# BOARD OF WATER AND SOIL RESOURCES

DATE: March 20, 2018

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

FROM: John Jaschke, Executive Director

SUBJECT: BWSR Board Meeting Notice – March 28, 2018

The Board of Water and Soil Resources (BWSR) will meet on Wednesday, March 28, 2018, beginning at 9:00 a.m. The meeting will be held in the lower level Board Room, at 520 Lafayette Road, Saint Paul. Parking is available in the lot directly in front of the building (see hooded parking area).

The following information pertains to agenda items:

#### COMMITTEE RECOMMENDATIONS

#### Water Management and Strategic Planning Committee

**One Watershed, One Plan Operating Procedures and Plan Content Requirements** – The One Watershed, One Plan Operating Procedures and Plan Content Requirements are the two policy documents that describe program requirements according to Minnesota Statutes §103B.801. These documents, which were based on policies for the pilot program (developed in 2014), were updated in 2016 when the program was formally established. Since that time, BWSR's Water Planning Program Team has identified a need to improve the organization and clarity of these documents, along with minor changes to policy elements. The team recommends re-formatting both documents with the new State of Minnesota logo and style. For both documents, the majority of non-policy information (background, context, and optional items) have been removed. **DECISION** 

Other changes include:

- Policy
  - High level summary of changes (see the last page of each document for more detail)
  - **Operating Procedures** 
    - Removed automatic exemption for LGUs with less than 5% of their area in the planning boundary
    - o Added requirements for sharing public comments during the plan review and approval process
- Plan Content Requirements
  - Land and Water Resources Inventory changed to Narrative; added requirement for discussion of watershed context
  - Fairly extensive wording changes in Plan Administration and Implementation Programs sections resulting in minor changes to policy elements.

#### Grants Program and Policy Committee

**One Watershed, One Plan Planning Grant Request for Proposals & Grants Policy** – The purpose of this agenda items is for the Board to approve the FY2018 One Watershed, One Plan Planning Grant Policy and Request for Proposals (RFP). Other than dates, the policy is unchanged from the previous policy. *DECISION* 

The RFP includes the following changes:

- Response requirements (see "comprehensive watershed management plans") encourage more early and meaningful discussions as partnerships are established.
- Review criteria are more specific and include minimum and preferred requirements that relate directly to new questions
- Timeline for responses shortened from 15 to 12 weeks.

#### Northern Region Committee

- Koochiching County Comprehensive Local Water Management Plan Koochiching County has submitted their Comprehensive Local Water Management Plan (Plan) for State review. The Northern Regional Committee (Committee) met March 7, 2018, to review the content of the Plan, state agency comments, and to make a recommendation of the Plan to the full Board. The Committee recommends approval by the full Board. *DECISION*
- 2. Joe River Watershed District Revised Watershed Management Plan The Joe River Watershed District (JRWD) was established on January 31, 1958, and is located in the northwest corner of Kittson County. The JRWD has completed the planning process for its Revised Watershed Management Plan (Plan). The JRWD distributed its proposed Plan as required for final review and comment. The Northern Regional Committee (Committee) met on March 7, 2018, to review the Plan and to make a recommendation for approval. The Committee recommends approval by the full Board. *DECISION*
- 3. Annual Red River Basin Commission Grant In 2017 the Legislature appropriated funds to the Board for grants to the Red River Basin Commission (RRBC) for waters quality and floodplain management, including administration of programs. The Northern Regional Committee (Committee) met March 7, 2018, to review and discuss the RRBC 2017 Annual Report, the RRBC 2018 Workplan, the current status of the RRBC, and to make a recommendation of the Order authorizing the FY2018 grant to the Red River Basin Commission to the full Board. The Committee recommends approval by the full Board. *DECISION*

#### **Central Region Committee**

- Mille Lacs Priority Concerns Scoping Document On January, 24, 2007, the Board of Water and Soil Resources approved Mille Lacs County's Comprehensive Local Water Management Plan for a ten year period ending January 31, 2017, which was extended to December 31, 2018. On May 5, 2015, the county passed a resolution to begin the plan update process. On November 30, 2017, the Mille Lacs County Water Planner submitted the priority concerns scoping document to the state agencies for review. On March 8, 2018, the BWSR Central Committee reviewed the Mille Lacs County Comprehensive Local Water Management Priority Concerns Scoping document and recommended the full Board approve the draft letter finding the priority concerns identified to be appropriate and for the county to continue working on the development of the plan. *DECISION*
- 2. Sherburne County Comprehensive Local Water Management Plan On May 23, 2007, the Board of Water and Soil Resources approved Sherburne County's Comprehensive Local Water Management Plan for a ten year period ending January 31, 2017, which was extended to February 28, 2018. On July 7, 2015, the county passed a resolution to begin the plan update process. On August 28, 2016, the Sherburne County Water Planner submitted the priority concerns scoping document to the state agencies for review, which was affirmed by the BWSR on October 27, 2016. On March 8, 2018, the BWSR Central Committee reviewed the Sherburne County Comprehensive Local Water Management Updated Plan and recommended the full Board approve the updated plan through the approval of the Board Order. DECISION

- 3. Wright County Comprehensive Local Water Management Plan Wright County which includes the North Fork Crow River, South Fork Crow River and Mississippi-St. Cloud major watersheds developed their current Local Water Management Plan in 2006. Since that time, the County in coordination with the Wright County Soil and Water Conservation District (SWCD) has focused its implementation efforts on the 300 plus lakes, two major river systems and more than 34,000 wetlands. Both the County and SWCD, have been active participants in the North Fork Crow River One Watershed, One Plan and identified a need to amend its Local Water Management Plan to better address the areas outside of that effort. The Central Region Committee met earlier this month to discuss the Amendment and recommends approval per the attached draft Order. *DECISION*
- 4. Riley-Purgatory-Bluff Creek Watershed District Boundary Change The Riley Purgatory Bluff Creek Watershed District filed a Petition dated September 18, 2017 with the Board of Water and Soil Resources (Board) to change the boundary of the Riley Purgatory Bluff Creek Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District.

The territory included in the boundary change, the Petitioned Area, is located in Carver and Hennepin Counties entirely within the metropolitan area and totals approximately 2,171.32 acres of land. The Petitioned Area is depicted on a map attached to the Petition and further identified in property identification tables attached to the Petition. On March 8, 2018, the Board's Central Region Committee and staff met in St. Paul to review and discuss the boundary change Petition. The committee voted unanimously to recommend approval of the boundary change to the full board. No hearings have been requested. *DECISION* 

#### Wetlands Conservation Committee

 Wetland Mitigation Fee Policy Addendum – Policies for Single-User Accounts and Stewardship of Large Mitigation Sites – Staff have analyzed the outcomes of implementation of the Board's 2017 Wetland Mitigation Fee Policy, effective June 1, 2017, for unusually large wetland banks and single-user account transfers. Staff have concluded that, for unusually large transfers, a modified credit withdrawal fee schedule is justified due to lower agency costs. Similarly, staff have concluded that the current fee policy has the potential to over-collect the Easement Stewardship Fee for very large mitigation sites. In order to address these less-common situations, staff have prepared an addendum to the 2017 Wetland Mitigation Fee Policy. The purpose of this addendum is to use the flexibility provided in Minn. Stat. § 103G.2242, Subd. 14(b) to define the type, amount, and collection of fees associated with credit transfers of more than 100 wetland banking credits to a single-user account; and modify the determination and collection of the Easement Stewardship Fee for mitigation sites with easement areas in excess of 300 acres. *DECISION*

#### **NEW BUSINESS**

1. Nutrient Reduction and Climate Protection – Pollution Control Agency staff will provide information regarding the greenhouse gas benefits of various nutrient reduction practices. *INFORMATION* 

If you have any questions regarding the agenda, please feel free to call me at 651-296-0878. We look forward to seeing you on March 28.

#### BOARD OF WATER AND SOIL RESOURCES 520 LAFAYETTE ROAD N. LOWER LEVEL BOARD ROOM ST. PAUL, MINNESOTA 55155 WEDNESDAY, MARCH 28, 2018

#### PRELIMINARY AGENDA

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

#### PLEDGE OF ALLEGIANCE

#### **ADOPTION OF AGENDA**

#### MINUTES OF JANUARY 24, 2017 BOARD MEETING

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

#### CONFLICT OF INTEREST DECLARATION

#### INTRODUCTION OF NEW EMPLOYEES

- Chris Pence, Board Conservationist
- Henry Van Offelen, Clean Water Specialist Red River Valley
- Kelly Voigt, Northern Regional Training Conservationist
- Lawrence Svien, Southern Regional Training Conservationist

#### REPORTS

- Chair & Administrative Advisory Committee Gerald Van Amburg
- Audit & Oversight Committee Gerald Van Amburg
- Executive Director John Jaschke
- Dispute Resolution Committee Gerald Van Amburg
- Grants Program & Policy Committee Steve Sunderland
- RIM Reserve Committee Gene Tiedemann
- Water Management & Strategic Planning Committee Jack Ditmore
- Wetland Conservation Committee Tom Schulz
- Buffers, Soils & Drainage Committee Kathryn Kelly
- Drainage Work Group Tom Loveall/Al Kean

#### COMMITTEE RECOMMENDATIONS

#### Water Management and Strategic Planning Committee

One Watershed, One Plan Operating Procedures and Plan Content Requirements
– Julie Westerlund/Melissa Lewis – *DECISION ITEM*

#### Grants Program and Policy Committee

 One Watershed One Plan Planning Grant Request for Proposals & Grants Policy – Julie Westerlund/Melissa Lewis – *DECISION ITEM*

#### Northern Region Committee

- 1. Koochiching County Comprehensive Local Water Management Plan Rich Sve DECISION ITEM
- Joe River Watershed District Revised Watershed Management Plan Neil Peterson DECISION ITEM
- 3. Annual Red River Basin Commission Grant Ryan Hughes DECISION ITEM

#### Central Region Committee

- 1. Mille Lacs Priority Concerns Scoping Document Kevin Bigalke **DECISION ITEM**
- Sherburne County Comprehensive Local Water Management Plan Kevin Bigalke DECISION ITEM
- 3. Wright County Comprehensive Local Water Management Plan Kevin Bigalke DECISION ITEM
- Riley-Purgatory-Bluff Creek Watershed District Boundary Change Kevin Bigalke DECISION ITEM

#### Wetlands Conservation Committee

1. Wetland Mitigation Fee Policy Addendum – Policies for Single-User Accounts and Stewardship of Large Mitigation Sites – Les Lemm and Tim Smith – **DECISION ITEM** 

#### NEW BUSINESS

 Nutrient Reduction and Climate Protection – Frank Kohlasch, Minnesota Pollution Control Agency – INFORMATION ITEM

#### AGENCY REPORTS

- Minnesota Department of Agriculture Susan Stokes
- Minnesota Department of Health Chris Elvrum
- Minnesota Department of Natural Resources Tom Landwehr
- Minnesota Extension Service
- Minnesota Pollution Control Agency Rebecca Flood/Shannon Lotthammer

#### ADVISORY COMMENTS

- Association of Minnesota Counties Jennifer Berquam
- Minnesota Association of Conservation District Employees Chessa Frahm
- Minnesota Association of Soil & Water Conservation Districts LeAnn Buck

- Minnesota Association of Townships Nathan Redalen
- Minnesota Association of Watershed Districts Emily Javens
- Natural Resources Conservation Service Cathee Pullman/Curtis Elke

#### UPCOMING MEETINGS

• Next BWSR Meeting is scheduled for April 25, 2018 at 9:00am in the Lower Level Board Room

#### ADJOURN

#### BOARD OF WATER AND SOIL RESOURCES 520 LAFAYETTE ROAD N. LOWER LEVEL BOARD ROOM ST. PAUL, MINNESOTA 55155 WEDNESDAY, JANUARY 24, 2018

#### **BOARD MEMBERS PRESENT:**

Jill Crafton, Jack Ditmore, Kathryn Kelly, Tom Landwehr, DNR; Tom Loveall, Nathan Redalen, Tom Schulz, Susan Stokes, MDA; Steve Sunderland, Rich Sve, Gene Tiedemann, Gerald Van Amburg, Paige Winebarger, Rebecca Flood, MPCA, Joe Collins, Chris Elvrum, MDH; Neil Peterson

#### **BOARD MEMBERS ABSENT:**

Duane Willenbring, Patty Acomb

#### **STAFF PRESENT:**

John Jaschke, Hannah Pallmeyer, Angie Becker Kudelka, Jeremy Olson, Annie Mueller, Nicole Miner, Scott Smith, Aaron Peter, Al Kean, Paul Erdmann, Darren Mayers, Dave Weirens, Travis Germundson, Megan Lennon, Bill Penning, Suzanne Rhees, Don Buckhout, Tim Gillette, Josh Van Den Berg, Jenny Gieseke, Dale Krystosek, Kevin Bigalke, Annie Felix-Gerth

#### **OTHERS PRESENT:**

Craig McDonnell, MDA Carrie Raber, MDH Brian Martinson, Southern Minnesota Beet Sugar Cooperative Curtis Elke, NRCS

#### Chair Gerald Van Amburg called the meeting to order at 9:05 AM

#### PLEDGE OF ALLEGIANCE

- ADOPTION OF AGENDA Moved by Jill Crafton, seconded by Paige Winebarger, to adopt the agenda as
   presented. *Motion passed on a voice vote*.
- MINUTES OF DECEMBER 20, 2017 BOARD MEETING Moved by Nathan Redalen, seconded by Kathryn
   18-02 Kelly, to approve the minutes of the December 20, 2017 meeting, as circulated. Motion passed on a voice vote.

#### CONFLICT OF INTEREST DECLARATION

#### Chair Van Amburg 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."

#### INTRODUCTION OF NEW EMPLOYEES

- Jeremy Olson, Chief Financial Officer
- Annie Mueller, Human Resources Office and Administrative Specialist
- Scott Smith, Regional Training Engineer
- Aaron Peter, Regional Training Engineer
- Paul Erdmann, Buffers and Soil Loss Specialist
- Darren Mayers, Buffers and Soil Loss Specialist

Chair Van Amburg and the Board members welcomed the new employees to BWSR!

#### ACKNOWLEDGEMENT OF OUTGOING BOARD MEMBERS

John Jaschke acknowledged the contributions of Rebecca Flood, who is retiring from the MPCA, and Gene Tiedemann, who is the longest serving BWSR board member and is not reapplying for appointment to the board. He presented both board members with gifts on behalf of BWSR. Gerald Van Amburg also thanked the outgoing board members for their time on the board.

#### REPORTS

**Chair & Administrative Advisory Committee** – Chair Gerald Van Amburg reported that the Administrative Advisory Committee met before the board meeting and largely discussed the Farmer-Led Council proposal. The committee also discussed the Governor's bonding proposals for local roads and CREP. Gerald Van Amburg attended the Environmental Quality Board (EQB) meeting on December 20, 2017. The 25 percent water quality improvement goals by 2025 ("25x25" proposals) were discussed at the EQB meeting by many agency staff, including BWSR Assistant Director Angie Becker Kudelka. Angie Becker Kudelka mentioned that the agencies are working with the Governor's office on these recommendations to come up with actionable items for the upcoming years.

The EQB also heard a report from attendees of the UN Climate Conference in Germany. The EQB authorized the chair and staff to do rulemaking about proposed draft amendments to MN Rules 4410.2550, which addresses environmental review. The Legislature directed the EQB to update their

rule to reflect statute changes to allow a proposer of a project to submit a draft Environmental Impact Statement. The Red River Watershed Management Board will be holding their annual meeting on March 21-22, 2018, and the EQB will meet in conjunction with the Flood Damage Reduction meeting. BWSR board members are invited to attend this free conference.

Audit and Oversight Committee – Chair Gerald Van Amburg reported that the committee met on January 23, 2018. The audit from the Office of the Legislative Auditor is not ready yet and will be discussed at a later date. The committee also discussed the PRAP report which will be discussed later in the board agenda.

**Executive Director's Report** - John Jaschke reviewed the schedule for the board meeting and introduced Susan Stokes from the Department of Agriculture. Susan Stokes introduced herself to the board. John Jaschke also introduced Curtis Elke, who is the acting NRCS state conservationist while Cathee Pullman is out on medical leave. Curtis Elke introduced himself to the board.

John Jaschke reviewed the updated documents prepared for the board. He reminded the board that board members are not allowed to accumulate rewards points at businesses such as hotels. He also reminded board members to fill out the Annual Recertification of Statement of Economic Interest. Also included in the packet were an updated BWSR staff listing, updated organizational chart, and February's Snapshots. John Jaschke explained to board members that documents that committees have edited during the committee process have been updated and new versions of those documents were provided to board members.

**Dispute Resolution Committee** - Travis Germundson provided an update to the board. There are six pending appeals regarding the Wetland Conservation Act. One new appeal has been received since the December 20, 2017 board meeting and is in Clay County. No decision has been made on that appeal yet. For File 17-5, the appeal was withdrawn and the April 25 hearing has therefore been cancelled.

BWSR recently received a petition for Intervention under Minn. Stat. 103A.311. This part of statute deals with water policy and requires that the petitioner identify the specific proceeding and an important question of water policy in the area of water conservation, water pollution, preservation and management of wildlife, drainage, soil conservation, public recreation, forest management, and municipal planning. The petition, however, was in regards to a landownership dispute involving a court proceeding. Therefore, it was determined that the petition failed to identify a question of water policy in a proceeding of an agency, as such there is no jurisdiction for Board intervention.

**Grants Program & Policy Committee** - Steve Sunderland reported that the committee met on January 18, 2018, via telephone conference call and will have two items in front of the board today.

**RIM Reserve Committee** - Gene Tiedemann reported that the committee met on January 22, 2018, via telephone conference call and will have two items in front of the board today.

Water Management & Strategic Planning Committee - Jack Ditmore reported that the committee has not met since the December 20, 2017 meeting. The next committee meeting is tentatively scheduled for March 19, 2018, at 1pm.

**Wetland Conservation Committee** - Tom Schulz reported that the committee has not met since the December 20, 2017 meeting and does not have any committee meetings scheduled at this time.

**Buffers, Soils & Drainage Committee** - Kathryn Kelly reported that the committee met on January 23, 2018, and has three agenda items on the board meeting agenda.

**Drainage Work Group (DWG)** - Tom Loveall reported that the DWG met on January 11, 2018. The DWG worked on the sixteen recommendations for the legislative report that is due to the legislature at the beginning of February. The legislative report was reviewed by the Buffers, Soils, and Drainage committee on January 23, 2018, and will be reviewed by the board later in the agenda. Al Kean reported that the legislative subgroup met on January 4 and is scheduled to meet again on January 25 and February 2, 2018. There was an inquiry from the board about the attendance of the Minnesota Viewer's Association training seminar, held on January 10, 2018, in Morton. Board members and staff discussed how the legislature may use the legislative report in formulating new legislative initiatives.

#### COMMITTEE RECOMMENDATIONS

#### Grants Program and Policy Committee

**Statewide Cover Crop Training Grant** – Megan Lennon presented the grant and resolution. Currently, one of the main bottlenecks to offering technical training for local conservation partner staff is a lack of trainers. In the past, the conservation partnership has relied on Natural Resources Conservation Service (NRCS) staff to provide technical training, but recent decreases in budgets and staffing have prevented training from being offered at a rate that is needed. The Technical Training and Certification Program is utilizing multiple strategies to address the shortage of trainers and to ensure delivery of high-priority training to conservation partners. One strategy is to harness the knowledge and experience of local subject matter experts and create opportunities for them widen their training audience and deliver trainings throughout the state.

The Statewide Cover Crop Grant to Fillmore SWCD is an effort of the Technical Training and Certification Program to utilize a regionally-recognized cover crop expert and deliver statewide training opportunities. Training on Cover Crops is a high priority training needed in all areas of Minnesota. Dean Thomas, a Fillmore SWCD employee, is an expert in soil health and cover crop management and will fulfill the deliverables of the cover crop training grant. The sole source grant will be executed on a reimbursement basis, up to \$15,000, to cover the cost of curriculum and training material development, staff time to deliver six full-day trainings, and lodging, mileage and per diem for the trainer. There is not a match requirement.

Statewide Cover Crop Grant deliverables:

- 1. Delivery of six full day trainings (Rochester, Fergus Falls, Pine County, Redwood Falls, St. Cloud, Crookston)
- 2. Curriculum and course design
- 3. Presentation and course material development
- 4. Coordination with Natural Resources Conservation Service
- 5. Training evaluation

The funding for this grant will come from an existing NRCS Contribution Agreement # 63-6322-15-500 and Accelerated Implementation funds that have been appropriated to the Board in the Laws of Minnesota 2017, 1st Special Session, Chapter 2, Article 2, and the Laws of Minnesota 2017, 1st Special Session, H. F. 707 4th Engrossment, Article 2, Sec. 7, for technical training.

Megan Lennon presented the Job Authority Approval (JAA) process. The board discussed the importance of the process and understanding the context. The board also discussed the new format for grant board orders. The board and staff discussed why this is a single-source grant with no match requirement, and the qualifications of the Fillmore SWCD service provider. Board members discussed the importance of cover crops in nutrient reduction.

\*\* Moved by Steve Sunderland, seconded by Kathryn Kelly, to approve the Statewide Cover Crop Training
 18-03 Grant Resolution. *Motion passed on a voice vote.*

Wellhead Protection RIM-Red Rock Rural Water System – Bill Penning presented the grant and resolution. Red Rock Rural Water System (RRRWS) is a public body organized under Minnesota State Statute 116A. It is a system of pipelines, storage reservoirs, pumping stations, wells, and treatment facilities located in Cottonwood, Jackson, Redwood, Murray, Lyon, Martin, Brown, Watonwan, and Nobles counties. It serves farms, rural residences, small towns, and unincorporated communities.

This proposal is for a new wellhead area for RRRWS recently coming on line under an approved wellhead management plan from the Minnesota Department of Health. This plan identifies critical areas of vulnerability of which the parcel in question is mapped as Very High Vulnerability. Upon completion, Pheasants Forever will work with the Minnesota Department of Natural Resources to develop this area as a Wildlife Management Area (WMA) open for public hunting. This addition is part of a larger habitat complex. This project will help to protect the Very High Vulnerability area and provide public recreation. It is modeled after the successful Worthington Wells WMA project, which BWSR was a part of.

One of the challenges of wellhead protection is that there are limited acres of high vulnerability areas, and some are in high production areas. Board members appreciated that BWSR is taking advantage of the opportunity to protect this wellhead area. By appropriation language, there is no match requirement for this grant.

\*\* Moved by Chris Elvrum, seconded by Tom Schulz, to approve the Wellhead Protection RIM-Red Rock
 18-04 Rural Water System Resolution. *Motion passed on a voice vote.*

#### RIM Reserve Committee

**Oeltjenbruns RIM Easement Alteration (17-46-01-01 & 17-08-90-01)** – Bill Penning presented the easement alteration request. The board clarified that by adopting the agenda, this agenda item has been taken from the table (as it was tabled during the December 20, 2017 board meeting) and is able to be discussed and have action taken on during this board meeting.

Kevin Oeltjenbruns is requesting a release of 7.7 acres from RIM conservation easement 17-46-01-01, and proposes to replace these acres by adding 20 acres on to RIM easement 17-08-90-01. Easement 17-46-01-01 is currently a 23 acre MN River CREP riparian easement, where the CRP contract has just expired. Easement 17-09-90-01 is a 40 acre sensitive ground water protection RIM easement. Both easements are in Delton Township in Cottonwood County.

Easement 17-46-01-01 is adjacent to a DNR protected stream and the release of 7.7 acres would still enable the remaining buffer to comply with the public waters buffer law requirements. The 20 acre area proposed for replacement adjacent to easement 17-08-90-01 contains 15.4 acres of cropland and 4.6 acres of non-crop. These acres are shallow to bedrock and will provide further protection of

groundwater resources. These replacement acres are also adjacent to a much larger tract of restored native grasses that are contained in a new DNR wildlife management area and Nature Conservancy tract. Mr. Oeltjenbruns has also offered to enroll the expanded easement into the Walk In Access program and seed the new cropland acres down to a native grass mix at his cost.

Mr. Oeltjenbruns has submitted all the necessary documents to support his proposal as required by RIM rule and Alteration Policy. Both the Cottonwood SWCD and the DNR Area Wildlife manager recommended approval of this proposed alteration.

The board discussed the merits and rationale of the easement alteration request, as well as nearby land use. How the state interest is determined was also discussed by the board. The board also discussed the use of a board resolution instead of a board order.

\*\* Moved by Gene Tiedemann, seconded by Joe Collins, to approve the Oeltjenbruns RIM Easement
 18-05 Alteration (17-46-01-01 & 17-08-90-01). *Motion passed on a voice vote.*

Reinvest in Minnesota (RIM) Reserve – Camp Ripley Army Compatible Use Buffer (ACUB) Program Rates – Bill Penning presented the rate proposal. Federally funded ACUB easements are intended to reduce human density within the ACUB buffer area to enable Camp Ripley to continue its training mission which involves firing heavy cannons and low level helicopter and airplane flights. These activities all generate considerable noise. Federally funded ACUB easements allow for the continued use of the land for agricultural purposes in perpetuity thus ensuring continued economic use while achieving the goal of reduced density.

In 2006, the State began taking federally funded ACUB easements using the board authorized per acre payment rate of 50% of RIM rate. Over the past few years there has been a significant reduction in the number of landowners interested in enrolling their land due to the perceived low payment being offered.

The Department of Defense and Army National Guard continue to be highly motivated to acquire additional lands within the ACUB Camp Ripley buffer zone. To this end, the board was recently awarded \$6.7M by the Department of Defense to acquire additional easements.

In order to meet federal and state goals for this program, Camp Ripley, BWSR, and SWCD personnel have identified a proposed change to the payment formula of 75% of the current RIM cropland rate for these parcels. This is for federally funded easements only as the payment rate for other ACUB easements (aka "ACUB high value riverfront easements") are calculated using a different methodology.

The board discussed the current and proposed rates for the program, both for federal and state funding. The board also discussed how a future formula change would impact current enrollees in the program and how to manage expectations about possible future rate changes.

\*\* Moved by Gene Tiedemann, seconded by Tom Landwehr, to approve the Reinvest in Minnesota (RIM)
 18-06 Reserve – Camp Ripley Army Compatible Use Buffer (ACUB) Program Rates Resolution. *Motion passed* on a voice vote.

#### Audit and Oversight Conservation Committee

**2017 PRAP Legislative Report** – Dale Krystosek presented the 2017 PRAP Legislative Report. The report presents a summary of PRAP reviews and activities conducted in 2017. The report also contains a list of planned program objectives, including three new items for PRAP in 2018; Evaluate implementation progress of at least 3 Targeted Watershed Demonstration Program projects as part of Level II reviews, evaluate and update protocol for PRAP Level I and Level II reviews for performance based funding for implementation of watershed-based One Watershed-One Plans and develop protocol for evaluating Technical Service Area (TSA) performance including development of performance standards and evaluate one TSA. The report has been reviewed by the Board's Audit and Oversight committee. The recommendation for Board action comes from the Audit and Oversight Conservation Committee, and is timed to meet a February 1, 2018 date for report submittal to legislative environmental policy committees, as required by M.S. 103B.102, Subd. 3.

Dale Krystosek reported that, for 2017, 90 percent of local government units are in full compliance with Level I Performance standards, out of 239 local government units what are tracked for Level I evaluations. BWSR also conducted two Level III PRAP assessments in 2017. For 2018, there are some changes, including that BWSR will develop protocol for evaluating Technical Service Area (TSA) performance (and evaluate one TSA, if time allows) and that BWSR will evaluate implementation progress of at least 3 Targeted Watershed Demonstration Program projects as part of Level II reviews. The Board and staff discussed various aspects of the reviews and how local government units are chosen for Level III reviews.

Jack Ditmore proposed a friendly amendment to the resolution to clarify which version of the report is being forwarded to the legislature.

\*\* Moved by Tom Schulz, seconded by Jill Crafton, to approve the resolution (as amended), to accept the report, and to authorize staff to send the report to the legislature. *Motion passed on a voice vote.*

#### Administrative Advisory Committee

**Farmer-Led Council (FLC) Pilot Startup** – Craig McDonnell, MDA, and John Jaschke presented about the Farmer-Led Council startup. The Farmer-Led Council (FLC) initiative was born out of the work of the Agricultural Water Quality Solutions Workgroup that was convened by the MDA and Environmental Initiative in 2016-17. The vision for the Farmer-Led Council initiative is to empower local communities of farmers to make their own decisions regarding how they want to improve water quality in their watershed. Through the establishment of Farmer-Led Councils the Workgroup, the MDA, and BWSR in partnership with local governments and private sector participants, hope to spur farmers to work with their neighbors to take the lead in improving water quality in their watershed.

Susan Stokes highlighted the importance of local farmer involvement in various conservation goals and the role that the Department of Agriculture will play in the councils.

Board members discussed the role that BWSR and the Department of Agriculture could play in the FLC pilots. The board also discussed if any legislation would be considered in the upcoming legislative session regarding these councils, which was determined to be unlikely. The funding of the FLCs was also discussed, including how to get buy-in from the private sector. There was discussion about how the FLCs would work with existing entities and if there would be increased competition for funding. The board discussed how the proposal has developed and what the time frame for the pilot startup would be.

\*\* Moved by Chris Elvrum, seconded by Susan Stokes, to approve the Farmer-Led Council Pilot Startup
 18-08 Resolution. *Motion passed on a voice vote.*

#### Buffers, Soils and Drainage Committee

**Working Lands Watershed Restoration Program – Report to the Legislature** – Suzanne Rhees and Dave Weirens presented the Working Lands Watershed Restoration Program report. In 2016, the Minnesota Legislature directed BWSR to prepare a plan and feasibility study for a Working Lands Watershed Restoration Program to incentivize the establishment and maintenance of perennial crops. The crops evaluated include perennial grasses and winter annual cover crops that keep roots in the soil and vegetation on the land throughout the year, improving soil health, storing carbon, and capturing excess nitrogen. These crops can be grazed, used for food products and livestock feed, or processed for electricity, thermal energy, advanced biofuels such as bio-jet fuel, renewable chemicals, or similar applications. A draft of this project's final report was presented to the board. A final version is due to be submitted to the Legislature by February 1, 2018, as required by the enabling legislation (Laws 2016, c. 189, s. 4).

The board discussed a state-funded crop insurance subsidy, like what Iowa has implemented. The board also discussed how this may relate to One Watershed, One Plan.

\*\* Moved by Kathryn Kelly, seconded by Jill Crafton, to approve the Working Lands Watershed Restoration
 18-09 Program Resolution, to accept the report, and to authorize staff to send the report to the legislature.
 Motion passed on a voice vote.

Public Comment for the Administrative Penalty Order (APO) Plan for Enforcement of Excessive Soil Loss Requirements – Suzanne Rhees and David Weirens presented about Public Comment for the Administrative Penalty Order (APO) Plan for Enforcement of Excessive Soil Loss Requirements. Amendments to Minn. Stat. 103B.101 that authorized the Board to enforce the riparian protection requirements of Minn. Stat. 103F.48 (Buffer Law) through the use of administrative penalty orders also authorized enforcement of the excessive soil loss requirements of Minn. Stat. 103F.415 and 103F.421 through this mechanism.

This Plan is required to follow the same statutory directive as for the Buffer Law, namely "monetary penalties of up to \$500 for noncompliance commencing on day one of the 11 month after the noncompliance notice was issued". With this requirement in place, the public comment draft of this APO Plan closely follows the Administrative Penalty Order Plan for Buffer Law Implementation.

The Buffers, Soils, and Drainage Committee reviewed this draft Plan on December 19, 2017 and January 23, 2018 prior to Board consideration of the staff request to authorize a public review and comment period.

Following this review and comment period, staff will review the Plan in light of the submitted comments and ask the Buffers, Soils and Drainage Committee to consider the Plan as amended prior to requesting Board adoption this coming spring.

Board members discussed the appeal process and the role of the BWSR Executive Director in that process. They also discussed the connection between the APO plan and the enabling statute. The board

discussed that a county does not have to adopt an APO and that if an APO is adopted, there are several steps before a penalty would be processed.

\*\* Moved by Rebecca Flood, seconded by Joe Collins, to approve the Public Comment for the
 18-10 Administrative Penalty Order (APO) Plan for Enforcement of Excessive Soil Loss Requirements Resolution and authorize a public review and comment period. *Motion passed on a voice vote*.

Legislative Report: Recommendations for Accelerating Public Drainage System Acquisition and Establishment of Buffer Strips and Alternative Practices – Don Buckhout and Al Kean presented the Recommendations for Accelerating Public Drainage System Acquisition and Establishment of Buffer Strips and Alternative Practices report. The 2017 Legislature directed BWSR to coordinate the Drainage Work Group (DWG) to evaluate and make recommendations that would accelerate the acquisition and establishment of buffer strips or alternative practices along public drainage systems in advance of the November 1, 2018 deadline and thereafter. Those recommendations are to be reported to the Minnesota Senate and House Agriculture and Environment policy committees by February 1, 2018.

The DWG formed an advisory committee that evaluated what impedes drainage systems from buffer strip establishment. The committee developed recommended actions for overcoming those impediments. The DWG revised the recommendations that were then incorporated in a report prepared by BWSR staff and approved by the DWG. The DWG's report has been reviewed by the Buffers, Soils and Drainage Committee and is recommended by that committee for the Board's acceptance and transmittal to the legislature.

The board discussed the importance of releasing buffer cost-share dollars to accelerate the establishment of buffers strips and alternative practices. The board also discussed the stakeholders, including the Governor's office and the executive branch. Staff discussed legal precedence of drainage authorities acquiring land surrounding ditches for installing buffer strips and the role of viewers.

Moved by Tom Loveall, seconded by Kathryn Kelly, to approve the Recommendations for Accelerating
 Public Drainage System Acquisition and Establishment of Buffer Strips and Alternative Practices
 Legislative Report resolution, to accept the report, and to authorize staff to send the report to the
 legislature. *Motion passed on a voice vote*.

#### **NEW BUSINESS**

**Groundwater Restoration and Protection Strategies (GRAPS)** – Annie Felix-Gerth introduced Carrie Raber, from the Minnesota Department of Health, who presented an introduction to the GRAPS process and how GRAPS can be used in the 1W1P effort. Carrie discussed the background of GRAPS, the status of current GRAPS efforts, and how to use the report for targeting. There are four pilot GRAPS: Pine River, North Fork Crow River, Cannon River, and the Missouri River Basin. It is important to integrate Working Lands into the GRAPS program. The board discussed the challenges of researching and accumulating groundwater data. Carrie shared several maps to show how data from various state agencies could be used to target specific areas to address groundwater issues and the board and staff discussed how One Watershed, One Plans can utilize those data sets.

**Interagency and University Drainage Management Team Report** – Tim Gillette presented a report about the Drainage Management Team (DMT). The DMT was established in 2008 at the request of the Drainage Work Group (DWG). While originally envisioned to provide technical assistance to LGUs that were implementing conservation practices on Minnesota's agricultural landscape's, its present purpose is to be "an interagency team comprised of staff members from state and federal agencies and academic institutions that meet regularly to coordinate and network regarding agricultural drainage topics." (DMT Charter, 2013) It is technically focused and is not involved in policy development.

The DMT's voluntary membership is made up of staff from the following organizations:

- Minnesota Board of Water and Soil Resources (BWSR)
- Minnesota Department of Agriculture (MDA)
- Minnesota Department of Natural Resources (DNR)
- Minnesota Pollution Control Agency (MPCA)
- University of Minnesota (UMN) Department of Bioproducts and Biosystems Engineering
- University of Minnesota (UMN) Extension
- University of Minnesota (UMN) Water Resources Center
- United States Army Corp of Engineers (USACOE)
- United States Fish and Wildlife Service (USFWS)
- United States Geological Service (USGS)
- USDA Natural Resources Conservation Service (NRCS)
- USDA Agricultural Research Service (USDA ARS)

Over the last few years the DMT has been increasingly focused on major technical issues related to drainage water management. Over the last year and a half the Team has been gathering information about the topic of Altered Hydrology (AH). The DMT is in the process of writing an AH guidance document for use by local governments in their water planning and drainage system administration.

The DMT plans to develop a number of fact sheets to support local implementation of conservation practices such as Two Stage Ditches, Woodchip Bioreactors, and Saturated Buffers, and alternative side inlets.

#### AGENCY REPORTS

Minnesota Department of Agriculture – no report provided.

Minnesota Department of Natural Resources – no report provided.

Minnesota Pollution Control Agency – no report provided.

**Minnesota Department of Health** – no report provided.

#### **ADVISORY COMMENTS**

Association of Minnesota Counties – no report provided.

Minnesota Association of Conservation District Employees – no report provided.

Minnesota Association of Soil & Water Conservation Districts – no report provided.

Minnesota Association of Townships – no report provided.

#### Minnesota Association of Watershed Districts – no report provided.

Natural Resources Conservation Services – no report provided.

#### UPCOMING MEETINGS

• Next BWSR Meeting is scheduled for 9:00am, March 28, 2018 in St. Paul.

Chair Van Amburg adjourned the meeting at 3:08 PM

Respectfully submitted,

Gerald VanAmburg Chair

# BOARD OF WATER AND SOIL RESOURCES

# **BOARD MEETING AGENDA ITEM**

AGENDA ITEM TITLE:	Dispute Resolution Committee Report					
Meeting Date:	March 28, 2018					
Agenda Category:	Committee Recon	nmendation		New Business		Old Business
Item Type:	Decision			Discussion	$\boxtimes$	Information
Section/Region:	Central Office					
Contact:	Travis Germundson					
Prepared by:	Travis Germundson					
Reviewed by:				Committee(s)		
Presented by:	Travis Germundson/ VanAmburg					
Audio/Visual Equipmen	t Needed for Agenda	tem Presenta	tion			
Attachments:	lution 🗌 Order	🗌 Мар	$\boxtimes$	Other Supporti	ing In	formation
Fiscal/Policy Impact         None         Amended Policy Request         New Policy Requested         Other:	ed	General Fun Capital Budg Outdoor Heri Clean Water	jet itage	Fund Budget		
ACTION REQUESTED						

None

LINKS TO ADDITIONAL INFORMATION

See attached Report

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

The report provides a monthly update on the number of appeals filed with BWSR.

Dispute Resolution Report March 15, 2018 By: Travis Germundson

There are presently **three** appeals pending. All of the appeals involve WCA. There has been **one** new appeal filed since the last report (January 24<sup>th</sup> Board Meeting).

Format note: <u>New appeals that have been filed since last report to the Board.</u> Appeals that have been decided since last report to the Board.

