The Board of Water and Soil Resources (BWSR) will meet on Wednesday, September 25, 2019, beginning at 9:00 a.m. The meeting will be held in the lower level Board Room, at 520 Lafayette Road North, St. 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**

**Northern Region Committee**

1. **Lake of the Woods Watershed Comprehensive Watershed Management Plan** – The Lake of the Woods Watershed was selected by BWSR as one of the seven planning areas for the One Watershed, One Plan program in 2016. The watershed partnership Policy Committee, Advisory Committee, and Planning Work Group members have attended regularly scheduled meetings and submitted the Lake of the Woods Watershed Comprehensive Watershed Management Plan to BWSR on July 3, 2019, for review and approval. The Northern Regional Committee (Committee) met on August 7, 2019, to review the content of the Plan, State agency comments on the Plan, and to make a recommendation for approval. The Committee recommends approval by the full Board. **DECISION ITEM**

2. **Pine River Watershed Comprehensive Watershed Management Plan** – The Pine River Watershed was selected by BWSR as one of the six planning areas for the One Watershed, One Plan program in 2017. The watershed partnership Policy Committee, Advisory Committee, and Planning Work Group members have attended regularly scheduled meetings and submitted the Pine River Watershed Comprehensive Watershed Management Plan to BWSR on July 2, 2019 for review and approval. The Northern Regional Committee (Committee) met on August 7, 2019, to review the content of the Plan, State agency comments on the Plan, and to make a recommendation for approval. The Committee recommends approval by the full Board. **DECISION ITEM**

**Wetland Conservation Committee**

1. **Minnesota Wetland Professional Certification Program Plan** – BWSR staff have developed a program plan for transitioning the Wetland Delineator Certification Program (WDCP) currently administered by the University of Minnesota to a new certification program administered by BWSR. The University is prepared to end their administration of the WDCP program on January 1, 2020.

In 2002 the Board via resolution 02-104 endorsed development of an implementation plan to certify wetland delineators in Minnesota and to enter into agreements with the University of Minnesota to implement the plan pursuant to Minnesota Statutes 103G.2242, Subdivision 2(c). Pursuant to resolution 02-
104, a certification plan for wetland delineators was developed and has been administered by the University of Minnesota and BWSR since 2002. The program has been referred to as the WDCP. The WDCP has successfully educated over 2,600 individuals and certified over 400 wetland delineators since inception. It remains an important component of the Wetland Conservation Act (WCA) program. The science and methodology of wetland delineation as well as the academic preparedness of wetland professionals has changed considerably since 2002. This has created the need to adapt and evolve the WDCP to continue to make it relevant and useful for the implementation of WCA and other wetland regulatory programs in the state. The University of Minnesota Water Resources Center is not situated well to adapt the program to meet its future needs and desires to transfer full administration of the WDCP to BWSR. The transfer of the program to BWSR is likely to result in increased certification and program participation of local government unit staff, and it would allow for program expansion and diversification. The Wetland Committee at their August 27, 2019 meeting, reviewed this proposal and recommended the Board approve this order.

**DECISION ITEM**

**Grants Program and Policy Committee Recommendations**

1. **Watershed-based Implementation Funding Program** – The purpose of this agenda item is to authorize the Watershed-based Implementation Funding Program. The Board was appropriated $13,591,000 the first year and $13,375,000 the second year for the FY20-21 biennium. BWSR staff have met over the past 12 months with an internal staff team (Clean Water Team), local government partners (Metro Forum and Local Government Water Roundtable Work Group), BWSR Executive Team, and BWSR Board Committees (Grants Program and Policy and Water Management and Strategic Planning) to discuss the policy and allocations for the Watershed-based Implementation Funding Program. The BWSR Grants Program and Policy Committee reviewed the policy and allocation authorizations on September 17th, 2019 and made a recommendation to the full Board. The Draft 2020-2021 Clean Water Fund Watershed-based Implementation Funding Program policy and board order are attached based on the recommendations of the Grants Program and Policy Committee. **DECISION ITEM**

**RIM Committee Recommendations**

1. **Jamie Pauling RIM Easement Alteration (21-09-02-01-B)** – The easement alteration amends MN River CREP easement 21-09-02-01-B in Douglas County to remove 0.66 acres as the result of building construction and replace it with 1.37 acres adjacent to the current RIM boundary. **DECISION ITEM**

2. **Bruggeman RIM/PWP Easement Alteration (21-01-93-03-C)** – The easement alteration amends easement 21-01-93-03-C in Douglas County. The alteration releases 1 acre for an existing building site and replaces it with the original 1 acre building site that was left out of the easement for the purpose of development. **DECISION ITEM**

3. **Resolution Authorizing the RIM Rum River Watershed Protection Program** – ML 2019, 1st Special Session, Ch. 2, Art. 2 Sect. 7(l) appropriated $3M of Clean Water Fund money to BWSR “to purchase permanent conservation easements to protect lands adjacent to public waters with good water quality but threatened with degradation.” Staff will develop and implement a program to utilize these funds within the Rum River Watershed. **DECISION ITEM**

**NEW BUSINESS**

1. **BWSR/SWCD/NRCS Watershed Conservation Planning Initiative Progress and Highlights** – USDA-NRCS under its authorities within its Conservation Technical Assistance (CTA) program and Environmental Quality Incentive Program (EQIP) entered into a contribution agreement with BWSR to increase
landowner/producer readiness to implement conservation practices in seven HUC8 watersheds. A $3.0 M Budget with NRCS providing $1.5 M, BWSR Board authorized the $1.5 M match at the October 2017 Board meeting. An amendment to the scope and project timeline was approved by both parties in 2018, which now extends this agreement through December 2021. Project partners will update the Board on the progress towards milestones and local watershed planners will highlight activities from the field.

INFORMATION ITEM

If you have any questions regarding the agenda, please feel free to call me at 651-297-4290. The Board meeting will adjourn around 1:00 p.m. We look forward to seeing you on September 25th.
BOARD OF WATER AND SOIL RESOURCES
520 LAFAYETTE ROAD NORTH
ST. PAUL, MN 55155
WEDNESDAY, SEPTEMBER 25, 2019

PRELIMINARY AGENDA

9:00 AM CALL MEETING TO ORDER

PLEDGE OF ALLEGIANCE

ADOPTION OF AGENDA

MINUTES OF AUGUST 29, 2019 BOARD MEETING

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

INTRODUCTION OF NEW STAFF
• Siri Doyle, Wetlands Engineering Aide
• Josh Swanson, Wetlands Engineering Technician
• Anna Gillette, Office and Administrative Specialist

CONFLICT OF INTEREST DECLARATION
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. Any member who declares an actual conflict of interest must not vote on that agenda item. All actual, potential, and perceived conflicts of interest will be announced to the board by staff before any vote.

REPORTS
• Chair & Administrative Advisory Committee – John Jaschke
• Audit & Oversight Committee – John Jaschke
• Executive Director - John Jaschke
• Dispute Resolution Committee – Travis Germundson
• Grants Program & Policy Committee - Steve Sunderland
• RIM Reserve Committee – Tom Loveall
• Water Management & Strategic Planning Committee - Jack Ditmore
• Wetland Conservation Committee - Tom Schulz
• Buffers, Soils & Drainage Committee - Kathryn Kelly
• Drainage Work Group - Tom Loveall/Tom Gile

AGENCY REPORTS
• Minnesota Department of Agriculture – Thom Petersen
• Minnesota Department of Health – Chris Elvrum
• Minnesota Department of Natural Resources – Sarah Strommen
• Minnesota Extension Service – Joel Larson
• Minnesota Pollution Control Agency – Katrina Kessler
ADVISORY COMMENTS

- Association of Minnesota Counties – Brian Martinson
- 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 – Troy Daniell

COMMITTEE RECOMMENDATIONS

Northern Region Committee

Wetland Conservation Committee
1. Minnesota Wetland Professional Certification Program Plan – Les Lemm and Ken Powell – DECISION ITEM

Grants Program and Policy Committee Recommendations
1. Watershed-based Implementation Funding Program – Marcey Westrick/Melissa Lewis – DECISION ITEM

RIM Committee Recommendations
1. Jamie Pauling RIM Easement Alteration (21-09-02-01-B) – Tim Fredbo – DECISION ITEM
2. Bruggeman RIM/PWP Easement Alteration (21-01-93-03-C) – Tim Fredbo – DECISION ITEM
3. Resolution Authorizing the RIM Rum River Watershed Protection Program – Sharon Doucette and Bill Penning – DECISION ITEM

NEW BUSINESS
1. BWSR/SWCD/NRCS Watershed Conservation Planning Initiative Progress and Highlight - Mary Peterson, Shannon Carpenter, NRCS, Dan Wermager, Root River Planner, and Mary Jo Youngbauer, Lower St. Croix Planner – INFORMATION ITEM

UPCOMING MEETINGS
- Grants Program and Policy Committee will have a conference call on October 14, 2019 from 11:30 a.m. to 12:00 p.m.
- Water Management and Strategic Planning Committee scheduled for October 14, 2019, at 1:00 p.m. in Conference Room 101 at 520 Lafayette Road North, St. Paul. Will have a conference call option.
- BWSR Board Meeting is scheduled for October 23, 2019, at 9:00 a.m. in the Lower Level Conference Rooms at 520 Lafayette Road North, St. Paul.

ADJOURN
BOARD OF WATER AND SOIL RESOURCES
AGRICULTURAL RESEARCH SERVICE LABS
803 IOWA AVENUE
MORRIS, MN  56267
THURSDAY, AUGUST 29, 2019

BOARD MEMBERS PRESENT:
Jack Ditmore, Kathryn Kelly, Sarah Strommen, DNR; Tom Loveall, Nathan Redalen, Tom Schulz, Thom Peterson, MDA; Joe Collins, Harvey Kruger, Joel Larson, University of Minnesota Extension; Chris Elvrum, MDH; Glenn Skuta, MPCA

BOARD MEMBERS ABSENT:
Rich Sve, Katrina Kessler, Paige Winebargger, Steve Sunderland

STAFF PRESENT:
John Jaschke, Angie Becker Kudelka, Rachel Mueller, Jeremy Olson, Kevin Bigalke, Tom Gile, Ryan Hughes, Pete Waller, Sara Zimmerman

OTHERS PRESENT:
Jeff Berg, MDA, LeAnna Buck, Duane Willenbring, Gerald Van Amburg, Joe Montonye, Ron Staples, Linda Vavra, Emily Javens, Keith Swanson, Allen Wold, Matt Solemsaas
Acting Chair Tom Schulz called the meeting to order at 8:30 AM

PLEDGE OF ALLEGIANCE

ADOPTION OF AGENDA - Moved by Kathryn Kelly, seconded by Joel Larson, to adopt the agenda as presented. Motion passed on a voice vote.

MINUTES OF JUNE 26, 2019 BOARD MEETING – Moved by Nathan Redalen, seconded by Thom Peterson, to approve the minutes of June 26, 2019, as circulated. Motion passed on a voice vote.

PUBLIC ACCESS FORUM

Joe Montonye expressed his interest in a longer term commitment financially through contracting or an agreement with producers to work toward the option of soil health practices. Joe was asked to put his expression of interest writing and submit to BWSR.

CONFLICT OF INTEREST DECLARATION

Acting Chair Schulz 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. Any member who declares an actual conflict of interest must not vote on that agenda item. All actual, potential, and perceived conflicts of interest will be announced to the board by staff before any vote.”

REPORTS
Chair & Administrative Advisory Committee – John Jaschke reported he attended the EQB retreat where he met with Commissioners and other stakeholders on strategic planning and discussed what the most important things time should be spent on and how to accomplish it. Report is being prepared.

Audit and Oversight Committee – John Jaschke reported the committee did not meet.

Executive Director’s Report - John Jaschke reported the appointment process still in a holding process. Tom Schulz is the Acting Chair until otherwise. Gave update on Legislative process over the summer on LCCMR and Outdoor heritage proposals.

Tom Gile gave an information update on the approved 1 million for cover crop RFP. On pace, release RFP in mid-September. Targeting new adopters for cover crops to provide opportunities to utilize cover crops and soil health. Encouraging a long term adoption, increase local knowledge and outreach efforts. Four to eight recipients with that 1 million. Goal executed grants in February.

Dispute Resolution Committee – John Jaschke provided an update to the board. There is presently two appeals pending one in Morrison County and the other in Hennepin County. There have been no new appeals filed since the last Board Meeting.
Grants Program & Policy Committee – Tom Schulz report for Steve Sunderland that several items from the committee will be brought forward today. The next committee meeting will be on September 17.

RIM Reserve Committee – Tom Loveall reported that the committee did not meet. Next meeting is scheduled for Wednesday, September 4 at 9:00 a.m. in St. Paul conference room 100.

Water Management & Strategic Planning Committee - Jack Ditmore reported the committee met with jointly with Grants Program & Policy met multiple times to discuss watershed based implementation funding program. Goal is bring to board for September 25 meeting.

Wetland Conservation Committee - Tom Schulz reported they met this past Tuesday. The final approval of Minnesota Wetland Professional Certification Program being transferred from U of M to BWSR. Created a plan and hear more detail on this at our next board meeting.

Update of 404 assumption by states. $200,000 will be provided to the Environmental Quality Board “to begin to develop and assemble the material” to assume 404. BWSR applied for and was chosen to receive a $300,000 grant from EPA. The decision to assume will be made by the state legislature and governor, with input from state agency leadership. A decision could be made in the 2021 or 2022 legislative sessions.

Status Update on Local Government Roads Wetland Replacement Program. The Wetland Conservation Act exempts certain local road projects from State wetland replacement requirements and BWSR is required to replace the associated wetland impacts so the local governments don’t have to. BWSR has generated approximately 4,800 credits to offset 3,300 acres of wetlands impacted by local road projects since 1996. Although BWSR has had capital requests large enough to help fill the gap money has not been appropriated and there is a significant time lag in getting the credits generated. Likely will be out of credits state wide by 2021

Buffers, Soils & Drainage Committee - Kathryn Kelly reported the committee will be meeting in September for updates. The buffer implementation has been moving forward very well and will hopefully have an update for the Board in September.

Drainage Work Group (DWG) - Tom Loveall and Tom Gile reported they met in July and August. Two high priorities regarding the DNR and drainage authority. Reestablishing draining system records and DNR guidance for public water permits law and permission drainage. Had a fair amount of discussion with DNR. DNR and stakeholders group will work on charting a path forward. September meeting is cancelled, next committee meeting will be in October.

AGENCY REPORTS

Minnesota Department of Agriculture – Thom Petersen reported he met with Department of Revenue and Director Jaschke to look at buffer taxation and how counties are assessing and guidance revenue for buffers. Continuing to meet with farmers, assessors, and county. Water certification program continues to grow a lot of farmers in the queue. Working on different amendments for certification whether its soil or wildlife, interested to meet with different companies who are interested in partnering in that program. Soil health - visited a lot of farmers more demand for different cover crops. Environmental Congress meeting on December 3 in Mankato, focuses on water and different Ag practices.
Minnesota Department of Health – Chris Elvrum reported that the grant program for Source Water Protection Grants are open September 3 through the end of the month. Source water protection plans are either 1) implementation grant for well head protection plans and some surface water intake protection plans 2) Noncommunity Transient Grant public water supplies that serves people for brief periods.

Minnesota Department of Natural Resources – Sarah Strommen reported their agency leadership team is at full coverage. Hired northwest regional director Theresa Ebbenga in Bemidji office and central regional director Grant Wilson will start in November. Sara will be attending the State Fair for the state bee event. The DNR will also be issuing a Youth Conservation award for one youth from FFA and 4H for outstanding conservation projects.

Minnesota Extension Service – Joel Larson reported the Minnesota Water Resources Conference will be held on October 15 and 16, gave overview of conference. Announced Heidi Roop will be starting in June, she was hired for extension climatologist position that will replace Mark Seeley. Climate adaptation conference will be in January of 2020.

Minnesota Pollution Control Agency – Glenn Skuta reported they are half way through a 60 day comment period for series of reports on the MN River Basin, MN River, major tributaries, and major watersheds of the basin - have had a number of outreach events. Attended the lower MN watershed district boat tour. Lake Peppin TMDL will be going on public notice – event in Lake City tonight. Dana Vanderbosch is the new Municipal Division Director.

ADVISORY COMMENTS
Association of Minnesota Counties – No report was provided.

Minnesota Association of Conservation District Employees – No report was provided.

Minnesota Association of Soil & Water Conservation Districts – LeAnn Buck reflected on the tour. Reported there will be a local government roundtable meeting in September. Will have a governance 101 training for building public trust.

Minnesota Association of Townships – Nathan Redalen reported annual conference in Mankato November 22 and 23. One of the issue brought up by townships is the 1W1P so will have a BWSR attendee present at round table for general conversation about water.

Minnesota Association of Watershed Districts – Emily Javens reflected on the tour and the tough decisions that need to be made. Spoke of the Great Lakes Revival Report that includes 10 stories on how restoring polluted waters leads to the rebirth of great lakes communities.

Natural Resources Conservation Services – No report was provided.

COMMITTEE RECOMMENDATIONS

Southern Region Committee
Area II Minnesota River Basin Projects Biennial Plan & Area II Floodplain Management Grant – Kathryn Kelly presented the grant.
The funding provided to the Area II Board via specific legislation is targeted at administration of this nine-county joint powers board in the amount of $140,000 each for fiscal years 2020 and 2021. This grant requires a 25% local match.

Moved by Kathryn Kelly, seconded by Chris Elvrum, to approve the Area II Minnesota River Basin Projects Biennial Plan & Area II Floodplain Management Grant. **Motion passed on a voice vote.**

**Grants Program and Policy Committee**

One Watershed One Plan – Plan Content Requirements Amendment – Kevin Bigalke presented the Amendment to the One Watershed, One Plan - Plan Content Requirements.

In 2019, the Minnesota Legislature passed HF 1928, which included a modification to §103B.801 that adds “drinking water sources” to the requirement for plan content (Subd. 4, see screen shot below). Staff recommends updating the One Watershed, One Plan – Plan Content Requirements to reflect this change. The proposed update would be to add the words “drinking water sources” in the list of issues that must be addressed.

Moved by Nathan Redalen, seconded by Chris Elvrum, to approve the One Watershed One Plan – Plan Content Requirements Amendment. **Motion passed on a voice vote.**

One Watershed, One Plan Planning Grants – Kevin Bigalke presented One Watershed, One Plan Planning Grants.

The calendar year 2019 One Watershed, One Plan Planning Grants request for proposal (RFP) period opened on March 28, 2019 and closed on June 6, 2019. Three proposals were submitted and staff screened them against the RFP selection criteria. Staff also received feedback from the Interagency WRAPS Implementation Team and incorporated a new process step of coordination with MPCA. Senior Management Team reviewed staff recommendations on August 13, 2019, and recommended funding all three of the applications. Grants Program and Policy Committee reviewed this recommendation on August 19, 2019, and recommends the attached resolution to the board.

Funds are from the 2018-2019 biennium, Laws of Minnesota 2017, Chapter 91, Article 2, Section 7(i) for assistance, oversight, and grants to local governments to transition local water management plans to a watershed approach.

Moved by Jack Ditmore, seconded by Glenn Skuta, to approve the One Watershed, One Plan Planning Grants. **Motion passed on a voice vote.**

FY 2020 SWCD Local Capacity Grant Program – Kevin Bigalke presented the grant program.

This is the third biennium for the SWCD Capacity appropriation which came through the CWF once again. This biennium the legislature added additional funds and language that required the inclusion of private land and public water factors in the allocation formula. Staff worked, in consultation with other
stakeholders, to develop a new formula which includes those additional metrics. There was also additional language that stipulated 1% for BWSR administration, less than allowable in previous years, therefore BWSR has to reduce administration time spent on these grants. This necessitated strengthening the connection to the CWF Statute requirements within the program policy to ensure the grantees are aware of their responsibilities.

Moved by Joel Larson, seconded by Harvey Kruger, to approve the FY 2020 SWCD Local Capacity Grant Program. **Motion passed on a voice vote.**

** SWCD Conservation Delivery and Capacity Policy Update – Kevin Bigalke presented policy update.

Additional language added to the SWCD Conservation Delivery and Capacity Grants Policy to strengthen the connection to the Minnesota Constitution, article XI, section 15 and to Minnesota Management & Budget’s Guidance to Agencies for expenditure of Clean Water Funds.

Moved by Kathryn Kelly, seconded by Joel Larson, to approve the SWCD Conservation Delivery and Capacity Policy Update. **Motion passed on a voice vote.**

** FY 2020 and FY 2021 Cooperative Weed Management Area Program RFP – Kevin Bigalke presented Cooperative Weed Management Area Program RFP.

Approval of the FY 2020 and FY 2021 BWSR Cooperative Weed Management Area (CWMA) Program RFP is requested. The Board was appropriated $100,000 of cost-share grant funds in each year of the biennium for FY 2020 and FY 2021 ($200,000 total) for “county cooperative weed management cost-share programs and to restore native plants in selected invasive species management sites.” Staff have developed a request for proposal to make these funds available to qualified cooperative weed management groups.

Funding Source: ML 2019, 1st Special Session, Chapter 4, Article 1, Section 4(d-3)

Moved by Joe Collins, seconded by Kathryn Kelly, to approve the FY 2020 and FY 2021 Cooperative Weed Management Area Program RFP. **Motion passed on a voice vote.**

** Central Region Committee

Lower Minnesota River Watershed District Dredge Management Grant – Kevin Bigalke presented the grant.

The Lower Minnesota River Watershed District (LMRWD) is responsible for dredge material management within the Minnesota River and must maintain a 9 foot deep navigation channel as assigned by the US Army Corps of Engineers (COE). The District was largely established to serve as the principle entity to ensure local participation to the COE.

In 2017, the LMRWD successfully lobbied the Minnesota Legislature to appropriate $240,000 in 2017 and 2018 to carry out activities related to Minnesota River channel management. The Board of Water
and Soil Resources (BWSR) is the administrative agency that the appropriated funds will be delivered through. In 2019, the Legislature once again appropriated $240,000 for the first year and $240,000 for the second year of the biennium to defray the annual cost of operating and maintaining sites for dredge spoil to sustain the state, national, and international commercial and recreational navigation on the lower Minnesota River.

As part of the requirements for the funds to be disbursed, the LMRWD must submit a workplan for the management. Staff is recommending approval of disbursement of the funds pending approval of the workplan.

The Central Region Committee reviewed the materials on August 8, 2019. Glenn Skuta moved the recommendation to approve and Paige Winebarger seconded the motion. The Committee unanimously voted to recommend to the BWSR Board approval of disbursement of the funds per the staff recommendation.

