



Bois de Sioux Watershed District

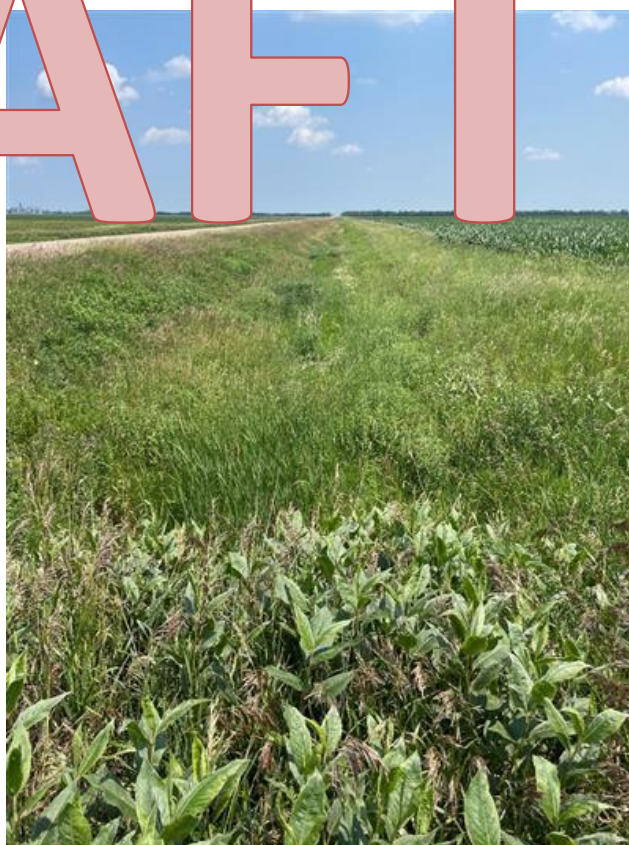
Calendar Year 2023

Annual Activity Report

DRAFT



Traverse County Ditch #41, April 2023



Traverse County Ditch #31, July 2023

This report is provided pursuant to MN Statute § 103D.351

**BOIS DE SIOUX WATERSHED DISTRICT
ANNUAL REPORT
CALENDAR YEAR 2023**

BOARD OF MANAGERS

NAME	COUNTY	PHONE	TERM EXPIRES	OFFICERS
<i>Linda Vavra</i>	Stevens	320-677-2586	2025	President
<i>Allen Wold</i>	Traverse	320-563-8743	2023	Secretary
<i>John Kapphahn</i>	Grant	218-685-4604	2023	Treasurer
<i>Scott Gillespie</i>	Big Stone	320-748-7149	2024	
<i>Jerome Deal</i>	Traverse	320-563-8377	2025	
<i>Doug Dahlen</i>	Grant	320-766-5794	2025	
<i>Benjamin Brutlag</i>	Otter Tail	218-731-2117	2023	
<i>Jason Beyer</i>	Wilkin	218-651-0135	2024	Vice President
<i>Steven Schmidt</i>	Traverse	320-563-8104	2024	

DISTRICT STAFF

Wendy Sullivan, Office Manager
Troy Fridgen, Engineer Technician
Jamie Beyer, Administrator

DISTRICT OFFICE

704 Highway 75 South
Wheaton, MN 56296
320-563-4185 P
320-563-4987 F
bdswd@runestone.net
www.bdswd.com



The Legacy Act Clean Water Fund, Red River Watershed Management Board, the Environment and Natural Resources Trust Fund, and the Outdoor Heritage Fund have provided grants supporting District projects in 2023. Please see “Project Grant Funding Sources” at the end of this report for awards from pass-thru state agencies, councils, and commissions.

CONSULTING PROFESSIONALS

Lukas Croaker
District Attorney
Ohnstad Twichell, P.C.
444 Sheyenne St, Suite 102
West Fargo, ND 58078
701.282.3249

Chad L. Engels, PE
District Engineer
Moore Engineering, Inc.
925 10th Ave E
West Fargo, ND 58078
701.282.4692

James Guler, PE
Engineer
Moore Engineering, Inc.
925 10th Ave E
West Fargo, ND 58078
701.282.4692

Renee Kannegiesser, CPA
Accountant
Morris & Associates
600 Atlantic Ave, Suite #101
PO Box 224
Morris, MN 56267
320.589.1122

Miranda Wendlandt, CPA CPE
Auditor
CliftonLarsonAllen LLP
510 22nd Ave E, Suite #501
Alexandria, MN 56308-1977
320.759.5100

**Contact Person for Questions
& Administrator:**
Jamie Beyer
704 Hwy 75 S
Wheaton, MN 56296
bdswd@runestone.net
320.563.4185



Picture from Rural Johnson, April 2023. A 24-hour rapid melt of record-breaking snow accumulations in the upstream portions of the District caused widespread flooding in downstream portions of the District (most significantly in Traverse County).

Contents

SECTION ONE - GENERAL FUND.....	6
2023 Board Meetings.....	6
Background	6
Mission Statement & Founding Petition.....	6
Board Activity.....	7
Board Education Opportunities	7
Red River Retention Authority.....	7
Red River Basin Flood Damage Reduction Work Group	8
Minnesota Association of Watershed Districts, now “Minnesota Watershed Districts”	8
BdSWD Advisory Committee	9
Other General Fund Activities.....	9
SECTION TWO - RRWMB FUND	12
Red River Watershed Management Board Levy.....	12
Other RRWMB Fund Activities	12
SECTION THREE – CONSTRUCTION FUND	13
Project Teams	13
Bylaws and Regulations	13
2023 Projects and Programs	13
Distributed Storage Strategy.....	13
Southern Boundary.....	14
North Ottawa Impoundment Project.....	14
River Watch Program	16
Minn. Stat. § 103F.48 Buffers	16
Land Acquisition and Sales.....	17
Moonshine Lakebed Restoration Project	17
Moonshine 24/13.....	17
Lake Traverse Water Quality Improvement Project	17
Big Lake Flood Control Outlet	19
Redpath Flood Impoundment & Mustinka River Fish and Wildlife Habitat Corridor Project	19
Redpath Collection Channel.....	20
Doran Creek Enhancement/Restoration.....	20
Fivemile Creek Restoration	20

East Branch Twelvemile Creek Project/Eldorado Township Flooding/640 th Ave Road Raise.....	20
Samantha Lake Flood Outlet Control Project	21
Lightning Lake	21
Spring Flood	22
Lake Traverse & Mud Lake Impoundments	24
Stream Gaging & Locations	24
Other Construction Fund Activities.....	26
SECTION FOUR - DITCH FUND	27
General Activities	27
Specific Activities by Ditch	28
SECTION FIVE – JOINT COMPREHENSIVE WATERSHED MANAGEMENT PLAN GOALS	30
Joint Comprehensive Watershed Management Plan District Program Activities	31
Progress Towards Joint Comprehensive Watershed Management Plan.....	32
2021 - 2023: 1) Progress for Measurable Goal: Erosion & Sedimentation	33
2021 - 2023: 2) Progress for Measurable Goal: Soil Health	35
2021 - 2023: 4) Progress for Measurable Goal: Public Flooding.....	37
2021 - 2023: 5) Progress for Measurable Goal: Private Flooding	39
2021 - 2023: 6) Progress for Measurable Goal: Public Ditch System Instability.....	40
2021 - 2023: 7) Progress for Measurable Goal: Public Ditch System Inadequacy	41
2021 - 2023: 8) Progress for Measurable Goal: Nutrient Loading	42
2021 - 2023: 9) Progress for Measurable Goal: Unstable Channels	43
2021 - 2023: 10) Progress for Measurable Goal: Bacteria Loading	44
SECTION SIX - PLANS FOR THE SUCCEEDING YEAR	45
2023 ACTIVE DEVELOPMENT & CONSTRUCTION.....	45
2023 103E DRAINAGE SYSTEM PROJECTS.....	46
2023 103D WATERSHED PROJECTS.....	47
PROJECT GRANT FUNDING SOURCES AS OF 12/31/2023	48
SECTION SEVEN - FINANCIAL STATEMENT HIGHLIGHTS	49

SECTION ONE - GENERAL FUND

Project Status and Business Transacted

2023 Board Meetings

January 26, 2023	June 15, 2023
February 27, 2023	July 20, 2023
(replaced February 23, weather cancellation)	August 17, 2023
March 16, 2023	September 21, 2023
March 24, 2023	October 19, 2023
April 20, 2023	November 17, 2023
May 18, 2023	December 21, 2023

The Bois de Sioux Watershed District Board of Managers meet regularly on the third Thursday of each month starting at 8:00 a.m., April through October, and at 9:00 a.m., November through March.

Background

The Bois de Sioux Watershed District (the “District”) was established on May 11, 1988, by order of the Minnesota Board of Water and Soil Resources (BWSR). The District represents an area of about 1,420 square miles and includes Traverse County (38%), Grant County (27%), Wilkin County (14%), Stevens County (10%), Big Stone County (7%) and Otter Tail County (4%).

The District includes the drainage basins of Lake Traverse and the Bois de Sioux River within the State of Minnesota. The major tributaries are the Mustinka River and numerous creeks in the south and east and the Rabbit River to the north.

Mission Statement & Founding Petition

To provide coordinated water resource management over the entire hydrologic basin of the Bois de Sioux River lying within the State of Minnesota.

Petitions submitted to establish the Bois de Sioux Watershed District cited the need for:

1. Control or alleviation of damage by flood waters;
2. Improvement of stream channels for drainage, navigation and any other public purpose;
3. Reclaiming or filling wet and overflowed lands;
4. Providing water supply for irrigation;
5. Regulating the flow of streams and conserving the waters thereof;
6. Diverting or changing watercourses in whole or in part;
7. Providing and conserving water supply for domestic, industrial, recreational, agricultural, or other public use;
8. Providing for sanitation and public health and regulating the use of streams, ditches, or watercourses for the purpose of disposing of waste;
9. Repair, improve, relocate, modify, consolidate, and abandon, in whole or in part, drainage systems within a watershed district;
10. Imposition of preventative or remedial measures for the control or alleviation of land and soil erosion and siltation of watercourses or bodies of water affected thereby;
11. Regulating improvements by riparian landowners of the beds, banks, and shores of lakes, streams, and marshes by permit or otherwise in order to preserve the same for beneficial use;
12. Protecting or enhancing the quality of water in watercourses or bodies of water;
13. Providing for the protection of groundwater and regulating groundwater use to preserve groundwater for beneficial use.

Furthermore, the petition cited that establishment of the District would be conducive to the public health and public welfare by:

1. Preventing damage to farm buildings and farmyards, public roads and farmlands due to flooding.
2. Removing county boundaries from determining an overall and comprehensive use of the water and natural resources.
3. Controlling and regulating private ditching, obstruction of natural waterways and the antagonism amongst neighboring landowners regardless of the county in which they are located.

Board Activity

The board held twelve regular monthly and one special meeting in 2023. Staff meetings were also conducted for purposes of reviewing issues identified at the board meetings and to meet with landowner groups in an informal setting, pursuant to Minn. Stat. § 103E.043, to discuss legal ditch repairs, improvements, permit activity, and other surface water related problems.

Board Education Opportunities

CONFERENCES & MEETINGS

Drainage Work Group Meetings (Monthly)
Red River Basin Commission Conference (Jan)
Joint Red River Watershed Management Board & Flood Damage Reduction Work Group Conference (Feb/Mar)
Minnesota Association of Watershed Districts Capitol Hill Meetings & Visits (Feb/Mar)
H2O Viewers Drainage Conference (Feb)
Grant County Ditch Meeting hosted by Rinke Noonan (Apr)
North Ottawa Project Team Meetings (January, March, July, December)
Minnesota Association of Watershed Districts Summer Tour (Aug)
SWCD Field Days
Minnesota Association of Watershed Districts Annual Conference (Dec)
Prairie Grains Conference (Dec)
1W1Plan/Joint Comprehensive Watershed Management Plan

INCLUDED IN BOARD MEETING PACKETS

ND Water Users Association WOTUS Update (01/26/23)
MPR - Juneteenth is Now a Holiday (02/27/23)
MPCA Guidance for considering natural background when assessing lakes for eutrophication (04/20/23)
BWSR 2023 Legislative Summary (06/15/23)
Lake Agassiz & Lake Ojibway (08/17/23)
Engie Wind Development (10/16/23)
Clean Water Council Policy Committee Meeting Minutes & Drainage Policy (11/17/23)
MW Statewide Survey (12/21/23)

Red River Retention Authority

In 2010, the Red River Retention Authority (RRRA) was formed through a joint powers agreement between the Red River Watershed Management Board (RRWMB) in Minnesota and Red River Joint Water Resource District (RRJWRD) in North Dakota. Long-time Executive Director Keith Weston announced his retirement and introduced his replacement Brian Fuder (07/20/23).

The RRRA is comprised of members of the RRWMB, a Minnesota political subdivision and the RRJWRD, a North Dakota political subdivision. The primary objective of the RRRA is to ensure joint, comprehensive, and strategic coordination of retention projects in the Red River of the North watershed and facilitate implementation and construction of retention in the Red River Valley. The RRRA and its members aggressively pursue federal dollars to off-set local costs for retention projects, and serve as an advocate for local projects in the federal regulatory

process. The RRRRA Directors seek basin-wide solutions to realize effective flood protection and flood damage reduction, accomplished on a strategic project-by-project basis.

Red River Basin Flood Damage Reduction Work Group

The Flood Damage Reduction Work Group (FDRWG or Work Group) was originally formed in 1998 to address issues related to the development of flood damage reduction projects in that portion of the Red River of the North Basin lying in Minnesota.

While recognizing that the ultimate solutions to the flood damage and natural resource problems in the Red River Basin will take a concerted effort from people throughout the Basin, the Work Group was formed to address issues that are unique to Minnesota. However, the Work Group maintains extensive communications and coordination with jurisdictions and organizations throughout the Basin. For example, in 2005, two members of the Flood Damage Reduction Work Group also served as chairpersons for other Basin-wide organizations.

The Work Group is not a legally constituted body and has no regulatory or funding authority. It is an ad hoc group of individuals representing federal, state, and local governments, and non-governmental organizations that meet voluntarily under a set of mutually agreed upon ground rules. The Work Group meets for the purpose of coordinating the implementation of the 1998 Mediation Agreement and making recommendations to other authorities and jurisdictions within the Red River Basin to that effect.

Linda Vavra serves as a member to the FDRWG representing the RRWMB.

Minnesota Association of Watershed Districts, now “Minnesota Watersheds”

Minnesota Watersheds provides educational opportunities, information, and training for watershed district managers and staff through yearly tours, meetings, and regular communication.

Minnesota Watersheds represents 45 watershed districts in the state. The watershed districts are partners in water protection and management.

Linda Vavra continued to serve as a member representing Region I for Minnesota Watersheds Board of Directors, and in 2023 served as President.



BdSWD Advisory Committee

Chair Ron Staples	Dean Frisch	Doug Jahnke	Chad Zimmer
Doyle Sperr	Mark Summers	Eric Klindt	
Scott Bauer	Duane Duin	John Walkup	

The Advisory Committee met on January 6, 2023. Committee members met with District Engineer Chad Engels, Attorney Lukas Croaker, Engineer Technician Troy Fridgen, President Linda Vavra, and Administrator Beyer. The Committee received information on permitting, ditch projects, watershed projects, buffers, and the One Watershed One Plan.

Other General Fund Activities

- **Legal & Engineer Rates:** 2023 rates were approved (01/26/23).
- **Billable Rates for 2023 set as follows (05/18/23).** Billable Rates were also set for engineering and legal staff (06/15/23).