<u>File 18-1 (2-6-18) This is an appeal of dual restoration orders in Wright County. The</u> <u>appeal regards the partial drainage of a 10.45 acre wetland associated with the installation</u> <u>of agricultural drain tile.</u> *No decision has been made on the appeal.* 

File 17-7 (12-29-17) This is an appeal of a restoration order in Wright County. The appeal regards the unauthorized impacts to approximately 4.74 acres of wetland associated with the placement of agricultural drain tile. The appeal was denied and the *Restoration Order affirmed*.

File 17-4 (5-22-17) This is an appeal of a restoration order in Caver County. The appeal regards the unauthorized impacts to wetlands resulting from excavation of a private ditch system. The appeal has been placed in abeyance for submittal of additional documentation in support of the appeal and for the county to make a final decision on the wetland applications. The Board's Order has since been amended to extend the time period of the stay for the TEP to convene and develop a revised written report. The appeal was denied and the Restoration Order affirmed.

File 16-12 (9 30-16) This is an appeal of a restoration order in Nicollet County. The appeal regards the unauthorized impacts to 11.2 acres of wetland associated with the installation of agricultural drain tile. The appeal has been placed in abeyance for submittal of additional documentation and for the TEP to convene onsite and develop written findings of fact. The order placing the appeal in abeyance was amended for a second time extending time period on the stay of the restoration order until the LGU makes a final decision on the wetland applications. A certificate of satisfactory restoration/replacement was issued as a result the appeal was dismissed.

File 15-7 (7-20-15) This is an appeal of a Restoration Order in Olmsted County. The appeal regards the unauthorized placement of drain tile in a purported wetland. Applications for exemption and no loss determinations have been submitted to the local unit of government concurrently with the appeal. The appeal has been placed in abeyance until the LGU makes a final decision on the applications for exemption and no-loss. That decision has been appealed (File 16-5). The appeal will remain in abeyance until there is a final decision on the exemption and no-loss appeal. An after-the-fact replacement plan was approved, as a result the restoration order was rescinded and the appeal dismissed.

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. Site certification is scheduled to take place during the 2017 calendar year.

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 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. A revised wetland bank plan application has been approved with conditions. Those conditions require the approval of partial ditch abandonment along with a Conditional Use Permit for alterations in the floodplain.

Type of Decision	Total for Calendar Year	Total for Calendar		
	2017	Year 2018		
Order in favor of appellant				
Order not in favor of appellant	3			
Order Modified				
Order Remanded	1			
Order Place Appeal in Abeyance	2			
Negotiated Settlement				
Withdrawn/Dismissed	5			

# Summary Table

#### COMMITTEE RECOMMENDATIONS

### Water Management and Strategic Planning Committee

1. One Watershed, One Plan Operating Procedures and Plan Content Requirements– Julie Westerlund/Melissa Lewis – **DECISION ITEM** 

# BOARD OF WATER AND SOIL RESOURCES

#### **BOARD MEETING AGENDA ITEM**

AGENDA ITEM TITLE:	One Watershed One Plan Operating Procedures and Plan Content Requirements						
Meeting Date:	March 28, 2018						
Agenda Category:	Committe	e Recom	nmendatio	n 🗆	New Business		Old Business
Item Type:	⊠ Decision □		Discussion		Information		
	Central Region	n – Local	Water				
Section/Region:	Management	Section					
Contact:	Julie Westerlu	nd					
Prepared by:	Julie Westerlu	nd					
	Water Manag	ement &	Strategic				
Reviewed by:	Planning			Committee(s)			
Presented by:	Julie Westerlund/Melissa Lewis						
Time requested:	10 minutes						
Audio/Visual Equipment Needed for Agenda Item Presentation							
Attachments:  □ Reso	lution 🛛	Order	🗆 Map	) 🛛	Other Support	ing Ir	nformation
Fiscal/Policy Impact							
□ None			General Fund Budget				
☑ Amended Policy Request		Capital Budget					
□ New Policy Requested □			Outdoor Heritage Fund Budget				
□ Other:	Clean Water Fur		iter Fund	d Budget			
ACTION REQUESTED							

Board approval of the 2018 One Watershed One Plan Operative Procedures and Plan Content Requirements.

LINKS TO ADDITIONAL INFORMATION

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

The One Watershed, One Plan Operating Procedures and Plan Content Requirements are the two policy documents that describe program requirements according to Minnesota Statutes §103B.801. These documents, which were based on policies for the pilot program (developed in 2014), were updated in 2016

when the program was formally established. Since that time, BWSR's Water Planning Program Team has identified a need to improve the organization and clarity of these documents, along with minor changes to policy elements. The team recommends re-formatting both documents with the new State of Minnesota logo and style. For both documents, the majority of non-policy information (background, context, and optional items) have been removed. Other changes include:

Policy	High level summary of changes (see the last page of each document for more detail)		
Operating	Removed automatic exemption for LGUs with less than 5% of their area in the planning boundary		
Procedures	Added requirements for sharing public comments during the plan review and approval process		
Plan Content	Land and Water Resources <i>Inventory</i> changed to <i>Narrative</i> ; added requirement for discussion of watershed context		
Requirements	Fairly extensive wording changes in Plan Administration and Implementation Programs sections resulting in minor changes to policy elements		

**Requested Action**: Board approval of the revised One Watershed, One Plan Operating Procedures and Plan Content Requirements to the Board.

BOARD DECISION #\_\_\_\_

# BOARD OF WATER AND SOIL RESOURCES

## **BOARD ORDER**

#### One Watershed, One Plan Program Operating Procedures and Plan Content Requirements Policies

#### PURPOSE

Adopt revised One Watershed, One Plan Operating Procedures and Plan Content Requirements.

#### **FINDINGS OF FACT / RECITALS**

- Minnesota Statutes §103B.801 establishes the Comprehensive Watershed Management Planning Program, also known as the One Watershed, One Plan Program, and provides that the Board shall develop policies for coordination and development of comprehensive watershed management plans and required comprehensive watershed management plan content.
- 2. The current Board approved policies for the program are the One Watershed, One Plan Operating Procedures, dated March 23, 2016, and Plan Content Requirements, dated March 23, 2016.
- An assessment by the agency's Water Planning Team, conducted an assessment between August 8, 2017 and March 2, 2018, identified the need for improvements in organization and clarity and minor changes to policy elements.
- 4. Changes to Operating Procedures and Plan Content requirements were reviewed and approved by Board's Senior Management Team on March 13, 2018 to forward to the Board's Water Management and Strategic Planning Committee for consideration.
- 5. The Board's Water Management and Strategic Planning Committee reviewed the policy revisions on March 19, 2018 and supports presentation of the revised policies to the Board.

#### ORDER

The Board hereby:

- 1. Adopts the One Watershed, One Plan Operating Procedures version 2.0, dated March 28, 2018, and
- 2. Adopts the One Watershed, One Plan Plan Content Requirements version 2.0, dated March 28, 2018.

Dated at St. Paul, Minnesota, this March 28, 2018.

#### MINNESOTA BOARD OF WATER AND SOIL RESOURCES

Date: \_\_\_\_\_

Gerald Van Amburg, Chair Board of Water and Soil Resources

Attachments:

- One Watershed, One Plan Operating Procedures version 2.0, dated March 28, 2018
- One Watershed, One Plan Plan Content Requirements version 2.0, dated March 28, 2018

# BOARD OF WATER AND SOIL RESOURCES

# One Watershed, One Plan Operating Procedures

From the Board of Water and Soil Resources, State of Minnesota

 Version:
 2.00

 Effective Date:
 03/23/2018

 Approval:
 Board Decision #18-\_\_\_\_

# **Policy Statement**



These are the minimum procedural requirements for developing a comprehensive watershed management plan through the Minnesota Board of Water and Soil Resources' (BWSR) One Watershed, One Plan program. The One Watershed, One Plan vision is to align local water planning on major watershed boundaries with state strategies towards prioritized, targeted, and measurable implementation plans. These procedures are based on the One Watershed, One Plan Guiding Principles adopted by BWSR on December 18, 2013.

Minnesota Statutes §103B.101 Subd. 14 permits BWSR to adopt methods to allow comprehensive plans, local water management plans, or watershed management plans to serve as substitutes for one another, or to be replaced with one comprehensive watershed management plan and requires BWSR to establish a suggested watershed boundary framework for these plans. Minnesota Statutes §103B.801 outlines the purpose of, and requirements for, comprehensive watershed management plans and directs BWSR to establish operating procedures for plan development.

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NOTE: One Watershed, One Plan - Plan Content Requirements are in separate document.

# I. Boundary Framework

The One Watershed, One Plan Boundary Framework consists of three parts: the suggested boundary map; procedures for establishing boundaries, requesting variances on boundaries, and appealing boundaries; and the criteria used to establish and consider requested variances from the suggested boundary map.

### A. Suggested Boundary Map

Local governments partnering to develop a One Watershed, One Plan, must begin with the planning boundaries identified in the suggested boundary map adopted by the BWSR Board on April 23, 2014 (see Figure 1). Boundaries within this map are recommended but not mandated; procedures for establishing and deviating from the boundaries are this section.



\*Not legal boundaries; intended for planning purposes through One Watershed, One Plan only.

#### Figure 1. Suggested Boundary Map

### **B.** Boundary Establishment and Adjustment Procedures

As per Minnesota Statute §103B.101 Subd. 14, BWSR "shall, to the extent practicable, incorporate a watershed approach when adopting the resolutions, policies, or orders, and shall establish a suggested watershed boundary framework for development, approval, adoption, and coordination of plans." The procedures for determining boundaries will conform to the following:

- 1. **Planning Boundary Establishment.** BWSR Board adopted the One Watershed, One Plan Suggested Boundary Map on April 23, 2014. This map establishes the suggested planning boundaries for plans developed through One Watershed, One Plan.
  - Before commencing planning under Minnesota Statutes §103B.101 Subd. 14, local governments participating in the plan (see also Section II) shall notify the BWSR Board Conservationist and Regional Supervisor of the intent to initiate planning. This notification shall include:
    - i Local concurrence of all participants within the planning boundary established in the BWSR Board adopted map, or
    - ii A new map delineating the intended planning boundary with local concurrence of all participants. If submitting a new map, participants must provide written documentation of the rationale and justification for deviation from the BWSR Board adopted map.
  - b. BWSR staff shall have 60 days to determine if a proposed plan boundary conforms with the requirements of Minnesota Statutes §103B.101 Subd. 14 and notify the participants of the determination.
  - c. If the participants disagree with the determination, they may submit a request for review to the executive director. The executive director may bring the issue before the BWSR Board if resolution cannot be found.
  - d. The final planning boundary will be approved by the BWSR Board concurrent with plan approval and incorporated into the BWSR Board order and adopted map.
- 2. Planning Boundary Amendment or Adjustment. After a planning boundary has been established, participants may find adjustments or amendments to the boundary are necessary. Procedures for changing a boundary will follow the establishment procedure above. The final adjusted boundary will be approved by the BWSR Board concurrent with a plan amendment or the next plan approval. BWSR comments on the boundary may include findings that an amendment to the plan is necessary to address the newly included or excluded area(s).
- 3. **Appeals.** Participants may appeal a BWSR Board decision to deny approval of a plan or the establishment of a plan boundary. Appeals and disputes of decisions follow existing authorities and procedures of the BWSR Board.

### C. Boundary Criteria

The following criteria, based on the criteria used for establishing the suggested boundary map, should be used to justify planning boundary adjustments.

- 1. **Full coverage.** The adjustment will not leave small, orphaned watershed areas between planning boundaries.
- 2. Smaller boundaries. For adjusted boundaries smaller than the suggested planning boundary:
  - a. Smaller area does not conflict with the purposes/intent of 1W1P
  - b. Significant dissimilarities or complexities in resource issues and solutions within suggested planning boundary justify the smaller area
  - c. Suggested planning boundary crosses a major river, e.g. on both sides of the Mississippi River
  - d. Existing watershed district in the area
  - e. Suggested planning boundary crosses Metro Water Planning area
  - f. Boundary for the smaller area closely follows a minor watershed, e.g. a 10 or 12-digit hydrologic unit code or watersheds defined by drainage systems managed pursuant to Minnesota Statutes §103E
- 4. Larger Boundaries. For adjusted boundaries larger than a suggested planning boundary, e.g. one boundary plus additional minor or major watershed(s):
  - g. Inclusion of a partial watershed on a state line
  - h. Confluence of major basins
  - i. Efficiencies due to similarity of issues and solutions
  - j. Existing watershed district that includes larger area
  - k. Major watersheds/8-digit hydrologic unit codes already lumped for PCA 10-year watershed approach/WRAPS
  - I. Boundary for the larger area closely follows a minor watershed, e.g. a 10 or 12-digit hydrologic unit code
- 3. Seven County Metro. When a suggested planning boundary crosses into the seven-county metropolitan area, the area within the seven-county metro may or may not be considered for inclusion in the boundary. If included, the area within the seven-county metro is not excluded from Metro Surface Water Management Act.

# II. Participation Requirements

When the One Watershed, One Plan planning process is initiated within a watershed area, all potentially affected local units of government within the given planning boundary should be invited to participate.

For the purposes of this section, levels of participation are defined as:

**Required Participant.** The local government unit must formally agree to a role in plan development and subsequent implementation. "Formally agree" means an in-writing consent to participate (see Section III).

**Optional Participant.** The local government unit is encouraged to be directly involved in the planning process, but is not required to formally agree. All municipalities (cities and townships) are optional participants.

	Participation Requirement
Soil & Water Conservation District	Required (Metro* SWCDs optional)
County	Required (Metro* counties optional)
103D Watershed District	Required
103B (Metro*) Watershed District or Watershed Management Organization	Optional
Municipality (city or township)	Optional

Table 1. Participation Requirements by Local Government Type

\*Metro refers to the seven-county metropolitan area.

### A. Participation by Land Area

All local governments with land area in the watershed have the opportunity to participate in planning and implementation. It may not be practical for local governments with a small portion of their land area in the watershed to participate in plan development, especially if that area will not play an important role in implementing the plan. If less than 10% of the jurisdictional land area of the local government is within the One Watershed, One Plan planning boundary, participation by that local government is optional unless the area will be important to the success of the plan. Important areas are those identified in a Watershed Restoration and Protection Strategies (WRAPS) report, a completed TMDL, a local diagnostic study, and/or another study or plan as being important places to take watershed management actions, and include those areas in close proximity to the watershed outlet.

# **B.** Participation Requirements Procedure

Participation requirements will be discussed as part of the plan initiation process with final determinations made by the Board Conservationist in consultation with the local government participants and BWSR Regional Manager. Disputes of staff decisions will be reviewed by the executive director and brought before the BWSR Board if resolution cannot be found.

Lack of willingness or interest of one local government unit should not be used as an initial basis for denying participation of the majority in One Watershed, One Plan. Additional factors or criteria may be considered, including the anticipated impact to the planning process or perceived challenges with implementation of the resulting plan if certain critical stakeholders are unwilling to participate. At the request of the majority of participants, BWSR may conduct an assessment of the potential impact of the nonparticipation and make a determination as to if the remaining participants should be able to proceed. This assessment and the final

recommendation will be reviewed by the executive director and brought before the BWSR Board if resolution cannot be found. In some situations, a watershed planning group may not be able to proceed until One Watershed, One Plan participation requirements are met.

## C. Participation Requirements and Plan Adoption

After a plan has been completed by participants and approved by the BWSR Board, it will need to be formally adopted within 120 days by all parties. Whether the plan is adopted individually by each county, soil and water conservation district, and/or watershed district, or if it is adopted by an established joint powers board on behalf of the participants, is a decision of the participants as outlined in the formal agreement and the authorities provided therein (see Section III).

In the case that a required participant decides not to formally adopt the plan after it has been approved by BWSR, the remaining local governments will need to reassess whether or not the plan can be successfully implemented without adoption by the particular local government. If it is possible the plan will work to a degree without the participant, the plan may need to be amended to function without the participant, and/or the remaining participants may need to work with the non-participant to address issues or concerns. BWSR staff may be available to assist in assessment or mediation at the request of the local governments involved. The decision to adopt the plan or not is a local decision. Any repercussions, such as ineligibility for state grants, will be specific to the individual participant(s) who chose not to adopt the plan.

See also Section IV for more detailed and specific plan adoption information.

# III. Planning Agreement and Organizational Structures for Implementation

A formal agreement for planning describes the relationships, responsibilities, and structure of the partners (i.e. local governments) during the development of comprehensive watershed management plan. It is not intended to address or mandate consolidation or changes to existing authorities of local governments.

# A. Planning Agreement

Prior to initiating plan development, participating partners must enter into a Memorandum of Agreement (MOA) or other type of formal agreement. Planning agreements must include the following:

- 1. **Purpose.** The purpose statement of the agreement include participation in developing a watershed plan.
- 2. **Participants.** The agreement must include all required participants (see Section II; agreement may include more than the required participants, e.g. a regional agreement that encompasses multiple One Watershed, One Plan planning boundaries or one or more cities).
- 3. **Procedures.** The agreement must include or refer to operating procedures and/or bylaws that outline a method for decision making that give each participant equal status in the planning partnership and include procedures for plan submittal (see Section IV.C). Bylaws may also include procedures for stakeholder processes, committees, etc.

4. **Fiscal Agent.** The agreement must identify a fiscal agent and/or requirement for an audit meeting the provisions of Minnesota Statutes §6.756 if the agreement creates an entity or organization that will be receiving funds directly.

Partners may use an existing formal agreement (e.g. a Joint Powers Agreement), provided that it includes the required elements listed above.

### **B.** Organizational Structures for Implementation

During the planning process, partners will identify programs essential to achieving goals and implementing the projects for the watershed. The partners must determine and identify in the plan the organizational structures, whether existing or new, that will most effectively and efficiently implement the plan. Assistance from the Minnesota Counties Intergovernmental Trust (MCIT) and/or the legal counsel of the participating organizations may be required. See <u>Section IV</u> below.

# **IV. Plan Development Procedures**

The intent of the One Watershed, One Plan program is to develop a high quality, long-term comprehensive watershed management plan that builds off of existing local and state plans and data as well as existing local government services and capacity, emphasizes watershed management and implementation through shorter–term work plans and budgeting, and can be updated via a streamlined process to incorporate or reference new data, trend analysis, changes in land use, and watershed priorities.

These procedures reflect the vision that the procedures for developing a plan through One Watershed, One Plan should not be any less rigorous than those of the implementation plans that are being substituted for or replaced.

# A. Committees, Notifications and Initial Planning Meeting

The following steps assume the formal agreement and/or bylaws establishing the planning partnership and outlining the process and procedures for committee involvement and decision-making are in place.

- 1. **Establish committees and workgroups.** The following committees and workgroups are all critical to successful development and implementation of the plan.
  - a. Steering Team This team is not a requirement of the plan development process. However, a smaller group of local staff (typically the local water planners and lead staff from participating local governments, BWSR Board Conservationist, and possibly consultants) is strongly recommended for the purposes of **logistical** and process (not policy) decision-making in the plan development process.
  - b. Policy Committee This is a required committee of local plan authorities for the purposes of making final decisions about the content of the plan and its submittal and regarding expenditure of funds allocated for plan development. The committee membership and the committee's decision-making process must clearly be a part of the formal agreement for planning and associated bylaws (see Section III). This committee may or may not continue after plan adoption.

- c. Advisory Committee(s) An advisory committee is required to meet public and stakeholder participation goals and requirements identified in rule and statute for existing local water plans. The purpose of an advisory committee is to **make recommendations** on the plan content and plan implementation to the Policy Committee. Full establishment of the Advisory Committee may not be finalized until after Steps 2 and 4 (below).
  - i More than one advisory committee may be formed (e.g., regional committees, and/or separate citizen and technical advisory subcommittees).
  - ii Advisory committee members should include members of the steering team, drainage authority representatives, county highway and planning and zoning staff, and potentially other stakeholders as noted in Step 2 below.
  - iii Advisory committee membership must include state agency representatives. The state's main water agencies, or plan review agencies, are committed to bringing state resources to the planning process. Each agency will designate a lead contact for their agency to participate on the advisory committee; however, specific participation may vary depending on local needs. Consideration should also be given to including federal agency representatives.
  - iv In the initial meeting of the advisory committee(s), a basic set of ground rules should be adopted that identify a decision-making process, and a chair should be appointed. The position of chair can be rotating.
- 2. Notify plan review authorities and other stakeholders. Prior to the development of the plan, notification must be sent to the plan review authorities of plan initiation. The notification must include an invitation to submit priority issues and plan expectations, and must allow 60 days for response to the notification. The notification may also be sent to other stakeholders or alternative methods for receiving input may be used for these interested parties.
  - a. Stakeholders: drainage authorities, federal agencies, tribal governments, lake or river associations, citizen-based environmental group(s), sporting organization(s), farm organization(s) and agricultural groups, other interested and technical persons such as current and former county water plan taskforce members.
  - b. Additional methods for public input should also be considered in addition to the formal notification process, such as web surveys, workshops with specific interest groups, and other citizen surveys.
- 3. **Start to aggregate watershed information.** Make use of existing local water plans, input received from agencies, TMDL studies, WRAPS, and other local and agency plans. Information to be aggregated includes land and water resources inventories, data, issues, goals, strategies, actions, etc. This aggregation of plan information is not intended to be exhaustive, but rather a compilation for the purposes of understanding current priorities and goals for the watershed and orientation to the watershed. This step and the previous step generally occur concurrently.
- 4. **Hold initial planning meeting.** The meeting is often referred to as the public information meeting for county water planning or a kickoff meeting in watershed district planning after the priority issues of stakeholders have been gathered, and should be held after steps 2 and 3 above.

- a. The planning meeting must be legally noticed to meet the requirements of MN Statutes §103B.313, Subd. 3 (county water planning).
- b. In consideration of the size of the watersheds, participants may want to consider more than one initial planning meeting and/or options for participating through video conference. Be sure to thoroughly document this participation.
- c. Talk to BWSR staff about potential resources available to assist in planning and facilitating this initial planning meeting in order to achieve effective participation.

### B. Draft Plan

This section outlines only the high-level steps for drafting the plan. Specifics on the plan content requirements can be found in the *One Watershed, One Plan – Plan Content Requirements* document. Steps are not always linear; some steps may be repeated more than once throughout the planning process and others may occur concurrently.

- 1. **Review information.** Review and assess aggregated watershed information for commonalities, conflicts, and gaps, and to better support understanding, discussion, and prioritization. Make use of input received at the initial planning meeting, existing local water plans, input received from agencies, TMDL studies, WRAPS, and other local and agency plans.
- Draft the plan. Analyze gathered information and draft the plan using available tools for prioritizing, targeting, and assessing measurability. Refer to the One Watershed, One Plan Plan Content Requirements document for required elements and to the One Watershed, One Plan Guidebook for more information on the requirements and suggestions for planning.
- 3. Determine organizational structure for implementation. Determine the most effective and efficient organizational structure(s), existing and/or new, to implement the actions identified in the plan, such as shared services or collaborative grant-making. Modifications to an existing agreement and/or a new agreement may or may not be necessary depending on the implementation plan and needs of the participating local governments. The Minnesota Counties Intergovernmental Trust and/or legal counsel of the participating organizations may be consulted to assist in this determination.

# C. Formal Review and Public Hearing

After the plan has been drafted, the Policy Committee submits the plan on behalf of the local plan authorities to the plan review authorities (see definitions below) for formal review. Depending on the decision-making outlined in the formal agreement for plan development, the participating local governments may need to approve the draft prior to submittal.

 Submit the draft plan. The draft plan may be submitted to the plan review authorities electronically via email attachment, website link, or digital storage device. BWSR must receive a paper copy, email attachment or digital storage device of all submitted documents (website link not acceptable) in order to maintain a record of the submittal. If paper copies are requested, they must be provided. It is also encouraged to make a copy of the draft plan available online with a clear process for stakeholder comments.

- 2. **60 day review.** Plan review authorities have 60 days to provide comment on the plan. Comments must be submitted to both the Policy Committee (can be via a staff or consultant contact; does not mean submitting to each member of the policy committee) and BWSR (Board Conservationist).
- 3. **Public hearing(s).** The Policy Committee will schedule and hold a public hearing(s) on the draft plan no sooner than 14 days after the 60-day review period of the draft plan. Responses to comments received during the review period must be provided to BWSR, the state review agencies, and anyone who provided comments 10 days before the public hearing.
  - i Depending on the formal agreement, the participating local governments may need to hold individual public hearings.
  - ii If the formal agreement allows the Policy Committee to 'host' the public hearing, the committee may want to consider more than one hearing in a large watershed.

# **D.** Approval by BWSR

After the public hearing, the Policy Committee submits the final draft plan on behalf of the local plan authorities: a copy of all written comments received on the draft plan, a record of the public hearing(s), and a summary of responses to comments including comments not addressed and changes incorporated as a result of the review process to the plan review agencies for final review. The revised responses to comments will be published to the BWSR website. Depending on the decision-making outlined in the formal agreement, the participating local governments may need to approve the final draft prior to submittal.

- BWSR Board Review. The BWSR Board shall review the plan for conformance with the requirements of Minnesota Statutes §103B.101, Subd. 14 and §103B.801, final input from the state review agencies, this policy, and the One Watershed, One Plan – Plan Content Requirements document. Review process includes BWSR staff review and recommendation to a regional BWSR Committee where the plan will be presented to the committee by representatives of the participating local government(s). The Regional BWSR Committee makes a recommendation to the BWSR Board where final decision is made.
- 2. **BWSR Board Decision.** The BWSR Board may approve or disapprove a plan which it determines is not in conformance. The BWSR Board shall complete its review and approval within 90 days or the next scheduled BWSR Board meeting.
- 3. Appeals and Disputes. Appeals and dispute of plan decision follow existing authorities and procedures of BWSR Board.

# E. Local Adoption and Implementation

- 1. Local Adoption. Local adoption by the local plan authority is required within 120 days of BWSR Board approval. If so granted through a joint powers agreement, the adoption may be by a watershed joint powers entity. If no joint powers entity with the authorities of the local plan authority was created, each local government unit shall adopt the plan individually. A copy of resolution(s) to adopt the plan must be sent to BWSR in order to be eligible for grants.
- 2. Implementation. Implementation may occur individually or cooperatively for all or parts of the plan depending on ongoing agreement(s) between the planning partners.

## F. Assessment, Evaluation, Reporting, and Plan Revisions

Assessment, evaluation and reporting should be completed according to the approach described in the plan (see the One Watershed, One Plan – Plan Content Requirements).

Revisions to the plan are required every ten years. The depth of revision required will depend on evidence that implementation is occurring. BWSR can issue "findings" when a complete revision is not required based on the strength of the plan and updates that have occurred since the plan was last approved.

### **G.** Plan Development Definitions

The following definitions are used in this section:

- 1. Local plan authority. A local plan authority is county, soil and water conservation district, or watershed organization with authority to write and implement a local plan. County local water planning may be delegated with restrictions as per Minnesota statutes §103B.311.
- Local water plan. A local water plan is a county water plan authorized under Minnesota statutes §103B.311, a watershed management plan required under §103B.231, a watershed management plan required under §103D.401 or 103D.405, a county groundwater plan authorized under §103B.255, or a soil and water conservation district "comprehensive plan" under Minnesota statutes §103C.331, Subd. 11.
- 3. Metropolitan Council. The Metropolitan Council was created by Minnesota Statutes, section 473.123.
- 4. Plan review agencies. Plan review agencies refers to the Department of Agriculture, the Department of Health, the Department of Natural Resources, the Pollution Control Agency and the Board of Water and Soil Resources, and the Metropolitan Council if substituting for or replacing a plan under MN Statutes §103B.231. The Environmental Quality Board must also receive final submittal.
- 5. Plan review authorities. Plan review authorities refers to the Department of Agriculture, the Department of Health, the Department of Natural Resources, the Pollution Control Agency, the Board of Water and Soil Resources, counties, cities, towns, soil and water conservation districts, watershed districts, and watershed management organizations partially or wholly within the watershed, and the Metropolitan Council if substituting for or replacing a plan under MN Statutes §103B.231.
# History

Version	Description	Date
2.00	<ul> <li>Formatted with new policy template and logo; edited to improve clarity and readability</li> </ul>	March 28, 2018
	• Removed background information not directly relevant to the policy (in addition to minor text modifications, the following sections from Version 1.00 were removed: Introduction, Overview, and Table 3 – Formal Agreement Types and Recommended Uses)	
	<ul> <li>Simplified and clarified participation requirements and planning agreements (II.A and III.A.3, respectively)</li> </ul>	
	• Changed first step in draft plan to reflect addition of Land and Water Resources Narrative in Plan Content Requirements (IV.B.2.a)	
	<ul> <li>Added requirements for sharing public comments during the plan review and approval process (IV.C.3 and IV.D)</li> </ul>	
1.00	<ul> <li>Pilot Program Operating Procedures modified to reflect transition to program</li> </ul>	March 23, 2016
0.00	<ul> <li>Pilot Program Operating Procedures</li> </ul>	June 25, 2014

# BOARD OF WATER AND SOIL RESOURCES

# One Watershed, One Plan Plan Content Requirements

From the Board of Water and Soil Resources, State of Minnesota

 Version:
 2.00

 Effective Date:
 03/28/2018

 Approval:
 Board Decision #18-\_\_\_\_

# **Policy Statement**

These are the minimum requirements for contents of a comprehensive watershed management plan developed through the Minnesota Board of Water and Soil Resources' (BWSR) One Watershed, One Plan program. The One Watershed, One Plan vision is to align local water planning on major watershed boundaries with state strategies towards prioritized, targeted, and measurable implementation plans. These procedures are based on the *One Watershed, One Plan Guiding Principles* adopted by BWSR on December 18, 2013.

<u>Minnesota Statutes §103B.101 Subd. 14</u> permits BWSR to adopt methods to allow comprehensive plans, local water management plans, or watershed management plans to serve as substitutes for one another, or to be replaced with one comprehensive watershed management plan and requires BWSR to establish a suggested watershed boundary framework for these plans. <u>Minnesota Statutes §103B.801</u> outlines the purpose of and requirements for comprehensive watershed management plans and directs BWSR to establish content requirements for plans.



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# I. Introduction

This document contains specific content requirements for drafting a comprehensive watershed management plan through the One Watershed, One Plan program. The *One Watershed*, *One Plan Guidebook* elaborates on the requirements and provides guidance for not only meeting the requirements, but also for developing a quality plan that serves the needs of watershed resources and planning partners. Overall organization and format of the plan is a local decision.

The most effective and useful comprehensive watershed management plans are based on the best available data, models, and other science, especially making use of Watershed Restoration and Protection Strategies (WRAPS) where they are available. They are action-oriented, focusing on the *what* and the *how* of watershed management. Finally, they are succinct and readable, providing watershed managers with a tool to explain to the public and funders what needs to happen and the anticipated results of actions that appear in the plan. Where possible, partnerships are encouraged to make use of existing documents and incorporate them into the final plan document by reference. The *One Watershed, One Plan Guiding Principles* provides sideboards and direction in the plan content requirements outlined in the document.

Note: One Watershed, One Plan Operating Procedures are in a separate document.

# **II. Comprehensive Watershed Management Plans**

The requirements in this document are supported by the vision of the Minnesota Local Government Roundtable that future watershed-based plans will have sufficient detail that local government units can, with certainty, identify pollutant(s) of concern in - or risks to - a water body, identify the source(s) of the pollutant, and provide detailed projects that address identified sources or risks. This vision also includes a future of limited wholesale updates to watershed-based plans, with a streamlined process to incorporate collected data, trend analysis, changes in land use, and prioritization of resource concerns into the watershed-based plan, and an emphasis on watershed management and implementation through shorter-term work plans and budgeting. This vision includes acknowledging and building off of existing plans and data (including local and state plans and data), as well as existing local government services and capacity.

#### A. Issues that must be addressed

According to Minnesota Statutes, Section 103B.801, subdivision 4, the following issues must be addressed in the plan.

- Prevention of erosion and soil transport into surface water systems
- Restoration, protection, and preservation of natural surface water and groundwater storage and retention systems
- Promotion of groundwater recharge
- Minimization of public capital expenditures needed to correct flooding and water quality problems
- Wetland enhancement, restoration, and establishment
- Identification of priority areas for riparian zone management and buffers

Protection and enhancement of fish and wildlife habitat and water recreational facilities

### **B.** Other topics

The following topics, and others identified by planning partnerships, may also be addressed in the plan.

- Soil health
- Altered hydrology
- Maintenance of core services; understanding of local capacity
- Water supply (protect, provide, and conserve)
- Drinking water supply
- Drainage system management
- Wastewater management
- Storm water management
- Drought mitigation
- Education, outreach, and civic engagement

- Contaminants of emerging concern
- Emerging issues (e.g. land cover, climate change, etc.)
- Invasive species prevention and/or management
- Chlorides
- Administrative priorities (e.g. establishment of uniform local policies and controls in the watershed)
- Fiscal challenges (e.g. minimizing public capital expenditures in resolving problems in areas such as flood control or water quality protection)

## C. Special consideration: extreme weather

Planning partnerships are strongly encouraged to consider the potential for more extreme weather events and their implications for the water and land resources of the watershed in the analysis and prioritization of issues. While these events cannot be predicted with certainty as to time and occurrence, the meteorological record shows increased frequency and severity of extreme weather events, which directly affects issues in local water planning.

## D. Mission or vision statement

Although not required, planning partnerships are encouraged to develop an overarching mission and/or vision statement for the watershed, as well as higher-level guiding principles for planning and implementation, which provides direction for the plan and serves as a touchstone for participants in the process.

# **III. Plan Content Requirements**

Each watershed-based plan will contain the elements outlined in the following sections.

## A. Executive Summary

Each plan will have a section entitled Executive Summary. The purpose of the executive summary is to provide a condensed and concise plain language summary of the contents of the overall plan. A well-written executive

summary is beneficial for current and future elected officials, staff, citizens, and stakeholders to achieve an understanding of the plan and its intent. The executive summary must contain:

- 1. Purpose, mission, or vision statement if developed
- 2. A general map or description of the planning boundary and smaller planning or management units if used
- 3. A summary of the priority issues and goals that are addressed in the plan
- 4. A summary of the implementation actions and programs
- 5. A brief description of the process used to identify the measurable goals and targeted implementation actions
- 6. An outline of the responsibilities of participating local governments

In addition to the Executive Summary, the plan may need a table of acronyms and a definitions section; however, these are not required and may be included in the appendices.

### B. Land and Water Resources Narrative

The plan must contain a brief (e.g. 2-3 page) narrative summary of land and water resources information to inform the planning process and support actions in the plan. The narrative must make use of typical and available land and water resource information, and synthesize that information in a way that allows for a shared understanding of watershed characteristics and issues. The narrative must acknowledge the watershed's context regarding the influence it has on downstream waters, and it may discuss impacts from upstream watersheds if applicable. This information should include, but is not limited to:

- 1. Topography, soils, general geology
- 2. Precipitation
- 3. Water resources
  - a. Surface water resources, including streams, lakes, wetlands, public waters, and public ditches
  - b. Groundwater resources, including groundwater and surface water connections if known
  - c. Water quality and quantity, including trends of key locations and 100-year flood levels and discharges, regulated pollutant sources and permitted wastewater discharges
- 4. Stormwater systems, drainage systems, and control structures
- 5. Water-based recreation areas
- 6. Fish and wildlife habitat, rare and endangered species
- 7. Existing land uses and anticipated land use changes
- 8. Relevant socio-economic information

Inventory information critical to supporting the priorities and actions of the plan may need to be more thoroughly described in the sections of the plan where those priorities are discussed. For example, a trend analysis may need more in-depth description to support a priority issue in the plan; however, the data behind the analysis can be contained elsewhere and referenced.

If gaps in inventory information are identified through the plan development process, consider implementation action(s) to fill the gap rather than delaying the planning process to generate new data.

Sources of information used to develop the Land and Water Resources Narrative should be referenced in the plan appendix.

Please consult the *One Watershed, One Plan Guidebook* for additional information and guidance on selected requirements.

## C. Priority Resources and Issues

The plan must contain:

- 1. A summary of the issues and resource concerns identified from all sources for consideration in this section
- 2. The steps used to consider and prioritize the identified resources and issues
- 3. A list of the agreed upon priority resources and issues for the watershed and a brief issue statement that describes the relevance of the issue for the planning area

Priority issues can be articulated in the plan through both a list/description(s) and map(s). The format and exact planning terminology used in the plan for presenting priority issues may vary as long as the plan covers the three requirements above and the terminology used is defined in the plan (the summary and steps are suggested to be included as appendices). The plan is not expected to address all identified issues; however, it should include a brief explanation as to why certain issues were rejected as priorities for this planning cycle.

In the event that conflicts exist in the interpretation of issues and/or selection of priority issues, consider whether the conflict can be addressed by defining both watershed-wide priorities as well as individual priorities of the participating local governments.

Plans that do not demonstrate a thorough analysis of issues, and that do not use available science and data, will not be approved. Please consult the *One Watershed*, *One Plan Guidebook* for additional information and guidance on selected requirements.

## **D.** Measurable Goals

Each priority issue must have associated measurable goals for addressing the issue. Some goals will be watershed-wide; however, the majority should be focused on a specific subwatershed, natural resource, or local government where specific outcomes will be achieved. Goals for prevention of future water management problems should also be considered.

Plans that do not contain sufficient measurable goals to indicate an intended pace of progress for addressing the priority issues will not be approved.

BWSR will consider Minnesota Statutes §103B.801, Subd. 4 (2), the balance of broad versus focused goals and shorter-term versus longer-term goals, and detail in the targeted implementation schedule to assess whether goals are sufficient. Additionally, the pace of progress towards achieving goals will be used in determinations of the extent or depth of future ten year plan revisions. BWSR may consider issuing findings when a plan and associated implementation is sufficient that a complete revision will not be required.

**Specific Goal Requirement:** Consistent with the Clean Water Council policy, plans must establish water storage goals, expressed in acre-feet, and standards for water storage, retention, and infiltration.

Please consult the One Watershed, One Plan Guidebook for additional information and guidance on selected requirements.

## E. Targeted Implementation Schedule

Each plan must have a targeted implementation schedule with:

- 1. A brief description of each action
- 2. Location targeting where the action will occur
- 3. Identification of roles and the responsible government unit for the action
- 4. An estimate of cost for implementing the action
- 5. An estimate of when the implementation will occur within the ten-year timeframe of the plan in increments of two years or less
- 6. A description of how the outcomes of the action will be measured

These requirements can be articulated in a table and/or narrative form. The schedule must clearly identify the actions the planning partners will undertake with available local funds versus the actions that will be implemented only if other sources of funds become available, and should be supported by maps indicating the location(s) of the targeted activities.

Specific actions, such as capital projects that are local priorities (but not watershed priorities) or initiatives that are unique to a particular LGU (but that have not been identified as priorities for the partnership) may be included in the plan but must be clearly indicated as local priorities. Please consult the *One Watershed, One Plan Guidebook* for additional information and guidance on selected requirements.

