BOARD OF WATER AND SOIL RESOURCES 520 LAFAYETTE ROAD NORTH ST. PAUL, MN 55155 WEDNESDAY, JUNE 28, 2023

<u>AGENDA</u>

9:00 AM CALL MEETING TO ORDER

PLEDGE OF ALLEGIANCE

ADOPTION OF AGENDA

MINUTES OF MAY 24, 2023 BOARD MEETING

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

CONFLICT OF INTEREST DECLARATION

A conflict of interest, whether actual, potential, or perceived, occurs when someone in a position of trust has competing professional or personal interests, and these competing interests make it difficult to fulfill professional duties impartially. At this time, members are requested to declare conflicts of interest they may have regarding today's business. Any member who declares an actual_conflict of interest must not vote on that agenda item. All actual, potential, and perceived conflicts of interest will be announced to the board by members or staff before any vote.

REPORTS

- Chair & Administrative Advisory Committee Gerald Van Amburg
- Executive Director John Jaschke
- Audit & Oversight Committee Joe Collins
- Dispute Resolution and Compliance Report Travis Germundson/Rich Sve
- Grants Program & Policy Committee Todd Holman
- RIM Reserve Committee Jayne Hager Dee
- Water Management & Strategic Planning Committee Joe Collins
- Wetland Conservation Committee Jill Crafton
- Buffers, Soils & Drainage Committee Mark Zabel
- Drainage Work Group Neil Peterson/Tom Gile

AGENCY REPORTS

- Minnesota Department of Agriculture Thom Petersen
- Minnesota Department of Health Steve Robertson
- Minnesota Department of Natural Resources Sarah Strommen
- Minnesota Extension Joel Larson
- Minnesota Pollution Control Agency Melissa Lewis

ADVISORY COMMENTS

- Association of Minnesota Counties Brian Martinson
- Minnesota Association of Conservation District Employees Mike Schultz
- Minnesota Association of Soil & Water Conservation Districts LeAnn Buck

- Minnesota Association of Townships Eunice Biel
- Minnesota Watersheds Jan Voit
- Natural Resources Conservation Service Troy Daniell

NEW BUSINESS

1. Historical Context: Tribes – Melissa King and Craig Engwall – **INFORMATION ITEM**

COMMITTEE RECOMMENDATIONS

Administrative Advisory Committee

1. Bylaws Update – John Jaschke – **DECISION ITEM**

Grants Program and Policy Committee

- 1. Rock County Soil and Water Conservation District Watershed Project Tracking Grant Justin Hanson *DECISION ITEM*
- 2. Approval of FY23 Water Quality and Storage Pilot Grant Program Funding Recommendations Rita Weaver – **DECISION ITEM**
- 3. FY 2024 CWF Competitive Grants Policy and RFP Criteria Annie Felix-Gerth DECISION ITEM
- 4. Fiscal Year 2024 and 2025 Natural Resources Block Grants Authorization James Adkinson **DECISION ITEM**
- 5. Fiscal Year 2024 and 2025 Technical Service Area Grants Authorization James Adkinson **DECISION ITEM**

Central Region Committee

1. North Fork Crow River Comprehensive Watershed Management Plan 2018-2028 Plan Amendment – Steve Christopher – *DECISION ITEM*

UPCOMING MEETINGS

• Joint summer tour and meeting, August 23-24, 2023.

ADJOURN

BOARD DECISION #

BOARD OF WATER AND SOIL RESOURCES

BOARD ORDER

Fiscal Year 2023 Water Quality and Storage Pilot Grant Program Awards

PURPOSE

Authorize the FY23 grant awards for the Water Quality and Storage Pilot Grant Program.

RECITALS / FINDINGS OF FACT

- A. Laws of Minnesota 2021, 1st Special Session, Chapter 6, Article 1, Sec. 4(I), appropriated \$2 million in Fiscal Years 22-23 to a water quality and storage program. The remaining funds in the FY22-23 appropriation at an approximate amount of \$1,143,854.
- B. Laws of Minnesota 2023, Regular Session, Chapter 60, Article 1, Sec. 4(p), appropriated \$17 million in Fiscal Years 24-25 to a water quality and storage program.
- C. Laws of Minnesota 2021, 1st Special Session, Chapter 6, Article 2, Sec. 80 provides the statutory authority for the Water Quality and Storage Program (Minn. Stat. 103F.05), and includes the purposes of the Program that are "to control water volume and rates to protect infrastructure, improve water quality and related public benefits, and mitigate climate change impacts", identifies eligible practices, and establishes that the priority areas for the program are the Minnesota River basin and the lower Mississippi River basin.
- D. Based on board order #23-05, staff opened the application period for the Water Quality and Storage Pilot Grant Program in April 2023. The application period closed May 4, 2023.
- E. Six (6) applications were received requesting \$3,075,027. Board Staff reviewed the applications for eligibility and determined that five (5) applications are eligible. After ranking and scoring the applications Board staff recommend that two (2) projects be fully funded and one (1) project be partially funded, which will utilize the remaining funds in the FY22-23 appropriation. Board staff further recommend that the project partially funded by the FY22-23 appropriation be fully funded using the FY24-25 appropriation.
- F. The BWSR Senior Management Team, at their June 13, 2023 meeting, reviewed the proposed grant awards and recommended approval to the Grants Program and Policy Committee.
- G. The Grants Program and Policy Committee, at their June 26, 2023 meeting, reviewed the proposed grant awards and recommended approval to the Board.