2023 BILLING RATES

(based on 2022 Audit and BWSR Calculator)

	District Administrator	District Office Manager	District Engineer Tech
Salary + Benefits	\$ 45.00	\$ 46.65	\$ 55.22
Salary + Benefits + Facilities	\$ 77.18	\$ 59.66	\$ 87.40
Salary + Benefits + Facilities + Administration	\$ 85.75	\$ 68.24	\$ 95.97

Historical Rates

2022 Salary + Benefits + Facilities + Administration	\$ 81.81	\$ 60.75	\$ 87.69
2021 Salary + Benefits + Facilities + Administration	\$ 74.49	\$ 56.45	\$ 82.46
2020 Salary + Benefits + Facilities + Administration	\$ 74.79	\$ 56.18	\$ 81.75
2019 Salary + Benefits + Facilities + Administration	\$ 74.52	\$ 55.78	\$ 80.05
2018 Salary + Benefits + Facilities + Administration	\$ 140.51	\$ -	\$ 130.30

- **2023 Resolutions:**
 - Preliminary Resolution – Establishment of the Lightning Lake Outlet Project (01/26/23)
 - Final Resolution – Establishment of the Lightning Lake Outlet Project No. 1 (03/16/23)
 - Resolution Supporting Change of Boundary (06/15/23)
 - 2023 – 2024 Annual Resolution (06/15/23)
 - Resolution of Ad Valorem Levy (General Levy and Construction/RRWMB Levy) (08/17/23)
 - Resolution to Budget Redpath Impoundment Project Funds (08/17/23)
 - Resolution for State Flood Hazard Mitigation Grant Funding Assistance for Redpath Flood Impoundment (08/17/23)
 - Resolution Adopting the Traverse County Multi-Hazard Mitigation Plan (09/21/23)
 - Resolution Granting Authorization to File an Application with the Minnesota Management and Budget Office (10/19/23)
 - Resolution of Ad Valorem Tax Levy (12/21/23)
 - Resolution for Ditch Assessment Levies (12/21/23)
- **Financial Activities:** Grants associated with 2022 Flood, Doran Creek Development, Fivemile Creek Development, Lake Traverse Water Quality Project No. 1, Redpath Phase 1/TCD #35, Redpath Phase 2, Mustinka River Rehabilitation, Lightning Lake Outlets, Lined Waterways, WCD #Sub-1, and Project Team

quarterly grants were received and closed.

Grants associated with the following projects have not been closed: Doran Creek, Twelvemile Creek, Phase 3 of the Lake Traverse Water Quality Improvement Project No. 1, Redpath Phase 2 Mustinka River Rehabilitation, Redpath Phase 2 Flood Impoundment, WCD #Sub-1, Lightning Lake Outlet, 1W1Plan/JCWMP/WBIF.

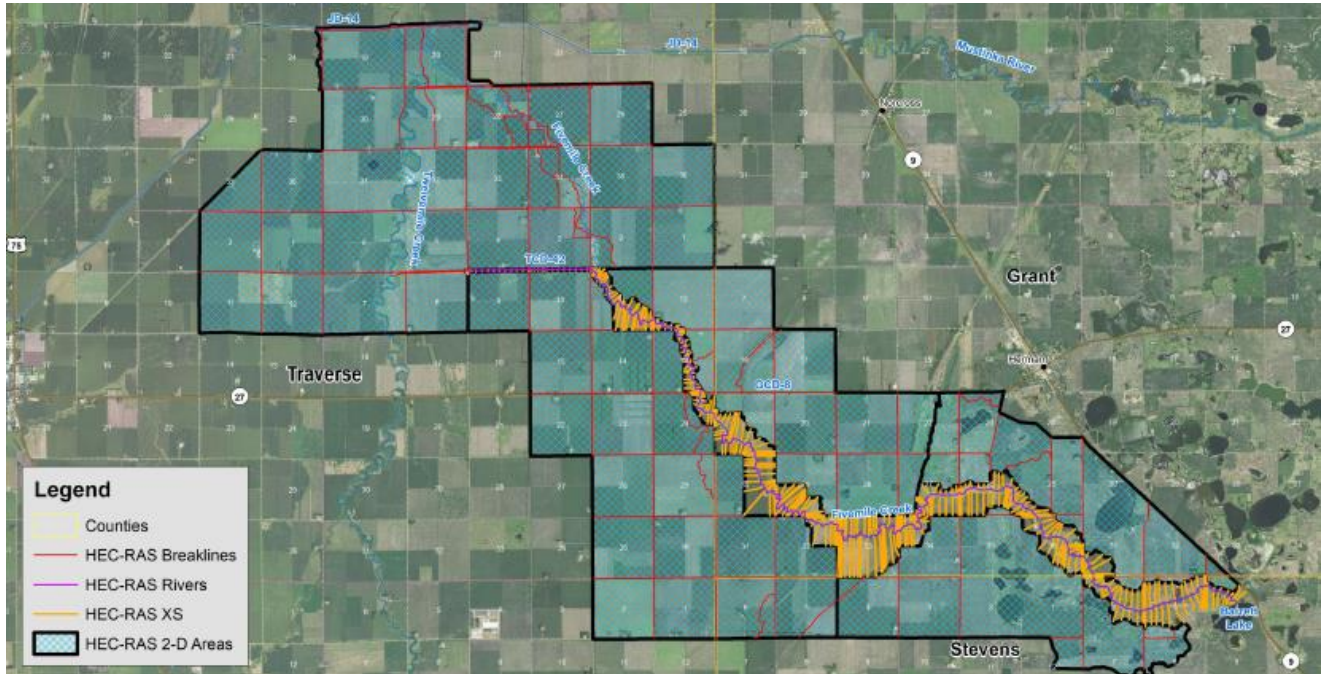
- **End of Year:** End of year transfers and journal entries for 2022 were approved (01/26/23).
- **Interest Accounts:** Staff were authorized to move District funds to interest-bearing accounts, as needed (02/27/23) and CD instruments (12/21/23).
- **Annual Audit:** The financial statements and results of the 2022 annual audit were presented (05/18/23).
- **Transfers and Project Closeouts:** Following Copeland/Western 32 land sale, funds transferred to Construction Fund; Tintah 34 Fund closed and balance transferred to Construction Fund; Construction Funds transferred to close Big Lake Project and Fund Deficit Balance (05/18/23).
- **Elections, Annual Organization & Committees:** Approval of the annual organization resolution, election of officers, and committee assignments was approved (06/15/23).
- **District Office:** The District's office building heat pump was replaced at a cost of \$11,582 (06/15/23). Staff are authorized to work with the new owner of the District's shared driveway, to update signage (06/15/23).
- **District Office Equipment:** Authorization of a new postage machine lease was given (06/15/23).
- **Tort Liability:** Tort liability limits were not waived (06/15/23).
- **Wind/Solar Impacts:** Board managers discussed potential impacts of placement, construction activities, and maintenance of wind and solar projects and transmission infrastructure to: 103E Drainage Systems, 103D Watershed Projects, Permitting, and District owned land. Staff were authorized to draft recommendations on setbacks, utility permits, and GopherOne registrations (06/15/23).
- **Annual Review of Conflict of Interest Policy:** Conflict of Interest policies were reviewed (08/17/23).
- **Phone Reimbursement:** Reimbursement for data/cell was increased to \$100/month for Engineer Technician Troy Fridgen (09/21/23).
- **Conference Room Display:** Board requested an update in visual technology (10/19/23).
- **2023 Audit:** A master services agreement and state of work with CliftonLarsonAllen were approved; the cost for the 2022 audit and financial statements will be \$15,500 (11/17/23).
- **Employee Holiday:** The floating holiday approved in 2022 was terminated; state-mandated Juneteenth was added to the list of employee holidays (12/21/23).
- **State Mandated Employee Earned Sick and Safe Time Program:** Mandatory program established; the required hours will be diverted from the District's sick leave program to supply the state-mandated program until maximum limits are reached (12/21/23).
- **Annual Review of Data Request Policy:** The review was suspended as the current policy has been rewritten



City of Dumont, Spring Flood 2023

and included in the District's formal review and adoption of the District's Bylaws, Rules, and Policies.

- **Budgets, Assessments & Levies:** Budget hearings were held, with assessment and levy approvals following each hearing (08/17/23, 12/21/23).
- **2024 Staff Wages:** Staff increases were set at 3.5% (12/21/23).



Above: Modeling for Fivemile Creek

Below: Fivemile Creek



SECTION TWO - RRWMB FUND

Project Status and Business Transacted

The Red River Watershed Management Board's jurisdiction and authority encompasses the area managed by the individual watershed districts that have membership on the Board. The Bois de Sioux Watershed District continued with its membership to the Red River Watershed Management Board.

Seven watershed districts within the Red River Valley form the RRWMB including the Joe River, Two Rivers, Roseau River, Middle-Snake-Tamarac Rivers, Red Lake, Wild Rice, and Bois de Sioux.

The RRWMB was created by an act of the Minnesota Legislature in 1976 to provide an organization with a basin-wide perspective concerning flooding. Historically, the activities of the RRWMB have centered on flood control. Previous efforts in dealing with the flooding problem within the Red River Basin consisted of single projects within a localized area, planned with primary regard to local benefits. The RRWMB actively promotes a basin-wide perspective for water management.

Linda Vavra was elected to represent the District beginning 2021 and continued through 2022, with Jason Beyer serving as alternate. According to RRWMB, the Bois de Sioux Watershed District position will expire December 31, 2024.

Red River Watershed Management Board Levy

Per a notice from a RRWMB meeting dated July 19, 2022 – effective for the 2023 certified tax levy:

THEREFORE, BE IT RESOLVED that the RRWMB Board of Managers hereby requests that member watershed districts operating pursuant to the RRWMB joint powers agreement levy an ad valorem tax in the amount of 0.0003627 times the taxable market value on all taxable property within their respective districts in accordance with provisions of Minnesota 1976 Sessions Law, Chapter 162, Section 1; as amended by laws of 1982, Chapter 474, Section 1; laws of 1983, Chapter 338; and laws of 1989 First Special Session, Chapter 1, Article 5, Section 45;

BE IT FURTHER RESOLVED that in accordance with said law each member watershed district retains one-half of the proceeds of said levy crediting those funds to the individual district's construction fund to be used for the development, construction, and maintenance of projects and programs of benefit to the district; and the proceeds from the remaining one-half of this levy be transmitted to the Red River Watershed Management Board, Robert L. Sip, Executive Director, 11 5th Avenue East, Suite B, Ada, MN 56510, to be credited to the general fund of the Red River Watershed Management Board and to be used for the development, construction, and maintenance of projects and programs of benefit to the Red River basin.

Other RRWMB Fund Activities

- **RRWMB Update:** Executive Director Rob Sip gave an update of financial position and funding commitments, along with changes to the Ring Dike Policy, presented (07/20/23).
- **Grants:** Grants were awarded to the District in 2023:
 - Signed March 29, 2023, a RRWMB agreement increases the total RRWMB funding commitment for the Mustinka/Redpath Project from \$15,542,197 to \$16,850,000 (maximum funding commitment of 36.3% of the Project costs). A total of \$6,667,000 had been advanced at the time the agreement was approved.
 - \$112,500 Base Funding Grant for WCD #Sub-1

SECTION THREE – CONSTRUCTION FUND

Project Status and Business Transacted

Project Teams

The Bois de Sioux Watershed District is a subwatershed of the Red River of the North Basin. In December 1998, many agencies and organizations signed the Red River Basin Mediation Agreement which outlined how projects will be developed in the Red River Valley in Minnesota. That agreement states that the districts within the basin will attempt to balance each project design with Flood Damage Reduction (FDR) benefits and Natural Resource Enhancements (NRE). Part of that process requires that each district establish a project team for each project containing members from local, regional, state, and federal agencies along with environmental organizations and local landowners.

The Bois de Sioux Watershed District has administered eight (8) project teams, and employs them when, or if needed, for planning projects: North Ottawa (project complete), Redpath (project permitted), East Branch Twelvemile Creek, West Branch Twelvemile Creek, Moonshine, Rabbit River, Bois de Sioux Direct (project complete), TCD #52. A great deal of information has historically been gathered from these teams, and the information gathered is considered in subsequent project design and permitting tasks.

Bylaws and Regulations

The Bois de Sioux Watershed District has adopted rules to control watershed activities as required by Minn. Stat. § 103D.341. Bois de Sioux Watershed District rules lay out a permit process that landowners must follow. Permits are required for any type of work related to subsurface drainage tile; new ditching; improved ditching; bridge and culvert installations; drainage from one sub-watershed to the other; construction, alteration, or removal of any dike; reservoir work; land forming; wetland drainage; and work within natural drainage ways, lakes, wetlands, and other abutting land and drainage structures. Landowners should contact the Bois de Sioux Watershed District Office for assistance and direction in filing permits.

For a copy of the Policies and Procedures Manual of the Bois de Sioux Watershed District, please contact the Bois de Sioux Watershed District Office or go to www.bdswd.com.

Any land owner that proceeds to do work without a permit, when the project requires one, is subject to a minimum \$250 After-The Fact Permit Fee plus any Engineering/Attorney Fees incurred in processing of said permit.

There were a total of 133 permit applications received in 2023.

2023 Projects and Programs

Distributed Storage Strategy

In 2012, the BdSWD completed a 20% Flow Reduction Strategy for the watershed, requiring 123,561 Ac-Ft of storage to be constructed after 1997. The study used a synthetic 100-yr event called the “Standard Melt Progression” that was calibrated to the USACE wet period 100-yr balanced hydrograph at Fargo. A total of 26 sites or potential projects were identified within the District, placing locations in the Lake Traverse and Rabbit River basins. Site selection was based primarily on the need for local flood control as flooding problems are widespread in the Bois de Sioux Watershed District.

The Bois de Sioux Watershed District prioritizes development of specific impoundment projects based on need, landowner support, permit compatibility, funding opportunities, and importance of other watershed projects and programs that require the time of district staff. Projects currently under construction: Redpath Flood Impoundment (19,000 ac-ft of gated storage; 23,000 ac-ft total storage).

The 20% flow reduction goal for the BdSWD and progress made by the BdSWD defined by “total utilized storage” which is gated and ungated storage:

TOTAL POST-1997 STORAGE GOAL	123,561 ACRE-FEET
STORAGE CONSTRUCTED	17,341 ACRE-FEET (NORTH OTTAWA)
STORAGE CONSTRUCTED	51 ACRE-FEET (SAMANTHA LAKE)
STORAGE CONSTRUCTION IN-PROGRESS	<u>23,000 ACRE-FEET (REDPATH)</u>
REMAINING GOAL	83,169 ACRE-FEET

In 2014, the Red River Basin Commission published the 2014 Halstad Upstream Retention (HUR) Study (https://www.mvp.usace.army.mil/Portals/57/docs/Civil%20Works/Projects/Red%20River/A03_AttachmentA3_RRBC%20HUR%20Final%20Report_R.pdf?ver=2018-04-18-101738-873), that included information on the 20% Flow Reduction Strategy for the District and the 26 sites or potential projects.

Southern Boundary

In July 2023, an amendment was filed with BWSR to correct the description used with the January 26, 2022 BWSR Boundary Resolution; a map included with the resolution identified the correct parcels to be included/removed from the Bois de Sioux Watershed District, but the description of the land excluded three quarter-quarters that were requested for addition to the District by the landowner in Section 20 of Parnell Township, Traverse County. In August 2023, a second resolution changing the District Boundary was submitted upon request of a landowner for portions of two parcels in Section 30 of Pepperton Township, Stevens County. Neither resolution was approved by BWSR before December 31, 2023.