## F. Plan Implementation Programs

The implementation programs described below support the targeted implementation schedule by describing the overarching program(s) that will be used to implement actions identified in the schedule and how these programs will be coordinated between the local water management responsibilities. All programs described in this section must be included in the plan, including feasibility studies. Please consult the *One Watershed*, *One Plan Guidebook* for additional information and guidance on selected requirements.

- 1. Incentive Programs. Describe local voluntary cost share or grant programs necessary to achieve the goals, including the general purpose and scope, criteria that will be used to select projects/disperse funds, actions to work with landowners in these critical areas to tailor conservation practices, and how the program(s) will be implemented across the watershed to provide consistency and achieve goals. Incentive programs may be targeted to specific issues, e.g. grants for sealing abandoned wells, or specific areas, e.g. a watershed of priority lakes.
- 2. **Capital Improvements.** Describe opportunities for watershed-wide collaboration (e.g. sharing of specialized services and/or lessons learned on these large-scale projects) on capital improvements (physical/structural improvement with an extended life) identified in the targeted implementation

schedule. Consider including opportunities for improved water management associated with county and township roads and within drainage systems managed through Drainage Law.

- a. **Drainage:** Describe opportunities for enabling large-scale, multi-purpose projects on a watershed basis and for engaging drainage authorities and drainage inspectors in implementation of the watershed plan. Describe local procedures for ensuring future drainage projects are not inconsistent with the goals of the plan.
- b. **Capital Improvement Programs (CIPs) for Watershed Districts**: CIPs are required in the plan when a watershed district is included, consistent with the requirements of Minnesota Statutes §103B and 103D. A CIP is an itemized program for at least a five-year prospective period. A CIP sets forth the schedule, timing, and details of specific contemplated capital improvements by year. CIPs also describe estimated costs, the need for each improvement, financial sources, and the financial effect that the improvements will have on the local government unit or watershed management organization. This requirement can be incorporated into the targeted implementation schedule if the specific requirements of Minnesota statutes §103B and 103D are clearly met. Amendments are subject to at least biennial review.
- c. **Permanent Protection**: Describe opportunities for permanent land protection necessary to meet the resource needs and achieve the goals for the watershed.
- 3. **Operation and Maintenance.** Include a description of who is responsible for inspection, operation, and maintenance of capital projects, stormwater infrastructure, public works, facilities, and natural and artificial watercourses, and legal drainage systems. Specify any new programs or revisions to existing programs needed to accomplish the goals or that may benefit from watershed-wide collaboration.
- 4. Regulation and Enforcement. Describe existing regulations, controls, and authorities relevant to water management for the purposes of highlighting areas of duplication, information gaps, and opportunities. Use this analysis to identify areas to maximize effectiveness and build efficiencies through improved coordination and consistent application of regulations, and/or to develop new regulation or enforcement in support of meeting plan goals. Regulatory areas to consider include, but are not limited to: shoreland, floodplain, septic, Wetland Conservation Act, Protected Waters Inventory, erosion control, municipal wastewater, Minimum Impact Design Standards (MIDS), land use, aggregate mining, feedlots, hazard mitigation, buffers, and prescription drug drop off locations.
  - a. **Regulation and Enforcement for Watershed Districts:** Describe the rules and associated permit programs of watershed districts in the watershed, consistent with and as necessary to meet the requirements of Minnesota statutes §103B.337-103D.345.
  - b. **Comprehensive or land use plans**: List the date of the last Comprehensive Plan adoption for each LGU. Describe the land use authorities within the watershed as well as potential opportunities to achieve goals through, or potential conflicts with, comprehensive land use plans.
- 5. Data Collection and Monitoring. Describe how data collection and monitoring activities will be used to reasonably evaluate progress toward plan goals, and describe additional data collection activities needed to fill gaps that have been identified during the planning process. Include commitments to periodically analyze data, collect data consistent with state compatibility guidelines, and submit locally collected data to the appropriate state agency for entry into public databases.

- a. **Monitoring Summary**: Summarize the locations, frequency, and parameters of existing water quality, quantity, and other monitoring in the watershed. The summary should include local, state, and other ongoing monitoring programs and the scale (e.g. field, subwatershed, major watershed) they are designed to evaluate. State agencies are available to help summarize state monitoring activities.
- b. **Use of Data:** Describe if these established monitoring programs are capable of producing an evaluation of the progress being made toward the goals (e.g. monitoring stations properly located relative to priority subwatersheds) and how the data will be used in the evaluation, including improved model calibration.
- c. Additional Data Collection: Identify any new data collection needed to improve understanding of the watershed condition, assess particular resources, or address any gaps in the land and water resources inventory that support actions in the targeted implementation schedule. Identify the purpose and lead organization for new data collection initiatives.
- 6. Public Participation and Engagement. The plan must describe approaches to public participation and engagement for implementing the plan, including information, outreach, and education program(s). Specifically, opportunities where there are benefits from watershed-wide collaborations and areas where focused or targeted actions will support the priority issues and goals of the plan. At a minimum, include: an analysis of the need for public participation and engagement in meeting plan goals, identification of strategies addressing the needs, and an estimate of the financial and technical support needed by the partnership for carrying out the strategies.

## G. Plan Administration and Coordination

Partners must decide what organizational structures are best suited to administer the various programs and how the partnership will carry out the plan. In some cases, new arrangements may be needed or desired. All items described in this section must be addressed in the plan. Please consult the *One Watershed, One Plan Guidebook* for additional information and guidance on selected requirements.

- 1. Decision-making and Staffing. Describe the roles of planning participants in implementation.
  - a. **Policy Committee** (decision-making): Describe if the policy committee created to develop the plan will continue through plan implementation. If the policy committee will not continue, clearly outline an alternative method to provide oversight and maintain accountability throughout plan implementation. Describe the anticipated role of the policy committee or alternative in plan implementation and its relationship to plan participants.
  - b. Advisory Committee (advising): Describe if the advisory committee(s) created for plan development will continue through plan implementation and/or describe alternative methods to ensure a dependable forum to exchange information and knowledge about the watershed and implementation of the plan, and to meet the statutory requirements for ongoing advisory committees of counties (Minnesota Statutes §103B.301-103B.3355) and watershed districts (Minnesota Statutes §103D.331-103D.337). Also, identify opportunities to coordinate with federal partners to convene Local Working Groups to fulfill federal Farm Bill requirements.

The plan should establish procedures for engaging state agencies and describe the ongoing roles and commitments of the state agencies for plan implementation.

c. **Identification and Coordination of Shared Services** (staffing): Describe specialized and shared service areas that may be used in the watershed to implement the actions identified in the schedule and achieve greater efficiencies in service delivery. This may include shared services for program management or for project management.

The watershed plan and associated formal agreements should describe how the service will be shared and/or the need met. Shared services may also include partnership with non-governmental organizations.

- 2. Collaboration with other Units of Government. Describe relationships with other units of government not part of the formal agreement for plan development, including the drainage authorities within the planning boundary. For example, cities and townships are not required participants, but they may contribute to improved watershed management in the areas of waste water treatment plants, source water and wellhead protection for population centers, MS4s, and culvert and road maintenance. Additionally, federal government partners are not required participants. However, federal programs and partnerships are very important resources in watershed management.
- 3. **Funding.** Describe how actions in the implementation schedule will be funded. Both the state and local governments have responsibility for funding water management. All funding methods currently available to participants remain available to the participants and/or to the organization as a whole through the participants.
  - a. Local: Describe the funding sources used to generate local funds for plan implementation and clearly outline the participants' local commitments to implementing the plan.
  - b. **State**: Describe state funding needed for implementation of the plan. This can be achieved through separation in the targeted implementation schedule of locally funded projects versus projects that will proceed only with state funds.
  - c. **Collaborative Grants**: Describe the intended approach to coordinated submittal of collaborative grant applications.
  - d. **Federal**: The plan should describe what type of federal funding resources may be pursued to implement the plan.
  - e. **Other Sources**: The plan should describe what other types of funding may be pursued to implement the plan.
- 4. Work Planning. Describe a frequency and method for developing and approving work plans based on: plan priorities, the targeted implementation schedule, and the implementation programs. The work plan can consist of a collaborative work plan for the watershed, elements of individual work plans for each local government participant, or some combination. Describe how the work plan will be finalized and approved.
  - a. Local Work Plan: Describe an annual commitment to implementing the plan via local budgeting and staffing decisions. Describe an approach to additional collaborative work planning based on the extent of collaboration intended in the implementation schedule, programs, and subsequent agreements, as well as the extent of collaborative grant-making intended.

- b. **Funding Request**: Describe a biennial commitment to collaboratively review and submit a funding request to BWSR.
- 5. **Assessment, Evaluation, and Reporting.** Describe approaches and decision-making for periodic assessment, evaluation, and reporting of plan implementation. Evaluation should measure progress and performance, drive the work plan, and provide accountability.
  - a. Accomplishment Assessment: Describe a method for tracking implementation consistently across the watershed. Describe the frequency and methods for compiling and reviewing implementation accomplishments under the targeted implementation schedule and implementation programs described in the plan. This assessment should support future work plan development, progress evaluation, and reporting. Suggested frequency is annual.
  - b. **Partnership Assessment:** Describe the frequency and methods for assessing the partnership with regards to the items listed in 1 3 above (fulfillment of committee purposes and roles, efficiencies in service delivery, collaboration with other units of government, and success in securing funding).
  - c. **Five Year Evaluation**: Include a schedule for a thorough five year assessment and potential revision to the implementation schedule. The purpose of this evaluation is to determine progress and consider whether staying the course or resetting direction is necessary. It may also include revisions to models and considerations of new monitoring data. If a WRAPS has been completed or revised since the plan was originally adopted, this evaluation must include an assessment of any changes to the plan necessary due to new information
  - d. **Reporting**: Describe collaborative approaches to provide accountability to stakeholders and to meet annual reporting requirements of local governments, grant reporting requirements, and specific program and financial reporting requirements. Information on required annual reporting can be found on the BWSR website. Consider a periodic 'state of the watershed report,' individualized 'waterbody report cards', or other methods to provide accountability and demonstrate outcomes locally.
- 6. **Plan Amendments.** Describe procedures for considering plan amendments, who can propose amendments, what criteria will be used in considering amendments, and who makes the decision to proceed with amendments.
- 7. Organizational Structures or Formal Agreements. List and briefly describe the organizational structures or entities that will be used to implement the plan's projects and programs. Indicate whether these are existing entities or new ones. In either case, indicate any formal agreements between local governments that are needed and whether these will be modifications of existing agreements or new agreements. For example, prior to completion of the plan, the Memorandum of Agreement (MOA) between partners for planning purposes could be revised for on-going coordination among entities responsible for plan implementation. Consultation with Minnesota Counties Intergovernmental Trust (MCIT) and legal counsel is recommended. MCIT may recommend revising the planning agreement, establishing separate agreements or contracts for specific services or actions, and/or developing a broader, watershed-wide agreement for ongoing partnership.

# History

Version	Des	scription	Date
2.00	•	Formatted with new policy template and logo; edited to improve clarity and readability	March 28, 2018
	1	Removed background information not directly relevant to the policy; Introduction and Overview sections reorganized and some content removed (I and II), background and contextual information for requirements removed (III A-E)	
		Updated list of issues that must be in the plan to reflect statute (II)	
	1	Land and Water Resources Inventory changed to <i>Narrative</i> and moved from appendix to plan; added requirement for discussion of watershed context (III.A).	
	1	Removed "potential sources of funding" from, and added requirement for two year time increments to, Targeted Implementation Schedule requirement (III.E.4)	
	ľ,	Modified Targeted Implementation Schedule requirement to clarify inclusion of local priorities (III.E)	
	ľ,	Added "legal drainage systems" to Operations and Maintenance requirement (III.F.3)	
	ľ,	Removed reference to the buffer law from Regulation and Enforcement requirement (III.F.4). Added inclusion of comprehensive plan dates (III.F.4.b)	
	ľ	Modified Data Collection and Monitoring requirement to clarify program intent (III.F.5)	
	1	Added needs assessment and strategy development; changed heading to Public Participation and Engagement (formerly <i>Information, Education, and</i> <i>Outreach</i> ) (III.F.6)	
	ľ	Added policy committee role and federal coordination to Decision-making and Staffing (III.G.1.a,b)	
		Modified Work Planning requirement to clarify program intent (III.G.2)	
	1	Modified Assessment, Evaluation, and Reporting to clarify program intent (III.G.3)	
1.00	•	Pilot Plan Content Requirements modified to reflect transition to program	March 23, 2016
0.00	•	Pilot Plan Content Requirements	June 25, 2014

#### COMMITTEE RECOMMENDATIONS

#### Grants Program and Policy Committee

1. One Watershed One Plan Planning Grant Request for Proposals & Grants Policy – Julie Westerlund/Melissa Lewis – *DECISION ITEM* 

## BOARD OF WATER AND SOIL RESOURCES

#### **BOARD MEETING AGENDA ITEM**

AGENDA ITEM TITLE:	One Watershed One Plan Planning Grant Request for Proposals & Grants Policy							
Meeting Date:	March 28, 2018							
Agenda Category:	🖾 Committee Recon	New Business		Old Business				
Item Type:	⊠ Decision □		Discussion		Information			
	Central Region – Loca	Central Region – Local Water						
Section/Region:	Management Section		_					
Contact:	Julie Westerlund		_					
Prepared by:	Julie Westerlund		_					
Reviewed by:	Grants Programs and	Committee(s)						
Presented by:	Julie Westerlund/Mel	_						
Time requested:								
□ Audio/Visual Equipment	Audio/Visual Equipment Needed for Agenda Item Presentation							
Attachments:	lution 🛛 Order	🗆 Map 🛛	Other Support	ing Ir	nformation			
Fiscal/Policy Impact								
□ None		ıdget						
⊠ Amended Policy Request	ed 🗆	Capital Budget						
New Policy Requested		Outdoor Heritage Fund Budget						
□ Other:		Clean Water Fur	nd Budget					

#### **ACTION REQUESTED**

Board approval of the 2018 One Watershed One Plan Planning Grant Request for Proposals and Grants Policy.

#### LINKS TO ADDITIONAL INFORMATION

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

The purpose of this agenda items is for the Board to approve the FY2018 One Watershed, One Plan Planning Grant Policy and Request for Proposals (RFP). Other than dates, the policy is unchanged from the previous policy. The RFP includes the following changes:

- Response requirements (see "comprehensive watershed management plans") encourage more early and meaningful discussions as partnerships are established.
- Review criteria are more specific and include minimum and preferred requirements that relate directly to new questions
- Timeline for responses shortened from 15 to 12 weeks

**Requested Action**: Board approval of the revised One Watershed, One Plan Grant Policy and authorization of the One Watershed, One Plan Request for Proposals.

BOARD DECISION #

## BOARD OF WATER AND SOIL RESOURCES

## **BOARD ORDER**

#### One Watershed, One Plan Program 2018 Grant Policy and Request for Proposals

#### PURPOSE

Adopt 2018 One Watershed, One Plan Grant Policy and authorize the 2018 Request for Proposals (RFP).

#### **FINDINGS OF FACT / RECITALS**

- 1. Minnesota Statutes §103B.801 establishes the Comprehensive Watershed Management Planning Program, also known as the One Watershed, One Plan Program.
- 2. The Board has authority under Minnesota Statutes §103B.3369 to award grants to local units of government with jurisdiction in water and related land resources management.
- 3. The Laws of Minnesota Laws of Minnesota 2017, 1st Special Session, Chapter 91, Article 2, Section 7(i) appropriated funds to the Board for assistance, oversight, and grants to local governments to transition local water management plans to a watershed approach.
- 4. The 2018 One Watershed, One Plan Grant Policy and Request for Proposals were reviewed and approved by the Board's Senior Management Team on March 13, 2018 to forward to the Board's Grants Program and Policy Committee for consideration.
- 5. The Board's Grants Program and Policy Committee reviewed the 2018 One Watershed, One Plan Grant Policy and RFP on March 19, 2018 and recommended approval to the Board.

#### ORDER

The Board hereby:

- 1. Adopts the 2018 One Watershed, One Plan Grant Policy; and
- 2. Authorizes staff to finalize, distribute, and promote a 2018 Request for Proposals.

Dated at St. Paul, Minnesota, this March 28, 2018.

#### MINNESOTA BOARD OF WATER AND SOIL RESOURCES

Date: \_\_\_\_\_

Gerald Van Amburg, Chair Board of Water and Soil Resources

Attachments:

- 2018 One Watershed, One Plan Grant Policy
- 2018 Request for Proposals

# BOARD OF WATER AND SOIL RESOURCES





From the Board of Water and Soil Resources, State of Minnesota

Approval:	Board Decision #18
Effective Date:	03/28/2018
Version:	1.00

# **Policy Statement**

The purpose of this policy is to provide expectations for One Watershed, One Plan Planning Grants conducted via the Board of Water and Soil Resources (BWSR) Clean Water Fund grants to facilitate development and writing of comprehensive watershed management plans consistent with Minnesota Statutes §103B.801.

# **Reason for this Policy**

The Clean Water Fund was established to implement part of Article XI, Section 15, of the Minnesota Constitution, with the purpose of protecting, enhancing, and restoring water quality in lakes, rivers, and streams and to protect groundwater and drinking water sources from degradation.

BWSR will use grant agreements for assurance of deliverables and compliance with appropriate statutes, rules and established policies. Willful or negligent disregard of relevant statutes, rules and policies may lead to imposition of financial penalties or future sanctions on the grant recipient.

# Requirements

#### 1. Applicant Eligibility Requirements

Eligible applicants include counties, watershed districts, watershed management organizations, and soil and water conservation districts working in partnership within a single One Watershed, One Plan planning boundary, meeting the participation requirements outlined in the *One Watershed, One Plan Operating Procedures*. Application for these funds is considered a joint application between participating local governments and may be submitted by a joint powers organization on behalf of local government members (partners). Formal agreement between the partners, consistent with the *One Watershed, One Plan Operating Procedures*, is required prior to execution of a grant agreement.

#### 2. Match Requirements

No match will be required of the grantees. Grantees will be required to document local involvement in the plan development process.

#### 3. Eligible Activities

Eligible activities must be directly for the purposes of providing services to the plan development effort and may include activities such as: contracts and/or staff reimbursement for plan writing; technical services; preparation of policy committee, advisory committee, or public meeting agendas and notices; taking meeting minutes; facilitating and preparing/planning for facilitation of policy or advisory committee meetings, or public meetings; grant reporting and administration, including fiscal administration; facility rental for public or committee meetings; materials and supplies for facilitating meetings; reasonable food costs (e.g. coffee and cookies) for public meetings; publishing meeting notices; and other activities which directly support or supplement the goals and outcomes expected with development of a comprehensive watershed management plan.

#### 4. Ineligible Expenses

Ineligible expenses include staff time to participate in committee meetings specifically representing an individual's local government unit; staff time for an individual, regularly scheduled, county water plan task force meeting where One Watershed, One Plan will be discussed as part of the meeting; and stipends for attendance at meetings.

#### 5. Grantee Administration of Clean Water Fund Grants

The grantee for these funds includes the partners identified in the formal agreement establishing the partnership, consistent with the One Watershed, One Plan Operating Procedures. Grant reporting, fiscal management, and administration requirements are the responsibility of the grantee. All grantees must follow the Grants Administration Manual policy and guidance.

- a. Formal agreement between partners is required prior to execution of a grant agreement and must identify the single local government unit which will act as the fiscal agent for the grant and which will act as a grantee authorized representative. Grant reporting, fiscal management, and administration requirements are the responsibility of the grantee.
- b. All grantees are required to report on the outcomes, activities, and accomplishments of Clean Water Fund grants.
- c. Grantees have the responsibility to approve the expenditure of funds within their partnership. The local government unit fiscal agent administering the grant must approve or deny expenditure of funds and the action taken must be documented in the governing body's meeting minutes prior to beginning the funded activity. This responsibility may be designated to a policy committee if specifically identified in the formal agreement establishing the partnership.
- d. BWSR recommends all contracts be reviewed by the grantee's legal counsel. All contracts must be consistent with Minnesota statute and rule.
- e. Grantees are required to document local involvement in the plan development process in order to demonstrate that the grant is supplementing/enhancing water resource restoration and protection activities.

#### 6. BWSR Grant Administration Requirements

BWSR staff is authorized to develop grant agreements, including requirements and processes for project outcomes reporting, closeouts, and fiscal reconciliations.

In the event there is a violation of the terms of the grant agreement, BWSR will enforce the grant agreement and evaluate appropriate actions, including repayment of grant funds at a rate up to 150% of the grant agreement.

# History

Version	Description	Date
1.00	Reformatted to new template and logo.	2018
0.00	New policy for One Watershed, One Plan Program	March 23, 2016

# BOARD OF WATER AND SOIL RESOURCES

# One Watershed, One Plan Planning Grants



April 2, 2018

**Request for Proposals** 

## Request for Proposals (RFP) General Information

The Clean Water Fund was established to implement part of Article XI, Section 15 of the Minnesota Constitution, with the purpose of protecting, enhancing, and restoring water quality in lakes, rivers, and streams in addition to protecting ground water and drinking water sources from degradation. The appropriation language governing the use of these funds is in Laws of Minnesota 2017, Chapter 91, Section 7. These funds must supplement traditional sources of funding and may not be used as a substitute to fund activities or programs. Final funding decisions will be dependent on the actual funds available. Up to \$1,500,000 is available.

#### **Proposal Guidelines**

Proposals must be in PDF format and will be submitted electronically via: BWSR.Grants@state.mn.us.

- 1. Proposals are subject to a five-page limit, minimum font size 11 pt.
- 2. Proposals must include a one page map of the watershed (maps are not included in the page limit) in PDF format. The map may be letter, legal, or ledger size and should identify the planning boundary, the boundaries of the planning partners, and any requested changes to the boundary. The One Watershed, One Plan Suggested Planning Boundaries, including a geodatabase, can be found at: www.bwsr.state.mn.us/planning/1W1P/index.html.
- 3. Proposals may be submitted by one or more of the eligible local governments on behalf of others in the watershed area. Respondents should demonstrate that a sufficient commitment exists to implement the project through a supporting motion or resolution from the board of each identified participant. A formal agreement between participants establishing a partnership to develop a plan will be required prior to execution of the grant agreement. If participants are unable to establish a formal agreement and work plan within six months of successful grant notification, the grant may be rescinded and funds redistributed.
- 4. Respondents who were previously awarded Clean Water Funds and have expended less than 50% of previous award(s) at the time of this proposal may need to demonstrate organizational capacity to finalize current projects and complete new project concurrently.
- 5. A cost estimate is a requirement for the project proposal. The final grant amount for successful respondents will be determined upon completion of a grant work plan and detailed budget. No cash match will be required of grant recipients.

## **Grant Execution**

Successful respondents will be required to complete a planning agreement and submit a detailed budget and work plan prior to execution of the grant agreement. For template agreements, work plans, and budgets, contact <u>julie.westerlund@state.mn.us</u>.

Newly updated (as of March 28, 2018) policies for participating in the program, (*One Watershed, One Plan Operating Procedures* and the *One Watershed, One Plan - Plan Content Requirements*), as well as additional resources for planning, can be found at: <u>www.bwsr.state.mn.us/planning/1W1P/index.html</u>. Successful respondents will be subject to version 2.0 of the program policies.

#### **Project Period**

The project period starts when the grant agreement is executed, meaning all required signatures have been obtained. Work that occurs before this date is not eligible for reimbursement with grant funds. All grants must be completed by June 30, 2021.

#### **Payment Schedule**

Grant payments will be distributed in three installments to the designated grantee for the planning region. The first payment of 50% of the grant amount will be paid after work plan approval and execution of the grant agreement, provided the grant respondents are in compliance with all BWSR website and eLINK reporting requirements for previously awarded BWSR grants. The second payment of 40% of the grant amount will be paid once the grantee has provided BWSR with notification and BWSR has reconciled expenditures of the initial payment. The last 10% will be paid after all final reporting requirements are met, the grantee has provided BWSR has reconciled these expenditures.

#### **Incomplete Proposals**

Proposals that do not comply with all requirements, including incomplete or missing proposal components, will not be considered for funding.

#### **Clean Water Fund Project Reporting Requirements**

- All grantees are required to report on the outcomes, activities, and accomplishments of Clean Water Fund grants. All BWSR funded projects will be required to develop a work plan, including detail relating to the outcome(s) of the proposed project. All activities will be reported via the eLINK reporting system. Grant funds may be used for local grant management and reporting that are directly related to and necessary for implementing this activity. For more information go to www.bwsr.state.mn.us/outreach/eLINK/index.html.
- 2. BWSR Clean Water Funds will be administered via a standard grant agreement. BWSR will use grant agreements as contracts for assurance of deliverables and compliance with appropriate statutes, rules and established policies. Willful or negligent disregard of relevant statutes, rules and policies may lead to imposition of financial penalties on the grant recipient.
- 3. When practicable, grantees shall prominently display on their website the legacy logo. Grant recipients must display on their website either a link to their project from the Legislative Coordinating Commission Legacy Site (<u>http://legacy.leg.mn</u>) or a clean water project summary that includes a description of the grant activities, including expenditure of grant funds and measurable outcomes (www.bwsr.state.mn.us/cleanwaterfund/stories/)

- 4. When practicable, grantees must display the legacy logo on printed and other materials funded with money from the Clean Water Fund. The logo and specifications can be found at <a href="http://www.legacy.leg.mn/legacy-logo">http://www.legacy.leg.mn/legacy-logo</a>
- 5. Grantees will be required to document local involvement in the plan development process in order to demonstrate that the grant is supplementing/enhancing water resource restoration and protection activities and not supplanting traditional sources of funding.

### **Grants and Public Information**

Under Minnesota Statute 13.599, responses to an RFP are nonpublic until the proposal deadline is reached. At that time, the name and address of the grantee, and the amount requested becomes public. All other data is nonpublic until the negotiation of the grant agreement with the selected grantee is completed. After the evaluation process is completed, all data (except trade secret data) becomes public. Data created during the evaluation process is nonpublic until the negotiation of the grant agreement with the selected grantee(s) is completed.

#### **Conflict of Interest**

State Grant Policy 08-01, (see <u>http://www.admin.state.mn.us/ogm\_policies\_and\_statute.html</u>) Conflict of Interest for State Grant-Making also applies to BWSR grantees. Grantees' conflicts of interest are generally considered organizational conflicts of interest. Organizational conflicts of interest occur with any of the following scenarios:

- 1. A grantee is unable or potentially unable to render impartial assistance or advice due to competing duties or loyalties.
- 2. A grantee's objectivity in carrying out the grant is or might be otherwise impaired due to competing duties or loyalties.
- 3. A grantee or potential grantee has an unfair competitive advantage through being furnished unauthorized proprietary information or source selection information that is not available to all competitors.

#### Submittal

All responses must be electronically delivered to: <u>BWSR.Grants@state.mn.us</u> and must be received no later than 4:30 p.m. July 2, 2018. Late responses will not be considered. The burden of proving timely receipt is on the respondent.

#### **Comprehensive Watershed Management Plan Development Proposals**

To propose a watershed area, describe the qualifications of interested respondents.

- Provide a general watershed map of the proposed planning boundary (map may be separate from the written information). If the proposed planning boundary deviates from the *1W1P <u>Suggested Planning</u> <u>Boundaries</u>, provide a brief narrative of the reasons for the deviation.*
- 2. In consideration of the local government units (LGUs) within the boundary, provide a table with: a list of all counties, soils and water conservation districts, watershed districts, and watershed management organizations, and the percentage of the jurisdictional land area of each local government within the boundary. For a list of required participants and land percentages for planning boundaries shown on the 1W1P Suggested Planning Boundaries, contact julie.westerlund@state.mn.us.

- a. Whether each LGU is a required participant (see section II of the One Watershed, One Plan Operating Procedures)
- b. Indication of interest of each LGU (e.g. verbal, letter, resolution, etc.) or why a given LGU is not interested
- c. Name and contact information for the primary contact(s) for each LGU
- 3. Briefly describe technical information data sources (TMDLs, diagnostic studies, models, plans, WRAPS, etc.) that will help inform the development of the comprehensive watershed management plan.
- 4. Briefly describe the capability (experience with plan development, project and consultant management, facilitation, etc.) and availability (ability to commit time to the effort) of staff and local officials to participate in plan development.
- 5. Briefly describe how the planning partnership will leverage each LGU's watershed management capacities and strengths (e.g. current water programs, areas of expertise), and how completing the plan will result in collaborative implementation approaches, shared services, and acquiring non-local funds for implementation.
- 6. Briefly describe discussions among the LGUs within the boundary regarding the plan development process (the minimum requirement is that initial discussions have taken place, not that decisions have been made).
  - a. Potential governance structure for the planning effort (e.g. memorandum of agreement, joint powers agreement, etc.)
  - b. Roles and responsibilities for the planning effort (e.g. administrative lead, fiscal agent, plan writing and facilitation consultants, etc.)
  - c. Cost estimate (range)

#### **Selection Criteria**

All complete proposals submitted by the deadline will be reviewed by BWSR staff, with assistance from an interagency review committee. The successful respondents will be selected by the Board of Water and Soil Resources based on:

- 1. Responses to questions in this RFP, considered as follows (failure to include information that addresses each of the elements below will be considered an incomplete proposal):
  - a. Inclusion of general watershed map and description of any boundary changes consistent with question 1.
    - □ Minimum: map (including proposed boundary changes if applicable) included with proposal
  - b. Inclusion of a table of local government information consistent with question 2.
    - □ Minimum: indication of support from required participants
    - □ Preferred: resolution of support signed by required participants
  - c. Pertinence of existing studies, plans, and information consistent with question 3 to the development of the comprehensive watershed management plan.

- Minimum: monitoring and assessment report (and stressor identification report, if applicable) approved
- Preferred: TMDL calculations and WRAPS document sufficiently developed to inform planning
- □ Highly Preferred: TMDL and WRAPS report on public notice or approved when proposal is submitted
- d. Demonstration of the partnership's readiness and commitment to planning together, based on early discussions of: capability, availability, and commitment to plan together, a shared understanding of one another's current work and strengths, and a vision for future watershed management that includes better resource outcomes and improved use of existing and future funding, consistent with questions 4 and 5.
  - □ Minimum: the following have been discussed or shared: staff capability and availability for planning, information about capacity and strengths present in each LGU.
  - Preferred: group has discussed 1W1P with local officials; group has shared information about one another's local programs; group has discussed a common vision for the future management of the watershed.
- e. Demonstration of understanding of the scope of work required for development of a comprehensive watershed management plan, consistent with question 6.
  - □ Minimum: group has discussed administrative roles.
  - □ Preferred: potential policy members have been identified and have met; MOA is drafted.
  - □ Highly preferred: MOA is signed by all required participants
  - □ Highly preferred: work plan and/or detailed budget drafted
- 2. Geographic distribution
- 3. Recommendation of the BWSR staff and inter-agency review committee

#### **BWSR Grant Administration**

BWSR reserves the right to partially fund any and all proposals based on the number of eligible proposals submitted, anticipated staff time requirements, and the amount of funding available. Proposals that are deemed complete may be considered for future proposal periods.

#### Timeline

- April 2, 2018– Proposal period begins
- July 2, 2018 Proposal deadline at 4:30 PM
- July August Proposal review
- August 22, 2018 BWSR Board approval of planning grant recipients
- Plans are intended to be submitted to BWSR by July 31, 2021

#### Questions

For more information concerning the request for proposal, contact BWSR's One Watershed, One Plan Coordinator: Julie Westerlund, julie.westerlund@state.mn.us or 651-600-0694.

#### COMMITTEE RECOMMENDATIONS

#### Northern Region Committee

- 1. Koochiching County Comprehensive Local Water Management Plan Rich Sve DECISION ITEM
- 2. Joe River Watershed District Revised Watershed Management Plan Neil Peterson **DECISION** ITEM
- 3. Annual Red River Basin Commission Grant Ryan Hughes DECISION ITEM

## BOARD OF WATER AND SOIL RESOURCES

#### **BOARD MEETING AGENDA ITEM**

AGENDA ITEM TITLE:	Koochiching County Comprehensive Local Water Management Plan						
Meeting Date:	March 28, 2018	}					
Agenda Category:	🛛 Committee	⊠ Committee Recommendation □		New Business		Old Business	
Item Type:	⊠ Decision	☑ Decision □		Discussion		Information	
Section/Region:	Regional Opera	tions/N	lorthern				
Contact:	Chad Severts						
Prepared by:	Chad Severts						
Reviewed by:	Northern Regio	nal			Committee(s)		
Presented by:	Rich Sve	Rich Sve					
Time requested:	5 minutes						
Audio/Visual Equipment Needed for Agenda Item Presentation							
Attachments:   Reso	lution 🛛 🕅	Order	🛛 Maj	o 🛛	Other Support	ing Ir	nformation
Fiscal/Policy Impact							
⊠ None			General Fund Budget				
Amended Policy Requested			Capital Budget				
New Policy Requested			Outdoor Heritage Fund Budget				
□ Other:			Clean Wa	ater Fund	d Budget		

#### **ACTION REQUESTED**

Approval of the Koochiching County Comprehensive Local Water Management Plan (CLWMP)

#### LINKS TO ADDITIONAL INFORMATION

Koochiching County Comprehensive Local Water Management Plan weblink:

https://koochichingswcd.org/wp-content/uploads/2018/02/final-koochiching-county-comprehensivelocal-water-management-plan.pdf

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

Koochiching County (County) has updated their Comprehensive Local Water Management Plan (Plan) as authorized under Minnesota Statutes, Section 103B.301, the Comprehensive Local Water Management Act. The initial step in the update process, the Priority Concerns Scoping Document (PCSD), was completed and the State's official comments were communicated to the County in a letter dated June 28, 2017. On January

5, 2017, the BWSR received the Plan, a record of the public hearing, and copies of all written comments pertaining to the Plan for final state review pursuant to Minnesota Statutes, Section 103B.315, subd. 5. State agency review comments were received from MDA, MDH, DNR, and MPCA.

BWSR staff completed its review and found the Plan meets the requirements of Minnesota Statutes, Section 103B.314. On March 7, 2018, the Northern Regional Committee met with County representatives and BWSR staff to review and discuss the Plan. The Committee's decision was to recommend approval of the Koochiching Comprehensive Local Water Management Plan update to the full 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 Local Water Management Plan for Koochiching County, pursuant to Minnesota Statutes, Section 103B.311, Subdivision 4 and Section 103B.315, Subdivision 5.

ORDER APPROVING COMPREHENSIVE LOCAL WATER MANAGEMENT PLAN

**Whereas**, the Board of Commissioners of Koochiching County (County) submitted a Comprehensive Local Water Management Plan (Plan) to the Minnesota Board of Water and Soil Resources (Board) on January 5, 2018, pursuant to Minnesota Statutes, Section 103B.315, Subdivision 5, 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. On April 17, 2017, the Board received a Priority Concerns Scoping Document from Koochiching County, pursuant to Minnesota Statutes, Section 103B.312.
- 2. On June 28, 2017, the Board approved official comments on Koochiching County's Priority Concerns Scoping Document. The approval was mailed to the county on June 28, 2017.
- 3. The Plan focuses on the following priority concerns:
  - A. Surface Water Quality
  - B. Ground Water Protection
  - C. Forest Management
  - D. Shoreline Management
  - E. Invasive Species
  - F. Wetland Management
  - G. Education and Outreach
  - H. Commercial/Industrial Impacts
- 4. On January 5, 2018, the Board received the Plan, a record of the public hearing, and copies of all written comments pertaining to the Plan for final State review pursuant to Minnesota Statutes, Section 103B.315, Subd. 5. State agency representatives attended and provided input at advisory committee meetings during development of the Plan. The following state review comments were received during the comment period.
  - A. Minnesota Department of Agriculture recommends approval of the Plan.

- B. Minnesota Department of Health provided comments for consideration and supports approval of the Plan.
- C. Minnesota Department of Natural Resources provided comments for consideration.
- D. Minnesota Pollution Control Agency provided comments for consideration.
- E. Minnesota Environmental Quality Board: No comments.
- 5. Northern Regional Committee. On March 7, 2018, the Northern Regional Committee of the Board reviewed the recommendation of the state review agencies regarding final approval of the Plan. Those in attendance from the Board's Committee were Neil Peterson, Gerald Van Amburg, Rich Sve, Gene Tiedemann, Rita Albrecht, and Committee Chair Tom Schulz. Board staff in attendance were Northern Regional Manager Ryan Hughes, and Board Conservationist Chad Severts. The representative from the County was Pam Tomevi. Board regional staff provided its recommendation of Plan approval to the Committee. After discussion, the Committee's decision was to present a recommendation of approval of the Plan to the full Board.
- 6. This Plan will be in effect for a ten-year period until March 28, 2028.

#### CONCLUSIONS

- 1. All relevant substantive and procedural requirements of law have been fulfilled. The Board has proper jurisdiction in the matter of approving a Comprehensive Local Water Management Plan for Koochiching County pursuant to Minnesota Statutes, Section 103B.315, Subd. 5.
- 2. The Koochiching County Plan attached to this Order states water and water-related problems within the county; priority resource issues and possible solutions thereto; goals, objectives, and actions of the county; and an implementation program. The attached Plan is in conformance with the requirements of Minnesota Statutes, Section 103B.301.

#### ORDER

The Board hereby approves the attached update of the Koochiching Comprehensive Local Water Management Plan. Koochiching County is required to assess the Plan at the midpoint and amend as necessary.

Dated at St. Paul, Minnesota, this twenty-eighth of March, 2018.

#### MINNESOTA BOARD OF WATER AND SOIL RESOURCES

BY: Gerald Van Amburg, Chair

# BOARD OF WATER AND SOIL RESOURCES

March 28, 2018

Koochiching County Commissioners c/o Pam Tomevi, Water Plan Coordinator 501 3<sup>rd</sup> Street, Suite 201 International Falls, MN 56649

#### RE: Approval of the Koochiching County Comprehensive Local Water Management Plan Update

Dear Koochiching County Commissioners:

The Minnesota Board of Water and Soil Resources (BWSR) is pleased to inform you the Koochiching County revised Comprehensive Local Water Management Plan (Plan) was approved at its regular meeting held on March 28, 2018. Attached is the signed Board Order that documents approval of the Plan and indicates the Plan meets all relevant requirements of law and rule.

This update of the Plan is effective for a ten-year period until March 28, 2028. The County is required to assess the plan at the midpoint and amend as necessary. Please be advised, the County must adopt and begin implementing the plan within 120 days of the date of the Order in accordance with Minnesota Statutes §103B.315, Subd. 6.

