



Bois de Sioux Watershed District



Calendar Year 2022 Annual Activity Report

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

**BOIS DE SIOUX WATERSHED DISTRICT
ANNUAL REPORT
CALENDAR YEAR 2022**

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

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

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**The Legacy Act Clean Water Fund, Red River Watershed Management Board, and the Environment and Natural Resources Trust Fund have provided grants supporting District projects in 2022.
Please see "Project Grant Funding Sources" at the end of this report.**

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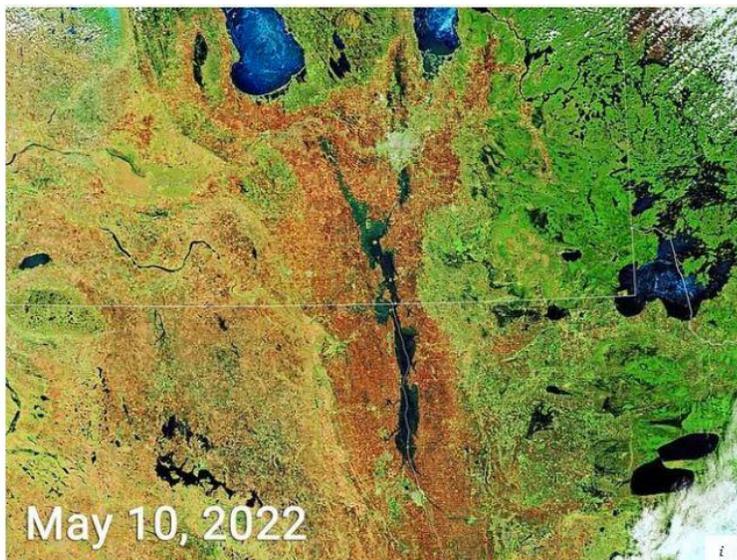
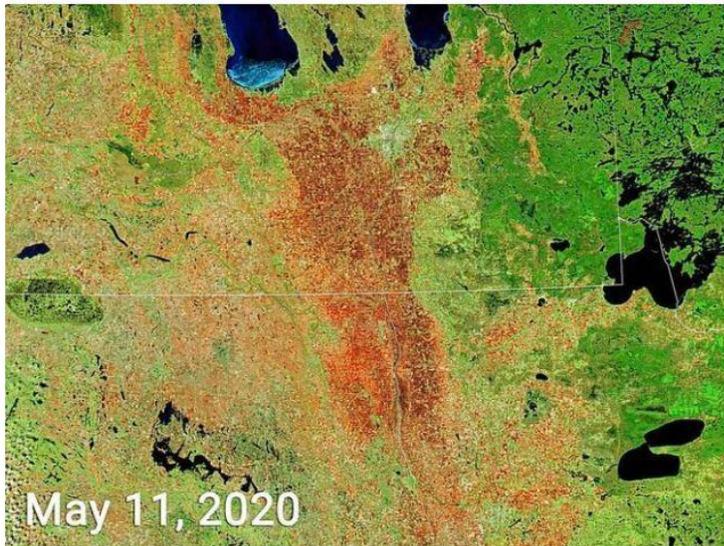
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NASA captures satellite images of the 2022 Red River Valley flood, from Big Stone County to Canada.

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SECTION ONE - GENERAL FUND

Project Status and Business Transacted

2022 Board Meetings

January 20, 2022
January 27, 2022
February 17, 2022
March 24, 2022
April 21, 2022
May 19, 2022
June 16, 2022

July 17, 2022
August 18, 2022
September 15, 2022
October 20, 2022
November 17, 2022
December 15, 2022

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 2022. 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)
Minnesota Association of Watershed Districts Capitol Hill Meetings & Visits (Mar)
Grant County Ditch Meeting hosted by Rinke Noonan (Apr)
District Policy Committee Meeting (Apr)
North Ottawa Project Team Meetings (June, Aug)
District Workshops (Aug)
Minnesota Association of Watershed Districts Summer Tour (Aug)
Grant County SWCD Field Day (Sept)
Minnesota Association of Watershed Districts Annual Conference (Dec)
Prairie Grains Conference (Dec)
1W1Plan/Joint Comprehensive Watershed Management Plan (Jan, Apr, June, Sept)

INCLUDED IN BOARD MEETING PACKETS

Corps Resumes Lake Traverse Releases (02/17/22)
State, Local Leaders Back Walz's Proposed Fund to Help Cities Fight Flooding Caused by Climate Change (02/17/22)
2021 Red River Basin River Watch Annual Report (04/21/22)
2022 Flood Information Red River Basin of the North (05/19/22)
The Prairie Ecologist: A Deep-Rooted Prairie Myth (06/16/22)
NASA Releases Satellite Images of Manitoba Flooding (06/16/22)
Buffalo River Watershed Stream Habitat Program (06/16/22)
Regular Session Ends with a Possibility of a Brief Special Session to Finish Work (06/16/22)
BWSR 2022 Legislative Session Update (07/21/22)
Clean Water Council Legislative Update (07/21/22)
DNR Water Talk Newsletter (07/21/22)
California Went Big on Rooftop Solar. Now that's a problem for Landfills (07/21/22)
If Solar Panels are So Clean, Why Do They Produce So Much Toxic Waste (07/21/22)
Disaster Aid Coming for Storm Ravaged Counties (07/21/22)
Flood Damage Reduction Workgroup Overview (08/18/22)
Flood Damage Reduction Workgroup Local Benefits to the Red River Basin (08/18/22)
Flood Damage Reduction Workgroup Enhancing Resources to the Red River Basin (08/18/22)
Interagency Recommendations for FY2024-2025 Clean Water Fund Budget (08/18/22)
Eminent Domain (09/15/22)
Guidelines for Ordinary High Water Level Determinations (09/15/22)

Wetland Mitigation on Ag Lands (10/20/22)
Anatomy of a Land Acquisition: Pheasants Forever (11/17/22)

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.

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 RRRA 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

The Minnesota Association of Watershed Districts (MAWD) provides educational opportunities, information, and training for watershed district managers and staff through yearly tours, meetings, and regular communication.

MAWD 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 the Minnesota Association of Watershed Districts Board of Directors, and in 2022 served as Vice President and interim President.

BdSWD Advisory Committee

Chair Ron Staples	Tom Monson	Doug Jahnke	Dean Frisch
Jay Backer	Mark Summers	Eric Klindt	Vernell Wagner
Scott Bauer	Duane Duin	John Walkup	

The Advisory Committee met on January 28, 2022. Committee members met with Engineers Chad Engels and James Guler, 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. In lieu of a second meeting, committee members were invited to attend one of three workshops hosted by the District, August 8 – August 10 in various locations across the District.

Other General Fund Activities

- **Billable Rates for 2022 set as follows (04/21/22).** Billable Rates were also set for engineering and legal staff (07/18/22).

2022 BILLING RATES

(based on 2021 Audit and BWSR Calculator)

	District Administrator	District Office Manager	District Engineer Tech
Salary + Benefits	\$ 45.00	\$ 23.95	\$ 50.88
Salary + Benefits + Facilities	\$ 73.63	\$ 52.57	\$ 79.51
Salary + Benefits + Facilities + Administration	\$ 81.81	\$ 60.75	\$ 87.69

- **End of Year:** End of year transfers and journal entries were approved (01/20/22, 02/17/22).
- **Copier Lease:** Approval was granted to replace the current copier lease (03/24/22).
- **2022 Audit:** A master services agreement and state of work with CliftonLarsonAllen were approved; the cost for the 2022 audit and financial statements will be \$14,000 (09/15/22).
- **2023 Staff Wages:** Staff increases were set at 3%.
- **Annual Audit:** The financial statements and results of the 2021 annual audit were presented (03/24/22).
- **2022 Resolutions:**
 - 2021 – 2022 Annual Organization Resolution (06/16/22 & 07/21/22)
 - Resolution Setting 103D.605 LTWQIP No. 1 Phase 3 Project Hearing (08/18/22)
 - Resolution of Ad Valorem Levy (08/18/22)
 - Resolution to Budget Redpath Impoundment Project Funds (08/18/22)
 - Resolution Clarifying Watershed District Project Establishment with Government Aid (08/18/22)
 - Increased Support & Participation for the Minnesota Drainage Work Group (08/18/22)
 - Recommendation to Obtain Stable Funding for the Flood Hazard Mitigation Program (08/18/22)
 - Clarification of the DNR’s Ordinary High Water Level Definition (08/18/22)
 - Resolution Authorizing a Transfer of Funds for the District’s Clean Water Retrofit Cost Share Policy (09/15/22)
 - Resolution Authorizing a Transfer of Funds for the District’s Culvert Sizing Cost Share Policy (09/15/22)
 - Resolution Authorizing a Transfer of Funds for Bond Prepayment (09/15/22)
 - Resolution of Ad Valorem Tax Levy (12/15/22)
 - Resolution for Ditch Assessment Levies (12/15/22)
- **Financial Activities:** Grants associated with JD #11, JD #6, and Phase 2 of the Lake Traverse Water Quality Project No. 1 were closed and received. Grants associated with the following projects have not been closed: Doran Creek, Phase 2 of the Lake Traverse Water Quality Improvement Project No. 1, Redpath Phase 1/TCD

#35, Redpath Phase 2 Mustinka River Rehabilitation, Redpath Phase 2 Flood Impoundment, WCD #Sub-1, Fivemile Creek, Lightning Lake Outlet, 1W1Plan/JCWMP/WBIF. Authorization was granted to utilize a second Legacy Act Clean Water Fund Watershed Based Implementation Fund grant allocation on behalf of the Bois de Sioux-Mustinka River Joint Comprehensive Watershed Management Plan (06/16/22).

- **Pay Equity Survey:** The Pay Equity Survey was submitted (06/16/22).
- **Tort Liability:** Tort liability limits were not waived (06/16/22).
- **Annual Review of Conflict of Interest Policy:** Conflict of Interest policies were reviewed (06/16/22).
- **Elections, Annual Organization & Committees:** Approval of the annual organization resolution, election of officers, and committee assignments were delayed to the July 21, 2022 board meeting (06/16/22, 07/21/22).
- **Employee Holiday:** Employees were awarded a floating holiday, to be reviewed in the future if the State of Minnesota adds additional, official state holidays (07/21/22).
- **Annual Review of Data Request Policy:** The review was suspended as the current policy has been rewritten and included in the District's formal review and adoption of the District's Bylaws, Rules, and Policies (07/21/22).
- **Budgets, Assessments & Levies:** Budget hearings were held, with assessment and levy approvals following each hearing (08/18/22, 12/15/22).
- **Records Retention Schedule:** A customized records retention schedule was presented and approved for further approval submission to various required state entities (10/20/22, 11/17/22).
- **October Board Meeting:** The October Board meeting will begin at 8:00 AM, instead of 9:00 AM (11/17/22, 12/15/22).