ORDER

The Board hereby:

- 1. Approves the allocation of funds to three applicants in the amounts listed as follows:
 - Area II (C23-0019): \$140,214.00 FY22-23 appropriation
 - Area II (C23-0018): \$584,813.00 FY22-23 appropriation
 - Bois de Sioux Watershed District (C23-0011): \$1,000,000 partial funding with the remaining FY22-23 funds and remaining funding from the FY24-25 funds
- 2. Authorizes staff to enter into grant agreements for these funds.

Dated at St. Paul, Minnesota, June 28, 2023.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

Date: _____

Gerald Van Amburg, Chair Board of Water and Soil Resources

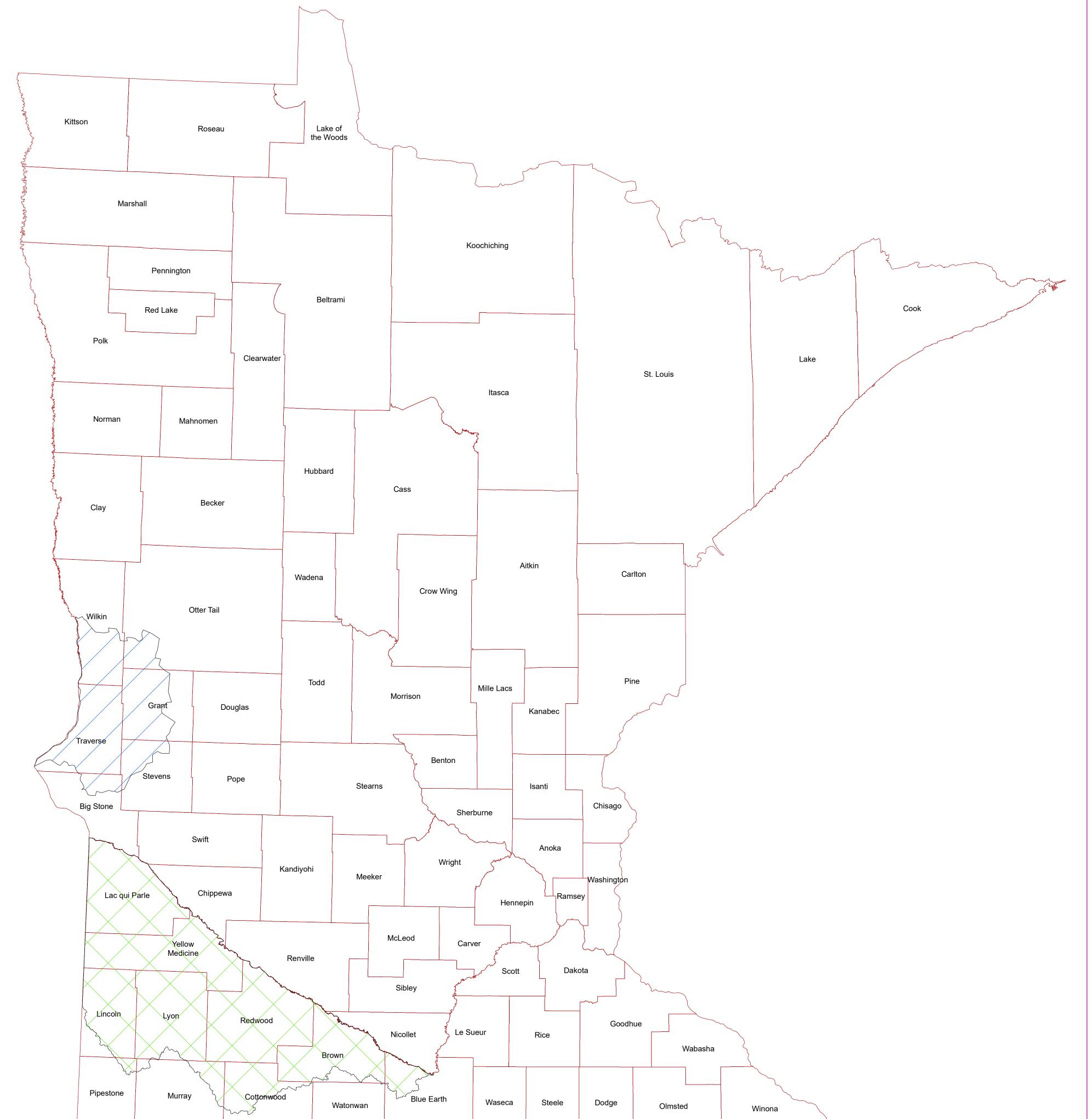
	AMOUNT		R	ECOMMENDED	
GRANT ID	REQUESTED	RATING		FUNDING	PROJECT TYPE
C23-0010	\$450,000.00	46.6	\$	-	Stormwater ponds in residential area
C23-0011	\$1,000,000.00	75.6	\$	1,000,000.00	Flood storage impoundment
C23-0013	\$700,000.00	55.6	\$	-	Stormwater treatment
C23-0017	\$200,000.00	INELIGIBLE	\$	-	Floodplain Storage
C23-0018	\$586,813.00	82.2	\$	586,813.00	Flood Reduction Structure
C23-0019	\$140,214.00	82.2	\$	140,214.00	Terraces and Grade Stabilization Structure