Moved by Joe Collins, seconded by Harvey Kruger, to approve the Lower Minnesota River Watershed District Dredge Management Grant. **Motion passed on a voice vote.**

Mille Lacs Soil and Water Conservation District Change in Location of Principal Office Headquarters – Kevin Bigalke presented the change in Location of Principal Office Headquarters.

On July 10, 2019, the Mille Lacs SWCD Board of Supervisors passed a resolution approving the district’s change of principal office location to 1016 5th Street SW, Milaca, MN 56353 to 635 2nd Street SE, Milaca, MN 56353. BWSR’s Central Region Committee met on August 1, 2019, to review this request and voted to recommend approval of the change of principal office location to the full BWSR Board.

Moved by Kathryn Kelly, seconded by Joe Collins, to approve the Mille Lacs Soil and Water Conservation District Change in Location of Principal Office Headquarters. **Motion passed on a voice vote.**

North Fork Crow River Watershed District Boundary Change and District Enlargement Petition Hearing – Kevin Bigalke presented Boundary Change and District Enlargement Petition Hearing.

The North Fork Crow River Watershed District will be filing a petition for a boundary change and a district enlargement pursuant to Minn. Stat. § 103D.251 & Minn. Stat. § 103D.261. Both a boundary change and district enlargement requires the Board of Water and Soil Resources (Board) to hold a hearing regarding the petitioned boundary change and enlargement. The Board has historically appointed and directed a Board Committee to hold the required hearing. In order to plan for the hearing and to make arrangements for the hearing, the Central Region Committee, at its August 8, 2019 meeting, made a recommendation that the Board authorize the Central Region Committee to hold the required hearing regarding the North Fork Crow River Watershed District Boundary Change and District Enlargement petition.

Moved by Joe Collins, seconded by Kathryn Kelly, to approve the North Fork Crow River Watershed District Boundary Change and District Enlargement Petition Hearing. **Motion passed on a voice vote.**
UPCOMING MEETINGS

- RIM Reserve meeting scheduled September 4th in St. Paul
- Southern Regional September 16th in Glenco and 26th in Mankato
- Grants Committee meeting on September 17 in St. Cloud
- Next BWSR meeting scheduled for 9:00 AM, September 25 in St. Paul

Acting Chair Schulz adjourned the meeting at 11:05 AM

Respectfully submitted,

Tom Schulz
Acting Chair
AGENDA ITEM TITLE: Dispute Resolution Committee Report

Meeting Date: September 25, 2019

Agenda Category: ☐ Committee Recommendation ☐ New Business ☐ Old Business
Item Type: ☐ Decision ☐ Discussion ☒ Information
Section/Region: Central Office

Contact: Travis Germundson
Prepared by: Travis Germundson
Reviewed by: Committee(s)
Presented by: Travis Germundson/Vice-Chair Tom Schulz
Time requested: 5 minutes

☐ Audio/Visual Equipment Needed for Agenda Item Presentation

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

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

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.
There is presently two appeals pending. There has been no new appeals filed since the last Board Meeting (August 29, 2019).

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

File 19-2 (6/6/19) This is an appeal of a WCA restoration order in Morrison County. The appeal regards the alleged drainage of approximately 11.5 acres of wetland associated with the placement of agricultural drain tile. Applications for exemption and no-loss determinations were submitted to the LGU concurrently with the appeal. The appeal has been placed in abeyance and the restoration order stayed for the Technical Evaluation Panel to develop written findings of fact and for the LGU to make a final decision on the applications. That decision has been amended to extend the time period on the stay of the restoration order.

File 18-3 (10-31-18) This is an appeal of a WCA restoration order in Hennepin County. The appeal regards the alleged filling and draining of over 11 acres of wetland. Applications for exemption and no-loss determinations were submitted to the LGU concurrently with the appeal. The appeal has been placed in abeyance and the restoration stayed for the LGU to make a final decision on the applications. That decision has been amended several times to extend the time period on the stay of the restoration order.

Summary Table

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BWSR Board Member Conflict of Interest in Grant Review – Disclosure Form

**Meeting:** BWSR Board Meeting  
**Date:** September 25, 2019

I certify that I have read and understand the descriptions of conflict of interest provided, reviewed my participation for conflict of interest, and disclosed any perceived, potential, or actual conflicts. As a BWSR Board member, appointed according to Minnesota Statute Section 103B.101, I am responsible for evaluating my participation or abstention from the review process as indicated below. If I have indicated an **actual conflict**, I will abstain from the discussion and decision for that agenda item.

*Please complete the form below for all agenda items. If you indicate that you do not have a conflict for an agenda item, you do not need to fill out additional information regarding that agenda item.*

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<th>Will you participate? (required if conflict identified)</th>
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Printed name:  ___________________________________________________________________

Signature:  ___________________________________________________________________ Date: __________

*All disclosed conflicts will be noted in the meeting minutes. Conflict of interest disclosure forms are considered public data under Minn. Stat. §13.599.*
COMMITTEE RECOMMENDATIONS

Northern Region Committee


AGENDA ITEM TITLE: Lake of the Woods Watershed Comprehensive Watershed Management Plan

Meeting Date: September 25, 2019

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

Item Type: ☒ Decision  ☐ Discussion  ☐ Information

Section/Region: Regional Operations/Northern

Contact: Ryan Hughes

Prepared by: Chad Severts

Reviewed by: Northern Regional Committee(s)

Presented by: Ryan Hughes

Time requested: 5 minutes

☐ Audio/Visual Equipment Needed for Agenda Item Presentation

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

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

Approval of the Lake of the Woods Watershed Comprehensive Watershed Management Plan as recommended by the Northern Regional Committee.

LINKS TO ADDITIONAL INFORMATION

Plan is on the Lake of the Woods 1W1P website:

https://www.low1w1p.org/

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

The Lake of the Woods Watershed Comprehensive Watershed Management Plan area is located in north-central Minnesota, encompassing portions of Roseau and Lake of the Woods Counties (including the Northwest Angle) and all of the Warroad River Watershed District. This Plan was developed as part of the One Watershed, One Plan program. Mike Hirst (Lake of the Woods SWCD) and Janine Lovold (Roseau SWCD) are the local lead staff responsible for development of the Plan.
On July 3, 2019, BWSR received the Plan, a record of the public hearings, and copies of all written comments pertaining to the Plan for final State review. The Planning Partnership has responded to all comments received and incorporated appropriate revisions to the final Plan. The State agencies recommended that BWSR approve the Plan as submitted.

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

On August 7, 2019, the Northern Regional Committee (Committee) met to review and discuss the Plan. The Committee’s decision was to recommend approval of the Lake of the Woods Watershed Comprehensive Watershed Management Plan to the full Board per the attached draft Order.
ORDER APPROVING COMPREHENSIVE WATERSHED MANAGEMENT PLAN

Whereas, the Policy Committee of the Lake of the Woods Watershed submitted a Comprehensive Watershed Management Plan (Plan) to the Minnesota Board of Water and Soil Resources (Board) on July 3, 2019, pursuant to Minnesota Statutes, Sections 103B.101, Subdivision 14 and Board Resolution #16-17, 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. Partnership Establishment. The Partnership was established January of 2017 through adoption of a Memorandum of Agreement for the purposes of developing a Comprehensive Watershed Management Plan. The membership of the Partnership includes: Lake of the Woods County, Lake of the Woods Soil and Water Conservation District (SWCD), Roseau County, Roseau SWCD and the Warroad River Watershed District.

2. Authority to Plan. Minnesota Statutes, Sections 103B.101, Subdivision 14 allows the Board to adopt resolutions, policies or orders that allow a comprehensive plan, local water management plan, or watershed management plan, developed or amended, approved and adopted, according to Chapter 103B, 103C, or 103D to serve as substitutes for one another or be replaced with a comprehensive watershed management plan. Minnesota Statutes, Sections 103B.801 established the Comprehensive Watershed Management Planning Program; also known as One Watershed, One Plan program. And, Board Resolution #16-17 adopted the One Watershed, One Plan Operating Procedures and Plan Content Requirements policies.

3. Nature of the Watershed. The Lake of the Woods Watershed (LOWW) One Watershed, One Plan (1W1P) plan area is located in north-central Minnesota, encompassing portions of Roseau and Lake of the Woods Counties (including the Northwest Angle) and all of the Warroad River Watershed District (WRWD). The LOWW 1W1P plan area drains approximately 1,178 square miles and includes three municipalities (Roosevelt, Warroad, and Williams). The southern portion of the watershed is primarily wetlands, with areas of forest/shrub interspersed, that transitions into more agricultural areas and
rangeland as it nears Lake of the Woods. The Northwest Angle portion of the watershed is 99% natural forests and wetlands with 1% developed. There is very little urban and commercial land use in the watershed. The watershed consists of a series of smaller drainages, all of which drain into Lake of the Woods. The economic vitality of the area includes agriculture, forestry, and Marvin Windows and Doors, but is also largely based on recreation and tourism related to Lake of the Woods, dubbed the “Walleye Capital of the World.” The watershed is unique in that a large portion of the watershed (approximately 59%, excluding Lake of the Woods) is either public or tribal lands.

4. **Plan Development.** The Plan was developed as a concise and coordinated approach to watershed management. The Plan consolidates policies, programs, and implementation strategies from existing data, studies and plans, and incorporates input from multiple planning partners to provide a single plan for management of the watershed. The Plan focuses on prioritized, targeted, and measurable implementation efforts and lays out specific actions to manage water quantity, protect and restore water quality, natural habitat, recreational uses and drinking water sources in the watershed.

5. **Plan Review.** On July 3, 2019, the Board received the Plan, a record of the public hearings, and copies of all written comments pertaining to the Plan for final State review pursuant to Board Resolution #16-17. 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 (MDA) confirmed receipt of the Plan and noted there will not be any comments provided for the final review due to limited staff capacity and participation during the process.

B. Minnesota Department of Health (MDH) confirmed receipt of the Plan and is satisfied with the responses to the issues raised during the review.

C. Minnesota Department of Natural Resources (DNR) confirmed receipt of the Plan and is satisfied with the responses to the issues raised during the review.

D. Minnesota Pollution Control Agency (MPCA) confirmed receipt of the Plan and is satisfied with the responses to the issues raised during the review.

E. Minnesota Environmental Quality Board (EQB) confirmed receipt of the Plan and did not provide final comments.

F. Minnesota Board of Water and Soil Resources (BWSR) regional staff: BWSR provided comments requesting numerous revisions to the Plan to ensure consistency throughout the Plan and that plan content requirements were met. All comments were adequately addressed in the final Plan. BWSR staff recommended approval of the plan.
6. **Plan Summary and Highlights.** The highlights of the Plan include:
   - The plan development process generated 48 issues of concern that were prioritized as A, B, or C issues. The planning group focused on the 35 A and B issues and created 21 measurable goals. Some of the measurable goals are planning region specific while others are watershed-wide.
   - The planning regions include the four separate drainages in the southern portion of the watershed which flow into Lake of the Woods and the Northwest Angle. Separate implementation tables were created for these planning regions that included Structural Practices, Management Practices, In-Channel Projects, Other Projects and Capital Improvement Projects. Watershed-wide implementation tables were created for Regulation & Enforcement, Data Collection & Monitoring and Education & Outreach activities.
   - PTMApp and Zonation planning tools were used during plan development. PTMApp estimated runoff and nutrient loading, identified potential BMPs, developed prioritized and targeted implementation scenarios, and measured the cost-effectiveness of the scenario for improving water quality. Zonation is a value-based model that uses a combination of geographic information and user-input weighting to prioritize areas for implementation that address multiple resource values. Zonation hotspots and influencing layers are shown with the PTMApp baseline practices in the planning region specific implementation sections. This can be used to target and implement practices with multiple benefits.
   - In-Channel Implementation information was based upon two existing studies. The USDA conducted an assessment of the Bostic and Zippel Creeks and published a report in 2013. The Warroad River Watershed District utilized Clean Water Funds to perform an in-channel sediment analysis on the Warroad River.
   - The plan contains baseline, moderate and high funding scenarios. PTMApp was utilized to evaluate progress towards sediment and phosphorous goals and provide a cost-benefit curve for those Structural and Management Practices measured by the model.

7. **Planning Boundary Adjustment.** The Board adopted the One Watershed, One Plan Suggested Boundary Map on April 23, 2014. The map established suggested planning boundaries for plans developed through the One Watershed, One Plan program. The Partnership requested a minor boundary adjustment to include the portions of the Warroad Watershed District outside the Board adopted Suggested Boundary Map planning boundaries. The Partnership provided documentation for local concurrence, rationale and justification of the adjusted boundary. The adjusted boundary was approved by Board staff per the One Watershed, One Plan Operating Procedures. The adjusted boundary is included as Figure ES-1 on page ES-3 in the Plan.

8. **Northern Regional Committee.** On August 7, 2019, the Northern Regional Committee met to review and discuss the Plan. Those in attendance from the Board’s Committee were Committee Chair Rich Sve, Tom Schulz, and Jeff Berg. Board staff in attendance were Northern Regional Manager Ryan Hughes, Board Conservationist Matt Fischer, and Clean Water Specialist Jeff Hrubes. The representatives from the Partnership were Mike Hirst and Nancy Dunnell from Lake of the Woods SWCD, Janine Lovold and Scott Johnson from Roseau SWCD, Bill Thompson from Warroad River Watershed District, and Kayla Bowe from the Red Lake Nation Department of Natural Resources. 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.

9. This Plan will be in effect for a ten-year period until September 25, 2029.
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 Watershed Management Plan for the Lake of the Woods Watershed pursuant to Minnesota Statutes, Sections 103B.101, Subd. 14 and 103B.801 and Board Resolution #16-17.

3. The Lake of the Woods Watershed Plan attached to this Order states water and water-related problems within the planning area; priority resource issues and possible solutions thereto; goals, objectives, and actions of the Partnership; and an implementation program.

4. The attached Plan is in conformance with the requirements of Minnesota Statutes Section 103B.101, Subd. 14 and 103B.801 and Board Resolution #16-17.

5. The One Watershed, One Plan Suggested Boundary Map is adjusted to include the portions of the Warroad Watershed District outside the One Watershed, One Plan Suggested Boundary Map approved by the Board April 23, 2014.

6. The attached Plan when adopted through local resolution by the members of the Partnership will serve as a replacement for the comprehensive plan, local water management plan, or watershed management plan, developed or amended, approved and adopted, according to Chapter 103B, 103C, or 103D, but only to the geographic area of the Plan and consistent with the One Watershed, One Plan Suggested Boundary Map.

ORDER


Dated at St. Paul, Minnesota, this twenty-fifth day of September, 2019.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

______________________________
BY: Tom Schulz, Acting Chair
September 25, 2019

Lake of the Woods Watershed Policy Committee
c/o Mike Hirst, Lake of the Woods SWCD
119 1st Avenue
PO Box 217
Baudette, MN 56623

RE: Approval of the Lake of the Woods Comprehensive Watershed Management Plan

Dear Lake of the Woods Watershed Policy Committee:

The Minnesota Board of Water and Soil Resources (BWSR) is pleased to inform you the Lake of the Woods Comprehensive Watershed Management Plan (Plan) developed through the One Watershed, One Plan program was approved at its regular meeting held on August 29, 2019. Attached is the signed Board Order that documents approval of the Plan and indicates the Plan meets all relevant requirements of law, rule, and policy.

This Plan is effective for a ten-year period until September 25, 2029. Please be advised, the partners must adopt and begin implementing the plan within 120 days of the date of the Order in accordance with Minnesota Statutes §103B.101, Subd. 14, and the One Watershed, One Plan Operating Procedures.

The members of the partnership and participants in the plan development process are to be commended for writing a plan that clearly presents water management goals, actions, and priorities of the Partnership, and for participating in the One Watershed, One Plan program. 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,

Tom Schulz, Acting Chair
Minnesota Board of Water and Soil Resources

Enclosure: BWSR Board Order
The Lake of the Woods Watershed (LOWW) One Watershed, One Plan (1W1P) plan area is located in north-central Minnesota, encompassing portions of Roseau and Lake of the Woods Counties (including the Northwest Angle) and all of the Warroad River Watershed District (WRWD). The LOWW 1W1P plan area drains approximately 1,178 square miles and includes three municipalities (Roosevelt, Warroad, and Williams). The southern portion of the watershed is primarily wetlands with areas of forest/shrub interspersed. The northern portion of the watershed, nearest the south shore of Lake of the Woods, is comprised of agricultural areas and rangeland. There is very little urban and commercial land use in the watershed. The watershed consists of a series of smaller drainages, all of which drain into Lake of the Woods. The economic vitality of the area includes agriculture, forestry, and Marvin Windows and Doors, but is also largely centered around recreation and tourism related to Lake of the Woods, dubbed the “Walleye Capital of the World.” The watershed is unique in that a large portion of the watershed (approximately 59%, excluding Lake of the Woods) is either public or tribal lands.

In 2017, the members of the two counties, two Soil and Water Conservation Districts (SWCD), and one watershed district (WD) within the LOWW joined together to create the LOWW 1W1P Planning Group. The purpose of the LOWW 1W1P Planning Group was to unite local entities—who would otherwise have separate local plans—under one Comprehensive Watershed Management Plan, creating a cohesive vision for implementing actions to improve locally prioritized water-related issues/concerns. This plan is the result of that vision, and the first step toward accelerating prioritized, targeted, and measurable implementation efforts in the LOWW. This plan reflects the resource diversity of the watershed itself and works towards improving a range of issues, most notably; restoration and protection of water quality, environmental degradation, water-related infrastructure, and education. The plan includes some goals that may be achieved with the implementation of just a few actions, while other goals will be progressive and realized through the implementation of multiple actions over time. Reaching the goal achievement is supported by the established actions with the anticipated measurable progress defined by a series of funding levels.
The objective of this plan is to serve as an everyday resource for local managers, providing them with science-based planning direction and guidance during something as focused as a grant application or as large-scale as the annual workplan development. The plan is purposefully designed by the LOWW Planning Group to easily identify how current and future funding is allocated, what actions and types of projects are a priority, what programs the actions and projects are funded through, and how their implementation achieves the plan’s goals.

This plan is designed to be both aspirational and practical, setting a path forward for the partners to work together and ultimately achieve a vision for a watershed capable of supporting good water quality, abundant fish and wildlife habitat, and productivity and profitability for residents.

Plan Structure

This plan is structured around a set of principles adopted by the LOWW Planning Group designed to:

- identify priority issues for the watershed that have been vetted and clearly tied to measurable goals that will have a positive impact on priority issues;
- establish detailed actions that are organized by implementation programs, that are planning region-based or watershed-wide, and that are prioritized based on funding levels;
- clearly define how baseline and additional funding will be prioritized generally across the planning regions and specific to implementation actions within the planning regions; and
- identify how to evaluate progress towards the measurable goals and provide anticipated progress towards those goals at an action level, aiding in plan progress reporting and accountability as the actions are implemented.

For purposes of organizing this plan, the LOWW is divided up into five smaller watersheds, or “planning regions,” shown in Figure ES-1. These planning regions form the basis for many of the identified issues, measurable goals, and implementation actions throughout the plan.
**Figure ES-1**: Lake of the Woods Watershed, One Watershed, One Planning Area and Planning Regions.
Priority Resources & Issues

If everything is a priority, then nothing is a priority. With its diverse land use and unique resources, the partners and stakeholders in the LOWW have a wide range of issues to manage. Recognizing limitations in staffing, time, and resources, the LOWW 1W1P Planning Group needed to prioritize issues as the focus of implementation efforts (and therefore funding) during the 10-year lifespan of this plan.

Using a combination of existing plans/reports, data, multi-benefit analysis (Zonation), and stakeholder input, the LOWW 1W1P Planning Group developed a comprehensive inventory of 48 issues (across 5 resource categories and 14 resource concerns) impacting the watershed. These issues underwent a prioritization process that included:

- An issue survey targeting multiple stakeholder groups;
- A Public Kickoff Meeting; and
- LOWW 1W1P Planning Group analysis and discussion.

The prioritization process resulted in each issue being given a designation A, B, or C priority level. This plan prioritizes and focuses on issues designated A or B (priority issues). Overall, 16 issues were identified as Level A priority issues and 19 issues were identified as Level B priority issues. The priority issues and their level designation are listed in Table ES-1. These issues are the focus of the implementation efforts in the LOWW 1W1P planning area.

Table ES-1: Priority issues for the Lake of the Woods Watershed 1W1P.

<table>
<thead>
<tr>
<th>Resource Category</th>
<th>Resource Concern</th>
<th>Issue</th>
<th>Priority Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groundwater</td>
<td>Drinking Water</td>
<td>Insufficient knowledge of groundwater condition in private drinking water sources (wells).</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Protection of groundwater supplies from elevated levels of nitrates.</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Protection of groundwater supplies from elevated bacteria (E. coli, and total coliform).</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Groundwater Supplies</td>
<td>Insufficient knowledge of groundwater resource supplies.</td>
<td>A</td>
</tr>
<tr>
<td>Surface Water</td>
<td>Streams and Rivers</td>
<td>Elevated concentrations of suspended solids and sediment.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elevated concentrations of total phosphorus.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Land use changes contributing runoff and increasing the amount of erosion, sediment, and nutrients.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elevated concentrations of bacteria.</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Lakes</td>
<td>Reduced concentrations of dissolved oxygen.</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elevated total phosphorus enrichment in lakes and toxic blue green algae in drinking water source.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Surface Runoff</td>
<td>Impacts from elevated Lake levels.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Land use changes causing an increase in the volume of runoff, peak discharges, and water levels.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Impacts related to increased frequency/intensity of precipitation events.</td>
<td>A</td>
</tr>
<tr>
<td>Resource Category</td>
<td>Resource Concern</td>
<td>Issue</td>
<td>Priority Level</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Wetlands</td>
<td></td>
<td><strong>Drainage and filling of wetlands</strong> and its impacts on <strong>hydrology, water quality, and habitat.</strong></td>
<td>B</td>
</tr>
</tbody>
</table>
| Aquatic Habitat for Fish, Macrornvertebrates & Aquatic Life | **Degradation** of aquatic and riparian **habitat** resulting from **altered hydrology.**  
**Increased flows** and **sediment load** impacting habitat for **fish spawning.**  
**Increased spread** of aquatic invasive species (**AIS**).                                                                                 | A              |
| Lake Shoreland and Stream Riparian Corridors          | Activities increasing **runoff** to streams and rivers increasing **stream bank erosion, deposition, and sediment transport.**  
**Increased shoreland development** causing loss of habitat and erosion and increasing runoff.  
Access, availability, and maintenance of **public access** along streams, rivers, and lakes.                                          | A, B           |
| Lands of Concern                                      | **Protection and restoration of habitat** (shoreline dunes, forests, Scientific and Natural Areas [**SNA**], and Wildlife Management Areas [**WMA**]).  
**Altered hydrology** in the headwater’s **peatlands** area and its impacts on the **groundwater/surface water interaction**, increased **volumes and peak flows**, and increased **base flows.** | B              |
| Drainage Ditch Systems                                | **Maintenance** of agricultural drainage systems to provide **flood control** and improve **water quality.**  
**Lack of ditch inventories.**  
**Lack of information** about locations and impacts of tile drainage.  
**Lack of ditch system** best management practices (**BMP**) and conservation practices (**CP**).                                           | A, B           |
| Point Sources                                         | **Non-compliant subsurface sewage treatment systems** (**SSTS**) nutrients and bacteria impacts to **surface and groundwater.**                                                                        | B              |
| Public Knowledge of and Behavior Relative to Water Issues | **Lack of a watershed-wide education and outreach** program focused on **youth.**  
**Lack of watershed-wide education and outreach** program focused on the **general public.**  
**Lack of watershed-wide educational opportunities for local units of government staff, local offices, and elected public officials.** | B              |
| Landowners’ & Producers’ Engagement in Water Management | **Lack of watershed-wide education and outreach** programs about **incentive** and **cost-share** programs to **landowners.**  
**Lack of watershed-wide education and outreach** programs about agricultural **incentives, management practices, and structural best management practices.**  
**Lack of watershed-wide education and outreach program about shoreline stabilization for lakeshore owners.** | A, B           |
| Technology, Tools, Funding & Existing Capabilities     | **Local staff** technical capacity to use emerging **technologies and tools.**  
**Lack of watershed-wide approach to administer and enforce ordinances and permit systems.**                                                                                                                                 | B              |
Measurable Goals

Measurable goals were established to address each LOWW priority issue (Level A or B). Measurable goals describe the desired condition of a resource impacted by an issue over a determined timeline and are presented as either short-term or long-term goals:

- Short-term measurable goals describe the interim conditions to accomplish or make progress toward during the 10-year lifespan of this plan.
- Long-term measurable goals describe the desired future condition to accomplish, regardless of timeframe.