BdSWD Board Managers Gillespie, Wold, Beyer & Vavra at the Annual MAWD Conference

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. Both terms will expire 12/31/23 (11/18/21).

Red River Watershed Management Board Levy

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

On July 19, 2022, the RRWMB Managers approved Resolution 2022R-19 (attached), requesting that its member watershed districts set the 2023 Red River Levy at 75 percent (0.0003627).

Other RRWMB Fund Activities

- **RRWMB Update:** Executive Director Rob Sip gave an update and presented the revised Joint Powers Agreement (08/18/22, 09/15/22)
- **Joint Water Meeting:** RRWMB was a sponsor for a Farm Bureau water policy meeting held at the Craig Lichtsinn Farm. Bois de Sioux Watershed District staff prepared a presentation (07/20/2022).
- **RRWMB JPA:** An updated Joint Powers Agreement was signed for membership in the Red River Watershed Management Board (08/18/22, 09/15/22).
- **Grants:** Several grants were awarded to the District in 2022:
 - \$100,000 to Doran Creek Project Development
 - \$1,200,000 to Lake Traverse Water Quality Improvement Project #3
 - \$1,000,000 to Redpath Phase 1
 - \$507,000 to Redpath Phase 2

Of note: at the September Board Meeting, eligibility for Redpath was increased by \$1,307,803 to \$16,805,000. Of this amount \$5,667,000 and \$1,000,000 have been received, leaving \$10,138,000. The commitment and undisbursed amounts were confirmed at the December 13, 2022 RRWMB board meeting and respective board packet.

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 (project in progress). 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 200 permit applications received in 2022.

2022 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	- 23,000 ACRE-FEET (REDPATH)
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

The Upper Minnesota River Watershed District and the BdSWD jointly initiated proceedings to reevaluate the southern border west of State Highway 75 (03/18/21). A landowner meeting was held June 25, 2021, and several changes were made in response to landowner comments. BdSWD and Upper Minnesota River Watershed District finalized the proposed boundary and both signed petitions requesting a boundary revision (07/15/21). The Northwest Region of the Board of Soil and Water Resources held a required landowner hearing on November 22, 2021. The boundary adjustment was approved by the Board of Water and Soil Resources Board on January 26, 2022.

North Ottawa Impoundment Project

The North Ottawa Project Team met two times in 2022 (06/22/22, 08/31/22); statements of Project Team Commitment were signed and collected.

Spring Operations: Aggressive, but controlled, releases were needed this spring to stay even with incoming floodwaters – there were three late spring storm events, two of which were classified as FEMA disasters. Over the summer, the Impoundment has received little inflow.

Maintenance & Repairs: The District placed gravel on the center road. The original oak stop logs have been found to become heavy when saturated, swell, and some have been damaged by beavers. Aluminum stop logs were constructed locally and installed last year, and this year, a new screw gate was installed in A4. The Project Team discussed the difference in operations between stop logs and screw gates. Stop logs are used to set a cell elevation; stop logs are added or pulled, and staff can walk away while cell water levels fall to the top stop log elevation. In contrast, screw gates usually draw water from the bottom of a cell – which requires staff to monitor elevations and close the screw gate once the desired elevation is achieved. Staff reported damages from vehicles driving on top of impoundment dikes, despite no trespassing signs. Three road gates were installed to prevent future damage. Mowing, and weed and beaver removal activities were conducted.

NRE's: DNR staff noted that sago pondweed is present in B4, and that the sago pondweed grows well in turbid water and is preferred by ducks. District staff noted American avocets nesting in the Impoundment. Drier-than-average conditions compromised the ability of the Impoundment to provide a steady flow downstream. Engineering staff have been asked to provide a means to measure outflows. Forty acres of Japanese Millet were proposed for harvest, so the seed could be kept and used in future years, but the combine operator was unable to get to the project. All one-hundred acres of the Japanese Millet cover crop were left for wildlife.

In July, President Vavra and engineering staff hosted engineers representing the Canadian Peguis First Nation on-site. The visiting team was interested in design and operation specifications as they consider construction of an impoundment twice the size of North Ottawa.

Summer Operations: After herbicides were applied and the soil was tilled, one hundred acres of Japanese Millet was drilled by Traverse SWCD into A3, and emerged within 4 days. (2,800 lbs of seed at a cost of \$1.36/lb).

Funding Mechanisms: In 2021, a request was made to the Flood Damage Reduction Workgroup to utilize shared project team funds to reimburse member watershed districts for 50% of meeting costs incurred for project teams continued after impoundment construction (which would include the North Ottawa Project Team). Each watershed district is currently capped at \$15,000 for project team expense reimbursement. The proposal was approved by the RRWMB November 2021, and was later approved/incorporated by the Flood Damage Reduction Work Group.

A two-year ag lease was signed in 2021 for the 2021 and 2022 growing seasons. Three cells were bid without a crop restriction, and two cells were bid with a corn silage/small grain restriction. Cells A1, A2, and A3 were rented without a restriction; Cells B1 and B2 produced corn silage. A lease for the 2023, 2024, and 2025 growing seasons was put together and advertised and awarded in December (12/15/22).

Window On Wildlife

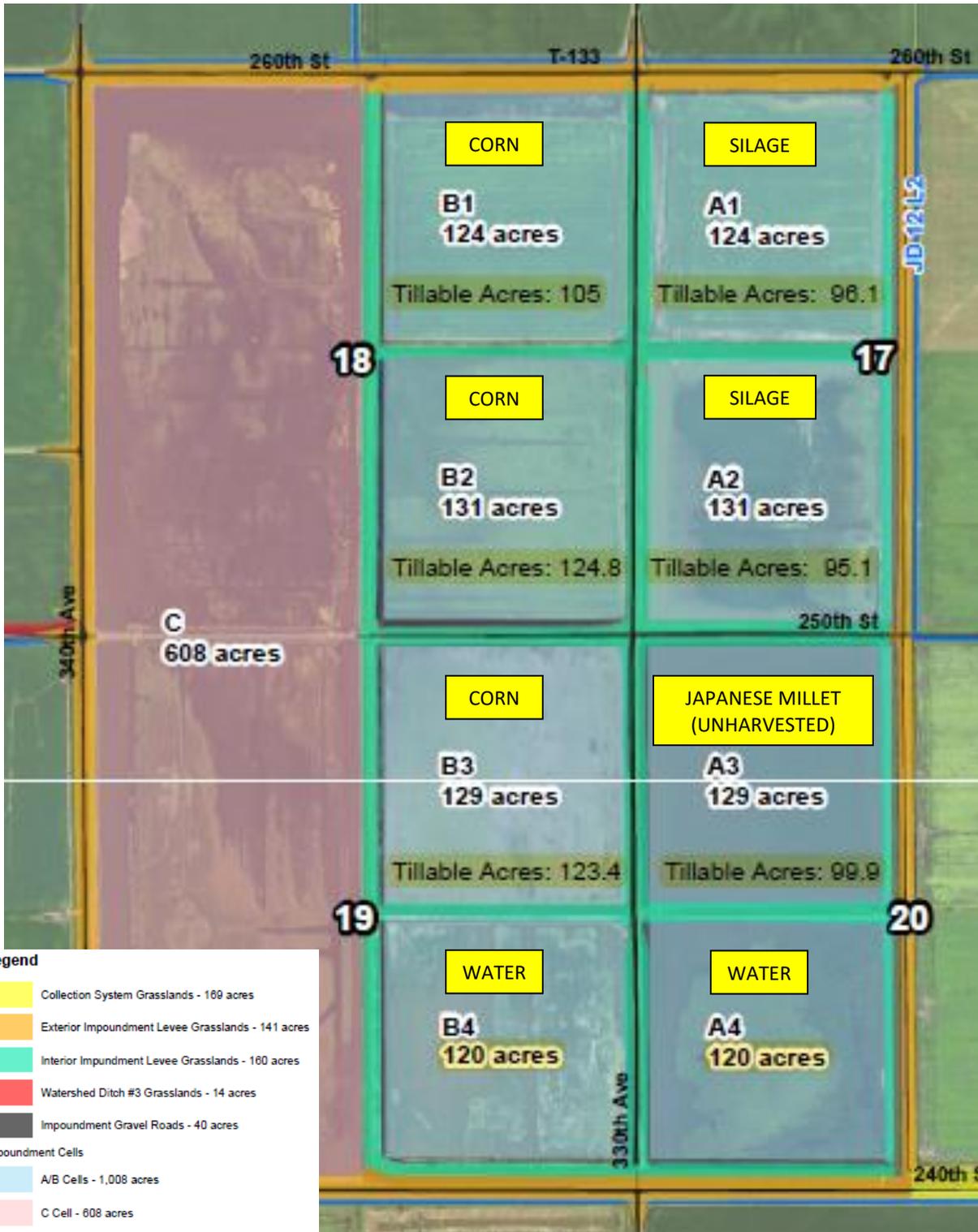


Wetland wildlife habitat

You're watching a live view of flood control impoundment in western Minnesota. The site is very popular with [waterfowl](#). Ducks, including mallards, green-winged teal, northern pintails, gadwall, ring-necked ducks, and redheads are commonly seen at the impoundment feeding in the shallow water on aquatic invertebrates and submerged plants. Canada geese are common throughout the fall, and greater white-fronted geese and snow geese have been noted during migration, both in the spring and fall. Geese often feed in surrounding grain fields, and loaf, or rest, in the shallow water and mudflats. While there is no hunting at this site as it is within a State Game Refuge, the immediate surrounding areas see improved waterfowl hunting given the proximity of the impoundment. Water levels on the impoundment are currently low as we are not in a time of flooding, this provides good feeding conditions for waterfowl and other shore birds. Move the red dot backward or click on the red slider to view footage from the last 12 hours. There is no sound on the stream.