North Ottawa Impoundment Project

The North Ottawa Project Team met six times in 2023 (01/20/23, 01/23/23, 03/08/23, 03/24/23, 07/17/23, 12/20/23).

Spring Operations and Events: Record snow accumulations were paired with a rapid warm-up. Staff identified flood condition potential and began mitigation measures (snow and ice removal from priority culverts and channels) April 1st. Flood conditions peaked the following week. Cells C, B4, A4, and A3 were flooded first. Gravel road blading repaired some of the flood damage. The agricultural lessee confirmed that A1, A2, and B1 would be planted without restrictions; the restricted silage/small grain would be planted in the B2 and B3 cells. A facility brochure was created.

Ag leases: A lease for the 2023, 2024, and 2025 growing seasons was put together and advertised and awarded in December (12/15/22).

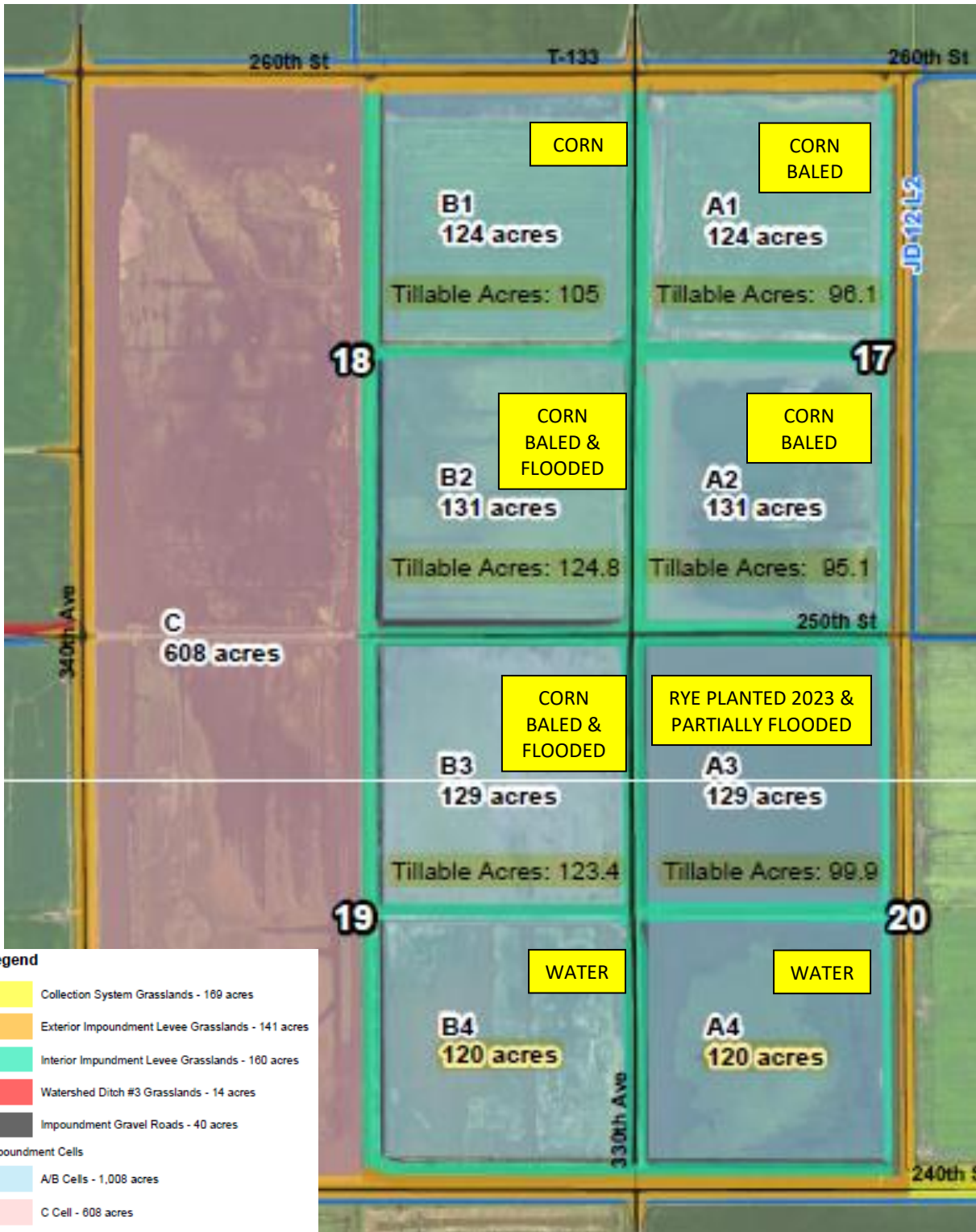
Maintenance & Repairs: Cattail spraying; 40 new aluminum stop logs installed; gates were repaired; collection channel clean-out; tools purchased to more easily manipulate the gates.

NRE's: All one-hundred acres of the Japanese Millet in Cell A3 had been left in 2022 for wildlife. The millet did not reseed or survive Spring Flood 2023. Weed growth took over the cell, so it was tilled, sprayed, and planted to rye. A wild rice producer met with Project Team members and described potential NRE's that could accompany cultivated rice production: cattail competition/control; wildlife feed source; uncommon wildlife habitat. Project Team members will implement a pilot project in 2024 to prepare for and begin a test whether wild rice production is compatible with flood impoundment operations.

Summer Operations and Events: Project Team members ordered staff to oversee a concrete pad and ADA port-a-potty installation. The summer drought limited cell manipulation options.

Fall Operations: The agricultural lessee failed to take corn silage early; harvest was able to be completed in Cell B2 and B3 in time for the cells to be flooded for the fall migration.

NORTH OTTAWA 2023 OPERATIONS



Legend

- Collection System Grasslands - 169 acres
- Exterior Impoundment Levee Grasslands - 141 acres
- Interior Impoundment Levee Grasslands - 160 acres
- Watershed Ditch #3 Grasslands - 14 acres
- Impoundment Gravel Roads - 40 acres

Impoundment Cells

- A/B Cells - 1,008 acres
- C Cell - 608 acres

Total Grasslands Area = 484 acres
 Total Area of North Ottawa Cells = 1,616 acres

River Watch Program

The River Watch (RW) program provides hands-on watershed science education, promotes water resources stewardship, and introduces high school participants to career opportunities in watershed science. The program focuses on education through water quality monitoring, macroinvertebrate and mussel sampling, snow and frost depth studies, and river geomorphology. The District supports the RW program and valuable water quality data is obtained within the watershed as a result of this project. Students provided a recorded presentation to the Bois de Sioux Watershed District on May 18, 2023.

The District provides support for the program by covering costs of substitute teachers, transportation, and students' lunches on sampling days and when students attend the RW Forum and the water quality training/certification session. Laboratory analyses of water samples have also been covered if a special research project is undertaken by a RW team or student. Financial support is also provided by the Red River Watershed Management Board (RRWMB) and the Minnesota Clean Water Legacy Fund. Coordination and implementation support is provided by the International Water Institute.

This partnership with the watershed district and area schools contributes to the education of the students, promotes good stewardship of our water resources, and provides valuable data to area water resource managers and agencies.

Long-time Campbell-Tintah Riverwatch Coordinator Roy Mayeda announced his retirement and was recognized by the District for his dedicated service.

Minn. Stat. § 103F.48 Buffers

The Soil Loss Committee met once in 2023 to continue to determine the best courses of action to reduce soil erosion and discussed the use of annual riparian aid. The Committee discussed the use of buffer damages to reseed drainage system buffers damaged during the Spring 2023 flood (subsequent FEMA reimbursement claims have been filed but were not finalized in 2023). Funds were also used to level spoils, mark intakes, hydroseed, cost share lined waterways, and mark rights-of-way.

The District's Use of Buffer Funds for Ditch Repairs Policy was approved (09/21/23). The policy allows Buffer/Soil Loss Prevention Funds to be used to stabilize ditches that have both a high ditch grade (which creates fast moving water and can erode side slopes) and steep side slopes (which creates an opportunity for sloughing).

The District's Preferred Alternative Practice Policy was approved (09/21/23). The policy provides a common alternative practice (no-till and cover crop) for landowners in the Bois de Sioux Watershed District to the 16.5' vegetated buffers required adjacent to public drainage ditches. Traverse County representatives have also expressed interest in utilizing the District's Preferred Alternative Practice Policy for enforcement of 50' buffers on Traverse County Public Waters (11/17/23).

The District continues to partner with our landowners to take an aggressive approach building a large number of projects that include the goal of preventing soil erosion into ditch systems and public waters. Some of these projects include:

- TCD #35 Drainage System Redetermination, including buffer acquisition and installation
- WCD #Sub-1 Drainage System Redetermination, including buffer acquisition and installation
- GCD #21 Drainage System Redetermination development
- GCD #3 Drainage System Repair development
- Mustinka River Rehabilitation Corridor: 2.1 miles of meandering channel and buffers were created.
- Doran Creek Stream Rehabilitation development
- Lake Traverse Water Quality Improvement Project No. 1 Phase No. 3 buffer acquisition and installation
- Wilkin SWCD Cover Crop Program \$5,000 commitment renewed for 2023, 2024, and 2025 (05/18/23, 06/15/23).

- Traverse SWCD Erosion Prevention Program commitment for lined waterway cost-share in the amount of \$12,000 in additional funds for 2023 and \$30,000 for 2024 (08/17/23, 12/21/23).
- Grant County Mustinka Corridor Program, for which the District continues to maintain a \$400,000 cost-share commitment.

In November 2023, two sets of landowners (for a total of three non-compliant parcels) had 11-month notices expire; the notices stated that buffers must be installed a corrective action letter would be issued. On December 6, 2023, staff from the Board of Water and Soil Resources requested that the District not send corrective action notices to landowners with the District’s approved, preferred alternative practice.

Land Acquisition and Sales

Buffer easements continue to be acquired for the close-out of JD #11, JD #6, and WCD #Sub-1. Watershed Districts are limited to \$2,000,000 in total debt, so the District relies on county bonding to finance these projects.

Board managers conducted a review of lands held by the District in 2022. Land owned in Section 32 of Western Township (purchased from the Copeland family) was approved for disposal in 2023 due to economic feasibility; an impoundment will not be built at this site because an impoundment would have limited frequency in use and a limited amount of captured flow (12/15/22). A plan for the sale of the Copeland land located in the SW1/4 of Section 32, Western Township, Otter Tail County, was decided (01/26/23), and a sale was finalized (03/16/23, 03/24/23) at a price of \$1,135,000. The funds were transferred to the Construction Fund, along with proceeds from the Tintah Section 34 land sale that took place in 2020.

Moonshine Lakebed Restoration Project

District staff learned more about how City of Graceville Public Works staff are currently using storage to manage flood risk for the City of Graceville, most recently during the Spring 2023 flood. Engineering staff conducted a study of the proposed impoundment project options and costs, met with DNR permit authorities, and met with impoundment landowners. Feedback and support must be evaluated for Big Stone County Commissioners, Big Stone County Highway staff, and downstream drainage system landowners for Big Stone County Ditch #8. This project will continue to be developed in 2024.



Lake Traverse Water Quality Improvement Project Phase 3

Moonshine 24/13

No action was taken on this project in 2023.

Lake Traverse Water Quality Improvement Project

Phase One: Construction completed in 2021.

Phase Two: Construction completed in 2022.

Phase Three (Final): Construction began Spring 2023; Wagner Company, Inc. completed construction (09/21/23)

Phases for this project have received funding from BWSR Clean Water Fund Legacy Act, Red River Watershed Management Board, DNR Conservation Partners Legacy, Traverse County Local Water Planning, and Traverse SWCD.

The Lake Traverse Water Quality Improvement Project consists of a multi-phased approach to stabilize a tributary inlet to Lake Traverse. The tributary is listed as a MN Public Water and is also a 103E ditch system known as Traverse County Ditch 52 (TCD #52). The Traverse County Ditch 52 tributary consists of 15 miles of open channel providing drainage for approximately 32.4 square miles of agricultural lands.



The vast majority of the system is designated as Minnesota Public Waters including the outlet reach which empties into Lake Traverse. Phase 1 of the stabilization project, finalized in 2021, began at the outlet into Lake Traverse and proceeded upstream to the first road crossing at State Highway 27. This 3,500 lineal foot stretch of public water was a severely eroded gully; this stretch alone discharged approximately 50,000 tons of sediment since 1951 into Lake Traverse. Phase 1 of the project has provided a stable outlet and enhanced fish passage and habitat. Runoff producing storms in 2021 demonstrated an effective natural-channel design that conveyed flows and provided ample habitat features such as pools and riffles.

Phase 2 of the project, constructed in late 2021, consisted of stabilizing a private drainage ditch identified as a public water, which outlets into TCD 52. This reach of public water runs parallel with State Highway 27 and experiences a steep drop in grade (approximately 19 feet in 1,575 ft) which had resulted in considerable downcutting, unstable side slopes and sediment deposition into Lake Traverse. Completion of Phase 2 was crucial to stabilize in order to minimize sedimentation and other impacts to the stable outlet created in Phase 1 of the project.

Phase 3 is located upstream of Phase 1 and Highway 27. This final phase of the project stabilizes 1.2 miles of heavily eroded stream bank. Stabilization methods used for the project included installation of a series of 4 boulder riffles, containing 6 weirs each and 23 individual permanent rock weir structures to provide aquatic passage, grade control, and aquatic habitat, consistent with the natural channel design used in Phases 1 and 2. The majority of the channel is stabilized using native vegetation (primarily grasses) with rip rap used in the vicinity of the rock riffles. The rock riffles provide additional water quality benefit as some sediment is likely to settle out immediately upstream of the riffle structures. Phase 3 construction was initiated on May 10, 2023, and was completed rapidly with the lack of precipitation during the 2023 construction season, over the course of five pay applications. The final construction punchlist and vegetation establishment confirmation will be completed Spring 2024.



Big Lake Flood Control Outlet

Due to a change in landowners, landowner support, and DNR permit requirements, the Big Lake Flood Control Outlet project was abandoned and the project was closed (05/18/23).

Redpath Flood Impoundment & Mustinka River Fish and Wildlife Habitat Corridor Project

In 2008, the Board of Managers established the Redpath Project Team and charged them with the task of identifying the problems in the area and reviewing alternative solutions. The team did their work in the first eight (8) months of the year and recommended a project solution to the Board in August 2008.



The Mustinka River Rehabilitation project is located in Traverse and Grant Counties, immediately north of the Redpath Flood

Impoundment. Over five miles of the Mustinka River will be re-meandered within a two-stage flood corridor channel. The design recreates a natural river sinuosity with flow controls that will stabilize the channel and protect it from future erosion. This project will be constructed concurrently with the Redpath Flood Impoundment Project; materials excavated from the rehabilitated Mustinka River two-stage channel will be used to build the north levy of the Redpath Flood Impoundment. There is widespread support (from landowners, Grant & Traverse Counties, and state agency representatives) for the Mustinka River Rehabilitation and Redpath Flood Impoundment Projects.

This project will be a significant bird and wildlife watching destination. In 2023, there were significant project developments.

Phase 1 Relocation of TCD #35:

August 2023 – Final Hearing & Closeout

Phase 2A Mustinka River & Redpath Impoundment

March 2023 – Bid Opening

April/May 2023 – Contract Docs Signed & Construction Begins

September 2023 – Groundbreaking Ceremony

December 2023 – Construction Mostly Complete

Phase 2A construction began May 2023, rehabilitating approximately two miles of the Mustinka River, constructing of a portion of the north levee embankment, and pre-loading at the outlet structure. Construction was not interrupted by adverse weather, so construction milestones were achieved ahead of schedule. Punchlist items will be completed on or before Summer 2024.