 Total FY22-23 funds:
 \$
 1,143,854.98

 Total FY24-25 Funds:
 \$
 583,172.02

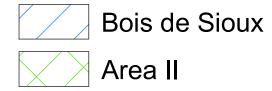
Total award: \$ 1,727,027.00

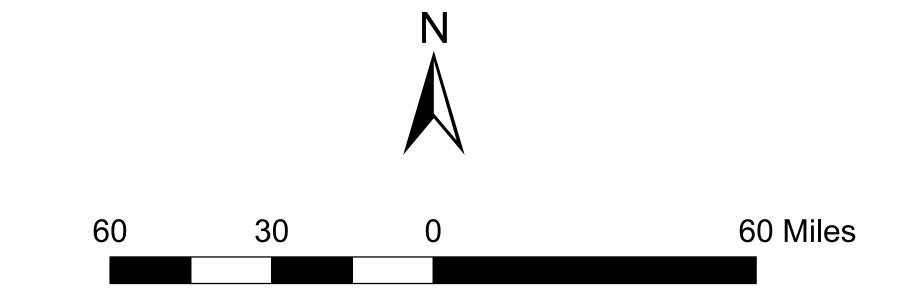
Water Quality and Storage Pilot Grant Program – FY23 Recommended Funding



Rock	Nobles	Jackson	Martin	Faribault	Freeborn	Mower	Fillmore	Houston

Recommended Funding Recipients





BOARD DECISION #____

BOARD OF WATER AND SOIL RESOURCES

BOARD ORDER

Fiscal Year 2024 Clean Water Fund Competitive Grants Program

PURPOSE

Authorize the fiscal year 2024 Clean Water Fund Competitive Grants Program and adopt fiscal year 2024 Clean Water Fund Competitive Grant Policy

FINDINGS OF FACT / RECITALS

- 1. The Laws of Minnesota 2023, Chapter 40, Article 2, Section 6 (b) appropriated \$8,500,000 for the fiscal year 2024 Clean Water Fund Projects and Practices Competitive Grants Program with up to 20 percent available for land-treatment projects and practices that benefit drinking water.
- 2. BWSR has received prior appropriations consistent with the criteria for this competitive grant program.
- 3. The Board has authorities under Minnesota Statutes §103B.3369 and 103B.101 to award grants and contracts to accomplish water and related land resources management.
- 4. On May 22 and June 26, 2024, the Grants Program and Policy Committee reviewed the proposed fiscal year 2024 Clean Water Fund Competitive Grants Request for Proposals criteria and Competitive Grant Policy, and recommended approval to the Board.

ORDER

The Board hereby:

- 1. Adopts the attached fiscal year 2024 Clean Water Fund Competitive Grant Policy.
- Authorizes the fiscal year 2024 Clean Water Fund Competitive Grants Program according to the attached ranking criteria for the FY 2024 Clean Water Fund Competitive Grants Request for Proposal. The program consists of Projects and Practices and the Projects and Practices – Drinking Water Subgrant.
- 3. Authorizes staff to shift and otherwise utilize unallocated funds from prior Clean Water Fund fiscal years to the fiscal year 2024 Clean Water Fund Projects and Practices Competitive Grant Program.
- 4. Authorizes staff to finalize and issue a Request for Proposals based on the amounts available for each of the programs listed including any remaining funds that have not been allocated from prior fiscal years.

Dated at St. Paul, Minnesota, this June 28, 2023.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES

Date: _____

Gerald Van Amburg, Chair Board of Water and Soil Resources

Attachments: FY 2024 Clean Water Fund Competitive Grants Request for Proposal Criteria FY 2024 Clean Water Fund Competitive Grant Program Policy

FY 2024 Clean Water Fund Competitive Grants Request for Proposal Criteria

Projects and Practices Ranking Criteria							
Ranking Criteria	Maximum Points Possible						
<u>Project Abstract</u> : The project abstract succinctly describes what results the applicant is trying to achieve and how they intend to achieve those results.	5						
<u>Prioritization (Relationship to Plans)</u> : The proposal is based on priority protection or restoration actions listed in or derived from the current state approved and locally adopted plan for the project area (see plans listed in 'Applicant Eligibility' of this RFP) and is linked to statewide Clean Water Fund priorities and public benefits.	20						
<u>Targeting</u> : The proposed project addresses identified critical pollution sources or risks impacting the water resource(s).	25						
<u>Measurable Outcomes and Project Impact</u> : The proposed project has a quantifiable reduction in pollution for restoration projects or measurable outputs for protection projects and directly addresses the water quality concern identified in the application.	20						
<u>Cost Effectiveness and Feasibility</u> : The application identifies a cost effective and feasible solution to address the non-point pollution concern(s).	15						
<u>Project Readiness</u> : The application has a set of specific activities that can be implemented soon after grant award.	15						
Total Points Available	100						