The DNR broadcasted a live webcam for fall migration, beginning October 20, 2022.

NORTH OTTAWA 2022 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 presentation to the Bois de Sioux Watershed District on May 19, 2022.



Riverwatch Students Present at BdSWD Board Meeting

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.

Minn. Stat. § 103F.48 Buffers

The Buffer Committee met in 2022 to continue to determine the best courses of action to reduce soil erosion and to set budgets for the use of annual riparian aid. For the first time in at least six years, watershed workshops were held in multiple cities across the watershed. Attendees included landowners, contractors, commissioners, township supervisors, and a state senator. Buffers were featured prominently in the presentation.

In addition to these workshops, 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. Some of these projects include:

- Repairs following erosion damage caused by spring flooding at 31 flood sites
- Preparation of close-out documents and hearings for Judicial Ditches Nos. 6 and 11
- Construction of Traverse County Ditch No. 35, in which the drainage system purchased and moved drainage system buffers, and installed side inlet culverts and berms
- Preparation of close-out documents and hearings for Lake Traverse Water Quality Improvement Project No. 1 - Phase II, a channel stabilization project to prevent erosion and acquisition of buffers
- Submission of design plans to BWSR and DNR for Lake Traverse Water Quality Improvement Project No. 1 Phase III, a more complicated channel stabilization project

- Collection of petitions for Wilkin County Ditch No. Sub-1 and Grant County Ditch No. 21 in preparation for possible 2023 acquisition and relocation of drainage system buffers and installation of side inlet culverts
- Coordination of multiple landowner meetings this spring and summer with SWCD and BWSR representatives to address current and future sedimentation of Doran Creek, a possible easement/berm/side-inlet/two-stage channel project anticipated for construction in 2024 or 2025
- Installation of concrete mats following ditch repairs with SWCD staff
- Continuation of a 3-year, \$25,000/year Multi-County Cover Crop Cost-Share Program with District SWCD's
- Lined Waterways Cost Share Program with Traverse SWCD on TCD #1W, TCD #4, TCD #27, and TCD #38
- Buffer right-of-way signage staking and installation
- Hydroseeding of buffers in difficult to establish areas
- Leveling of spoils to aid in buffer establishment
- Purchase of a new vehicle to monitor construction projects and follow-up inspections
- Side inlet culvert cost-share program led by Wilkin SWCD on JD #12

In November, two sets of landowners (for a total of three non-compliant parcels) were given an 11-month notice that buffers must be installed.

Land Acquisition and Sales

Right-of-way was acquired for the Lake Traverse Water Quality Improvement Project, closeout of JD #11, and Relocation of TCD #35.

Board managers conducted a review of lands held by the District. Land owned in Section 32 of Western Township (purchased from the Copeland family) has been approved for disposal in 2023 due to economic feasibility; an impoundment will not be built at this site because it have limited frequency in use and would capture a limited amount of flow (12/15/22).

Moonshine Lakebed Restoration Project

No action was taken on this project in 2022.

Moonshine 24/13

No action was taken on this project in 2022.

Lake Traverse Water Quality Improvement Project

Phase One: Construction completed in 2021.

Phase Two: Construction completed in 2022.

Phase Three: Design and permitting activities continued throughout 2022. A Phase 3 project establishment hearing was held September 15, 2022 and the BWSR Project Establishment order was granted October 17, 2022. Bid advertisement was held in November, and a Notice of Award for Wagner Company was approved (12/15/22). The contractor is expected to begin construction Spring 2022.

Phases for this project has 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.

Big Lake Flood Control Outlet

No action was taken on this project in 2022.

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 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 2022, there were significant project developments.



Phase 1 Relocation of TCD #35:

Mar 2022: Bid Opening, Awarded to Wagner Co.

May 2022: Construction Began

Oct. 2022: Seeding and Mulching Complete; Substantial Completion Met

Phase 2 – 4 Mustinka River Rehabilitation & Redpath Flood Impoundment

May 2022: LCCMR Grant Approved

July 2022: USACE Permits

Aug. 2022: BWSR & DNR Advisory Reports

Sep. 2022: 103D.605 Public Hearing

Oct. 2022: RRWMB Step III Approval

Nov. 2022: Draft bid package sent to DNR for Dam Safety requirements review

Phase 2 construction will begin Spring 2023 and will involve rehabilitation of approximately two miles of the Mustinka River, construction of a portion of the north levee embankment, and pre-loading at the outlet structure.

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

Engineering staff and landowners met to discuss flooding in Logan Township and Fivemile Creek, and flow to the Redpath Impoundment. Engineering staff have been authorized to analyze possible locations for a Redpath collection channel (07/21/22).

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 channel restoration, establish a permanent buffer corridor, and construct measures that reduce sediment transport. Additionally, the District seeks to obtain a Public Waters Work Permit that allows future maintenance activities, including cleanouts, under the provisions of an Operations and Maintenance manual. 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 1,100 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. There are 62 parcels that could be impacted by easements. Setting outcome expectations with landowners is also important for this project – this project will not result in transforming flood prone areas to prime farmland. With backwater effects from the Bois de Sioux River and a relatively flat river bed, a clean-out of Doran Creek will not prevent future floods; the clean-out will result in less frequent flooding, but flooding will still happen and could still happen during the growing season. Due to the accessibility of the creek and cattail growth, winter construction may be needed. Landowner meetings were held in March and July, and overall, landowners are supportive of the project. Engineering staff are formulating a phased construction and funding strategy.

This project has received funding from the BWSR Clean Water Fund Legacy Act and the Red River Water Management Board.

Fivemile Creek Restoration

Engineering staff identified several complexities that will need to be addressed, such as: involvement of two counties, establishment of a watershed management district that would potentially encompass a large area, relationships and connectivity with GCD #8, Redpath Collection Channel, and multiple downstream drainage systems. The District expects to consider a proposal in 2023 for a model that would demonstrate the existing flow and floodplain, and can then identify impacts of the future project at prioritized downstream locations. The model would be used for analysis of design alternatives, addressing landowner concerns and permitting considerations. A technical project team was developed for the single purpose of identifying the extents of the model.

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

East Branch Twelvemile Creek Project/Eldorado Township Flooding

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 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.

In 2021, a draft agreement between BdSWD and Dollymount Township for the 640th Road Raise Project was approved for Dollymount Township’s consideration – but, because the agreement includes specific project design clauses, Dollymount Township has not yet signed the agreement. Interstate Engineering was hired by Dollymount Township to put together a project design and permit application. Throughout 2022, engineering staff met with township stakeholders, revising design features. The project features include changes to culvert sizing and adjacent road ditches, alteration of existing ag dikes, and a clean-out up to TCD #8. The District awaits a permit submission and signed funding agreement from Dollymount Township.

Samantha Lake Flood Outlet Control Project

The District reviewed an Operations and Maintenance Agreement for the project now that construction is complete (12/15/22). Changes to the agreement will be considered by Grant County Commissioners in 2023.

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.



Current Lightning Lake Outlet Structure

The new design removes the vertical barrier to fish migration, benefitting fish movement and reproduction. This project will help to reduce the risk of road overtopping, and dovetails with the District’s natural resource goals for the Mustinka River.

At the onset, the project was estimated to cost \$450,000, but upon further development, is estimated to cost \$661,212. A \$500,000 grant application was approved by the DNR Conservation Partners Legacy Program (12/15/22).



Current Lightning Lake Outlet Structure

Spring Flood

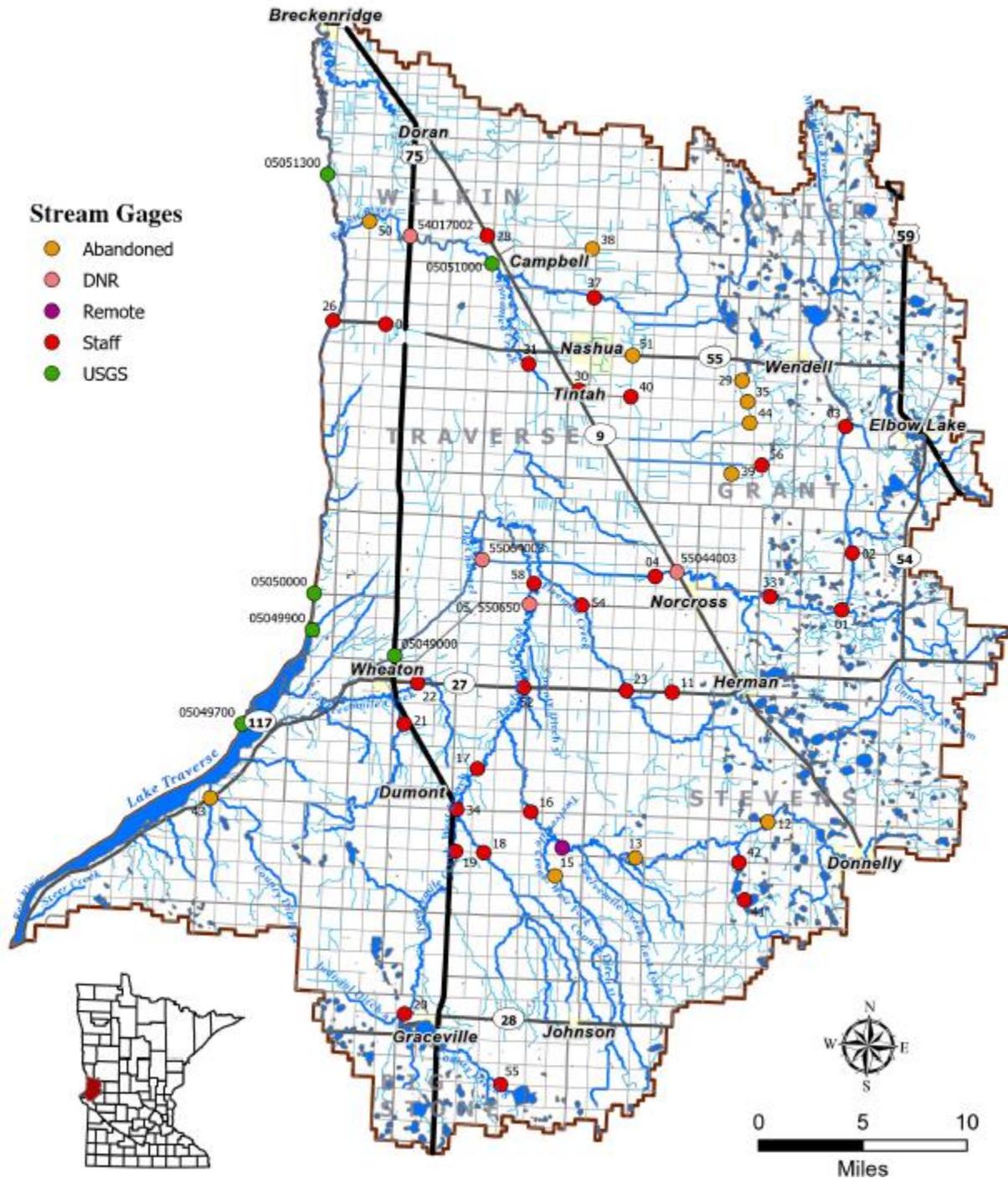
The 2022 Spring Flood events were approximately three – four weeks later in the year than previous events – extending into May. The District documented thirty-one damaged sites in Traverse, Wilkin, and Grant Counties. Many culverts were plugged with corn stalks and debris. A disaster declaration was signed by Minnesota Governor Walz in July of 2022, but did not include Wilkin or Grant Counties. Damages repaired by the District in Traverse County totaled \$59,757.85. A request for reimbursement has been placed with Minnesota HSEM.



