns of citizens, agencies, and organizations could be compiled and categorized in to major themes through which more detailed goals, objectives, and action items would be developed.

Over 50 participants attended the Community Conversation on water planning on November 18, 2013 in Two Harbors, MN.

October 25, 2013: Presentation to the Coldwater Coalition on the Water Planning process and the importance of Coalition member involvement.

November 8 and 15, 2013: Public meeting posted in the Lake County Chronicle and the North Shore Journal inviting all Lake County constituents to participate in the public Water Plan meeting on November 18, 2013.

November 18, 2013: Community Conversation on Lake County Water Plan priorities was facilitated at the Two Harbors Community Center. 51 participants attended to learn more about the priority concerns selected by the Lake County Water Plan advisory committee and provide input into what specific action and implementation steps may be considered to address these concerns. The community conversation was videotaped and a copy of this is available upon request by emailing dan.schutte@co.lake.mn.us . The video recording of the meeting is also available on the Lake County SWCD Facebook page.

January 13, 2014: Water Plan Advisory Committee meeting in Two Harbors to approve Priority Concern Scoping Document for submittal to state review agencies, pending receipt of MPCA priority concern input into the process. Also discussed at this meeting was Lake and Cook County SWCD interest in pursuing the One Watershed, One Plan pilot project proposals through BWSR, as well as goals, objectives, and action items for aquatic invasive species (AIS) management in Lake County. Representatives from the DNR and Sea Grant participated in this meeting as consultants for AIS management strategies in Lake County.

6. PRIORITY CONCERNS IDENTIFICATION PROCESS

The following discussion describes the issues, opportunities, and concerns identified through public input process. The summary of responses from citizens that commented through online and hard-copy citizen surveys is included. Additionally, the priority concern input from each agency, business, and organization that submitted comments is summarized.

Citizen Input Survey Responses

In total, there were 34 responses from Lake County citizens on water planning priorities for the County. The survey that was provided is shown below.

Water Resources Survey

Which county is your home/land located in? (X)
___ Lake County
___ St. Louis County
___ Cook County
___ Other: _____

What are the top four water-related problems in your county? (_X_ check 4)
___ Failing septic systems
___ Development pressure/impacts
___ Lack of environmental education
___ Natural habitat destruction
___ Declining water clarity
___ Erosion
___ Over-application of fertilizers
___ Stormwater/Drainage management
___ Contaminated runoff
___ Lack of regulations
___ Groundwater contamination
___ Other _____

Which resource is the most threatened?
Rank 1-5, with 1 being the most threatened.
___ Groundwater
___ Wetlands
___ Lakes
___ Streams/Rivers
___ Other _____

Additional Comments/Suggestions:

Participants could choose four water-related issues in the county as their top issues of concern. After compiling responses, the four water-related problems in the county most commonly chosen by participants were:

1) Development Pressures and Impacts (17)
2) Aquatic Invasive Species (14)
3) Natural Habitat Destruction (13)
4) Stormwater/Drainage Management (13)

The following resources were rated by citizens in as the most threatened water resources in the county were identified. They were rated on a scale of 1-4, with one being the least threatened resource, and four being the most threatened:

1) Streams/Rivers (3.14)
2) Lakes (2.39)
3) Groundwater (2.25)
4) Wetlands (2.21)

As the Advisory Committee begins to develop the content of the Water Plan, citizen input will be used to guide our discussions and define our focus. Development pressures and impacts will be considered as they relate to surface water, ground water, subsurface septic treatment systems, and aquatic invasive species. The aquatic invasive species concerned identified by citizens is reflected in the Advisory Committee's decision to establish this issue as one of the priority concerns for the Water Plan. Natural habitat destruction and storm water and drainage management issues will be addressed in goals and objectives related to the priority concerns of surface water and ground water. Citizens identified streams, rivers, lakes, and wetlands as some of the most threatened resources in the county. The Advisory Committee reflected this input in establishing surface waters as a priority concern, as well as ground water as a separate priority concern area. The following table presents specific written comments received from the public during the survey process. These responses have been categorized based on the topic area that comments most closely relate to.