The commissioners and staff, local partner agencies, and water plan advisory members are to be commended for writing a plan that clearly presents water management goals, actions, and priorities of the County. With continued implementation of this water plan, the protection and management of Koochiching County's water resources will be greatly enhanced. The BWSR looks forward to working with you as you implement this Plan and document its outcomes.

Please contact Board Conservationist Chad Severts of our staff at 218-755-2671 or Chad.Severts@state.mn.us for further assistance in this matter.

Sincerely,

Gerald Van Amburg , Chair Minnesota Board of Water and Soil Resources

Enclosure:

**BWSR Board Order** 

Cc Jeff Berg, MDA (via email) Barbara Weisman, DNR (via email) Mike Peloquin, DNR (via email) Chris Parthun, MDH (via email) Juline Holleran, PCA (via email) Pat Carey, PCA (via email) Mike Kennedy, PCA (via email) Jenny Jasperson, PCA (via email) Chad Severts, BWSR (via email) Ryan Hughes, BWSR (via email) Annie Felix-Gerth, BWSR (via email) Hannah Pallmeyer, BWSR (via email) Koochiching County Comprehensive Local Water Management Plan

# 2018-2028











Cover Photo by Jeff Kantor

Collage Photos by Tom Morris

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The following Koochiching County Comprehensive Local Water Management Plan (KCCLWMP) as defined in Minnesota Statutes §103B.305, was developed to identify resource priority concerns in Koochiching County and will serve as the foundation for the 2018 - 2028 Koochiching County Comprehensive Local Water Management Plan update.

The KCCLWMP was developed by the Koochiching Soil and Water Conservation District, the Koochiching County Environmental Services Department, and the Koochiching County Water Plan Advisory Committee with input provided by local stakeholders and resource agencies.

## ACRONYMS AND ABBREVIATIONS

- AIS Aquatic Invasive Species
- BMPs Best Management Practices
- BWCA Boundary Waters Canoe Area
- BWSR Board of Water and Soil Resources
- CECs Contaminants of Emerging Concerns
- CSP Conservation Stewardship Program
- cfs Cubic feet per second
- DWSMA Drinking Water Supply Management Area
- EDCs Endocrine Disrupting Compounds
- EPA Environmental Protection Agency
- EQIP Environmental Quality Incentives Program
- ESD Environmental Services Department
- FEMA Federal Emergency Management Agency
- GIS Geographic Information System
- GWP Ground Water Protection
- HSPF Hydrologic Simulation Program-Fortran
- IJC International Joint Commission
- IRLWWB International Rainy-Lake of the Woods Watershed Board
- IS Invasive Species
- ITPH Imminent Threat to Public Health
- JPB Joint Powers Board
- KEDA Koochiching Economic Development Authority
- KCCLWMP Koochiching County Comprehensive Local Water Management Plan
- LOWWSF Lake of the Woods Water Sustainability Foundation
- MASWCD Minnesota Association of Soil and Water Conservation Districts
- MDH Minnesota Department of Health
- MN DNR Minnesota Department of Natural Resources
- MN DOT Minnesota Department of Transportation
- MFRC Minnesota Forest Resources Council
- MLEP Minnesota Loggers Education Program
- MPCA Minnesota Pollution Control Agency
- NHIS Natural Heritage Information System
- NLF Northern Lakes and Forests
- NKASD North Koochiching Area Sanitary District
- NOAA National Oceanic and Atmospheric Administration
- NRBG Natural Resources Block Grant
- NRCS Natural Resources Conservation Service
- P Phosphorus
- PCA Packaging Corporation of America
- PCPs Pharmaceuticals and personal care products

# 2018-2028 Koochiching County Comprehensive Local Water Management Plan

- RLWD Red Lake Watershed District
- SFIA Sustainable Forest Incentives Act
- SHPO State Historic Preservation Office
- SSTS Subsurface Sewage Treatment System
- SWCD Soil and Water Conservation District
- TIP Targeted Implementation Plan
- TIS Terrestrial Invasive Species
- TMDL Total Maximum Daily Load
- TP Total phosphorus
- TSS Total suspended solids
- USACE U.S. Army Corps of Engineers
- USDA U.S. Department of Agriculture
- USGS U.S. Geological Survey
- VNP Voyageurs National Park
- WCA Wetland Conservation Act
- WHAF Watershed Health Assessment Framework
- WHPA Wellhead Protection Area
- WHPP Wellhead Protection Plan
- WPAC Water Plan Advisory Committee
- WRAPS Watershed Restoration and Protection Strategy
- VNPCWJPB Voyageurs National Park Clean Water Joint Powers Board
# ACKNOWLEDGEMENTS

The Koochiching County Comprehensive Local Water Management Plan was developed through the involvement and participation of numerous individuals. In addition to offering our thanks to members of the public and various agency staff for their input and feedback, Koochiching County and Koochiching Soil and Water Conservation District would like to acknowledge the following individuals for their time, dedication and contributions to the planning process.

## Koochiching County Board of Commissioners

- Kevin Adee
- Brian McBride
- Ron Norby
- Wade Pavleck
- Wayne Skoe

## Koochiching Soil and Water Conservation District Board of Supervisors

- George Aitchison
- Richard Dreher
- Ralph Lewis
- Al Linder
- Eldon Voigt

Water Plan Advisory Committee

- Dale Olson, Director Koochiching County Environmental Services
- Pam Tomevi, District Administrator Koochiching Soil and Water Conservation District
- Kevin Adee, Commissioner Koochiching County
- Eldon Voigt, Supervisor Koochiching Soil and Water Conservation District
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- James Aasen, Forest Resource Specialist Koochiching Soil and Water Conservation District
- Eric Olson, Resource Conservationist Koochiching Soil and Water Conservation District
- Sam Soderman, Water Resource Specialist Koochiching Soil and Water Conservation District
- Cyndy Strand, Executive Director North Koochiching Area Sanitary District
- Marc Windsnes, Citizen– Former Water Plan Committee

- Tom Worth, Resident Rainy Lake Sportfishing Club
- Brian Dreher, Resident
- Chad Severts, Board Conservationist Board of Water and Soil Resources
- Kelly Voigt, District Conservationist Natural Resources Conservation Service
- Mike Kennedy, Project Manager Minnesota Pollution Control Agency
- Kevin Peterson, Area Supervisor MN Department of Natural Resources, Fisheries Division
- Rian Reed, Area Hydrologist MN Department of Natural Resources, Ecological and Water Resources Division

#### **Key Contributors:**

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# 1 EXECUTIVE SUMMARY

# 1.1 Introduction

This is an update to the 2007-2017 Koochiching County Comprehensive Local Water Management Plan which was developed by the Koochiching Soil and Water Conservation District (SWCD), the Koochiching County Environmental Services Department (ESD), and the Water Plan Advisory Committee (WPAC).

Koochiching County is located along Minnesota's northern-most border, adjacent to Ontario, Canada. It is the state's second largest county, covering more than 2,000,000 acres. Rainy River runs almost the full length of Koochiching County's jagged northern border and serves as an international border between the United States and Canada.

Koochiching County is home to seven major watersheds (see **Figure 1**) including the Rapid River, Lower Rainy River, Rainy River-Rainy Lake, Rainy Headwaters, Upper/Lower Red Lake, Big Fork River, and Little Fork River. Within these major watersheds are 157 minor watersheds. Because portions of each watershed intersect multiple jurisdictions, agencies and other partners work across the border to ensure healthy waters.



Figure 1: Koochiching County and Major Watershed Boundaries

Not only does water provide the foundation for a thriving fishery and tourism industry, it is a vital source of drinking water for many communities including International Falls and the City of Ranier on the U.S. side, Fort Frances, Kenora and Winnipeg on the Canadian side, as well as many First Nation and tribal communities.

Upper/Lower Red Lake watershed flows west into the Red River of the North Basin; all other watersheds in Koochiching County flow north to the Rainy River which then flows west to Lake of the Woods and are part of the Rainy River Basin. The greater Rainy River Basin (**Figure 2**) is home to some of Minnesota's finest forest and water resources, such as Voyageurs National Park and the Boundary Waters Canoe Area Wilderness (BWCA).

According to the U.S. Geological Survey (USGS) website, over the past five years, the average daily discharge at the mouth of the Rainy River below the dam was 11,072 cubic feet per second (cfs) and the average daily discharge where Rainy River enters Lake of the Woods was 14,265 cfs (figures were calculated using daily averages over the past five years). The additional discharge added between International Falls and Baudette comes mainly from other rivers that drain into Rainy River including the Big Fork, Little Fork, Black, Rapid, Baudette, and Winter Road Rivers as well as several rivers on the Canadian side.



Figure 2: Major Watershed Boundaries within the Rainy River Basin (U.S. and Canada)



Figure 3: Rapid River Watershed Boundary

# Rapid River Watershed

The Rapid River watershed, which covers 573,060 acres, is located in the Laurentian Mixed Forest Ecological Province of northern Minnesota. Over 79% of the land in the watershed is owned or managed by state entities (Minnesota Pollution Control Agency (MPCA)). According to the Minnesota Department of Natural Resources (MN DNR) Watershed Health Assessment Framework data (2015), the majority of this watershed is in Lake of the Woods County, with 23% lying within the borders of Koochiching County. This data also shows that 94% of the land cover is wetland and

2% is agriculture. Over 72% of the watercourses were altered historically for log transport and agricultural drainage. The population in the Rapid River watershed is low, 182 residents total (U.S. Census Bureau, 2010). Very few impervious surfaces exist, less than .05%. MN DNR's hydrology scores in the Rapid River showed no concern in water quality, ranging from 93-100 (where 100 is a perfect score).

# Lower Rainy River Watershed

The Lower Rainy River watershed lies on the United States-Canadian border and covers 195,153 acres. The watershed is situated in the Laurentian Mixed Forest Ecological Province of northern Minnesota. The Lower Rainy River watershed is characterized by extensive wetlands located on the Glacial Lake Agassiz lake bed (MPCA). The largest populated area in this watershed is the county's seat, International Falls (population 6,424 – U.S. Census Bureau, 2010). Much of the land in the watershed is poorly suited for agricultural uses.



Figure 4: Lower Rainy River Watershed Boundary

Wetlands are the dominate land cover at

approximately 48%, followed by forest at 32%, grass/pasture/hay at 9%, and row crops at 7%. Compared to the other six watersheds in Koochiching County, the Lower Rainy River watershed has a relatively higher percentage of private ownership, creating increased opportunities for private stewardship outreach to protect water quality.



Figure 5: Rainy River-Rainy Lake Watershed Boundary

#### Rainy River - Rainy Lake Watershed

The Rainy River-Rainy Lake watershed covers 583,791 acres and has a total population of 5,103 (U.S. Census Bureau, 2010). Open water makes up 75,815 of those acres and wetlands occupy another 84,851 acres. The northern boundary is part of the international border waters with Ontario, Canada. There are no large cities in this remote watershed. Ranier (population 145 – U.S. Census, 2010) is the only town and is located on the northwestern-most corner of the watershed. The eastern two-thirds of massive Rainy River-Rainy Lake is part of the border lakes in Voyageurs National Park (VNP), as are adjacent Namakan and Sand Point

Lakes. Rat Root River and Rat Root Lake are also located in this watershed. Protection projects began in 2011 and continue at present to enhance fish habitat and reduce shoreline erosion. More information on this project can be found at <u>http://koochichingswcd.org/conservation-partners-legacy-grant-cpl/</u>.

This area is primarily boreal forest on shallow soils over bedrock or peat bog. The eastern four-fifths is in the Border Lakes ecological sub-region; the western one-fifth is in the Little Fork/Vermillion Uplands interlaced with extensive wetland bogs. Wilderness recreation/tourism is the prime economic driver due to the scenic beauty, resorts, camping, fishing and hunting opportunities (MPCA). According to MN DNR Watershed Health Assessment Framework (WHAF) data (2015), hydrology scores ranged between 74-100 and water quality scores ranged from 92 to 97 on a scale of 1-100.

#### Rainy Headwaters Watershed

The Rainy Headwaters watershed covers 1,890,689 acres and includes 3,531 lakes which represent 267,654 of the watershed's acreage; wetlands represent another 362,218 acres. The population in this region totals 6,261 (U.S. Census Bureau, 2010).

The watershed starts in northern Cook and Lake Counties and flows west and northwesterly into St. Louis County, the Canadian border waters, Basswood Lake and the Rainy River. Only a very small, northwest portion of the Rainy Headwaters watershed crosses into Koochiching County.



Figure 6: Rainy Headwaters Watershed Boundary

This remote watershed is largely protected as the *Boundary Waters Canoe Area Wilderness (BWCAW)*, located in the northern third of the Superior National Forest in northeastern Minnesota. Approximately 1.1 million acres in size, it extends nearly 150 miles along the international boundary adjacent to Canada's Quetico

Provincial Park and is bordered on the west by Voyageurs National Park. According to the MN DNR Watershed Health Assessment Framework data (2015), the largest town in the Rainy River Headwaters is Ely, MN with a population of 3,460 (U.S. Census Bureau, 2010). This watershed consists of over 90% federal lands and has near perfect scores in both water quality and hydrology.



Figure 7: Upper/Lower Red Lake Watershed Boundary

#### Upper/Lower Red Lake Watershed

The Upper/Lower Red Lake watershed covers 1,263,678 acres. Located in Minnesota's Northern Wetlands, Northern Lakes and Forest Ecoregions and a portion of the Red River Valley Ecoregion, this watershed is home to Upper and Lower Red Lakes. Combined, these two lakes make up the largest body of water within the state. The watershed is, by both flow volume and surface area, the largest drainage basin of the Red River. Shotley Brook and the Tamarac River are the most prominent tributaries that flow directly into Upper Red Lake. Significant tributaries that flow directly into Lower Red Lake

(from west to east) include the Sandy River, Pike Creek, Mud River, Hay Creek, Blackduck River, and Battle River. According to the MN DNR Watershed Health Assessment Framework data (2015), Koochiching County holds 16% of the watershed, including the town of Northome, population 200 (U.S. Census Bureau, 2010). Excessive nutrients in Bartlett Lake are a concern in this watershed and will be discussed further in this document. This is the only watershed in Koochiching County that does not reside in the Rainy River Basin, but rather in the Red River of the North Basin. Upper/Lower Red Lake watershed scores high in water quality and hydrology but low in biological health (55% for terrestrial species and 65% for stream species). There are also a number of altered (channelized) streams.

#### Big Fork River Watershed

The Big Fork River watershed, which covers 1,326,947 acres, flows 165 miles from Dora Lake (45 miles northeast of Bemidji in north-central Itasca County) to the Rainy River, which forms the Minnesota/Canadian border. Towns within this watershed are Bigfork, population 446, and Big Falls, population 236 (U.S. Census Bureau, 2010). This confluence is 16 miles west-southwest of International Falls. Nearly 60% of the watershed is land owned or managed by the state. Just over 50% of this watershed lies within Koochiching County, shared with Itasca County and is 57% wetland. MN



Figure 8: Big Fork River Watershed Boundary

DNR's Watershed Health Report shows near perfect scores in the high 90's for water quality and hydrology, where flow variability and altered streams scored the lowest. A Watershed Restoration and Protection Strategy (WRAPS) with the MPCA was completed in 2016 and found no impairments in Koochiching County's portion of the Big Fork River watershed.

#### Little Fork River Watershed

The Little Fork River watershed is 1,179,520 acres, the main stem flowing 160 miles through north central St. Louis County and heading northwest into Koochiching County, then flowing more northerly until it reaches its confluence with the Rainy River about 11 miles west of International Falls. There are no large cities in this remote watershed. Cook's population is 667 and Little Fork, 674 (U.S. Census Bureau, 2010). According to MN DNR's Watershed Health Report, 39% of the Little Fork River watershed lies in Koochiching County, shared with Itasca and St. Louis counties



Figure 9: Little Fork River Watershed Boundary

and is 46% wetland. Water quality scored between 95 and 98 and hydrology scored between 69 and 99.

A WRAPS and TMDL were completed in 2015, where it was determined that there are impairments in Koochiching County stream segments for Total Suspended Solids (TSS), meaning there is too much sediment in the water to meet the water quality standard set by the MPCA for this water body. Koochiching SWCD plans to partner with adjacent counties over the course of this water plan to address as much of the TSS issue as possible.

**Table 1** below provides a good overview of the general make up and health of Koochiching County watersheds. However, due to variations in geographical boundaries used by different state and federal agencies as well as the timing of data collection, acres and percentages may vary between the text above and the table below.

	Total Acres	% of Watershed	Demulation		Water Quality					
Watershed		in Koochiching	1	Open Water	Crops	Prairie/ Shrub	Forest	Wetland	Developed	Scores
Rapid River	603,843	23%	182	0%	2%	1%	2%	94%	1%	93 - 100
Lower Rainy River	196,592	Not Listed	2,372	1%	13%	3%	3%	77%	2%	92 - 98
Rainy River - Rainy Lake	582,765	36%	5,103	17%	0%	5%	45%	32%	1%	92 - 97
Rainy Headwaters	1,607,851	Not Listed	6,261	14%	0%	8%	48%	29%	1%	91 - 98
Upper/Lower Red Lake	1,241,690	16%	10,784	24%	6%	1%	18%	49%	2%	92 - 98
Big Fork River	1,315,135	51%	5,079	5%	2%	5%	30%	57%	2%	95 - 99
Little Fork River	1,198,295	39%	7,319	3%	2%	10%	37%	46%	2%	93 - 98

#### Table 1: Watershed Statistics - MN DNR WHAF

# 1.2 Plan Purpose

The purpose of the Koochiching County Comprehensive Local Water Management Plan is to address existing and/or potential water resource related issues, threats, and concerns. Developed under the legislative authority and mandate of the Comprehensive Local Water Management Act (Minnesota Statutes, Chapter 103B), county water plans must:

- 1. Cover the entire area within a county;
- 2. Address water problems in the context of watershed units and groundwater systems;
- 3. Be based upon principles of sound hydrologic management of water, effective environmental protection, and efficient management;
- 4. Be consistent with local water management plans prepared by counties and watershed management organizations wholly or partially within a single watershed unit or groundwater system;
- 5. Cover a period of at least five years and no more than ten years; and
- 6. Fully utilize existing water and related land resources plan; including plans related to agricultural land preservation programs.

The Koochiching County Board of Commissioners has delegated the KCCLWMP update responsibility to the Environmental Services Department (ESD) and the Koochiching Soil and Water Conservation District (SWCD). As the LGUs responsible for the development and implementation of the KCCLWMP, the ESD and SWCD are committed to protecting, preserving and improving water resources in Koochiching County.

The first resolution by Koochiching County to develop a comprehensive local water management plan was in 1990, with the original plan being completed and adopted in 1995. Pursuant to Minnesota Statutes §103B.305, the KCCLWMP has been revised three times in the following years: 2000, 2007, and 2012.

The current Koochiching County Comprehensive Local Water Management Plan is set to expire on December 31, 2017.

# 1.3 Priority Concerns Addressed by Plan

After review of existing data and considering input from the public as well as local, state, and federal resource agencies, eight main priority concerns were selected for inclusion in the KCCLWMP. A summary of this process is located in **Appendix D** of this document (*Priority Concerns Scoping Document*).

# 1. Surface Water Quality

Koochiching County's surface water is a valuable resource for maintaining citizen health and well-being. The impacts of surface water to transport chemical, nutrient, and soil particles into water bodies makes management of Koochiching County's surface water quality a high priority and can be addressed through an array of different projects and programs.

# 2. Ground Water Protection

Groundwater is found in bedrock fractures and small glacial aquifers that often have a limited capacity for groundwater pumping. Clean groundwater is important as a drinking water supply for many residents within Koochiching County.

# 3. Forest Management:

Protection of forest hydrology through Best Management Practices (BMPs) and designation of riparian zones, training and education programs, community involvement, and retention of public ownership of water accesses can have a positive effect on water quality.

# 4. Shoreline Management

Koochiching County has 4,228.5 miles of shoreline. The proper management of the shoreline protection, use of BMPs and implementation of restoration initiatives can decrease the risk of erosion, runoff, and contamination of Koochiching's water resources.

# 5. Invasive Species

The presence/spread of aquatic and terrestrial invasive species has the potential to negatively affect native ecosystems, reduce biodiversity and negatively impact fisheries, wildlife habitat, water quality, tourism, recreational activities and the agricultural and forest industries.

## 6. Wetland Management

Wetlands provide valuable ecosystem functions and services that can be lost when impacts to wetlands occur from development, catastrophic weather events, and invasive species.

## 7. Education and Outreach

Public education is essential to sustain high water quality and good land management practices in Koochiching County.

# 8. Commercial / Industrial Impacts

Minimizing impacts of heavy industry activity through management and regulation will protect the natural resources in Koochiching County's watersheds.

Although individual concerns can appear to have minor effects on our vast water resources, it should be recognized that their cumulative effect can produce more significant actions. Koochiching County and Koochiching SWCD will continue to work with local, state, and federal agencies on assessing and addressing the cumulative effects of priority concerns on water resources wherever possible. These collaborative efforts play a key role in reaching our ultimate goal of keeping the waters of northern Minnesota among the most pristine in the state.

# 1.4 Summary of Plan Goals and Implementation

Priority concerns to be addressed in the KCCLWMP were identified through the assessment of current local and regional management plans as well as input from the Water Plan Advisory Committee, resource agencies, and the public. Existing studies and plans were reviewed to identify overlapping goals and potential project partners. Using these resources, priority concerns were defined, measurable goals were developed, and implementation activities were assigned to address individual goals, in combination with local knowledge of the specific resource protection and/or restoration needs.

The implementation activities were prioritized and sorted by tiers, resulting in the development of three separate implementation planning categories within the *KCCLWMP Targeted Implementation Plan (TIP)*, a 10-year plan with identified actions to achieve the stated goals (see **Table 4** on **pages 50** through **60**). Within the plan, activities to be completed include on the ground conservation practices, data collection, outreach and education, and implementation of protection and restoration strategies. On an annual basis, the WPAC will meet to review activities identified in all three tiers of the TIP, assess progress, and re-evaluate/set priorities for the next year.

The first tier includes activities to be completed with currently approved funding and identified as carried out by the County and SWCD, the entities ultimately responsible for plan implementation.

The second and third tiers contain other implementation items that were identified as needing additional funding or staff resources and/or supported by the KCCLWMP but led and administered by an entity other than the County or SWCD.

# Tier 1 – Targeted Implementation Activities

This tier identifies implementation activities that Koochiching County and Koochiching SWCD plan to undertake within the 10-year time frame of the KCCLWMP, funded by the Natural Resources Block Grant (NRBG), Local Capacity Grant, and/or in-house contributions.

# Tier 2 – Secondary Implementation Activities

This tier identifies implementation activities that Koochiching County and Koochiching SWCD hope to accomplish if additional sources of funding, staff resources, or shared service opportunities become available over the 10-year time frame of the KCCLWMP.

# Tier 3 – Partner Implementation Activities

This tier contains additional implementation activities identified during the plan development process that are the responsibility of state and/or federal agencies or are better suited to other entities in the watershed. In addition to the annual review, ongoing partner communication will continue to identify opportunities to collaborate on these implementation activities.

The estimated cost to implement action items within the KCCLWMP Targeted Implementation Plan is approximately \$1,136,420 (Tier 1 activities), \$24,021,330 (Tier 2 activities), and \$820,595 (Tier 3 activities) for a total estimated cost of \$25,978,345 over the next 10 years.

# 1.5 Local, State, and Regional Plans

While determining priority concerns, existing state, local, and regional management plans were reviewed including the Northern Landscape Management Plan, Big Fork River WRAPS final document, Little Fork River WRAPS draft document, Little Fork River Watershed Total Maximum Daily Load (TMDL) draft document, Little Fork/Rat Root River Management Plan, Big Fork River Management Plan, "A Long Range Plan for the Management of Tax Forfeited Land and Forest Resources of Koochiching County", 2014 Multi-Hazard Mitigation Plan, Koochiching County Subsurface Sewage Treatment System (SSTS) Ordinance, Voyageur's National Park General Management Plan (2002), 2007 Koochiching County Priority Concerns Scoping Document from the Comprehensive Local Water Management Plan, and the 2015 "A Water Quality Plan of Study for the Lake of the Woods Basin". Information found in these plans was used to ensure consistency with regard to potential goals, objectives, and action items identified in the KCCLWMP.

This review confirmed that all priority concerns selected are supported by these existing resource management plans. The review of other plans also highlighted additional issues for consideration including stormwater reduction, feedlot permits and rules, and preservation of historical and archeological sites.

# 2 ASSESSMENT OF PRIORITY CONCERNS

# 2.1 Priority Concerns Analysis

Priority concerns areas were determined based on data derived from a variety of sources including WRAPS and TMDL reports from the MPCA, MN DNR WHAF, Rapid Watershed Assessment reports from United Stated Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS) and geographic information system (GIS) mapping developed by the Minnesota Association of Soil and Water Conservation Districts (MASWCD) Area 8 GIS specialist (see **Appendix C** for information on priority concerns map development).

# SURFACE WATER QUALITY (SWQ)

Koochiching County's surface water is a valuable resource for maintaining citizen health and well-being; it is equally valuable for local wildlife and the economy. The potential impacts of surface water transportation of

chemical, nutrient, and soil particles into water bodies makes management of Koochiching County's surface water quality a high priority. This can be addressed through an array of different projects and programs such as forestry and agricultural BMPs, drinking water source protection, flood effect mitigation, improving/protecting at risk waters, maintaining local septic systems, and increasing stormwater management.



# BOARD OF WATER AND SOIL RESOURCES

#### **BOARD MEETING AGENDA ITEM**

AGE	NDA ITEM TITLI	Joe River	Watersh	Vatershed District Revised Watershed Management Plan								
Mee	ting Date:		Ma	rch 28, 201	18							
Age	nda Category:		$\boxtimes$	Committe	e Recom	nmenda	tion		New Business		Old Business	
Item	п Туре:		$\boxtimes$	Decision					Discussion		Information	
Sect	ion/Region:		Reg	gional Oper	rations/N	Northerr	า					
Con	tact:		Ma	tt Fischer								
Prep	oared by:		Ma	tt Fischer								
Revi	ewed by:		No	rthern Regi	ional				Committee(s)			
Pres	ented by:		Nei	l Peterson								
Time	e requested:		5 m	ninutes								
	Audio/Visual E	quip	ment Nee	ded for Ag	enda Ite	em Pres	entatio	on				
Atta	chments:		Resolutio	n 🛛	Order	×V	lap	$\boxtimes$	Other Support	ting Ir	nformation	
Fisca	I/Policy Impact											
⊠ None					General Fund Bud							
Amended Policy Requested						Capital Budget						
	New Policy Rec	quest	ed			Outdo	or Heri	itage	e Fund Budget			
	Other:					Clean \	Water	Fund	d Budget			

#### **ACTION REQUESTED**

Approval of the Joe River Watershed District Revised Watershed Management Plan as recommended by the Northern Regional Committee.

LINKS TO ADDITIONAL INFORMATION

Link to Revised Watershed Management Plan:

http://www.bwsr.state.mn.us/boardpackets/nr committee/2018/JRWD Overall Plan.pdf

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

Joe River Watershed District (JRWD) submitted a proposed Revised Watershed Management Plan (Plan) to the Board of Water and Soil Resources (BWSR) on September 29, 2017, and a final Plan on January 5, 2018.

The JRWD is located in the extreme northwest corner of Minnesota and encompasses 124 square miles of area entirely within Kittson County. The Plan follows the BWSR Administrative Guidelines for Red River Basin Watershed District Revised Watershed Management Plan Content from December 1998. The Plan

incorporates new data and information that has come available since the last plan revision including a distributed detention study, culvert inventory, recommendations regarding surface and subsurface drainage, technical papers developed by the Flood Damage Reduction Work Group, and the Watershed Restoration and Protection Strategies. This revision also improves on the measurability of goals, objectives, and desired outcomes for both flood damage reduction and natural resource enhancement.

BWSR staff completed its review and subsequently found the Plan meets the requirements of Minnesota Statutes.

On March 7, 2018, the Northern Regional Committee (Committee) met to review and discuss the Plan. The Committee's decision was to recommend approval of the Joe River Watershed District Revised Watershed Management Plan to the full 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 prescribing a Revised Watershed Management Plan for the Joe River Watershed District Pursuant to Minnesota Statutes, Section 103D.405

ORDER PRESCRIBING WATERSHED MANAGEMENT PLAN

**Whereas**, the Joe River Watershed District (District) filed a proposed Revised Watershed Management Plan (Plan) with the Board of Water and Soil Resources (Board) on September 29, 2017, and a final revised Plan on January 5, 2018, pursuant to Minnesota Statutes, Section 103D.405, 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. **District Establishment.** The District was established on January 31, 1958, and is located in the NW corner of Kittson County. The general purposes of the District are to manage flooding, water quality, water supply, and drainage.
- 2. **Requirement to Plan.** A watershed district is required to revise their watershed management plan at least once every ten years pursuant to Minnesota Statutes, Section 103D.405, Subd. 1 (a). The latest Watershed Management Plan of the District was prescribed by the Board on September 13, 2004. The Plan includes an inventory of the District's physical features and water resources, describes water-related problems and possible solutions, describes activities that the District has completed, and states objectives for current and future water resource management.
- 3. **Nature of the Watershed.** The District is made up of eight separate sub-watershed areas. Most are tributaries to the Joe River, with a few exceptions that drain directly to the Red River, directly to Canada, or enter an unnamed coulee near the St. Vincent area. These sub-watersheds range in size from a few hundred acres to about 25 square miles. The District is bordered to the west by the Red River of the North (also the Minnesota/North Dakota border), to the north by the Province of Manitoba, Canada, and to the east and south by the Two Rivers Watershed District. The District lies within the area once covered by prehistoric glacial Lake Agassiz. The glacial lake receded by stages, each of which is represented by sandy beach deposits and shallow near-shore sands, which occur in the eastern portion of the District. The fine textured silt and clay material stirred up by wave action on Lake Agassiz were carried to quiet deep water areas and deposited out as lake clays, and formed the very flat, Red River Valley. Land use within the District is primarily agriculture cropland with wheat, barley, sugarbeets, and soybeans as the primary crops. In the northeastern areas of the District there are pasture, hay, CRP, and scrub-shrub lands mixed with wetland areas. There are only two small

municipalities in the District, Humboldt and St. Vincent.

- 4. **Territory.** The District is approximately 124 square miles in size (79,360 acres of land) and is located in the extreme northwest corner of Minnesota entirely within Kittson County. The District accounts for approximately 11% of the total land area within the County.
- 5. Local Review. The District sent a copy of the draft Plan to local units of government for their review pursuant to Minnesota Statutes, Section 103D.405.
- 6. **Department of Natural Resources Review.** The Department of Natural Resources, in a letter dated November 29, 2017, provided comments on the Plan recommending that the District use the Ecological Classification System to describe the ecological landscape down to the subsection level, request a NHIS database query and list and describe the rare and endangered species found within the watershed, and improve on the measurability of goals and actions identified in the plan. They also recommended that the District consider the use of MESBOAC criteria, the Minnesota Public Drainage Manual, and natural stream design for future implementation. The DNR's comments have been acknowledged, but the District does not feel the recommendations belong in the Plan.
- 7. **Minnesota Geological Survey Review.** The Minnesota Geological Survey, in correspondence dated October 5, 2017, provided comments on the Plan that were editorial in nature. The District incorporated all recommended changes into the final revised Plan filed with the Board on January 5, 2018.
- 8. **Highlight of the Plan**. The Plan follows the BWSR Administrative Guidelines for Red River Basin Watershed District Revised Watershed Management Plan Content from December 1998. The Plan incorporates new data and information that has come available since the last plan revision including a distributed detention study, culvert inventory, recommendations regarding surface and subsurface drainage, technical papers developed by the Flood Damage Reduction Work Group, and the Watershed Restoration and Protection Strategies. This revision also improves on the measurability of goals, objectives, and desired outcomes for both flood damage reduction and natural resource enhancement. The District intends to work closely with the County, Soil and Water Conservation District (SWCD), and other regional, state and federal entities to achieve the policies and proposed actions outlined in the Plan, paying particular attention to flood damage reduction, soil erosion, agricultural drainage, and natural resources.
- 9. Hearing Notice. The Legal Notice of Filing on the Plan, pursuant to Minnesota Statutes, Section 103D.105, Subd. 2, was published in the Kittson County Enterprise on the weeks of December 20<sup>th</sup> and 27<sup>th</sup>, 2017. Further, a copy of the notice of filing was mailed to several addresses notifying them of the Legal Notice of Filing, including the Kittson County Auditor/Administrator, and SWCD; all of the municipalities within the District; and a representative for the Watershed District.
- 10. **Public Hearing.** The Legal Notice of Filing was published pursuant to Minnesota Statutes, Section 103D.105, Subd. 2, which requires within 30 days of the last date of publication of the Notice of Filing of the Revised Watershed Management Plan that at least one request for hearing be received by the Board before a hearing will be held. No request for hearing and no comments from the public were received during the specified period of time and no hearing was held.

- 11. **Board Staff Report.** Staff participated with the District through the revision process, providing guidance, comments, and recommendations. The final revised Plan does conform to the requirements of Minnesota Statute, Chapter 103D and guidance developed by BWSR. Therefore, staff recommends approval of the District's Revised Plan and look forward to assisting the District in its implementation.
- 12. Northern Regional Committee. The Northern Regional Committee (Committee) met on March 7, 2018 to review and discuss the Plan. Committee members present were Neil Peterson, Gerald Van Amburg, Rich Sve, Gene Tiedemann, Rita Albrecht, and Committee Chair Tom Schulz. Board staff present were Northern Regional Manager Ryan Hughes and Board Conservationist Matt Fischer. Based on the record, the Plan meeting the requirements of Minnesota Statutes, Section 103D.405, and staff recommendation to approve the Plan, the Committee unanimously recommended approval of the District's Revised Plan.

# CONCLUSIONS

- 1. The proposed Revised Plan is valid in accordance with Minnesota Statutes, Section 103D.405.
- 2. Proper notice of filing was given in accordance with applicable laws.
- 3. All relevant, substantive and procedural requirements of law and rule have been fulfilled.
- 4. The Board has proper jurisdiction in the matter of prescribing a Revised Plan for the District pursuant to Minnesota Statutes, Section 103D.405.
- 5. The attached Revised Plan of the District received January 5, 2018, would be for the public welfare and public interest and the purpose of Minnesota Statute, Chapter 103D would be served.

# ORDER

The Board hereby prescribes the attached Plan received January 5, 2018, as the Revised Watershed Management Plan for the Joe River Watershed District.

Dated at Saint Paul, Minnesota this twenty-eighth day of March, 2018.

# MINNESOTA BOARD OF WATER AND SOIL RESOURCES

By: Gerald Van Amburg, Chair

# BOARD OF WATER AND SOIL RESOURCES

March 28, 2018

Joe River Watershed District Managers c/o H. Shane Stewart, President 3809 160<sup>th</sup> Ave Humboldt, MN 56731

#### RE: Approval of the Joe River Watershed District Revised Watershed Management Plan

Dear Joe River Watershed District Managers:

The Minnesota Board of Water and Soil Resources (BWSR) is pleased to inform you the Joe River Watershed District Revised Watershed Management Plan (Plan) was approved at its regular meeting held on March 28, 2018. Attached is the signed Board Order that documents approval of the Plan and indicates the Plan meets all relevant requirements of law and rule.

The Joe River Watershed District Board, local partner agencies, and plan advisory members are to be commended for writing a plan that presents water management goals, actions, and priorities of the District. With continued implementation of this Plan, the protection and management of the Joe River Watershed will be greatly enhanced. The BWSR looks forward to working with you as you implement this Plan and document its outcomes.

Please contact Board Conservationist Matt Fischer of our staff at 218-755-2683 or matt.fischer@state.mn.us for further assistance in this matter.

Sincerely,

Gerald Van Amburg, Chair Minnesota Board of Water and Soil Resources

Enclosure:

BWSR Board Order Joe River Watershed District Revised Watershed Management Plan

CC: Eric Christensen, Kittson County Administrator (via email) Jamie Osowski, Kittson SWCD District Manager (via email) Nathan Kestner, DNR (via email) Ryan Hughes, BWSR Regional Manager (via email) Matt Fischer, BWSR Board Conservationist (via email) Hannah Pallmeyer, BWSR (file copy)

# Joe River Watershed District

In Northwest Kittson County, Minnesota

# **Overall Plan** 2017

# OVERALL PLAN OF THE JOE RIVER WATERSHED DISTRICT Revised September 13, 2004 Revised March, 2018

# **Board of Managers**

Name	Office	Address	Term Expires
H. Shane Stewart	President	3809 160 <sup>≞</sup> ave, Humboldt, MN 56731	2018
Marshall Hemmes	Secretary	P.O. Box 27, Humboldt, MN 56731	2018
John Finney	Treasurer	P.O. Box 13, Humboldt, MN 56731	2019
Leroy Clow	Manager	1225 370 <sup>th</sup> St., St. Vincent, MN	2017
Neil Wiese	Manager	P.O. Box 11, Humboldt, MN 56731	2019

## **District Mailing Address**

P.O. Box 27, Humboldt, MN 56731 Phone: 218-379-3205 Email: Finney@wiktel.com

#### Advisory Committee

Dennis Diamond Theun Steyn Ken Spanier Bill Dykhuis Chris Ohman Vernon Bahr

## Meeting Information

2<sup>nd</sup> Monday of the following months: January, March, June, July, September, & December at St. Vincent Town Hall, Humboldt, Minnesota (unless otherwise noted/posted)

#### Consultants

Legal Counsel:	Brink, Sobolik, Severson, Malm, & Albrecht, P.A.; Hallock, MN
Engineering:	Widseth, Smith, & Nolting
Auditor:	Dahl, Hatton, Muir, & Reese; Hallock, MN
Planning & Technical:	Prairie Aquatics; Hallock, MN

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#### I. INTRODUCTION

The Joe River Watershed District (JRWD) was organized on January 31, 1958, the third watershed district established in the State of Minnesota. It has been governed by a 5 member Board of Managers since its inception. The first JRWD Overall Plan was prescribed by the Minnesota Water Resources Board on December 16, 1958. This first Overall Plan was terminated on December 15, 1986 and on the same day the first Revised Overall Plan was prescribed. The first Revised Overall Plan was replaced by the 2<sup>nd</sup> Revision of the Overall Plan on September 13<sup>th</sup>, 2004, and the current 3<sup>rd</sup> Revision was approved in March 2018.

Since its inception, the JRWD has conducted its business for the sole purpose of the management of water natural resources, concentrating on drainage, flood control, and water quality. The operations of the JRWD are governed by the Minnesota Statutes Chapter 103D. The JRWD is a local unit of government and is considered a "Special District" under this statute. Annual reports and audits are filed annually with the MN Board of Water & Soil Resources.