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 seventy-five dollars (\$125.00) per gauge, per year, to help offset costs for accessing the gauge. Stream Gauge Data for 2021 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.



Other Construction Fund Activities

- **Permit Notification Policy:** Permit notices will be sent to both selected landowners and taxpayers of record (01/20/22).
- **Property Tax Exemptions:** Approval was given to request exemptions for District owned land purchased for public property used exclusively for public purposes (01/20/22).
- District Workshops
- **District Workshops:** The District held three workshops in Campbell, Herman, and Graceville. District staff and consultants presented at the workshops regarding District projects, including buffer establishment and maintenance.
- **Cover Crop Cost Share:** The District continued the third annual payment (of three) in the amount of \$5,000 to Wilkin SWCD for their cover crop program. Stevens SWCD was unable to use their funds in 2020 and a carryover into 2022 was approved (02/17/22, 04/21/22).
- **Redpath Bin Disposal:** There are two grain bins owned by the District that need to be disposed of prior to Redpath Construction; the District approved their removal (10/20/22).
- **Pickup Acquisition & Suburban Disposal:** The District's 2001 Chevrolet Suburban was requiring more frequent repairs. Staff purchased a 2022 Silverado with riparian funds, and 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).



Bois de Sioux
Watershed District

BOIS DE SIOUX
WATERSHED
DISTRICT:
Proposed Changes
to Rules, Policies,
and Bylaws

OhnstadTwichell
attorneys
Your life. Your law firm.

Lukas Croaker, Attorney

District Workshops were held in three locations in 2022.

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; in total, 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 2022 as an annual index, based on the Long Term Federal Interest Rate for December. For negative ditch funds, the amount used for 2022 was 4.34% (12/15/22).
- **Contractors Hired:** LM Road Services was contracted to spray cattails and remove trees and brush for Inspection Area 1 (04/22/22). Ditch maintenance contractors included: Ag Tech Drainage, Hormann Works LLC, Houston Engineering Inc, Industrial Builders Inc, Olson & Tile Excavating LLC, Pat and Greg Vold Farms, Schultz Welding, Wagner Company Inc, and Whaley Excavating & Concrete.
- **2022 Ditch Assessments (including bond payments):** \$858,647.00
- **2022 Ditch Assessments (excluding bond payments):** \$481,700.00
- **GIS Tool:** A web-based GIS tool was developed by Moore Engineering and Technician Troy Fridgen to more efficiently and effectively store annual drainage ditch inspection information. Ditch Area 3 inspections were ordered for 2022 (02/17/22).

Specific Activities by Ditch

- **JD 2:** Rip rap placed; snow removed
- **JD 6:** Repair/retrofit project closed
- **JD 11:** Repair/retrofit project closed; flood damages repaired
- **JD #12:** Side inlet cost-share; Cleaned-out; culvert installation; snow removed
- **JD #14:** Flood damages repaired
- **TCD #1E:** Culvert sized and replaced
- **TCD #1W:** Culvert sized
- **TCD #2:** Cleaned-out
- **TCD #4:** Snow removed
- **TCD #8:** Culvert trap; snow removed
- **TCD #9:** Cleaned-out; snow removed
- **TCD #10:** Cleaned-out
- **TCD #11:** Remove sediment and debris

- **TCD #17:** Cleaned-out; buried trees
- **TCD #24:** Snow removed
- **TCD #26:** Removal sediment and debris
- **TCD #27:** Cleaned-out; buried trees
- **TCD #28:** Arch pipe and band
- **TCD #31:** Snow removed
- **TCD #32:** Cleaned-out
- **TCD #40:** Snow removed
- **TCD #41:** Cleaned-out; buried trees; snow removed
- **TCD #42:** Culvert; snow removed
- **TCD #43:** Cleaned-out
- **TCD #46:** Clean aprons
- **TCD #51:** Cleaned-out; tree removed
- **TCD #52:** Culvert
- **WCD #Sub-1:**
- **WCD #8:** Culvert
- **WCD #9:** Cleaned-out
- **WCD #20:** Cleaned-out
- **WCD #35:** Cleaned-out
-



In partnership with Traverse SWCD, lined concrete mats are used to stabilize field outlets.

Ditch Petitions

- GCD #21
- WCD #Sub-1
- Petition approved for Felix Frish & Sons to use TCD #15 to outlet Parcel #03-0079000: SE1/4, Section 16, Range 46, Croke Township (126), Traverse County
- Petition approved for Todd Kemper to use TCD #11 to outlet Parcel #10-0019000: SE1/4, Section 5, Range 45, Redpath Township (128), Traverse County
- Petition approved for Steve Grimes to use TCD #15 to outlet Parcel #03-0075000: W1/2SW1/4 Section 15, Croke Township (126), Traverse County
- Petition approved for Bryan Crandall, on behalf of the Kathleen & Edwin Crandall Estate to use TCD #7 to outlet #09-0139-000: NW1/4 Section 31, Logan Township (127), Grant County
- Petition approved for Bryan Crandall, on behalf of the Kathleen & Edwin Crandall Estate to use TCD #51 to outlet #09-0139-000: NW1/4 Section 31, Logan Township (127), Grant County



This picture is an example of a culvert that is too short for its location, causing in-channel erosion and destabilization of the road approach.

SECTION FIVE – JOINT COMPREHENSIVE WATERSHED MANAGEMENT PLAN GOALS

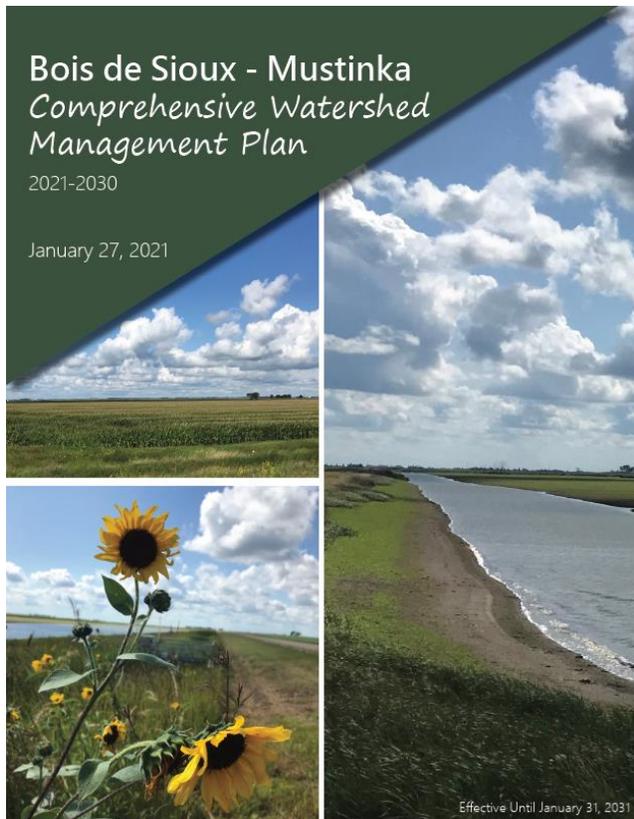
Process: One Watershed One Plan (1W1Plan)

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	\$42,670	Lightning Lake
	\$3,130	Fivemile Creek
	\$114,570	Doran Creek
	\$956,110	Drainage Systems & Right of Way Easements
	\$382,584	Lake Traverse Water Quality Improvement Project
	\$83,260	North Ottawa Flood Impoundment
	\$2,728,320	Redpath Flood Imp. & Mustinka River Rehab.
	\$1,970	Ring Dikes
	\$5,825	Eldorado / 640 th Ave Road Raise / Dollymount Twp / East Branch Twelvemile Creek

DATA COLLECTION PROGRAM	\$1,920	River Watch
	\$7,840	Stream Gages
	\$440	Rain Gages
	\$1,825	Advisory Committee

GENERAL FUND EDUCATION & OUTREACH PROGRAM	\$2,030	Annual Report
	\$1,220	Website
	\$17,970	Advertising, Notices, Financial Reports
	\$230	Text Notification System
	\$6,660	Workgroups, Conferences, Certifications, Public Meeting Facilitation

PROJECTS AND PRACTICES PROGRAM	\$182,250	Joint Comp. Watershed Management Plan
	\$826,920	Red River Watershed Management Plan Projects
	\$30,220	Clean Water Cost Share
	\$318,220	Culvert Sizing Cost Share
	\$629,230	Routine Drainage System Repairs
	\$5,000	SWCD Cover Crop Program

REGULATORY PROGRAM	\$170,785	Buffer Program & Workshops
	\$68,917	Floods/FEMA/HSEM
	\$285,330	Permitting
	\$1,660	Boundary Revisions
	\$10,240	Policy Reviews, Recodification & Retention Schedule
	-----	Drainage System Inspections (Reported w/Repairs)