A groundbreaking ceremony was held September 21, 2023 in coordination with a 25th Anniversary Tour hosted by the Flood Damage Reduction Workgroup. District staff also provided presentations and hosted the Minnesota Capital Investment Committees for both the House of Representatives and Senators.

These projects have received funding from the Lessard Sams Outdoor Heritage Fund, the Legacy Act LCCMR Fund, Legacy Act BWSR Clean Water Fund Projects and Practices and Multipurpose Drainage Management Grants, DNR Flood Hazard Mitigation Program, the Red River Watershed Management Board, DNR Conservation Partners Legacy, and Environment and Natural Resources Trust Fund.

Redpath Collection Channel

Development was paused until the Redpath Impoundment is near completion.

Doran Creek Enhancement/Restoration

Engineering staff continue to refine project details of a proposed Doran Creek Restoration. The ultimate goals of the project are to construct a 19.25 mile channel restoration, remove up to 3' of sediment, establish a permanent buffer corridor, and construct measures that reduce sediment transport. In order to meet this goal, engineering staff anticipate that grassland easements will be required and meandering pools be widened. Depending on the event (2-, 5-, or 10-Year), up to 1,300 acres would be enrolled under an easement. The project would need to be constructed in phases, as grants are available and – because easement grants are the primary mechanism to pay for the majority of the project – willing, supporting landowners are imperative. The proposed project would address 80% of the 10-year sediment reduction goal and 53% of the 10-year nutrient reduction goal for the Lake Traverse & Bois de Sioux Watershed District planning region. Estimates are that the project could cost up to \$8.4 million (02/27/23). RRWMB prepared and submitted a joint Lessard Sams Outdoor Heritage Council Grant on behalf of several RIM projects, including Doran Creek (04/20/23). The Draft Engineer's Report was prepared March 2023, and a Minn. Stat § 103D.605 public hearing was held on July 20, 2023. The meeting was reconvened August 17, at which a request from the DNR was presented stating that the project could not be established until a negative declaration on the need for an Environmental Impact Statement is issued, following official Environmental Assessment Worksheet (EAW) review, which was initiated in 2023, but not finalized.

This project has received funding from the BWSR Clean Water Fund Legacy Act, the Red River Water Management Board, and the NRCS National Water Quality Initiative.

Fivemile Creek Restoration

A technical unsteady, 2D RAS river model was developed, a survey and soil borings were completed, and an 85-page hydraulic study was produced. In general, the area is naturally flat and sediment deposits are not frequent in the channel; barring construction of an impoundment, the prior problem contributing to flood conditions are cattail and vegetation growth. Engineering staff have met with DNR permitting authorities and discussed the results of the study. Board Managers requested that staff meet with landowners after harvest to discuss possible options (10/19/23).

This project has received funding from the BWSR Clean Water Fund Legacy Act.

East Branch Twelvemile Creek Project/Eldorado Township Flooding/640th Ave Road Raise

In December 2005, the East Branch Twelvemile Creek Project Team made a recommendation to the BdSWD Board for the implementation of 3,300 acre feet of storage in the sub-watershed, but to-date, site suitable land has not been offered for sale by landowners.

Following the Spring of 2019 flood, residents voiced a need and support for flood mitigation efforts in this area. Drainage issues continue on the Traverse County-Stevens County line. Drainage issues in the area were divided into those north and south of Stevens County Highway 20/Traverse County Highway 6. In general, landowners and township officials support project plans that correctly separate and control overland flow between the TCD #37 and TCD #8 drainage areas. A 640th Road Raise Project was identified in Dollymount Township and a new drainage system that would outlet to TCD #37 was identified for Eldorado Township.

Dollymount Township received bids for the construction of the 640th Ave Road Raise, which will provide some flood damage protection and is supported by area landowners; the District entered into a cost-share agreement for construction of the project because of the flood damage reduction benefits derived from the project (10/19/23). Construction will begin in 2024.

Samantha Lake Flood Outlet Control Project

Grant County is pursuing implementation of a drawdown of Elbow and Samantha Lakes (of up to 18”), and were awarded cost-share funds to complete a Desktop Wetland Delineation and Assessment; Bathymetric Survey; and Hydraulic Study (08/17/23). An existing culvert between Lake Samantha and Elbow Lake was replaced, at an elevation determined by DNR staff (10/19/23).

Lightning Lake

In January 2022, DNR staff presented a cost-share opportunity in coordination with Stoney Brook Township and Grant County to replace a failing Lightning Lake outlet structure with three rock weirs and an additional culvert. The current structure is located on Township Road 54, at the outlet from Lightning Lake to the Mustinka River. The existing structure consists of a concrete weir drop structure that limits the ability for fish to navigate between the two waterbodies. The replacement structure will be redesigned for lower velocities while improving the hydraulic capacity of the crossing.



Lightning Lake Outlet Project No. 1 Granular Fill Placement



Lightning Lake Outlet Project No. 1 Boulder Weir Placement

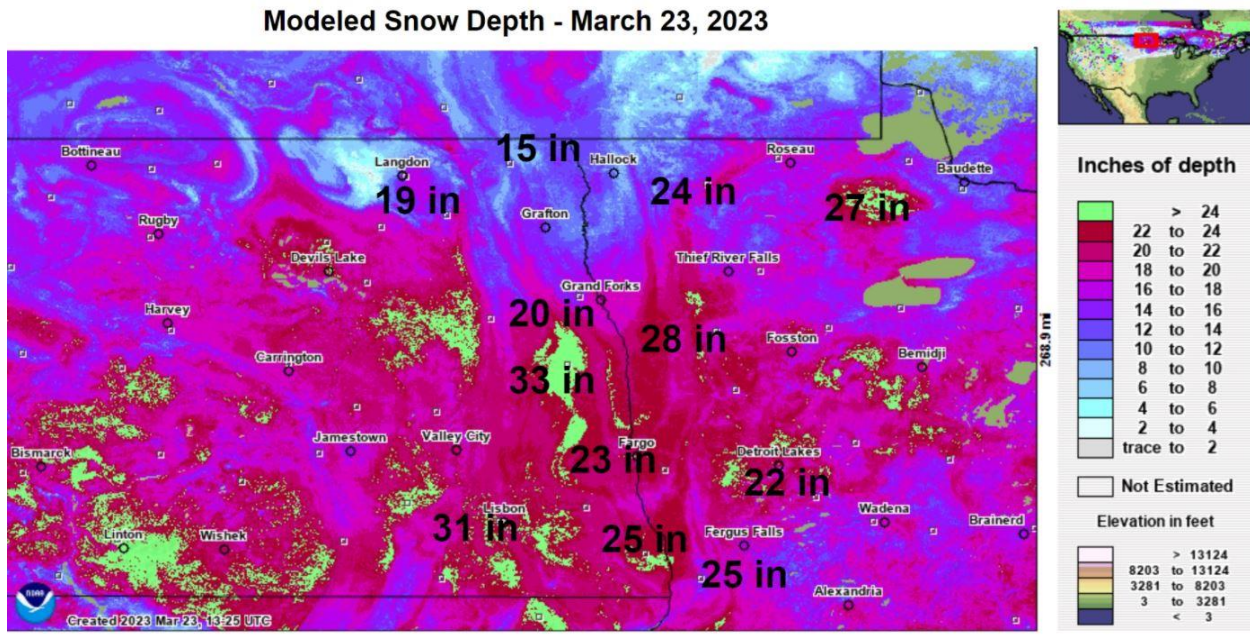
The Minn Stat. § 103D.601 Preliminary Resolution Hearing was held February 23, 2023. Engineering staff presented the current culvert and dam condition and plan to increase the culvert size and replace the current dam with two staggered rock weirs. The new system will maintain the current OHWL, but will feature small notches that will allow for continuous flow into the downstream channel. Permanent and temporary easements were obtained for construction and future maintenance. On June 15, 2023, a final hearing pursuant to Minn. Stat. §§ 103D.735-103D.745 was held. A Joint Powers Agreement with Stoneybrook Township was enacted for installation, operation, and future maintenance of the new culverts. The project

was publicly bid and awarded to Midwest Contracting (07/20/23, 08/17/23). Construction is complete (11/17/23), and the project will be closed in 2024.

Spring Flood

Winter 2022 – 2023 provided record snowfall accumulations. Temperatures from December – April never broached above freezing, so no early melt occurred. To keep roads clear throughout the winter season, road and highway crews had stockpiled snow in drainage ditches, filling the full depth of the ditches. District staff monitored flood risk and possibilities throughout February and March, and identified the last week of March, that snow would need to be removed from public drainage ditches in order to prevent widespread damage to public infrastructure. Extreme warm temperatures (in some areas, 70-degrees) occurred the 2nd week in April in the upstream regions of the Bois de Sioux and Mustinka River Watersheds. In some cases, all snow accumulated throughout the season melted in 24 hours; this rapid melt caused a wall of floodwater that moved from the eastern, southeastern, and southwestern edges of the District, towards Twelvemile and Fivemile Creeks, and Mustinka and Rabbit Rivers. The vast majority of the public drainage systems were blocked with snow and ice, in addition to a lack of capacity to convey extreme spring flood flow volumes. In places where the drainage ditches were full of snow and ice, roads overtopped, eradicating the flood control that roads can provide. Some areas experienced higher water than in 1997.

Modeled Snow Depth - March 23, 2023



Doran Creek: Flooding occurred in the Rabbit River on and after April 16th. Campbell has a new City bridge that was not breached by floodwaters.

WCD #8 & #9: Floodwater runoff to WCD #8 came quickly. As staff documented a breakout on the north-south stretch of WCD #9, the road washed out behind. The Upper Rabbit River Tributary did not breach the ridge in Western Twp Section 32.

North Ottawa: The quickly melted snow and ice arrived in the area of the North Ottawa Impoundment, overtopping roads and overwhelming the frozen collection channel, threatening area farmsteads and a large dairy. Each of the inlets on the Impoundment A cells had to be heated to open.

JD #14/Mustinka River: The channel was completely jammed with snow and ice; some water broke out and cut to the Rabbit River watershed. Flows also bypassed the Lake Traverse Flood Impoundment altogether, travelling across Traverse County directly to Mud Lake.

Twelvemile Creek to Dumont: The event highlighted the lack of control over flooding in this watershed. Without the placement of sandbags on the Dumont levy on April 14, floodwaters would have overtopped the City of Dumont levy. The Traverse County highway and bridge in Dumont had 1.2 feet of headloss at the crest of the flood. Individuals on-site discussed whether floodwaters should be kept on the east side of Highway 75, as it would go north if allowed

to cross Highway 75. The creek remained at high levels from April 14-16, and late surges were experienced following the opening of JD #4 and Moonshine. Improved flood risk reduction is needed for the City of Dumont.

Twelvemile Creek downstream of Dumont: Channels and ditches downstream of Dumont were frozen. A portion of flow broke out to Eighteenmile Creek, with significantly smaller road culverts, eventually flooding at least four separate properties. Some areas experienced higher water than in 1997.

Moonshine: Snow and artificial blocks were used by Graceville officials to hold floodwaters in storage. The gravel road bisecting the Moonshine Lakebed overtopped for $\frac{3}{4}$ of a mile. Once discharge begins, the Moonshine lakebed empties in 2.5 days.



TCD #52: Phase 2 channel was partially opened. The upstream end of Phase 2 was at/near capacity due to downstream snow and ice pinching the full width of the channel.

Lake Traverse: Because the Mustinka River was frozen, a portion of the flow bypassed north of Wheaton and entered Mud Lake directly from the east. Flows overtopped Highway 27 in at least two places on April 17 and receded April 18. Lake Traverse elevations were set at 979'. The reservation dam was briefly open, but was later closed.



FEMA/State of Homeland Security claims were filed, with funds to be received in 2024. The total expenses for the 2023 flood are detailed below.

Class	Snow Removal	Repairs	Total
Construction Fund	\$ 23,857.50	\$ 54,972.22	\$ 78,829.72
Buffers/Riparian/Sediment Loss	\$ -	\$ 4,500.00	\$ 4,500.00
North Ottawa Impoundment	\$ 6,324.50	\$ -	\$ 6,324.50
JCD #2	\$ 9,425.00	\$ -	\$ 9,425.00
JCD #3	\$ -	\$ 7,346.77	\$ 7,346.77
JCD #6	\$ -	\$ 1,747.69	\$ 1,747.69
JCD #11	\$ 1,462.50	\$ 6,780.46	\$ 8,242.96
JCD #12	\$ 18,022.50	\$ 18,841.34	\$ 36,863.84
JCD #14	\$ 1,260.00	\$ 145.00	\$ 1,405.00
TCD #1E	\$ 4,050.00	\$ -	\$ 4,050.00
TCD #2	\$ -	\$ 653.00	\$ 653.00
TCD #4	\$ 3,680.00	\$ 8,826.54	\$ 12,506.54
TCD #7	\$ 555.00	\$ -	\$ 555.00
TCD #8	\$ 2,645.00	\$ -	\$ 2,645.00
TCD #9	\$ 1,634.00	\$ -	\$ 1,634.00
TCD #10	\$ -	\$ 675.00	\$ 675.00
TCD #15	\$ -	\$ 2,977.00	\$ 2,977.00
TCD #16	\$ 1,350.00	\$ -	\$ 1,350.00
TCD #17	\$ 555.00	\$ -	\$ 555.00
TCD #23	\$ 3,200.00	\$ 1,115.00	\$ 4,315.00
TCD #24	\$ 2,890.00	\$ -	\$ 2,890.00
TCD #27	\$ -	\$ 4,062.64	\$ 4,062.64
TCD #28	\$ -	\$ 702.00	\$ 702.00
TCD #29	\$ -	\$ 3,716.00	\$ 3,716.00
TCD #30	\$ 1,202.50	\$ -	\$ 1,202.50
TCD #31	\$ 5,125.00	\$ 2,132.51	\$ 7,257.51
TCD #32	\$ 1,750.00	\$ -	\$ 1,750.00
TCD #35	\$ -	\$ 53,129.20	\$ 53,129.20
TCD #36	\$ -	\$ 562.50	\$ 562.50
TCD #38	\$ -	\$ 162.00	\$ 162.00
TCD #41	\$ 1,665.00	\$ 495.00	\$ 2,160.00
TCD #42	\$ -	\$ 2,781.00	\$ 2,781.00
TCD #43	\$ -	\$ 5,659.60	\$ 5,659.60
TCD #44	\$ -	\$ 2,072.00	\$ 2,072.00
TCD #51	\$ 2,100.00	\$ 540.00	\$ 2,640.00
TCD #53	\$ -	\$ 990.00	\$ 990.00
WCD #Sub-1	\$ -	\$ 270.00	\$ 270.00
WCD #8	\$ 2,267.50	\$ 4,124.00	\$ 6,391.50
WCD #9	\$ 3,470.00	\$ 8,948.00	\$ 12,418.00
WCD #20	\$ -	\$ 2,258.33	\$ 2,258.33
WCD #35	\$ -	\$ 270.00	\$ 270.00
Total	\$ 98,491.00	\$ 201,454.80	\$ 299,945.80

Lake Traverse & Mud Lake Impoundments

Federal US Army Corps staff held listening sessions to collect comments on the update to the Lake Traverse-Mud Lake operations manual. The District provided comments, including a request that the US Army Corps perform maintenance to restore the Bois de Sioux channel to its original design standard.