In some instances, measurable goals are focused on either protecting resources in good condition (protection) or restoring resources that have deteriorated (restoration). Short-term and long-term goals set milestones for resource improvement and allow for resource management flexibility during implementation efforts.

The basis for the measurable goals includes:

- the Lake of the Woods Watershed Restoration and Protection Strategy (WRAPS) Report (2017);
- the Lake of the Woods Watershed Total Maximum Daily Load (TMDL) Study (2017);
- the Lake of the Woods Excess Nutrients TMDL Study (2018);
- the Bostic and Zippel Watershed Assessment (2013);
- the Warroad River In-Channel Sedimentation Analysis Study (2018);
- Prioritize, Target, and Measure Application (PTMAApp) analysis for the watershed; and
- Locally defined goals including but not limited to existing plans.

In certain instances, goals vary across the watershed and are therefore set differently within the five planning regions. Other goals are considered watershed-wide.

This comprehensive plan outlines and describes 21 measurable goals in a series of easy-to-understand factsheets that collectively provide background for and address all priority issues. Each measurable goal factsheet includes information about applicable priority issues, short- and long-term goals, basis for the goals, and metrics by which the goals are measured. The 21 measurable goals are summarized in Table ES-2. A single measurable goal may apply to one priority issue or to several priority issues. Measurable goal factsheets can be found in Section 3.
Table ES-2: List of plan measurable goals.

<table>
<thead>
<tr>
<th>Measurable Goal ID</th>
<th>Measurable Goal</th>
<th>Applicable Resource Concern(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MG-1</td>
<td>Drinking Water Nitrate Protection</td>
<td>Drinking Water</td>
</tr>
<tr>
<td>MG-2</td>
<td>Drinking Water Bacteria Protection</td>
<td>Drinking Water</td>
</tr>
<tr>
<td>MG-3</td>
<td>Drinking Water and Groundwater Supply Data Gaps</td>
<td>Drinking Water, Groundwater</td>
</tr>
<tr>
<td>MG-4</td>
<td>Streams and Rivers - Sediment Protection and Restoration</td>
<td>Streams &amp; Rivers</td>
</tr>
<tr>
<td>MG-5</td>
<td>Streams, Rivers, and Lake of the Woods - Phosphorus Protection and Restoration</td>
<td>Streams &amp; Rivers, Lakes</td>
</tr>
<tr>
<td>MG-6</td>
<td>Lake of the Woods Water Levels</td>
<td>Lakes</td>
</tr>
<tr>
<td>MG-7</td>
<td>Surface Runoff - Watershed Water Retention</td>
<td>Streams &amp; Rivers, Surface Runoff, Wetlands, Lake Shoreland and Stream Riparian Corridors, Lands of Concern</td>
</tr>
<tr>
<td>MG-8</td>
<td>In-Channel Projects</td>
<td>Aquatic Habitat for Fish, Macroinvertebrates, &amp; Aquatic Life</td>
</tr>
<tr>
<td>MG-9</td>
<td>Aquatic Invasive Species Management</td>
<td>Aquatic Habitat for Fish, Macroinvertebrates &amp; Aquatic Life</td>
</tr>
<tr>
<td>MG-10</td>
<td>Lake of the Woods Shoreline Protection and Restoration</td>
<td>Lake Shoreland and Stream Riparian Corridor</td>
</tr>
<tr>
<td>MG-11</td>
<td>Riparian Shoreline Protection and Restoration</td>
<td>Lake Shoreland and Stream Riparian Corridor</td>
</tr>
<tr>
<td>MG-12</td>
<td>Public Water Access Establishment and Maintenance</td>
<td>Lake Shoreland and Stream Riparian Corridors</td>
</tr>
<tr>
<td>MG-13</td>
<td>Habitat Protection and Restoration</td>
<td>Lands of Concern</td>
</tr>
<tr>
<td>MG-14</td>
<td>Tile Drainage Management</td>
<td>Drainage Ditch Systems</td>
</tr>
<tr>
<td>MG-15</td>
<td>Multipurpose Drainage Management</td>
<td>Drainage Ditch Systems</td>
</tr>
<tr>
<td>MG-16</td>
<td>Drainage Inventory Management</td>
<td>Drainage Ditch Systems</td>
</tr>
<tr>
<td>MG-17</td>
<td>Subsurface Sewage Treatment Compliance</td>
<td>Point Sources</td>
</tr>
<tr>
<td>MG-18</td>
<td>General Public Watershed Education</td>
<td>Public Knowledge of and Behavior Relative to Water Issues</td>
</tr>
<tr>
<td>MG-19</td>
<td>Landowners’ and Producers’ Watershed Engagement</td>
<td>Landowners’ &amp; Producers' Engagement in Water Management</td>
</tr>
<tr>
<td>MG-20</td>
<td>Technological Training</td>
<td>Technology, Tools, Funding &amp; Existing Capabilities</td>
</tr>
<tr>
<td>MG-21</td>
<td>Ordinance and Permitting Enforcement</td>
<td>Technology, Tools, Funding &amp; Existing Capabilities</td>
</tr>
</tbody>
</table>
Targeted Implementation Schedule and Implementation Programs

This plan uses a targeted implementation strategy to identify the most cost-effective and measurable actions to implement to make progress towards achieving measurable goals for priority issues.

The implementation actions in this plan are organized into categories based on their implementation programs (Section 5) and presented in two groups: planning region-based actions and watershed-wide actions. The action organization is shown in Table ES-3.

Table ES-3: Action categorization and plan organization.

<table>
<thead>
<tr>
<th>Implementation Program</th>
<th>Action Description</th>
<th>Plan Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural Practices</td>
<td>Structural conservation practices, including side water inlets, grade stabilization structures, filter strips, and grassed waterways.</td>
<td></td>
</tr>
<tr>
<td>Management Practices</td>
<td>Non-structural conservation practices which describe an activity, technique, or methodology that can be thought of as an industry or sector accepted standard operating procedure. Examples include planting cover crops, using conservation tillage methods, and fertilizer management methods.</td>
<td></td>
</tr>
<tr>
<td>In-Channel Projects</td>
<td>In-channel projects including channel restoration/remeandering, bank stabilization, and grade stabilization.</td>
<td>Planning Region-Based</td>
</tr>
<tr>
<td>Other Projects</td>
<td>Specific “other” projects such as the addition of public access to waterbodies or shoreline stabilization.</td>
<td></td>
</tr>
<tr>
<td>Capital Improvement Projects</td>
<td>Major non-recurring expenditures for the construction, repair, retrofit, or increased utility or function of physical facilities, infrastructure, or environmental features, such as a harbor dredging or watercourse access development.</td>
<td></td>
</tr>
<tr>
<td>Regulation &amp; Enforcement</td>
<td>Common and consistent administration and enforcement of statutory responsibilities, local regulations, and local ordinances.</td>
<td>Watershed-Wide</td>
</tr>
<tr>
<td>Data Collection &amp; Monitoring</td>
<td>Actions to close a data gap identified within the plan and continue existing monitoring activities.</td>
<td></td>
</tr>
<tr>
<td>Education &amp; Outreach</td>
<td>Actions intended to increase public engagement, improve communication, and increase understanding.</td>
<td></td>
</tr>
</tbody>
</table>
The actions in the targeted implementation schedule for each planning region and/or watershed-wide include the following information:

- A brief description of each action;
- Measurable goal(s) corresponding to the action;
- How much of the action will be implemented (i.e., the action measurable output);
- How the action implementation will be measured (i.e., the action metric);
- When implementation will occur within the 10-year timeframe of the plan;
- Responsible entities and their role in implementing the action; and
- Estimated cost of the action.

The development of this plan was guided by the use of two different watershed planning tools: PTMAApp and Zonation.

PTMAApp is a tool that lets practitioners:

- estimate runoff and nutrient loading;
- identify potential best management practices (BMPs);
- build prioritized and targeted implementation scenarios;
- measure the cost-effectiveness of the scenario for improving water quality; and
- report the results to pursue funds for project implementation.

The LOWW Planning Group applied a series of screening criteria and decisions to refine PTMAApp results and match typical implementation within the plan area. This included decisions on unit costs for practices, how to calculate cost-effectiveness, and how to evaluate progress towards measurable goals. The group also decided how funding would be allocated among the planning regions and the various types of structural and management practices/projects within the planning regions. PTMAApp was used to select the most cost-effective practices for removing sediment at the field edge until the cost of practices met the funding allocations for each planning region.
Zonation is a value-based model that uses a combination of geographic information and user-input weighting to prioritize places on the landscape for protection and restoration to address multiple resource values.

The LOWW 1W1P combined the data from both tools to develop a targeted implementation schedule for structural and management practices that is cost-effective, high-value, and provides multiple benefits at both the planning region level and watershed-wide.

Planning Region-Based
A unique feature of this plan is the Planning Region Implementation Profiles (Section 4.4). The LOWW 1W1P Planning Group wanted this plan to include day-to-day implementation guides that are specific to each planning region. These profiles provide easy-to-reference information about:

- overall planning region implementation priorities for baseline and additional funding;
- current resource conditions, including which waterbodies are assessed/impaired or require protection/restoration as well as biological stressor information;
- all the feasible PTMApApp structural and management practices in the watershed;
- planning region-specific structural and management incentive program actions, prioritized by funding level;
- baseline funding targeting of the most cost-effective PTMApApp practices—guided by Zonation—and a summary table with practice information and estimated progress towards measurable goal;
- PTMApApp implementation progress towards measurable goals across all funding levels;
- targeted in-channel projects based on existing studies (where applicable) and anticipated progress towards measurable goals; and
- locations of potential capital improvement projects identified during the planning process (where applicable) and supporting information (i.e. costs, timelines, responsibility and applicable measurable goals).

Watershed-Wide
Actions pertaining to Regulation & Enforcement, Data Collection & Monitoring, and Education & Outreach are implemented watershed-wide to create consistency and opportunity for shared
services. These actions are presented in separate tables and prioritized based on funding level. Also included in the targeted implementation tables are any actions that are necessary to achieve measurable goals but will be completed by other entities outside of the LOWW 1W1P Planning Group.

Funding Levels
The ability to achieve plan measurable goals is largely dependent on the amount of funding available to implement actions. However, the amount of funding (combined local, state, and federal) for implementing this plan is uncertain. To address this challenge, the plan presents more than one implementation funding level, which are summarized in the targeted implementation schedule where all actions are assigned a funding level. The LOWW Planning Group felt this was a realistic and defensible approach. It allowed them to build out scenarios for a plan cost that communicates to decision makers (in the planning area and at the state) realistic expectations for achieving results.

- **Baseline Funding** - The baseline funding level has been designed to fund plan implementation costs at or near the estimated most recent (2017) local funding level, recognizing that annual funding may fluctuate greatly between years. Actions identified as a baseline action level are the highest priority for plan implementation.

- **Increased Funding** - If more funds are available for implementation, either locally or form the state or federal government, more actions within the targeted implementation schedule can be implemented and more progress can be made toward measurable goals. To illustrate the impacts of additional funding scenarios, moderate and high increased funding levels are included. Actions identified as moderate funding level have greater priority than those identified as high funding level and would be implemented first if additional dollars become available.

The anticipated cost for implementing the baseline funding level ($7,124,029) is shown in Table ES-4. In Section 4, both the moderate ($18,658,519) and high ($28,278,459) funding levels show how additional funding leads to increased progress toward plan goals. Each action is supported by an implementation program, as described in Section 5 and summarized in Table ES-4.
### Table ES-4: Annualized and total plan cost for actions within the baseline funding level.

<table>
<thead>
<tr>
<th>Plan Actions</th>
<th>Funding Source Program</th>
<th>Annualized Cost</th>
<th>Total Plan Cost (10-year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incentive Programs - Structural Practices¹</td>
<td>Structural and Management Practices Incentive Program⁴</td>
<td>$295,603</td>
<td>$2,956,030</td>
</tr>
<tr>
<td>Incentive Programs - Management Practices²</td>
<td></td>
<td>$61,037</td>
<td>$610,370</td>
</tr>
<tr>
<td>Capital Improvements³</td>
<td>Capital Improvement Projects Program</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Regulations &amp; Enforcement⁴</td>
<td>Regulation &amp; Enforcement Program</td>
<td>$109,412</td>
<td>$1,094,120</td>
</tr>
<tr>
<td>Data Collection &amp; Monitoring⁵</td>
<td>Data Collection &amp; Monitoring Program</td>
<td>$17,811</td>
<td>$178,110</td>
</tr>
<tr>
<td>Education &amp; Outreach⁵</td>
<td>Education &amp; Outreach Program</td>
<td>$163,776</td>
<td>$1,637,760</td>
</tr>
<tr>
<td><strong>Additional Expenses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plan Administration⁶</td>
<td>Existing Budget</td>
<td>$64,764</td>
<td>$647,639</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>$712,403</td>
<td>$7,124,029</td>
</tr>
</tbody>
</table>

¹ Includes total cost of baseline structural practice targeted implementation approach plus an additional 10% for technical assistance.
² Includes total cost of baseline management practice targeted implementation approach plus an additional cost of $10/acre for site visits.
³ Includes any CIPs identified at the funding level.
⁴ Assumes an annualized cost similar to estimated current (2017) local funding levels.
⁵ Includes the funding level sum of program action costs as well as additional funding identified by the PWG in the planning process.
⁶ Administration costs assumed to be up to 10% of the overall plan cost.

### Plan Implementation

The LOWW 1W1P Planning Group previously entered into a formal agreement through a Memorandum of Agreement (MOA) to lead the 1W1P planning process for the LOWW. The subject parties have drafted a Joint Powers Agreement (JPA) for purposes of implementing this plan once it is State approved and locally adopted by each of the parties. Expectations are that the roles of the local Policy Committee, Planning Work Group, and Advisory Committee will shift and change focus during plan implementation. Details about plan implementation decision making are included in Section 5.
**BOARD MEETING AGENDA ITEM**

**AGENDA ITEM TITLE:** Pine River Watershed Comprehensive Watershed Management Plan

**Meeting Date:** September 25, 2019

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

**Item Type:**
- ☒ Decision
- ☐ Discussion
- ☐ Information

**Section/Region:** Regional Operations/Northern

**Contact:** Ryan Hughes

**Prepared by:** Chris Pence

**Reviewed by:** Northern Regional Committee(s)

**Presented by:** Ryan Hughes

**Time requested:** 5 minutes

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

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

**Fiscal/Policy Impact**
- ☒ None
- ☐ General Fund Budget
- ☐ Capital Budget
- ☐ Outdoor Heritage Fund Budget
- ☐ Clean Water Fund Budget

**ACTION REQUESTED**

Approval of the Pine River Watershed Comprehensive Watershed Management Plan as recommended by the Northern Regional Committee.

**LINKS TO ADDITIONAL INFORMATION**

Plan is on the Crow Wing County website:

http://www.crowwing.us/1476/Pine-River-1W1P

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

The Pine River Watershed Comprehensive Watershed Management Plan (Plan) area includes the Pine River 8-Digit Hydrologic Unit. The planning area contains portions of Cass, Crow Wing, Hubbard, and Aitkin counties in North Central MN. This Plan was developed as part of the One Watershed, One Plan program. Melissa Barrick (Crow Wing SWCD), Jacob Frie (Crow Wing County Land Services Department), Kelly Condiff and John...
Ringle (Cass Environmental Services Department and SWCD) are the local lead staff responsible for development of the Plan.

On July 2, 2019, BWSR received the Plan, a record of the public hearings, and copies of all written comments pertaining to the Plan for final State review pursuant to Board Resolution #14-46. The Planning Partnership has responded to all comments received and incorporated appropriate revisions to the final Plan. The State agencies recommended that BWSR approve the Plan as submitted.

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

On August 7, 2019, the Northern Regional Committee (Committee) met to review and discuss the Plan. The Committee’s decision was to recommend approval of the Pine River Watershed Comprehensive Watershed Management Plan to the full Board per the attached draft Order.
Whereas, the Local Government Units of the Pine River Watershed submitted a Comprehensive Watershed Management Plan (Plan) to the Minnesota Board of Water and Soil Resources (Board) on July 17, 2019, pursuant to Minnesota Statutes, Sections 103B.101, Subdivision 14 and Board Resolution #16-17, 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. Partnership Establishment. The Partnership was established November/December of 2017 through adoption of a Memorandum of Agreement for the purposes of developing a Comprehensive Watershed Management Plan. The membership of the Partnership includes: Cass County, Cass Soil and Water Conservation District (SWCD), Crow Wing County and Crow Wing SWCD.

2. Authority to Plan. Minnesota Statutes, Sections 103B.101, Subdivision 14 allows the Board to adopt resolutions, policies or orders that allow a comprehensive plan, local water management plan, or watershed management plan, developed or amended, approved and adopted, according to Chapter 103B, 103C, or 103D to serve as substitutes for one another or be replaced with a comprehensive watershed management plan. Minnesota Statutes, Sections 103B.801 established the Comprehensive Watershed Management Planning Program; also known as One Watershed, One Plan program. And, Board Resolution #16-17 adopted the One Watershed, One Plan Operating Procedures and Plan Content Requirements policies.

3. Nature of the Watershed. The Pine River Watershed covers over 502,400 acres (785 square miles). The headwaters of the watershed starts at Pine Mountain Lake west of Backus in south central Cass County where the Pine River winds east into Crow Wing County and the Whitefish Chain of Lakes before its confluence with the Mississippi River. In addition, the watershed drains an area south of the City of Remer down to Pelican Lake near the City of Breezy Point. Forests cover almost half of the watershed area with an additional one third of the area covered by wetlands. The watershed contains over 500 lakes including 64 lakes of biological significance, 18 cold water cisco refuge lakes and wild
rice is found in 63 lakes and 5 streams. Under the forest floor and throughout the watershed, sandy and coarse loamy soils are the dominant soil types. The water quality in this watershed is of high quality with only five impaired lakes and four impaired streams and a limited number of lakes with a declining water quality trend. Due to this high water quality, the overall goal for this watershed is protection in nature with limited enhancement. Agricultural production is a strong land use in the western part of the watershed with other economic drivers being tourism and the forest industry. Cities in the planning area include Backus, Pine River, Breezy Point and Crosslake, Fifty Lakes and Emily.

4. **Plan Development.** The Plan was developed as a single, concise, and coordinated approach to watershed management. The Plan consolidates policies, programs, and implementation strategies from existing data, studies and plans, and incorporates input from multiple planning partners to provide a single plan for management of the watershed. The Plan focuses on prioritized, targeted, and measurable implementation efforts and lays out specific actions to protect existing forests and both surface and groundwater resources. The Plan also set goals to enhance water quality in lakes with declining water quality trends, protect and enhance natural habitat, recreational uses and drinking water sources in the watershed.

5. **Plan Review.** On July 17, 2019, the Board received the Plan, a record of the public hearings, and copies of all written comments pertaining to the Plan for final State review pursuant to Board Resolution #16-17. 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.

- Minnesota Department of Agriculture (MDA): MDA provided comments requesting revisions and resulted in a change to the Plan. MDA did confirm receipt of the Plan at the final formal review and did not submit additional comments.

- Minnesota Department of Health (MDH): MDH provided comments requesting no revisions to the Plan. MDH confirmed receipt of the Plan at the final formal review, did not submit additional comments and recommended approval of the plan.

- Minnesota Department of Natural Resources (DNR): DNR provided comments and resulted in changes to the Plan. DNR confirmed receipt of the Plan at the final formal review, did not submit additional comments and recommended approval of the plan.

- Minnesota Pollution Control Agency (MPCA): MPCA provided comments requesting two revisions to the Plan which resulted in one change to the Plan. MPCA confirmed receipt of the Plan at the final formal review, did not submit additional comments and recommended approval of the plan.

- Minnesota Environmental Quality Board (EQB): EQB confirmed receipt of the Plan and did not provide comments.

- Minnesota Board of Water and Soil Resources (BWSR) regional staff: BWSR provided comments requesting revisions to the Plan to ensure consistency throughout the Plan and that plan content requirements were met. All comments were adequately addressed in the final Plan. BWSR staff recommended approval of the plan.
6. Plan Summary and Highlights.