Drinking Water Protection Ranking Criteria						
Ranking Criteria	Maximum Points Possible					
<u>Project Abstract</u> : The project abstract succinctly describes what results the applicant is trying to achieve and how they intend to achieve those results.	5					
Prioritization (Relationship to Plans): The proposal is based on priority actions listed in an approved local water management plan or a state approved plan (Minnesota Department of Health approved drinking water (source water) protection plan such as a wellhead protection plan, wellhead protection action plan and surface water intake plan.	20					
Targeting: The proposed project addresses pollution sources or risks directly impacting drinking water sources. The project is either in an area designated as a Drinking Water Supply Management Area, vulnerable to groundwater contamination, high groundwater sensitivity, or in an area with elevated levels of contamination that pose a risk to human health.	35					
<u>Project Impact</u> : The proposed project reduces pollution sources posing the greatest risk to drinking water sources.	30					
Project Readiness: The application has a set of specific activities that can be implemented soon after grant award.	10					
Total Points Available	100					

BOARD OF WATER AND SOIL RESOURCES

BWSR-NRCS training introduces conservation engineering skills





TTCP funding is split between Clean Water Funds and federal dollars through an NRCS contribution agreement. Details about TTCP training resources are available on the <u>TTCP web page</u>. weeklong training designed for conservation staffers new to their positions reinforced classroom instruction with hands-on practice assessing resource concerns and weighing engineering options in the field.

Introduction to Conservation Engineering drew 21 Natural Resources Conservation Service (NRCS) and soil and water conservation district employees from throughout the state to the Brainerd area in early May. Technical staff from NRCS and the Minnesota Board of Water and Soil Resources (BWSR) shared their expertise through 17 sessions that included a focus on waterways, wetlands, watering systems, streambanks, soils and surveying.

The goal of the training was to present an overview of engineering practices and how they function,





Top: Trainers led discussions about potential erosion concerns and potential solutions during a May 10 field visit to a Morrison County dairy farm, part of the Introduction to Conservation Engineering training. **Above:** Wright County-based NRCS soil conservation technician Cassidy Voeltz, left, and Cottonwood County-based NRCS soil conservation technician Kiara Tomassini listened to a discussion about water and sediment control basins. **Photo Credits:** Ann Wessel, BWSR

where to best implement them, and what skills are needed to plan them. The training serves as a confidencebooster for employees who will work with landowners, coordinate with other agency staff, and may decide to VIDEO: NRCS Assistant State Conservation Engineer Lea Holter discusses benefits of the hands-on training.



St. Paul-based NRCS Agricultural Engineer Mike Krcmarik, **left**, one of four presenters during the May 10 Morrison County field tour, and Benton County SWCD technician Megan Tritz, **right**, listened to a discussion about feedlots. **Middle:** Elk River-based NRCS Area Engineer Craig Peterson led a discussion about feedlots. **Photo Credits:** Ann Wessel, BWSR

pursue additional in-depth trainings.

"I think the important thing is to understand how engineering practices fit into addressing resource concerns for landowners," said NRCS Assistant State Conservation Engineer Lea Holter. "It'll give them, I think, a better foundation for when they work with landowners and understand the unique challenges and opportunities."

On most days, the group spent mornings in the classroom and afternoons outside.

After a presentation about surveying terminology, note-

66 It's very important to get them out on a working farm so they can see the topography, how certain practices can fit into the operation and the landscape.

 Lea Holter, NRCS assistant state conservation engineer

keeping and equipment, the group spent one afternoon conducting four mock waterway surveys. The NRCS and SWCD staffers shot and recorded centerline stations, cross-sections, turning points and benchmarks using laser levels — something most attendees had never used.

Before a Morrison County dairy farm visit, that morning's classroom presentations covered typical resource concerns and common engineering practices used in conjunction with livestock facilities. NRCS design engineer Mike Krcmarik's enthusiasm for the topic was evident when he tasked attendees with overcoming obstacles to get nutrients from livestock waste (represented by a steady, unyielding stream of colorful balls) onto their fields. The "farmers" could enlist engineers and planners to help improve nutrients' storage, timing and utilization.

That afternoon, the group toured livestock holding facilities, compared manure storage types, and discussed what sorts of concerns a landowner might have. While standing atop a water and sediment control basin



NRCS and SWCD staffers new to conservation engineering got a look at a feed storage pad during the May 10 field visit to a Morrison County dairy farm.

built to stop gully erosion in a nearby field, presenters discussed hydrology determination and project construction — topics explained in the classroom earlier.

Conservation staffers elaborated on the benefits of a training approach that combined classroom sessions and field visits.