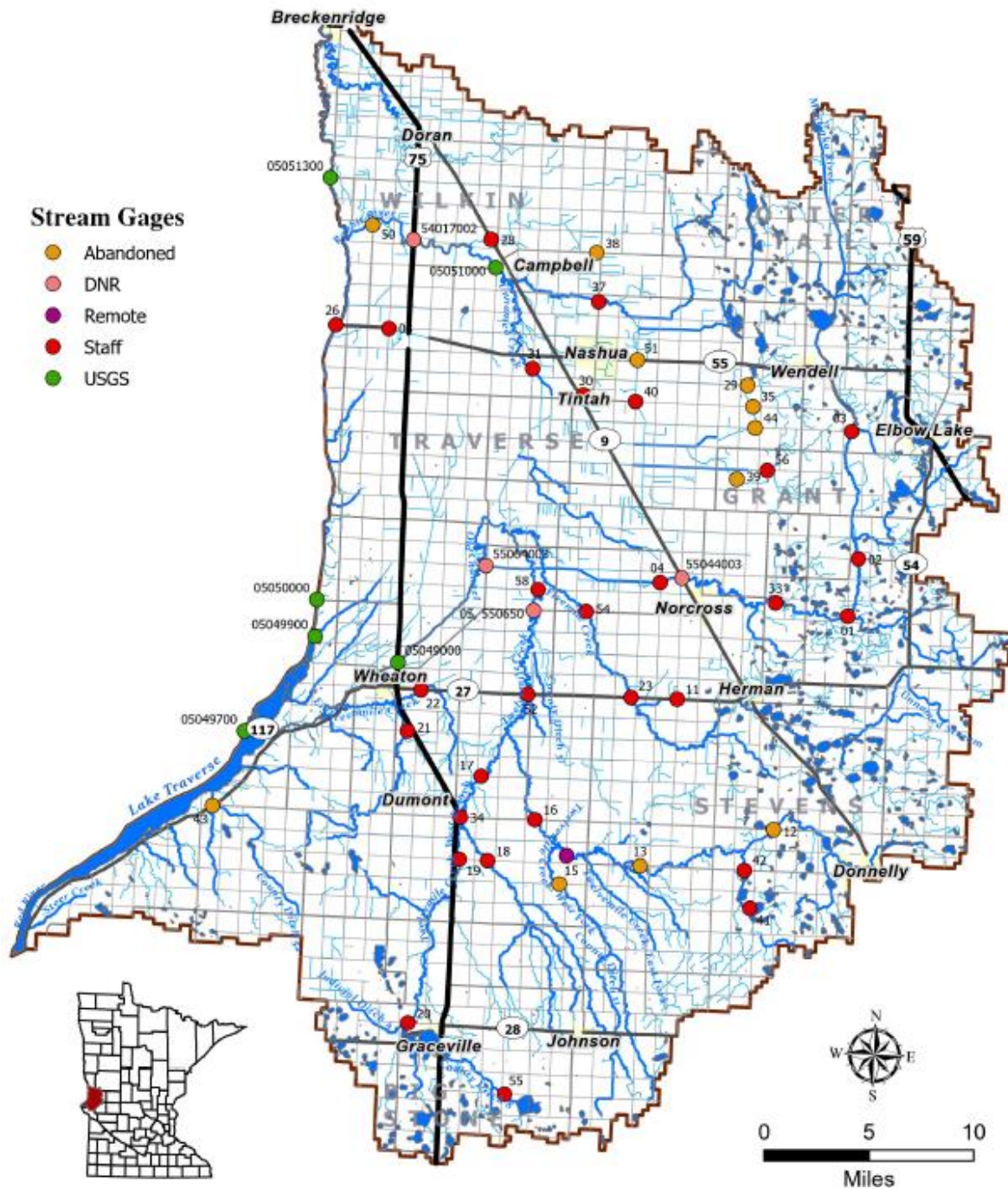
Stream Gaging & Locations

Volunteers that live within the vicinity of each gauge conduct the actual day-to-day monitoring of the stream gauge. The program is coordinated through the administrative office. Volunteer readers are compensated at a rate of one hundred twenty-five dollars (\$125) per gauge, per year, to help offset costs for accessing the gauge. Stream Gauge Data for 2023 has been entered into the BdSWD computer database.

Each year, gauge readers are asked about the condition of their gauging site via a questionnaire sent by mail. If the gauge needs work or there is a request to modify the gauge, it is reviewed by the administration and assigned to an engineering technician to investigate, repair, or modify as the case may require.

This year an electronic fillable form was utilized for interested gauge readers. This allows readers to input the information on their phone through ESRI ArcGIS Survey 123. All information submitted by gauge readers can be found at an online dashboard (link below).

<https://mooreengineering.maps.arcgis.com/apps/dashboards/d0a689a20cbd45c19efc15ba649bc0c3>



Other Construction Fund Activities

- **Policy Committee:** Due to confusion with the Joint Comprehensive Watershed Management Plan/One Watershed One Plan Policy Committee, the District's committee was renamed to the Rules Committee (01/23/23).
- **103E Outlet Fund:** Authorization to establish a \$50,000 budget to remove silt, sediment, beaver dams, trees, and other debris from public water courses up to ½ mile downstream of a legal drainage ditch (01/23/23).
- **Nuisance Beaver Fund:** Authorization to establish a \$10,000 fund to remove problematic beavers/dams outside of public drainage systems (01/23/23).
- **Property Tax Exemptions:** Approval was given to request exemptions for District owned land purchased for public property used exclusively for public purposes (01/23/23).
- **Clean Water Cost Share Policies:** Authorization to revise District Culvert Sizing Cost-Share and Clean Water Policies to recognize sediment reductions in public tile systems (03/24/23).
- **MPCA Professional Judgement Meeting:** MPCA staff coordinated two back-to-back Professional Judgement Meetings to discuss natural background factors for proposed impairments in May; District comments were authorized for submission in response (04/20/23, 05/18/23).
- **Cover Crop Cost Share:** Wilkin SWCD presented the results of District cost-share funds used in 2022 (01/26/23). Stevens SWCD refunded the unused portion of the District's cost-share funds, in the amount of \$3,700 (02/27/23). An annual \$5,000 cost share award was approved for Wilkin SWCD for 2023, 2024, and 2025 (05/18/23).
- **Construction Fund Transfers:** Copeland/Western 32 fund balance was transferred to the Construction Fund and closed; Tintah 34 fund balance was transferred to the Construction Fund and closed; Construction funds were transferred to cover the negative Big Lake Project fund and the fund was closed (5/18/23).
- **Culvert Repairs:** The District provided funding to repair culverts through the City of Dumont flood protection levy (07/20/23, 11/17/23).
- **2011 Ring Dike Repair:** Staff have exhausted the program and cost-share options available to respond to a ring dike neighbor who feels his property floods because of the location of the ring dike burrow pit (08/17/23, 09/21/23, 10/19/23).
- **Houston Engineering Inc. Contract:** SWCD staff requested that Joint Comprehensive Watershed Management Plan Watershed Based Implementation Grant Funds be used to acquire a pollution reduction spreadsheet, instead of utilizing the PTMApp Tool that they purchased (09/21/23).
- **Farmland Leases:** Redpath and Moonshine leases expire 12/31/23. Board managers supported utilization of a sealed, one-time best-price submission for 3-year terms (11/17/23, 12/21/23).
- **Pickup Acquisition & Suburban Disposal:** The District's 2001 Chevrolet Suburban required more frequent repairs. Staff purchased a 2022 Silverado with riparian funds, and will trade-in/sell the 2001 Chevrolet Suburban (06/15/22).
- **Mud Lake Drawdown:** The Army Corps of Engineers continued an effort to propose an incremental drawdown of Mud Lake in the fall to expose mudflats to achieve waterfowl goals. This operation will begin Fall 2023. Engineering staff provided written recommendations on behalf of the District (11/17/22, 12/15/22).
- **Elbow Lake:** Board Manager Kapphahn has helped organize an Elbow Lake landowner association. Grant County has agreed to submit correspondence to the DNR to request a review of the Ordinary High Water Level for Elbow Lake, and later for consideration to lower elevations on Lake Samantha.
- **75% Grant Fund Equalization & Clean Water Retrofit Cost Share Policy:** Minnesota Legacy Act Clean Water BWSR Grant Funds have been applied to the District's recent multipurpose drainage management projects (for grant eligible features such as side inlet culverts, berms, and seeding). Up to 75% of costs are eligible for grant funding from BWSR, but due to the competitive nature of the grant program and early application, project applications have been submitted by BdSWD seeking varying levels of funding in order to secure an award (50 – 75%). In addition, BdSWD's grant requests are based on project estimates, which inevitably vary from the actual amount of grant eligible costs realized at the close of a project. Board managers

approved using the Construction Fund, Buffer Fund, and/or Watershed Based Implementation Funds to equalize the percentage of grant funding to cover 75% of eligible items for recent JD #6 and JD #11 projects (08/18/22, 09/15/22).

SECTION FOUR - DITCH FUND

Project Status and Business Transacted

Since 1992, sixty (60) ditch systems have been under the jurisdiction of the Bois de Sioux Watershed District (with JD #3 added in 1995; GCD #21 transferred March 7, 2023; GCD # transferred June 20, 2023) - this amounts to approximately 414.9 lineal miles of ditch. Ditch funds are managed by the District office. Annual ditch inspections are completed on a three-year rotation, or as deemed necessary by the District. A copy of the inspection reports are kept on file at the District office.

The District administers an annual spray program to remove, as needed, heavy vegetation, trees, cattails, and brush in legal ditch systems. The District also performs beaver removal practices. This work is also conducted on a three-year rotation, or as deemed necessary by the District.

Legal Drainage Ditch Work

General Activities

- **Equipment Purchased:** No substantial equipment purchased.
- **Equipment Sold:** No substantial equipment sold.
- **Interest Rate:** The interest rate was set in 2019 as an annual index, based on the Long Term Federal Interest Rate for December. For negative ditch funds, the amount used for 2023 was 5.03% (12/21/23).
- **Contractors Hired:** LM Road Services was contracted to spray cattails and remove trees and brush for Inspection Area 2 (05/18/23). Ditch maintenance contractors included: Ag Tech Drainage, Ehlert Excavating Inc, Hedstrom Excavating LLC, Hormann Works LLC, Houston Engineering Inc, Industrial Builders Inc, Nick Persing, Northland Area Services, Olson & Tile Excavating LLC, Pat and Greg Vold Farms, Shores Edge Excavating Inc, Traverse County Hwy Department, Wagner Company Inc, and Whaley Excavating & Concrete.
- **Viewer Pay Rate:** \$45/hour approved (08/17/23).
- **Drainage Work Group:** The District approved compensation for District Attorney Lukas Croaker to attend Drainage Workgroup Meetings (08/17/23).
- **Lined Waterway Outlet Mats:** An additional \$12,000 in cost-share to Traverse SWCD was approved, but mats installed on Minn. Stat. Ch. 103E legal drainage ditches must acquire a District permit.
- **Ditch Inspections:** Zone 1 Inspections were completed and presented (11/17/23).
- **Program of the Year:** The Bois de Sioux Watershed District's rolling Multipurpose Drainage Management Retrofit Program was awarded Minnesota Watershed's statewide program of the year. Over the past seven years, the District has supported landowner-directed repairs and improvements to legal drainage systems, totaling \$14.7 million. The District has leveraged its own cost-share programs, and Minnesota Clean Water Fund Legacy Act and Red River Watershed Management Board grant funds.

- **2023 Ditch Assessments (excluding bond payments):** \$438,080.

Specific Activities by Ditch

- **BdSWD No. 5 (Proposed):** Informal landowner meetings authorized (02/27/23); petition circulated (03/16/23). Signed petition and bond presented and received; preliminary design engineering initiated (08/17/23).
- **GCD #3:** Landowner meetings began to discuss repair extents (06/15/23). Grant County Transfer Authority Resolution received (06/20/23). Repair petition received by the District (08/17/23). Further repair details given (11/17/23).
- **GCD #21:** Preliminary Survey Public Hearing held (02/23/23, 03/16/23); Grant County Transfer Authority Resolution received (03/16/23). Vegetation control applied by drone (09/21/23). Viewers' Report, Property Owner's Report, Final Hearing Notices sent and Final Hearing held (10/19/23, 11/17/23, 12/21/23).
- **JD 2:** Snow removal, vegetation control, dam removal
- **JD 3:** Flood repairs
- **JD 6:** Continued finalization of repair land easements, flood repairs
- **JD 7:** Cleanout, vegetation control
- **JD 11:** Snow removal, flood repairs, continued finalization of improvement land easements
- **JD #12:** Snow removal, flood repairs, vegetation control, cleanout, dam removal, culvert cost-share
- **JD #14:** Fourteen erosion areas on private land have been identified; staff are working with Traverse SWCD to put together a grant application (08/17/23). Snow removal, flood repairs, nuisance beaver removal
- **TCD #1E:** MN-DOT and landowner planning meeting authorized ahead of Highway 27 project (02/27/23). Snow removal
- **TCD #2:** Flood repair
- **TCD #4:** Snow removal, flood repair
- **TCD #7:** Snow removal, cleanout
- **TCD #8:** Snow removal, lateral plan and cleanout
- **TCD #9:** Snow removal, flood repair
- **TCD #10:** Flood repair
- **TCD #11:** Right-of-way verification
- **TCD #15:** Flood repair
- **TCD #16:** Landowner meeting authorized, but was not held in 2023 (02/27/23). Takeoff repair, snow removal
- **TCD #17:** Snow removal
- **TCD #18:** Cleanout
- **TCD #19:** Cleanout
- **TCD #20:** Cleanout
- **TCD #22:** Repair, culvert replaced, cleanout
- **TCD #23:** Snow removal, flood repair
- **TCD #24:** Snow removal, maintenance, tree removal
- **TCD #26:** Riprap, culvert
- **TCD #27:** Flood repair, culvert cost share approved with landowner Mr. Curt Bruan (08/17/23), cleanout
- **TCD #28:** Flood repair, cleanout
- **TCD #29:** Flood repair
- **TCD #30:** Snow removal
- **TCD #31:** Snow removal, repair, flap gate
- **TCD #32:** Snow removal
- **TCD #35/Redpath Phase 1:** Final hearing held and the project was closed (08/17/23).
- **TCD #36:** Cleanout rocks

- **TCD #37:** Vegetation control, cleanout
- **TCD #38:** Flood repair
- **TCD #39:** Cleanout
- **TCD #40:** Cleanout
- **TCD #41:** Flood repair, cleanout
- **TCD #42:** Flood repair
- **TCD #43:** Flood repair, cleanout
- **TCD #44:** Snow removal, flood repair, cleanout
- **TCD #51:** Snow removal, flood repair, cleanout, culvert sizing
- **TCD #52:** Cleanout, nuisance beaver removal, dam removal, sediment removal
- **TCD #53:** Flood repair, replace culvert
- **WCD #Sub-1:** Final hearing for Improvement (01/26/23) and Amendment (02/27/23); construction bid awarded to Gladen Construction (03/24/23). Improvement construction.
- **WCD #8:** Snow removal, flood repair, vegetation control
- **WCD #9:** Snow removal, flood repair, vegetation control
- **WCD #18:** Vegetation control
- **WCD #20:** Flood repair, vegetation control
- **WCD #25:** Vegetation control, repair petition circulating among landowners (01/26/23)
- **WCD #35:** Flood repair, vegetation control
- **WCD #39:** Vegetation control