- This is a protection based watershed plan with some enhancement activities. The primary goals of the Plan are to achieve 75% protection of existing forests in the watershed in targeted subwatersheds with lakes that have stable or increasing water quality trends. The other primary goal is to reduce phosphorous inputs by 5% into lakes with declining water quality trends.
- Due to its status as a protection-focus watershed, one protection focused goal was written to include all three resource categories because the implementation actions for the goal would be the same. Minnesota’s state agencies that manage surface water, drinking water, and habitat (DNR, MDH, MPCA, BWSR) agree that forest and vegetative cover benefits clean surface water, drinking water, and habitat. More specifically, DNR Fisheries research has shown that once a minor watershed is over 25% disturbed (urban, agriculture, mining), the water quality is negatively affected. Therefore, the measure of 75% of the minor watershed being in protected land uses is used in this combination protection goal. Protected land uses are defined as surface water, public land, private wetlands, conservation easements, and Sustainable Forest Incentive Act lands.
- The surface water goals encompass a variety of issues including phosphorus loading to lakes, culvert management and wetland protection. None of the economically significant lakes in the Pine River Watershed are currently impaired, but some have declining transparency trends. It is important economically to the region to work to reverse these trends before they exceed water quality standards. Stormwater and agricultural phosphorus loading to priority declining lakes was quantified using the HSPF model developed during the Watershed Restoration and Protection Strategy (WRAPS 2017). A phosphorus reduction of 5% was determined to be achievable in a 10-year timeframe, and it was also the reduction goal used in the DNR’s Phosphorus Sensitivity Analysis (Radomski 2018).
- Historical installation of ditches and culverts in the watershed has changed the water drainage, storage and connections in the watershed. In addition, when culverts are not sized correctly or installed properly, they can cause impacts to habitat, fish migration, water levels, channel stability and increase nutrient transfer. The culvert management goal addresses the issues of stream channelization, culvert installation, connectivity, channel stability, and altered hydrology as it affects nutrient transfer and habitat.
- Wetlands can reduce the effects of flooding and high water, store water to allow nutrients to settle out, and are also important habitat for fish, wildlife, and birds. Although the Pine River Watershed has not lost large numbers of wetlands like western Minnesota, wetlands around lakeshore have been filled for development over time. Wetlands throughout the watershed have varying amounts of protection enforced by different government agencies, federal (Clean Water Act, ACOE), state (Wetlands Conservation Act, BWSR, MN DNR) and county (County Wetlands Ordinance). This goal aims to continue current programs and administration of ordinances.
- The groundwater goals include addressing subsurface sewage treatment systems (SSTS), chlorides, nitrates, well sealing and Drinking Water Supply Management Areas (DWSMAs). The Pine River Watershed sits atop a surficial sand aquifer, making it vulnerable to surface contaminants. Chlorides, SSTS, and nitrates are all potential contaminants for drinking water. Sealing unused wells and protecting DWSMAs are ways to prevent contaminants from reaching the aquifer.
- The Pine River Watershed has abundant forests and habitat, but some of these areas, especially along lakes and streams (riparian), have been lost over time as the area has developed. The forestry and habitat goals address protection of undeveloped riparian lands and corridors and enhancing and restoring riparian areas that have been disturbed.
7. **Northern Regional Committee.** On August 7, 2019, the Northern Regional Committee met to review and discuss the Plan. Committee members in attendance were Committee Chair Rich Sve, Tom Schulz and Jeff Berg. BWSR staff in attendance were Northern Regional Manager Ryan Hughes, Board Conservationist Chris Pence and Clean Water Specialist Jeff Hrubes. The representatives from the Partnership were Melissa Barrick, Crow Wing SWCD, Kelly Condiff, Cass County Environmental Services Department and SWCD. Policy Committee members in attendance were Bill Brekken (Crow Wing County), Jeff Peterson (Cass County) and Jim Ballenthin (Cass SWCD). 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.

8. This Plan will be in effect for a ten-year period until September 25, 2029.

**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 Watershed Management Plan for the Pine River Watershed pursuant to Minnesota Statutes, Sections 103B.101, Subd. 14 and 103B.801 and Board Resolution #16-17.

3. The Pine River Watershed Plan attached to this Order states water and water-related problems within the planning area; priority resource issues and possible solutions thereto; goals, objectives, and actions of the Partnership; and an implementation program.

4. The attached Plan is in conformance with the requirements of Minnesota Statutes Section 103B.101, Subd. 14 and 103B.801 and Board Resolution #16-17.

5. The attached Plan when adopted through local resolution by the members of the Partnership will serve as a replacement for the comprehensive plan, local water management plan, or watershed management plan, developed or amended, approved and adopted, according to Chapter 103B, 103C, or 103D, but only to the geographic area of the Plan and consistent with the One Watershed, One Plan Suggested Boundary Map.

**ORDER**


Dated at St. Paul, Minnesota, this twenty-fifth day of September, 2019.

**MINNESOTA BOARD OF WATER AND SOIL RESOURCES**

BY: Tom Schulz, Acting Chair
September 25, 2019

Pine River Watershed Policy Committee
c/o Melissa Barrick, Crow Wing SWCD
322 Laurel St, Suite 22
Brainerd, MN  56401

RE: Approval of the Pine River Comprehensive Watershed Management Plan

Dear Pine River Watershed Policy Committee:

The Minnesota Board of Water and Soil Resources (BWSR) is pleased to inform you the Pine River Comprehensive Watershed Management Plan (Plan) developed through the One Watershed, One Plan program was approved at its regular meeting held on September 25, 2019. Attached is the signed Board Order that documents approval of the Plan and indicates the Plan meets all relevant requirements of law, rule, and policy.

This Plan is effective for a ten-year period until September 25, 2019. Please be advised, the partners must adopt and begin implementing the plan within 120 days of the date of the Order in accordance with Minnesota Statutes §103B.101, Subd. 14, and the One Watershed, One Plan Operating Procedures.

The members of the partnership and participants in the plan development process are to be commended for writing a plan that clearly presents water management goals, actions, and priorities of the Partnership, and for participating in the development of the One Watershed, One Plan program. BWSR looks forward to working with you as you implement this Plan and document its outcomes.

Please contact Board Conservationist Chris Pence of our staff at 218-203-4477 or chris.pence@state.mn.us for further assistance in this matter.

Sincerely,

Tom Schulz, Acting Chair
Minnesota Board of Water and Soil Resources

Enclosure: BWSR Board Order
CC: Margaret Wagner, MDA (via email)
Luke Stuewe, MDA (via email)
Barbara Weisman, DNR (via email)
Nathan Kestner, DNR (via email)
Heidi Lindgren, DNR (via email)
Carrie Raber, MDH (via email)
George Minerich, MDH (via email)
Juline Holleran, MPCA (via email)
Jeff Risberg, MPCA (via email)
Scott Lucas, MPCA (via email)
Erik Dahl, EQB (via email)
Julie Westerlund, BWSR (via email)
Ryan Hughes, BWSR (via email)
Chris Pence, BWSR (via email)

Equal Opportunity Employer
One watershed One plan

While arrows on the map show the direction of water flow through the watershed.
One Watershed One Plan

Project Partners
Crow Wing County
Crow Wing Soil and Water Conservation District
Cass County
Cass Soil and Water Conservation District

Planning Work Group
Melissa Barrick, Crow Wing SWCD
Jacob Frie, Crow Wing County
Kelly Condiff, Cass County SWCD and ESD
Jeff Hrubes, BWSR
Chris Pence, BWSR
Mitch Brinks, Technical Service Area 8
Tad Erickson, Region 5
Moriya Rufer, RMB Environmental Laboratories, Inc

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Mark Evenson, MPCA

Prepared for
Crow Wing Soil & Water Conservation District
322 Laurel St #22
Brainerd, MN 56401
Acknowledgements

Local Governments
Crow Wing Soil and Water Conservation District
Crow Wing County
Cass Soil and Water Conservation District
Cass County

State Agencies
Minnesota Board of Water and Soil Resources (BWSR)
Minnesota Department of Agriculture (MDA)
Minnesota Department of Health (MDH)
Minnesota Department of Natural Resources (DNR)
Minnesota Pollution Control Agency (MPCA)

Citizen Representation
Citizens-at-Large
City Governments
Association of Cass County Lakes (ACCL)
White Fish Area Property Owners Association (WAPOA)
Pine River Watershed Alliance (PRWA)

Policy Committee
Jeff Peterson, Cass County Commissioner
Jim Ballenthin, Cass SWCD
Joann Weaver, Crow Wing SWCD
Paul Thiede, Crow Wing County Commissioner
Bill Brekken, Crow Wing County Commissioner

Advisory Committee
Ron Meyer, PRWA
Dave Sohn, ACCL
Scott Lucas, MPCA
Heidi Lindgren, DNR
George Minerich, MDH
Luke Stuewe, MDA
Jon Lubke, City of Jenkins
James Schultz, Lakes
Dave Peterson, Township
Bob Holman, Lakes
Bob Scharenbroich, Resort
Dana Leverington, Township
Dave Schaumberg, Business
John Lael, Agriculture
Richard Nelles
Mike Tauber
Table of Contents

1. Plan Summary (a stand-alone document) ................................................................. 4
2. Land and Water Resources Narrative .................................................................. 11
3. Executive Summary .............................................................................................. 23
4. Issue Identification ............................................................................................... 34
5. Lake Prioritization ............................................................................................... 53
6. Measurable Goals ............................................................................................... 60
7. Targeted Implementation Schedule .................................................................... 85
8. Plan Implementation Programs ........................................................................... 105
9. Plan Administration and Coordination ................................................................. 118
10. Appendices .......................................................................................................... 128
    a. Maps to support Land and Water Resource Narrative .................................. 129
    b. Issues List and Prioritization ........................................................................... 134
    c. Lake Trends ...................................................................................................... 139
    d. Landscape Stewardship Plan Summary .......................................................... 142
    e. Protection Potential Table ............................................................................... 144
    f. Phosphorus Loading Table ............................................................................. 147
    g. Local Ordinances and Standards ................................................................... 149
    h. Memorandum of Agreement .......................................................................... 152
    i. Glossary of Terms ............................................................................................ 164
    j. References ......................................................................................................... 165
Section 1.

Plan Summary
Watershed highlights:

- Contains over 500 lakes
- Lakes, rivers and wetlands cover 34% of the surface of the watershed
- Supplies 15 million people with clean drinking water from St. Cloud, MN to Cairo, Illinois.
- The watershed covers 502,400 acres (785 square miles)
- Is part of four counties: Aitkin, Cass, Crow Wing and slight slice of Hubbard
- Primary towns include Backus, Pine River, Breezy Point and Crosslake

What is One Watershed One Plan?

- Developed following the guidelines set by the Minnesota Board of Water and Soil Resources (BWSF)
- Aligns water planning along watershed boundaries, and enhances the existing county water plans
- Voluntary program and plan
- Uses existing authorities and funding mechanisms
- Based on current state information and data
- It is an Action Plan
- Progress is monitored and tracked for achieving measurable goals
- After adopted, BWSR implementation funding will be obtained through a non-competitive process rather than competitive process

What each of us does with our property will either have a positive or negative effect on the watershed. Thankfully, there are proven conservation methods to protect or improve water quality.
Pine River One Watershed Plan

- Formed a Memorandum of Understanding between four entities: Cass County, Cass Soil and Water Conservation District, Crow Wing County, and Crow Wing Soil and Water Conservation District.
- Resulted in a resource-based plan that recognizes the roles of watershed partners to influence future watershed conditions and identifies specific activities that achieve common goals.

Plan Highlights
- Process had great participation from the public through the Advisory Committee, who drafted the plan content.
- Under budget and on schedule (completed draft plan one year after the public kick-off).
- The plan targets phosphorus reduction for non-impaired lakes. This means lakes are initially protected from impairment as opposed to fixed after showing signs of impairment. (It is less costly to protect than it is to repair!) This analysis used data from the Watershed Restoration and Protection Strategies or “WRAPS”.
- Includes a land protection goal that results in multiple benefits to lakes, streams, drinking water, habitat, and forests. (Protected land uses are defined as surface water, public land, private wetlands, conservation easements, and private forest management programs).
- This plan was the first to have a Landscape Stewardship Plan incorporated into it for protection planning.

Why does it matter?

Maintaining the cleanliness of our waters is more important than most people realize. The Pine River Watershed is dependent on a strong fishing industry, a healthy deer population for hunters, and beautiful lakes to uphold tourism numbers and property values. Whitefish land value alone is worth over $2.7 billion! Our above-average water quality can, in a large part be credited to the rich forested lands within the watershed. Woodlands act as a giant sponge within the watershed, filtering and absorbing contaminants and retaining soil sediment, which in turn, keeps our water clean. Furthermore, our forested lands hold great ecological, aesthetic, and monetary value! To put it simply, our Minnesota way of life is dependent on the quality of our waters.
**Enhance**

- **Fix it** -

**What:** Lakes with declining water quality trends, vulnerable groundwater, shoreland habitat, impaired streams, and problem culverts

**How:** (Surfacewater)
- Implement stormwater basin management practices (Shoreline Restoration, Rain Gardens, sediment treatment)
- Pasture Management
- Culvert inventory, maintenance, & replacement

**Measure:** Pounds of Phosphorus Reduced (reduce the main nutrient that feeds plants and algae in lakes)

**How (Groundwater):**
- Fertilizer / Chloride Management

---

**Protect**

- **Keep it** -

**What:** Sensitive and Outstanding Lakes, Forests, Habitat, Groundwater, Wetlands, Source water to downstream cities & communities

**How:** (Surfacewater)
- Implement Private Forest Management to keep forested areas forested
- Protect undeveloped shore lands in sensitive habitat areas

**Measure:** Acres Protected (goal is 75% of the minor watershed protected)

**How (Groundwater):**
- Well sealing and Septic System Maintenance above shallow sandy aquifer
Four kinds of landowners

The goal of the Pine River 1 Watershed Plan is to work with all types of landowners to protect the water and natural resources within the watershed.

How each landowner can help

Information first

Your first step to aid in conservation is to gain the knowledge you need to be effective. There are a host of materials that provide best management practices backed by conservation success stories. Conservation professionals are ready and willing to assist you in forming a plan for your property. Ask questions, gather info, get organized, make a plan!

Managing landscapes for conservation

Managing land for conservation begins with observing ordinances, and maintaining low impact development practices. Beyond your initial efforts, and depending on the type of land you own, a forest stewardship plan, or maybe a few ag best management practices like pasture management would be helpful. Many conservation practices can be implemented in tandem with your existing plans for your working lands.

Protecting landscapes for conservation

Want to take it to the next level? Landowners can designate tracts of property under protection from development for the sake of conservation. Again... Many conservation practices and protection programs can be implemented in tandem with landowners existing plans for your working lands. Easements and Forest Management Incentive Payments can be applied to property with limited impact to the landowners working land plans. One of the major goals of conservation professionals is to keep large tracts of undeveloped lands in the hands of good land stewards.

Fixing landscapes for conservation

Some lands are beyond simple management or protection projects. Some lands will benefit from some conservation “fix it” projects. Professionally guided erosion control, shoreline stabilization, feedlot fixes, septic system upgrades, or even strategically designed rain gardens can turn the tides on declining lakes. Conservation organizations like your local SWCD are prepared to assist with technical projects that require engineering or even financial assistance.
Want to find out more?

Find out more! To dig deeper into the plan details, visit: www.crowwing.us/1476/Pine-River-1W1P

Plan Administration

This plan will be implemented through a Memorandum of Understanding between Cass County, Cass SWCD, Crow Wing County, and Crow Wing SWCD.

Cass SWCD
Cass County
Crow Wing SWCD
Crow Wing County
Cass SWCD

Cass County
Crow Wing Soil & Water Conservation District
Clean Water Land & Legacy Amendment
Crow Wing
Board of Water and Soil Resources

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Pine River Watershed

One Watershed One Plan

Section 2.

Land and Water Resource Narrative
2 Land and Water Resources Narrative

Imagine the ideal Northern Minnesota scene from a postcard: a large lake with lightly rippling water, a family of loons leisurely floating, a bald eagle soars by looking for fish, pine, birch and aspen trees lining the shore, kids jumping off docks and splashing in the water, and a few fishermen perched off a point. This scene perfectly describes much of the Pine River Watershed.

Nestled in the heart of north central Minnesota “Lakes Country”, the Pine River Watershed contains over 500 lakes (over 10 acres) which combined with an abundance of wetlands cover 34% of the surface of the watershed. The watershed covers 502,400 acres (785 square miles), and is part of four counties: Aitkin, Cass, Crow Wing and a slight slice of Hubbard. The primary towns include Backus, Pine River, Breezy Point and Crosslake (Figure 2.1).

Figure 2-1. Pine River Watershed general location map.
The Pine River Watershed was formed approximately 10,000 years ago from glaciers moving back and forth across the landscape, carving deep holes in some areas and leaving till in others. The resulting geographic features, soils, forests and lakes bear the fingerprint of the glaciers as they slowly receded. The soils are made up of two main categories: sorted material (separated by grain size) by water (outwash) and unsorted materials with a mixture of grain sizes like gravel, sand, silt, and clay deposited directly by ice (till) (LSP 2017). Different soil types support different tree and plant species, types of lakes (deep vs shallow, oligotrophic vs eutrophic), potential for agriculture, and potential for development (lakeshore). For example, sandy areas such as moraine till and outwash support pine forests, while till plains are suitable for agriculture. Most of the lakes in the watershed are located in the outwash plain (Figure 2.2).

Figure 2-2. Sediment deposits from glaciation in the Pine River Watershed.

The climate of the Pine River Watershed has warm summers and cold winters (Figure 2.4). Because of its location on the continent, Minnesota is subject to large swings in both temperature and precipitation (Figures 2.3-2.4). In the winter, the lakes in the watershed freeze over. The ice-on season averages 153 days, although it is highly variable from year to year. This winter freezing has a major effect on the lakes’ biology.
The Crosslake area averages about 30 inches of precipitation annually. The majority of the precipitation occurs in the summer months (Figure 2.3). Future scenarios for climate change predict an increase of 1.4–1.7 inches of precipitation per year, along with an increase of heavy precipitation events (NCADAC 2013). The Pine River Watershed Restoration and Protection Strategy (WRAPS 2017) contains a modeling scenario for climate change-induced precipitation changes, which showed a 20 percent potential increase in watershed runoff volume and total phosphorus loads across the Pine River Watershed (WRAPS 2017).

Figure 2-3. Average monthly precipitation for Crosslake, MN 2012-2017.

Figure 2-4. Average monthly high and low temperatures for Crosslake, MN 2017.

The headwaters of the Pine River Watershed originate in wetlands northwest of Backus, MN and flow into Pine Mountain Lake. The Pine River exits Pine Mountain Lake and flows through numerous smaller lakes, dropping approximately 100 feet in elevation upon reaching Whitefish Lake. The Whitefish Chain of Lakes is a reservoir made up of 14 lakes and is held back by the Cross Lake Dam, which is regulated by the Army Corps of Engineers. From the Cross Lake Dam, the elevation drops another 50 feet, flowing through Big Pine Lake before draining into the Mississippi River (Figure 2.5).

Figure 2-5. Pine River elevation profile from its headwaters to its confluence with the Mississippi River.

Major tributaries to the Pine River include the South Fork of the Pine River, which flows east through agricultural areas before joining the Pine River just upstream from the Whitefish Chain and Daggett Brook, which flows southwest through forested areas and numerous lakes before entering Cross Lake.
Almost half of the Pine River Watershed is forested and another third is covered by lakes and wetlands (Figure 2.6). **Forests** play a critical role in keeping water clean by absorbing and filtering water, preventing erosion through soil stabilization, and allowing for groundwater recharge (LSP 2017). The forests help to protect the outstanding surface water resources along with the shallow groundwater resources in the region. The 2017 Landscape Stewardship Plan highlighted substantial forestry opportunities. Creating Forest Stewardship Plans for private forested land and re-establishment of pine trees in the watershed were priorities in the plan.

Much of the agricultural land in the watershed is located in the western side (Figure 2.7). These lands contain a mixture of pasture and animal feedlots (Figure 10.5, Appendix A).
Expansion of anthropomorphic land uses such as agriculture and urban expansion can cause a desire
to drain water from the landscape more quickly than it would naturally. Installation of ditches and culverts for this purpose and historical wetland filling has changed the water drainage, storage and connections in the watershed (Figure 6.5). These alterations in hydrology can cause impacts to habitat, water levels, channel stability and increase nutrient transfer.

The water resources in the watershed are not only some of the best in Minnesota, but also some of the best in the nation. Lakes, streams and wetlands, home to sensitive fish species such as Ciscoes and Trout and incubators for wild rice (a major food source for waterfowl) illustrate the biological importance of this area (Figure 2.8, Table 2.1). There is one lake in the watershed with trout (Big Trout), 16 wild rice lakes, 16 cisco refuge lakes, and 25 lakes with outstanding biological significance in the watershed. Water quality is vital to this watershed as the local economy and quality of life depends on it. Pelican and Whitefish Lake, in particular, are some of the most important lakes economically in the region and in Minnesota, with high property values and excellent fisheries and recreational opportunities.

Table 2-1. Selected high quality lakes in the Pine River Watershed, sorted by size.

<table>
<thead>
<tr>
<th>Lake Name</th>
<th>Size (acres)</th>
<th>Trophic State</th>
<th>Outstanding Qualities</th>
<th>Phosphorus Sensitivity</th>
<th>Current Water Quality Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pelican</td>
<td>8,507</td>
<td>32 - Oligotrophic</td>
<td>Cisco</td>
<td>Highest</td>
<td>Stable</td>
</tr>
<tr>
<td>Whitefish</td>
<td>7,716</td>
<td>45 - Mesotrophic</td>
<td>Cisco</td>
<td>Highest</td>
<td>Declining</td>
</tr>
<tr>
<td>Pine Mountain</td>
<td>1,623</td>
<td>45 - Mesotrophic</td>
<td>Wild Rice, Headwaters</td>
<td></td>
<td>Stable</td>
</tr>
<tr>
<td>Washburn</td>
<td>1,618</td>
<td>43 - Mesotrophic</td>
<td>Cisco &amp; Wild Rice</td>
<td></td>
<td>Improving</td>
</tr>
<tr>
<td>Roosevelt</td>
<td>1,520</td>
<td>46 - Mesotrophic</td>
<td>Cisco</td>
<td></td>
<td>Stable</td>
</tr>
<tr>
<td>Big Trout</td>
<td>1,368</td>
<td>40 - Mesotrophic</td>
<td>Cisco and Trout</td>
<td>Highest</td>
<td>Declining</td>
</tr>
<tr>
<td>Ossawinnamakee</td>
<td>689</td>
<td>40 - Mesotrophic</td>
<td>Cisco</td>
<td></td>
<td>Improving</td>
</tr>
</tbody>
</table>

Figure 2-8. Pelican Lake, in Breezy Point, MN.
Figure 2-9. Prioritized lakes from the WRAPS with outstanding qualities highlighted.