Development Pressures	◦ Protect areas from overdevelopment and increases in impervious surfaces. ◦ Plan AHEAD for results of worse storms than we've had so far.
SSTS	◦ Program for the assessment of aged septic systems with funding resources available for septic upgrades ◦ Failing septic systems and industrial waste/runoff abuses are the most serious or significant and we need to know the remedies for these. We also need to be made aware of other waste treatment systems besides mound septic systems. ◦ Adopting a sanitary district to assist home owners with proper management, maintenance, and operation of their septic systems.
River/Stream Resources	◦ Get more volunteers to monitor rivers and lakes and take appropriate actions to prevent their degradation. ◦ Reduce intensity of county forestry clear-cuts and logging in watersheds. ◦ Streams seem to be warming, logging too close
Education	◦ Education is vital! ◦ Increase and encourage public participation in protecting water resources. ◦ Provide education about rain gardens. ◦ A continual drumbeat is needed on the importance of our water resources, that they belong to all of us but are being abused for the benefit of a few. ◦ Some kind of educational campaign for our Lake County visitors (tourists) about water resources here; something leaning toward being concise and visual with a small amount of very pointed text; posted/available at trailheads for wheelers, beaches, and other points of public access. ◦ We need to better educate county residents, and elected officials on the impacts development can have in the watershed, i.e., we need to be aware of available resource tools in the tool box to better anticipate what may happen when we develop a certain area.
Mining	◦ I am very concerned about the possibility of sulfide mining in the area that could contaminate groundwater, our well, our stream, and other lakes and rivers! ◦ Stop land exchanges that open forest lands to open pit mining without environmental review. Same for mineral leasing on both public and private property. The potential sulfide mines always pollute ground and surface water. Taxpayers wind up paying for the cleanup. ◦ Please ban sulfate mining ◦ Very concerned about sulfide mining ◦ Very concerned about impact of proposed non-ferrous mining, especially Twin Metals' projects near Birch Lake and Spruce Road. ◦ I wish you would list sulfide mining as a separate water-related concern in question 3. Yes, it would have an economic impact, short-term for the good. But long-term - it is NOT worth ruining our most valuable resource
AIS	◦ Block all incoming boats from reaching Lake County waters.

Table One – Comments received from Lake County citizens through the Citizen Input Survey process for the Lake County Water Planning activities from July – November, 2013.

Business, Organization, and Agency Input

Appendix 3 includes a summary of the input provided from a variety of stakeholder businesses, organizations, and agencies with vested interest in Lake County water resource management. Original copies of the submitted Priority Concern Input Forms are available for review by emailing dan.schutte@co.lake.mn.us . A total of 13 businesses, organizations, and agencies submitted priority concern input for the water planning process. These comments were compiled and presented to the Water Plan Advisory Committee in conjunction with citizen input for review and inclusion in planning discussions.

Additional Priority Concerns Input

Lake County SWCD Supervisors were asked to assist with gathering input from constituents in their respective districts. The following comments were gathered from the northern half of Lake County, and represent a sampling of water resource priority concerns living in that area:

1. Protection of the Kawishiwi/Rainy River watershed from potential damage from future industrial development. Also, the St. Louis/Lake Superior watersheds from same.
2. Development of a means to provide testing or information on testing of private and public water wells for hazardous metals, e.g., manganese, nickel, arsenic, sulfates, mercury, etc. Currently, commercial wells like the several on my resort ("non-community wells") are merely sampled annually for e coli and nitrates.
3. Other protections for ground water?
4. Proper regulation of effluent from current and future industrial development in Lake County.
5. The 2011 Minn. Dept. of Health study, **Mercury in Newborns in the Lake Superior Basin**, which found that 10% of newborns tested in the Lake Superior Watershed had toxic levels of mercury in their blood. What is being done, if anything, about this, other than recommending mothers don't eat much fish from the lakes while pregnant? Interesting article in this week's (October 20-27, 2014) Duluth Reader Weekly by Carla Arneson.