"I am a visual learner," said Benton County SWCD technician Megan Tritz, adding that the field visits allowed the group "to go out and actually see what projects they have done and to be able to visualize other possible practices that could be installed out there."

Pope County-based NRCS soil conservationist Cole Montgomery commented on another station that afternoon where erosion was a resource concern: "It helped to put into perspective which erosion control practices work better for different sites and how they would fit in with the current farming direction."

"We really want to focus on the interaction between the planners and the landowners. So it's very important to get them out on a working farm so they can see the topography, how certain practices can fit into the operation and the landscape," Holter said during the dairy farm visit.

One afternoon in Crow Wing County, conservation staffers dug into soils and geology of Minnesota. After an on-site overview, NRCS geologist Miranda Berge and resource soil scientist Brandon DeFoe led hands-on demonstrations, using a Giddings probe — a truck-mounted hydraulic





Top: The object of one classroom exercise was to guide plastic balls as they flowed from "farm headquarters" out to "cropland." Bottom: Pope County-based NRCS soil conservationist Cole Montgomery, left, and Joseph Kaseforth of the Pipestone SWCD learned how to properly shoot and label a temporary benchmark during the weeklong Introduction to Conservation Engineering. Photo Credits: Aaron Peter, BWSR

drill — and hand tools to extract soil samples, and then learn about texturing soils for engineering practice design.

Goodhue County-based NRCS soil conservation technician Emily Voelker commented on that segment of training: "I learned it's important to know and dive into your area's geological and soil information, as it varies a ton across the state. I also learned of many resourceful apps you can use while out in the field."

Throughout the five-day training, group exercises and icebreakers helped to build professional connections among the SWCD and NRCS attendees, whose job duties, experiences and backgrounds varied. One **66** I learned it's important to know and dive into your area's geological and soil information, as it varies a ton across the state. I also learned of many resourceful apps you can use while out in the field.

—Emily Voelker, Goodhue County-based NRCS soil conservation technician

activity allowed staffers to anonymously ask trainers questions about things like job advancement and benefits. Another put them in groups for a paper airplanebuilding contest.

"As simple and silly as some of the activities seemed, it allowed me to very easily connect with others in the evenings and as the week went on. I developed what I would consider new friendships," Voelker said.

Montgomery added: "It also was just enjoyable to hear about how different parts of the state function and the different types of projects that people work on in the diverse landscapes of Minnesota."

NRCS and BWSR staff coordinated the Technical Training and Certification Program (TTCP) course, which was designed to provide high-level overviews. Attendees learned about additional TTCP training opportunities where they can hone skills specific to their job duties.

BOARD OF WATER AND SOIL RESOURCES

2023 Legislative Session delivers myriad conservation investments







The Minnesota Legislature allocated \$155 million from the Clean Water Fund to BWSR for the 2024-25 biennium to support competitive grants, Watershed-Based Implementation Funding, easements and other conservation priorities.

Conservation efforts overseen by the Minnesota Board of Water and Soil Resources (BWSR) will benefit from funding allocations and policy changes passed during the 2023 Legislative Session. These significant investments in conservation provide new funding for emerging initiatives, continued funding for existing programs and support for Gov. Tim Walz's Climate Action Framework for natural and working landscapes. Highlights are covered in this wrap-up; see BWSR's website for a more in-depth 2023 BWSR Legislative Summary that includes complete funding breakdowns.

General fund

The Minnesota Legislature passes a biennial budget during oddnumbered years. BWSR's general fund budget for fiscal years 2024 and 2025 (FY24-25) supports ongoing grant programs, agency operations, easement stewardship and Wetland Conservation Act implementation. Many of these programs were funded at the same levels as the previous biennium. New fiscal years begin on July 1.

Changes include a one-time increase for county Natural Resources Block Grants, a one-time increase for southwest Minnesota's Area II Minnesota River Basin Projects' floodplain management, and ongoing funding for a BWSR tribal liaison. Noteworthy one-time general fund appropriations this biennium include: \$21 million for soil health efforts; \$17 million for water quality and storage; \$4 million for the Lawns to Legumes Program; \$1 million for the Habitat Friendly Utilities Program; \$4 million for the Habitat Enhancement Landscape Program (HELP); \$21 million for grassland easements; \$9 million for peatland easements; \$4 million to enhance existing easements and \$3 million for Conservation Reserve Program (CRP) state incentives.

Clean Water Fund

The Legislature approved the Clean Water Council's recommendation for BWSR to receive \$155 million from the Clean Water Fund (CWF) this biennium. Nearly 90% will go to local governments for conservation implementation. Funding highlights include: \$79 million for Watershed-Based Implementation Funding; \$17 million for competitive projects and practices grants; \$11 million for accelerated implementation grants and \$10 million for wetland restoration easements.

This year's Clean Water, Land and Legacy Act Bill appropriated more than \$318 million from the CWF

From left: The Minnesota Senate passes legislation in the senate chamber; "The Progress of the State," a gilded quadriga statue, perches atop the Minnesota State Capitol; the Minnesota House of Representatives passes leaislation in the house chamber. Photo Credits: Minnesota **Historical Society**

across state government for the 2024-25 biennium.