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 - 2022: 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 ✓
Wilkin County Ditch #35	LT&BDS		Reestablishment of Records	260
Judicial Ditch #6	RR	Rabbit River	Completed Construction	417 ✓
Traverse County Ditch #35	LM&TMC	Twelvemile Creek and Mustinka River	Construction In Progress	230 ✓
Wilkin County Ditch Sub-1	LT&BDS	Bois de Sioux	Permitting & Funding Strategy	90
Lake Traverse Water Quality Imp. Project #1	LT&BDS	Lake Traverse	Phase 1 Complete Phase 2 Complete Phase 3 Construction Under Contract	Phase 1 = 750 ✓ Phase 2 = 450 ✓ Phase 3 = 2,250
Doran Creek Rehabilitation	LT&BDS		Design	890
Western 32 Flood Impoundment	RR		Site Investigations	TBD

Redpath Phase 2 - Mustinka River Corridor	LM&TMC	Mustinka River	Bid Document Preparation	235
Redpath Phase 2 - Flood Impoundment	LM&TMC	Mustinka River	Bid Document Preparation	TBD
E. Branch Twelvemile Creek	LM&TMC	Twelvemile Creek and Mustinka River	Site Investigations	TBD
EDUCATION & OUTREACH PROGRAM	PLANNING REGION	PRIORITY RESOURCE	PROGRESS	TONS/YR
River Watch Program	All	NA	Program continued	NA
REGULATORY PROGRAM	PLANNING REGION	PRIORITY RESOURCE	PROGRESS	TONS/YR
Ordinances & Permitting	All	NA	Program continued	NA
Law Requirements	All	NA	Program continued	NA
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



In-Channel Erosion

2021 - 2022: 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

COUNTY, TOWNSHIP, SECTION	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✓
Wilkin County Ditch Sub-1	LT&BDS	Permitting & Funding Strategy	TBD
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	Bid Document Preparation	260
Redpath Phase 2 – Flood Impoundment	LM&TMC	Bid Document Preparation	TBD
Available to all District SWCD's	Reported by SWCD	Funded Cover Crop Program	Reported by SWCD

2021 - 2022: 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.

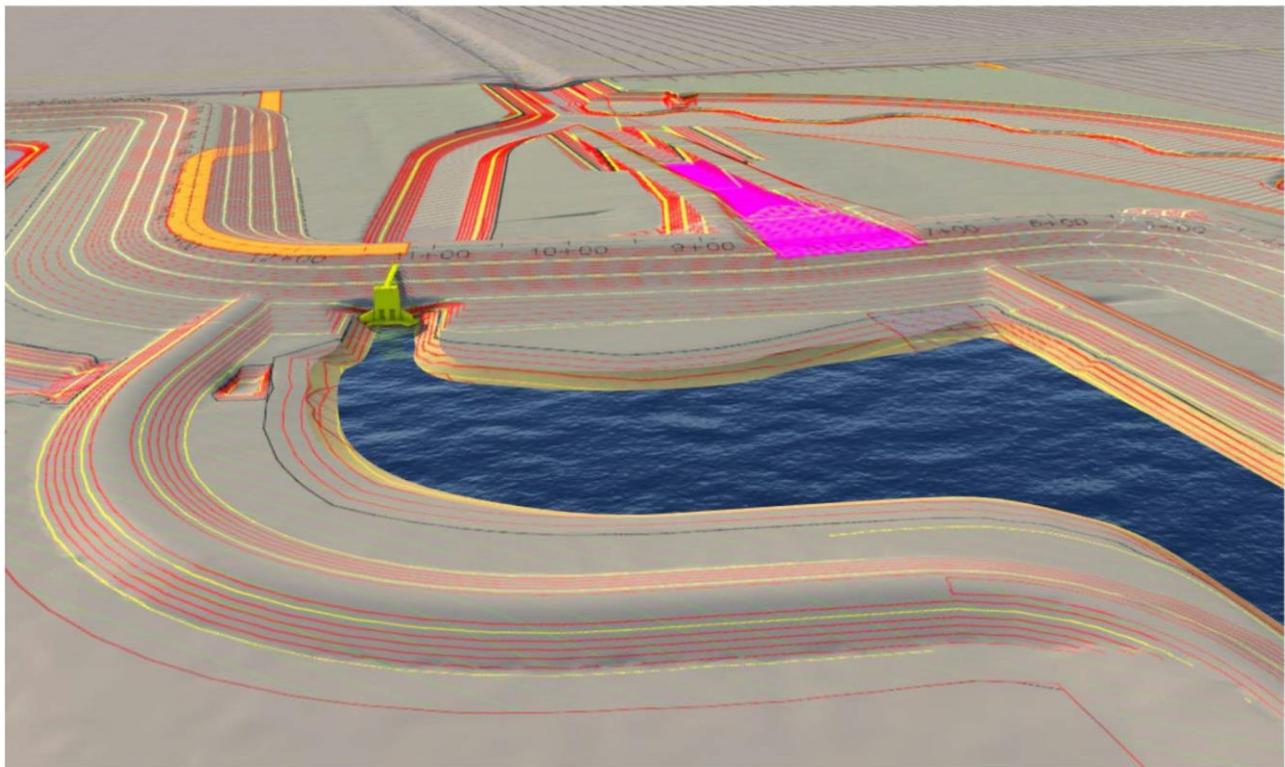
Planning Region Focus

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 ✓
Big Lake Project	TMC	Design	350
Western 32 Flood Impoundment	RR	Site Investigations	TBD
Redpath Flood Impoundment	LM&TMC	Bid Document Prep	22,500
E. Branch Twelvemile Creek	LM&TMC	Site Investigations	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	Data collection system initiated	NA
Maintain up-to-date culvert inventory	All	Ongoing	NA
Annual Dam Operation Process	All	Annual meeting requested	NA



Planned design of the inlet structure of the Mustinka River Rehabilitation Corridor and Redpath Impoundment Project

2021 - 2022: 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	Design and Permitting
Western 32 Flood Impoundment	RR	Wilkin County Highways, Township Roads	Site Investigations
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
Big Lake Project	TMC	Herman, MNDOT, Grant County Highway	Designment & Permitting

Redpath Flood Impoundment & Mustinka River Rehab.	LM&TMC	Traverse County Highway, Wilkin County Highway, MNDOT, Township Roads, Breckenridge	Phase 1 Construction Nearly Complete; Preparing Phase 2A Bid Package
E. Branch Twelvemile Creek	LM&TMC	MNDOT, Grant County Highway, Traverse County Highway, Township Roads	Site Investigations
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 system initiated	
Maintain up-to-date culvert inventory	All	Done	



Road washout, Spring Flood 2022

2021 - 2022: 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 (Assessment District)	Completed Construction
Wilkin County Ditch #9	RR	Benefitting Landowners (Assessment District)	Completed Construction
Wilkin County Ditch #8	RR	Benefitting Landowners (Assessment District)	
Judicial Ditch #11 Main Retrofit	LT&BDS	Benefitting Landowners (Assessment District)	Completed Construction
Wilkin County Ditch #35 Retrofit	LT&BDS	Benefitting Landowners (Assessment District)	Reestablishment of Records
Judicial Ditch #6 Retrofit	RR	Benefitting Landowners (Assessment District)	Completed Construction
Traverse County Ditch #35			
Wilkin County Ditch #Sub-1	LT&BDS	Benefitting Landowners (Assessment District)	Design & Permitting
Western 32 Flood Impoundment	RR	Downstream landowners	Site Investigations
Mustinka Corridor	UM	Benefitting Landowners (Assessment District)	Grant County Design and Permitting

Samantha & Elbow Lake Project	UM	Elbow/Samantha Lake Landowners	Samantha Outlet Installed 2020; Elbow Lake Design
Big Lake Project	TMC	Adjacent and Downstream landowners	Designment & Permitting
Redpath Flood Impoundment & Mustinka River Rehab.	LM&TMC	Downstream Landowners in Mustinka and Rabbit River. Wheaton	Phase 1 Construction Nearly Complete; Preparing Phase 2A Bid Package
E. Branch Twelvemile Creek	LM&TMC	Landowners along TCD 8 and Twelvemile Creek	Site Investigations
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	2022 – Technician worked with road authorities directly	
Maintain up-to-date culvert inventory	All	Done and ongoing	
MDM Plan Development	All	Initiated data collection system	



Private property is threatened by flooding, Spring Flood 2022

2021 - 2022: 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		2.5✓
BdSWD	Wilkin County Ditch #8	RR		7.5✓
BdSWD	Wilkin County Ditch #9	RR		13.5✓
BdSWD	Judicial Ditch #11	LT&BDS	Yes	9✓
BdSWD	Judicial Ditch #6	RR	Yes	8✓
BdSWD	Traverse County Ditch #35	LM&TC		5✓
BdSWD	Judicial Ditch #14 (Mustinka River Rehab)	LM&TC		Corner✓
BdSWD	Wilkin County Ditch #Sub-1	LT&BDS		8
BdSWD	Grant County Ditch #21	TMC		TBD
BdSWD	Wilkin County Ditch #25	RR		TBD
BdSWD	Lake Traverse Water Quality Imp. Project #1: Overlaps w/TCD #52	LT&BDS	Yes	Phase 1 = 0.6✓ Phase 3 = 1
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	Initiated data collection system	NA
BdSWD	Maintain up-to-date permits and records	All	Ongoing	NA

2021 - 2022: 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		2.5✓
BdSWD	Wilkin County Ditch #8	RR		7.5✓
BdSWD	Wilkin County Ditch #9	RR		13.5✓
BdSWD	Judicial Ditch #11	LT&BDS	Yes	9✓
BdSWD	Judicial Ditch #6	RR	Yes	8✓
BdSWD	Traverse County Ditch #35	LM&TC		5✓
BdSWD	Judicial Ditch #14 (Mustinka River Rehab)	LM&TC		Corner✓
BdSWD	Wilkin County Ditch #Sub-1	LT&BDS		8
BdSWD	Grant County Ditch #21	TMC		TBD
BdSWD	Wilkin County Ditch #25	RR		TBD
BdSWD	Lake Traverse Water Quality Imp. Project #1: Overlaps w/TCD #52	LT&BDS	Yes	Phase 2 = 0.3
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	Initiated data collection system	NA
BdSWD	Maintain up-to-date permits and records	All	Ongoing	NA

2021 - 2022: 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 PTMApp.