Additionally, following a public meeting on November 18, 2013 in Two Harbors, a constituent of the Advocates for the Knife River Watershed contacted Lake SWCD to provide the following reflections:

1) As to the content that got recorded, I don't think it fully captured the concerns I heard from the two water tables that the baseline info on water quality and the critter diversity needs heavy documentation for the county (more than just for WICOLA area) prior to any mining start.

2) The passion for our water resources threatened by acidification, metals, sulfate, and wetland loss from sulfide mining is going to be heard again and again by the counties and agencies. I would hope that SWCD might let them know the concern has legs and passion.

7. PRIORITY CONCERN SELECTION PROCESS

After public input was gathered, the information was compiled by the Lake County Water Plan coordinator and presented to the Water Plan Advisory Committee at the Priority Concern Selection Meeting on October 23, 2013. After reviewing the submitted information, the Advisory Committee held a discussion to establish areas of concerns that served to encompass a number of the individual concerns that had been presented through the process. Ryan Hughes, Duluth area BWSR Board Conservationist and member of the Lake County Water Plan Advisory Committee, noted that priority concerns may be established in a broad context to ensure that a variety of individual issues may be addressed in goals and objectives associated with priority concern areas. With this as a guiding principle for priority concerns establishment, the Water Plan Advisory Committee established four priority concern areas to serve as umbrella concerns under which a variety of more specific issues could be addressed. These priority concerns and their associated issues include:

1) **Surface Water Protection**
    a. Storm Water Management
    b. Forestry Management Practices
        i. Terrestrial invasive species
        ii. Riparian zone management
    c. Stream Crossings
    d. Stream Stability
    e. Surface Source Water Protection
    f. Surface Water Monitoring and Assessment

2) **Groundwater Protection**
    a. Groundwater source protection
    b. Well sealing
    c. Groundwater monitoring and assessment
        i. Increase efforts to inventory unused and unsealed wells

3) **Subsurface Septic Treatment Systems (SSTS)**
    a. Addressing systems that are failing, non-compliant, or pose an imminent threat to public health
        i. Increase efforts to inventory SSTS conditions in Lake County
    b. Investigating, promoting, and utilizing alternative septic system design when appropriate

4) **Aquatic Invasive Species**
    a. Monitoring
    b. Prevention
    c. Outreach and Education

Through the public input process, it became clear that participants in the process felt educational efforts are needed in all areas of priority concern. Additionally, more effective coordination between agencies, organizations, businesses, and other entities is necessary for water planning activities to be effective

through the long-term. Both educational activities and coordination of efforts will be incorporated into the goals, objectives, and action plans associated with the priority concern areas.

8. PRIORITY CONCERNS NOT ADDRESSED

Throughout the public input process it was clear that mining, particularly non-ferrous mineral extraction projects being proposed in the northern parts of Lake County, represent a serious concern to Lake County constituents. The video of the November 18th, 2013 Community Conversation on water planning held in Two Harbors reflects this concern as it was presented by a number of Lake County constituents. Mining has the potential to affect the water resources of Lake County, including waters of the Boundary Waters Canoe Area in the northern sections of Lake County, as well as Lake Superior. However, the planning and permitting processes related to mining activities are governed at the state (Minnesota DNR, Minnesota Department of Commerce) and federal (EPA) levels.

It was communicated to constituents that Local Water Management Plans are not necessarily the place where mining activities are able to be addressed. However, initiating or continuing monitoring and collection of baseline water data in areas that may potentially be affected by mining is within the scope of local water planning activities and will be a consideration during conversations related to surface and ground water concerns. Additionally, the Lake County SWCD will be providing information on opportunities and avenues through which the public can provide input to mining planning and permitting processes. This information will be made available to interested persons at future public meetings.

Outside of concerns directly related to mining, nearly all of the input received by the Water Plan Advisory Committee was able to be included within the scope of the four priority concerns that were established.