One of the first projects the District undertook was a flood control and water management project constructed through the federal PL-566 program in cooperation with the Kittson Soil & Water Conservation District (SWCD) and the USDA Natural Resources Conservation Service (NRCS). This project (described in more detail later in this plan) constructed a channel improvement to provide drainage capacity for up to a 10 year runoff event, and to address flood damage reduction by providing an adequate outlet for floodwater. Other programs of the District over the years have included construction of several farmstead ring dikes, a water quality monitoring program, culvert inventory, administration of the *Rules of the Joe River Watershed District*, and other data collection activities.

The *Rules of the JRWD* were adopted on September 21, 1988 and became effective on November 16, 1988. These Rules were updated and revised on February 14, 2000. The *Rules* govern the manipulation of the water based natural resources of the District. Under these *Rules*, permits are required from the Board of Managers for such activities as ditching, diking, installation of culverts, road construction, water appropriation, and other activities that affect water management.

To date, the JRWD has focused its activities primarily on flood control. The land area of the District is not only affected by flooding on the main channel of the Joe River and its tributaries, but also by the flooding from the Red River of the North. The JRWD, being the furthest land area north and west in the State of Minnesota, is the last area to be affected by the Red River before it enters the Province of Manitoba, Canada. At this point the Red River is several miles wide during a major flood event.

Other problems or issues that are being addressed by the District are erosion control, water quality, wildlife, maintenance of projects, investigation of new projects, information and education, and data collection.

The JRWD has taxing authority and receives funding through levies and through grants and State and Federal programs. The District participates as a member of the Red River Watershed Management Board (RRWMB). Through this organization ½ of taxes collected under the construction fund are turned over to the RRWMB for the purpose of flood control on the Red River of the North. This was authorized by action of the Minnesota Legislature in 1976.

#### **II. MISSION STATEMENT**

Minnesota Statutes, Chapter 103D govern all aspects of Watershed Districts within the State. It is the intent of the Board of Managers of the Joe River Watershed District to carry out the powers of Watershed Districts as set forth under this Statute. In doing so, the Board of Managers will pay particular attention to flood control, prevention of flood damages, water quality, water supply, erosion and sedimentation, wildlife, maintenance of existing projects, public health, and recreation.

The powers of a watershed district, as stated in Minnesota Statutes, Chapter 103D are as follows:

103D.201 Watershed District purposes.

Subdivision 1. General purposes. To conserve the natural resources of the state by land use planning, flood control, and other conservation projects by using sound scientific principles for the protection of the public health and welfare and the provident use of the natural resources, the establishment of watershed districts is authorized under this chapter.

Subd. 2. Specific purposes. A watershed district may be established for any of the following purposes:

(1) to control or alleviate damage from flood waters;

(2) to improve stream channels for drainage, navigation, and any other public purpose;

(3) to reclaim or fill wet and overflowed land;

(4) to provide a water supply for irrigation;

(5) to regulate the flow of streams and conserve the streams' water;

(6) to divert or change all or part of watercourses;

(7) to provide or conserve water supply for domestic, industrial, recreational, agricultural, or other public use;

(8) to provide for sanitation and public health, and regulate the use of streams, ditches, or watercourses to dispose of waste;

(9) to repair, improve, relocate, modify, consolidate, and abandon all or part of drainage systems within a watershed district;

(10) to control or alleviate soil erosion and siltation of watercourses or water basins;

(11) to regulate improvements by riparian property owners of the beds, banks, and shores of lakes, streams, and wetlands for preservation and beneficial public use;

(12) to provide for hydroelectric power generation;

(13) to protect or enhance the water quality in watercourses or water basins; and

(14) to provide for the protection of groundwater and regulate its use to preserve it for beneficial purposes.

It is the Joe River Watershed District's stated mission to:

Utilize and carry out the intended duties of Watershed Districts as directed under Minnesota Statute, Chapter 103D. In doing so, the Board of Managers will apply sound technical, scientific, and practical methods to carry out projects relating to flood control, water quality, water quantity, natural resources, and other water management issues. The District will cooperate and work with other local, state, and federal units of government, private organizations, and individuals to the best of its ability.

The JRWD has been effective in carrying out its intended goals in numerous ways. The District has implemented flood control projects, and has established water quality monitoring and culvert inventory projects in order to accomplish its goals and objectives. The *Rules of the Joe River Watershed District* are utilized to issue permits for works of improvement that affect the water natural resources within the District. Further work and investigations will be undertaken as needed and approved by the JRWD in order to improve upon past accomplishments.

#### **III. DESCRIPTION OF THE DISTRICT**

- A. Watershed Setting
  - 1. Location & Size

The land area of the Joe River Watershed district is located in the extreme northwest corner of Kittson County, which is the northwestern most county in the State of Minnesota. The District comprises 79,360 acres of land (124 square miles) in all or parts of the Townships of St. Vincent, Clow, Richardville, Hill, and Hampden. The JRWD is bordered to the west by the Red River of the North (also the MN - ND border), to the north by the Province of Manitoba, Canada, and to the east and south by the Two Rivers Watershed District.

Beginning in the southwest corner of the District, the boundary line runs 9.5 miles north following the Red River. The boundary then travels 19 miles east along the Canadian border, where it turns south - south west for a distance of 9.5 miles. The border then travels westerly about 10 miles back to the point of origin. [See figure #1- Basemap]



Figure 1. Basemap

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#### 2. Political Units Within the District

Several International, Federal, State, and Local political units of government exist within the boundaries of the Joe River Watershed District. For the purposes of this plan, the entities pertinent to water management and their website contact information are listed below.

**INTERNATIONAL AND REGIONAL** 

The International Joint Commission (IJC): www.ijc.org

Red River Basin Commission: www.redriverbasincommission.org

Red River Watershed Management Board (RRWMB): www.rrwmb.org

#### FEDERAL AGENCIES

U.S. Army Corps of Engineers (USACE): www.mvp.usace.army.mil/us Fish & Wildlife Service (USFWS): http://midwest.fws.gov/agassiz/ USDA Natural Resources Conservation Service (NRCS): www.mn.nrcs.usda.gov USDA Farm Service Agency (FSA): www.fsa.usda.gov/MN/ U.S. Environmental Protection Agency (EPA): www.epa.gov/ow/index.html Federal Emergency Management Agency (FEMA): www.fema.gov/reg-v/ U.S. Geological Survey (USGS): www.mn.water.usgs.gov NOAA / National Weather Service: www. http://www.weather.gov/fgf/

STATE AGENCIES <u>https://mn.gov/portal/</u>

Board of Water & Soil Resources (BWSR): www.bwsr.state.mn.us Department of Natural Resources (DNR): www.dnr.state.mn.us Pollution Control Agency (MPCA): www.pca.state.mn.us Department of Agriculture (MDA): www.mda.state.mn.us Department of Health (MDH): www.health.state.mn.us Department of Transportation (MNDOT): www.dot.state.mn.us Environmental Quality Board (EQB): www.mnplan.state.mn.us/eqb Geological Survey (MGS): www.mngs.umn.edu

# Local Agencies <a href="http://visitnwminnesota.com/">http://visitnwminnesota.com/</a>

There are several local agencies that have some sort of mission pertinent to water resources. The above website is a good resource to utilize in learning about the local political subdivisions within the Joe River Watershed District. Listed below are the major units that relate to the activities of the JRWD.

Kittson County Board of Commissioners: <u>http://co.kittson.mn.us/</u> Kittson County Department of Emergency Management Kittson County Highway Department Kittson County Geographic Information System / atlas Kittson County Soil & Water Conservation District: <u>http://www.kittsonswcd.org/</u>

North Kittson Rural Water

City of Humboldt

City of St. Vincent

Townships of St. Vincent, Clow, Richardville, Hill, and Hampden

#### 3. Population Characteristics

Statistics from the U.S. Census bureau indicate that the population of the JRWD and Kittson County has steadily declined since the 1950's. The table below shows the current population trends within selected governmental subdivisions in the Joe River Watershed District.

Kittson County Demographic Information

Kittson County Population Source: US Census of Population and MN Demographers Office Estimates

	1950 Pop. Census	1960 Pop. Census	1970 Pop. Census	1980 Pop. Census	1990 Pop. Census	2000 Pop. Census	2010 Pop. Census
Kittson County	9,649	8,343	6,852	6,672	5,767	5,285	4,552
Clow township	174	124	104	49	33	37	46
Hampden twp	117	111	84	64	56	51	38
Hill township	131	125	63	41	32	18	15
Humboldt city	143	169	112	111	74	61	45
Richardville twp	246	196	162	171	126	110	102
St. Vincent city	272	217	177	141	116	117	64
St. Vincent twp	338	307	192	127	118	74	58

#### 4. The Economy

#### A. Agriculture

Ninety percent of the JRWD is devoted to farming, and farms are generally large with small grains, beans and sugar beets the most common crops. Other crops grown include sunflowers, grass seeds, legumes, canola, and corn. Land values in 2016 ranged from \$760 to \$3,067 per acre for tillable acres within the District and \$237 to \$598 per acre for woodland, according to statistics from the Kittson County Assessor's office. In general, the lower values are on the eastern end of the District in the sandy ridge areas, and the higher values are on the western end in the flat lake-plain.

In addition to crops, several beef cattle operations exist, generally in the eastern portion of the District. These operations consist of pasture and hay land. Cattle are let out to pasture during the spring, summer, & fall months and kept in yards during the winter months.

Two agricultural processing facilities in the area are the American Crystal Sugar plant located in Drayton, ND and a CHS canola processing plant located 15 miles south of the City of Humboldt. Sugar beets are placed in piles at a piling facility located near Humboldt, and later trucked to the plant. The canola facility accepts both truck and rail delivery of canola, which is then crushed to produce canola oil and shipped to market via railway. Other crops are shipped out of the area to processing plants via railroad or over the road semi truck. One grain elevator is located in the City of Humboldt and one is also located in the City of Hallock. Another is under construction south of Hallock.

#### B. Industry

Industry contributes in part to the economy of the area. Motor Coach Industries, a bus manufacturing plant located just outside of the District in Pembina, North Dakota, employs several hundred people. This is vital to the population of the small cities of Humboldt and St. Vincent.

Utility companies are another important source of industry. Two natural gas pipelines cross the District and have pumping facilities located near the Canadian border. Great Lakes Gas Transmission's facility is within ½ mile of the international border, located 7 miles east of the US Customs station at Noyes. Excel Energy's station is located along Kittson County State Aid Highway #6 one mile east of the City of Humboldt.

Other industry within the District includes several power line transmissions (PKM & Otter Tail) and telephone transmissions. Ag related businesses are also predominant. Cenex Land O' Lakes operates a bulk fertilizer plant in Humboldt. A service garage and bulk oil station is located between Humboldt and Noyes along US Highway #75. At the Canadian border in Pembina, ND is a port of entry with US Customs and Border Patrol. A number of agricultural chemical crop spraying operations serve farmers within the District. Business and industry has seen a steady decline in the past 20 years.

#### C. Transportation

Transportation within the District consists mainly of a network of highways and rail roads. There are no municipal or regional airports within the District however the City of Hallock's municipal airport is located 12 miles south of the City of Humboldt. US Highway #75 runs north - south through the middle of the District, and US Highway 59 is located 1 mile east of the eastern side of the District for a distance of 1.5 miles north - south. Minnesota State highway #171 connects US highway 75 to the City of St. Vincent and is a major route to cross the Red River into Pembina, ND. A major network of county state aid highways, county roads, and township roads also connect various points within the District (see Figure 1). These range from bituminous to gravel to dirt trails.

Two railroads have depots at Noyes - the Soo Line and Burlington Northern Sante Fe. Burlington's line runs parallel to US highway #75 and the Soo Line runs diagonally NW -SE across the north eastern portion of the District.

#### **B.** Physical Features

#### 1. Climate

Kittson County is in the extreme northwest corner of Minnesota, in the heart of the rich Red River Valley. The county, near the center of the North American continent, is well within the great interior climate region, and has a very strong continental climate. Outside of mountain regions, the northwest portion of Kittson County is one of the coldest locations in the United States. Winters are very cold, but summers are mild and pleasant. Daily or weekly extremes of temperature may be great in any season.

Temperatures measured in Humboldt, MN between 1995 and 2015 indicate the low average monthly temperature is 2.17 degrees F in January and the high is 67.9 degrees F in July. Extreme temperatures can vary between -50 to over 100 degrees F. Average precipitation for the period was 20.98" with the most occurring in the month of June and the least occurring in February. 24 hour rainfall events have occurred in excess of 10", however 2" to 4" events are more common.

The prevailing wind is out of the north - northwest. However, the wind blows from the northeast quadrant slightly over 25% of the time, and from the southwest quadrant onethird of the time. April is the windiest and July is the least windy. Strongest winds are usually from the northwest quadrant, the lightest from the northeast quadrant. Southwesterly winds are also usually light with the exception of the summer months. Kittson County is subject to daylong windstorms of gale velocity that may result in extensive blowing dust, and very occasionally may lower visibility to a mile or less. Tornadoes and straight line winds have been documented in the county during the summer months.

Dust limits visibility to 6 miles or less 0.6% of the time over the year as a whole, which is not a small amount of time relative to most of the United States and most other parts of Minnesota. In April, the figure rises to 4% of the time. Dust reaches minimum impact in August and again in December. In summer, high winds are generally brief, and limited to occasional high velocities (over 50 mph) from the thunderstorm activity. Dust occasionally blows prior to the beginning of rain from such a storm. Such winds produce damage of a localized nature, in a spotty pattern. Hail falls at times in the warmer part of the year, but such storms occur in an irregular pattern and affect relatively small areas.

Sunshine is a vital part of the Kittson County climate, since it is far north. At the summer solstice, day length is 16 hours, 20 minutes, while at the winter solstice, it is 8 hours, 6 minutes. Possible sunshine varies from 70% in July (when the days are also long) to 38% in November (when the days are also short). On a seasonal basis, winter averages

59%, spring 58%, summer 63%, and autumn 47%.

In the past 25 years, climate change has been a subject of concern and debate both in the scientific and social arenas. This plan recognizes that climate change may be happening, and the JRWD Board of Managers will adapt its policies, programs, and activities as needed to address concerns of its constituents.

The following tables, charts and maps are intended to give background information regarding climate within the Joe River Watershed District.

Data from North Dakota Agricultural Weather Network https://ndawn.ndsu.nodak.edu National Weather Service Monthly Normals Period of Record: 1995 to 2015 Humboldt, MN; Lat 48.884, Long -97.15 Elevation 798 ft msl

Average Monthly Temperature and Precipitaion

Month	Max Air Temp	Min Air Temp	Avg Air Temp	Heating	Cooling	Precipitation
	·	·	<b>.</b> .	Degree Days	Degree Days	·
	Degrees F	Degrees F	Degrees F	Degrees F	Degrees F	inch
Jan	11.3	-7.07	2.17	1950	0	0.61
Feb	17.59	-2.16	7.73	1661.5	0	0.51
March	31.12	12.59	21.83	1339	0	0.78
April	51.02	28.82	39.92	754	0	0.86
May	64.99	41.42	53.19	382	10.5	3.09
June	74.38	52.74	63.54	118.5	74.5	3.94
July	79.13	56.5	67.91	37.5	123.5	3.05
Aug	78.15	53.82	66	74	107	2.68
Sept	67.35	42.87	55.11	314.5	16	2.13
Oct	51.74	30.22	40.98	744.5	0	1.71
Nov	32.15	15.93	24.01	1231	0	1
Dec	16.49	-0.26	8.14	1761.5	0	0.62

20.98



Figure 2. Precipitation and Frost Free Dates



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U.S. Department of Commerce National Oceanic & Atmospheric Administration

Summary of Annual Normals 1981-2010

National Environmental Satellite, Data, and Information Service

National Climatic Data Center Federal Building 151 Patton Avenue Asheville, North Carolina 28801 www.ncdc.noaa.gov

Station: HALLOCK, MN US

GHCND:USC00213455 Elev: 248 ft. Lat: 48.772° N Lon: 96.941° W

					Freeze Data						
					eze Dates (Month	n/Dav)					
T (F)			Proba		ate in spring (thr		n indicated(*)				
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90		
36	6/07	6/02	5/31	5/27	5/24	5/21	5/18	5/14	5/10		
32	5/31	5/25	5/21	5/17	5/15	5/12	5/08	5/04	4/30		
28	5/20	5/15	5/12	5/08	5/05	5/01	4/29	4/26	4/20		
24	5/12	5/06	5/02	4/29	4/27	4/24	4/20	4/15	4/09		
20	5/02	4/27	4/23	4/20	4/16	4/13	4/09	4/06	4/03		
16	4/22	4/17	4/13	4/10	4/07	4/05	4/03	4/01	3/27		
Fall Freeze Dates (Month/Day)											
T			Proba	bilty of earlier	date in fall (begin	nning Aug 1) tha	n indicated(*)				
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90		
36	9/01	9/06	9/10	9/12	9/14	9/16	9/18	9/21	9/23		
32	9/11	9/15	9/18	9/20	9/22	9/24	9/26	9/29	10/02		
28	9/20	9/24	9/26	9/28	10/01	10/02	10/05	10/08	10/13		
24	9/27	10/01	10/03	10/06	10/08	10/11	10/14	10/18	10/24		
20	10/04	10/08	10/12	10/15	10/18	10/21	10/25	10/29	11/03		
16	10/12	10/17	10/21	10/25	10/28	11/01	11/03	11/07	11/12		
				Fre	eze Free Period						
Temp (F)			Pr	obabilty of lone	ger than indicate	d freeze free per	iod (Days)				
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90		
36	128	122	118	114	111	107	103	98	91		
32	147	140	136	132	129	125	121	116	110		
28	166	159	154	150	147	143	139	135	129		
24	185	178	173	168	164	160	156	151	145		
20	205	198	192	187	183	179	175	169	162		
16	221	215	210	206	202	197	193	187	181		

\* Probability of observing a temperature as cold, or colder, later in the spring or earlier in the fall than the indicated date 0/00 Indicates that the probability of occurrence of threshold temperature is less than the indicated probability. Derived from 1981-2010 serially complete daily data

Complete Documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html



# Minnesota State-Averaged Annual Precipitation

03/01/2013

Elevation 798 msl

Year	Max Temp	Min Temp	Avg Temp	Avg Bare Soil	Avg Turf Soil	Avg Wind	Max Wind	Total Solar	Total	Avg Dew	Avg Wind
	Degrees	Degrees	Degrees	Temp Degrees	Temp Degrees	Speed	Speed	Rad	Rainfall	Point Degrees	Chill
	F	F	F	F	F	mph	mph	Lys	inch	F	Degrees F
1996	43.805	23.343	33.574	44.994	43.687	9.939	22.96	325.815	15.353	25.816	25.748
1997	47.572	27.954	37.763	44.358	44.067	10.357	23.837	316.487	12.97	30.752	30.721
1998	51.818	31.999	41.908	46.326	46.662	8.963	21.369	316.348	15.627	33.814	36.506
1999	51.286	29.827	40.556	45.67	44.869	9.903	23.46	309.887	15.767	32.418	34.98
2000	50.359	26.959	38.659	47.224	45.796	9.819	23.618	321.153	16.94	29.726	32.637
2001	50.629	30.156	40.393	47.251	44.732	9.705	22.698	318.819	16.794	34.265	34.448
2002	49.352	28.51	38.931	44.175	43.107	9.864	23.73	312.328	18.55	31.179	32.327
2003	49.943	27.847	38.895	46.656	44.196	9.701	23.231	321.055	12.623	30.499	32.479
2004	49.622	27	38.311	45.073	42.514	10.019	23.159	288.871	22.12	30.885	31.744
2005	51.288	29.669	40.479	46.449	44.037	10.017	23.507	293.768	21.91	32.646	34.503
2006	52	30.284	41.142	47.618	45.196	9.539	22.741	309.766	12.63	32.75	35.683
2007	49.371	27.451	38.411	46.225	43.859	9.85	23.454	304.506	24.01	30.944	32.57
2008	47.269	24.933	36.101	45.405	42.335	10.04	23.78	323.86	17.327	27.569	29.341
2009	46.997	26.867	36.932	45.302	43.229	9.364	21.892	308.352	17.44	29.336	30.415
2010	50.341	30.381	40.361	47.504	45.383	9.42	22.185	304.299	27.1	32.229	34.895
2011	50.168	28.856	39.512	46.728	44.194	9.576	23.217	308.227	17.34	31.528	33.724
2012	53.065	29.968	41.517	47.79	46.427	9.716	23.768	302.68	15.87	32.035	36.225
2013	46.54	24.699	35.62	45.832	42.85	9.396	22.317	321.454	17.769	28.813	29.143
2014	46.844	25.803	36.323	45.127	43.15	10.216	23.947	300.08	17.05	28.592	29.066
2015	52.737	30.081	41.409	47.628	46.363	9.125	23.04	310.643	21.342	32.787	35.727
Ave	49.5503	28.12935	38.83985	46.16675	44.33265	9.72645	23.0955	310.9199	17.8266	30.92915	32.6441

Source: North Dakota Ag Weather Network

# 2. Topography

The Joe River Watershed District lies within the area once covered by prehistoric glacial Lake Agassiz. The land in the District is very flat. A small portion of the land in the northeast corner from the Canadian border south for 4 to 5 miles has slightly over a 2% slope to the west and northwest. The balance of the watershed from the Canadian border to south of the City of Humboldt has a 0-1% slope to the northwest. Along the Red River the slope is to the northwest. At the Canadian border the elevation of the Red River is 785 feet, the elevation in Section 12 of Hill Township is 798 feet, and at the eastern boundary in Richardville Township the elevation is 953 feet. [See Figure #3-Elevation Map]



Figure 3. Elevation Map

## 3. Geology

Glacial Lake Agassiz covered the entire Red River Valley with its approximate center where the Red River of the North now flows (See Figure #4). This glacial lake receded by stages, each of which is represented by sandy beach deposits and shallow near-shore sands. Some of these sandy deposits occur north and east of the City of Orleans in Kittson County. The fine and textured silt and clay material stirred up by wave action on Lake Agassiz were carried to quiet deep water areas west of the City of Orleans and deposited out as lake clays.



Figure 4. Glacial Lake Agassiz

Geomorphology of the District is dominated by classification known as the Lake Agassiz Level Lacustrine zone. This covers the entire District except in the extreme north east corner of the District and areas adjacent to the Red River. In the north east areas, several small beach ridges occur, and are classified as Lake Agassiz rolling Lacustrine. Along the Red River the geomorphological classification is Fluvial Level Alluvium. [See Figure #5-Geomorphology]



Figure 5. Geomorphology

The lake clays deposited by silts settling to the bottom of Lake Agassiz covered the westerly two - thirds of the District's land surface. They are about 60 feet thick resting upon 125 feet of glacial material. This material rests upon a thin layer of Cretaceous shale. The shale is underlain by 460 feet of early Paleozoic marine sediment composed of limestone, shale, and sandstone. At about 645 feet below the surface lies granite bedrock. The sandstone layers contain salt water.

## 4. Soils

In general, the soils in the District are stratified from east to west. In the far east, soils are sandy in nature. A very thin and narrow band of coarse – loamy soil is present in the beach ridge area, and to the west of that is a large area of very fine soils encompassing about 1/3 of the District and occurring in the east-central region of the District. An area of fine – silty soils interspersed with fine textured soils occurs in the west central region of the District, and the area near the Red River is classified as very fine. [See Figure #6-Soil Texture]


Figure 6. Soil Texture

The majority of soils were formed mainly in Lacustrine silts and clays. The soils association found are Northcote, Bearden-Fargo, and Hegne Northcote associations. These soils associations are nearly level, poorly drained, very fine to medium texture soils. These soils are inherently fertile, permeability is high and available water capacity is generally high. A large area of the JRWD north of a line from Humboldt to Orleans is classified as saline.

A small area of soils formed mainly in loamy till are found in the eastern one-third of the District next to the Canadian border. Percy-Fram and Mavie-Foxhome are the two soils associations. Fertility is medium, water holding capacity is low to moderate, and stones and boulders influence use and management.

To the east of these soils, in the extreme eastern portion of the District, are located the Rockwell-Grimstad association, which is a soil that was formed in Lacustrine loams and sands. This is a nearly level, poorly drained and moderately well drained, medium textured soil formed in Lacustrine loamy and sandy material over lake-modified loamy glacial till.

The U.S. Department of Agriculture, Natural Resources Conservation Service collected and maintains soils information for the area, and has compiled it into a soil survey, which is available in hard copy and interactively on the world wide web. It can be accessed at

#### https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

The information in the soil survey can be utilized in selecting sites for roads, ponds, building and other structures and for judging the suitability of tracts of land for farming. In addition, foresters, wildlife managers, and planners can utilize information contained within the soil survey. Appendix B lists soils from the soil survey, and describes the soil properties and classifications with regard to conservation planning.

### 5. Land Use / Public & Private Land Ownership

Land use within the District is primarily agriculture cropland with wheat, barley, sugarbeets, and soybeans the primary crops. In the north - eastern areas of the District there is pasture / hay / crp / and scrub-shrub lands mixed with wetland areas. There are only 2 small cities, and several township, county, and state roads. Figure 7 below depicts the 2001 land use from the National Land Cover Data Base for the 'Lower Red River Watershed', which includes the Joe River, Tamarac River, and an unnamed coulee. The Joe River on the map is located in the upper area of the map.

Figure 8 shows the 1990 land use for the Joe River Watershed District. Land use within the District has remained about the same since 1990. The main change is that there have been areas that were enrolled in the Conservation Reserve Program in 1990 that have now been broken up and are actively farmed.



#### National Land Cover Database

#### Land Cover Class

 Open Water

 Developed, Open Space

 Developed, Low Intensity

 Developed, Med Intensity

 Developed, High Intensity

 Barren Land

 Deciduous Forst

 Evergreen Forest

 Mixed Forest

 Shrub/Scrub

 Grassland/Herbaceous

 Pasture/Hay

 Cultivated Crops

 Woody Wetlands

 Emergent Herbaceous Wetland

Figure 7. 2011 Land Use in Joe River WD



Figure 8. 2001 Land Use in the Lower Red River Watershed Joe River Watershed is in the upper / northern portion of the map

### 6. Natural Resources

A review of the above mentioned land uses within the District gives a good picture of how the natural resources of the District are being used. The broad category of "Natural Resources" includes soils, lakes & rivers, the air, forests, wildlife, minerals, and all of the processes that affect them. The resources of the District are predominantly managed toward agriculture, as seen by the land use in cropland. The quality of natural resources that are present is dependent largely on the point of view of the reader.

The quality of each of the resources listed above in the JRWD are in different levels of integrity relative to the resource. For instance, the quality of the water in the rivers and streams is generally good. However, all of the watercourses within the Joe River (with the exception of the Red River) are intermittent in nature, drying up in the late summer

months. This obviously has an impact on water quality and the value and occurrence of fish in the streams. Fish can most likely migrate from the Red River into the upper reaches of the JRWD during the spring to spawn, but there is a lack of information as to how many make it back to the Red River as adults. This most likely is dependent on the type of rainfall and snowmelt runoff that occurs and can change from year to year. Most years some percentage of young of the year fish are probably trapped in small pools and either die from suffocation due to summer kills resulting in lack of oxygen or become prey for great blue heron or other types of wading birds. The fishery resource, then can be described as poor from man's point of view but as good from a heron's point of view!

Available water quality and stream information indicates that most stream channels do not fully support aquatic life. Most streams were channelized in the early to mid 1900's to facilitate drainage for farming, and this most likely is a primary stressor to aquatic life. Wildlife corridors are present and maintained in good shape along the Joe River and the branches and laterals of the PL 566 project. Grass buffer strips were established as a part of the project and are maintained by the JRWD. These buffer strips provide excellent habitat and travel corridors for whitetail deer, fox, raccoon, garter snakes, and many other species.

A forestry resource is present in the eastern most reaches of the JRWD in the areas upstream of the Joe River Wildlife Management area. This is a beach ridge area and as such is not as conducive to tilled cropland. Therefore, about 3.5% of the land area of the District is deciduous forest, and most of it is located in this area. Almost all of the forest land of the District, excluding about 80 acres, is in private ownership.

The same beach ridge area is home to most of the remaining wetland acres, open and closed shrub grassland, and pasture and hayland. There is potential in this area to manage the land to enhance these areas and promote the natural resource goals and initiatives that are named in the 1998 Red River Basin Flood Damage Reduction Work Group Agreement.

By and large the greatest natural resource of the JRWD is the very rich soils that are conducive to growing crops such as wheat, barley, sugar beets, soybeans, canola, sunflowers, and other crops. This natural resource has driven the local economy and the economy of the Red River Valley since settlers first entered the area. It is responsible for the major industry of the area which provides careers and income for the majority of the area's residents.

A wind erosion prediction system (WEPS) model was developed by Houston Engineering in 2016 as a part of the watershed restoration and protection strategy for the watershed. Crop types, parcel data, and soil loss factors were considered. It was determined that within the Joe River HUC 10 watershed, there are 49,245 acres. These acres experience erosion rates of 96,939 tons/year, and that factors to 1.97 tons/acre.

Land use changes have altered the quality and quantity of natural resources in the watershed. Agricultural lands are common in the western three-fourths of the watershed while some large blocks of grassland and woodland habitats are common in the northern and eastern portions. A beach ridge runs through the eastern one-third and some gravel pits are present. Some wetland areas remain but most areas have been drained. An overall

lack of large habitat blocks and a lack of connectivity between existing grasslands, wetlands, brushlands, and woodlands limit the function of the terrestrial habitats in the Joe River Watershed District.

Many of the natural waterways in the watershed have been converted to ditches. The remaining natural waterways and the ditches provide some fish and aquatic habitat but most of these are probably limited to seasonal use. Small waterways here are likely to provide spawning and rearing habitat for northern pike and a limited variety of other species. Flashy flows, susceptibility to extended low flow or no flow periods, unstable channels, and a lack of riparian habitat limit the function of these aquatic resources.

Monitoring information done by the MPCA in 2008-2009 indicates fish and invertebrate communities are doing quite poorly in this system. Poor instream habitat was cited, consisting of substrate having fine silts, lack of pools and riffles, and vegetation that chokes the waterways. Lack of flow and low channel gradient were noted in the study as possible contributing factors.

In addition to these general habitat features, the Minnesota DNR has documented several natural heritage elements. The number and type of these elements can be obtained by contacting the DNR. These heritage elements, found on public and private land, include rare and endangered birds, mammals, insects, and unique habitats (DNR heritage database). No known state designated "outstanding resource value waters" or "critical vegetated habitat" as defined in state statutes have been found in this sub-watershed.

#### C. Water Resources

### 1. Major Sub Watersheds of the District

The JRWD is made up of 8 separate sub-watershed areas. Most are tributary to the Joe River, with a few exceptions that drain directly to the Red River, directly to Canada, or enter an unnamed coulee near the St. Vincent area. These sub-watersheds range in size from a few hundred acres to about 25 square miles. [See Figure #9-Subwatersheds].



#### 2. Surface Water

#### A. Rivers & Natural Streams

#### Joe River:

The Joe River serves as the principle water course within the District and is for which the District is named. The Joe River arises near the southwestern edge of Clow Township, where several small coulees and field drains come together. It then flows northwesterly through sections 30, 19, & 18 of Clow Township and sections 12 and 2 of St. Vincent Township and sections 28 and 34 of St. Vincent fraction. It crosses the Canadian border in the NW 1/4 section 28 St. Vincent fraction about 3 <sup>1</sup>/<sub>2</sub> miles east of the Red River of the North. It continues northwesterly through Manitoba, Canada and outlets in the Red River at a point 3 <sup>1</sup>/<sub>2</sub> miles north of the U.S. - Canadian border.

#### Salt Coulee:

Salt Coulee drains the central portion of the District. Kittson County Ditch #12 arises near the southern border of the District in the NE corner of Hill Township and flows northward to outlet into Salt Coulee near the City of Humboldt. It then flows straight north and outlets into the main channel Joe River about 2 miles south of the Canadian border. Salt Coulee is also known as Branch 1 of the Joe River PL 566 Project.

#### **Unnamed Coulees:**

Several coulee systems are present within the JRWD. These are located 1) in the eastern portion of Clow Township upstream of the Joe River Wildlife Management Area, 2) in the extreme western edge of the District where a coulee channel runs parallel to and 2 miles east of the Red River of the North for about 8 miles, out-letting into Canada, and 3) in the NW corner of the District several small systems collectively drain about 7 square miles and outlet directly to Canada. All of these systems are intermittent, only carrying water during spring runoff and summer rains.

### **Red River:**

The Red River serves as the western boundary of the JRWD and is the system that serves as the outlet for the Joe River. The Red River begins about 230 miles south of the U.S. - Canada border and flows through Winnipeg, Manitoba and outlets into Lake Winnipeg. The last 10 miles of the river on the U.S. side serves as the western border for the JRWD. The Red River has a major influence upon the JRWD, especially during times of spring flooding.

### B. Lakes

The JRWD is home to two lakes, which actually are small wetland systems with little open water. These water bodies are known as Lake Stella and Lake Cameron, and are both located in the NW corner of the District. Both are type 3-4 wetlands and are characterized by some open water surrounded by cattails. Both are flow through systems and provide little recreational opportunities.

### C. Wetlands; Natural - Altered - Drained

Approximately 0.27% of the land area of the District is made up of wetlands. The U.S. Fish & Wildlife Service's National Wetlands Inventory (NWI) lists the location of wetlands within the District and identifies what type they are classified as and whether they have been drained or altered. The U.S. Fish and Wildlife Service maintains this inventory and map. The U.S. Dept. of Agriculture - Natural Resources Conservation Service also has a listing of wetlands located on agricultural land.

Generally speaking, a majority of the wetlands in the District have been drained since the early 1900's. This was done for the purpose of agricultural production and is evidenced by the numerous drainage ditches within the District. The drainage of wetlands has enabled the use of the land to grow crops and has fueled the local economy in the area. The NE corner of the District is an area with lower grade farm land and therefore most wetlands in this area remain either intact or in a partially drained state.

#### D. Artificial Drainage Systems

Three types of artificial drainage systems are present within the JRWD. These include 1) County drainage ditches, 2) the Joe River PL 566 Flood Control Project, and 3)

Agricultural Drains - Private Systems - Group Ditches - Road Ditches.

1. Kittson County Drainage Ditches

The table below details each county ditch system within the District. Figure 9 shows the locations of these ditches and other projects of the JRWD.

DITCH	LOCATION	JURISDICTION
Kittson Co. Ditch	Sect. 2 &11 T162 R50; Sect. 26 & 35 T163 R50	Kittson County
#12		
Kittson Co. Ditch	Sect. 5 T163 R49	Kittson County
#17		
Kittson Co. Ditch	Sect. 31, 32, 33 T164 R49; Sect. 36 T164 R50	Kittson County
#20		
Kittson Co. Ditch	Sect. 23, 26, & 36 T163 R49; Sect. 2 & 11 T162	Kittson County
#22	R49	
Kittson Co. Ditch	Sections 20, 21, 22, 30 T163 R50, Sect. 25 T163,	Kittson County
#28	R51	
Kittson Co. Ditch	Sect. 33,34,35,36 T163 R50; Sect 5 &6 T162 R50;	Kittson County
#29	Sect 1 T162 R51	
Kittson Co. Ditch	Sect. 5 & 6 T163 R49; Sect. 1 T163 R50	Kittson County
#30		

Kittson County Ditch Systems

#### 2. PL - 566 Project

In 1963 the JRWD partnered with the Natural Resources Conservation Service (formerly Soil Conservation Service) and the Kittson Soil & Water Conservation District to prepare a work plan for flood control under the Federal Public Law 566 Program. Installation of the structures and channel work relative to this plan took place between 1968 and 1971.

The project consisted of the outlet, 11.7 miles of main channel improvement, Branch #1 consisting of 3.9 miles, Branch #2 consisting of 6 miles (also lots #1 & #2 comprising 0.81 miles), Branch #3 and interceptor comprising 2.17 miles, and Branch #4 comprising 0.81 miles. The improved system consists of 26.47 miles, which has done an excellent job of removing excess water within the Joe River Watershed District. [See Figure #10-Joe River WD Watercourses].

The channel improvement serves the purposes of flood prevention and improvement of water management off the land. The channels were designed to contain a 10 year frequency storm.



Figure 10. Joe River WD Watercourses

The wildlife structure was also installed and the stored water has resulted in a shallow lake. The structure is located in the north one half of the NW 1/4 section 34 Township 164 North, Range 49 West and occupies about 49 acres. Its outlet is at the southwest corner of the impoundment.

The construction of the project was performed by the Platte Valley Construction Company of Nebraska at a cost of \$350,000. The contract called for 26.26 miles of multiple purpose channel improvements with side inlets, rock fords, road culverts and seeding of 255 acres. The District accepted the completed project on June 26, 1971.

During project planning and the assessing of benefits to affected properties, the Kittson County Board of Commissioners requested they be allowed to pay the cost of bridges on the highways crossing the Joe River and to maintain them in lieu of any assessment. The managers approved this request, and five bridges were installed by the County at an estimated cost of \$200,000.

Since the original construction a few miles of channel improvement have been added by the landowner in sections 20, 21, and 22 Clow Township. Two drop structures were installed also.

The performance of the work of improvement have been above expectation of all concerned parties. There was much improvement in excess water removal in the area affected. All construction has stood the test of excessive runoff conditions, both in spring and summer seasons.

The Work Plan, prepared and completed in 1963 by technicians of the NRCS, followed after an application for technical and financial assistance was made by the Kittson SWCD and the Kittson County Board of Commissioners, under the authority of the Watershed Protection and Flood Prevention Act (Public Law 566, 83<sup>rd</sup> Congress, as amended).

The improvement of the Joe River channel and its tributaries was carried out by the cooperative efforts of affected citizens and groups found in our local, state, and federal levels of government.

#### 3. Other Systems

Other drainage related systems within the JRWD include agriculture drainage installed by individual farmers, group ditches designed and installed in the 1950's and 1960's by the NRCS, and road ditches installed by State, County, and Township road authorities. These types of systems all represent different levels of drainage for different purposes, but nonetheless exist within the District and carry water from upper areas to lower areas. The installation of tile drainage is relatively new in the area, having begun within the past 7-10 years. Permits are required for new drainage and the Joe River can track these installations and what effect they may have.

#### E. Water Management Structures

One water management structure exists within the JRWD, and was constructed as part of the aforementioned PL 566 Project. It is located in the NW corner of section 34 fraction of Clow Township (T164N, R49W), ½ mile south of Canada and 8 miles west of the NE border of the District.

The structure consists of a 30" half round drop inlet with 34 feet of 18" corrugated metal pipe spillway. The structure has no drawdown capability, and there is an emergency spillway that is 75' wide. An earthen dike was constructed 2,000 feet long and with a top width of 8 feet. Construction date was from February 1968 to September 1969 under contract with the Natural Resources Conservation Service (formerly Soil Conservation Service).