CAPITAL IMPROVEMENT PROJECTS	PLANNING REGION	PRIORITY RESOURCE	PROGRESS	LBS/YR
Traverse County Ditch #37	TMC		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		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 Construction Phase 3 Construction Under Contract	188✓ 113✓ 565
Doran Creek Rehab	LT&BDS		Design	170
Western 32 Flood Impoundment	RR		Site Investigations	TBD
Redpath Phase 2 – Mustinka River	LM&TMC	Mustinka River	Bid Document Prep	72
Redpath Phase 2 - Flood Impoundment	LM&TMC	Mustinka River	Preparing Phase 2A Bid	TBD

E. Branch Twelvemile	LM&TMC	Twelvemile Creek and Mustinka River	Site Investigations	UNKNOWN PROJECT DESIGN
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 - 2022: 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 Construction Phase 3 Construction 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	Preparing Bid	8
Redpath Phase 2 - Flood Impoundment	LM&TMC	Mustinka River	Preparing Phase 2A Bid	TBD
E. Branch 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 - 2022: 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 2023:

2023 ACTIVE DEVELOPMENT & CONSTRUCTION		
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	<u>103E Ditches</u>	<u>103D Watershed Projects</u>
2022 Construction Carryover	TCD #35	
2023 Active Development & Construction	GCD #21 WCD #Sub-1 Improv.	LTWQIP No. 1 Phase No. 3 Lightning Lake Outlet Redpath Impoundment & Mustinka River Rehab. 640 th Ave Road Raise
2023 Prelim. Development	WCD #25	Doran Creek Enhancement Moonshine Lakebed Redpath Collection Channel Fivemile Creek Rehabilitation
2023 Minor Repairs	WCD #20 WCD #35	
Identified for Future	JD #12 TCD #8 TCD #52 GCD #3	Fivemile Creek Rehabilitation

- The Bois de Sioux Watershed District will conduct the necessary procedures to maintain the 414.9 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 that they are currently a part of. 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 Rabbit River, Bois de Sioux, Five Mile Creek, Moonshine, and TCD #52 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 2023 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 equivalent 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 - 2022	
JD #12	WCD #25 Outlet Repairs Rabbit River	WCD #Sub-1 450 LBS/YR PHOS 90 TONS/YR SED 8 MILES STAB/ADEQU 10 ACRES PE Bois de Sioux River	TCD #35 65 LBS/YR PHOS 230 TONS/YR SED 5 MILES STAB/ADEQU 9.72 ACRES PE Twelvemile Creek	WCD #20 Outlet Repairs Rabbit 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		GCD #21 Reductions TBD		WCD #35	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					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
GCD #3					WCD #18 Grade Stabilization Cost Share Program Wilkin SWCD Rabbit River	JD #12 Field Side Approach Project Rabbit River

2023 103D WATERSHED PROJECTS

Identified Need for Future Project	Preliminary/Feasibility & Landowner Meetings	Active Development	In Construction	Active Minor Projects	Completed 2017 – 2022	
	Moonshine Lakebed Project	Doran Creek Enhancement	LTWQIP No. 1 Phase 3 565 LBS/YR TP 2250 TONS/YR SED 1 MILE STAB/ADEQ 35.37 ACRES PE Lake Traverse	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
	Fivemile Creek Rehabilitation	Grant County Mustinka River Corridor Project	Lightning Lake Outlet IMPROVE HYDRAULIC CAPACITY, LOWER VELOCITIES, IMPROVE FISH PASSAGE	North Ottawa Impoundment Collection channel repairs Stop logs for bays	2019, 2020, 2021, 2022 Lined Waterways Project Traverse County & Traverse SWCD	2020 Grade Stabilization Cost Share Program Wilkin SWCD
		Grant County Elbow Lake Flood Control Outlet	Redpath Flood Impoundment TBD 22,500 AC-FT STORAGE		Wilkin & Stevens SWCD Cover Crop Program 2020 – 2022	2020 Buffer Seeding Cost Share Program Wilkin & Traverse SWCDs
			Redpath Phase 2 - Mustinka River 72 LBS/YR TP 235 TONS/YR SED 8 MILES STAB 260 ACRES PE			TCD #23 Lined Waterways Traverse County & Traverse SWCD Fivemile Creek
			640 th Ave Road Raise FLOOD HAZARD MITIGATION			TCD #31 Lined Waterways Traverse County & Traverse SWCD Twelvemile Creek
						Grant County Lake Samantha Flood Control Outlet Olson Construction Elbow Lake – 51 AC-FT

PROJECT GRANT FUNDING SOURCES				
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
	BWSR Legacy Amendment Clean Water WBIF Grant #1	12/31/23*	\$115,000	FULL FUNDING RECEIVED
	RRWMB Base Funding Grant	12/31/23	\$100,000	\$0
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	\$0
	BWSR Legacy Amendment Clean Water WBIF Grant #2	12/31/25**	\$100,000	\$0
	RRWMB Water Quality Grant	12/31/24	\$1,200,000	\$0
	DNR Conservation Partners Legacy Grant	06/30/25	\$400,000	\$0
	BWSR Legacy Amendment Clean Water Project Grant	12/31/24	\$800,000	\$400,000
TCD #35	RRWMB Funding Agreement	GRANT CLOSED	\$1,000,000	FULL FUNDING RECEIVED
	BWSR Legacy Amendment Clean Water MDM Grant	12/31/24	\$320,000	\$288,000
MUSTINKA RIVER RHB.	Lessard Sams Outdoor Heritage Grant	06/30/24	\$2,440,000	\$0
	RRWMB Water Quality Grant	07/31/23	\$507,000	\$0
	LCCMR Grant	06/30/25	\$2,692,000	\$0
	BWSR Legacy Amendment Clean Water Project Grant	12/31/24	\$800,000	\$0
REDPATH IMPNDMNT	Flood Hazard Mitigation Grant	07/26/25	\$800,000	FULL FUNDING RECEIVED
	RRWMB Funding Commitment	NA	\$16,850,000	\$5,667,000
RETROFITS, TBD	BWSR Legacy Amendment Clean Water WBIF Grant #2	12/31/25**	\$370,000	\$0
FIVEMILE CREEK STUDY	BWSR Legacy Amendment Clean Water WBIF Grant #2	12/31/25**	\$100,000	\$0
LIGHTNING LAKE OUTLET	DNR Conservation Partners Legacy Grant	TBD	\$500,000	\$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	\$532,261

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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PROJECTS WITH GRANTS CLOSED IN 2022

PROJECT	SOURCE	EXPIRATION	ORIG. AMOUNT	AMOUNT RECEIVED
JD #11	BdSWD Project Development/Clean Water Cost Share	GRANT CLOSED	\$327,000	FULL FUNDING RECEIVED
	BdSWD 75% Equalization Policy	GRANT CLOSED	\$114,641	FULL FUNDING RECEIVED
	MN-DOT Road Crossing Cost Share	PAYMENT REC'D	\$291,961	FULL PAYMENT RECEIVED
	BWSR Legacy Amendment Clean Water MDM Grant	GRANT CLOSED	\$327,000	FULL FUNDING RECEIVED
	Traverse SWCD Buffer Cost Share	GRANT CLOSED	\$13,521	FULL FUNDING RECEIVED
	Wilkin SWCD Buffer Cost Share	GRANT CLOSED	\$2,038	FULL FUNDING RECEIVED
JD #6	BWSR Legacy Amendment Clean Water MDM Grant	GRANT CLOSED	\$356,359	FULL FUNDING RECEIVED
	BWSR Legacy Amendment Clean Water WBIF Grant #1	12/31/23*	\$148,000	FULL FUNDING RECEIVED
LTWQIP #1 PHASE #2	BdSWD Project Development/Clean Water Cost Share	GRANT CLOSED	\$100,000	FULL FUNDING RECEIVED
	RRWMB Water Quality Grant	GRANT CLOSED	\$277,973	FULL ELIGIBILITY RECEIVED
	BWSR Legacy Amendment Clean Water Project Grant	GRANT CLOSED	\$418,235	FULL FUNDING RECEIVED
	BWSR Legacy Amendment Clean Water WBIF Grant #1	GRANT MOVED	\$279,431	APPLY TO PHASE 3



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Bois de Sioux Watershed District

Audit Results

Year Ended December 31, 2022



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Governance Communications

Governance Communications

Our responsibility under Generally Accepted Auditing Standards

- **Express an opinion** on the financial statements in accordance with basis of reporting as permitted by the MN Office of the State Auditor
- Plan and perform the audit to **obtain reasonable, not absolute, assurance**
- **Evaluate internal controls** over financial reporting – no opinion on internal controls
- Utilize a **risk based** audit approach

Planned scope and timing of the audit

- Performed the audit according to the **planned scope** previously communicated during planning discussions



Governance Communications

Other information in documents containing audited financial statements

- Financial statements may only be **used in their entirety**
- **Our approval** is required in order to use our audit reports in any client prepared documents

Significant accounting policies

- **Management is responsible** for the accounting policies
- Outlined in **Note 1** to the financial statements
- Change in reporting for 2022 – regulatory to cash basis

Management representation letter

- Management provided a management representation letter in conjunction with the **approval of the audited financial statements**



Governance Communications

We experienced

- **No Delays** in issuing the audit
- **No issues** discussed prior to retention as independent auditors
- **No disagreements** with management regarding accounting, reporting, or auditing matters
- **No consultations** with other independent accountants

Adjusting, proposed, and passed adjusting journal entries

- **Adjusting journal entries** – none
- **“Passed” adjusting journal entries** – To recognized interest earned on a CD totaling \$1,555.