Figure 2-10. Pine Mountain Lake, Backus, MN.
The Minnesota Pollution Control Agency (MPCA) Watershed Restoration and Protection Strategy (WRAPS), completed in 2017, resulted in very few waterbodies being listed as impaired (not meeting state standards), which further documents the excellent water quality of the region. Just five lakes, Kego, Mitten, Jail, Lows and Emily, and four streams are listed as impaired (non-mercury) (Figure 2.11). Of the five impaired lakes, only four are impaired due to anthropogenic (human activity) causes. Lows Lake is classified as a “natural background (4D)” impairment. Permitted phosphorus sources, such as wastewater treatment plants and feedlots can be found in Appendix A.

![Map of Pine River Watershed](image)

**Figure 2-11.** Impaired waters in the Pine River Watershed, from the Pine River WRAPS, MPCA 2017.
Because most of the lakes in the watershed are not impaired, the water quality trend of the unimpaired lakes is an important factor used to identify possible threats and assist with prioritizing (Figure 2.12). Trend analysis showed that there are some lakes that are declining in water quality, but not at the impaired waters standard yet. These lakes can be prioritized for implementation projects that can work to reverse the trend. Lakes without trends or improving trends can be prioritized for protection strategies, such as land protection and forest conservation.

Figure 2-12. Water quality trends in the Pine River Watershed, MPCA and RMB Environmental Laboratories.

Groundwater in the Pine River Watershed is characterized by sand aquifers in generally thick sandy and clayey glacial drift overlaying bedrock in the Central Groundwater Province. The surficial sand aquifers are sensitive to changes in land use, since there is a close connection from the surface to the aquifer (Figure 2.13), and much of the water table in the watershed is less than 10 feet deep (Figure 10.3 in Appendix A).

These sand and gravel aquifers supply water to most of the 3,120 private wells and the 286 public water supply wells in the watershed (DNR 2016). Approximately 93% of all water appropriated in 2014 within the watershed was groundwater, 7% of appropriated water came from surface water sources (DNR Permitting and Reporting System (MPARS)). A map of Drinking Water Source
Protection areas and water appropriation permits can be found in Appendix A (Figures 10.1 and 10.2).

With this close connection between groundwater and surface water, waste treatment can be an issue. Each well has a septic system and each septic system needs maintenance, so proper septage disposal in sandy soils is important to protect both surface and groundwater. The Pine River Watershed is mostly rural, with over 3,000 subsurface waste treatment systems (county records). The total discharge from septic systems probably matches or exceeds the outputs from permitted waste water treatment plants in the watershed.

The Pine River Watershed is also a source water to major downstream cities including St. Cloud, Little Falls, Minneapolis and St. Paul (serving over 1 million people). In fact, it ranked first out of 83 watersheds studied in Minnesota that are most important for providing a clean drinking water supply to the Twin Cities Metropolitan Area (USDA FS). Aquifer depletion accelerated by population growth in the Twin Cities metro area is forcing communities to increase their usage of the Mississippi River as a drinking water source.

Figure 2-13. Map of surficial sand aquifers in the Pine River Watershed (MNDNR).
The Pequot Lakes, Breezy Point and Crosslake area have experienced **rapid growth** in the past twenty years (Figure 2.14). Property values in the watershed are currently in excess of $6.5 Billion (LSP 2017), with much of the value focused around the Whitefish Chain of Lakes and Pelican Lake. The population of this north central Minnesota lakes region is projected to increase 32% by 2030, with much of the increase focused around lakeshore (Gould, Walker & Frazell 2009). The MPCA WRAPS report modeling showed that in the future, if expansion occurred around lakeshores, in cities, and in local agriculture, the phosphorus loading could increase significantly (potentially up to double).

![Figure 2-14. Development density increase in the Pine River Watershed between 1998-2017.](image)

Land use changes such as agricultural practices, urban expansion, and shoreline development alter the landscape and increase impervious surface area, thereby allowing more phosphorus to enter lakes and streams than would occur naturally. Phosphorus is the main nutrient that feeds aquatic plants and algae and causes the lake's clarity to decline. These land use changes also fragment important fish and wildlife habitat such as forests, wetlands, and shoreland. For example, loons need natural emergent vegetation along the shoreline for nesting and clear water for catching their food.
These assets of **clean water**, **fish**, **wildlife** and **forests** are what draw people to this region and define its character. Along with its importance as a **drinking water source**, this character is well worth protecting. With our commitment to protecting this area, future generations will be able to enjoy it as we do today.
Section 3.

Executive Summary
3 Executive Summary

Introduction

The Pine River Watershed, nestled into the heart of northern Minnesota’s lakes country (Figure 3.1), is characterized by clean water, fish, wildlife, and forests. These qualities contribute to the economic significance of the area and are a magnet for tourism and development. In addition, as the “Land of 10,000 Lakes”, residents often feel a deep connection to these natural resources because of the legacy of family cabins and family vacations. These assets and connection to the local area are illustrated in the watershed’s vision statement, which was developed during this planning process.

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*Harmonizing people, water, forests, and the economy in a place to renew your spirit.*

---

*Figure 3.1. Map of the Pine River Watershed.*
Purpose, Roles and Responsibilities

The Pine River Watershed One Watershed One Plan (PRW1W1P) was developed following the guidelines set by the Minnesota Board of Water and Soil Resources (BWSR). The purpose of the 1W1P process is to align local water planning along major watershed boundaries, not just local governmental jurisdictions. 1W1Ps must contain targeted, prioritized, and measurable implementation plans, with the purpose of achieving meaningful and lasting results for Minnesota’s water resources.

The PRW1W1P began with a Memorandum of Agreement (MOA) between Crow Wing County Soil and Water Conservation District, Crow Wing County, Cass County Soil and Water Conservation District, and Cass County (Appendix G). Aitkin and Hubbard counties elected not to participate because they have such a small area in the watershed (Table 3-1). A representative from each MOA governmental unit was appointed to serve on the Policy Committee, which is the decision-making body for this plan. Crow Wing SWCD was the fiscal agent for this project (Figure 3.2).

The writing of this plan was a collaborative effort between many committed volunteers representing lake associations, townships, cities, and local business owners involved in the public meetings and Advisory Committee, along with the Planning Work Group, comprised of local and state government officials and consultants (Figure 3.2).

The planning process began with a public kick-off meeting in May of 2018 to introduce the project and begin gathering information that would eventually form the PRW1W1P. Participants’ comments were illustrated in a word map of people’s feelings about the watershed (Figure 3.3). The size of the words corresponds to the frequency in which it was mentioned.

<table>
<thead>
<tr>
<th>County</th>
<th>% of Watershed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cass</td>
<td>50.3%</td>
</tr>
<tr>
<td>Crow Wing</td>
<td>47.3%</td>
</tr>
<tr>
<td>Aitkin</td>
<td>2.3%</td>
</tr>
<tr>
<td>Hubbard</td>
<td>0.1%</td>
</tr>
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</table>

Table 3-1. The percentage of the watershed in each four counties.

---

**Policy Committee**
- One representative from each entity on the MOA
- Decision-making body for the PRW1W1P

**Advisory Committee**
- Local Stakeholders including state agencies, lake groups, cities and private business
- Drafted all plan content

**Planning Work Group**
- One staff member from each LGU on the MOA, BWSR, Consultants
- Guided the process and produced deliverables

*Figure 3-2. The three committees that were part of the PR1W1P process and their roles.*
The overall planning process was very inclusive with the Advisory Committee, which contained a wide range of stakeholders and citizens, drafting all the major plan content (Figure 3.4). At each milestone in the process, the output was presented to the Policy Committee for input and approval.

Prioritization and analyses were completed using the latest existing data and science including lake water quality trend data (collected by citizen volunteers), Lakes of Phosphorus Sensitivity Significance (Radomski 2018), Hydrological Simulation Program – Fortran (HSPF model, WRAPS 2017), and the Landscape Stewardship Plan (LSP 2018).
### Plan Process for PRW1W1P

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<tr>
<th>Step 1: Issue Identification</th>
<th>Public Input</th>
<th>Output</th>
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<tr>
<td>WRAPS</td>
<td>Public Kick-Off</td>
<td>- Comprehensive Issues List</td>
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<td>Local &amp; Regional Plans</td>
<td>Advisory Committee</td>
<td>- Land &amp; Water Resource Narrative</td>
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<td>GIS Maps</td>
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<td>Data Aggregation</td>
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<td>- Issue Statements</td>
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<td>- Lake Prioritization</td>
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<td>Lake Prioritization</td>
<td>Policy Committee</td>
<td>- Mapping Prioritization</td>
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<td>- Goals Section</td>
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<th>Step 4: Implementation Plan</th>
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<td>HPSF Modeling</td>
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<td>Landscape Stewardship Plan</td>
<td>Implementation Plan</td>
<td>- Implementation Section</td>
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<td>- Plan Programs Section</td>
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<td>SWCD County Advisory Policy Staff Committee Committee</td>
<td>- 60-Day Review Draft Plan</td>
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<td>Preliminary Draft Plan</td>
<td></td>
</tr>
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</table>

| Step 6: Final Plan | 60-day Notification | Public Hearing | BWSR Review | Approval | |
|-------------------|-------------------|----------------|-------------|----------|
| 60                | Public            | BWSR Review    | Approval    | Local adoption of the Pine River Watershed, One Plan  |

Figure 3-4. Overall plan process for the PRW1W1P
Issue Identification

The issues were generated and prioritized with input from the Advisory Committee, existing resource plans, and state agency priorities (Appendix B, Figure 3.6, Figure 4.1). The priority issues that matched all sources emerged as issue themes. These priority issue themes were used to craft the issue statements (Figure 3.5, Section 4). Issue statements were only written for the priority issues.

The issues and resources that emerged in the planning process relate to three main resource categories: surface water, ground water, and forests & habitat. The Pine River Watershed is a protection – focused watershed, meaning that most of the water resources are currently in good condition, and this plan aims to protect that condition.

![Diagram of resource categories and issue themes]

*Figure 3-5. Resource categories and priority issue themes that led to issue statements.*
Figure 3.6. Issues generated at the Advisory Committee meeting and prioritized with dots.

Goals

The priority issue themes were then used in the development of the plan’s goals. The goals guide what quantifiable changes to resource conditions this plan expects to accomplish in its ten-year lifespan. The goals for the Pine River Watershed were developed by the Advisory Committee in a three-meeting process and then revised and approved by the Policy Committee.

Due to its status as a protection-focus watershed, one protection-focused goal was written to include all three resource categories because the implementation actions for the goal would be the same. Minnesota’s state agencies that manage surface water, drinking water, and habitat (DNR, MDH, MPCA, BWSR) agree that forest and vegetative cover benefits clean surface water, drinking water, and habitat. More specifically, DNR Fisheries research has shown that once a minor watershed is over 25% disturbed (urban, agriculture, mining), the water quality is negatively affected. Therefore, the measure of 75% of the minor watershed being in protected land uses is used in this combination protection goal. Protected land uses are defined as surface water, public land, private wetlands, conservation easements, and Sustainable Forest Incentive Act lands.

Figure 3.7. Graph showing the effect of land disturbance on water quality (DNR Fisheries).
Figure 3-8. Figure illustrating the reasoning behind 75% as a protection goal.

Woodlands are giant water filters
Forests and well vegetated lands serve as a giant natural sponge, filtering and retaining storm water. The root system and vegetative base of woodlands protect both groundwater and surface water.

Land use affects water quality
The “Disturbance” of land has an effect on its ability to slow down and filter storm water runoff. As woodlands are developed or converted to crop or pasture lands the soil loses its ability to retain and filter water.

25%
The tipping point for water quality
Studies show that when more than 25% of the forest within a watershed is converted to other land uses, water quality declines. This is because more disturbed lands cause more phosphorus to enter the lakes and streams.

75%
The protection goal is 75%
If 75% of the land within a watershed can be protected, we gain the ability to maintain cold water fisheries into the future. Protection doesn’t mean the land can’t be used, rather it points to sustainable management of the land.
The surface water goals encompass a variety of issues including phosphorus loading to lakes, culvert management and wetland protection. None of the economically significant lakes in the Pine River Watershed are currently impaired, but some have declining transparency trends. It is important economically to the region to work to reverse these trends before they exceed water quality standards. Stormwater and agricultural phosphorus loading to priority declining lakes was quantified using the HSPF model developed during the Watershed Restoration and Protection Strategy (WRAPS 2017). A phosphorus reduction of 5% was determined to be achievable in a 10-year timeframe, and it was also the reduction goal used in the DNR’s Phosphorus Sensitivity Analysis (Radomski 2018). Agricultural runoff and impaired streams in the South Fork Sub-watershed and Whitefish Sub-watershed can be mitigated by pasture management in the area. Specific streams and minor watersheds were identified for projects from the WRAPS.

Historical installation of ditches and culverts in the watershed has changed the water drainage, storage and connections in the watershed. In addition, when culverts are not sized correctly or installed properly, they can cause impacts to habitat, fish migration, water levels, channel stability and increase nutrient transfer. The culvert management goal addresses the issues of stream channelization, culvert installation, connectivity, channel stability, and altered hydrology as it affects nutrient transfer and habitat.

Wetlands can reduce the effects of flooding and high water, store water to allow nutrients to settle out, and are also important habitat for fish, wildlife, and birds. Although the Pine River Watershed has not lost large numbers of wetlands like western Minnesota, wetlands around lakeshore have been filled for development over time. Wetlands throughout the watershed have varying amounts of protection enforced by different government agencies, federal (Clean Water Act, ACOE), state (Wetlands Conservation Act, BWSR, MN DNR) and county (County Wetlands Ordinance). This goal aims to continue current programs and administration of ordinances.

The groundwater goals include addressing subsurface sewage treatment systems (SSTS), chlorides, nitrates, well sealing and Drinking Water Supply Management Areas (DWSMAs). The Pine River Watershed sits atop a surficial sand aquifer, making it vulnerable to surface contaminants. Chlorides, SSTS, and nitrates are all potential contaminants for drinking water. Sealing unused wells and protecting DWSMAs are ways to prevent contaminants from reaching the aquifer.

The Pine River Watershed has abundant forests and habitat, but some of these areas, especially along lakes and streams (riparian), have been lost over time as the area has developed. The forestry and habitat goals address protection of undeveloped riparian lands and corridors and enhancing and restoring riparian areas that have been disturbed.
## Pine River Watershed Goals

<table>
<thead>
<tr>
<th>Surface Ground Forestry</th>
<th>Surface Ground Water</th>
<th>Surface Water</th>
<th>Ground Water</th>
<th>Ground Water</th>
<th>Forests &amp; Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect and enhance forest cover, outstanding lake water quality, habitat, surficial sand aquifers, and downstream drinking water by <strong>promoting 75% land protection</strong> in targeted minor watersheds.</td>
<td><strong>Maintain an average discharge</strong> of 306,945 acre-feet at the pour point of the Pine River Watershed.</td>
<td>Reduce phosphorus loading into declining lakes by 5% by implementing best management practices in residential and road areas.</td>
<td>Reduce agricultural runoff to downstream lakes by 5% and improve stream habitat in impaired streams to meet the IBI standard in the South Fork and Whitefish Subwatersheds by promoting <strong>pasture management</strong>.</td>
<td>Implement an integrated approach to <strong>culvert management</strong> that includes inventories and cooperation between local units of government to understand drainage and restore proper function with future culvert replacements.</td>
<td>Protect <strong>two miles of undeveloped riparian lands</strong>, ice ridges and forested riparian corridors through outreach to private residents.</td>
</tr>
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<td><strong>Protect and enhance forest cover</strong>, <strong>outstanding lake water quality</strong>, <strong>habitat</strong>, <strong>surficial sand aquifers</strong>, and <strong>downstream drinking water by promoting 75% land protection</strong> in targeted minor watersheds.</td>
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<td>Maintain current coverage of <strong>wetlands</strong> as currently administrated under federal, state and local regulations and identify potential restoration areas where past disturbance occurred.</td>
<td>Maintain high quality drinking water in surficial sand aquifer areas by encouraging landowners to have their <strong>subsurface sewage treatment systems maintained every three years</strong> to achieve a 90% maintenance rate for the watershed.</td>
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<td>Reduce phosphorus loading into declining lakes by 5% by implementing best management practices in residential and road areas.</td>
<td>Reduce agricultural runoff to downstream lakes by 5% and improve stream habitat in impaired streams to meet the IBI standard in the South Fork and Whitefish Subwatersheds by promoting <strong>pasture management</strong>.</td>
<td>Implement an integrated approach to <strong>culvert management</strong> that includes inventories and cooperation between local units of government to understand drainage and restore proper function with future culvert replacements.</td>
<td>Maintain current coverage of <strong>wetlands</strong> as currently administrated under federal, state and local regulations and identify potential restoration areas where past disturbance occurred.</td>
<td>Maintain high quality drinking water in surficial sand aquifer areas by encouraging landowners to have their <strong>subsurface sewage treatment systems maintained every three years</strong> to achieve a 90% maintenance rate for the watershed.</td>
</tr>
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<td>Reduce agricultural runoff to downstream lakes by 5% and improve stream habitat in impaired streams to meet the IBI standard in the South Fork and Whitefish Subwatersheds by promoting <strong>pasture management</strong>.</td>
<td>Implement an integrated approach to <strong>culvert management</strong> that includes inventories and cooperation between local units of government to understand drainage and restore proper function with future culvert replacements.</td>
<td>Maintain current coverage of <strong>wetlands</strong> as currently administrated under federal, state and local regulations and identify potential restoration areas where past disturbance occurred.</td>
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</tr>
</tbody>
</table>

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**Pine River Watershed** ● **One Watershed One Plan** ● **Introduction** 32
COMMITTEE RECOMMENDATIONS

Wetland Conservation Committee

1. Minnesota Wetland Professional Certification Program Plan—Les Lemm and Ken Powell—
   DECISION ITEM
BOARD MEETING AGENDA ITEM

AGENDA ITEM TITLE: Minnesota Wetland Professional Certification Program Plan

Meeting Date: September 25, 2019

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

Item Type: ☒ Decision ☐ Discussion ☐ Information

Section/Region: Wetlands

Contact: Les Lemm and Ken Powell

Prepared by: Les Lemm and Ken Powell

Reviewed by: Wetlands Conservation Committee(s)

Presented by: Les Lemm and Ken Powell

Time requested: 15 minutes

☐ Audio/Visual Equipment Needed for Agenda Item Presentation

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

Fiscal/Policy Impact

☐ None ☐ General Fund Budget
☐ Amended Policy Requested ☐ Capital Budget
☐ New Policy Requested ☐ Outdoor Heritage Fund Budget
☒ Other: Certification and course fees ☐ Clean Water Fund Budget

will be collected by BWSR.

ACTION REQUESTED

Staff are seeking Board approval to implement the Minnesota Wetland Professional Certification Program plan beginning on January 1, 2020.

LINKS TO ADDITIONAL INFORMATION

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

As directed by the Board, BWSR staff have developed a program plan for transitioning the Wetland Delineator Certification Program (WDCP) currently administered by the University of Minnesota to a new certification program administered by BWSR. The University is prepared to end their administration of the WDCP program on January 1, 2020.

In 2002 the Board via resolution 02-104 endorsed development of an implementation plan to certify wetland delineators in Minnesota and to enter into agreements with the University of Minnesota to implement the plan pursuant to Minnesota Statutes 103G.2242, Subdivision 2(c). Pursuant to resolution 02-104, a
certification plan for wetland delineators was developed and has been administered by the University of Minnesota and BWSR since 2002. The program has been referred to as the WDCP. The WDCP has successfully educated over 2,600 individuals and certified over 400 wetland delineators since inception. It remains an important component of the Wetland Conservation Act (WCA) program. The science and methodology of wetland delineation as well as the academic preparedness of wetland professionals has changed considerably since 2002. This has created the need to adapt and evolve the WDCP to continue to make it relevant and useful for the implementation of WCA and other wetland regulatory programs in the state. The University of Minnesota Water Resources Center is not situated well to adapt the program to meet its future needs and desires to transfer full administration of the WDCP to BWSR. The transfer of the program to BWSR is likely to result in increased certification and program participation of local government unit staff, and it would allow for program expansion and diversification. The Wetland Committee at their August 27, 2019 meeting, reviewed this proposal and recommended the Board approve this order.
BOARD ORDER

Authorizing the Establishment of the Minnesota Wetland Professional Certification Program

PURPOSE

To authorize staff to establish the Minnesota Wetland Professional Certification Program which will incorporate and expand upon the Wetland Delineator Certification Program (WDCP) as currently administered by the University of Minnesota (UM) Water Resources Center.

FINDINGS OF FACT / RECITALS

1. In 2002 the Board of Water and Soil Resources (Board) via resolution 02-104 endorsed development of an implementation plan to certify wetland delineators in Minnesota and to enter into agreements with the UM to implement the plan pursuant to Minnesota Statutes 103G.2242, Subdivision 2(c).

2. Pursuant to resolution 02-104, a certification plan for wetland delineators was developed and has been administered by the UM and BWSR since 2002. The program is referred to as the Minnesota Wetland Delineator Certification Program (WDCP).

3. The WDCP has successfully educated over 2,600 individuals and certified over 400 wetland delineators since inception. It remains an important component of the Wetland Conservation Act (WCA) program.

4. The science and methodology of wetland delineation as well as the academic preparedness of wetland professionals has changed considerably since 2002. This has created the need to adapt and evolve the WDCP to continue to make it relevant and useful for the implementation of WCA and other wetland regulatory programs in the state.

5. The UM Water Resources Center has determined that it is not positioned to best meet future program needs, and it desires to transfer full administration of the WDCP to BWSR.

6. The transfer of the program to BWSR is likely to result in increased certification and program participation of local government unit staff, and it would allow for program expansion and diversification to meet future needs.

7. On March 27, 2019 the Board authorized staff to develop a plan in cooperation with the UM to transfer administration of the WDCP to BWSR and present that plan to the Board for consideration.

8. Staff, working with the UM and stakeholders, developed a plan to establish the Minnesota Wetland Professional Certification Program, which will incorporate and expand upon the WDCP program as currently administered by the UM.

9. The Board’s Wetland Conservation Committee, at their August 27, 2019 meeting, reviewed the plan and recommended the Board approve this order.
ORDER

The Board hereby:

1. Authorizes staff to implement the plan to establish the Minnesota Wetland Professional Certification Program beginning January 1, 2020, including the transfer of membership from the WDCP.