The original cost of the structure was \$3,365 and was split between the JRWD, the Kittson SWCD, and DNR. The cost included 21 dugouts within the impoundment. The size of the impoundment is 47 acres at elevation 815.5 feet, msl, which is the normal pool. The pool has a maximum depth of 4 feet and an average depth of 2 feet. The upstream watershed size is 525 acres.

The impoundment was developed by the Department of Conservation, Division of Game and Fish, SCS, the JRWD, and the Kittson SWCD for the purpose of flood control and wildlife development. It was part of the "Work Plan for Watershed Protection and Flood Prevention – JRWD". This plan was prepared in 1963 under the authority of the Watershed Protection and Flood Prevention Act by the Kittson SWCD and Kittson County Board of Commissioners with assistance from SCS and the Forest Service. An operation and maintenance agreement was entered into on February 23, 1968 by the State of Minnesota, Dept. of Conservation and the JRWD.

Ring Dikes – The Joe River Watershed District has assisted with the plans, designs, funding, and construction of numerous farmstead ring dikes. These dikes have been built to MN DNR specifications for the purpose of protecting private property, buildings, and infrastructure from devastating floods.

### 3. Groundwater

The lake clay found over the western 2/3 of the District is over one hundred feet thick. This deposit yields no water to wells. Occasional lines of silt and very fine sands yield less than one gallon per minute, and such wells commonly go dry during late summer and fall. The water quality is poor; it is salty with a bitter taste and unsuitable for human consumption and for livestock. Chloride content generally is 500 to 1000 parts per million. It is the opinion of the JRWD that the high chloride content is due to geologic phenomena that naturally occurred over thousands of years.

Beneath a thin till layer is a large depth of limestone, mudstone, sandstone, and shale resting on granite. The water quality of wells in this layer is poor. Water is brine-like and

highly saline and unsuitable for nearly all domestic and agricultural uses.

From settlement period until 1979 potable water for domestic and livestock purposes was obtained from surface water in watercourses, use of farm cisterns or by hauling supplies from a nearby community water system. Since 1979, water is obtained via the North Kittson Rural Water System, which utilizes gravity flow pipelines from wells located near Lake Bronson, Minnesota – 30 miles to the southeast and situated in the Two Rivers Watershed District.

Evaluation of the ground water system depends upon knowing where water enters, how fast it moves through the soil and subsurface layers, and where it leaves the ground water reservoir. Movement of ground water is controlled by the geologic units that make up the reservoir.

Water is a solvent that is in motion within the groundwater reservoir and tends to approach chemical equilibrium with the materials in the reservoir. Because of this continuous chemical charge towards equilibrium, water quality information provides a basis for the interpretation of movement of water in the ground water reservoir - chemical changes in water type (the dominant ion or ions in solution) and total dissolved solids can be used to interpret water movement.

Pollution of the ground water by man's activities is considered minimal, because of the depth of the lake clay above the underground aquifer and the absence of any large dischargers.

### 4. Unique Water & Land Related Resources

#### A. Outstanding Resource Value Waters

No known outstanding resource value waters as defined by Minnesota statute exist within the JRWD.

#### B. Rare & Endangered Species

The Minnesota County Biological Survey has inventoried Kittson County and keeps a detailed record of its finding. The following excerpt is from their web page. Information on rare and endangered species is available from them.

The Minnesota County Biological Survey (MCBS) began in 1987 as a systematic survey of rare biological features. The goal of the Survey is to identify significant natural areas and to collect and interpret data on the distribution and ecology of rare plants, rare animals, and native plant communities.

Native habitats surveyed by MCBS contribute to a sustainable economy and society because they:

**Provide** reservoirs of genetic materials potentially useful in agriculture, medicine, and industry.

Provide ecological services that contribute to the quality of air, soil, and water.

□ Provide opportunities for research and monitoring on landscapes, native plant communities, plants, animals and their relationships within the range of natural variation.

□ Serve as benchmarks for comparison of the effects of resource management activities.

Are part of natural ecosystems that represent Minnesota's natural heritage and are sources of recreation, beauty and inspiration.

### C. Critical Vegetated Habitats

#### 1. Buffer Strips

As a part of the Joe River Watershed District's PL 566 Project, grass buffer strips were installed along, adjacent, and parallel to the channel work that was done. These buffer strips serve as a filter strip that removes sediment that is carried from the adjacent agricultural fields. The sediment is removed by the grasses which results in a benefit to water quality and also to prevent silting in of the waterway thereby reducing a potential channel maintenance problem. These buffer strips also are a benefit to wildlife, as they serve as a "greenway" and provide a travel corridor for animals such as whitetail deer, fox, raccoon, garter snake, several species of birds, and many others. One other benefit these strips provide is an economic one. In late summer and fall, the JRWD allows some producers to clip the grass for hay. This provides local farmers a source of feed for cattle and also provides a boost to the local economy.

#### MN 103F.48 - Buffer Law:

In 2016 the State of Minnesota enacted a 'Buffer Law', which requires lands adjacent to legal ditches and designated public waters to have either a buffer or an alternative water quality practice. Through implementation of this law buffers will be uniformly established in these designated areas.

#### Other Waters:

Part of the Buffer Law requires that local plans have a map or description of Other Waters. The law states: Subd. 4. Local water resources riparian protection. In consultation with local water management authorities, on or before July 1, 2017, the soil and water conservation district shall develop, adopt, and submit to each local water management authority within its boundary a summary of watercourses for inclusion in the local water management authority's plan. A local water management authority that receives a summary of watercourses identified under this subdivision must incorporate an addendum to its comprehensive local water management plan or comprehensive watershed management plan to include the soil and water conservation district recommendations by July 1, 2018. The incorporation to include the summary of watercourses provided by the soil and water conservation district does not require a plan amendment as long as a copy of the included information is distributed to all agencies, organizations, and individuals required to receive a copy of the plan changes. A local water management authority that receives a summary of watercourses identified under this subdivision must address implementation of the soil and water conservation district recommendations when revising its comprehensive local water management plan as part of a regularly scheduled update to its comprehensive local water management plan or

development of a comprehensive watershed management plan under section 103B.801. The Kittson SWCD submitted the following resolution to the JRWD.
Little opportunity was given to consult, and it appears the SWCD adopted a broad based resolution that many other SWCD's in the state have also adopted. The JRWD would like to see a listing of 'Other Waters' that is tailored to local priorities and local resources. While the JRWD was not fully consulted, the SWCD resolution is included below to comply with the statute.

## A RESOLUTION REGARDING THE "OTHER WATERS" FOR THE MINNESOTA BUFFER LAW

# Kittson SWCD {*Resolution 1702*}

- **Whereas**; Minnesota statues 103F.48 requires SWCDs in consultation with local water management authorities, to develop, adopt, and submit to each local water management authority within its boundary a summary of watercourses for inclusion in the local water management plan.
- Whereas; The summary of watercourses has been commonly referred to as "other waters".
- Whereas; The Kittson SWCD believes the purpose of identifying "other waters" is to be inclusive of all watercourses where water quality would benefit from the voluntary installation of a buffer
   1 or filter strip.
- **Whereas**; Current state and federal programs exist to provide landowners with incentives to voluntarily install buffer or filter strips.
- **Whereas;** Current State and Federal programs have eligibility criteria for watercourses where water quality would benefit from the installation of a buffer or filter strip.
- **Whereas**; Producing a map of all the watercourses meeting the eligibility criteria would be time consuming and may not be inclusive of all watercourses where water quality would benefit from the installation of a buffer or filter strip.
- Whereas; The "other waters" map must stay voluntarily, and can not be used to expand the watercourse depicted on the DNR Buffer protection map.
- **Therefore be it resolved** that; The summary of watercourses or "other waters" for Kittson County shall be descriptive in format instead of in map format.
- **Be it further resolved** that; the description of watercourses to be included in the summary of watercourses or "other waters" shall be; All watercourses deemed eligible for the adjacent land to be voluntarily enrolled into a buffer or filter strip practice under the current eligibility criteria for state and federal programs. Excluding those watercourses depicted on the DNR buffer protection map.

A list of watercourses included in this descriptive inventory are;

Perennial streams, Seasonal streams depicted on USGS topographic maps, Identified by onsite visits, And drainage ditches that are perennial or seasonal streams.

Adopted fourteenth day of

June 20 Chair of the Kitt

#### 2. Ridge Areas

The area of the JRWD in the furthest northeast portion, upstream of the Wildlife Impoundment, is an area that may be of special interest. This area typically is of a rocky nature because of the glacial till deposited. Therefore, it has less tilled acres and is more of a hay - pasture - open grassland area. There may be benefits to study this area further to determine the feasibility of wetland restoration or management of the area for wildlife, prairie restoration, prairie seed harvesting, and other resource opportunities.

#### D. Water Use

#### 1. Surface Waters

Surface water within the JRWD is not used by any municipalities, nor is it used extensively for any farming operations. The saline and brackish nature of the water makes it unsuitable. Prior to 1979 potable water for domestic and livestock use was obtained by use of farm cisterns or by hauling supplies from nearby community systems. Since 1979 most usable water has been supplied by the North Kittson Rural Water System, which has wells located in the Two Rivers Watershed District.

Surface water from the Red River can be and is used for industrial, municipal, and agricultural uses, after treatment. There are no entities at this time within the JRWD using the Red River as a source of water.

#### 2. Groundwater

Because of the conditions of the groundwater underlying the JRWD described in the groundwater section above, there is little or no groundwater use. As stated above, the North Kittson Rural Water system is the main supplier of potable water, and their supply comes from wells located in the east central part of Kittson County, within the Two Rivers Watershed District.

#### 3. Inventory of Public Water Supplies

The Cities of Humboldt & St. Vincent and the Village of Noyes are the only population centers within the JRWD. The rest of the population of the District lives on farmsteads. Most residents within the District get their water supply from the North Kittson Rural Water System (NKRW).

The NKRW system began its project in July 1979. The system serves most of the rural farmsteads within the District and also all of the towns. The wells are located outside of the Joe River Watershed District and do not affect groundwater within the District. The system starts in Lake Bronson (within the Two Rivers Watershed District) and runs via pipeline to the north to the Canadian border and also west to the Red River. The water lines range from 12" down to 2" in size. There are two water towers on the system that have a capacity of 75,000 gallons. In addition, water towers in Lake Bronson & Hallock are also used. The system is governed by a water board consisting of seven members. The total gallons pumped in 1983 were one hundred two million gallons and the amount that left the system was ninety three million gallons.

North Kittson Rural Water was established in 1979 in Lake Bronson, an oasis compared to the areas of the west of it. North Kittson completed a major expansion in 1993 as it added two cities, Stephen and Kennedy, to its service area. The system also sells water to Lake Bronson, Lancaster, and Hallock in addition to serving residents of St. Vincent and Humboldt, bringing its total rural connections to 630. With the pipeline to Stephen passing Donaldson, home of Kittson-Marshall Rural Water, a few more miles of pipe were added to establish an interconnection between the two systems.

Besides bring North Kittson's capacity to 2.5 million gallons per day, far more than it would need even during peak periods in the summer, the plant improvements included a new filter, contact chamber, and aerator. The old filter, which had encompassed all three functions, is still in use. In addition, the water system added a new well field with two 175-foot-deep wells to go with two 128-foot-deep wells in the existing well field.

#### 4. Inventory of Municipal Wastewater Treatment Systems

The Cities of Humboldt, St. Vincent, & Noyes are all small (<100 population) unsewered communities served by properly constructed and maintained septic systems and drain fields. Rural farmsteads are typically served also by septic tanks and drain fields. These septic systems and individual sewage treatment systems have worked satisfactorily in the past and it is generally accepted that they will continue to be adequate into the future.

#### E. Existing Water Management Plans & Programs

#### 1. County Water Management Plans

Kittson County has had a Comprehensive Local Water Plan (CLWP) since 1990. This plan consists of inventories of surface and ground water, monitoring and data collection initiatives, and implementation plans to protect, preserve, and promote wise use of these water sources. The JRWD has partnered with CLWP initiatives in the past and will continue to do so whenever possible. This partnership helps to eliminate duplication of efforts and pools resources to help efficiently manage water resources. The following 3 resource concerns are listed in the Kittson CLWP.

#### Priority Concern 1: Land Use

The main objective in this category will be to focus on erosion and sediment control. Wind and water erosion is a big problem in Kittson County. Wind erosion is the biggest cause of siltation in watercourses, ditches, basins and wetlands in the county. Because of the flat topography, water erosion is also a concern. In recent years, the Kittson SWCD has seen a big demand for state cost

share and LWMP cost share dollars for streambank erosion repairs. While the Kittson SWCD has been able to technically and financially help on several erosion projects, the cost share dollars are not enough to make a major impact on the problem. With the recent cut announced for 2010 cost share funding, this situation will only become a larger problem.

Recommended actions include educating the public on programs that are available to aid in the erosion fight such as planting trees and working with watershed districts and other agencies within the county on funding sources for large erosion projects.

#### Priority Concern 2: Surface Water

The main objective in this category will be to focus on impaired waters/Total Maximum Daily Loads (TMDL). The Minnesota Pollution Control Agency (MPCA) is completing a long-term monitoring study in Kittson County. Over the years the Kittson SWCD, watershed districts in the county, and high school students participating in the Riverwatch program, have also done water quality studies in the county. MPCA is now looking for local partners in putting together a study on the data collected, and beginning an implementation program of best management practices that will restore any impaired reaches. As the plan unfolds, the Kittson SWCD/water plan program will need to determine what role they will take in this partnership.

Recommended actions include being a partner in the TMDL process, and to determine where best the Kittson SWCD/water plan program fits in the TMDL process.

#### **Priority Concern 3: Groundwater**

The main objective in this category will be to focus on protecting drinking water resources. All public water supplies in Kittson County come from underground water sources. None of the communities rely on surface water. Therefore, groundwater quality and quantity are big issues in Kittson County.

Recommended actions include working with public water suppliers on wellhead protection areas. This can happen through education programs that educate property owners on the importance of using best management practices in wellhead protection areas. This may also include the implementation of land use programs designed specifically for the protection of those areas. Other concerns that will be addressed in the Groundwater category include the sealing of unused wells and developing a well inventory/database. Also an inventory for Individual Sewage Treatment Systems (ISTS) would like to be conducted in Kittson County. This inventory would see how many systems are in the county, which ones are not working properly and what to do with those not up to code.

The State of Minnesota is recommending and transitioning to a new way of local water planning, known as One Watershed One Plan. This is a method of combining comprehensive local water plans, SWCD plans, Watershed District plans, and other local plans into one plan, based upon drainage boundaries instead of political boundaries. The state would like all local government to transition by 2025. The Board of Managers of the Joe River WD considered 1W1P for this update, but rather decided to wait until the next update in 2027 to change planning methods.

Kittson County is the drainage authority over all of the legal ditches within the JRWD. As such they are responsible for annual inspection, maintenance and repair activities. This responsibility lies with the County Commissioners. Any proposed new ditch systems or improvements to existing systems by law must be petitioned to the JRWD.

#### 2. Kittson Soil & Water Conservation District (SWCD)

The KSWCD provides technical aid to landowners, upon request, for water removal, wind erosion control through field windbreaks and farmstead plantings and assistance in crop rotation on farms.

Conservation plans for land operators are prepared by the technical staff of this agency. Conservation tillage (reduced and no till) systems, cover crops, and other methods are encouraged by the supervisors of the SWCD to further reduce sheet and wind erosion.

State cost share assistance and Clean Water Funds from the State of Minnesota have been utilized to install side water inlets and repair bank failures on ditches and waterways. Clean water funding was obtained to provide incentives to landowners to install buffers along watercourses.

Annually since 1971, the SWCD provided personnel to inspect the Joe River PL 566 Project with the JRWD Managers and their other guests. Maintenance inspection sheets for the elements of the Joe River Project are completed, signed and filed in the offices of the JRWD and the SWCD.

Wetland Conservation Act: Since 1991 the SWCD has been the local government unit charged with administering the WCA. This State of Minnesota law fosters the no net loss of wetlands. This law regulates the draining or filling of wetlands and requires mitigation (replacement of impacted wetlands) for any projects that reduce the acreage of wetlands.

The Kittson SWCD undergoes planning which details their goals and initiatives for each year. These goals & initiatives are closely linked with the programs outlined above and are available from the SWCD upon request. Further details on the Kittson SWCD can be found at their website: http://kittsonswcd.org/index.html

### 3. Other Local Government Plans

There are no other known local government plans that deal with water related issues within the JRWD.

#### 4. State Agency Water & Resource Management Plans

A request was made at the beginning of the update of this 10 year Overall Plan to all State agencies to supply any information relating to plans and initiatives dealing with water management within the JRWD. Responses were received from BWSR, MDA, and MDH. An attempt is made to outline below these and other programs that the District knows of.

DNR: The DNR operates numerous programs relating to water natural resources and these will not be detailed here. However, worth noting is the Protected Waters program administered by the Ecological and Water Resources Division. In 1984 a map was published listing all protected wetlands and watercourses within Kittson County. A permit is required from the DNR before any work is started which would alter the course, current, or cross section of water courses and drain or fill certain wetlands. The DNR should be contacted for details of this regulatory program.

MPCA: The Minnesota Pollution Control Agency is also responsible for many programs too numerous to cover here. Among these are the Total Maximum Daily Load program, various water quality monitoring programs, the feedlot program, and NPDES permits, which relate to construction projects which by their nature are conducive to causing soil erosion and sedimentation.

WRAPS - Lower Red River Watershed Restoration and Protection Strategy - The MPCA began a long term water quality monitoring program for the "Lower Red River" in 2009. The area

studied includes the Joe River, Tamarac River, and an unnamed coulee system . A "Watershed Restoration and Protection Strategy" (WRAPS) is in the final stages of being written, and this will identify the current conditions of surface water quality within the watershed and identify how to restore and protect the water quality. Several reports, including a 'Monitoring and Assessment', 'Wind Erosion', Total Maximum Daily Load', Watershed Restoration and Protection Strategy', and 'Stressor ID' have been completed and are under review. Under the Federal Clean Water Act, reaches of the Joe River will be assessed and water quality impairments will be identified. Intensive monitoring will be completed once every 10 years to monitor the resources and document progress to achieving water quality goals. The first round of this monitoring was completed in 2009.

BWSR: The Board of Water & Soil Resources deals with the Wetland Conservation Act, State Cost Share Program, Watershed District overall plans, Comprehensive Local Water Planning, and the Nonpoint Priority Funding Plan.

Buffer Law – Beginning in 2016 a new law in Minnesota went into effect known as the 'Buffer Law'. Under this law, all legal ditch systems and all watercourses identified in the 'Protected Waters Inventory' will be required to have a buffer. Ditchs will have a 16.5' buffer, and protected waters will have a buffer between 30' and 50'. The Kittson SWCD and BWSR will be the primary implementers of the law. Kittson County has chosen to do enforcement relative to the legal ditch systems and protected waters within the JRWD.

MDA: The MDA is statutorily responsible for the management of pesticides and fertilizer other than manure to protect water resources. The MDA implements a wide range of protection and regulatory activities to ensure that pesticides and fertilizer are stored, handled, applied and disposed of in a manner that will protect human health, water resources and the environment. The MDA works with the University of Minnesota to develop pesticide and fertilizer Best Management Practices (BMPs) to protect water resources, and with farmers, crop advisers, farm organizations, other agencies and many other groups to educate, promote, demonstrate and evaluate BMPs, to test and license applicators, and to enforce rules and statutes. The MDA has broad regulatory authority for pesticides and has authority to regulate the use of fertilizer to protect groundwater. The MDA is the lead agency for all aspects of pesticide and fertilizer environmental and regulatory functions as directed in the Groundwater Protection Act (Minnesota Statute 103H). These include but are not limited to the following:

- Serve as lead agency for groundwater contamination from pesticide and fertilizer nonpoint source pollution.
- Conduct monitoring and assessment of agricultural chemicals (pesticides and nitrates) in ground and surface waters.
- Oversee agricultural chemical remediation sites and incident response.
- Regulate use, storage, handling and disposal of pesticides and fertilizer.

### 5. Federal, Regional, & International Programs

Many federal, regional, & International agencies, organizations, and groups exist that also deal with water natural resources and have an effect on the resources within the JRWD. Worth mentioning are the Red River Watershed Management Board, Red River Basin Board, The International Coalition, the U.S. Army Corps of Engineers, the U.S. Geological Survey, and the International Joint Commission. For information on these organizations and their programs, please refer to the prior

section listing the names and web sites of each.

The Red River Basin Commission has prepared a 'Long Term Flood Solutions' document to address flooding and flood flows on the Red River of the North. This document addresses the need and the possibility of reducing peak flows on the Red River by 20%, thereby reducing damages that traditionally occur. In 2010 the RRBC produced a 'Flow Reduction Strategy' that used sophisticated computer modelling and other tools to develop potential amounts of flow reduction that could be allocated to each tributary to achieve the 20% goal.

The US Army Corps of Engineers has initiated a 'Feasibility Study' for the Red River of the North to look at flooding and analyze flooding in order to come up with strategies to reduce flooding. Two major products have come out of the feasibility study, one being LIDAR and another being extensive computer RAS modelling. These tools are being used to aid engineers and water resource professionals in analyzing and designing projects aimed at reducing Red River Flooding.

The Red River Watershed Management Board adopted a 'Flow Reduction Strategy' in 2014 to look at areas where flood water can be stored, with a goal to reduce peak flows on the Red River by 20%. This strategy was based upon the 2010 report of the Red River Basin Commission known as the 'Flow Reduction Strategy'. The strategy called for reductions in the JRWD for both peak flow and volume of 7%. Detailed analysis determined that the Joe River contribution to Red River flooding could be reduced for volume by 14% and for flow by 12%. A potential site considered by the JRWD flow reduction strategy shows that sufficient storage for the Joe River Watershed can practically be obtained to exceed their allocated share of the Red River flow reduction strategy. This could be done by constructing an impoundment with capacity to hold 5,670 acre feet. The Complete report is on file with the Joe River WD and is available upon request. Feasibility of constructing such an impoundment will be determined by the JRWD Board of Managers.

The Red River Watershed Management Board has also studied and prepared information and recommendations regarding surface and subsurface drainage. The RRWMB has made Recommendations for Tile Drainage, and has worked with its member watershed districts to distribute model Rules.

The Red River Flood Damage Reduction Work Group has developed several Technical Papers that are widely accepted to utilize as resource information when looking at flooding and flood damages, and how to solve flooding problems.

### IV EXISTING CONDITIONS, RELATED POTENTIAL PROBLEMS, & SOLUTION ALTERNATIVES - Assessment & Issue Identification -

In 2004, the Joe River Watershed District performed an extensive and in depth update of its Overall Plan. The update included preparation of detailed Geographic Information System data, a HEC-RAS model specific to the JRWD, and other data collection initiatives. In addition, Citizen's Advisory and Technical Advisory Committees were convened and utilized to provide in depth and detailed identification of problems and opportunities. These issues, still pertinent in 2017, are listed below, followed by updated information that was compiled by a similar process in 2016-2017 to update the plan.

## BOARD OF WATER AND SOIL RESOURCES

#### **BOARD MEETING AGENDA ITEM**

AGE	NDA ITEM TITLE		Annual Red River Basin Commission Grant								
Meeting Date:			March	28, 202	18						
Agenda Category:			🛛 Co	oxtimes Committee Recommendation $oxtimes$			New Business		Old Business		
Item Type:			🖾 De	☑ Decision □				Discussion		Information	
Section/Region:			Region	al Opei	lorthern						
Contact:		Henry	Van Of								
Prepared by:		Henry	Van Of								
Reviewed by:		Northe	ern Reg		Committee(s)						
Presented by:		Ryan H	lughes								
Time requested:		5 minu	tes								
	Audio/Visual Equipment Needed for Agenda Item Presentation										
Atta	chments:	□ F	Resolution	$\boxtimes$	Order	🗆 Map		Other Support	ing Ir	nformation	
Fisca	l/Policy Impact										
⊠ None					General Fund Budget						
	Amended Policy Requested					Capital Budget					
	New Policy Requested					Outdoor Heritage Fund Budget					
	Other:					Clean Wa	ter Fun	d Budget			

#### **ACTION REQUESTED**

Approval of the Order to provide FY 2018 Legislatively allocated general funds to the Red River Basin Commission.

#### LINKS TO ADDITIONAL INFORMATION

Red River Basin Commission Homepage https://www.redriverbasincommission.org/

Long Term Flood Solutions available at https://www.redriverbasincommission.org/resources

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

The legislatively directed funding provided to the Red River Basin Commission (RRBC) is to support ongoing work related to their Natural Resources Framework Plan and Long Term Flood Solutions plan. For Fiscal Year 2018 this amount is \$100,000. The RRBC has secured the required match from Manitoba and North Dakota and will help further the work that they do in outreach and education for projects and issues related to water quality and floodplain management.

BOARD DECISION #



## **BOARD ORDER**

#### **Annual Red River Basin Commission Grant**

#### PURPOSE

Provide fiscal year 2018 legislatively allocated general funds to the Red River Basin Commission.

#### **RECITALS / FINDINGS OF FACT**

- 1. The Laws of Minnesota 2017, Regular Session, Chapter 93, Article 1, Section 4(i) appropriated funds to the Board for grants to the Red River Basin Commission for water quality and floodplain management, including administration of programs.
- 2. The Northern Regional Committee, at their March 7, 2018 meeting, reviewed the Red River Basin Commission work plan and recommended the Board approve this grant.

#### ORDER

The Board hereby:

1. Approves the allocation of \$100,000 to the Red River Basin Commission for water quality and floodplain management, including administration of programs.

Dated at St. Paul, Minnesota, this March 28, 2018.

#### MINNESOTA BOARD OF WATER AND SOIL RESOURCES

Date: \_\_\_\_\_

Gerald Van Amburg, Chair Board of Water and Soil Resources



## **Red River Basin Commission 2018 Workplan**

The Red River Basin Commission (RRBC) is a charitable; not-for-profit organization designed to help facilitate a cooperative approach to water management within the Basin and is a well-

established forum for identifying, developing, and implementing solutions to cross-boundary land and water issues.

The RRBC is led by 44 directors from Manitoba, Minnesota, North Dakota and South Dakota representing the diversity of this multi-jurisdictional Basin. The board is comprised of local, state, provincial, the environmental community and at-large members dedicated to innovation in the management of the Red River Basin's water resources.

## **4 Centers of Activity**

- 1. <u>Administration/Finance</u> <u>Administration</u> (5100)
- Board Meetings: March, June, September, November
- Board Retreat: February 28 & March 1; In Fargo with a focus, by facilitator van der Linde, on current organizational strengths/weakness and a look at "State of the Commission".
- Summer Tour and Board Meeting in North Dakota Tour June 6-7 to include tour of USGS Monitoring sites near Pembina, and Pembina Road at border. The Board meeting will address Ongoing efforts at starting new projets, specifically an update of the Long Term Flood Solution (LTFS).
- Executive Committee: Monthly, 3<sup>rd</sup> Thursday, additional meetings as needed
- Workplan Development: January March Finalized in March based on feedback from RRBC Board Retreat
- Staff Evaluations: November

## <u>Finance (</u>5400)

- Prepare Annual Budget: January board approval. Begin 2019 budget process in July 2018.
- Manage budgets. Report Monthly Income and expenditures, approval by Board when they meet and Executive Committee the other months.
- Prepare workplans for the agreements for base funding with states and province.
- Request and report to local units of government base funding supports annually.
- Manage existing project funding.
- Develop and prepare new project funding as appropriate for RRBC mission.
- Manage Annual Audit in Canada, United States and Combined, board approval June/July.
- Manage Red River Watershed Center expenses and payments, for all the partners located jointly with RRBC at our current location. (NRCS, IWI, River Keepers, ND DOH, ND SWC and RRRA).

## 2. Partnerships (7000)

• Assist COE Basin Comprehensive Plan, integrate with Update to RRBC Natural Resource Framework Plan. Weave in the goals, objectives and action items into the NRFP. Identify any gaps or overlaps between the CWMP and NRFP to bring forward to board for updates, changes, discussion, etc. The NRFP vs. CWMP is a main theme in the March Retreat.

- Facilitate Basin groups including the following in Minnesota: Roseau River International Watershed, MN Counties Red River Joint Powers Board, International Red River Board and South Valley Initiative.
- Coordinate with the MN Red River Watershed Management Board on flood damage reduction and natural resource enhancement and communication activities by participating at RRWMB monthly meetings as well as committee work.
- Coordinate outreach to local government entities in MN with administrator of RRWMB

## 3. NRFP Workings Groups (7100)

The Natural Resources Framework Plan (NRFP) was written with the intent of providing a vision for the Red River Basin as a whole – for citizens, local governments, and water management agencies. The complex nature of the Red River Basin has resulted in challenges to effective, integrated land and water management. As such, the Red River Basin Commission has developed the "Natural Resources Framework Plan" – to aid in achieving a basin-wide approach to integrated natural resource management, and provide a framework for overcoming political barriers. Primary issues of concern identified by the RRBC with input from citizens, governments and agencies included: Flood Damage Reduction; Fish, Wildlife, Aquatic and Riparian Ecosystem Health; Water Quality; Water Supply; Recreation; and Soil Conservation. Goals and objectives were developed and refined based on the identification of these issues of concern and the need for comprehensive, integrated watershed stewardship and management for the Basin.

## Flood Damage Reduction and Hydrology

- Gaging/Forecasting Project: implementation of the gaging report that will include potential data coordination, installation of additional monitoring stations including soil moisture/frost and development of strategies to improve our gaging efforts.
- Halstad Upstream Retention Project: continue outreach activity on implementation of distributed storage plans in conjunction with IWI, RRRA, NDJWRD and MNRRWMB. Work with Buffalo-Red WSD and Bois de Sioux WSD to advance storage projects that can utilize \$25 million funding set aside by City of Fargo for storage projects in the southern end.
- Continue to work where appropriate with Buffalo Red Watershed District on integrated water management on a watershed scale, work with interested parties on a similar project in the Cass County area of ND.
- Work to integrate Manitoba's provincial Departments that are working on Roseau River watershed with work already completed on Minnesota side of this watershed. LiDAR for the Manitoba portion is now in place. The IWI PTM App is under development for all the Roseau River watershed including into MB. And the Crooks Creek next to the Roseau watershed in Manitoba is working on surface water retention strategies like the U.S.
- Integrate efforts with Southern Chiefs Organization in Manitoba, layout framework for FDR planning for 33 First Nation Communities, begin outreach as funding becomes available
- Participate where appropriate in the discussions and ongoing planning for the Fargo-Moorhead Diversion Project.
- Continue outreach on the IWI lead, Basin Technical and Scientific Committee working on surface drainage and continue to work with that group on the implementation of the tile drainage guidelines.

## Fisheries, Wildlife, Aquatic and Riparian Ecosystem Health

- Review the action items from the COE Comprehensive Planning effort to address areas of opportunity and integration of goal areas into the NRFP.
- Continue work on the watershed AIS LCCMR Project, leveraging local resources, and completing the pilot watershed risk assessments for AIS. Promote, organize and bring together basin-wide participants from Minnesota, North Dakota and Manitoba to address AIS issues within the basin.
- Work with International Water Institute to expand River Watch program across the basin including targeted efforts in the Pembina and Roseau International Watersheds.

## Water Quality

- Work with the COE Comprehensive Plan development water quality focus area. Outline additional Water Quality issues that need to be addressed beyond the nutrient reduction scope of work being done by the IRRB.
- Continue to assist and work with the IRRB-Water Quality Committee on the Nutrient Reduction initiatives that they and the individual states and province are advancing.
- Continue work on the Nutrient Capture LCCMR Project with the partners identified in that project. This work will document the water quality benefit provided by distributed storage projects like North Ottawa. Continue to collaborate with IISD on cattail harvest work they are leading in Manitoba.
- Continue work with Dr. Joe Magner U of MN, St. Paul on sources of nutrients within the agricultural watershed that feeds the North Ottawa Impoundment. We received a MPCA/EPA 319 Grant effective April 2015 to do this work. This project will help future phosphorus reduction strategies by clearly identifying relative inputs of nutrients that contribute to the impoundment, will close out in June 2018
- Partner with the MN Ag Water Research Center and MN Department of Ag to host a series of citizen/farmer nutrient reduction strategy input meeting. We received a Bush Foundation Community Innovations Grant to assist with this effort. Twelve input meetings will be held on the US side of the Red River Basin.
- Continue to work on and expand the efforts of the Water Quality Strategic Plan, funded by the MN legislature through PCA to work with IRRB, MN, ND, and MB efforts and goals to produce a "State of the Basin: Water Quality Report" that can be annually updated. Legislative report to be finalized in March and outreach efforts will continue through 2018.

### Water Supply/Drought Management

- Continue with meeting of the Water Supply Working group to integrate voices from all jurisdictions as they consider drought management studies.
- Continue work with the COE Comprehensive Plan to integrate our water supply work of our NRFP into COE Comprehensive Plan.
- Facilitate discussions with Minnesota and Manitoba on North Dakota's Eastern Water Supply project where they propose to bring water to Fargo from the Missouri River.
- Work with International Red River Board's initiative to develop low-flow protection levels and drought preparedness work for the entire Red River basin.

## **Recreation**

- Work with the COE Comprehensive Plan to integrate our NRFP recreation work into COE Comprehensive Plan. This will involve identifying problem areas, developing recreation goals and an implementation strategy.
- Collaborate with River Keepers in the Moorhead/Fargo area and other water recreation orientated organizations within the basin to improve water related recreational opportunities.

## Soil Conservation and Land Use

- Work with the COE Comprehensive Plan to integrate our Soil Conservation/Soil Health work of the NRFP into COE Comprehensive Plan.
- Coordinate with Becker County SWCD and other SWCD's within the basin that are working on specific soil conservation grants from BWSR and others that are targeted to make improvements to soil health and water quality within the basin
- Development of drainage/soil health task team/working group to look at drainage and related soil health needs from various perspectives in conjunction with the drainage outreach effort by the Red River Retention Authority. We are partnering with RRRA to hold a series of ag drainage workshops in March April 2018. Kickoff event was held in Winnipeg as a preconference workshop focusing on drainage and soil health.

## 4. Education & Information/Communication (7700)

- Press releases, Ripple Effect newspaper columns and Water Minutes done Monthly.
- Annual Summit Conference: January 23-25, 2018. Gathering of 300-400 participants basin stakeholders.
- Continue synergistic activities through co-location effort. Efforts include coordination with NRCS and Red River Retention Authority on implementation of Federal Farm Bill provisions for the Red River Basin and joint efforts on soil health workshops later in 2017 or 2018 and coordination with International Water Institute on water quality, LIDAR based PTM App tool usage for improving water quality at the local level. Coordinate, volunteer and supplement work being done with all co-location partners including River Keepers, ND Department of Health and ND State Water Commission. Explore the potential for future co-location efforts with MN funders and partners.
- New RRBC website has been developed and is being updated with reports.
- Participate in annual meetings of: MAWD, MN Assoc. SWCD, RRWMB/FDRWG and joint RRRA meetings and tour in August.
- Participate and present at regional SWCD meetings; like 20 March 2018 at Crookston.

## Other Grants

The RRBC was successful in receiving competitive grants in two different project areas. This project work supplements our base funding and allows us to advance activities in the basin that we would not otherwise be able to undertake.

 The RRBC is also working on several water quality projects in the Bois de Sioux Watershed District. LCCMR is funding a nutrient capture project at the North Ottawa flood control impoundment. MPCA/EPA funded additional phosphorus source identification in the watershed that feeds North Ottawa. The 319 grant that runs through June 2018 was for \$290,000. • The RRBC was awarded \$200,000 out of the 2015 Minnesota Bonding bill to work on a Basinwide water quality plan that will involve North Dakota, Manitoba and Minnesota looking at both point source and non-point source nutrient reduction efforts. In 2016, a Technical Advisory group was formed that will represent numerous sources to help guide this effort. Legislative report to be completed in March 2018, outreach and stakeholder feedback will continue through June of 2018.



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#### COMMITTEE RECOMMENDATIONS

#### **Central Region Committee**

- 1. Mille Lacs Priority Concerns Scoping Document Kevin Bigalke **DECISION ITEM**
- 2. Sherburne County Comprehensive Local Water Management Plan Kevin Bigalke **DECISION ITEM**
- 3. Wright County Comprehensive Local Water Management Plan Kevin Bigalke DECISION ITEM
- 4. Riley-Purgatory-Bluff Creek Watershed District Boundary Change Kevin Bigalke **DECISION ITEM**

## BOARD OF WATER AND SOIL RESOURCES

#### **BOARD MEETING AGENDA ITEM**

AGENDA ITEM TITLE:	Mille Lacs County PCSD							
Meeting Date:	March 28, 2018							
Agenda Category:	$\boxtimes$ Committee Recommendation $\boxtimes$			$\boxtimes$	New Business		Old Business	
Item Type:	□ Decision	cision 🛛				Discussion		Information
Section/Region:	Central Region							
Contact:	Jason Weinerman							
Prepared by:	Jason Weiner	Jason Weinerman						
Reviewed by:	Central					Committee(s)		
Presented by:	Kevin Bigalke							
Time requested:	5 minutes							
Audio/Visual Equipment Needed for Agenda Item Presentation								
Attachments:   Reso	lution 🛛	Order		Лар		Other Support	ing Ir	nformation
Fiscal/Policy Impact								
⊠ None □			General Fund Budget					
□ Amended Policy Requested □			Capital Budget					
□ New Policy Requested □			Outdoor Heritage Fund Budget					
□ Other:			Clean Water Fund Budget					
ACTION REQUESTED								

Board affirmation of the Mille Lacs County Priority Concerns Scoping Document

#### LINKS TO ADDITIONAL INFORMATION

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

On May 5, 2015, Mille Lacs County began the process of updating their county local water management plan, which will expire on December 31, 2018. The county solicited state agencies and members of the public and submitted their Priority Concerns Scoping Document for review on November 30, 2017. The MN Dept. of Ag., MN Dept. of Health, MPCA, and BWSR provided comment in support of the concerns listed within the document. The central committee met on March 8 to review the county scoping documented and provided a recommendation for approval by the full board.

## BOARD OF WATER AND SOIL RESOURCES

March 28, 2018

Mille Lacs County Commissioners c/o Susan Shaw, Water Plan Coordinator Historic Courthouse 635 2nd Street SE Milaca, MN 56353

#### RE: Official Comments Pertaining to the State Review of the Mille Lacs County Priority Concerns Scoping Document for the Local Water Management Plan Update

Dear Mille Lacs County Commissioners:

Pursuant to Minnesota Statutes §103B.313, subdivision 5, this letter communicates the official comments of the State of Minnesota pertaining to the priority concerns Mille Lacs County has chosen to address in the update of the County Comprehensive Local Water Management Plan (Plan).