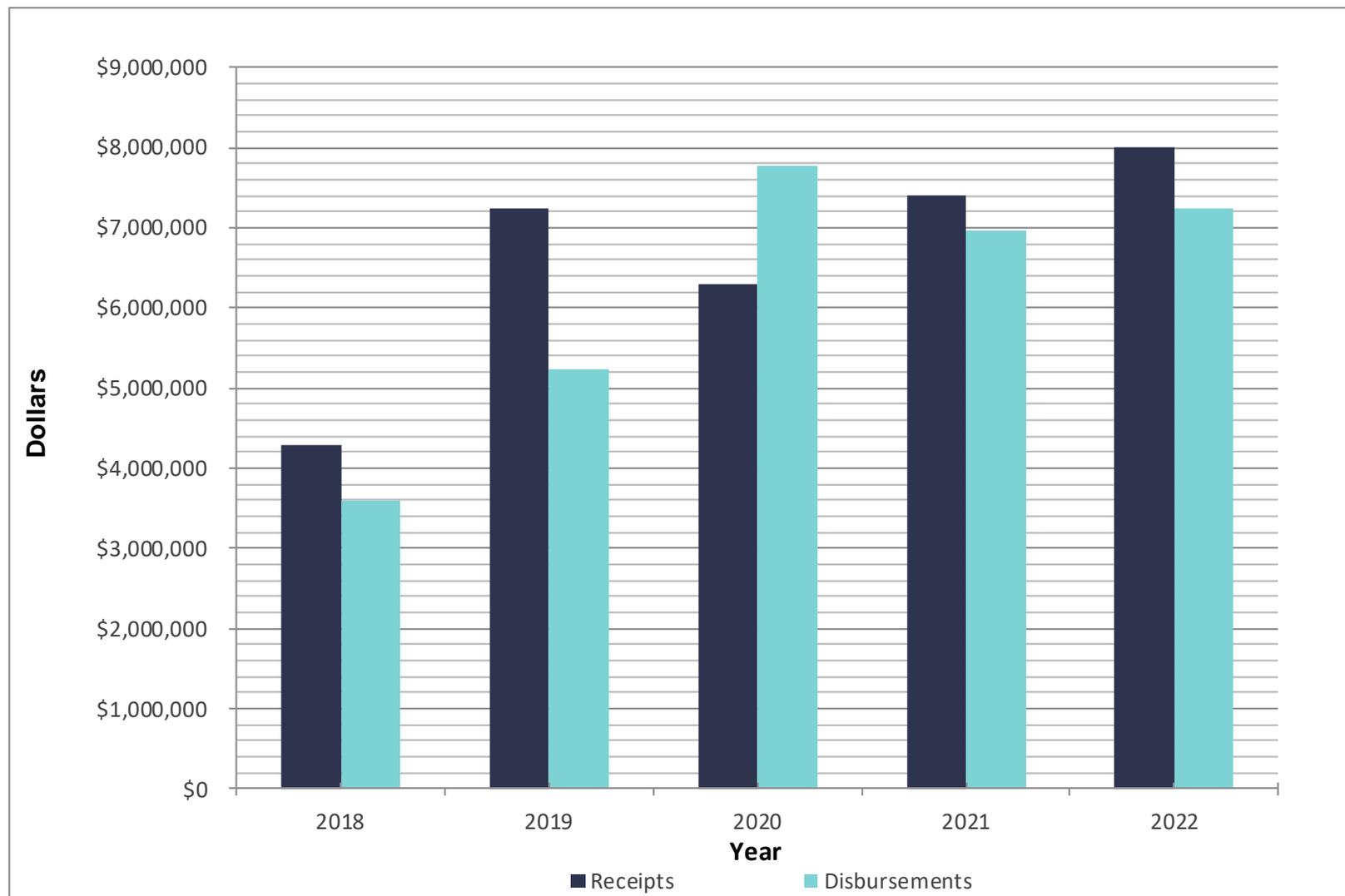


Financial Statement Highlights

Financial Statement Highlights

Total Receipts and Disbursements

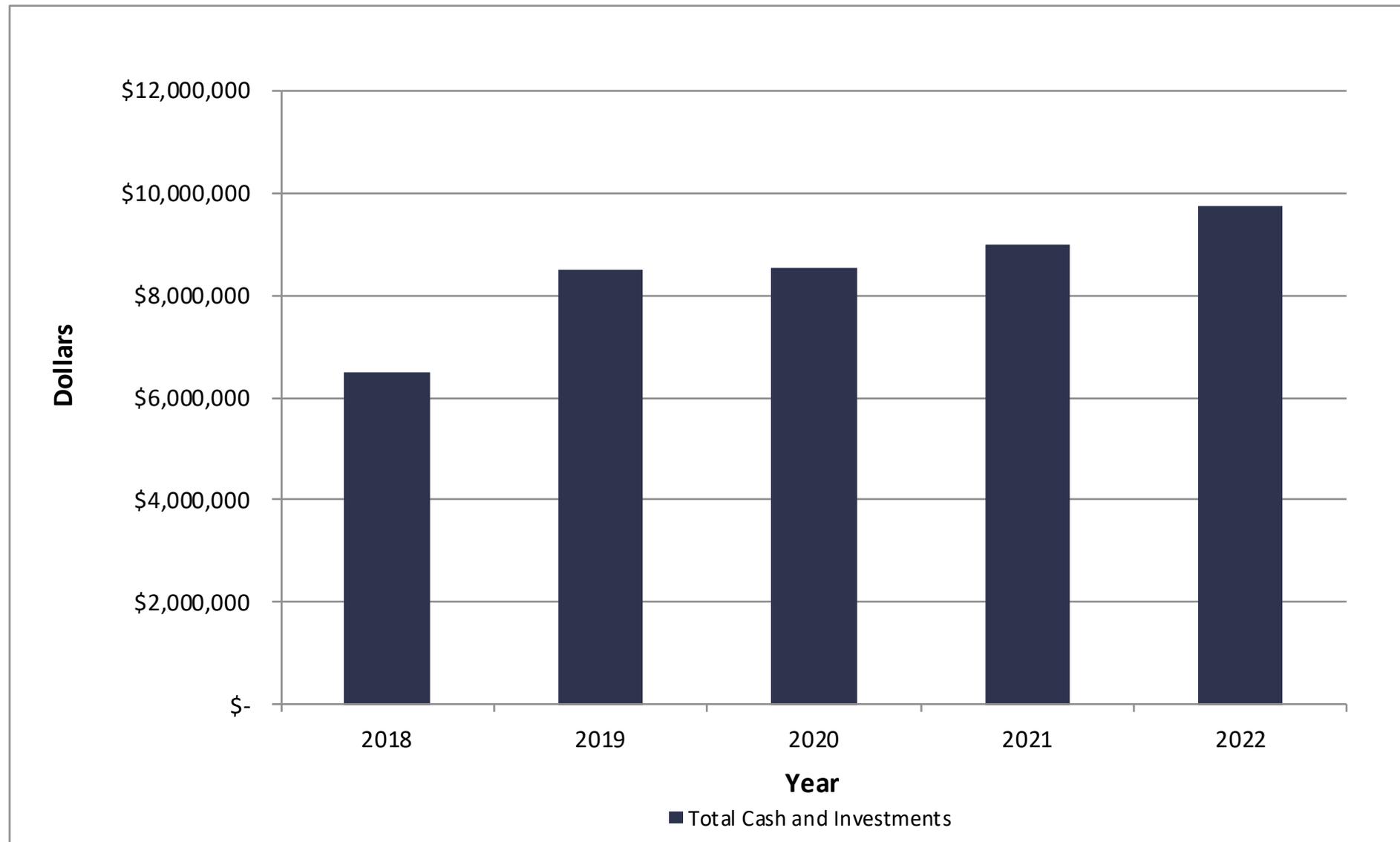
	2018	2019	2020	2021	2022
Receipts	\$ 4,283,604	\$ 7,237,444	\$ 6,306,683	\$ 7,404,976	\$ 7,998,548
Disbursements	3,584,948	5,243,446	7,783,695	6,968,768	7,231,635



Financial Statement Highlights

Total Cash Levels at Year-End

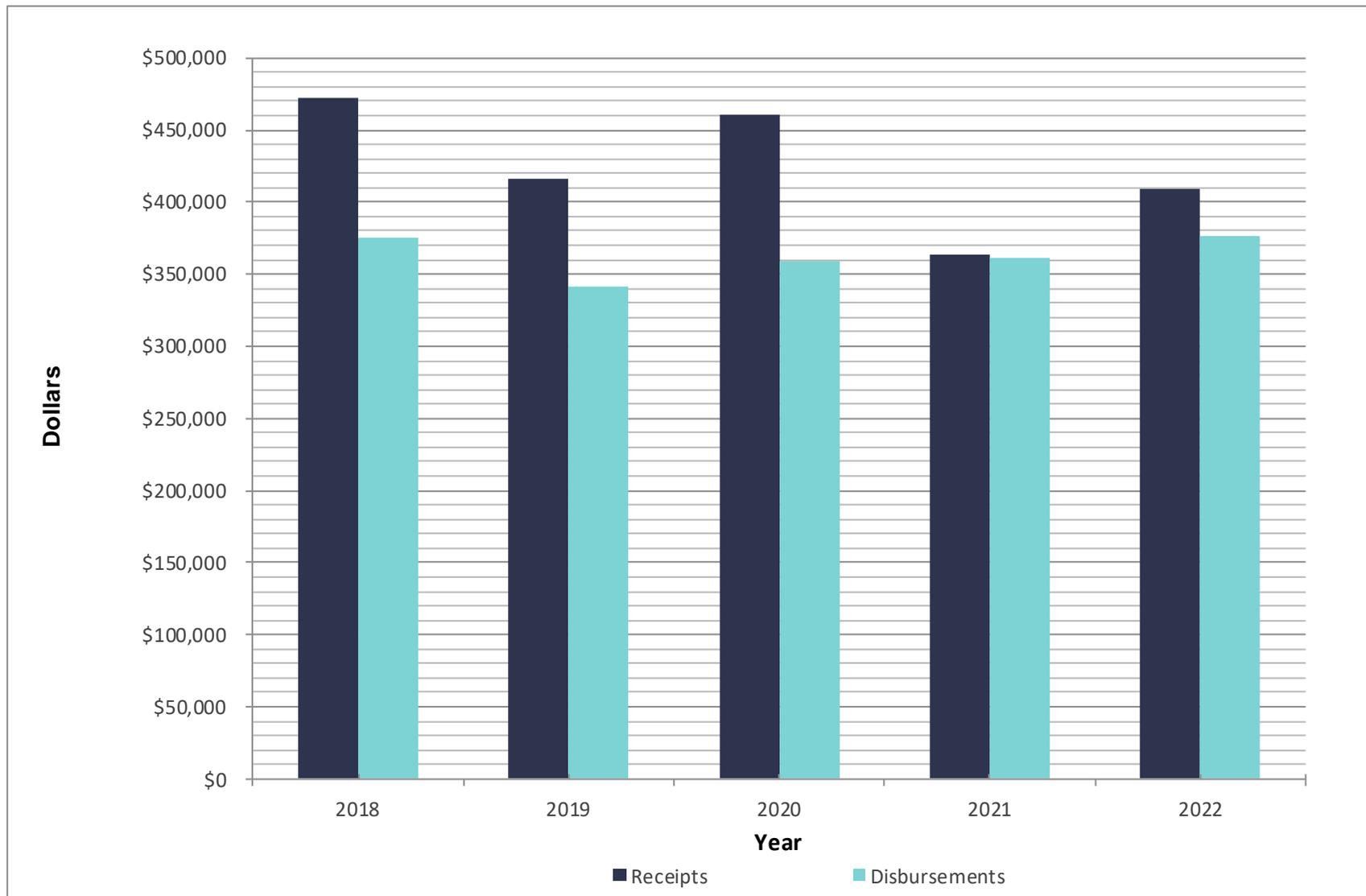
	2018	2019	2020	2021	2022
Total Cash and Investments	\$ 6,511,089	\$ 8,490,615	\$ 8,543,603	\$ 8,979,811	\$ 9,746,724