New this year: The

2023 Omnibus Tax Bill established Soil and Water Conservation District (SWCD) Aid as a direct payment from the Minnesota Department of Revenue to SWCDs. Previously, this funding came from the CWF.

Outdoor Heritage Fund

Through the approved Clean Water, Land and Legacy Amendment Bill, BWSR will receive funding for six projects as recommended by the Lessard-Sams Outdoor Heritage Council:

• \$4.1 million: Reinvest in Minnesota (RIM) Reserve for wetlands

• \$3.3 million: RIM Reserve for One Watershed, One Plan

• \$2.7 million: RIM Reserve for grasslands

• \$2.7 million: RIM Reserve for working lands

\$2.1 million: Camp Ripley Army Compatible Use Buffer (ACUB) Program
\$1.5 million: Buffalo-Red River Watershed District stream habitat

Environment and Natural Resources Trust Fund

The Environment Omnibus Bill passed this year included funds from the Environment and Natural Resources Trust Fund (ENRTF) for projects recommended





BWSR's general fund budget for fiscal years 2024 and 2025 supports ongoing grant programs, agency operations, easement stewardship and Wetland Conservation Act implementation.

by the Legislative-Citizens Commission on Minnesota Resources (LCCMR). BWSR is listed as a collaborator with three programs: Statewide Forest Carbon Inventory and Change Mapping, Conservation Cooperative for Working Lands, and Increasing Diversity in Environmental Careers. Language updates to a 2022 BWSR appropriation to reflect efforts for the Watershed and Forest Restoration: What a Match! project were also included.

Capital investment

The Legislature approved a total of \$2.6 billion of capital investment funding this year via two bills — one containing general obligation bonds and another for general fund spending. These bills included four BWSR appropriations and funding for additional Minnesota Department of Natural Resources (DNR) flood hazard mitigation projects. The DNR projects, to the extent practicable and consistent with the project. shall create wetlands that are eligible for wetland replacement credit in BWSR's Local Government Road Wetland Replacement Program.

Policy changes

Multiple BWSR-related policy provisions passed as part of the Environment Omnibus Bill:

Program updates:

New statute language creates frameworks for the following programs: Lawns to Legumes, RIM, RIM Working Lands, Habitat Friendly Utilities and the HELP program. A framework was also developed for an initiative that supports soil health practices.

Easement stewardship

accounts: These changes will allow BWSR to use existing stewardship accounts to undertake critical maintenance of water management structures that are located on BWSR-managed easements.

Wetland banking: Updated language improves the state's valuable wetland banking program, which generates mitigation credits to offset negative impacts to wetlands.

Drainage Work Group (DWG) expectations:

The omnibus bill requires the DWG to review a drainage authority's power on various provisions including abandonment, reconstruction, or dismantling of watercontrol structures. Language in the bill also directs BWSR and the DWG to evaluate and develop recommendations on outlet adequacy and public notice requirements for proposed public drainage.

Updates for conservation

practices: New language reflects BWSR's efforts to work on conservation practices such as habitat restoration and climate work in addition to existing water quality practices.

Clarify ability to work with tribal governments and others: Provisions

in the bill extend BWSR's opportunities for collaboration, including grant agreements and conservation practices, with partners outside of its traditional clientele of local governments.

Updates to recognize future funding

opportunities: Updates were made to existing cost-share statute language for grants to SWCDs. This change creates more flexibility and reflects the opportunity to use a framework for potential funding from the federal government and other nonstate sources.

Clarify watershed districts authority for establishing

projects: Updated language clarifies that following a project hearing, watershed district managers will initiate the project through an establishment order.

Compensation: BWSR Board members' daily compensation cap increased from \$75 to \$125.

BOARD OF WATER AND SOIL RESOURCES

2023 July Snapshots Subscribe to <u>Snapshots</u>

Collaborations, grants buoy North Shore stormwater fixes



Left: Apprentices placed with the Lake County SWCD through Conservation Corps Minnesota & lowa sampled the discharge from a stormwater pipe outletting into Agate Bay in Two Harbors. Agate Bay is impaired for E. coli. Below: A stormwater pipe discharged directly into Agate Bay. It's one of three that outlet directly into the bay. Photo Credits: Lake County SWCD



The three North Shore communities' stormwater management plans drew from Watershed-Based Implementation Funding. The Clean Water Fund supports WBIF. One Watershed, One Plan implementation funds were used to identify needs and begin project implementation for three North Shore communities' stormwater management plans. Tailored to each community, the plans guide work to alleviate flooding, address bacteria and sediment impairments and improve drainage. The plans incorporate Watershed-Based Implementation Funding (WBIF) and available outside funds.

Prior to European settlement, the Anishinaabe were the primary inhabitants along the north shore of Lake Superior. The landscape was mostly forested; rain and snowmelt followed natural channels, streams and rivers to Lake Superior. Much of the North Shore landscape remains forested. But the discovery of iron ore and extensive logging in the late 1800s and early 1900s changed the landscape and flow patterns. Two Harbors, aptly named because of its two harbors (Burlington Bay and Agate Bay), was well positioned to ship iron ore. As taconite



production replaced higher-grade iron ore, 28 miles up the shore, the city of Silver Bay was established in 1954 as a taconite processing and shipping center.