The Mille Lacs County Priority Concerns Scoping Document (PCSD) provides information about the county, summarizes the priority concerns development process, and provides the following priority concerns for inclusion in the Plan update:

- Cumulative negative impacts of improper land management and continued development with the Rum River Watershed.
- Impaired or degraded waters in the Upper Rum River and West Branch of the Rum River intermediate watershed.
- Adverse impacts to water quality, infiltration, and flow, caused by land use conversion or development.
- Adverse impacts of detrimental surface and sub-surface water management practices on existing and future development.
- Lack of information and understanding regarding the quality and quantity of groundwater, and the resultant impact on land management decisions.

The Board of Water and Soil Resources (BWSR), along with the state review agencies, received the PCSD on November 30, 2017. Comments were received from BWSR staff, Minnesota Department of Health, Minnesota Department of Agriculture, and the Minnesota Pollution Control Agency. The Minnesota Department of Natural Resources did not provide comments on the PCSD.

The MDA, MDH, BWSR, and MPCA concurred with the priority concerns identified and noted they felt the process to identify the concerns was commendable.

The BWSR Central Regional Committee met on March 8, 2018, to discuss comments received from state review agencies and others, discuss the content of the PCSD, and recommendations for the content of the final plan. The Committee's findings were presented to the BWSR Board at its meeting on March 28, 2018.

The BWSR Board has deemed the priority concerns to be addressed in the Plan are appropriate; no changes are recommended or required to the PCSD as drafted. Please proceed with the development of your Plan. During the development of the goals and action items, the County should include a discussion on climate change and how that may influence water management within the County. The BWSR Board also encourages the County to continue to engage in a process that includes a broad range of citizens and interest groups, in addition to local government officials, and state and federal resource managers during the development of goals, objectives, and an implementation plan.

We look forward to the completion of your plan and its implementation.

Sincerely,

Gerald Van Amburg, Chair Minnesota Board of Water and Soil Resources

cc: Susan Shaw, County Water Plan Coordinator Jeff Berg, MDA (via email) George Minerich, MDH (via email) Dan Lais, DNR (via email) Juline Holleran, MPCA (via email) Kevin Bigalke, BWSR Regional Manager (via email) Jason Weinerman, BWSR Board Conservationist (via email) Hannah Pallmeyer, BWSR (file copy)



July 11, 2017



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## 1. Introduction

## 1.1 County Primer

#### **General Information**

Mille Lacs County is located in east central Minnesota, approximately 70 miles north of the Twin Cities. The county is approximately 682 square miles in area and has a population of 26,097 (2010 census). The county seat is located in the City of Milaca, situated near the intersection of State Highway 23 and U.S. Highway 169. The county is home to Mille Lacs Lake and the headwaters of the Rum River, flowing through Ogechie, Shakopee, and Onamia lakes before making its way through the county and ultimately to the Mississippi River.





#### Demographics

Mille Lacs County is a growing rural county. Historical census data shows a steady population increase over the past 50 years; the Minnesota State Demographic Center projects a continuation in this trend. While growth was steady from 1960 to 1990, the rate greatly increased between 1990 and 2010, as illustrated in Figure 1.2. Overall, from 1960 to 2010 the average annual growth rate was nearly 1.2% per year. Projections for the years between 2010 and 2040 estimate a slower rate of 0.88% per year.



Figure 1.2: Population Growth 1950 to 2010





Figure 1.3: Population Growth Projections 2010 to 2040

Source: Minnesota State Demographic Center

The latest census data shows that 15,787 of Mille Lacs County's 26,097 residents, or approximately 60%, live in the unincorporated areas of the County's 17 townships. The remaining 10,310 residents live within one of Mille Lacs County's eight incorporated municipalities. The largest population center in the county is the City of Princeton, which is home to 18% of Mille Lacs county's residents.



#### Figure 1.4: Population by Geographic Area

Source: United States Census Bureau

The population within Mille Lacs County is, on average, older than the rest of Minnesota and the nation as a whole. Median age within the county is nearly 41 years of age, while median age in Minnesota and the rest of the nation is closer to 37 years of age.

While there is a minor difference in the median age between the cities and townships, the largest age gap is evident in an examination of various geographic regions within the county. The cities and townships surrounding Mille Lacs Lake are significantly older than the rest of the county, with the four townships and two cities situated on the lake having an average median age of 46.1 years old. In comparison, the average median age in the remainder of the county is only 39 years old.


#### Figure 1.5: Median Age by Geographic Area

Source: United States Census Bureau

Mille Lacs County is surrounded by seven counties: Aitkin, Benton, Crow Wing, Isanti, Kanabec, Morrison, and Sherburne. In comparison to these neighboring counties, Mille Lacs County ranks relatively low in total tax capacity, with only Kanabec County ranking lower.



Figure 1.6: 2015 Certified Adjusted Net Tax Capacity

Source: Minnesota Department of Revenue

#### Land Cover Data

Although agricultural land use is focused in the county's southern tier, it is still the largest single land cover category based on 2011 United States Geological Survey (USGS) national land cover data. Just under one-third of the county (32.77%) was classified as cultivated crops in 2011, while mixed forests (24%) and wetlands (16%) comprised the next largest categories.



Map 1.7: Land Cover





Figure 1.8: Percentage of Land Area by Land Cover

#### Land Use

Mille Lacs County is located in east central Minnesota, straddling the Rum River. The various natural features in the county have played a significant role in the county's development patterns and land use.

The southern tier of Mille Lacs County is characterized by sprawling urban development and intensive agriculture. The City of Princeton is located within this tier, in both Mille Lacs and Sherburne counties. This tier has experienced significant growth, partially in response to the growing number of commuters choosing to live on the fringe of the Twin Cities metropolitan area. Agriculture, while still a significant land use within this tier, has continued to decline in response to development pressure after reaching its peak in the early twentieth century.

The middle tier of the county is a transitionary area, bridging the gap between agricultural land use in the southern tier, and forestland and shoreland development in the northern tier. Agriculture and rural development maintain a presence in this tier; however, it is not near the extent realized in the southern tier. This tier has significant gravel deposits, and is home to the majority of the county's gravel pits. Moving north, within the middle tier, large forest stands and vast wetlands are more prevalent. This area is home to the Rum River State Forest, the Mille Lacs Wildlife Management Area, and various other lands designated for public use.

The northern tier is dominated by Mille Lacs Lake and resorts, RV parks, and family cabins that have been constructed in the area. Most parcels located around and adjacent to Mille Lacs Lake were platted for development in the early 1920s, and do not meet the shoreland standards established in the 1980s. While family cabins have historically been seasonal residences for many, the cabins and developments have slowly seen a shift towards year-round occupation by retiring baby boomers.

The land use trends exhibited in the first decade of the 21<sup>st</sup> century have continued, albeit at a highly reduced pace. Agriculture has continued to diminish, particularly in the northern tier of the county, while grasslands and forest continue to make way for new residential developments. While the area surrounding Mille Lacs Lake has historically been heavily developed, increased activity has led to the development of marginal properties that were once considered not worthy of development.

Development in Mille Lacs County is constrained by a number of factors: environmental resources, the amount of land under government ownership, and restrictions imposed by a variety of regulations. The chart below shows that 45% of the land in Mille Lacs County is privately owned and subject to county development regulations.



Figure 1.9: Percentage of Land Area by Type

Of the 45% of privately-owned lands subject to the county's development regulations, only 38% are free from additional regulatory restrictions, such the Wetland Conservation Act and Shoreland or Wild and Scenic River regulations. This is approximately 115 out of the 682 square miles that comprise the county. These lands may be further constrained by access to transportation routes.



Figure 1.10: Private Land, Subject to County Zoning and Additional Environmental Regulations

While the compilation of this data provides information for the analysis of county-wide development potential, it does not account for the conversion of forest habitat in the northern and middle tiers of the county. To further analyze susceptibility to forest conversion, an assortment of existing land cover and government ownership data, along with areas of environmental protection overlays, were compiled to create a map showing forested areas that could possibly be susceptible to conversion. The result of this analysis is shown in Map 1.11.



# Map 1.11: Northern & Middle Tier Development Analysis



#### Watersheds

Mille Lacs County is covered by four major watersheds. The majority of Mille Lacs County is encompassed by the Rum River Watershed, covering approximately 83% of the county's total surface area. The Snake River Watershed covers a sizeable portion of northeast Mille Lacs County, while the Mississippi-Sartell and Mississippi-St. Cloud watersheds cover small portions of western Mille Lacs County.

Historically the Rum River Watershed, stretching from the northern end of Mille Lacs Lake to the Mississippi River in Anoka, has been subject to a number of projects intended to address water quality. This watershed has been evaluated by the Minnesota Pollution Control Agency (MPCA) for the development of a Watershed Restoration and Protection Strategy Report (WRAPS). The WRAPS includes water quality assessment, watershed analysis, civic engagement, planning, implementation, and measurement of results in a 10-year cycle that addresses both restoration and protection. Waters within the watershed that don't meet state standards are listed as impaired, and Total Maximum Daily Load (TMDL) studies are performed.

The Mississippi-St. Cloud and Snake River Watersheds have also been evaluated by the MPCA through the WRAPS and TMDL process. The Mississippi-Sartell watershed is currently being re-evaluated.

Map 1.12 depicts the major watersheds in Mille Lacs County. The Rum River watershed flows south from Mille Lacs Lake through Princeton on its way to the Mississippi River in Anoka. The Mississippi-Sartell and Mississippi-St. Cloud Watersheds flow southwest toward their confluence with the Mississippi River in Sartell and St. Cloud, respectively. In contrast, the Snake River Watershed flows in a southeasterly direction, ultimately emptying into the St. Croix River near Pine City.



# Map 1.12: Major Watersheds







## Map 1.13: Intermediate Watersheds



#### 1.2 Plan Information

#### Water Planning Authority and Responsibility

The Mille Lacs Soil & Water Conservation District (SWCD) is responsible for coordinating the preparation of the comprehensive water management plan, in conjunction with the Mille Lacs County Land Services Office (LSO). The SWCD has had this role since 1989.

#### Current and Historical Water Planning Efforts in Mille Lacs County

Water management planning in Mille Lacs County began in the fall of 1989, when the Mille Lacs County Board voted to begin the process of creating a comprehensive water management plan.

The first comprehensive water management plan was adopted in 1992, with subsequent updates in 1995 and 2006. The current plan, adopted in 2006, expired on December 31, 2016. However, on May 3, 2016 the Mille Lacs County Board authorized the submittal of an extension request to the Minnesota Board of Water and Soil Resources. On July 29, 2016 this extension request was approved, extending the deadline for adoption of a new plan until December 31, 2018. This extension was necessary to extend the planning period to incorporate data from the recently completed Rum River Watershed Restoration and Protection Strategy (WRAPS) into the plan.

This Comprehensive Water Management Plan will be the fourth water management plan prepared for Mille Lacs County.

# 2. Priority Concerns

Priority concerns, as defined in Minnesota Statute § 103B.305, refers to the issues, resources, sub watersheds, or demographic areas identified as a priority by a water planning authority. The concerns identified for this plan update as priorities within Mille Lacs County include:

- 1. Cumulative negative impacts of improper land management and continued development within the Rum River watershed.
- 2. Impaired or degraded waters in the Upper Rum River and West Branch of the Rum River intermediate watersheds.
- 3. Adverse impacts to water quality, infiltration, and flow, caused by land use conversion or development.
- 4. Adverse impacts of detrimental surface and sub-surface water management practices on existing and future development.
- 5. Lack of information and understanding regarding the quality and quantity of groundwater, and the resultant impact on land management decisions.

# 3. Priority Concern Identification Process

The priority concern identification process in Mille Lacs County began in January, 2016. The Local Water Management Plan Advisory Committee began the process by identifying local groups that may be interested in contributing and commenting on water management needs and priorities. Community events where public input could be obtained were also identified.

Following this meeting, the SWCD and LSO staff implemented a coordinated effort to educate and facilitate discussion with local citizens regarding water management efforts in Mille Lacs County.



## BOARD OF WATER AND SOIL RESOURCES

#### **BOARD MEETING AGENDA ITEM**

AGENDA ITEM TITLE	:	Sherburne County Local Water Management Plan								
Meeting Date:	Mai	March 28, 2018								
Agenda Category:			Committee Recommendation			$\boxtimes$	New Business		Old Business	
Item Type:			Decision					Discussion		Information
Section/Region:		Cen	tral Regior	า						
Contact:		Jaso	on Weinerr	man						
Prepared by:		Jaso	on Weinerr	nan						
Reviewed by:		Cen	tral					Committee(s)		
Presented by:		Kev	in Bigalke							
Time requested:		10 r	ninutes							
Audio/Visual Ec	quipmen	t Nee	ded for Ag	enda Ite	em Pres	sentati	on			
Attachments:	□ Resc	olutio	n 🛛	Order		Иар		Other Suppor	ting Ir	nformation
Fiscal/Policy Impact										
⊠ None					Gene	ral Fun	d Bu	dget		
□ Amended Policy	/ Request	ted			Capita	al Budg	get			
□ New Policy Requ	uested				Outdoor Heritage Fund Budget					
□ Other:					Clean	Water	Fun	d Budget		
ACTION REQUESTED										

Board approval of the Sherburne County Local Water Management Plan.

#### LINKS TO ADDITIONAL INFORMATION

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

Sherburne County (County) has updated their Comprehensive Local Water Management Plan (Plan) as authorized under Minnesota Statutes, section 103B.301, the Comprehensive Local Water Management Act. The initial step in the update process, the Priority Concerns Scoping Document (PCSD), was completed and the State's official comments were communicated to the County in a letter dated October 27, 2016. On December 12, 2017, the BWSR received the Plan, a record of the public hearing, and copies of all written comments pertaining to the Plan for final state review

pursuant to Minnesota Statutes, section 103B.315, subd. 5. State agency review comments were received from MDA, MDH, MPCA, and BWSR. The County has responded to all comments received and incorporated appropriate revisions to the final draft. The state agencies recommended that BWSR approve the entire Plan Update as submitted.

The priority concerns to be addressed in the final Plan were deemed to be appropriate and no changes were recommended or required. These priority concerns included the following: 1) Surface Water Quality, 2) Ground Water Quality and Quantity, and 3) Aquatic Invasive Species. The County actively engaged citizens, partners and agency representatives in the development of the Plan Update and included measurable and targeted goals and strategies in their implementation program.

BWSR staff completed its review and found that it meets the requirements of Minnesota Statutes, section 103B.314. The Plan:

- focuses on the priority concerns identified in the PCSD;
- assesses the priority concerns and sets forth appropriate goals and objectives;
- provides an implementation program with measureable actions, timeline and budget; and
- includes all required sections.

On March 8, 2018, the Central Regional Committee met with County representatives and BWSR staff to review and discuss the Plan. The Committee's decision was to recommend approval of the Sherburne Comprehensive Local Water Management Plan update to the full Board.

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

**In the Matter** of the review of the Comprehensive Local Water Management Plan for Sherburne County, pursuant to Minnesota Statutes, Section 103B.311, Subdivision 4 and Section 103B.315, Subdivision 5.

ORDER APPROVING COMPREHENSIVE LOCAL WATER MANAGEMENT PLAN

**Whereas**, the Board of Commissioners of Sherburne County (County) submitted a Comprehensive Local Water Management Plan (Plan) to the Minnesota Board of Water and Soil Resources (Board) on December 12, 2017 pursuant to Minnesota Statutes, Section 103B.315, Subdivision 5, 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. On August 28, 2016 the Board received a Priority Concerns Scoping Document from Sherburne County, pursuant to Minnesota Statutes, Section 103B.312.
- 2. On October 27, 2016 the Board approved official comments on Sherburne County's Priority Concerns Scoping Document. The approval was mailed to the county on October 27, 2016.
- 3. The Plan focuses on the following priority concerns:
  - A. Surface Water Quality
  - B. Ground Water Quality and Quantity
  - C. Aquatic Invasive Species
- 4. On December 12, 2017, the Board received the Plan, a record of the public hearing, and copies of all written comments pertaining to the Plan for final State review pursuant to Minnesota Statutes, Section 103B.315, Subd. 5. State agency representatives attended and provided input at advisory committee meetings during development of the Plan. The following state review comments were received during the comment period.
  - A. Minnesota Department of Agriculture: Recommended approval as presented. MDA provided some clarification regarding minor textual corrections that were incorporated into final draft.
  - B. Minnesota Department of Health: Recommended approval as presented. Commends county on inclusion of drinking and ground water protection.
  - C. Minnesota Department of Natural Resources: Did not provide comment

- D. Minnesota Pollution Control Agency: Recommended approval as written. MPCA provided some additional textual clarifications and corrections that were included in final plan.
- E. Minnesota Environmental Quality Board: Did not provide comment
- F. Minnesota Board of Water and Soil Resources regional staff: Recommended approval as written.
- 5. **Central Regional Committee.** On March 8, the **Central** Regional Committee of the Board reviewed the recommendation of the state review agencies regarding final approval of the Plan. Those in attendance from the Board's Committee were Joe Collins chair, Jack Ditmore, Duane Willenbring, Paige Winebarger, Patty Acomb by telephone, Jill Crafton by telephone, Terry McDill. Board staff in attendance were Central Regional Manager Kevin Bigalke, Board Conservationist Jason Weinerman and Board Conservationist Steve Christopher. The representatives from the County were Dan Cibulka. Board regional staff provided its recommendation of Plan approval to the Committee. After discussion, the Committee's decision was to present a recommendation of approval of the Plan to the full Board.
- 6. Pursuant to MS 103B.311, subd. 4, upon approval by the Board, this plan will be in effect until March 28, 2028.

#### CONCLUSIONS

- 1. All relevant substantive and procedural requirements of law have been fulfilled. The Board has proper jurisdiction in the matter of approving a Comprehensive Local Water Management Plan for Sherburne County pursuant to Minnesota Statutes, Section 103B.315, Subd. 5.
- 2. The Sherburne County Plan attached to this Order states water and water-related problems within the county; priority resource issues and possible solutions thereto; goals, objectives, and actions of the county; and an implementation program. The attached Plan is in conformance with the requirements of Minnesota Statutes Section 103B.301.

#### ORDER

The Board hereby approves the update of the Sherburne Comprehensive Local Water Management Plan with a required amendment by March 28, 2023.

Dated at St. Paul, Minnesota, this 28<sup>th</sup> day of March, 2018.

#### MINNESOTA BOARD OF WATER AND SOIL RESOURCES

BY: Gerald Van Amburg, Chair

# BOARD OF WATER AND SOIL RESOURCES

March 28, 2018

Sherburne County Commissioners c/o Dan Cibulka, Water Plan Coordinator 14855 Highway 10 Elk River, MN 55330

#### RE: Approval of the Sherburne County Comprehensive Local Water Management Plan Update

Dear Sherburne County Commissioners:

The Minnesota Board of Water and Soil Resources (BWSR) is pleased to inform you the Sherburne revised Comprehensive Local Water Management Plan (Plan) was approved at its regular meeting held on March 28, 2018. Attached is the signed Board Order that documents approval of the Plan and indicates the Plan meets all relevant requirements of law and rule.

This update of the Plan is effective for a ten-year period until March 28, 2027, with Goals, Objectives and Action Items to be amended by March 28, 2023. Please be advised, the County must adopt and begin implementing the plan within 120 days of the date of the Order in accordance with Minnesota Statutes §103B.315, Subd. 6.

The commissioners and staff, local partner agencies, and water plan advisory members are to be commended for writing a plan that clearly presents water management goals, actions, and priorities of the County. With continued implementation of this water plan, the protection and management of Sherburne County's water resources will be greatly enhanced. The BWSR looks forward to working with you as you implement this Plan and document its outcomes.

Please contact Board Conservationist Jason Weinerman of our staff at 320-223-7072 or jason.weinerman@state.mn.us for further assistance in this matter.

Sincerely,

Gerald Van Amburg, Chair Minnesota Board of Water and Soil Resources

Enclosure:

**BWSR Board Order** 

CC: Jeff Berg, MDA (via email) George Minerich, MDH (via email) Dan Lais, DNR (via email) Juline Holleran, MPCA (via email) Kevin Bigalke, BWSR Regional Manager (via email) Jason Weinerman, BWSR Board Conservationist (via email) Hannah Pallmeyer, BWSR (file copy)



# **Local Water Management Plan**

Prepared by Sherburne Soil & Water Conservation District

> 14855 Highway 10 Elk River, MN 55330 www.sherburneswcd.org



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# Acknowledgements

#### Sherburne County Board of Commissioners

District 1 – Barbara Burandt (2017 Board Chair) District 2 – Ewald Petersen District 3 – Tim Dolan District 4 – Felix Schmiesing District 5 – Lisa Fobbe (2017 Board Vice Chair)

#### Water Plan Advisory Committee

2018 Members: Clint Jordahl (Chair) Terrance Vander Eyk (Vice Chair) Melanie Waite-Altringer (At-large member) Rick Dahlman (At-large member) Scott Ruiter (At-large member) Tom Hammer (At-large member) Michael Niziolek (Alternate member) Vicki MacGlover (Alternate member)

#### 2018 Advisors:

Andrew Witter (County Public Works) Dan Cibulka (Sherburne SWCD) Francine Larson (Sherburne SWCD) Frances Gerde (Sherburne SWCD) Jason Weinerman (BWSR) Lisa Fobbe (County Commissioner) Mike Lindeneau (County Public Works) Phil Votruba (MPCA) Shane Berg (Sherburne SWCD Supervisor) Zach Guttormson (County Planning & Zoning)

#### Participating Stakeholders & Partners

Cities of Becker, Big Lake, Clear Lake, Elk River, Princeton, St. Cloud, & Zimmerman Elk River Watershed Association Mississippi River – St Cloud Watershed partnership Rum River Watershed partnership Residents and businesses of Sherburne County Sherburne County Coalition of Lake Associations Sherburne County Public Works and Planning & Zoning Townships of Baldwin, Becker, Big Lake, Blue Hill, Clear Lake, Haven, Livonia, Orrock, Palmer & Santiago United States Fish & Wildlife Service (Sherburne National Wildlife Refuge staff)

#### **Technical Advisory Agencies**

Board of Water and Soil Resources Farm Service Agency Minnesota Department of Natural Resources Minnesota Pollution Control Agency Minnesota Department of Agriculture Minnesota Department of Health Natural Resource Conservation Service

#### Author

Dan Cibulka (Water Resource Specialist, Sherburne Soil & Water Conservation District)

# Acronyms

Acronym	What it means
AIS	Aquatic Invasive Species
BMP	Best Management Practice
BWSR	Board of Water and Soil Resources
COLA	Coalition of Lake Associations
CRP	Conservation Reserve Program
CSP	Conservation Stewardship Program
DWSMA	Drinking Water Supply Management Area
EDRR	AIS Early Detection and Rapid Response
EQB	Environmental Quality Board
EQIP	Environmental Quality Incentives Program
EPA	Environmental Protection Agency
FSA	Farm Service Agency
GIS	Geographic Information System
HUC	Hydrologic Unit Code
HUP	Historically Underserved Producers
LGU	Local Governmental Unit
LWMP	Local Water Management Plan
MAWQCP	Minnesota Agricultural Water Quality Certification Program
MCD	Metro Conservation Districts
MGY	Million gallons per year
MS4	Municipal Separate Storm Sewer System
NEMO	Nonpoint Education for Municipal Officials
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
РСТ	Precision Cropping Technologies
PRAP	Performance Review and Assistance Program
SSTS	Subsurface Sewage Treatment Systems
SWCD	Soil and Water Conservation District
TEP	Technical Evaluation Panel
TKN	Total Kjeldahl Nitrogen
TMDL	Total Maximum Daily Load
USDA	United States Department of Agriculture
WCA	Wetland Conservation Act
WHP	Wellhead Protection Program
WPLMN	Watershed Pollutant Load Monitoring Network
WRAPS	Watershed Restoration and Protection Strategy

# **1.0 Executive Summary**

The waters of Sherburne County are of critical importance to the region's health, recreational opportunity, and economic / tourism value. Surface waters within the county's lakes and streams provide recreational opportunity for swimming, angling, water sports, paddling, hunting, nature viewing, or the relaxing pontoon boat cruise. Sherburne County's groundwater is a valuable resource for agricultural irrigation as well as a drinking water and industrial cooling water source. The numerous wetlands in the county filter pollutants from surface runoff, mitigate flooding, and provide habitat for numerous species of mammals, reptiles, aquatic and terrestrial plants, and birds. The many types of water found here help to define the county's identity and quality of life; therefore, it is vital that they be protected using efficient and effective approaches and sound scientific principles.

Of course, the quality and quantity of water leaving Sherburne County directly impacts the quality and quantity of water downstream. Water flowing downstream eventually joins the Mississippi River and flows through the twin cities of Minneapolis and St. Paul. Here, there is a heavy reliance on groundwater for drinking and industrial use in the twin cities of Minneapolis and St. Paul. Using groundwater efficiently in Sherburne County, and encouraging infiltration and recharge to replenish groundwater reserves, will decrease stresses on this groundwater usage. As this water flows further downstream it will cover another ~1,850 miles before reaching the Gulf of Mexico, where in 2017, scientists measured the "dead zone", an area void of aquatic life due excessive pollutants, in the Gulf of Mexico to encompass over 8,770 square miles. This is the largest ever documented dead zone since monitoring began 30 years ago. Reductions must be made to nutrient and sediment contributions from Sherburne County as part of a watershed-wide effort if the goal of reducing the dead zone to 1,950 square miles is to be achieved.

Sherburne County is committed to protecting surface and ground water for its best interests as well as the interests of those downstream. However, many challenges face water management in the county, including rural and urban runoff of pollutants, erosion of shoreline, increasing development pressures, overuse of fertilizers, pesticides and herbicides, transport of fecal coliform bacteria, a decline in soil and native vegetation health, increasing pressure or use of groundwater, and proliferation of invasive species. Currently, a number of Sherburne waterbodies are listed as impaired for recreational activity, aquatic life or aquatic consumption due to a number of these challenges. Numerous threats exist to upland areas of agriculture, prairie and native forests; impacts to these areas will of course increase runoff and transport of pollutants into area waterways, further exacerbating water impairment issues.

Following a series of public input opportunities and extensive review of scientific and environmental data for Sherburne County waterways, the Sherburne County Local Water Management Plan (LWMP) has identified three priority concerns:

- 1. <u>Surface Water Quality</u>: "Cumulative impacts of land use in directly connected and/or riparian areas which have a direct impact on surface water quality."
- 2. <u>Ground Water Quality and Quantity</u>: "High levels of nitrates in groundwater and quantity in areas identified as sensitive."
- 3. <u>Aquatic Invasive Species</u>: "Introduction and spread of aquatic invasive species and their negative effect on water quality, navigation, recreation and fisheries."

Addressing these concerns will require a multi-faceted approach involving citizen education and outreach, wise rural land management, strategic urban planning, completion of diagnostic / feasibility studies, the forming and continuation of strong partnerships, continued monitoring of environmental variables, and in many ways a change in behavior for residents and visitors of Sherburne County. The Implementation Plan specifies the various approaches Sherburne County will take to address the Priority Concerns, utilizing the variety of approaches outlined above. Each Priority Concern has numerous Objectives, which may be considered the approaches selected to address the concern. Each Objective may be met through the completion of numerous Actions, which are defined and targeted steps that should be taken to reach that Objective. Every effort was made to define the numerous Actions with a targeted goal, responsible party, estimated cost, potential funding source. These variables will help to direct implementation, while also providing direction and a target for achieving success in implementation. The goals and actions presented in the Implementation Plan will encourage partnerships, citizen education, monitoring of Sherburne County waterways, and integration of Best Management Practices on agricultural fields, lake and stream shorelines, city streets and sidewalks, and residential neighborhoods throughout the county.

By outlining the Priority Concerns and strategically developing an Implementation Plan that addresses those concerns, protection and rehabilitation of Sherburne County waters will be achieved in a way that is as cost efficient as possible. It is estimated that the cost of implementation would be \$3,981,000 to fully reach these goals between 2018 and 2027, which is higher than the figure of \$2,956,700 projected within the 2007-2017 Sherburne County LWMP. The activities outlined in this document are consistent with the activities and purpose of the Sherburne County Comprehensive Land Use Plan (2010-2030), which itself was developed with the integration of township planning efforts. The LWMP is also consistent with neighboring county water plans. Though some approaches may vary between counties based upon the priority conditions and local priorities, each county specifies similar approaches that are designed to protect and enhance water resources in their geographic region. Recognizing the importance of working across political boundaries to address water concerns, the concept of water management on a watershed scale is discussed in neighboring plans often, as well as within this plan.

To summarize, the 2018-2027 LWMP explores in detail the challenges water managers face in Sherburne County and outlines what approaches have been identified to meet those challenges. The process in which these determinations were made included input from a variety of county stakeholders as well as officials from local cities, townships, county offices, and numerous state agencies. Implementation of this plan has been defined through specifying the action steps that will be completed, the partners involved, the resources needed, and timeframe of estimated completion. The plan further specifies that success will be measured not only by completing these action steps, but also by leveraging partnerships within and outside of the county to tackle these issues on a watershed scale. Because water flows across jurisdictional and political boundaries, the future of water management in Sherburne County and elsewhere will require a collaborative effort from upstream and downstream interests alike in order to meet water resource goals. Ultimately, collective and numerous small victories achieved in all of Minnesota's 81 major watershed are necessary in order to meet a statewide goal proposed by Governor Mark Dayton in 2017, which is to improve water quality 25% by the year 2025 ("25 by 25").



## BOARD OF WATER AND SOIL RESOURCES

#### **BOARD MEETING AGENDA ITEM**

AGENDA ITEM TITLE:		Wright County Local Water Management Plan Amendment								
Meeting Date:	March	28, 201	18							
Agenda Category:	🛛 Co	oxtimes Committee Recommendation $oxtimes$				New Business		Old Business		
Item Type:	🛛 De	⊠ Decision				Discussion		Information		
Section/Region:	Centra	l Regio	n			_				
Contact:	Steve (	Christop	oher		_					
Prepared by:	Steve (	Christop	oher			_				
Reviewed by:	Centra	l Regio	n			Committee(s)				
Presented by:	Kevin I	Bigalke				_				
Time requested:	Ved by: Central Region Committee(s)   Inted by: Kevin Bigalke Committee(s)   requested: 5 minutes Committee(s)   udio/Visual Equipment Needed for Agenda Item Presentation Committee(s)									
□ Audio/Visual Equipme	ent Needeo	d for Ag	genda Ite	em Presentat	ion					
Attachments: 🛛 Re	esolution	$\boxtimes$	Order	🗆 Мар	$\ge$	Other Support	ing Ir	nformation		
Fiscal/Policy Impact										
⊠ None				General Fur						
□ Amended Policy Requ	ested			Capital Budg	get					
□ New Policy Requested □				Outdoor Heritage Fund Budget						
□ Other:				Clean Wate	r Fun	d Budget				
ACTION REQUESTED										

Approval of the Wright County Local Water Management Plan Amendment

#### LINKS TO ADDITIONAL INFORMATION

http://www.wrightswcd.org/docs/WaterPlan.pdf

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

#### **Background:**

The Wright Soil and Water Conservation District is currently responsible for the administration of the Local Water Management Plan 2006-2022 (Plan) for Wright County as delegated by the County Board of Commissioners. The county is located in the western metro area and contains three main transportation corridors: State Highway 12 through the south, State Highway 55 through the center, and I-94 through the north. Wright County is bound by the Clearwater and Mississippi Rivers to the north, McLeod and Carver

Counties to the south, Meeker County to the west, and the Crow River and Hennepin County to the east. The county is blessed with a diverse and abundant mix of water resources, including over 300 lakes, 2 major river systems, many miles of creeks and ditches, and over 34,000 acres of wetlands. The total surface water comprises 16% of the county total land area.

The Wright County Water Management Task Force is a nine member advisory body appointed by the County Commissioners who provide input and direction. Members represent citizens, lake associations, cities, sportsperson and agricultural groups.

The Plan expires on December 31, 2022.

#### **Plan Amendment Process:**

Wright County and Wright SWCD have been active participants in the North Fork Crow River One Watershed, One Plan and identified a need to update its Local Water Management Plan for areas outside of the area covered by that plan and initiated conversations with BWSR staff. Throughout summer and fall of 2017, numerous Wright County Water Plan Task Force meetings were held to determine what was needed to amend the Local Water Management Plan.

On September 11, 2017, Wright County submitted a petition to BWSR stating its intent to amend its current Plan and requested an extension through December 2022. Wright County provided a signed resolution and proposed draft amendment on December 15, 2017. The County notified the Plan stakeholders of the Amendment and held a public hearing on February 20, 2018. No comments were received through the process and a final draft was submitted to BWSR.

#### Plan Amendment Summary:

The Amendment includes revisions to the Executive Summary and updates to the implementation plan. The implementation revisions focus on prioritized and targeted implementation of conservation efforts in the Mississippi-St Cloud and South Fork of the Crow River Watersheds. The County is also adopting the Clearwater River Watershed District plan for areas where the boundaries overlap.

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

**In the Matter** of the review of the Comprehensive Local Water Management Plan Amendment for Wright County, pursuant to Minnesota Statutes Section 103B.315, Subdivision 6.

ORDER APPROVING WRIGHT COUNTY COMPREHENSIVE LOCAL WATER MANAGEMENT PLAN AMENDMENT

**Whereas**, on September 26, 2007, the Minnesota Board of Water and Soil Resources (Board), by Board Order, approved the Wright County Local Water Management Plan Update 2006 – 2015 (Plan); and

**Whereas,** the Board approved an amendment to the Wright County Local Water Management Plan for an update to the implementation section on June 22<sup>nd</sup>, 2011; and

**Whereas**, the Wright County Board submitted an extension request on October 1, 2015 due to participation in a One Watershed, One Plan Pilot which was approved by the Board on January 27, 2016 to extend the Plan through December 31, 2017 consistent with Resolution #14-76 Local Water Plan Extensions Policy; and

**Whereas,** the Wright County Board submitted an extension request with an intent to amend the existing Plan on September 11, 2017 due to continued participation in a One Watershed, One Plan Pilot which was approved by the Board on December 20, 2017 to extend the Plan through December 31, 2022; and

**Whereas**, the Wright County Board submitted a Comprehensive Local Water Management Plan Amendment (Amendment) to the Board on December 17, 2017, pursuant to Minnesota Statutes Section 103B.314, Subdivision 6; 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. On September 11, 2017, the Board received a petition from Wright County stating its intent to amend its current Plan, pursuant to M.S. Section 103B.314, Subd. 6.
- 2. On December 15, 2017, Wright County provided a signed resolution and proposed draft amendment and plan stakeholders were notified.

- 3. On February 9, 2018, the County provided proper notice to all local units of government and state agencies of the required public hearing scheduled for February 20, 2018, to review and provide comments on the drafted Amendment.
- 4. Wright County did not receive any comments on the draft Amendment.
- 5. On February 20, 2018, the Board received the Amendment, a record of the public hearing pursuant to Minnesota Statutes, Section 103B.314, Subd. 6.
- 6. On March 8, 2018, the Board's Central Region Committee and staff met in St. Paul to review and discuss the Amendment. Those in attendance from the Board's committee were Joe Collins, Jack Ditmore, Terry McDill, Duane Willenbring, Paige Winebarger, and via phone Jill Crafton and Patty Acomb. Board staff in attendance were Central Region Manager Kevin Bigalke and Board Conservationist Steve Christopher. Wright County Water Planner, Alicia O'Hare provided an overview of the Amendment. Board staff recommended approval of the Amendment. After presentation and discussion, the committee unanimously voted to recommend the approval of the Plan to the full board.
- 7. This Plan will be in effect until December 31, 2022.

#### CONCLUSIONS

- 1. All relevant substantive and procedural requirements of law have been fulfilled.
- 2. The Board has proper jurisdiction in the matter of approving a Comprehensive Local Water Management Plan Amendment pursuant to Minnesota Statutes, 103B.315, Subd. 6.
- 3. The Amendment attached to this Order is in conformance with the requirements of Minnesota Statues, Section 103B.301.

#### ORDER

The Board hereby approves the attached Amendment of the Wright County Comprehensive Local Water Management Plan 2006-2022. The plan will be in effect until December 31, 2022.

Dated at St. Paul, Minnesota, this 28th day of March, 2018.

#### MINNESOTA BOARD OF WATER AND SOIL RESOURCES

By: Gerald Van Amburg, Chair

# BOARD OF WATER AND SOIL RESOURCES

March 28, 2018

Wright County C/o Alicia O'Hare, Wright County Water Planner 311 Brighton Avenue South, Suite C Buffalo, MN 55313

Dear Chair and Commissioners:

I am pleased to inform you that the Minnesota Board of Water and Soil Resources (Board) has approved the Wright County Local Water Management Plan Amendment (Amendment) at its regular meeting held on March 28, 2018. For your records, I have enclosed a copy of the signed Board Order that documents approval of the Plan. Please be advised that the County must adopt and implement the Plan within 120 days of the date of the Order, in accordance with MN Statutes 103B.315, Subd. 6.

The commissioners, staff, advisory committee members, and all others involved in the planning process are to be commended for their efforts in ensuring an up to date plan for implementation.

Please contact Steve Christopher of our staff at 651-249-7519, or at the central office address for further assistance in this matter.

Sincerely,

Gerald Van Amberg Chair

Enclosure

Cc: Barbara Weisman, DNR (via email) Dan Lais, DNR (via email) Karen Voz, MDH (via email) Jeff Berg, MDA (via email) Juline Holleran, MPCA (via email) Kevin Bigalke, BWSR (via email) Steve Christopher, BWSR (via email) File Copy

Bemidji	Brainerd	Detroit Lakes	Duluth	Mankato	Marshall	Rochester	St. Cloud	St. Paul
	St. Paul HQ	520 Lafayette	Road North	St. Paul, M	N 55155	Phone: (651	) 296-3767	
	www	w.bwsr.state.mn.us	TTY: (80	0) 627-3529	An equal op	portunity employe	er	

This section is an amendment to the 2006, version of the Wright county Water Management Plan. It addresses the following items:

- The adoption of the North Fork One Watershed One Plan
- Description of the priority concerns that will be addressed
- A summary of the consistency of the plan with other pertinent local, state and regional plans and controls.
- Update Implementation Program to pertinent land areas

# **E**xecutive Summary

## Introduction

Wright County has experienced a continual progression of development, being located on the northwestern fringe of the Minneapolis-St. Paul metropolitan area. This progression has changed the county's land use from hardwood forests dotted by countless wetlands and numerous lakes all dissected by miles of streams and rivers to mostly cleared agricultural land. As the dichotomy of agriculture has changed in the last half of the century, so has the land use of Wright County. The previous strong dairy and livestock component has steadily transitioned to intensive row-cropping operations. Combining the major transportation corridors (Hwy 12 through the south, Hwy 55 through the center and I-94 through the north) along with Wright County's close proximity to the metropolitan area, agriculture is succumbing to large lot residential and the denser suburban/urban land uses (Figure 1 and Table 1). This progression of land use is not unique to Wright County is its combination of lakes, rivers and streams and its blend of topographical formations and the current mix of land uses.