Financial Statement Highlights

General Fund Receipts and Disbursements

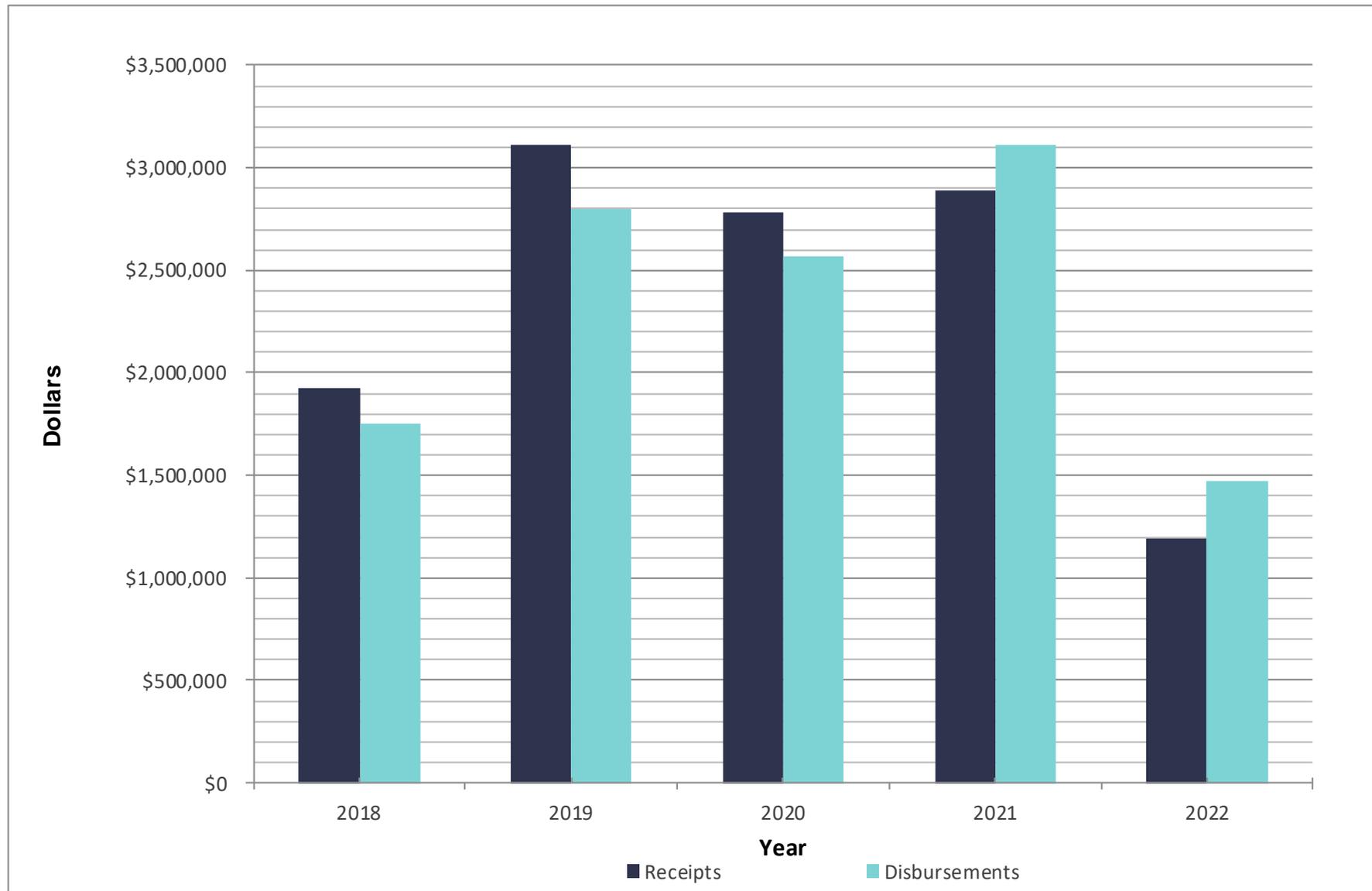
	2018	2019	2020	2021	2022
Receipts	\$ 472,479	\$ 416,290	\$ 460,582	\$ 363,853	\$ 409,411
Disbursements	374,760	341,360	358,566	361,263	377,007



Financial Statement Highlights

Ditch Fund Receipts and Disbursements

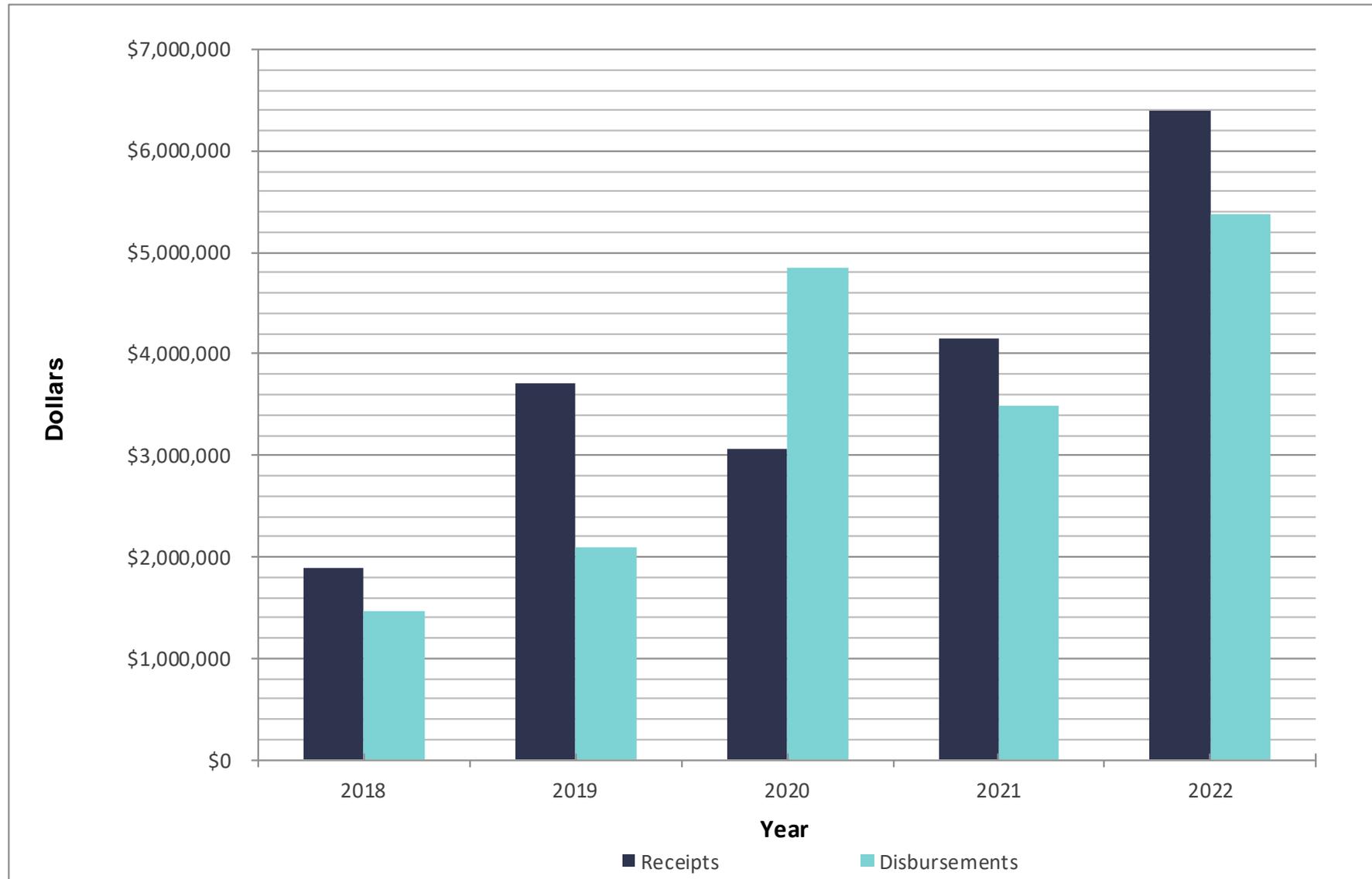
	2018	2019	2020	2021	2022
Receipts	\$ 1,923,807	\$ 3,111,816	\$ 2,779,535	\$ 2,886,453	\$ 1,190,193
Disbursements	1,749,355	2,802,549	2,572,354	3,114,591	1,475,262



Financial Statement Highlights

Construction Fund Receipts and Disbursements

	2018	2019	2020	2021	2022
Receipts	\$ 1,887,318	\$ 3,709,338	\$ 3,066,566	\$ 4,154,670	\$ 6,398,944
Disbursements	1,460,833	2,099,267	4,852,775	3,492,914	5,379,366





Financial Statement Internal Control and Compliance

Financial Statement Internal Control and Compliance

- Material Weaknesses
 - 2022-001: Financial Reporting Process
 - 2022-002: Limited Segregation of Duties
- Significant Deficiency
 - None reported





Minnesota Legal Compliance

Minnesota Legal Compliance

- Compliance Findings
 - None in current year



Thank you!

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