COMMITTEE RECOMMENDATIONS

Southern Region Committee

1. Lincoln County Comprehensive Local Water Management Plan Extension Request – Kathryn Kelly - ***DECISION ITEM***

2. Pipestone County Comprehensive Local Water Management Plan Extension Request – Kathryn Kelly – ***DECISION ITEM***

3. Rice County Comprehensive Local Water Management Plan Extension Request – Kathryn Kelly - ***DECISION ITEM***

BOARD MEETING AGENDA ITEM

AGENDA ITEM TITLE: **Lincoln County CLWM Plan Extension**

Meeting Date: August 28, 2014

Agenda Category: ☒ Committee Recommendation ☐ New Business ☐ Old Business

Item Type: ☒ Decision ☐ Discussion ☐ Information

Section/Region: Southern Region

Contact: Jeff Nielsen

Prepared by: Carla Swanson-Cullen

Reviewed by: Southern Region Committee(s)

Presented by: Kathryn Kelly

☐ **Audio/Visual Equipment Needed for Agenda Item Presentation**

Attachments: ☐ Resolution ☒ Order ☐ Map ☒ Other Supporting Information

Fiscal/Policy Impact

☒ None
☐ Amended Policy Requested
☐ New Policy Requested
☐ Other:

☐ General Fund Budget
☐ Capital Budget
☐ Outdoor Heritage Fund Budget
☐ Clean Water Fund Budget

ACTION REQUESTED

Approval to extend the Lincoln County Comprehensive Local Water Management Plan until December 31, 2016.

LINKS TO ADDITIONAL INFORMATION

SUMMARY (*Consider: history, reason for consideration now, alternatives evaluated, basis for recommendation*)

Lincoln County (County) has a Comprehensive Local Water Management Plan (Plan) that was approved by the Board on September 23, 2009, and locally adopted by the County via a resolution dated November 17, 2009. The effective date (end date) of this Plan is August 31, 2014.

On July 21, 2014, the Board received a written request from the Lincoln County Board of Commissioners requesting a two-year, four-month extension. This extension will allow Lincoln County to work with the appropriate entities to complete the One Watershed, One Plan pilot effort for the Yellow Medicine River Watershed and to complete the water management update for those areas outside the pilot planning area in their County.

BWSR policy is to grant extensions which facilitate the transition to One Watershed, One Plan. The updated County Plan would expire on December 31, 2021.

Minnesota Board of Water and Soil Resources
520 Lafayette Road North
St. Paul, Minnesota 55155

In the Matter of Extending the Comprehensive Local Water Management Plan for Lincoln County	ORDER EXTENDING WATER MANAGEMENT PLAN

Whereas, the Lincoln County Board of Commissioners has a state-approved Comprehensive Local Water Management Plan (Plan) that is effective until August 31, 2014 pursuant to Minnesota Statutes 103B.301; and

Whereas, the Minnesota Board of Water and Soil Resources (Board) has authorization to grant extensions pursuant to Minnesota Statutes 103B.3367.

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions, and Order:

FINDINGS OF FACT

On September 23, 2009, the Board approved the Lincoln County Comprehensive Local Water Management Plan. The approved Plan is effective for a five-year period until August 31, 2014.

On July 15, 2014, Lincoln County approved and submitted a formal letter requesting an extension of their Plan. This extension is needed in order to allow Lincoln County to work with appropriate entities to complete the One Watershed, One Plan pilot effort for the Yellow Medicine River Watershed and to complete the water management update for those areas outside the pilot planning area in the County.

On August 4, 2014, Board staff reviewed and recommended approval of the extension request by Lincoln County. Board policy provides for extensions which facilitate the transition to One Watershed, One Plan. In conformance with Board policy, Board staff recommended a two-year, four month extension for the Lincoln County Plan.

On August 7, 2014, the Southern Region Committee met via conference call to discuss Lincoln County's request for extension. The Committee's decision was to present to the Board a recommendation of approval to extend Lincoln County's Plan until December 31, 2016. At which point, Lincoln County will provide the equivalent of a five-year update to the current Plan, which would expire on December 31, 2021, in an effort to synchronize water management efforts between partners in order to develop and complete watershed based plans through One Watershed, One Plan.