Dated at St. Paul, Minnesota, this September 25, 2019.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

___________________________  Date:  ________________________

Thomas Schulz, Acting Chair
Board of Water and Soil Resources

Attachments:

- Minnesota Wetland Professional Certification Program Plan, August 27, 2019
Minnesota Wetland Professional Certification Program Plan

Project Description:

The Minnesota Wetland Professional Certification Program (MWPCP) is a replacement program for the Wetland Delineator Certification Program (WDCP) currently administered by the University of Minnesota (University) in cooperation with Board of Water and Soil Resources (BWSR). The MWPCP expands the scope of the WDCP. A March 27, 2019 BWSR Board Order directed staff to develop a plan to transfer administration of the WDCP solely to BWSR with the goal of modifying the program to increase its future effectiveness. BWSR staff have consulted with stakeholders in the development of this plan.

This program plan addresses program purpose, scope, certification requirements, testing, continuing education requirements, transition, training, key staff involved in implementation, program fees and budget. The program will involve primarily BWSR Wetland Section staff with occasional training assistance from individuals in the Engineering, Resource Conservation and Organizational Effectiveness Sections at BWSR. Other state and federal agencies, local governments and the University with wetland expertise will be asked for assistance with trainings depending on the subject matter.

Program Lead:  BWSR, Wetland Conservation Act (WCA) Operations Coordinator

Purpose:

The purpose of the MWPCP is to increase and maintain the level of knowledge and expertise for those conducting and/or reviewing professional work associated with wetland regulatory compliance in Minnesota. This includes identifying and delineating wetlands as well as reviewing and/or assisting applicants/landowners in complying with wetland regulations in Minnesota.

The MWPCP provides the following:

1. More stability for implementing WCA through standardized training, experience and educational requirements for wetland professionals;

2. Increased efficiency of the regulatory process by standardizing wetland regulatory expectations and products;
3. Greater protection for landowners and other consumers by providing a base level of required knowledge and ongoing training for certified wetland professionals conducting and reviewing wetland regulatory work on private and public lands; and

4. An incentive for wetland professionals to maintain and enhance their knowledge and skills.

The program is strictly voluntary. There is no requirement for individuals conducting professional wetland work in Minnesota to be certified by this or any other program. However, it is the goal of this program for certification to be recognized as a "standard" for individuals working in a professional capacity related to wetland regulatory compliance in Minnesota.

**Scope:**

The MWPCP provides certification for wetland professionals conducting and/or reviewing work related to compliance with wetland regulations in Minnesota. Certification indicates an individual has a fundamental understanding of the basic technical tools, rules, policies and guidance associated with wetland regulatory compliance in Minnesota. This includes the following subject areas:

- Wetland identification and delineation;
- Wetland restoration;
- State and Federal wetland regulations (rules, policies, procedures);
- Wetland functional assessment; and
- Wetland monitoring.

The program emphasizes the practical components of these subject areas as they apply to wetland regulatory implementation. The program does not test for, nor does it certify the competency of a wetland professional. It certifies that a wetland professional has successfully completed foundational training developed specifically for those working in the wetland regulatory field in Minnesota and that they have the basic background knowledge and training to become competent at conducting work associated with wetland regulatory compliance.

**Certification Requirements:**

There are both In-training and professional certifications.

**In-Training Certification Requirements**

Individuals that are certified as In-training have demonstrated a basic understanding of the subject areas identified in the program scope, but have minimal professional experience. In-training certification requirements are as follows:
• Must pass an In-training exam covering wetland delineation, wetland science and the application of wetland regulations in Minnesota; and

• Within the three years prior to passing the exam, must have completed at least 18 hours of wetland regulatory and/or technical coursework related to one or more of the five subject areas listed under Program Scope. All training hours must be obtained through in-person completion of an approved course or courses. Online or remote training cannot be used to meet this requirement.

Professional Certification Requirements

• Must pass a Professional certification exam covering wetland delineation, wetland science and the application of wetland regulations in Minnesota;

• Within the three years prior to passing the exam, must have completed at least 18 hours of wetland regulatory or technical coursework related to one or more of the five subject areas listed under Program Scope. All training hours must be obtained through in-person completion of an approved course or courses. Online or remote training cannot be used to meet this requirement. This requirement is not applicable if an individual is In-training certified at the time they pass the Professional exam; and

• Within the twelve years prior to passing the exam, must have the equivalent of at least three years of full-time professional employment where wetland regulation, delineation, management and/or restoration are among the primary duties/tasks of the position(s) held. The requirement is two years if the individual holds an advanced degree (Masters or PhD) in natural resources including wetland ecology, wildlife biology, hydrology, water resources, soil science, botany, plant ecology, ecology, fisheries, zoology, aquatic biology or closely related field.

There is no distinction between public and private sector wetland professionals with respect to the necessary training and knowledge for certification.

Certification Testing:

Professional and In-training certification tests will generally be offered following a multi-day introductory wetland course or courses offered annually plus occasional testing opportunities associated with regional training events. Tests will be prepared and reviewed by selected BWSR wetland staff with additional peer review by staff from other cooperating agency partners. Tests will generally involve multiple choice questions covering a core curriculum established by the program. A study guide will be prepared and made available for those preparing to take either exam.
**Continuing Education:**

Individuals that are certified as In-training or Professional must maintain their knowledge and expertise through attendance of periodic training/educational events related to wetlands. Certified individuals must attend at least 18 hours (credit hours) of training/educational events every three years to maintain their certification.

Qualifying training/educational events must be primarily focused on one or more the following subject areas: wetland delineation/identification, wetland restoration, state/federal wetland regulations, wetland functional assessment and wetland monitoring. These events can include training courses, webinars, online training, structured field trips, professional conferences and seminars. Individuals requesting qualifying credit hours for these events must be a registered participant or instructor. Credit hours are equivalent to the number of hours (to the nearest hour) associated with a particular course or event minus scheduled breaks. No more than four of the 18 required credit hours in a three-year period can be obtained from online training/events where the participant does not attend in person.

Training events sponsored by the MWPCP will be assigned credit hours for continuing education. For non-MWPCP sponsored training/events participants are required to submit detailed agendas justifying qualifying credit hour claims.

Certified individuals will be provided with annual reports on the credit hours they have obtained to date within their three-year renewal period.

Certified individuals failing to meet the continuing education requirements will be de-certified and required to pass the certification exam and meet all other certification requirements to become certified again.

BWSR will maintain a list of certified individuals and update it annually.

**Transition:**

All in-training and professional wetland delineators certified and in good standing with the WDCP as of January 1, 2020 will automatically be certified under the new program. As of January 1, 2020, all certified individuals will need to complete 18 credit hours of continuing education per new program requirements by January 1, 2023 to maintain their certification.

**Training:**

The MWPCP will sponsor annual training classes throughout the state as part of BWSR's wetland training plan as updated and amended. Generally, training will include a combination of classroom and field-based classes depending on the subject matter. In addition to regional training venues, at least one basic wetland regulatory and delineation training class will be offered annually. Training courses
will generally be open to the public, although specific classes may occasionally be limited to local government unit staff implementing WCA. Online training modules have been and will continue to be developed and made available on the BWSR website for self-directed learning and as preparation, background and supplemental information for those attending more advanced classes.

**Fees:**

The program will charge fees for classes, testing and certification. These fees will be used to offset costs associated with program administration, management and training. At least biennially, costs associated with the program will be tabulated, fees will be evaluated and adjusted as necessary, and a training schedule with budget will be developed. A major program goal is to provide training and testing at an affordable cost for local government unit staff, consultants and other wetland professionals. Annual fee schedules will be developed and approved through the existing decision-making process of BWSR’s Senior Management Team. Fees may be waived or reduced for course attendees from other agencies and entities in proportion to any training assistance they provide for the program.

**Staff Roles:**

The following table identifies BWSR staff involved in program administration and implementation along with their role(s) and an estimate of the effort involved in hours on an annual basis. Other staff will occasionally be asked to provide assistance with instruction depending on the training topic. Their involvement is estimated to collectively not exceed 40 hours on an annual basis.

<table>
<thead>
<tr>
<th>Staff</th>
<th>Role</th>
<th>Estimated Effort</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCA Operations Coordinator</td>
<td>Program oversight, budget preparation, fee evaluation and overall management in consultation with the Wetlands Section Manager.</td>
<td>50 hours</td>
</tr>
<tr>
<td>Wetlands Program Assistant</td>
<td>Test administration, process continuing education hours and renewals, program communications, secure training facilities, process and manage class registrations, assist in preparing class materials and secure lodging/transportation for instructors.</td>
<td>300 hours</td>
</tr>
<tr>
<td>Wetland Specialist (co-lead)</td>
<td>Formulate annual class schedule and class content, create training agendas, secure instructors, assist with class instruction and prepare exams.</td>
<td>200 hours</td>
</tr>
</tbody>
</table>
Wetland Specialist (co-lead) | Formulate annual class schedule and class content, create training agendas, secure instructors, assist with class instruction and prepare exams. | 200 hours
---|---|---
Wetland Specialists (Regional) | Identify and secure regional field sites, training instructor. | 560 hours
Training Coordinator | Assist with planning and training materials. | 15 hours
Regional OAS | Assist with regional training venue coordination. | 10 hours

**Budget:**

The program budget includes some hard costs for equipment, facilities, travel and lodging. The following annual estimates for these costs are in-part based on average costs associated with regional and WDCP trainings in 2017 and 2018. These estimates will change over time and will be adjusted with each annual program budget.

<table>
<thead>
<tr>
<th>Expense Type</th>
<th>Estimated Annual Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment Replacement (augers, Munsell books, plant lists, misc. supplies, etc.)</td>
<td>$500</td>
</tr>
<tr>
<td>Training Facilities (room rentals, refreshments, etc.)</td>
<td>$1,500</td>
</tr>
<tr>
<td>Lodging (for instructors)</td>
<td>$2,000</td>
</tr>
<tr>
<td>Travel (mileage reimbursement, car rental, etc.)</td>
<td>$1000</td>
</tr>
</tbody>
</table>

In addition to the estimated annual expenses above, an initial purchase of supplemental field equipment estimated at $2,000 will be necessary prior to the start of the BWSR-led training classes in 2020. The University of Minnesota owned the majority of the field equipment used in the classes, none of which will transfer to BWSR. In the future, the program may utilize and integrate into the eLINK training database established by BWSR. Costs for this integration have not been estimated. Another optional cost is the purchase of several software licenses needed for developing online modules internally within the Wetland Section without assistance from other BWSR staff. The cost for two licenses is approximately $500 annually.
Grants Program and Policy Committee Recommendations

1. Watershed-based Implementation Funding Program – Marcey Westrick/Melissa Lewis – DECISION ITEM
2. Jamie Pauling RIM Easement Alteration (21-09-02-01-B) – Tim Fredbo – DECISION ITEM
3. Bruggeman RIM/PWP Easement Alteration (21-01-93-03-C) – Tim Fredbo – DECISION ITEM
4. Resolution Authorizing the RIM Rum River Watershed Protection Program – Sharon Doucette and Bill Penning – DECISION ITEM
**BOARD MEETING AGENDA ITEM**

**AGENDA ITEM TITLE:** Watershed-based Implementation Funding Program

**Meeting Date:** September 25, 2019

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

**Item Type:**☒ Decision ☐ Discussion ☐ Information

**Section/Region:** Central Region

**Contact:** Marcey Westrick

**Prepared by:** Marcey Westrick

**Reviewed by:** Grants Program and Policy Committee(s)

**Presented by:** Marcey Westrick/Melissa Lewis

**Time requested:** 30 minutes

☐ Audio/Visual Equipment Needed for Agenda Item Presentation

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

**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**

Authorization of the FY20-21 Clean Water Fund Watershed-based Implementation Funding Program

**LINKS TO ADDITIONAL INFORMATION**

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

BWSR staff have met over the past 12 months with an internal staff team (Clean Water Team), local government partners (Metro Forum and Local Government Water Roundtable Work Group), BWSR Executive Team, and BWSR Board Committees (Grants Program and Policy and Water Management and Strategic Planning) to discuss the policy, assurance measures, and allocations for the Watershed-based Implementation Funding Program. The Committees met jointly to provide direction to staff and develop recommendations to
be included in the policy and grants authorization, with the Grants Committee assigned the final responsibility for making recommendations to the Board.

The BWSR Grants Program and Policy Committee reviewed the policy and allocation authorizations on September 17, 2019, and made a recommendation to the full Board. The Draft 2020-2021 Clean Water Fund Watershed-based Implementation Funding Program policy and board order are attached based on the recommendations of the Grants Program and Policy Committee.
BOARD ORDER

Clean Water Fund Watershed-based Implementation Funding Program

PURPOSE
Authorize the fiscal year 2020-2021 Clean Water Fund Watershed-based Implementation Funding Program (Program) and adopt the Program Policy.

FINDINGS OF FACT / RECITALS

1. The Laws of Minnesota 2019, 1st Special Session, Chapter 2, Article 2, Sec. 7(a) appropriated $13,591,000 for fiscal year 2020 and $13,375,000 for fiscal year 2021 for the Clean Water Fund Watershed-based Implementation Funding Program (Program).
2. The Board has authorities under Minnesota Statutes §103B.3369 and 103B.101 to award grants and contracts to accomplish water and related land resources management.
3. The Board has authorities under Minnesota Statutes §103B.101, Subd. 14 and 103B.801 to approve comprehensive watershed management plans, Minnesota Statutes §103B.255 to approve county groundwater plans, Minnesota Statutes §103C.401 to approve soil and water conservation district plans, and Minnesota Statutes §103B.231 to approved watershed management plans.
4. The fiscal year 2020-2021 Clean Water Fund Watershed-based Implementation Funding Program policy was created to provide expectations for application to the Program and subsequent implementation activities conducted with these funds.
5. The Board staff held nine facilitated meetings with local government partners in the Seven-county Metropolitan Area (Metro) between September 2018 and January 2019 to gather recommendations for the Program in the Metro.
6. The Board staff held three facilitated meetings with statewide local government partners in March through May 2019 and met twice with the Local Government Water Roundtable to gather recommendations for the Program statewide.
7. The Grants Program and Policy Committee and the Water Management and Strategic Planning Committees met jointly on June 25, August 5, and August 19, 2019 to discuss the recommendations of the Metro and statewide facilitated meetings for the Program.
8. The Grants Program and Policy Committee, at their September 17, 2019 meeting discussed and recommended a formula for distribution of fiscal year 2020-2021 Clean Water Fund Watershed-based Implementation Fund that includes: a) a $250,000 minimum per watershed planning area outside of the Metro, and b) a distribution of funds based on a weighting of 90% private land and 10% on public waters to all eligible areas.
9. The Grants Program and Policy Committee, at their September 17, 2019 meeting, reviewed the fiscal year 2020-2021 Clean Water Fund Watershed-based Implementation Funding Program policy, and proposed funding allocations, and recommended approval to the Board.
ORDER

The Board hereby:

1. Adopts the attached fiscal year 2020-2021 Clean Water Fund Watershed-based Implementation Funding Program Policy.
2. Authorizes staff to approve a Metro soil and water conservation district plan of work developed consistent with Minnesota Statutes §103C.331.
3. Authorizes staff to enter into grant agreements consistent with statutory appropriations and the attached Table 1: FY2020 and FY2021 Watershed-based Implementation Funding Grant Allocations. Note: fiscal 2021 funds will not be available until July 1, 2020 and some recipients may not receive funds until after this date.
4. Authorizes staff to reallocate funds identified in Table 1 that become available if a work plan cannot be approved by March 30, 2021 - unless extended for cause - in the amounts identified in Table 2: 2018 One Watershed, One Plan (1W1P) Planning Grant Recipients and Proposed Watershed Based Implementation Fund Allocations unless superseded by a future Board action. Watershed planning areas identified in Table 1 that do not meet this deadline – unless extended for cause – are not eligible for fiscal year 2020-2021 Clean Water Fund Watershed-based Implementation Funding.
5. Makes available unallocated fiscal year 2020-2021 Clean Water Fund Watershed-based Implementation funds to be distributed to the FY18 One Watershed, One Plan planning grant recipients upon plan approval in the amounts identified in Table 2: 2018 One Watershed, One Plan (1W1P) Planning Grant Recipients and Proposed Watershed Based Implementation Fund Allocations as long as funds are available, and authorizes staff to enter into grant agreements for this purpose. Watershed planning areas identified in Table 2 that are not able to develop a workplan by June 30, 2021 – unless extended for cause – are not eligible for fiscal year 2020-2021 Clean Water Fund Watershed-based Implementation Funding.
6. Adopts the boundaries in the attached Figure 1: One Watershed, One Plan Participating Watersheds Map, September 2019 as the basis for calculation of the allocations in Tables 1 and 2.
7. Adopts the attached Figure 2: Twin Cities Metropolitan Area Allocation for describing the Metro allocations in Table 1.

Dated at St. Paul, Minnesota, this September 25, 2019.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

___________________________ Date: ______________________

Gerald Van Amburg, Chair
Board of Water and Soil Resources

Attachments:
- FY 2020-2021 Clean Water Fund Watershed-based Funding Program Policy
Table 1: FY2020 and FY2021 Watershed-based Implementation Funding Grant Allocations

<table>
<thead>
<tr>
<th>1W1P #</th>
<th>1W1P Planning Grant Year*</th>
<th>1W1P Name</th>
<th>FY20/21 Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pilot (approved)</td>
<td>Lake Superior North</td>
<td>$599,767</td>
</tr>
<tr>
<td>12</td>
<td>Pilot (approved)</td>
<td>North Fork Crow River</td>
<td>$1,120,477</td>
</tr>
<tr>
<td>32</td>
<td>Pilot (approved)</td>
<td>Root River</td>
<td>$1,469,595</td>
</tr>
<tr>
<td>41</td>
<td>Pilot (approved)</td>
<td>Red Lake River</td>
<td>$1,071,149</td>
</tr>
<tr>
<td>19</td>
<td>Pilot (approved)</td>
<td>Yellow Medicine River</td>
<td>$814,603</td>
</tr>
<tr>
<td>4</td>
<td>2016 (approved)</td>
<td>Leech Lake River</td>
<td>$598,115</td>
</tr>
<tr>
<td>51</td>
<td>2016</td>
<td>Lake of the Woods</td>
<td>$621,173</td>
</tr>
<tr>
<td>42</td>
<td>2016</td>
<td>Thief River</td>
<td>$529,892</td>
</tr>
<tr>
<td>17</td>
<td>2016</td>
<td>Pomme de Terre River</td>
<td>$717,428</td>
</tr>
<tr>
<td>54</td>
<td>2016</td>
<td>Cannon River (non-metro)</td>
<td>$1,028,658</td>
</tr>
<tr>
<td>33</td>
<td>2016</td>
<td>Cedar River</td>
<td>$593,987</td>
</tr>
<tr>
<td>52</td>
<td>2016</td>
<td>Missouri River Basin</td>
<td>$1,320,445</td>
</tr>
<tr>
<td>35</td>
<td>2017</td>
<td>Mustinka/Bois de Sioux</td>
<td>$1,064,522</td>
</tr>
<tr>
<td>6</td>
<td>2017</td>
<td>Pine River</td>
<td>$482,142</td>
</tr>
<tr>
<td>10</td>
<td>2017</td>
<td>Sauk River</td>
<td>$832,550</td>
</tr>
<tr>
<td>37</td>
<td>2017</td>
<td>Buffalo-Red River</td>
<td>$1,296,838</td>
</tr>
<tr>
<td>29</td>
<td>2017</td>
<td>Lower St. Croix River</td>
<td>$471,070</td>
</tr>
<tr>
<td>25</td>
<td>2017</td>
<td>Watonwan River</td>
<td>$700,477</td>
</tr>
</tbody>
</table>

**Subtotal** | **$15,332,889**

| Metro | NA | Mississippi East | $1,085,485 |
| Metro | NA | Mississippi West | $874,153  |
| Metro | NA | Rum River        | $366,982  |
| Metro | NA | Lower St. Croix River (non-metro) | $793,461 |
| Metro | NA | Cannon River     | $305,293  |
| Metro | NA | Lower Minnesota North | $673,699 |
| Metro | NA | Lower Minnesota South | $829,075 |
| Metro | NA | Vermillion       | $650,684  |
| Metro | NA | North Fork Crow River | $91,105  |
| Metro | NA | South Fork Crow River | $330,063 |

**Subtotal** | **$6,000,000**

**Total Allocation** | **$21,332,889**

*As per the 2020-2021 Clean Water Fund Watershed-based Implementation Funding Program Policy, a comprehensive watershed management plan must be approved to be eligible for these funds.*
Table 2: 2018 One Watershed, One Plan (1W1P) Planning Grant Recipients and Proposed Watershed Based Implementation Fund Allocations

<table>
<thead>
<tr>
<th>1W1P #*</th>
<th>1W1P Name</th>
<th>Potential Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Mississippi River Headwaters</td>
<td>$861,581</td>
</tr>
<tr>
<td>8</td>
<td>Redeye River</td>
<td>$706,488</td>
</tr>
<tr>
<td>15</td>
<td>Rum River (non-metro)</td>
<td>$1,011,327</td>
</tr>
<tr>
<td>30</td>
<td>Zumbro River</td>
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<td>38</td>
<td>Marsh and Wild Rice</td>
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<td>Two Rivers Plus</td>
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<tr>
<td>53</td>
<td>Hawk Creek</td>
<td>$942,433</td>
</tr>
<tr>
<td>63</td>
<td>Shell Rock River/Winnebago Watershed</td>
<td>$322,128</td>
</tr>
<tr>
<td>64</td>
<td>Nemadji River</td>
<td>$250,000</td>
</tr>
</tbody>
</table>

*As per the 2020-2021 Clean Water Fund Watershed-based Implementation Funding Program Policy, a comprehensive watershed management plan must be approved to be eligible for these funds.
Figure 1: One Watershed, One Plan Participating Watersheds

Legend:
- 7 County Metro Area
- 1W1P Planning Boundaries *
- Major Watersheds
- Approved Plan
- Grant Recipients - 2016
- Grant Recipients - 2017
- Grant Recipients - 2018
- Grant Recipients - 2019

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

September 2019
Figure 2: Twin Cities Metropolitan Area Allocation
Watershed-Based Implementation Funding Policy – FY20-21

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

Effective Date: XX/XX/2019
Approval: Board Resolution #19-XX
Duration: Availability and use of funds appropriated by Laws of Minnesota 2019, 1st Special Session, Chapter 2, Article 2, Section 7 (a).

Policy Statement

The Clean Water Fund was established to implement part of Article XI, Section 15, of the Minnesota Constitution, and Minnesota Statutes §114D 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.

Reason for the policy

The purpose of this policy is to provide expectations for implementation activities conducted via the Board of Water and Soil Resources (BWSR) Clean Water Fund (CWF) Watershed-based Implementation Funding program as defined by the Clean Water Fund appropriation under Laws of Minnesota 2019, 1st Special Session, Chapter 2, Article 2, Section 7 (a).