Figure 1. Population changes by township in Wright County

Table 1. Table 1. 2004 Extrapolated Population Projections (based on State Demographic Center data). 2002 2005, 2010 and

2016 reflect actual populations

								%
	2002	2005	2010	2016	2020	2025	2030	Change
								2005 to 2030
Wright County	98410	100260	109710	132598	126410	133240	139010	41.3%
Albertville City	4517	5616	7044	7370	7911	8698	8753	93.8%
Albion Township	1189	1208	1255	1317	1206	1216	1227	3.2%
Annandale City	2713	2895	3228	3334	3257	3406	3548	30.8%
Buffalo City	11422	13251	15453	16119	15290	16311	17270	51.2%
Buffalo Township	1919	1914	1804	1879	1714	1673	1638	-14.6%
Chatham Township	1191	1223	1302	1366	1512	1598	1679	41.0%
Clearwater City (part)	883	1315	1735	1780	1152	1238	1308	48.1%
Clearwater Township	1396	1401	1306	1399	1598	1655	1711	22.6%
Cokato City	2745	2726	2694	2753	3230	3365	3494	27.3%
Cokato Township	1300	1344	1311	1357	1480	1531	1581	21.6%
Corinna Township	2461	2418	2322	2427	2869	2982	3092	25.6%
Dayton City (Part)	21	52	54	54	13	12	12	-42.9%
Delano City	3981	4612	5464	5947	5168	5484	5783	45.4%
Franklin Township	2711	2727	2760	2894	2567	2544	2528	-6.9%
French Lake Township	1153	1158	1172	1230	1331	1381	1430	24.0%
Hanover City (part)	1407	1762	2329	2692	2348	2589	2815	100.1%
Howard Lake City	1876	1966	1962	2053	2280	2390	2495	33.0%
Maple Lake City	1650	1879	2059	2127	1857	1917	1976	19.8%
Maple Lake Township	2145	2141	2048	2146	2396	2469	2540	18.4%
Marysville Township	2121	2100	2147	2220	2342	2408	2472	16.5%
Middleville Township	938	978	937	980	905	901	900	-4.1%
Monticello City	9347	10662	12759	13409	12711	13153	13552	53.3%
Monticello Township	3635	3579	3181	3277	4235	4278	4326	4.4%
Montrose City	1413	2145	2847	3136	1795	1898	1995	41.2%
Otsego City	8210	10584	13571	16019	11051	11798	12504	52.3%
Rockford City (part)	3529	3478	3890	964	4663	4963	5246	48.7%
Rockford Township	3397	3382	3194	3345	3275	3261	3255	-4.2%
St. Michael City	11197	14150	16399	17174	17429	19035	20539	83.4%
Silver Creek Township	2380	2419	2335	2468	2879	3016	3146	32.2%
South Haven City	191	208	187	190	180	178	177	-7.3%
Southside Township	1576	1564	1521	1524	1877	1960	2039	29.4%
Stockholm Township	832	843	959	1007	857	867	878	5.5%
Victor Township	1075	1100	1032	1082	1016	1007	1000	-7.0%
Waverly City	747	925	1357	1414	855	885	915	22.5%
Woodland Township	1142	1112	1082	1145	1162	1173	1185	3.8%

There are three major basins that drain Wright County (Figure 2). The Mississippi-Saint Cloud basins drains the northern portion of the county (29.5%). The North Fork of the Crow drains much of the remaining county (65.8%) except for a small portion of the south and southeast that drains to the South Fork of the Crow (4.6%). Wright County is composed of 40,081 acres of lakes and 34,399 acres of wetlands. The total surface water of Wright County comprises 16% of the total 457,084 acres of the county. Ultimately, of the water in Wright County drains to the Mississippi River and travels through the Twin Cities Metro area.



Figure 2. The three major basins draining Wright County. Also identified is the a portion of the Clearwater River Watershed District whose Watershed Management Plan was updated in 2010.

Wright County's Local Water Management Plan (LWMP) has been in effect since it was formally adopted in 1990. The Plan was revised in 1992, 1997 and 2006. The plan was amended in 2011.

In recent years there has been a shift from individual county water plans to creating comprehensive watershed plans that cover major watersheds through the One Watershed One Plan program (1W1P). Wright County contains portions of three major watersheds (Mississippi-Clearwater, North Fork Crow, and South Fork Crow). Eventually, Wright County will adopt three different watershed plans tailored to each of these major watersheds.

The first of Wright County's major watersheds to adopt a comprehensive watershed plan will be North Fork Crow in 2018. Thus management of that area will follow the North Fork Crow 1W1P.This plan has been extended, with updates to the implementation plan, until the other watersheds adopt a comprehensive watershed plan. Additionally, the more recent water management plan (2010) for the Clearwater River Watershed District (CRWD) will be accepted for their area of interest (Figure 2).

### Purpose

The purpose of this Local Water Management Plan is to identify existing and potential problems and opportunities for protection, management and development of water resources and related land resources in Wright County. This plan is formulated in accordance with the requirements of Minn. Stat. 103B.311subd.4, which states that:

- 1. The plan must cover the entire county
- 2. The plan must address problems in the context of watershed units and ground water systems
- 3. The plan must be based upon principals of sound hydrologic management of water, effective environmental protection and efficient management
- 4. The plan must be consistent with local water management plans prepared by counties and watershed management organizations wholly or partially within a single watershed unit or ground water system.
- 5. The plan must cover a five year period (2005-2022)

## Description of Priority Concerns

With public participation and comment taken from both surveys and a public meeting, the citizens of Wright County as well as various governmental agencies, addressed their concerns on the water resources within the county. From this process, the following priority concerns were identified:

- 1. Groundwater quality
- 2. Surface water quality
- 3. Development pressure
- 4. Agricultural issues

The focus of these four priority concerns will form the goals, objectives and action items which will be implemented for the duration of this plan.

# Summary of Goals and Actions

The process of choosing the above priority concerns highlighted specific activities within our society which are negatively impacting Wright County's water resources. These challenges bring opportunities to reverse both the perceived and observed degradation of the county's water quality.

## Goal A: Groundwater Quality:

Provide high quality groundwater supplies to the citizens of Wright County. Actions focus on the implementation of the following objectives:

- 1. Increase available background information of Wright County's groundwater through monitoring, analysis, outside data sources and better information distribution
- 2. Work to prevent failure of individual septic treatment systems (ISTS) and related sewage pollution in Wright County

## Goal B: Surface Water Quality:

Position Wright County to maximize local control and funding for TMDLs. Actions focus on the implementation of the following objectives:

- 1. Expedite the TMDL process for all of the 303d listed waters in Wright County
- 2. Identify and prioritize all the impaired river systems and "General Development and Recreation Lakes" of Wright County

## Goal C: Development Pressures:

Develop regulations, educate and offer incentives to ensure orderly development with minimal impacts to Wright County's water quality. Actions focus on the implementation of the following objectives:

- 1. Guide new development with comprehensive planning, accessible information and consideration for natural resources
- 2. Influence existing developments and landowners use practices which reduce and/or mitigate negative human impact on natural resources

## Goal D: Agricultural Land Use:

Achieve countywide use of environmentally conscious practices by agricultural producers to protect and enhance Wright County's natural resources. Actions focus on the implementation of the following objectives.

- 1. Continue Wright County's partnership with the MPCA to ensure all county feedlots are in compliance with 7020 rules.
- 2. Influence agricultural operators to use practices which either reduce and/or mitigate negative human impact on natural resources

# Consistency of plan with other pertinent local, state, and regional plans

The lake and river management plans overlaying Wright County have been considered in the completion of this document. Plans from neighboring counties were also reviewed to ensure consistency in the protection of regional water resources. There are no known conflicts between the Wright CWMP and other plans.
## **Implementation Program**

Amendment – January 2018

This section establishes the implementation program for the priority concerns. The implementation program identifies the following:

- Actions to be implemented; when the action will be accomplished; responsible agencies; and cost/funding sources. Costs do not include staff time.
- If capital improvement projects are listed, they will include the following: physical components of the project-size, configuration, location; purposes of the project and relationship to the objectives; proposed schedule for project construction; expected federal, state and local costs; types of financing proposed-special assessments, grants and sources of local financing proposed.

The North Fork Crow is in the One Watershed One Plan (1W1P) process. A draft of the plan will be available in early 2018 and the implementation program for that draft plan will apply to the portion of Wright County in the North Fork Crow Watershed. Once the plan is accepted (mid-2018, it will take over as the watershed plan for that North Fork portion of Wright County). In addition, since the North Fork Crow 1W1P is a pilot plan the activities in the implementation program will be used in other portions of Wright County to determine the board scale effectiveness of the pilot program.

## Impaired Waters and TMDLs:

The federal Clean Water Act (CWA) requires states to adopt water-quality standards to protect waters from pollution. These standards define how much of a pollutant can be in the water and still allow it to meet designated uses, such as drinking water, fishing and swimming. The standards are set on a wide range of pollutants, including bacteria, nutrients, turbidity and mercury. A water body is "impaired" if it fails to meet one or more water quality standard. To identify and restore impaired waters, Section 303(d) of the Clean Water Act requires states to:

- 1. Assess all waters of the state to determine if they meet water-quality standards.
- 2. List waters that do not meet standards (also known as the 303d List) and update every even-numbered year.
- 3. Conduct TMDL studies in order to set pollutant reduction goals needed to restore waters.

MPCAs responsibilities include performing assessment activities, listing impaired waters, and conducting TMDLs in Minnesota. The agency also coordinates closely with other state and local agencies on restoration activities.

The Clean Water Legacy Act, passed in June 2006, allocates first-year funding to accelerate water monitoring, TMDL development and restoration activities throughout the state.

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Table 2. The MPCA 2016 Clean Water Act Section 303 (d) list of impaired waters in the county. This list has not yet been accepted by the Environmental Protection Agency.

L TMDL target car completion vear	2010		2025		2023	2023	2023	
TMDL target start year			1998		2018	2018	2018	
Pollutant or stressor	Nutrient/ eutrophication biological indicators	Mercury in fish tissue	Mercury in fish tissue	Dissolved oxygen	Fishes bioassessments	Aquatic macroinvertebrate bioassessments	Fishes bioassessments	Nutrient/ eutrophication biological indicators
Affected designated use	Aquatic Recreation	Aquatic Consumption	Aquatic Consumption	Aquatic Life	Aquatic Life	Aquatic Life	Aquatic Life	Aquatic Recreation
Watershed name	Mississippi River - St. Cloud	Mississippi River - St. Cloud	Mississippi River - St. Cloud	Mississippi River - St. Cloud	Mississippi River - St. Cloud	Mississippi River - St. Cloud	Mississippi River - St. Cloud	Mississippi River - St. Cloud
AUD	86-0212-00	86-0227-00	86-0252-01	07010203-511	07010203-511	07010203-717	07010203-717	86-0183-00
Year added to List	2008	1998	1998	2006	2012	2012	2012	2008
Water body description	Lake or Reservoir	Lake or Reservoir	Lake or Reservoir	Clearwater Lk to Mississippi R	Clearwater Lk to Mississippi R	Scott Lk to Lk Louisa	Scott Lk to Lk Louisa	Lake or Reservoir
Water body name	Albion	Cedar	Clearwater (East)	Clearwater River	Clearwater River	Clearwater River	Clearwater River	Fish

TMDL TMDL target target start year completion year	2010	.8 2023			.8 2023	8 2023		
Pollutant or TMDI stressor target start y	Nutrient/ eutrophication biological indicators	Nutrient/ 2018 eutrophication biological indicators	Mercury in fish tissue	Nutrient/ eutrophication biological indicators	Nutrient/ 2018 eutrophication biological indicators	Nutrient/ 2018 eutrophication biological indicators	Nutrient/ eutrophication biological indicators	Nutrient/ eutrophication biological indicators
Affected P designated st use	Aquatic N Recreation et b	Aquatic N Recreation el b	Aquatic N Consumption ti	Aquatic N Recreation e1 b	Aquatic N Recreation et b	Aquatic N Recreation et b	Aquatic N Recreation et b	Aquatic N Recreation e1 b
Watershed name	Mississippi River - St. Cloud	Mississippi River - St. Cloud	Mississippi River - St. Cloud	Mississippi River - St. Cloud	Mississippi River - St. Cloud	Mississippi River - St. Cloud	Mississippi River - St. Cloud	Mississippi River - St. Cloud
AUD	86-0213-00	86-0026-00	86-0146-00	86-0223-00	86-0139-02	86-0139-01	86-0168-00	73-0014-00
Year added to List	2008	2012	2014	2008	2012	2012	2006	2008
Water body description	Lake or Reservoir	Lake or Reservoir	Lake or Reservoir	Lake or Reservoir	Lake or Reservoir	Lake or Reservoir	Lake or Reservoir	Lake or Reservoir
Water body name	Henshaw	Hunters	Ida	Indian	Little Mary (North Bay)	Little Mary (South Bay)	Locke	Marie

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December 12, 2017 revision

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Water	Water hody	Уеаг	ATID	Watershed	Affected	Pollintant or	TMDL	TMDL
body name	description	added to List		name	designated use	stressor	target start year	target completion year
Millstone	Lake or Reservoir	2012	86-0152-00	Mississippi River - St. Cloud	Aquatic Recreation	Nutrient/ eutrophication biological indicators	2018	2023
Mink	Lake or Reservoir	2008	86-0229-00	Mississippi River - St. Cloud	Aquatic Recreation	Nutrient/ eutrophication biological indicators		
Mississippi River	Clearwater R to Crow R	2002	07010203-729	Mississippi River - St. Cloud	Aquatic Recreation	Fecal Coliform	2018	2023
Mississippi River	Clearwater R to Crow R	1998	07010203-729	Mississippi River - St. Cloud	Aquatic Consumption	Mercury in fish tissue		
Mississippi River	Clearwater R to Crow R	1998	07010203-729	Mississippi River - St. Cloud	Aquatic Consumption	PCB in fish tissue	1998	2025
Pleasant	Lake or Reservoir	1998	86-0251-00	Mississippi River - St. Cloud	Aquatic Consumption	Mercury in fish tissue		
School	Lake or Reservoir	2012	86-0025-00	Mississippi River - St. Cloud	Aquatic Recreation	Nutrient/ eutrophication biological indicators	2018	2023
Scott	Lake or Reservoir	2008	86-0297-00	Mississippi River - St. Cloud	Aquatic Recreation	Nutrient/ eutrophication biological indicators		
Silver	Lake or Reservoir	1998	86-0140-00	Mississippi River - St.	Aquatic Consumption	Mercury in fish tissue		

Water body name	Water body description	Year added to List	AUD	Watershed name	Affected designated use	Pollutant or stressor	TMDL target start year	TMDL target comple year
				Cloud				
Silver	Lake or Reservoir	2008	86-0140-00	Mississippi River - St. Cloud	Aquatic Recreation	Nutrient/ eutrophication biological indicators		
Silver Creek	Locke Lk to Mississippi R	2012	07010203-557	Mississippi River - St. Cloud	Aquatic Life	Aquatic macroinvertebrate bioassessments	2018	2023
Silver Creek	Locke Lk to Mississippi R	2012	07010203-557	Mississippi River - St. Cloud	Aquatic Life	Dissolved oxygen	2018	2023
Silver Creek	Locke Lk to Mississippi R	2012	07010203-557	Mississippi River - St. Cloud	Aquatic Recreation	Escherichia coli		
Silver Creek	Locke Lk to Mississippi R	2012	07010203-557	Mississippi River - St. Cloud	Aquatic Life	Fishes bioassessments	2018	2023
Silver Creek	Unnamed cr to Silver Lk	2012	07010203-662	Mississippi River - St. Cloud	Aquatic Life	Aquatic macroinvertebrate bioassessments	2018	2023
	,			• • •	•	ļ		

December 12, 2017 revision

completion

TMDL target 11

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eutrophication

Aquatic Recreation

Mississippi River - St. Cloud

86-0208-00

2008

Reservoir Lake or

Swartout

biological

2023

2018

bioassessments

Fishes

Aquatic Life

Mississippi

07010203-662

2012

Unnamed cr to Silver Lk

Silver Creek

River - St. Cloud eutrophication

biological indicators Nutrient/

Nutrient/

Aquatic Recreation

Mississippi River - St. Cloud

86-0230-00

2008

Lake or Reservoir

Somers

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Water body name	Water body description	Year added to List	AUID	Watershed name	Affected designated use	Pollutant or stressor	TMDL target start year	TMDL target completion year
						indicators		
Unnamed creek	T121 R23W S19, south line to Mississippi R	2012	07010203-528	Mississippi River - St. Cloud	Aquatic Life	Aquatic macroinvertebrate bioassessments	2018	2023
Unnamed creek	T121 R23W S19, south line to Mississippi R	2014	07010203-528	Mississippi River - St. Cloud	Aquatic Recreation	Escherichia coli		
Unnamed creek	T121 R23W S19, south line to Mississippi R	2012	07010203-528	Mississippi River - St. Cloud	Aquatic Life	Fishes bioassessments	2018	2023
Rice	Lake or Reservoir	2016	86-0032-00	South Fork Crow River	Aquatic Recreation	Nutrient/ eutrophication biological indicators	2012	2017

## BOARD OF WATER AND SOIL RESOURCES

#### **BOARD MEETING AGENDA ITEM**

AGEND	A ITEM TITLE	:		Riley-Pu	rgatory-E	Bluff Cr	eek W	aters	shed District Bou	undar	ry Change
Meetin	g Date:		Marc	ch 28, 201	18						
Agenda	Category:		$\boxtimes$ (	Committe	e Recom	nmenda	ation	$\boxtimes$	New Business		Old Business
Item Ty	pe:			Decision					Discussion		Information
Section	/Region:		Cent	ral Regio	n						
Contact	t:		Anni	e Felix-Ge	erth						
Prepare	ed by:		Anni	e Felix-Ge	erth						
Review	ed by:		Cent	ral					Committee(s)		
Present	ted by:		Kevir	n Bigalke							
Time re	equested:		5 mii	nutes							
🗆 Au	idio/Visual Ec	quipme	nt Need	ed for Ag	genda Ite	em Pres	sentati	on			
Attachn	nents: [	solution	$\boxtimes$	Order		Иар		Other Support	ting Ir	nformation	
Fiscal/Po	olicy Impact										
🛛 No	one		🗆 🛛 General Fun					0			
🗆 An	nended Policy	/ Reque	sted	ed 🗌 Capital Budget							
□ Ne	ew Policy Req	uested		Outdoor Heritage Fund Budget							
□ Ot	her:					Clean	Water	Fun	d Budget		
ACTION	I REQUESTED										

Board approval of the Riley-Purgatory-Bluff Creek Watershed District Boundary Change.

LINKS TO ADDITIONAL INFORMATION

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

The Riley Purgatory Bluff Creek Watershed District filed a Petition dated September 18, 2017 with the Board of Water and Soil Resources (Board) to change the boundary of the Riley Purgatory Bluff Creek Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District.

The territory included in the boundary change, the Petitioned Area, is located in Carver and Hennepin

Counties entirely within the metropolitan area and totals approximately 2,171.32 acres of land. The transfer of acres is summarized in the table below. The Petitioned Area is depicted on a map attached to the Petition and further identified in property identification tables attached to the Petition.

Current District/WMO	Proposed District/WMO	Area (Ac)
Carver County	Riley Purgatory Bluff	50.88
Lower Minnesota	Riley Purgatory Bluff	136.88
Minnehaha Creek	Carver County	76.70
Minnehaha Creek	Riley Purgatory Bluff	463.01
Nine Mile Creek	Riley Purgatory Bluff	690.37
N/A	Minnehaha Creek	1.61
N/A	Riley Purgatory Bluff	2.48
Riley Purgatory Bluff	Carver County	154.62
Riley Purgatory Bluff	Lower Minnesota	190.88
Riley Purgatory Bluff	Minnehaha Creek	139.79
Riley Purgatory Bluff	Nine Mile Creek	264.09

Table 1. Summary of transfer acres

The proposed boundary change would achieve a more accurate alignment between the hydrologic and legal boundaries of the Riley Purgatory Bluff Creek Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District.

On March 8, 2018, the Board's Central Region Committee and staff met in St. Paul to review and discuss the boundary change Petition. Board staff recommended approval of the boundary change. After discussion, the Committee unanimously voted to recommend approval of the Riley Purgatory Bluff Creek Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District boundary change to the full Board contingent on there being no request for a public hearing. There were no hearings requested.

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

In the Matter of the Boundary Change for the Riley Purgatory Bluff Creek Watershed District Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District in Carver and Hennepin Counties pursuant to Minnesota Statutes § 103B.215.

## ORDER BOUNDARY CHANGE

Whereas, the Riley Purgatory Bluff Creek Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District filed a Petition dated September 18, 2017 with the Board of Water and Soil Resources (Board) to change the boundary of the Riley Purgatory Bluff Creek Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District, the Nine Mile Creek Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District pursuant to <u>Minn</u>. <u>Stat.</u> § 103B.215, and;

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

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

# **FINDINGS OF FACT**

- Petition. The Petition to change the boundaries of the Riley Purgatory Bluff Creek Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District was filed by the Riley Purgatory Bluff Creek Watershed District Board of Managers with the Board on September 18, 2017.
- 2. **Property Description.** The territory included in the boundary change, the Petitioned Area, is located in Carver and Hennepin Counties entirely within the metropolitan area and totals approximately 2,171.32 acres of land. The transfer of acres is summarized in the table below. The Petitioned Area is depicted on a map attached to the Petition and further identified in property identification tables attached to the Petition.

Proposed District/WMO	Area (Ac)
Riley Purgatory Bluff	50.88
Riley Purgatory Bluff	136.88
Carver County	76.70
Riley Purgatory Bluff	463.01
Riley Purgatory Bluff	690.37
Minnehaha Creek	1.61
Riley Purgatory Bluff	2.48
Carver County	154.62
Lower Minnesota	190.88
Minnehaha Creek	139.79
Nine Mile Creek	264.09
	Riley Purgatory BluffRiley Purgatory BluffCarver CountyRiley Purgatory BluffRiley Purgatory BluffMinnehaha CreekRiley Purgatory BluffCarver CountyLower MinnesotaMinnehaha Creek

#### Table 1. Summary of transfer acres

- 3. Reasons for Boundary Change. The proposed boundary change would achieve a more accurate alignment between the hydrologic and legal boundaries of the Riley Purgatory Bluff Creek Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District. The requested boundary change is consistent with the purposes and requirements of <u>Minn</u>. <u>Stat.</u> §§ 103B.205 to 103B.255.
- 4. **Statements of Concurrence.** The required statements of concurrence pursuant to <u>Minn.</u> <u>Stat.</u> §103B.215, Subd. 2 (c) from the Riley Purgatory Bluff Creek Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District were submitted with the Petition.
- Effect on Benefits and Damages. The Petition states the proposed boundary change will not affect the benefits or damages for any improvements previously constructed by the Riley Purgatory Bluff Creek Watershed District, or the Minnehaha Creek Watershed District, or the Nine Mile Creek Watershed District, or the Lower Minnesota River Watershed District pursuant to <u>Minn. Stat.</u> § 103B.225.
- 6. Notice of Filing. Legal Notice of Filing of the proposed boundary change, pursuant to Minn. Stat. § 103B.215, Subd. 3, was published in the Chaska Herald, the Chanhassen Villager, the Eden Prairie News, the Sun Sailor, and the Bloomington Sun Current on February 12<sup>th</sup> and 19<sup>th</sup>, 2018, and mailed to the Carver County and Hennepin County Auditors, the Cities of Minnetonka, Deephaven, Shorewood, Chanhassen, Eden Prairie, Bloomington, and Chaska, and all of the watershed districts involved.
- 7. Public Hearing. The Legal Notice of Filing was published pursuant to <u>Minn</u>. <u>Stat</u>. § 103B.215, Subd.3, which requires within 20 days of the last date of publication of the Notice of Filing of the Petition that at least one request for hearing be received by the Board before a hearing will be held. No requests for hearing and no comments were received during the specified period of time and no hearing was held.

8. Central Region Committee. On March 8, 2018, the Board's Central Region Committee and staff met in St. Paul to review and discuss the boundary change Petition. Those in attendance from the Board's Committee were Joe Collins – chair, Paige Winebarger, Teresa McDill, Jack Ditmore, Duane Willenbring, and Jill Crafton and Patty Acomb – by telephone. Board staff in attendance were Central Region Manager Kevin Bigalke, and Board Conservationists Steve Christopher & Jason Weinerman. Board staff recommended approval of the boundary change. After discussion, the Committee unanimously voted to recommend approval of the Riley Purgatory Bluff Creek Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District boundary change to the full Board contingent on there being no request for a public hearing.

#### CONCLUSIONS

- The Petition for boundary change of the Riley Purgatory Bluff Creek Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District is valid in accordance with Minn. Stat. § 103B.215.
- 2. All relevant substantive and procedural requirements of law and rule have been fulfilled.
- 3. The Board has proper jurisdiction in the matter of ordering a watershed district boundary change.
- 4. The territory included in the requested boundary change is within the hydrologic boundaries of the Riley Purgatory Bluff Creek Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District.
- 5. The governing bodies of the Riley Purgatory Bluff Creek Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District concur with the requested boundary change.
- 6. The requested boundary change is consistent with the purpose and requirements of <u>Minn.</u> <u>Stat.</u> §§ 103B.205 to 103B.255.
- 7. The requested boundary change can be accomplished in conformance with <u>Minn. Stat.</u> § 103B.225 regarding benefits and damages.
- 8. The proposed boundary change should be approved per the Petition for the Riley Purgatory Bluff Creek Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District should be encouraged to change their organizational boundaries consistent with this Order.

# ORDER

The Board hereby orders that the boundaries of the Riley Purgatory Bluff Creek Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District are changed per the Petition as depicted on the map attached to this Order and made a part hereof, including the data sets the map was created from. The Board recommends that the Riley Purgatory Bluff Creek Watershed District, the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, and the Lower Minnesota River Watershed District take immediate action to change its organizational boundary consistent with this Order.

Dated at Saint Paul, Minnesota this 28th day of March, 2018.

## MINNESOTA BOARD OF WATER AND SOIL RESOURCES

By:

Gerald Van Amburg, Chair

#### NOTICE OF FILING RILEY PURGATORY BLUFF CREEK, THE MINNEHAHA CREEK WATERSHED DISTRICT, THE NINE MILE CREEK WATERSHED DISTRICT, AND THE LOWER MINNESOTA WATERSHED DISTRICT BOUNDARY CHANGE

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

**In the matter of** the petition for the boundary change of the Riley Purgatory Bluff Creek Watershed District and adjacent watershed management organizations including: the Minnehaha Creek Watershed District, the Nine Mile Creek Watershed District, the Lower Minnesota River Watershed District, pursuant to <u>Minn. Stat.</u> §103B.215.

**Whereas,** the subject petition and complete supporting documentation were received on September 18, 2017 and served on the Board of Water and Soil Resources (Board) pursuant to <u>Minn. Stat.</u> §103B.215.

Now therefore, the Board hereby issues the following:

**NOTICE IS HEREBY GIVEN** that the Board invites written comments on the petition for a boundary change. All comments received will be considered before a decision is made to change the boundary. Any person who objects to the petition may submit a written request for hearing to the Board. If no written requests for a hearing are submitted within 20 days of the last publication of this notice of filing, the Board will consider all of the comments and information received pertaining to the petition and make a decision on the boundary change at a regular Board meeting without conducting a public hearing.

The proposed boundary change impacts approximately 2,171.32 acres of land in Carver and Hennepin Counties, Minnesota that would correct the assessment designation of 805 parcels at various location along the common boundaries of the watershed management organizations.

The Board must review the petition for conformance with state law and rule.

A copy of the petition for inspection is available during normal business hours at the Riley Purgatory Bluff Creek Watershed District office, 18681 Lake Drive East, Chanhassen, MN 55317.

For more information on the petition, contact Claire Bleser, Riley Purgatory Bluff Creek Watershed District Administrator, at 952-687-13-48 or <u>cbleser@rpbcwd.org</u>.

For further information regarding this notice or to submit a written request for a hearing, contact Annie Felix-Gerth, Water Programs Coordinator, Board of Water & Soil Resources at 651-238-0677 or <u>annie.felix-gerth@state.mn.us</u>.

Dated in Saint Paul, Minnesota this 7th day of February, 2018.

/s/ Kevin Bigalke Central Region Manager



#### COMMITTEE RECOMMENDATIONS

#### Wetlands Conservation Committee

1. Wetland Mitigation Fee Policy Addendum – Policies for Single-User Accounts and Stewardship of Large Mitigation Sites – Les Lemm and Tim Smith – *DECISION ITEM* 

## BOARD OF WATER AND SOIL RESOURCES

#### **BOARD MEETING AGENDA ITEM**

AGE	NDA ITEM TITLE:	_	W		•		•		endum – Policies of Large Mitigati		•
Mee	ting Date:	-	Marc	h 28, 20	18						
Age	nda Category:		⊠ C	ommitte	e Recon	nmenda	ition		New Business		Old Business
Item	туре:		D	ecision					Discussion		Information
Sect	ion/Region:	_	Wetla	ands Sec	tion						
Cont	tact:	_	Les Le	emm							
Prep	ared by:	_	Les Le	emm							
Revi	ewed by:	_	Wetla	ands Cor	servatio	n Comn	nittee		Committee(s)		
Presented by:			Les Le	emm & 1	im Smitl	h					
Time requested:			20 minutes								
	Audio/Visual Equip	ment	Neede	ed for A	genda Ite	em Pres	entatio	on			
Atta	chments: 🛛 🖂	Reso	ution		Order		Лар	$\boxtimes$	Other Support	ing Ir	nformation
Fisca	l/Policy Impact										
	None					General Fund Budget					
$\boxtimes$	Amended Policy Re	queste	ed			Capital Budget					
	New Policy Request	ed				Outdo	or Heri	tage	e Fund Budget		
	Other:					Clean	Water	Fun	d Budget		

#### **ACTION REQUESTED**

Board adoption of an addendum to the Wetland Mitigation Fee Policy to address certain credit transfers to single user accounts and stewardship of large mitigation sites.

#### LINKS TO ADDITIONAL INFORMATION

The current Wetland Mitigation Fee Policy is located on the BWSR website at: <u>http://www.bwsr.state.mn.us/wetlands/wetlandbanking/sales\_fees.html</u>

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

Staff have analyzed the outcomes of implementation of the Board's 2017 Wetland Mitigation Fee Policy, effective June 1, 2017, for unusually large wetland banks and single-user account transfers. Staff have concluded that, for unusually large transfers, a modified credit withdrawal fee schedule is justified due to

lower agency costs. Similarly, staff have concluded that the current fee policy has the potential to overcollect the Easement Stewardship Fee for very large mitigation sites. In order to address these less-common situations, staff have prepared an addendum to the 2017 Wetland Mitigation Fee Policy. The purpose of this addendum is to:

- 1) use the flexibility provided in Minn. Stat. § 103G.2242, Subd. 14(b) to define the type, amount, and collection of fees associated with credit transfers of more than 100 wetland banking credits to a single-user account; and
- 2) modify the determination and collection of the Easement Stewardship Fee for mitigation sites with easement areas in excess of 300 acres.

Board Resolution # 18-

## Wetland Mitigation Fee Policy Addendum Policies for Single-User Accounts and Stewardship of Large Mitigation Sites

**WHEREAS,** BWSR is directed pursuant to Minn. Stat. § 103B.103, Subd. 3 and § 103G.2242, Subd. 14 and 15 to collect fees for administering the state wetland bank program; and

**WHEREAS,** Minn. Stat. § 103G.2242, Subd. 14(b) authorizes the board to "establish fees at or below the amounts in paragraph (a) for single-user or other dedicated wetland banking accounts"; and

**WHEREAS**, BWSR Board action 03-93 established the Wetland Banking Fee Policy, and updated this policy through BWSR Board actions 07-88, 08-113, 11-09, and 11-98; and

**WHEREAS,** on October 27, 2016, BWSR Board action 16-87 adopted a new Wetland Mitigation Fee Policy to replace the previous policy established in Board Action 11-98, effective June 1, 2017; and

**WHEREAS**, staff have further analyzed the administrative fees established under current Board policy and have determined that the fees, when applied to large transfers to single user accounts, exceed the necessary agency costs to administer the Wetland Banking Program; and

**WHEREAS,** staff have further analyzed the collection of the wetland mitigation easement stewardship fee and have determined that the process to determine the fee could potentially result in an over-collection of the fee for unusually large wetland mitigation sites; and

**WHEREAS**, the Wetlands Conservation Committee reviewed the proposed "Wetland Mitigation Fee Policy Addendum – Policies for Single-User Accounts and Stewardship of Large Mitigation Sites" on March 19, 2018 and recommends approval of the addendum and publishing the corresponding fee schedule included in this addendum.

**NOW THEREFORE BE IT RESOLVED,** that BWSR amends the 2017 Wetland Mitigation Fee Policy to include the "Policies for Single-User Accounts and Stewardship of Large Mitigation Sites" Addendum dated March 28, 2018.

**BE IT FURTHER RESOLVED,** that the policies contain in this addendum are effective on May 1, 2018.

Date: \_\_\_\_\_

Gerald Van Amburg, Chair Board of Water and Soil Resources

Attachment: Wetland Mitigation Fee Policy Addendum – Policies for Single-User Accounts and Stewardship of Large Mitigation Sites, dated March 28, 2018.

## Wetland Mitigation Fee Policy Addendum

#### Policies for Single-User Accounts and Stewardship of Large Mitigation Sites

#### I. Background.

This document is an addendum to the Minnesota Board of Water and Soil Resources (BWSR) "2017 Wetland Mitigation Fee Policy," effective June 1, 2017 (2017 Policy). The purpose of this addendum is to:

- 1) use the flexibility provided in Minn. Stat. § 103G.2242, Subd. 14(b) to define the type, amount, and collection of fees associated with credit transfers of more than 100 wetland banking credits to a single-user account; and
- 2) modify the determination and collection of the Easement Stewardship Fee for mitigation sites with easement areas in excess of 300 acres.

#### II. Definitions.

A "single-user wetland bank account" or "single-user account" means a wetland banking account established by a single entity (person, business, or organization) where the credits transferred or deposited into the account will be used solely to provide wetland replacement for that entity. Upon establishment of a single-user account the account holder agrees that credits transferred or deposited into the account may not be sold or transferred to another entity.

#### III. Single-user Account Fees.

This section implements Minn. Stat. § 103G.2242, Subd. 14(b), which allows BWSR to establish wetland banking fees at or below the amount prescribed in statute for single-user or other dedicated wetland banking accounts. For the transfer of more than 100 wetland bank credits into a single-use account, the following fees will not be collected for the account: annual maintenance fee, account establishment fee, or transfer fee. The amount of the withdrawal fee will not be prescribed as provided in Section III, Paragraph D of the 2017 policy and will be determined according to the following table:

Number of Credits Transferred into the Single-user Account	Percent of Withdrawal Fee Applied to Transferred Credits				
Up to 100	100%				
101-200	75%				
201-300	50%				
301+	25%				

The withdrawal fee prescribed in this policy addendum applies to all credits transferred within the identified range. For example, for a 500 credit transfer, the withdrawal fee would be 100% of the existing fee for the first 100 credits, plus 75% of the existing fee for the second 100 credits, plus 50% of the existing fee for the third 100 credits, plus 25% of the existing fee for the remaining 200 credits. The fee for multiple transfers from a single bank into the same single-use account will be determined on a cumulative basis (i.e. all such transfers will count towards the number of transferred credits associated with the fee determination tiers).

For transfers that qualify for the withdrawal fee under this section, the fee will be collected in its entirety at the time of transfer, unless the transfer account holder and BWSR agree in writing to an alternative fee payment mechanism prior to the transfer of credits into the single-user account or within 120 days of the effective date of this fee policy addendum.

By making the transfer and accepting the modified withdrawal fee described in this section, the account holder agrees that the transferred credits are now subject to single-user account limitations (see Section II. Definitions).

#### IV. Easement Stewardship Fee.

This section describes the mitigation easement stewardship payment determination and collection mechanisms for large mitigation sites. For wetland mitigation sites with more than 300 acres under easement BWSR will determine a site-specific easement stewardship financial contribution amount, unless the bank sponsor requests that the fee be determined and collected according to Section III, Paragraphs G and I of the 2017 Policy. In determining the amount of the financial contribution, the BWSR will consider the factors prescribed in Minn. Stat. § 103B.103, Subd. 3. Appropriate stewardship calculators or tools may be used to aid in determining the appropriate amount of financial contribution.

For site-specific easement stewardship payment determinations under this section, the financial contribution will be assessed in its entirety at the time of the first credit deposit, unless the account holder and BWSR agree in writing to an account-specific contribution amount collected at the time of credit withdrawal or other alternative collection mechanism. No withdrawals will be processed until the easement stewardship payment has been received by BWSR or an account-specific mechanism is in place.

#### **NEW BUSINESS**

1. Nutrient Reduction and Climate Protection – Frank Kohlasch, Minnesota Pollution Control Agency – *INFORMATION ITEM* 

## BOARD OF WATER AND SOIL RESOURCES

#### **BOARD MEETING AGENDA ITEM**

AGENDA ITEM TITLE:	Nutrient Reduction and Climate Protection Presentation							
Meeting Date:	March 28, 2018							
Agenda Category:	Committee Reco	ommendation	$\boxtimes$	New Business		Old Business		
Item Type:	Decision			Discussion	$\boxtimes$	Information		
Section/Region:								
Contact:								
Prepared by:	Hannah Pallmeyer							
Reviewed by:	John Jaschke							
Presented by:	Frank Kohlasch, MP	CA						
Time requested:	20 minutes							
Audio/Visual Equipment Needed for Agenda Item Presentation								
Attachments:   Reso	lution 🗌 Orde	r 🗆 Map		Other Support	ing Ir	nformation		
Fiscal/Policy Impact								
⊠ None		General Fun	General Fund Budget					
□ Amended Policy Request	ed 🗆	Capital Bud	get					
New Policy Requested		Outdoor He	ritage	e Fund Budget				
□ Other:		Clean Wate	r Fun	d Budget				
ACTION REQUESTED								
LINKS TO ADDITIONAL INFOR	MATION							

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

Pollution Control Agency staff will provide information regarding the greenhouse gas benefits of various nutrient reduction practices.