CONCLUSIONS

All relevant requirements of law have been fulfilled. The Board has proper jurisdiction in the matter of extending the Comprehensive Local Water Management Plan of Lincoln County pursuant to Minnesota Statutes 103B.3367.

ORDER

The Board hereby approves the extension of the Lincoln County Comprehensive Local Water Management Plan until December 31, 2016. Lincoln County shall strive to complete the updating of their Comprehensive Local Water Management Plan in a timely manner.

Dated at Vadnais Heights, Minnesota, this 28th day of August 2014.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Brian Napstad, Chair

The Lincoln County Board of Commissioners
State of Minnesota

Rick Hamer
Curt Blumeyer

Don Evers
Chair

Larry Hansen
Joan Jagt

319 N. Rebecca Street
PO Box 29
Ivanhoe, MN 56142

507-694-1529
Fax: 507-694-1198
E-Mail: lincoln@co. lincoln.mn.us

July 15, 2014

Minnesota Board of Water and Soil Resources (BWSR)
261 Hwy 15 S
New Ulm, MN 56073

Dear Board of Water & Soil Resources:

The five-year Lincoln County Comprehensive Local Water Plan is effective until August 31, 2014. Lincoln County is requesting additional time to align with the current watershed based planning efforts that are occurring state-wide.

Lincoln County contains the following watersheds. The current timeline for the state efforts in these watersheds are as follows:

Yellow Medicine River Watershed	WRAP Document-June, 2015
Big Sioux River Watershed	WRAP Document-December, 2016
Lac qui Parle River Watershed	WRAP Document-December, 2019
Redwood River Watershed	WRAP Document-December, 2020

The additional time requested will allow staff to utilize the information and scientific data attained from the above mentioned efforts to focus and target watershed priorities and align future planning. The Yellow Medicine River Watershed has just been selected as a One Watershed One Plan pilot project. Lincoln County and SWCD staff will be actively involved in this planning process. At the same time – for those geographic areas of Lincoln County outside of the Yellow Medicine River Watershed – staff will update our current water plan's implementation section which includes action items as well as the executive summary and description of past accomplishments. This information will be useable for future watershed based planning.

The Lincoln County Board of Commissioners requests from the Board of Water and Soil Resources an extension of the effective date of the existing Lincoln County Water Management Plan until December 31, 2016. This will allow us to work with the appropriate entities to complete the One Watershed One Plan pilot effort for the Yellow Medicine River Watershed. Furthermore this extension will also allow our County to complete the water management update process in accordance with Minnesota Statutes, Chapter 103B.301 - Comprehensive Local Water Management Act, for those areas outside the pilot planning area. The purpose of this update would be to recognize the various accomplishments that have been made over the past five years and to articulate updates to ongoing items as well as any new items of concern to the residents of Lincoln County. The updated action items and implementation plan would be ideally developed in a manner consistent with the prioritized, targeted and measurable goals and objectives under development in the One Watershed One Plan program. We propose that the plan update would be valid until December 31, 2021. This will allow a coordinated effort under the One Watershed One Plan program for the development of new water planning for those additional watersheds in Lincoln County.

Sincerely,

Donald Evers

Donald Evers,
Chairman

BOARD MEETING AGENDA ITEM

AGENDA ITEM TITLE: **Pipestone County CLWM Plan Extension**

Meeting Date: August 28, 2014

Agenda Category: ☒ Committee Recommendation ☐ New Business ☐ Old Business

Item Type: ☒ Decision ☐ Discussion ☐ Information

Section/Region: Southern Region

Contact: Jeff Nielsen

Prepared by: Carla Swanson-Cullen

Reviewed by: Southern Region Committee(s)

Presented by: Kathryn Kelly

☐ **Audio/Visual Equipment Needed for Agenda Item Presentation**

Attachments: ☐ Resolution ☒ Order ☐ Map ☒ Other Supporting Information

Fiscal/Policy Impact

☒ None
☐ Amended Policy Requested
☐ New Policy Requested
☐ Other:

☐ General Fund Budget
☐ Capital Budget
☐ Outdoor Heritage Fund Budget
☐ Clean Water Fund Budget

ACTION REQUESTED

Approval to extend the Pipestone County Comprehensive Local Water Management Plan until December 31, 2015.