These funds are specifically to be used to advance Minnesota’s water resource goals through prioritized and targeted cost-effective actions with measurable water quality results.

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.

BWSR’s Grants Administration Manual (http://www.bwsr.state.mn.us/grants/manual/) provides the primary framework for local management of all state grants administered by BWSR.
Program Requirements

1. Local Governmental Unit Eligibility Criteria

For areas outside of the seven-county Twin Cities Metropolitan Area: counties, soil and water conservation districts, watershed management organizations, watershed districts and other local governments that have a current state approved and locally adopted comprehensive watershed management plan authorized under Minnesota statutes §103B.101, Subd. 14 or §103B.801. To be eligible, local governments must have entered into an implementation agreement with other members of the planning partnership. If a local government within the geographic area of the plan has not adopted the plan, these funds can still be spent on implementation in that area by another eligible local government.

In the seven-county Twin Cities Metropolitan (Metro) Area: counties, watershed districts, watershed management organizations, soil and water conservation districts, and municipalities\(^1\) having a current state approved and locally adopted watershed management plan as required under §103B.231, county groundwater plan authorized under §103B.255, or soil and water conservation district comprehensive plan under Minnesota statutes §103C.331, Subd. 11. Participants, including one representative from each watershed district, watershed management organization, soil and water conservation district\(^2\), county with a county groundwater plan, and at least two municipalities, must coordinate within the designated watershed-based funding boundaries to develop a watershed-based funding budget request that is prioritized, targeted and measurable. BWSR reserves the right for the Executive Director to determine if sufficient coordination exists to meet the goals of the program. Appeals of an Executive Director decision may be made to the BWSR Central Region Committee.

All recipients must be in compliance with applicable federal, State, and local laws, policies, ordinances, rules, and regulations. Recipients who have previously received a grant from BWSR must be in compliance with BWSR requirements for grantee website and eLINK reporting before grant execution and payment.

2. Match Requirements

A non-State match equal to at least 10% of the amount of the Watershed-Based Implementation Funding received is required. Match can be provided by landowners, land occupiers, private organizations, local governments or other non-State sources and can be in the form of cash or the cash value of services or materials contributed to the accomplishment of grant objectives.

3. Eligible Activities

The primary purpose of activities funded through this program is to implement projects and programs that protect, enhance, and restore surface water quality in lakes, rivers, and streams; protect groundwater from degradation; and protect drinking water sources. Eligible activities must be identified in the implementation

\(^1\) Municipalities (cities and townships) in the seven-county metropolitan area are eligible if they have a water plan that has been approved by a watershed district or a watershed management organization as provided under Minn. Stat. 103B.235.

\(^2\) Including Hennepin and Ramsey Counties if they have an annual work plan authorized under Minn. Statute 103C.331.
section of a state approved, locally adopted comprehensive watershed management plan developed under Minnesota statutes §103B.101, Subd. 14 or §103B.801, watershed management plan required under §103B.231, county groundwater plan authorized under §103B.255, or Metro soil and water conservation district annual work plan authorized under §103C.331 and the activity must have a primary benefit towards water quality. Activities must be first submitted through a budget request and work plan that will be reviewed by BWSR. The work plan must be approved by BWSR prior to funds being distributed.

Eligible activities can consist of structural practices and projects; non-structural practices and programs; program and project support, including staffing; and grant management and reporting. Technical and engineering assistance necessary to implement these activities are considered essential and are eligible to be included. Activities that result in multiple benefits are strongly encouraged.

3.1 **Effective Life.** All structural practices must be designed and maintained for a minimum effective life of ten years for best management practices and 25 years for capital improvement practices. The beginning date for a practice’s effective life is the same date final payment is approved and the project is considered complete. Where questions arise under this section, the effective lifespan of structural practices and projects shall be defined by current and acceptable design standards or criteria as defined in Section 3.7.

3.2 **Project Assurances.** The grantee must provide assurances that land owners or land occupiers receiving this funding will keep the practice in place for its intended use for the expected lifespan of the practice. Such assurances may include easements, deed recordings, enforceable contracts, performance bonds, letters of credit, and termination or performance penalties. BWSR may allow replacement of a practice or project that does not comply with expected lifespan requirements with a practice or project that provides equivalent water quality benefits. See also the Projects Assurances chapter of the Grants Administration Manual.

3.3 **Operation, Maintenance and Inspections.** All practice designs must include identification of operation and maintenance activities specific to the installed practices. An operation and maintenance plan is critical to ongoing performance of installed practices as well as to planning and scheduling those activities and must be prepared by designated technical staff for the life of the practice. An inspection schedule, procedure, and assured access to the practice site shall be included as a component of maintaining the effectiveness of the practice.

3.4 **Technical and Administrative Expenses.** Eligible activities include actual technical and administrative expenses to advance plan implementation, site investigations and assessments, design and cost estimates, construction or installation supervision, and inspections. Technical and administrative expenditures must be documented according to the Grants Administration Manual.

3.5 **Project Support.** Eligible activities include community engagement, education and outreach, equipment and other activities, which directly support or supplement the goals and outcomes expected with the implementation of items identified in the plan consistent with the purposes of these funds. Project support expenditures must be appropriately documented according to the Grants Administration Manual. Refer to guidance within the Grants Administration Manual for Capital Equipment Purchases.
3.6 **Grant Management and Reporting.** Eligible activities include local grant administration, management, and reporting that are directly related to and necessary for implementing the project or activity. All grant recipients are required to report on the outcomes, activities, and accomplishments of Clean Water Fund grants. Grant management and reporting expenditures must be documented according to the Grants Administration Manual.

3.7 **Practice Standards.** All practices must be consistent with the Natural Resource Conservation Service (NRCS) Field Office Technical Guide (FOTG), Minnesota Stormwater Manual, or be professionally accepted engineering or ecological practices. Design standards for all practices must include specifications for operation and maintenance for the effective life of the given practice, including an inspection schedule and procedure.

**Livestock Waste Management Practices.** Eligible activities are limited to: livestock management systems that were constructed before **October 23, 2000**; and livestock operations registered with the Minnesota Pollution Control Agency Database or its equivalent, not classified as a Concentrated Animal Feeding Operation (CAFO), and with less than 500 animal units (AUs) in accordance with Minnesota Rule Chapter 7020. BWSR reserves the right to deny, postpone or cancel funding where financial penalties related to livestock waste management violations have been imposed on the operator. Eligible practices and project components must meet all applicable local, State, and federal standards and permitting requirements.

a. Funded projects must be in compliance with standards in MN Rule Chapter 7020 upon completion.

b. Eligible practices are limited to best management practices listed by the Minnesota NRCS.

c. Feedlot roof structures are eligible up to $100,000 per project. Funding is not eligible for projects already receiving flat rate payment equaling or exceeding this amount from the NRCS or other State grant funds.

d. Feedlot relocations are eligible, up to $100,000 per project. Funding is not eligible for projects already receiving flat rate payment equaling or exceeding this amount from the NRCS or other State grant funds. The existing eligible feedlot must be permanently closed in accordance with local and State requirements. The existing and relocated livestock waste management systems sites are considered one project for grant funding.

**Subsurface Sewage Treatment Systems**

a. Eligible activities are limited to identified imminent threat to public health systems (ITPHS) and systems that fail to protect groundwater. Project landowners must meet low income thresholds. Low income guidelines from U.S Rural Development are strongly encouraged as the basis for the definition of low income.

b. Proposed community wastewater treatment solutions involving multiple landowners are eligible for funding, but must be listed on the MPCA’s Project Priority List (PPL) and have a Community Assessment Report (CAR) or facilities plan [Minn. Rule 7077.0272] developed prior to work plan submittal. For community wastewater system applications that include ITPHS, systems that fail to protect groundwater are also eligible.
c. Connecting a home to a sewer line and/or municipal waste water treatment plant (WWTP) in an unsewered area is eligible, if the criteria in a. or b. above are met.

**Multipurpose Drainage Management.** Funds can be used as an external source of funding for Minnesota Statutes § 103E.011 Subd 5 to facilitate multi-purpose drainage management practices to reduce erosion and sedimentation, reduce peak flows and flooding, and improve water quality, while protecting drainage system efficiency and reducing drainage system maintenance for priority Chapter 103E drainage systems.

Eligible activities must be conducted on, adjacent to, or within the watershed of a priority Minnesota Statutes Chapter 103E Drainage System(s), defined as an established system that has priority sediment and/or water quality concerns, and may include structural practices meeting the primary purpose to protect or improve water quality under Minnesota Statutes 103E.015.

Any storage and treatment wetland restoration requires a perpetual easement for storage and treatment and associated benefits to be held by the Chapter 103E drainage system. Easements must be approved by BWSR and the total state easement payment shall not exceed current standard Reinvest in Minnesota (RIM) rates.

**3.8 Non-Structural Practices and Measures.** Eligible practices include non-structural practices and activities that supplement or exceed current minimum State standards or procedures for protection, enhancement, and restoration of water quality in lakes, rivers, and streams or that protect groundwater from degradation. Non-structural vegetative practices must follow the Native Vegetation Establishment and Enhancement Guidelines: [www.bwsr.state.mn.us/native_vegetation/seeding_guidelines.pdf](http://www.bwsr.state.mn.us/native_vegetation/seeding_guidelines.pdf).

**In-lake or in-channel treatment.** Eligible practices include management practices such as rough fish management, vegetation management, lake drawdown, and alum treatments that have been identified as an implementation activity in a TMDL study or Watershed Restoration and Protection Strategies report and/or in a comprehensive watershed management plan or metro watershed management plan. Eligible expenses include only initial costs for design and implementation. All subsequent applications and treatments under this subsection are considered to be a local operation and maintenance expense responsibility. A feasibility study must be completed, reviewed and approved by BWSR staff prior to these activities being proposed in a grant work plan. The feasibility study must include:

a. Lake and watershed information (at minimum, include lake morphology and depth, summary of water quality information, and the assessment of aquatic invasive species);

b. Description of internal load vs. external load reductions;

c. History of projects completed in the watershed, as well as other in-lake treatments if applicable;

d. Cost benefit analysis of treatment options;

e. Projected effective life of the proposed treatment; and

f. For activities related to rough fish (example carp), the feasibility study must also include:

   i. Methods to estimate adult and juvenile carp populations;

   ii. Description of the interconnectedness of waterbodies (lakes, ponds, streams, wetlands, etc.);

   iii. Identification of nursery areas;
iv. Methods to track carp movement;
v. Proposed actions to limit recruitment and movement; and
vi. Proposed actions to reduce adult carp populations,

**Incentives.** Eligible practices may include incentives to help landowners mitigate risk to install or adopt land management practices that improve or protect water quality. Incentive payments should be reasonable and justifiable, supported by grant recipient policy, consistent with prevailing local conditions, and must be based on established standards. BWSR reserves the right to review and approve incentive payment rates established by grant recipient policy.

a. **Duration.** Incentives to install or adopt land management practices must have a minimum duration of 3 years with a goal of ongoing landowner adoption unless otherwise approved by BWSR. Any projects proposing incentives other than 3-years must be reviewed by BWSR staff and approved by the Assistant Director of Regional Operations prior to work plan approval.

**Easements.** Eligible practices include easements. Easements and payment amounts must be reviewed and approved by BWSR staff prior to expenditure of grant funds to acquire an easement. When implementing perpetual easements, state easement payments shall not exceed current standard Reinvest in Minnesota (RIM) rates.

**Ordinance Development.** Eligible practices include development of ordinances to protect water quality (example: Minimal Impact Design Standards) that supplement existing federal/state/local requirements.

4. **Ineligible Activities**

The following activities will not be considered:

a. Activities that do not have a primary benefit of groundwater and surface water quality.
b. Water quality monitoring (such as, but not limited, to: diagnostic, effectiveness, routine and/or baseline).
c. Household water conservation appliances and water fixtures.
d. Wastewater treatment systems with the exception of certain Subsurface Sewage Treatment Systems (see 3.7)
e. Municipal drinking water supply facilities or individual drinking water treatment systems
f. Stormwater conveyances that collect and move runoff, but do not provide water quality treatment benefit.
g. Replacement, realignment or creation of bridges, trails or roads.
h. Aquatic plant harvesting.
i. Routine maintenance activities or repair of capital equipment and infrastructure within the effective life of existing practices or projects.
j. Feedlots (see 3.7)
  1) Feedlot expansions beyond state registered number of animal units.
  2) Slats placed on top of manure storage structures.
k. Subsurface Sewage Treatment Systems (SSTS):
1) Small community wastewater treatment systems serving over 10,000 gallons per day with a soil treatment system, and
2) A small community wastewater treatment system that discharges treated sewage effluent directly to surface waters without land treatment.

I. Drainage management
1) Drain tile, except for tile outlets required for water and sediment control basins, tile required to make eligible drainage water management practices function, tile required to collect and move runoff to treatment system, and dense pattern tile to replace open tile inlet(s).
2) Ditching except if needed for the creation of a storage and treatment wetland restoration.
3) Back-flow preventing flap gates on side inlet structure pipes where a system-wide analysis has not been completed.
4) Continuous berms greater than an average of 3 feet high (above existing ground) along Chapter 103E drainage ditches.

m. Fee title land acquisition (costs may count towards match).

n. Buffers or other alternative practices that are required by law (e.g. Buffer Law, Drainage Law, Shoreland Law).

o. Contribution to a contingency or reserve fund or payment(s) to an equipment replacement fund that extends beyond the grant agreement period.

5. Technical Expertise

The grantee has the responsibility to ensure that the designated technical staff have the appropriate technical expertise, skills and training for their assigned role(s). See also the Technical Quality Assurances chapter of the Grants Administration Manual.

5.1 Technical Assistance Provider. Grantees must identify the technical assistance provider(s) for the practice or project and their credentials for providing this assistance. The technical assistance provider(s) must have appropriate credentials for practice investigation, design, and construction. Credentials can include conservation partnership Job Approval Authority (JAA), also known as technical approval authority; applicable professional licensure; reputable vendor with applicable expertise and liability coverage; or other applicable credentials, training, and/or experience.

5.2 Practice or Project Construction and Sign-off. Local governments receiving these funds shall have the assigned technical assistance provider(s) certify that the practice or project was properly installed and completed according to the plans and specifications, including technically approved modifications, prior to authorization for payment.

5.3 BWSR Review. BWSR reserves the right to review the qualifications of all persons providing technical assistance and review the technical project design if a recognized standard is not available.

6. Grant Administration

6.1 Work Plans, Reporting, and Reconciliation. BWSR staff is authorized to develop grant agreements and requirements and processes for work plans, project outcomes reporting, fiscal reconciliations, and grant
closeouts. All grantees must follow the Grants Administration Manual policy and guidance including requirements for proposed work plan revisions and grant amendments. BWSR reserves the right to:

1. Consider the extent of direct implementation activities and proposed outcomes in the approval of grant work plan;
2. Not approve all or a portion of a work plan if proposed work is not consistent with the purposes of these funds;
3. Modify, suspend, or cancel the grant agreement at any time if work under the grant agreement is found by BWSR to be unsatisfactory.

In the event there is a violation of the terms of the grant agreement, BWSR will enforce the grant agreement and evaluate appropriate actions, up to and including repayment of 100% of grant funds.

6.2. Approval of Expenditures. The grantee board has the authority and responsibility to approve the expenditure of funds within their own organization. The approval or denial of individual expenditures of funds must be documented in the grantee board’s meeting minutes.

7. Assurance Measures

Watershed-based Implementation Funding Assurance Measures are based upon fiscal integrity and accountability for achieving measurable progress towards water quality elements of watershed management or comprehensive watershed management plans. Assurance measures will be used as a means to help grantees meaningfully assess, track, and describe use of these grant funds to achieve clean water goals through prioritized, targeted, and measurable implementation. The following assurance measures are supplemental to existing reporting and on-going grant monitoring efforts.

1. Prioritized, targeted, and measurable work is making progress toward achieving clean water goals.
2. Programs, projects, and practices are being implemented in priority areas.
3. Grant work is on-schedule and on-budget.
4. Leverage of non-state funds.

History

This version is the first for this policy
AGENDA ITEM TITLE: Jamie Pauling RIM Easement Alteration (21-09-02-01-B)

Meeting Date: September 25, 2019

Agenda Category: ☒ Committee Recommendation ☒ New Business ☐ Old Business
Item Type: ☒ Decision ☐ Discussion ☐ Information
Section/Region: Conservation Easement Section
Contact: Sharon Doucette, Section Mgr.
Prepared by: Tim Fredbo, Easement Specialist
Reviewed by: RIM Committee(s)
Presented by: Tim Fredbo
Time requested: 15 minutes

Audio/Visual Equipment Needed for Agenda Item Presentation

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

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 approval to amend RIM easement 21-09-02-01-B in Section 35, T130N, R40W, Douglas County to remove 0.66 acres from the 100 acre easement to accommodate an inadvertent encroachment into the easement boundary for a building that was constructed by a previous landowner and went undetected until recently. The landowner proposes to replace this with 1.37 acres adjacent to the current RIM easement boundary.

LINKS TO ADDITIONAL INFORMATION
Easement alteration policy http://www.bwsr.state.mn.us/easements/easement_alteration_policy.pdf
Pauling support docs.pdf (attached)

SUMMARY (Consider: history, reason for consideration now, alternatives evaluated, basis for recommendation)
William Teschendorf originally placed this land into a CREP/RIM Reserve easement in 2003. The 126.8 acre easement is a perpetual wetland restoration easement. The CRP contract expired in 2017.
In 2004, the Teschendorfs subdivided and sold the land into three separate parcels, with the 100 acre parcel (21-09-02-01-B) being sold to Tim Helgeson. After 2004, Mr. Helgeson built a new shed that encroached on the easement boundary. An examination of historical aerial photography shows this building first appeared on 2008 photography. The area was not in the USDA CRP contract acreage, but in a RIM-only area adjacent to the excluded building site. Both the Helgesons and Douglas SWCD staff thought this area was not within the RIM easement boundary when the new building was proposed. The area was not numbered or included in the plan map that was given to Mr. Helgeson by the SWCD after he purchased the land.

In 2015, the Helgesens sold the property containing the RIM easement to Jamie Pauling. The building on the easement was first discovered in 2016 and the Paulings were not aware of the situation when they purchased the property. The Paulings were contacted by the SWCD in early 2017 and are willing to replace the impacted acres at 2:1 as required by the Easement Alteration Policy in effect at that time, despite not being the owners who built on the easement. When Mr. Pauling was contacted by the SWCD about the issue, his offer to work with them resulted in the current proposal. The easement boundary was not staked by the SWCD and SWCD staff never realized the building was within the easement boundary until BWSR notices it in 2016 when working on an ownership change.

The current proposal is to release approximately 0.66 acres from within the current easement and proposes replacement with roughly 1.37 acres of non-cropland adjacent to the current RIM boundary. This proposal was developed by the SWCD and landowner together. The photo in the supporting documents attached show the locations of these areas in relation to the current RIM easement boundary.

Both the Douglas SWCD and the MN DNR Wildlife Specialist are in support of this request, as required by RIM rule and policy.

**Recommendation**

Staff recommends approval of this request. The 1.37 acres being offered as replacement meets the 2:1 acreage replacement criteria. Mr. Pauling was not the landowner responsible for the building on the easement and he was unaware that there was a problem when he purchased the property from the previous owner in 2015. He has also shown a willingness to rectify the situation, therefore staff believes it is appropriate to waive the $500 processing fee.
WHEREAS, BWSR acquired a 126.8 acre MN River CREP/RIM easement in Sec. 35, T130N, R40W, Douglas County, on March 19, 2003 from William Teschendorf; and

WHEREAS, Mr. Teschendorf subdivided the land containing the easement in 2004 and sold 100 acres of the easement to Tim Helgeson; and

WHEREAS, the Helgesons built a shed on the easement adjacent to the excluded building site sometime after 2004 and before 2008 aerial photography; and

WHEREAS, the 0.66 acre encroachment was on non-cropland RIM-only acres (not part of the USDA CRP acres on the site), and both SWCD staff and the Helgesons thought the shed was constructed outside of the easement; and

WHEREAS, in 2015 the Helgesons sold the land containing the 100 acre RIM easement to Jamie Pauling, who was unaware of the building being within the RIM easement boundary; and

WHEREAS, BWSR easement staff working on the ownership change for this easement in 2016 noticed the shed within the easement; and

WHEREAS, BWSR staff contacted Douglas SWCD and the SWCD followed up with a RIM corrective action to Jamie Pauling to remedy the easement violation; and

WHEREAS, Mr. Pauling agreed to work with the SWCD staff and together they came up with the current proposal to replace the 0.66 acres with 1.37 acres, which meets the 2:1 replacement ratio contained in the Easement Alteration Policy (these acreages may change slightly as BWSR develops a revised legal description for the amended boundary); and

WHEREAS, the DNR Area Wildlife Manager and Douglas SWCD are in agreement with the proposed change;

NOW, THEREFORE, BE IT RESOLVED THAT, BWSR approves the alteration of RIM easement 21-09-02-01-B as proposed and authorizes staff to work with the Pauling family and Douglas SWCD staff to officially amend the necessary RIM easement documents; and

BE IT FURTHER RESOLVED THAT, BWSR waives the $500 processing fee because the previous owners and the SWCD staff believed the building was constructed outside of the RIM easement boundary and the current owner had no role in the building construction; and

BE IT FURTHER RESOLVED THAT, the landowner is responsible for removing or correcting any objectionable title defects, liens, or encumbrances, as specified by BWSR, prior to amending this easement; and agrees to pay any local title and recording fees.
Dated at Saint Paul, Minnesota this 25th day of September, 2019.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

__________________________________________   Date:  ________________________
Tom Schulz, Acting Chair
Board of Water and Soil Resources
CORRECTIVE ACTIONS REQUIRED

<table>
<thead>
<tr>
<th>Item</th>
<th>Deadline</th>
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<tbody>
<tr>
<td>Landowner work with SWCD to find suitable spot to replace area (41) where shed is built on easement area.</td>
<td>5-1-17</td>
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Approved by SWCD [Signature] 2-13-17

(SWCD Chairperson's signature) (Date)

LANDOWNER RESPONSE

Attach additional pages as necessary.

will work with local SWCD to replace areas impacted by shed.

I, [Print Name], (print name) have read the Corrective Actions Required listed above and forward my statement for consideration by the district in the resolution of this matter.

[Signature] (Landowner signature) 3-10-17 (Date)

This form must be signed and returned to the SWCD office within 30 days of delivery to the landowner for landowner input to be considered.
August 13, 2019

Douglas County Soil and Water Conservation District Board
900 Robert Street, Suite 102
Alexandria, MN 56308

Dear Douglas SWCD Board,

I am writing in regards to a request to alter the RIM Plan for easement 5682 (RIM easement 21-09-02-01-B) in Section 35 of Lund Township. The request is to remove 0.66 acres from the existing RIM easement and replace it with 1.37 acres nearby. The previous landowner had built on the easement area. This alteration will replace the easement acres impacted by the building with an area twice the size of the impacted area.