Ditch Petitions

- **TCD #4:** Hearing for Virginia Fickes to use TCD #4 as an outlet for Parcel #09-0025-000, SE1/4 of Section 6, Range 44, Logan Township (127), Grant County (04/20/23)
- **TCD #41:** Hearing for Bill and Kayla Schmidt to use TCD #41 as an outlet for Parcel #03-0005000 in Section 10, Croke Township (126), Traverse County (05/18/23).
- **TCD #9:** Hearing for Scott and Lori Gilsdorf to use TCD #9 as an outlet for Parcel #10-0067000, SE1/4 less 49.32 acres, Section 16, Redpath Township (128), Traverse County and Parcel #10-0063000, NE1/4, Section 16, Redpath Township (128), Traverse County (05/18/23).
- **TCD #31:** Hearing for Stueve Farmland, LLLP to use TCD #31 as an outlet for Parcel #03-0156000, NE1/4, Section 33, Croke Township, Traverse County (05/18/23).
- **TCD #31:** Hearing for Donald G. Stueve Trust to use TCD #31 as an outlet for Parcel #03-0157001, NW1/4, Section 33, Croke Township, Traverse County (less a separate farmstead parcel) (05/18/23).
- **TCD #31:** Hearing for Frisch Family Revocable Trust to use TCD #31 as an outlet for Parcel #03-0159000, SW1/4, Section 33, Croke Township, Traverse County (05/18/23).
- **TCD #31:** Hearing for Stueve Farmland, LLLP to use TCD #31 as an outlet for Parcel #03-0158000, SE1/4, Section 33, Croke Township, Traverse County (05/18/23).
- **TCD #39:** Hearing for Marcie J. Conroy Trust to use TCD #39 as an outlet for Parcel #06-0028000, Parcel #06-0028000, E1/2SW1/4 & Lots 6 & 7 less 59.46 acres in Section 6, Lake Valley Township, Traverse County (05/18/23).
- **TCD #39:** Hearing for Marcie J. Conroy Trust to use TCD #39 as an outlet for Parcel #06-0026000, SE1/4NW1/4 & Lots 3 & 4 less 600' x 600' in Section 6 & Lot 5, Lake Valley Township, Traverse County (05/18/23).
- **TCD #15:** Hearing for Schaffer Land Holdings, LLC to use TCD #15 as an outlet for Parcel #03-0076000, E1/2 NE1/4 of Section 15, Croke Township, Traverse County (10/19/23).
- **TCD #23:** Hearing for Evergreen Falts LLP to use TCD #23 as an outlet for Parcels #09-0015-000, #09-0016-000, #09-0018-000, the S1/2 of Section 4, Logan Township, Grant County (10/19/23).
- **TCD #51:** Hearing for Gary Findlay to use TCD #51 as an outlet for Parcel #02-0168000, W1/2 of the SE1/4 of Section 36, Clifton Township, Traverse County (12/21/23).

SECTION FIVE – JOINT COMPREHENSIVE WATERSHED MANAGEMENT PLAN GOALS

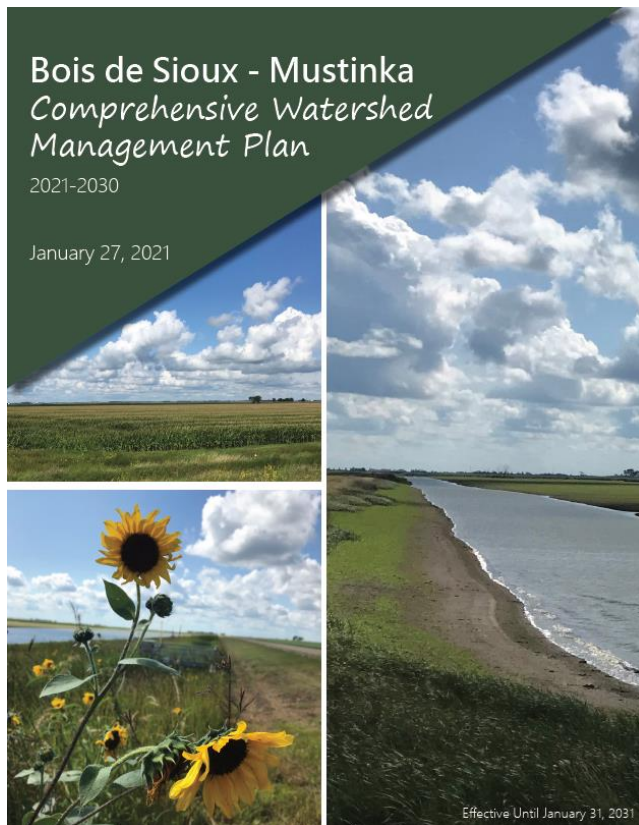
Process: One Watershed One Plan (1W1Plan)

Product: Joint Comprehensive Watershed Management Plan (JCWMP)

Effective January 27, 2021 – January 31, 2031

**Funding: BWSR Clean Water Fund Legacy Amendment Act
Watershed-Based Implementation Funds (WBIF)**

The District continued contract work with Houston Engineering, Inc. and finished development of a Joint Comprehensive Watershed Management Plan on behalf of the District and 12 partners (Big Stone County & SWCD, Grant County & SWCD, Otter Tail County & SWCD, Stevens County & SWCD, Traverse County & SWCD, and Wilkin County & SWCD). The Board of Water and Soils Resources subsequently approved the plan by order (01/27/21).



BdSWD volunteered to serve as the Fiscal Agent for the future grant agreement, and approved the Joint Implementation Agreement (02/18/21). The One Watershed One Plan planning grant was closed-out, and a formal Reimbursement Policy was enacted for the future watershed based implementation fund grant (04/15/21); the Clean Water BWSR Watershed Based Implementation Fund grant provides \$1,064,522 to sponsor portions of eligible activities described in the Joint Comprehensive Watershed Management Plan; funds must be used on or before 12/31/2023.

For the current Watershed Based Implementation Funds grant cycle, the BdSWD was budgeted to receive: \$148,000 for JD #6 BMP Construction; \$115,000 for Doran Creek Project Development; \$325,000 for Lake Traverse Water Quality Improvement Project Construction; and \$25,000 for Plan Administration/Coordination.

A second Watershed Based Implementation Fund grant was awarded in 2022, and the BdSWD was budgeted to receive: \$370,000 for Multipurpose Drainage Management BMP Construction; \$100,000 for Fivemile Creek Stream Restoration Project Development; \$100,000 for Lake Traverse Water Quality

Improvement Project Construction; and \$25,000 for Plan Administration/Coordination.

Staff from the participating members meet monthly, serving on the Steering Committee. Appointed/elected officials from the participating members meet periodically, as needed. The Bois de Sioux Watershed District currently serves as Grant Fiscal Agent.

The following pages detail the Bois de Sioux & Mustinka Joint Comprehensive Watershed Management Goals and related 2021 - 2022 BdSWD activity progress. Short-term measurable goals describe the interim conditions to accomplish during the 10-year timeframe of this plan. Long-term measurable goals describe the desired future condition to accomplish, regardless of timeframe.

Joint Comprehensive Watershed Management Plan District Program Activities
(by District Expense)

CAPITAL IMPROVEMENT PROJECTS PROGRAM	\$31,508	640 th Ave Road Raise & BdSWD No. 5
	\$192,678	Doran Creek
	\$2,420,458	Drainage Systems & Right of Way Easements
	\$163,421	Fivemile Creek
	\$2,853,020	Lake Traverse Water Quality Improvement Project
	\$479,438	Lightning Lake
	\$27,698	Moonshine Flood Impoundment
	\$105,059	North Ottawa Flood Impoundment
	\$25,448	Redpath Collection Channel
	\$5,455,710	Redpath Flood Imp. & Mustinka River Rehab.
	\$14,842	Ring Dikes
	\$29,818	Samantha & Elbow Lake
	\$57,815	Twelvemile Creek & City of Dumont
	\$11,856,913	Total Capital Improvement Projects Program 2023
DATA COLLECTION PROGRAM	\$1,256	River Watch
	\$25,856	Stream Gages
	\$1,619	Advisory Committee
	-----	Drainage System Inspections (Reported w/Repairs)
	\$28,731	Total Data Collection Program 2023
EDUCATION & OUTREACH PROGRAM	\$1,351	Annual Report
	\$17,019	Advertising, Notices, Mailings, Printed Materials
	\$20,925	Audit & Financial Disclosures
	\$280	Text Notification System
	\$2,202	Website
	\$20,090	Workgroups, Conferences, Certifications, Public Meeting Facilitation, Education, DWG
	\$61,867	Total Education & Outreach Program 2023
PROJECTS AND PRACTICES PROGRAM	\$0.00	Clean Water Cost Share
	\$0.00	Culvert Sizing Cost Share
	\$7,166	JCWMP Implementation (Staff & Board Time)
	\$811,101	Red River Watershed Management Plan Projects
	\$410,928	Drainage System Routine Maintenance & Repairs
	\$5,000	SWCD Cover Crop Program
	\$25,591	SWCD Lined Waterway Outlets
	\$1,259,786	Total Projects and Practices Program 2023
REGULATORY PROGRAM	\$4,662	Boundary Revisions
	\$119,520	Buffer Program & Workshops
	-----	Drainage System Inspections (Reported w/Repairs)
	\$311,108	Floods/FEMA/HSEM
	\$235,512	Permitting
	\$3,887	Policy Reviews, Recodification & Retention Schedule
	\$670,027	Total Regulatory Program 2023

2021 - 2031: Summary of Bois de Sioux Watershed District Progress Towards Joint Comprehensive Watershed Management Plan Measurable Projects & Practices Goals

*(there are 12 other LGU partners working on the same goals;
the data below reflects only the District's accomplishments)*

	Short Term <u>Goal</u>	Long Term <u>Goal</u>	2021 - 2031 <u>Progress</u>	Short Term <u>% Done</u>	Long Term <u>% Done</u>
Reduce Sediment (tons/yr)	3,770	69,900	3,771	100%	5%
Soil Health Practices (acres)	2,321	193,200	276	12%	0%
Reduce Phosphorus (lbs/yr)	1,255	200,500	1,244	99%	1%
Stabilize River/Stream (miles)	23	465	0.3	1%	0%
Defined Flood Risk (#)	3	100%	-	-	-
Flood Risk Reduction (#)	2	100%	-	-	-
Ring Dike Protection (%)	50%	100%	-	-	-
Stabilized Ditches (miles)	75	581	46	61%	8%
Increased Ditch Adequacy (miles)	75	581	46	61%	8%
Storage (ac-ft)	34,505	78,903	51	0.15%	0.06%



Ditch Retrofits provide significant progress to many of the Joint Comprehensive Watershed Management Plan goals.

2021 - 2023: 1) Progress for Measurable Goal: Erosion & Sedimentation

Measurable Goals



Long-Term Goal: Long-term goal sediment load reductions are met, as defined in the Planning Region Focus table below.



Short-Term Goal: Short-term load reduction goals are met, as defined in the Planning Region Focus table below.

Planning Region Focus



Bois de Sioux Watershed		Mustinka Watershed		
Lake Traverse & Bois de Sioux River	Rabbit River	Upper Mustinka River	Lower Mustinka and Twelvemile Creek	Fivemile & Twelvemile Creek Headwaters
Reduce by 50% or 26,800 tons/yr	Reduce by 34% or 6,000 tons/yr	Reduce by 14% or 4,400 tons/yr	Reduce by 58% or 28,400 tons/yr	Reduce by 10% or 4,300 tons/yr
Reduce by 1,125 tons/yr	Reduce by 225 tons/yr	Reduce by 345 tons/yr	Reduce by 1,175 tons/yr	Reduce by 900 tons/yr

Metric: % load reduction or mass load reduction at the end of 10-year plan. Load reduction estimates established at planning region outlets using PTMApp

CAPITAL IMPROVEMENT PROJECTS	PLANNING REGION	PRIORITY RESOURCE	PROGRESS	TONS/YR UPON COMPLETION
Traverse County Ditch #37	TMC	Twelvemile Creek	Completed Construction	340 ✓
Wilkin County Ditch #9	RR	Rabbit River	Completed Construction	569 ✓
Wilkin County Ditch #8	RR	Rabbit River	Completed Construction	595 ✓
Judicial Ditch #11 Main	LT&BDS	Bois de Sioux River	Completed Construction	420 ✓
Judicial Ditch #6	RR	Rabbit River	Completed Construction	417 ✓
Traverse County Ditch #35	LM&TMC	Twelvemile Creek and Mustinka River	Completed Construction	230 ✓
Wilkin County Ditch Sub-1	LT&BDS	Bois de Sioux	Under Construction	90 ✓
Wilkin County Ditch #35	LT&BDS	Bois de Sioux	Reestablishment of Records	260
Grant County Ditch #21	UPPER M.	Mustinka River	Improvement Development	37.5
Grant County Ditch #3	UPPER M.		Repair Development	TBD
BdSWD Ditch No. 5	TMC	Twelvemile Creek	Establishment Development	TBD
North Ottawa Flood Impoundment	RR	Rabbit River	Annual reduction	268✓
Lake Traverse Water Quality Imp. Project #1	LT&BDS	Lake Traverse	Phase 1 Complete Phase 2 Complete Phase 3 Under Contract	Phase 1 = 750 ✓ Phase 2 = 450 ✓ Phase 3 = 2,250 ✓

Doran Creek Rehab.	LT&BDS	Doran Creek	Design	890
Redpath Phase 2 - Mustinka River Corridor	LM&TMC	Mustinka River	Under Construction	253✓
Redpath Phase 2 - Flood Impoundment	LM&TMC	Mustinka River	Under Construction	TBD
Twelvemile Creek	LM&TMC	Twelvemile Creek and Mustinka River	Site Surveys and Data Collection	TBD
640 th Ave Road Raise	LM&TMC	Twelvemile Creek	Under construction contract	TBD
Fivemile Creek	LM&TMC	Fivemile Creek	Hydraulic Study Completed	TBD
Moonshine Flood Impoundment	TMC	Lannon Lake & Toqua Lake	Under Development	TBD
Redpath Collection Channel	TBD	TBD	Some Development Completed	TBD
DATA COLLECTION PROGRAM	PLANNING REGION	PRIORITY RESOURCE	PROGRESS	TONS/YR
Assess Rivers and Stream Channel Banks	All	NA	Program continued	NA
MDM Plan Development	All	NA	Data collection system initiated	NA
EDUCATION & OUTREACH PROGRAM	PLANNING REGION	PRIORITY RESOURCE	PROGRESS	TONS/YR
River Watch Program	All	NA	Program continued	NA
Stream Gages	All	NA	Program Continued	NA
PROJECTS & PRACTICES	PLANNING REGION	PRIORITY RESOURCE	PROGRESS	TONS/YR
RRWMB	All	NA	Program continued	Varies
103E Drainage System Maintenance & Repair	All	NA	Program continued	Varies
SWCD Cover Crops	Wilkin Co.	NA	Program continued	Varies
SWCD Lined Waterways	Traverse Co.	NA	Program continued	Varies
REGULATORY PROGRAM	PLANNING REGION	PRIORITY RESOURCE	PROGRESS	TONS/YR
Ordinances & Permitting	All	NA	Program continued	NA
Law Requirements	All	NA	Program continued	NA
Buffer/Soil Loss	All	NA	Program continued	Varies
Snow Removal & Flood Repairs	All	NA	Repairs Constructed	Varies

2021 - 2023: 2) Progress for Measurable Goal: Soil Health

Measurable Goals



Long-Term Goal: Soil health practices are implemented on 25% of all farmed soils within the plan area, as defined in the Planning Region Focus table below.



Short-Term Goal: Soil health practices are implemented on 2,321 farmed acres to protect critical soil loss areas, as defined in the Planning Region Focus table below.