LINKS TO ADDITIONAL INFORMATION

SUMMARY (*Consider: history, reason for consideration now, alternatives evaluated, basis for recommendation*)

Pipestone County (County) has a Comprehensive Local Water Management Plan (Plan) that was approved by the Board on September 23, 2009, and locally adopted by the County via a resolution dated November 10, 2009. The effective date (end date) of this Plan is August 25, 2014.

On July 22, 2014, the Board received a request from the Pipestone County Board of Commissioners requesting a one year, four month extension and subsequent update to allow facilitation of the transition to One Watershed, One Plan in Pipestone County and with its local partners.

BWSR policy is to grant extensions which facilitate the transition to One Watershed, One Plan. The updated County plan would expire on December 31, 2020.

Minnesota Board of Water and Soil Resources
520 Lafayette Road North
St. Paul, Minnesota 55155

In the Matter of Extending the Comprehensive Local Water Management Plan for Pipestone County	ORDER EXTENDING WATER MANAGEMENT PLAN

Whereas, the Pipestone County Board of Commissioners has a state-approved Comprehensive Local Water Management Plan (Plan) that is effective until August 25, 2014 pursuant to Minnesota Statutes 103B.301; and

Whereas, the Minnesota Board of Water and Soil Resources (Board) has authorization to grant extensions pursuant to Minnesota Statutes 103B.3367.

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions, and Order:

FINDINGS OF FACT

On September 23, 2009, the Board approved the Pipestone County Comprehensive Local Water Management Plan. The approved Plan is effective for a five-year period until August 25, 2014.

On July 22, 2014, Pipestone County approved and submitted a formal letter requesting an extension of their Plan. This extension is needed in order to allow Pipestone County facilitation of the transition to One Watershed One Plan in Pipestone County and with its local partners.

On August 4, 2014, Board staff reviewed and recommended approval of the extension request by Pipestone County. Board policy provides for extensions which facilitate the transition to One Watershed, One Plan. In conformance with Board policy, Board staff recommended a one-year, four month extension for the Pipestone County Plan.

On August 7, 2014, the Southern Region Committee met via conference call to discuss Pipestone County's request for extension. The Committee's decision was to present to the Board a recommendation of approval to extend Pipestone County's Plan until December 31, 2015. At which point, Pipestone County will provide the equivalent of a five-year update to the current Plan, which would expire on December 31, 2020, in an effort to synchronize water management efforts between partners in order to develop and complete watershed based plans through One Watershed, One Plan.

CONCLUSIONS

All relevant requirements of law have been fulfilled. The Board has proper jurisdiction in the matter of extending the Comprehensive Local Water Management Plan of Pipestone County pursuant to Minnesota Statutes 103B.3367.

ORDER

The Board hereby approves the extension of the Pipestone County Comprehensive Local Water Management Plan until December 31, 2015. Pipestone County shall strive to complete the updating of their Comprehensive Local Water Management Plan in a timely manner.

Dated at Vadnais Heights, Minnesota, this 28th day of August 2014.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

_____

BY: Brian Napstad, Chair

Pipestone County Commissioners

416 Hiawatha Ave. South Pipestone, Minnesota 56164-1566
507-825-6742
Fax 507-825-6843

District 1- Luke Johnson
District 2- Harold (Butch) Miller
District 3- Bruce Kooiman
District 4- Bill Johnson
District 5- Jerry L. Remund

July 22, 2014

Minnesota Board of Water and Soil Resources (BWSR)
261 Highway 15 South
New Ulm, MN 56073