Today, privately owned parcels and communities dot the shore, following historic Highway 61 and other major roads. The Lake Superior North (LSN) Comprehensive Watershed Plan developed under the One Watershed, One Plan program (and approved by the Minnesota Board of Water and Soil Resources [BWSR] in January 2017) identified these "urban nodes" as areas where stormwater treatment and management would benefit streams as well as Lake Superior.

Over time, streets and storm sewers carried runoff directly to Lake Superior without treatment. This runoff carries sediment and pollutants to the lake, which can negatively impact fish.

In Two Harbors, for example, multiple stormwater outlets discharge directly into Agate Bay and Skunk Creek, a stream that runs through town and outlets into Burlington Bay. Two Harbors' aging, original sewer and stormwater infrastructure was incorrectly connected in the older parts of town before the sewer was established. Both Burlington Bay and Agate Bay are impaired for E. coli bacteria; Skunk Creek is impaired for E. coli and sediment.

The concept of a stormwater management plan for Two Harbors grew from the Lake County Soil and Water Conservation District (SWCD) and stakeholders' work on the LSN plan. Funding for the plan — which identified projects that would help improve stormwater drainage while reducing bacteria and sediment drew from WBIF and local dollars.



Above: A hydrodynamic separator was installed to collect sediment from stormwater pipes before it's discharged into Skunk Creek. Below left: A health advisory sign posted at Agate Bay indicated high levels of E. coli bacteria. The Minnesota Department of Health conducts weekly Lake Superior beach monitoring from Memorial Day to Labor Day. Below right: Stormwater drains into Burlington Bay. Photo Credits: Lake County SWCD



"The North Shore is a highly valued, beautiful place, and it's impressive to see everyone come together to plan for a healthy, sustainable watershed. Watershed planning and the implementation funds allow opportunities to incorporate projects that address water quality and quantity concerns while leveraging federal funds to make the project a success," said Lake County SWCD District Manager Tara Solem.

Lake County SWCD staff helped Two Harbors staff and their contracted

engineers to reference and implement the stormwater plan and the LSN plan. Together, the stormwater plan and the LSN plan led to the installation of two hydrodynamic separators installed in conjunction with a road improvement project, and supported by WBIF from BWSR. The hydrodynamic separators separate sediment from stormwater before it's discharged into Skunk Creek.

The Lake County SWCD also received a \$250,000 U.S. Army Corps of Engineers (USACE) grant to implement stormwater treatment and filtration incorporating hydrodynamic separators plus native vegetation planted on the boulevard in a three-block road reconstruction project. That project could begin as early as this summer.

Additionally, a \$750,000 grant the SWCD received from the Great Lakes **Restoration Initiative** program will allow the SWCD to davlight stormwater that is discharging into Agate Bay, moving the stream out of the pipe and above ground. The planned two-stage ditch enhanced with biochar is designed to curb the bacteria impairments that have periodically affected the beach. Together, the Two Harbors Stormwater Management and LSN plans have leveraged more than \$1 million in grant funding to assist with stormwater treatment and enhanced filtration.

The city of Silver Bay completed its stormwater management plan in March, drawing from WBIF and <u>Minnesota's Lake</u> <u>Superior Coastal Program</u> funds from the Minnesota Department of Natural Resources (DNR). Projects addressing stormwater quality and quantity are being planned.

Lake County SWCD engineer Derrick Passe was instrumental in coordinating the grant application and project design.

"Neither Two Harbors nor Silver Bay is an MS4 (short for "municipal separate storm sewer system") city; meaning there is no state mandate for municipal stormwater management. Creating these stormwater management plans in collaboration with these cities allows us to augment traditional capital improvement plans by adding features that will target sediment and bacteria removal from the stormwater runoff," Passe said.

Elsewhere along the North Shore, the Lake County Highway Department and Lake County SWCD collaborated to hire a consultant to create a Knife River Stormwater

The North Shore is a highly valued, beautiful place, and it's impressive

to see everyone come together to plan for a healthy, sustainable watershed.

- Tara Solem, Lake County SWCD district manager

Management Plan. This was supported by WBIF via Clean Water Funds, coastal funding from the DNR, and climate resiliency funding from the Minnesota Pollution Control Agency. Slated for completion in fall 2023, the Knife River Stormwater Management Plan addresses flooding, drainage, green infrastructure options, and long-term county road planning.

An SWCD-hosted public meeting to hear citizens' priorities regarding the Knife River Stormwater Management Plan drew roughly 45 people who shared their concerns about flooding, drainage problems, and their ideas about where to incorporate green infrastructure and rain gardens.

"I'm excited about local government collaboration and coordination with citizen input on stormwater planning and resiliency and the ability to incorporate green infrastructure enhancements into these projects," Solem said.