I approve the replacement plan for RIM easement 5682 as it corrects a land use problem created by the previous landowner. The area being removed from the easement provides minimal wildlife habitat due to the building, lawn and gravel. The replacement acres provide woody habitat along a field boundary, and should provide more wildlife habitat benefits than the acreage that would be removed from the RIM easement.

Sincerely,

Kevin Kotts
Glenwood Area Wildlife Supervisor
DOUGLAS SOIL & WATER CONSERVATION DISTRICT
MINUTES
Monday, August 12, 2019 – 7:30 A.M.

The Douglas Soil & Water Conservation District Board of Supervisors met at the USDA Service Center on Monday, August 12, 2019. Chairman Barsness called the meeting to order at 7:30 a.m. Members attending were: Barsness, Rutten, Cleary, Dropik and Froemming. Also, in attendance were: Lake Ida Residents, Commissioner Englund, Staff attending: Haggenmillner, Dybdal, Rice, Olson, Albertsen and Arceneau.

Minutes of the regular July 8, 2019, meeting was discussed. Motion by Cleary to approve, subject to audit, seconded by Froemming. Motion carried.

Treasurer’s Report was read. Motion by Cleary to approve, subject to audit, seconded by Rutten. Motion carried.

Reports

A. Coordinator’s Report – Haggenmillner handed out his monthly report.
B. Pomme de Terre Update – Barsness reviewed the Grant Overview, extension of 1W1P along with public Notice and 90-day review, Tour is scheduled for August 28,
C. Sauk River Report – Rutten reviewed the grant extension.
D. Douglas County WQLF – putting together a brochure, next meeting August 20.
E. Douglas County Commissioner Report- Commissioner Englund getting ready for the fair and the budget meeting on Tuesday, August 20th.
F. Conservation Tour – Cleary and Staff reviewed the tour.

Old Business

A. Save the Date Governance 101 Training-September 12-13 Bloomington
B. Dodge Pickup – Public Works dropped off the new dodge. Title has been transferred
A. Clean Water Fund Applications Haggenmillner reviewed the Lake Ida County Ditch 23 and Watershed BMP’S Applications. Motion by Cleary to approve the Clean Water Fund Applications, seconded by Rutten. Motion Carried.

New Business

A. Field Office Update- Dybdal reviewed 2 wetland determination requests, no more EQIP applications, CRP reviewing new contracts and one-year extensions. Nick last day is Friday, August 16.

B. RIM Modification Request Haggenmillner reviewed the RIM modification request for the Pauling easement 21-09-02-01-B. The previous owner of the easement constructed a shed on the easement
area. The violation was discovered once the Pauling’s owned the easement and had nothing to do with the violation. The Pauling’s are willing to remove .6 acre from the existing easement and add 1.37 acres into RIM Program. The MN DNR provided a letter in support of the RIM Modification. **Motion by Rutten to approve the RIM Modification Request, seconded by Dropik. Motion Carried.**

C. **FY20-21 BWSR Programs & Operations Grant Agreement** **Motion by Cleary to approve the FY20-21 BWSR Programs & Operations Grant Agreement, seconded by Froemming. Motion Carried.**

D. **Low Income Septic Upgrade Cost Share Applications** Mathew Meyer Total Cost $9,500 Cost Share Flat Rate $4,500 **Motion by Froemming to approve Mathew Meyer Low Income Septic Upgrade Cost Share Application for $4,500, seconded by Rutten. Motion Carried.**

E. **State Cost Share Applications** Craig Haseman- Water & Sediment Control Basins Sec 27 Evansville Township. Total Cost $35,488 Chippewa River Cost Share $21,610.00 State Cost Share $5,006.00 for Total of 75% Cost Share **Motion by Rutten to approve Craig Haseman Water and Sediment Control Basin Cost Share Applications for Chippewa River Cost Share $21,610.00 State Cost Share $5,006.00, seconded by Cleary. Motion Carried.**

Mike Fernholz – Water & Sediment Control Basins Sec 33 Moe Township. Total Cost $7,521.00 EQIP Cost Share $3,297.20, State Cost Share $2,343 for 75% Motion by Cleary to approve Mike Fernholz Water and Sediment Control Basin Cost Share Applications for Cost $7,521.00 EQIP Cost Share $3,297.20, State Cost Share $2,343, seconded by Dropik. Motion Carried.

F. **2020 SWCD Budget Meeting** – Haggenmillar will present the budget to the County Commissioners on August 20th.

G. **2019 Conservation Cooperator** – Haggenmillar recommended several names for this year’s Conservation Cooperator. **Motion by Rutten to approve William and Larry Lund as the 2019 Conservation Cooperator’s, seconded by Cleary. Motion Carried.**

H. **Fair August 14-17** – Haggenmillar handed out the 2019 Fair Work Schedule

I. **Audit** – Auditor’s will be here on August 15

**Bills to Pay.** During the month of August, the Douglas SWCD issued Checks #9841-9872 for a total of $47,209.85 including eFile (State Withholding) and EFTP (Federal Withholding). **Motion by Rutten to pay the bills, seconded by Dropik. Motion carried.**

**Adjournment.** **Motion by Cleary to adjourn the meeting, seconded by Rutten. Motion carried.**

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Secretary,

Bill Dropik, Secretary
BOARD MEETING AGENDA ITEM

AGENDA ITEM TITLE: Bruggeman RIM/PWP Easement Alteration (21-01-93-03-C)

Meeting Date: September 25, 2019

Agenda Category: ☒ Committee Recommendation ☒ New Business ☐ Old Business
Item Type: ☒ Decision ☐ Discussion ☐ Information
Section/Region: Conservation Easement Section
Contact: Sharon Doucette, Section Manager
Prepared by: Tim Fredbo, Easement Specialist
Reviewed by: RIM Committee(s)
Presented by: Tim Fredbo
Time requested: 15 minutes

☐ Audio/Visual Equipment Needed for Agenda Item Presentation

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

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 approval to legally amend RIM/PWP easement 21-01-93-03-C in Section 11, T128N, R37W, Douglas County. The proposal removes approximately 1 acre from the 38.8 acre easement and replaces it with the 1.0 acre building site that was left out of the original easement because the original excluded site became too wet to build on and accommodate the necessary onsite sewage treatment system. Much of the easement area is palustrine emergent wetland.

LINKS TO ADDITIONAL INFORMATION

Easement alteration policy http://www.bwsr.state.mn.us/easements/easement_alteration_policy.pdf
Bruggeman support docs.pdf (attached)

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

Doug Bruggeman purchased a 38.8 acre portion of easement 21-01-93-03 from the original easement holder in 1998 with plans to eventually build a home on the 1 acre in the NE corner of the 40 acre parcel that was left out of the easement. When Mr. Bruggeman started to look into getting the necessary permits from the
local zoning authorities to build on the site in 2014 it was discovered that the site was wet and not ideal for development.

Mr. Bruggeman contacted the Douglas SWCD in 2014 to request a change to his easement that would move the one acre exclusion area to a higher and drier location along the SW boundary, and enable him to get the required building permits. The request was approved by the Douglas SWCD Board at their September 8, 2014 Board meeting. The request was also approved on June 4, 2015 by Kevin Kotts, DNR Area Wildlife Supervisor.

According to Jerry Haggenmiller, Coordinator for the SWCD, he was out of the office when the DNR approval letter came in to the Douglas SWCD office and Mr. Haggenmiller never knew that it had been received and subsequently misfiled. Mr. Haggenmiller lost track of the proposal until recently due to a 2018 spot check of the easement. Mr. Haggenmiller has also informed BWSR easement staff that Mr. Bruggeman was under the impression that after the SWCD and DNR had approved his request, he was authorized to build on the site.

The original one acre building site proposed as the replacement site has never been altered. The vegetative cover remains intact and the same as the land under easement. Mr. Bruggeman owns no other land that is not under easement on this 40 acre parcel, so it will not be possible to meet the 2:1 replacement requirement.

**Recommendation**

In light of both the SWCD and DNR supporting Mr. Bruggeman’s proposal, staff recommends approval of this 1:1 easement alteration request. Five years have already passed since the landowner first approached the Douglas SWCD and mistakes were made by all parties. The proposed change will have no impact on the wildlife benefits afforded by this easement and the original easement acreage of 38.8 acres will remain intact after the easement is amended.
WHEREAS, BWSR acquired a 395 acre RIM/PWP easement in Sec. 11, T128N, R37W, Douglas County, on August 15, 1995 from Bernard Rachel; and,

WHEREAS, Mr. Rachel subdivided the land containing the easement in 1998 and sold a 40 acre parcel to Doug Bruggeman, of which 38.8 acres are in the Permanent Wetland Preserves (PWP) conservation easement; and

WHEREAS, the 40 acre parcel acquired by Mr. Bruggeman contained a one acre exclusion on the NE corner of the parcel that was not part of the easement and Mr. Bruggeman had future plans to build there; and

WHEREAS, Mr. Bruggeman sought to gather the necessary permits to build on the excepted area in 2014 and because the site was deemed less than ideal due to excessive soil moisture issues, he approached the Douglas SWCD about the possibility of moving the building site to higher ground within the easement boundary and replacing it with the current exception area; and

WHEREAS, the Douglas SWCD approved the landowner’s proposal to move the one acre building site to higher ground in the southwest corner of the easement and replace it with the current one acre exception at their September 8, 2014 meeting, with approval contingent upon receiving DNR’s approval; and

WHEREAS, the DNR Area Wildlife Supervisor approved the landowners request in June of 2015 and mailed a letter to the Douglas SWCD; and

WHEREAS, the letter from the DNR was misfiled at the SWCD and Jerry Haggenmiller, District Coordinator was unaware it had arrived and subsequently lost track of the alteration request; and

WHEREAS, Mr. Bruggeman assumed that he had all the approvals that he needed and proceeded to build a structure on the new site in 2015; and

WHEREAS, the required site inspection in 2018 discovered the new building on the easement; and

WHEREAS, The Bruggemans own no other land but this 40 acres and are not able to meet the 2:1 replacement required by the Easement Alteration Policy and easement acreage will not be reduced and there will be no negative impacts to the wetlands or wildlife on the site; and

WHEREAS, the replacement ratio for non-cropland was 1:1 when the landowner initiated this proposal in 2014;

NOW, THEREFORE, BE IT RESOLVED THAT, BWSR approves the alteration of RIM easement 21-01-93-01-C as proposed, and authorizes staff to work with the Bruggeman family and Douglas SWCD staff to officially amend the necessary RIM easement documents; and

BE IT FURTHER RESOLVED THAT, the Bruggeman family is responsible for removing or correcting any objectionable title defects, liens, or encumbrances, as specified by BWSR, prior to amending this easement; and agrees to pay any title and recording fees.
Dated at Saint Paul, Minnesota this 25th day of September, 2019.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

__________________________________________   Date:  ________________________
Tom Schulz, Acting Chair
Board of Water and Soil Resources
Doug Bruggeman
4457 Surrey Lane NW
Rochester, Mn. 55901
1-507-272-5612
Dbrug6@msn.com

I am requesting that my one acre building site on my RIM property at Liberty
Road in Alexandria Mn. be moved to the west side of the property due to
drainage issues at the original building site. I am attaching a map of the
property with the new site marked. Please contact me if this is a problem.

Sincerely

[Signature]

Doug Bruggeman
New building first showed up in 2015 photo.
DOUGLAS SOIL & WATER CONSERVATION DISTRICT
MINUTES
Monday, September 8, 2014 – 8:00 P.M.

The Douglas Soil & Water Conservation District Board of Supervisors met at the USDA Service Center on Monday, September 8, 2014. Chairman Thoennes called the meeting to order at 8:00 p.m. Members attending were: Barsness, Rutten, Schneider, Thoennes and Wolf. Also in attendance were: Haggenmiller, Dybdal and Arceneau.

Pledge was recited

Minutes of the regular August 11, 2014, meeting was discussed. Motion by Rutten to approve, subject to audit, seconded by Barsness. Motion carried.

Treasurer’s Report was read. Motion by Wolf to approve, subject to audit, seconded by Barsness. Motion carried.

Reports

A. Coordinator’s Report – Haggenmiller handed out his monthly report.
B. Pomme De Terre Watershed Project- No report was given.
C. County Commissioner Report – No report was given.
D. Area II meeting- Thoennes reported on the September 3rd meeting in Sauk Centre.

Old Business

A. 60 Year Anniversary – There were about 40-50 people who attended the Open House on August 20th.
B. Douglas County Health Insurance – Haggenmiller handed out the quotes for Health Insurance. Since there are so many choices on plans, Haggenmiller recommends the staff choose their own plan and the District’s portion would be deducted from the individual plan. The board suggested tabling until the October meeting to give more time to look into different plans.
C. 2014 Fair Booth – There was considerable discussion on how to improve the booth. Supervisor’s Schneider and Wolf were appointed to look into ideas for the 2015 fair booth.

New Business

A. Field Office Update–Dybdal reported they have six drainage requests requiring wetland determination; Three CSP applications; two Easement WRP; twenty two CRP Requests; new Soil Conservationist, Casey Guether started on September 8th.
B. BWSR Academy - Scheduled for October 28-30 in Brainerd. Wolf made a motion to send Arceneau & Henry to the Academy, seconded by Barsness. Motion Carried.
C. RIM Alteration Request – RIM Alteration Request – Haggenmiller reviewed a request to alter an existing RIM boundary on the Doug Brugerman easement 21-01-93-3-C. Doug
would like to swap a one acre piece of non-rim with a one acre piece of RIM. The reason for the requested swap is the one acre that was not enrolled into the RIM program in 1993 has become wet and is currently not suitable for a building site. Mr. Brugerman would like to take out one acre of higher ground that is in RIM and put in the one acre low ground into the program. Haggenmiller handed out an aerial photo showing the proposed swap. There will be no loss of RIM acres with the proposed swap. Haggenmiller explained this is the first step of the alteration process; the next step would be that the DNR provide a letter saying that the proposed swap will not have a negative effect on the entire easement. The final step is for the BWSR to approve the alteration. The alteration is contingent on approval from all agencies. The board discussed the proposal. Barsness made a motion to approve the RIM alteration request for Doug Brugerman, seconded by Wolf. Motion Carried with Schneider opposing.

D. **2014 Low Income Septic C/S Payment**–Bonita Wagner C/S Flat Rate $7,500. Barsness made a motion to approve Wagner’s Septic System C/S Payment, Rutten seconded it. Motion Carried.

E. **2014 Low Income Septic System Applications**
   1. Alan Becker-Lake Irene- $7,500. Barsness made a motion to approve Becker’s Septic System Application, Wolf seconded it. Motion Carried.
   2. Robert Keesling- CR 2 - $7,500. Rutten made a motion to approve Keesling’s Septic System Application, Schneider seconded it. Motion Carried.

F. **2014 Clean Water Fund Well Sealing Cost Share** – Barsness made a motion to appro $500 Cost Share for the following: Le Homme Dieu Villes, John Drown, Terry Egger, Mark Arnold, Greg Hilgendorf, Donald Altman and Cullens Home Center, Rutten seconded it. Motion Carried.

G. **2014 Clean Water Fund Well Sealing Payments** – Wolf made a motion to approve Cost Share Payments to William Stewart-$167.50, Mark Remme-$292.50, Dwight Johnson - $265.00, Allan Crowser - $167.50, Brad Warren - $167.50, Harolden Heskins - $265.00, Cheryl VanRoekel -$97.50 and Ruth Struck - $167.50, Schneider seconded it. Motion Carried.

**Bills to Pay.** During the month of September, the Douglas SWCD issued Checks #7416-7462 for a total of $46,725.17 including eFile (State Withholding) and EFTP (Federal Withholding). **Motion by Barsness to pay the bills, seconded by Schneider. Motion carried.**

**Adjournment.** **Motion by Wolf to adjourn the meeting, seconded by Barsness. Motion carried.**

**Secretary,**

[Signature]

Jon Schneider, Secretary
June 4, 2015

Douglas County Soil and Water Conservation District Board
900 Robert Street, Suite 102
Alexandria, MN  56308

Dear SWCD Board:

I am writing in regards to a request to alter the Bruggeman RIM easement (21-01-93-3-C) in NW1/4NW1/4 Section 11, T 128N, R 37W (Alexandria Township). Mr. Bruggeman’s request is to remove one acre from the south west corner of the existing RIM easement and replace it with an acre of grassland habitat adjacent to the current RIM easement.

There are no DNR Heritage Elements within one mile of the Bruggeman RIM easement.

I approve this acreage switch because the total size of the contiguous RIM easement will be the same and because both tracts have similar habitat. I don’t think this acreage switch will have any negative impacts to wildlife.

Sincerely,

[Signature]

Kevin Kotts
Area Wildlife Supervisor
AGENDA ITEM TITLE: Resolution Authorizing the RIM Rum River Watershed Protection Program

Meeting Date: September 25, 2019

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

Item Type: ☒ Decision ☐ Discussion ☐ Information

Section/Region: Conservation Easement Section

Contact: Sharon Doucette

Prepared by: Bill Penning

Reviewed by: RIM Reserve Committee(s)

Presented by: Sharon Doucette/Bill Penning

Time requested: 15 minutes

Audio/Visual Equipment Needed for Agenda Item Presentation

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

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

The Board is requested to approve the recommendation of the RIM Committee to authorize the RIM Rum River Watershed Protection Program.

LINKS TO ADDITIONAL INFORMATION

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

ML 2019, 1st Special Session, Ch. 2, Art. 2 Sect. 7(l) appropriated $3M of Clean Water Fund money to BWSR “to purchase permanent conservation easements to protect lands adjacent to public waters with good water quality but threatened with degradation”. This project will utilize RIM easements to protect priority parcels in the Rum River Watershed, an important and threatened tributary to the Mississippi River and the source water for numerous Twin Cities metropolitan and rural communities while providing other benefits. This resolution authorizes staff to utilize these funds and develop and implement this program within the Rum River Watershed.
WHEREAS, the Minnesota State Legislature has appropriated Reinvest In Minnesota (RIM) Reserve funds to the Board of Water and Soil Resources (BWSR) from the Clean Water Fund to acquire and restore permanent RIM conservation easements under Minnesota Statutes, Section 103F.515 to 103F.531; and

WHEREAS, ML 2019, 1st Special Session, Ch. 2, Art. 2 Sect. 7(l) designated funds “to purchase permanent conservation easements to protect lands adjacent to public waters with good water quality but threatened with degradation”; and

WHEREAS, BWSR staff, working with local partners, identified the Rum River Watershed as one of the most important and threatened tributaries to the Mississippi River which is the source water for many Twin Cities metropolitan and rural communities; and

WHEREAS, the RIM Reserve Conservation Easement Program is administered by BWSR in cooperation with local Soil and Water Conservation Districts (SWCDs); and

WHEREAS, SWCDs will be reimbursed for their services using the most current RIM Reserve service rates; and

WHEREAS, the Board, by separate resolution, has established the process for determining RIM easement payment rates for “Standard Easement Payment Rates: Northern Forests Region”; and

WHEREAS, riparian lands within the Rum River Watershed are similar in use and value to lands in other RIM programs in northern Minnesota; and

WHEREAS, this resolution is supplemental to previously approved BWSR Board resolutions and will remain in effect until material changes in the program warrants an amendment; and

WHEREAS, the BWSR RIM Reserve Committee met on September 4, 2019 and unanimously recommends the following provisions.

NOW, THEREFORE, BE IT RESOLVED THAT, the Minnesota Board of Water and Soil Resources authorizes staff to:

1. Utilize appropriated funds to implement the RIM – Rum River Watershed Protection program.
2. Work with partners to develop program guidelines and outreach efforts focused on priority parcels within the Rum River Watershed.
3. Utilize RIM easement payment rates as established for “Standard Easement Payment Rates: Northern Forests Region”.
4. Conduct landowner sign-ups and select applications using available funding for the RIM Rum River Watershed Protection Program.

Dated at Saint Paul, Minnesota this 25th day of September, 2019.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

______________________________   ________________________
Tom Schulz, Acting Chair
Board of Water and Soil Resources

Date: ____________________
NEW BUSINESS

1. BWSR/SWCD/NRCS Watershed Conservation Planning Initiative Progress and Highlights – Mary Peterson, Shannon Carpenter, NRCS, Dan Wermager, Root River Planner, and Mary Jo Youngbauer, Lower St. Croix Planner – INFORMATION ITEM
AGENDA ITEM TITLE: BWSR/SWCD/NRCS Watershed Conservation Planning Initiative Progress and Highlights

Meeting Date: September 25, 2019
Agenda Category: ☑ New Business  □ Old Business
Item Type: ☑ Information  □ Decision  □ Discussion
Section/Region: Regional Operations
Contact: Mary Peterson
Prepared by: Mary Peterson
Reviewed by: Kevin Bigalke
Presented by: Mary Peterson, Shannon Carpenter, NRCS, Dan Wermager, Root River Planner, and Mary Jo Youngbauer
Time requested: 30 minutes

Audio/Visual Equipment Needed for Agenda Item Presentation

Attachments: □ Resolution  □ Order  □ Map  ☑ Other Supporting Information

Fiscal/Policy Impact
☑ None  □ Amended Policy Requested  □ New Policy Requested  □ Other:

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

ACTION REQUESTED

No Action Required: Information agenda Item. Power Point presentation to be made at the meeting.

LINKS TO ADDITIONAL INFORMATION

WCPI September Update handouts will be available at the meeting.

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

WCPI BACKGROUND: USDA-NRCS entered into a contribution agreement with BWSR to increase landowner/producer readiness to implement conservation practices in seven major watersheds. The Purpose is to establish a partnership framework for cooperation between NRCS, BWSR and SWCDs on activities that involve the planning and implementation of conservation activities in these watersheds. The
Goals include: 1) increase technical capacity of SWCDs to conduct resource assessments and prepare conservation plans within the selected watersheds; 2) target conservation planning assistance to high priority acres in these watersheds; 3) increase landowner readiness and participation in conservation programs; and 4) accelerate conservation practice implementation along with quantifying the environmental benefits. The Budget totals $3 million, equally funded by NRCS and BWSR and funds this Initiative through December 2021. The Approach includes working through participating SWCDs to recruit, hire/contract, and support dedicated watershed conservation planners to work with landowners and the watershed partners to achieve the goals.

At the Board’s September board meeting, WCPI partners will provide an update on the progress toward the goals and present highlights of local implementation.