Dear BWSR Review Agency,

The five-year Pipestone County Comprehensive Local Water Plan is effective until August 25, 2014. Pipestone County is requesting additional time to align with the current watershed based planning efforts that are occurring state-wide.
Pipestone County contains the Big Sioux, Rock River, Des Moines, and Redwood River Watersheds. The current timeline for the state efforts in these watersheds are as follows:

	WRAP Document
Big Sioux River Watershed	December 2016
Rock River Watershed	December 2016
Des Moines River Watershed	December 2018
Redwood River Watershed	December 2020

The additional time requested will allow staff to utilize the information and scientific data attained from the above mentioned efforts to focus and target watershed priorities. Pipestone County staff will update the action items, and implementation sections as well as executive summary and description of past accomplishments. This information will be useable for future watershed based planning.

Pipestone County Board of Commissioners requests from the Board of Water and Soil Resources an extension of the effective date of the existing County Water Management Plan until December 31st, 2015 in order to work with the appropriate entities in order to complete the Water Management update process in accordance with Minnesota Statutes, Chapter 103B.301, Comprehensive Local Water Management Act. During this extension Pipestone County proposes an update to our

implementation schedule and action items in the current plan. The purpose of this update would be to recognize the various accomplishments that have been made over the past five years and to articulate updates to ongoing items as well as any new items of concern to the residents of Pipestone County. The updated action items and implementation table would be ideally developed in a manner consistent with the prioritized, targeted and measureable goals and objectives under development in the 1 Watershed 1 Plan program. We propose that the plan update would be valid until December 31, 2020. This extension will allow a coordinated effort under the 1 Watershed 1 Plan program for development of a new water plan for Pipestone County.

Sincerely,

Bruce Kooiman

Bruce Kooiman, Vice Chairperson
Pipestone County Board of Commissioners

BOARD MEETING AGENDA ITEM

AGENDA ITEM TITLE: **Rice County CLWM Plan Extension**

Meeting Date: August 28, 2014

Agenda Category: ☒ Committee Recommendation ☐ New Business ☐ Old Business

Item Type: ☒ Decision ☐ Discussion ☐ Information

Section/Region: Southern Region

Contact: Jeff Nielsen

Prepared by: Tom Gile

Reviewed by: Southern Region Committee(s)

Presented by: Kathryn Kelly

☐ **Audio/Visual Equipment Needed for Agenda Item Presentation**

Attachments: ☐ Resolution ☒ Order ☐ Map ☒ Other Supporting Information

Fiscal/Policy Impact

☒ None
☐ Amended Policy Requested
☐ New Policy Requested
☐ Other:

☐ General Fund Budget
☐ Capital Budget
☐ Outdoor Heritage Fund Budget
☐ Clean Water Fund Budget

ACTION REQUESTED

Approval to extend the Rice County Comprehensive Local Water Management Plan until December 31, 2015.

LINKS TO ADDITIONAL INFORMATION

SUMMARY (*Consider: history, reason for consideration now, alternatives evaluated, basis for recommendation*)

Rice County has submitted a request for an extension of the Rice County Comprehensive Local Water Management Plan (Plan). The existing Plan will expire on December 31, 2014. This extension is needed to facilitate Rice County's interests in synchronizing water management efforts between partners in order to develop and complete watershed-based plans through One Watershed, One Plan. The request for an extension is deemed acceptable. In conformance with Board policy, BWSR staff recommends a one-year extension, which would make the Plan update deadline December 31, 2015. At that time Rice County will provide an update, which would expire on December 31, 2019. The BWSR Southern Region Water Planning Committee met on August 7, 2014 and will make its recommendation of approval to the full BWSR Board.

Minnesota Board of Water and Soil Resources
520 Lafayette Road North
St. Paul, Minnesota 55155

In the Matter of Extending the Comprehensive Local Water Management Plan for Rice County	ORDER EXTENDING WATER MANAGEMENT PLAN

Whereas, the Rice County Board of Commissioners has a state-approved Comprehensive Local Water Management Plan (Plan) that is effective until December 31, 2014 pursuant to Minnesota Statutes 103B.301; and

Whereas, the Minnesota Board of Water and Soil Resources (Board) has authorization to grant extensions pursuant to Minnesota Statutes 103B.3367.