Planning Region Focus



Bois de Sioux Watershed		Mustinka Watershed		
Lake Traverse & Bois de Sioux River	Rabbit River	Upper Mustinka River	Lower Mustinka and Twelvemile Creek	Fivemile & Twelvemile Creek Headwaters
30,800 acres	45,800 acres	21,800 acres	39,800 acres	55,000 acres
343 acres	698 acres	665 acres	238 acres	377 acres

Metric: Acres of soil health practices implemented

CAPITAL IMPROVEMENT PROJECTS	PLANNING REGION	PROGRESS	ACRES
Traverse County Ditch #37	TMC	Completed Construction	23.05✓
Wilkin County Ditch #9	RR	Completed Construction	51.54✓
Wilkin County Ditch #8	RR	Completed Construction	23.91✓
Judicial Ditch #11 Main	LT&BDS	Completed Construction	95.5✓
Wilkin County Ditch #35	LT&BDS	Reestablishment of Records	260
Judicial Ditch #6	RR	Completed Construction	44.96✓
Traverse County Ditch #35	LM&TMC	Construction In Progress	9.72✓
Lake Traverse Water Quality Imp. Project #1	LT&BDS	Phase 1 Easement Established and Acquired Phase 2 Easement Established and Acquired Phase 3 Easement Established and Acquired	Phase 1 = 21.31✓ Phase 2 = 6.01✓ Phase 3 = 35.37✓
Redpath Phase 2 – Mustinka River	LM&TMC	Under Construction	226 acres grasslands 76 acres wetlands
Redpath Phase 2 – Flood Impoundment	LM&TMC	Under Construction	724 acres grasslands
Wilkin County Ditch Sub-1	LT&BDS	Under Construction	45.33✓

Grant County Ditch #21		Improvement Development	TBD
BdSWD Ditch No. 5		Establishment Development	TBD

2021 - 2023: 3) Progress for Measurable Goal: Altered Hydrology

Measurable Goals



Long-Term Goal: A total of **78,903 acre-feet** of additional water storage is achieved, broken out by planning region, as indicated in the Planning Region Focus table below.



Short-Term Goal: Achieve progress towards long-term goal through implementation of Redpath Controlled Flood Impoundment Project and small-scale storage to mitigate impacts of altered hydrology.

Planning Region Focus

Bois de Sioux Watershed		Mustinka Watershed		
Lake Traverse & Bois de Sioux River	Rabbit River	Upper Mustinka River	Lower Mustinka and Twelvemile Creek	Fivemile & Twelvemile Creek Headwaters
1,915 acre-feet	15,422 acre-feet	917 acre-feet*	24,367 acre-feet**	36,282 acre-feet
1,237 acre-feet*	2,545 acre-feet	917 acre-feet*	24,367 acre-feet**	5,442 acre-feet

Metric: Acre-feet of storage
Goal source: * 0.1 inches additional storage across planning region; ** Redpath Controlled Flood Impoundment Project

PROJECTS & PRACTICES	PLANNING REGION	PROGRESS	ACRE-FEET
Ring Dike Program	All	Farmsteads and private infrastructure most at risk identified. Implemented Cost Share Program	NA
CAPITAL IMPROVEMENT PROJECTS	PLANNING REGION	PROGRESS	ACRE-FEET
Doran Creek Rehabilitation	LT&BDS	Design	TBD
Samantha & Elbow Lake Project	UM	Samantha Outlet Installed 2020; Permitting of additional drawdown in progress	51 ✓
Redpath Flood Impoundment	LM&TMC	Bid Document Prep	22,500 ac-ft; 19,000 ac-ft gated
Twelvemile Creek	LM&TMC	Site Investigations	TBD
Lightning Lake Outlet No. 1	UM	Under construction	Protect existing storage

Fivemile Creek	LM&TMC	Hydraulic Study Complete	TBD
EDUCATION & OUTREACH PROGRAM	PLANNING REGION	PROGRESS	ACRE-FEET
Publish Article	All	1 Redpath article published	NA

REGULATORY PROGRAM	PLANNING REGION	PROGRESS	TONS/YR
Ordinances & Permitting	All	Program continued	NA
Buffer Law Requirements	All	Program continued	NA
DATA COLLECTION PROGRAM	PLANNING REGION	PROGRESS	ACRE-FEET
Assess Rivers and Stream Channel Banks	All	Program continued	NA
MDM Plan Development	All	Program continued	NA
Maintain up-to-date culvert inventory	All	Ongoing	NA
Annual Dam Operation Process	All	Annual meeting requested	NA

2021 - 2023: 4) Progress for Measurable Goal: Public Flooding

Measurable Goals



Long-Term Goal: Flood risk reduction is provided against the Atlas 14 100-year, 24-hour event for all communities and against the Atlas 14 10-year, 24-hour event for all rural public infrastructure.



Short-Term Goal: The level of flood risk for unevaluated priority communities is defined and flood risk reduction against 100-year event is provided for 50% of those at-risk priority communities.

Metric: % communities, rural public infrastructure "protected" with flood risk reduction

PROJECTS & PRACTICES	PLANNING REGION	PRIORITY COMMUNITY	PROGRESS
Flood Risk and Flood Risk Reduction Evaluations for 100-Year Events			Rough cost estimates collected: Dumont (\$30,000), Campbell (\$20,000) and Herman (\$10,000) (11/16/21).
CAPITAL IMPROVEMENT PROJECT	PLANNING REGION		PROGRESS
Traverse County Ditch #37	TMC	MNDOT, Traverse County, Township Roads	Completed Construction
Wilkin County Ditch #9	RR	MNDOT, Wilkin County, Township Roads	Completed Construction
Wilkin County Ditch #8	RR	MNDOT, Wilkin County, Township Roads	Completed Construction
Traverse County Ditch #35	LM&TMC	Township Roads	Completed Construction

Judicial Ditch #11 Main Retrofit	LT&BDS	MNDOT, Traverse County Highway, Wilkin County Highway, Township Roads	Completed Construction
Wilkin County Ditch #35 Retrofit	LT&BDS	MNDOT, Wilkin County Roads, Township Roads	Reestablishment of Records
Judicial Ditch #6 Retrofit	RR	MNDOT, Wilkin County Highways, Township Roads	Completed Construction
Wilkin County Ditch #Sub-1	LT&BDS	MNDOT, Wilkin County Highway, Township Roads, Railroad	Under Construction
Grant County Ditch #21	UPPER M.	Mustinka River	Improvement Development
Grant County Ditch #3	UPPER M.		Repair Development
BdSWD Ditch No. 5	TMC	Twelvemile Creek	Establishment Development
Mustinka Corridor	UM	MNDOT, Grant County Highway, Township Roads	Grant County Design and Permitting
Samantha & Elbow Lake Project	UM	Grant County Highway, Township Roads	Samantha Outlet Installed 2020; Additional Drawdown depth in permit stage
Redpath Flood Impoundment & Mustinka River Rehab.	LM&TMC	Traverse County Highway, Wilkin County Highway, MNDOT, Township Roads, Breckenridge	Phase 1 Complete Phase 2A Under Construction
Twelvemile Creek	LM&TMC	MNDOT, Grant County Highway, Traverse County Highway, Township Roads	Site Investigations
Lightning Lake Outlet No. 1	UPPER M.	Upper Mustinka	Under Construction
Doran Creek Rehabilitation	LT&BDS	Doran Creek	Under Development
Moonshine Flood Impoundment	TMC	Lannon Lake & Toqua Lake	Under Development
Fivemile Creek	LM&TMC	Fivemile Creek	Hydraulic Study Complete
DATA COLLECTION PROGRAM	PLANNING REGION	PROGRESS	
Identify and prioritize communities to determine risk	All	No work yet; goal is 50% protection of at-risk communities	
Hold annual meeting with road authorities to define roads are high priority based on risk of overtopping	All	2022 – Technician worked with road authorities directly	
MDM Plan Development	All	Data collection ongoing	
Maintain up-to-date culvert inventory	All	Done	

2021 - 2023: 5) Progress for Measurable Goal: Private Flooding

Measurable Goals



Long-Term Goal: Flood risk reduction is provided against the Atlas 14 100-year, 24-hour event for all rural homesteads and against the Atlas 14 10-year, 24-hour event for other private infrastructure.



Short-Term Goal: Farmsteads and private infrastructure most at risk are identified and prioritized, with 50% protected with ring dikes as needed.

Metric: Percent of homesteads and farmlands, rural infrastructure "protected" with flood risk reduction

PROJECTS & PRACTICES	PLANNING REGION	PRIORITY COMMUNITY	PROGRESS
Ring Dike Program	All	NA	Farmsteads and private infrastructure most at risk identified. Implemented Cost Share Program
CAPITAL IMPROVEMENT PROJECT	PLANNING REGION		PROGRESS
Traverse County Ditch #37	TMC	Benefiting Landowners	Completed Construction
Wilkin County Ditch #9	RR	Benefitting Landowners	Completed Construction
Wilkin County Ditch #8	RR	Benefitting Landowners	Completed Construction
Judicial Ditch #11 Main Retrofit	LT&BDS	Benefiting Landowners	Completed Construction
Wilkin County Ditch #35 Retrofit	LT&BDS	Benefiting Landowners	Reestablishment of Records
Judicial Ditch #6 Retrofit	RR	Benefiting Landowners	Completed Construction
Traverse County Ditch #35	LM&TMC	Twelvemile Creek & Mustinka River	Completed Construction
Wilkin County Ditch #Sub-1	LT&BDS	Benefiting Landowners	Under Construction
Grant County Ditch #21	UPPER M.	Mustinka River	Improvement Development
Grant County Ditch #3	UPPER M.		Repair Development
BdSWD Ditch No. 5	TMC	Twelvemile Creek	Establishment Development
Mustinka Corridor	UM	Benefiting Landowners	Grant County Design and Permitting
Samantha & Elbow Lake Project	UM	Elbow/Samantha Lake Landowners	Samantha Outlet Installed 2020; Elbow Lake Design
Redpath Flood Impoundment & Mustinka River Rehab.	LM&TMC	Downstream Landowners in Mustinka and Rabbit River. Wheaton	Phase 1 Complete Phase 2A Under Construction

Twelvemile Creek	LM&TMC	Landowners along TCD 8 and Twelvemile Creek	Site Investigations
Fivemile Creek	LM&TMC	Fivemile Creek	Hydraulic Study Complete
DATA COLLECTION PROGRAM	PLANNING REGION	PROGRESS	
Identify and prioritize farmsteads and private infrastructure to determine risk	All	Farmsteads and private infrastructure most at risk were identified and prioritized through a Ring Dike Policy that was approved October 21, 2021. A landowner contract template was approved November 18, 2021.	
Hold annual meeting with road authorities to define roads are high priority based on risk of overtopping	All	Meet annually in the spring prior to flood season	
Maintain up-to-date culvert inventory	All	Done and ongoing	
MDM Plan Development	All	Done and ongoing	

2021 - 2023: 6) Progress for Measurable Goal: Public Ditch System Instability

Measurable Goals



Long-Term Goal: All 581 miles of public ditch systems are stable.



Short-Term Goal: 75 miles of public, unstable ditches that are eroding and silting are stabilized.

Metric: Miles of ditch stabilized

DITCH AUTHORITY	DRAINAGE DITCH SYSTEM	PLANNING REGION	RESOURCE PRIORITY	MILES
BdSWD	Traverse County Ditch #37 L1	TMC	Yes	2.5✓
BdSWD	Wilkin County Ditch #8	RR	Yes	7.5✓
BdSWD	Wilkin County Ditch #9	RR	Yes	13.5✓
BdSWD	Judicial Ditch #11	LT&BDS	Yes	9✓
BdSWD	Judicial Ditch #6	RR	Yes	8✓
BdSWD	Traverse County Ditch #35	LM&TC	Yes	5✓
BdSWD	Judicial Ditch #14 (Mustinka River Rehab)	LM&TC	Yes	Corner✓
BdSWD	Wilkin County Ditch #Sub-1	LT&BDS	Yes	8✓
BdSWD	Grant County Ditch #21	TMC	Yes	TBD
BdSWD	Wilkin County Ditch #25	RR	Yes	TBD
BdSWD	Lake Traverse Water Quality Imp. Project #1: Overlaps w/TCD #52	LT&BDS	Yes	Phase 1 = 0.6✓ Phase 3 = 1✓
BdSWD	Grant County Ditch #3	UPPER M.		TBD
LGU	DATA COLLECTION PROGRAM	PLANNING REGION	PROGRESS	MILES
BdSWD	Administer ordinances and permitting	All	Ongoing	NA

All	Administer Buffer Law Requirements	All	Ongoing	NA
BdSWD	Inventory and classify unstable and inadequate portions of public ditches and prioritize repairs	All	Ongoing, updated annually	NA
BdSWD	MDM Plan Development	All	Ongoing, updated annually	NA
BdSWD	Maintain up-to-date permits and records	All	Ongoing	NA

2021 - 2023: 7) Progress for Measurable Goal: Public Ditch System Inadequacy

Measurable Goals



Long-Term Goal: All 581 miles of public drainage systems have the capacity to convey the Atlas 14 10-year, 24-hour storm event, providing opportunity to private landowners for improved drainage.



Short-Term Goal: 75 miles of public ditch systems are repaired/improved to reach capacity to convey the Atlas 14 10-year, 24-hour event.

Metric: Miles of ditch repaired/improved to convey 10-year, 24-hour event

DITCH AUTHORITY	DRAINAGE DITCH SYSTEM	PLANNING REGION	RESOURCE PRIORITY	MILES
BdSWD	Traverse County Ditch #37 L1	TMC	Yes	2.5✓
BdSWD	Wilkin County Ditch #8	RR	Yes	7.5✓
BdSWD	Wilkin County Ditch #9	RR	Yes	13.5✓
BdSWD	Judicial Ditch #11	LT&BDS	Yes	9✓
BdSWD	Judicial Ditch #6	RR	Yes	8✓
BdSWD	Traverse County Ditch #35	LM&TC	Yes	5✓
BdSWD	Judicial Ditch #14 (Mustinka River Rehab)	LM&TC	Yes	Corner✓
BdSWD	Wilkin County Ditch #Sub-1	LT&BDS	Yes	8✓
BdSWD	Grant County Ditch #21	TMC	Yes	TBD
BdSWD	Wilkin County Ditch #25	RR	Yes	TBD
BdSWD	Lake Traverse Water Quality Imp. Project #1: Overlaps w/TCD #52	LT&BDS	Yes	Phase 2 = 0.3✓ Phase 3 = 1.2✓
BdSWD	Grant County Ditch #21	UPPER M.	Yes	TBD
LGU	DATA COLLECTION PROGRAM	PLANNING REGION	PROGRESS	MILES
BdSWD	Administer ordinances and permitting	All	Ongoing	NA
All	Administer Buffer Law Requirements	All	Ongoing	NA
BdSWD	Inventory and classify unstable and inadequate portions of public ditches and prioritize repairs	All	Updated annually	NA
BdSWD	MDM Plan Development	All	Updated annually	NA
BdSWD	Maintain up-to-date permits and records	All	Ongoing	NA

2021 - 2023: 8) Progress for Measurable Goal: Nutrient Loading

Measurable Goals



Long-Term Goal: Planning region long-term goal total phosphorus load reductions are met, as defined in the Planning Region Focus table below.



Short-Term Goal: Planning region short-term goal total phosphorus load reductions are met, as defined in the Planning Region Focus table below.



Bois de Sioux Watershed		Mustinka Watershed		
Lake Traverse & Bois de Sioux River	Rabbit River	Upper Mustinka River	Lower Mustinka and Twelvemile Creek	Fivemile & Twelvemile Creek Headwaters
Reduce by 64% or 91,900 lbs/yr	Reduce by 44% or 19,700 lbs/yr	Reduce by 57% or 10,800 lbs/yr	Reduce by 41% or 39,100 lbs/yr	Reduce by 72% or 38,400 lbs/yr
Reduce by 320 lbs/yr	Reduce by 190 lbs/yr	Reduce by 110 lbs/yr	Reduce by 375 lbs/yr	Reduce by 260 lbs/yr

Metric: Percent of load reduction/mass load reduction at the end of the 10-year plan. Load reduction estimates established at planning region outlets using PTMAApp.