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions, and Order:

FINDINGS OF FACT

On December 16, 2009, the Board approved the Rice County Comprehensive Local Water Management Plan. The approved Plan is effective for a five-year period until December 31, 2014.

On June 23, 2014, Rice County approved and submitted a formal letter requesting an extension of their Plan. This extension is needed due to Rice County's interest in the development of a One Watershed, One Plan in coordination with local partners. Rice County was an interested participant in two, non-selected, pilots and the staff and Board have expressed interest in the future program.

On August 7, 2014, Board staff reviewed and recommended approval of the extension request by Rice County. Board policy provides for extensions which facilitate the transition to One Watershed, One Plan. In conformance with Board policy, Board staff recommended a one-year extension for the Rice County Plan.

On August 7, 2014, the Southern Region Water Planning Committee met via conference call to discuss Rice County's request for extension. The Committee's decision was to present to the Board a recommendation of approval to extend Rice County's Comprehensive Local Water Management Plan until December 31, 2015. At which point, Rice County will provide an update to the current Plan, which would expire on December 31, 2019, in an effort to synchronize water management efforts between partners in order to develop and complete watershed based plans through One Watershed, One Plan.

CONCLUSIONS

All relevant requirements of law have been fulfilled. The Board has proper jurisdiction in the matter of extending the Comprehensive Local Water Management Plan of Rice County pursuant to Minnesota Statutes 103B.3367.

ORDER

The Board hereby approves the extension of the Rice County Comprehensive Local Water Management Plan until December 31, 2015. Rice County shall strive to complete the updating of their Comprehensive Local Water Management Plan in a timely manner.

Dated at Vadnais Heights, Minnesota, this 28th day of August 2014.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

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BY: Brian Napstad, Chair

BOARD OF COMMISSIONERS
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June 23, 2014

Minnesota Board of Water and Soil Resources (BWSR)
261 Highway 15 South
New Ulm, MN 56073

Dear BWSR Review Agency,

The five-year Rice County Comprehensive Local Water Plan is effective until December 31st, 2014. Rice County Environmental Services Department is requesting additional time to align with the current watershed based planning efforts that are occurring state-wide.

Rice County contains the Zumbro, Cannon, and Lower Minnesota River Watershed. The current timeline for the state efforts in these watersheds are as follows:

	Intensive Water Monitoring	Stressor Identification	Draft TMDL	WRAP Document
Zumbro River Watershed	2014-2015	2014-2015	2016	End of 2016
Cannon River Watershed	2013-2014	2013-2014	2015	End of 2015
Lower Minnesota River Watershed	2015	2016	2018	End of 2018

The additional time requested will allow staff to utilize the information and scientific data attained from the abovementioned efforts to focus and target watershed priorities. Rice County staff will update the action items, and implementation sections as well as executive summary and description of past accomplishments. This information will be useable for future watershed based planning.

Rice County Board of Commissioners requests from the Board of Water and Soil Resources an extension of the effective dates of the existing County Water Management Plan until December 31st, 2015 in order to work with the appropriate entities to complete the Water Management update process in accordance with Minnesota Statutes, Chapter 103B.301, Comprehensive Local Water Management Act. During this 1 year extension Rice County proposes an update to our implementation schedule and action items in the current plan. The purpose of this up date would be to recognize the various accomplishments that have been made over the past five years and to articulate updates to ongoing items as well as any new items of concern to the residents of Rice County. The updated action items and implementation table would be ideally developed in a manner consistent with the prioritized, targeted and measureable goals and objectives under development in the One Watershed One Plan program. We propose that the plan update would be valid until

December 31, 2019. At which time we anticipate a coordinated effort under the One Watershed One Plan program for development of a new water plan for Rice County.

Sincerely,

Galen Malecha

Galen Malecha, Chairperson
Rice County Board of Commissioners