CAPITAL IMPROVEMENT PROJECTS	PLANNING REGION	PRIORITY RESOURCE	PROGRESS	LBS/YR
Traverse County Ditch #37	TMC	Twelvemile Creek	Completed Construction	85✓
Wilkin County Ditch #8	RR	Rabbit River	Completed Construction	143✓
Wilkin County Ditch #9	RR	Rabbit River	Completed Construction	149✓
Judicial Ditch #11 Main Retrofit	LT&BDS	Bois de Sioux River	Completed Construction	117✓
Wilkin County Ditch #35 Retrofit	LT&BDS	Doran Creek	Reestablishment of Records	250
Judicial Ditch #6 Retrofit	RR	Rabbit River	Completed Construction	384✓
Traverse County Ditch #35	LM&TMC	Twelvemile Creek and Mustinka River	Completed Construction; Waiting for Seeding	65✓
Wilkin County Ditch #Sub-1	LT&BDS	Lake Traverse	Design & Permitting	90✓
Lake Traverse Water Quality Imp. Project #1	LT&BDS	Lake Traverse	Phase 1 Complete Phase 2 Complete Phase 3 Under Contract	188✓ 113✓ 565✓
Doran Creek Rehab	LT&BDS	Doran Creek	Design	170
Redpath Phase 2 – Mustinka River	LM&TMC	Mustinka River	Bid Document Prep	72
Redpath Phase 2 - Flood Impoundment	LM&TMC	Mustinka River	Phase 2A Under Construction	TBD
Twelvemile Creek	LM&TMC	Twelvemile Creek	Site Investigations	TBD

Grant County Ditch #21	UPPER M.		Improvement Development	3.67
EDUCATION & OUTREACH PROGRAM	PLANNING REGION	PRIORITY RESOURCE	PROGRESS	LBS/YR
River Watch Program	All	NA	Program continued	NA
REGULATORY PROGRAM	PLANNING REGION	PRIORITY RESOURCE	PROGRESS	LBS/YR
Ordinances & Permitting	All	NA	Program continued	NA
Buffer Law Requirements	All	NA	Program continued	NA
DATA COLLECTION PROGRAM	PLANNING REGION	PRIORITY RESOURCE	PROGRESS	LBS/YR
Assess Rivers and Stream Channel Banks	All	NA	Program continued	NA
MDM Plan Development	All	NA	Data collection system initiated	NA

2021 - 2023: 9) Progress for Measurable Goal: Unstable Channels

Measurable Goals



Long-Term Goal: All 465 miles of rivers and streams channel banks within the plan area are assessed and stabilized.



Short-Term Goal: 23 miles of priority river or stream channels are assessed and stabilized (where needed) through stream stabilization practices to decrease excessive erosion and channel sediment accumulation.

Metric: Miles of river or stream stabilized

CAPITAL IMPROVEMENT PROJECTS	PLANNING REGION	PRIORITY RESOURCE	PROGRESS	MILES
Doran Creek Rehabilitation	LT&BDS	Doran Creek	Design	20
Lake Traverse Water Quality Imp. Project #1	LT&BDS		Phase 1 Complete Phase 2 Complete Phase 3 Under Contract	Phase 1 = Ditch Phase 2 = 0.3✓ Phase 3 = Ditch
Western 32 Flood Impoundment	RR		Site Investigations	TBD
Redpath Phase 2 – Mustinka River	LM&TMC	Mustinka River	Phase 2A Under Construction	2.1✓ of 8
Redpath Phase 2 - Flood Impoundment	LM&TMC	Mustinka River	Phase 2A Under Construction	TBD
Twelvemile Creek	LM&TMC	Twelvemile Creek and Mustinka River	Site Investigations	TBD
REGULATORY PROGRAM	PLANNING REGION	PRIORITY RESOURCE	PROGRESS	TONS/YR
Ordinances & Permitting	All	NA	Program continued	NA

Buffer Law Requirements	All	NA	Program continued	NA
DATA COLLECTION PROGRAM	PLANNING REGION	PRIORITY RESOURCES	PROGRESS	ACRE-FEET
Assess Rivers and Stream Channel Banks	All	NA	Program continued	NA

2021 - 2023: 10) Progress for Measurable Goal: Bacteria Loading

Measurable Goals



Long-Term Goal: Planning region bacteria long-term goal is achieved, as defined in the Planning Region Focus table below.



Short-Term Goal: Implement projects, specifically focused on reducing bacterial loading to nearly or barely impaired priority resources, as defined in the Planning Region Focus table below.

Planning Region Focus

Bois de Sioux Watershed		Mustinka Watershed		
Lake Traverse & Bois de Sioux River	Rabbit River	Upper Mustinka River	Lower Mustinka and Twelvemile Creek	Fivemile & Twelvemile Creek Headwaters
Delist all (2)	Protection	Protection	Delist all (5)	Delist all (2)
3.4 miles fencing to restrict livestock access to riparian areas and shorelines	N/A	1,400-foot fencing to restrict livestock access to riparian areas and shorelines	N/A	N/A

Metric: Long-term: number of impaired reaches; Short-term: number of projects

EDUCATION & OUTREACH PROGRAM	PLANNING REGION	PRIORITY RESOURCE	PROGRESS	FEET
River Watch Program	All	NA	Program continued	NA

SECTION SIX - PLANS FOR THE SUCCEEDING YEAR

- The BdSWD anticipates continued development of the following for 2024:

2023 ACTIVE DEVELOPMENT & CONSTRUCTION		
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	<u>103E Ditches</u>	<u>103D Watershed Projects</u>
2023 Construction Carryover	WCD #Sub-1	LTWQIP Phase No. 3 Lightning Lake Outlet Redpath & Mustinka Ph. 2A
2024 Final Development & Construction	GCD #21 GCD #3 WD #5	Redpath Ph. 2B 640 th Ave Road Raise (funding only)
2024 Prelim. Development		Redpath Ph 3 and 4 Doran Creek Restoration Moonshine Lakebed Impoundment Redpath Collection Channel Fivemile Creek Landowner Technical Assistance Program Twelvemile Creek Flood Study
Identified for Future	WCD #20 WCD #35 WCD #25 JD #12 TCD #8 BCD #8	

- The Bois de Sioux Watershed District will conduct the necessary procedures to maintain the 429.9 lineal miles of legal ditch systems under their jurisdiction. This includes inspections, vegetation control, repairs, accounting, reports, etc.
- The BdSWD will continue to work towards acquisition of funding partners for the purpose of finalizing the needs for the Redpath Project & Mustinka River Fish & Wildlife Habitat Corridor.
- The BdSWD Board and staff will continue to serve on the many boards, committees, and commissions. They will also consider serving any new capacities they are asked to participate in to further the goals of the District and Red River Basin.
- The BdSWD will continue to support the River Watch Program and encourage new schools to participate.
- The BdSWD will continue to promote education through the distribution of social media updates and periodic public informational meetings.
- The BdSWD will continue to meet with the Twelvemile, Moonshine, and North Ottawa Project Teams as necessary to continue development of the necessary summary reports and recommendations as directed by the Board of Managers.
- The BdSWD will continue to facilitate additional project teams, as needed, to work towards resolving water problems in the watershed.
- The BdSWD will continue implementation of the District’s responsibilities within the Joint Comprehensive Watershed Management Plan in the 2024 calendar year.
The BdSWD will continue to use a diverse set of programs and policies to reduce soil erosion through establishment of riparian buffers and/or alternative comparable conservation practices.

2023 103E DRAINAGE SYSTEM PROJECTS

Identified Need for Future 103E Projects & Major Repairs (Retrofits)	Preliminary/Feasibility & Landowner Meetings	Active Development	In Construction	Active Minor Repairs	Completed 2017 - 2023	
JD #12	WCD #25 Outlet Repairs Rabbit River	GCD #21 Reductions TBD	WCD #Sub-1 450 LBS/YR PHOS 90 TONS/YR SED 8 MILES STAB/ADEQU 10 ACRES PE Bois de Sioux River		TCD #37 85 LBS/YR PHOS 340 TONS/YR SED 2.5 MILES STAB/ADEQU 23.05 ACRES PE Twelvemile Creek	WCD #9 149 LBS/YR PHOS 595 TONS/YR SED 13.5 MILES STAB/ADEQU 51.54 ACRES PE Rabbit River
TCD #8	BCD #8	BDSWD #5			WCD #8 143 LBS/YR PHOS 569 TONS/YR SED 7.5 MILES STAB/ADEQU 23.91 ACRES PE Rabbit River	JD #6 384 LBS/YR TP 417 TONS/YR SED 8 MILES STAB/ADEQU 44.96 ACRES PE Rabbit River
TCD #52		GCD #3			TCD #23 Field Approach Project Twelvemile Creek	JD #11 117 LBS/YR TP 569 TONS/YR SED 9 MILES STAB/ADEQU 95.5 ACRES PE Bois de Sioux River
					WCD #18 Grade Stabilization Cost Share Program Wilkin SWCD Rabbit River	JD #12 Field Side Approach Project Rabbit River
					TCD #35 65 LBS/YR PHOS 230 TONS/YR SED 5 MILES STAB/ADEQU 9.72 ACRES PE Twelvemile Creek	

2023 103D WATERSHED PROJECTS

Identified Need for Future Project	Preliminary/Feasibility & Landowner Meetings	Active Development	In Construction	Active Minor Projects	Completed 2017 – 2023	
	Fivemile Creek	Doran Creek Restoration	Lightning Lake Outlet IMPROVE HYDRAULIC CAPACITY, LOWER VELOCITIES, IMPROVE FISH PASSAGE	Lined Waterways Project Traverse County & Traverse SWCD	LTWQIP No. 1 Phase 1 188 LBS/YR TP 750 TONS/YR SED 0.6 MILES STAB/ADEQ 21.32 ACRES PE Lake Traverse	LTWQIP No. 1 Phase 2 113 LBS/YR TP 450 TONS/YR SED 0.3 MILES STAB 6.01 ACRES PE Lake Traverse
	Twelvemile Creek	Grant County Mustinka River Corridor Project	Redpath Flood Impoundment TBD 22,500 AC-FT STORAGE	North Ottawa Impoundment Collection channel repairs Stop logs for bays	LTWQIP No. 1 Phase 3 565 LBS/YR TP 2250 TONS/YR SED 1 MILE STAB/ADEQ 35.37 ACRES PE Lake Traverse	2020 Grade Stabilization Cost Share Program Wilkin SWCD
		Grant County Elbow Lake Flood Control Outlet	Redpath Phase 2 - Mustinka River 72 LBS/YR TP 235 TONS/YR SED 8 MILES STAB 260 ACRES PE		2019, 2020, 2021, 2022, 2023 Lined Waterways Project Traverse County & Traverse SWCD	2020 Buffer Seeding Cost Share Program Wilkin & Traverse SWCDs
		Big Stone County Moonshine Lakebed Project	640 th Ave Road Raise FLOOD HAZARD MITIGATION		Wilkin & Stevens SWCD Cover Crop Program 2020 – 2022	TCD #23 Lined Waterways Traverse County & Traverse SWCD Fivemile Creek
						Grant County Lake Samantha Flood Control Outlet Olson Construction Elbow Lake – 51 AC-FT

PROJECT GRANT FUNDING SOURCES AS OF 12/31/2023

PROJECT	SOURCE	EXPIRATION	ORIG. AMOUNT	AMOUNT RECEIVED
DORAN CREEK	BdSWD Project Development/Clean Water Cost Share	GRANT CLOSED	\$100,000	FULL FUNDING RECEIVED
	RRWMB Base Funding Grant	GRANT CLOSED	\$100,000	FULL FUNDING RECEIVED
	RRWMB Base Funding Grant	GRANT CLOSED	\$100,000	FULL FUNDING RECEIVED
	BWSR Legacy Amendment Clean Water WBIF Grant #1	GRANT CLOSED	\$115,000	FULL FUNDING RECEIVED
	NRCS National Water Quality Initiative Planning Grant	09/04/25	\$43,560	\$0
LIGHTNING LAKE OUTLET	DNR Conservation Partners Legacy Grant	TBD	\$500,000	\$125,096
LTWQIP #1 PHASE #3	BdSWD Project Development/Clean Water Cost Share	GRANT CLOSED	\$100,000	FULL FUNDING RECEIVED
	BWSR Legacy Amendment Clean Water WBIF Grant #1*	12/31/23	\$325,000	FULL FUNDING RECEIVED
	RRWMB Water Quality Grant	12/31/24	\$1,200,000	\$1,070,142
	DNR Conservation Partners Legacy Grant	06/30/25	\$400,000	FULL FUNDING RECEIVED
	BWSR Legacy Amendment Clean Water Project Grant	12/31/24	\$800,000	WAITING FINAL 10% CLOSEOUT
MUSTINKA RIVER RHB.	Lessard Sams Outdoor Heritage Grant	06/30/24	\$2,440,000	\$2,133,217
	RRWMB Water Quality Grant	07/31/23	\$507,000	FULL FUNDING RECEIVED
	LCCMR Grant	06/30/25	\$2,692,000	\$0
	BWSR Legacy Amendment Clean Water Project Grant	12/31/24	\$800,000	\$720,000
REDPATH IMPNDMNT	Flood Hazard Mitigation Grant	07/26/25	\$800,000	FULL FUNDING RECEIVED
	Flood Hazard Mitigation Grant	NA	\$4,400,000	\$0
	BWSR Water Storage Grant	12/31/25	\$1,000,000	\$0
	RRWMB Funding Commitment	NA	\$16,850,000	\$5,667,000 PRE-CONSTRUCTION + \$172,714 USED FOR PHASE 1 + \$1,119,265 USED FOR PHASE 2
TWELVE MILE CREEK STUDY	HSEM – FEMA Hazard Mitigation Grant Program	TBD	\$300,750	\$0
	BWSR Legacy Amendment Clean Water WBIF Gr #2**	12/31/25	\$100,000	\$0
1W1PLAN/JCWMP/WBIF #1 (2021 – 2023)	*BWSR Legacy Amendment Clean Water WBIF Grant (to disburse for eligible projects to 13 LGU's)	12/31/23	\$1,064,522	WAITING FINAL 10% CLOSEOUT

1W1PLAN/JCWMP/WBIF #2 (2022 – 2025)	**BWSR Legacy Amendment Clean Water WBIF Grant (to disburse for eligible projects to 13 LGU's)	12/31/25	\$1,064,522	\$532,261
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WCD-#SUB 1	BWSR MDM Grant	12/31/25	\$244,150	\$219,735
	RRWMB Water Quality Grant	12/31/25	\$112,500	FULL FUNDING RECEIVED
	BWSR Legacy Amendment Clean Water WBIF Gr #2**	12/31/25	\$370,000	FULL FUNDING RECEIVED

PROJECTS CLOSED IN 2023 SUPPORTED BY GRANTS

PROJECT	SOURCE	EXPIRATION	ORIG. AMOUNT	AMOUNT RECEIVED
TCD #35	RRWMB Funding Agreement	GRANT CLOSED	\$1,000,000	FULL FUNDING RECEIVED
	BWSR Legacy Amendment Clean Water MDM Grant	GRANT CLOSED	\$320,000	FULL FUNDING RECEIVED
FIVEMILE CREEK STUDY	BWSR Legacy Amendment Clean Water WBIF Gr #2**	12/31/25	\$100,000	FULL FUNDING RECEIVED