BOARD OF WATER AND SOIL RESOURCES

First 7 miles of Whiskey Creek restoration show effectiveness









BWSR awarded two Clean Water Fund grants totaling \$660,000, to the Wilkin SWCD for gully stabilization and stream restoration — \$320,000 in 2019, and \$340,000 in 2021. **B** RECKENRIDGE — Work is planned for this season on the third phase of a \$7 million Whiskey Creek restoration designed to improve water quality, water quantity and wildlife habitat in and along the 20-mile-long Red River tributary and two ditches that outlet into the creek and add 9 miles to the project.

Related upland practices bring the total cost to \$9.9 million.

The project fixes decades-old erosion and flooding problems stemming from sediment buildup. It directly affects about 650 landowners. But the benefits of phosphorus and nitrogen reduction here extend north to Lake Winnipeg, which has experienced blue-green algae blooms. Native plants and grasses buffering the remeandered creek will create a swath of wildlife habitat stretching from the Rothsay area to the Red River near Kent.

"We're cleaning this out and rechannelizing, and we are improving our water quality. We are improving our water quantity; and we're creating wildlife habitat and we're adding aquatic habitat," said Kim Melton, Wilkin Soil & Water Conservation District (SWCD) technician. "Restoring Whiskey Creek, really it's got multiple benefits."

Those benefits include reducing instances of frequent farmland flooding.

The 2.8-mile-long remeander completed in August 2022 brings the length of remeandered stream to 7.1 miles. The Buffalo-Red River Watershed District (BRRWD) awarded the contract for the next, 3.1-mile-long segment to Ehlert Excavating of Breckenridge, which completed the previous work.

The BRRWD seeks and approves project funding. Staff from the Wilkin SWCD and the USDA's Natural Resources Conservation Service (NRCS) work directly with landowners on voluntary conservation projects.

Melton and NRCS District Conservationist Jon Quast surveyed the contractor's progress in early August 2022.

Backhoes and bulldozers excavated a winding channel, which ranges from 2.5 to 3 feet deep, and built the berms that contained the wider, shallower riparian corridor.



VIDEO: Phase 2 remeandering

Left and right: A crew from Ehlert Excavating dug the new, remeandered channel and harvested sod to stabilize the banks of Whiskey Creek on Aug. 2, 2022, near Breckenridge. This second phase of construction created 2.8 miles of remeandered stream within a 2.1-mile-long corridor. It connected to Phase 1 work completed in fall 2021, which created 4.3 remeandered stream miles within a 3.3-mile corridor along Minnesota Highway 9. Middle: From left: BWSR Board Conservationist Pete Waller, Wilkin SWCD technician Kim Melton and NRCS District Conservationist Jon Quast stopped along segments of Whiskey Creek to see previous and current restoration work. Photo Credits: Ann Wessel, BWSR



Melton and Quast discussed progress of the Whiskey Creek project on Aug. 2, 2022, as they walked along a newly remeandered stream segment in Wilkin County near Breckenridge.

Remeandering the oncestraightened channel will help to slow velocity, curb bank erosion and avoid the sedimentation build-up that caused break-out flooding and cut gullies into fields. Spring melt and heavy rains will spill over into the riparian corridor. The constructed berms are designed to handle a 10-year flood event, and to stop overland flooding from contributing sediment and nutrients to the stream.

"Before this project was started, this was a big slough. It was farmed up (to the banks) on both sides," Melton said during a stop overlooking a segment constructed in fall 2021. "It was wide. It was flat. It was full of cattails and sediment, and farmers contributed nutrients into (the stream). It was backed up. It did not flow. ... It was an impaired stream that did not function."

Beaver dams and downed trees exacerbated the problem.

"Now we see this beautiful two-stage channel that's going to help water move

Whiskey Creek Funding Sources

Federal, state and local sources support the Whiskey Creek restoration. (And the water management district's assessment of benefiting landowners covers expenses that aren't covered by grants, and builds a long-term maintenance fund.) Starting with the largest award, the grants include:

NRCS' NATIONAL WATER

QUALITY INITIATIVE AWARD: \$2.9 million, received in 2020, available over four years; a partnership among NRCS, state agencies and the U.S. Environmental Protection Agency, providing targeted funding for financial and technical assistance in small watersheds with great need and where conservation practices can make the most difference

OUTDOOR HERITAGE FUND: \$2 million, available via the Minnesota Department of Natural Resources' Stream Habitat Program

off the landscape," Melton said. The buffer, she said, will add wildlife habitat, and it will prevent sediment and the pollutants it carries from entering Whiskey Creek.

A \$2.9 million National

MPCA: About \$1 million, available in four four-year cycles starting in 2020, via an EPA Small Watersheds Focus Program pilot; designed to restore impaired waters, prevent degradation, provide long-term funding for targeted water bodies

BWSR CLEAN WATER FUNDS:

Two grants totaling \$660,000, both awarded to Wilkin SWCD for gully stabilization and stream restoration; \$320,000 awarded in 2019, \$340,000 awarded in 2021

U.S. FISH & WILDLIFE SERVICE:

\$50,000 via USFWS' Great Plains Fish Habitat Partnership

RED RIVER BASIN FLOOD

DAMAGE REDUCTION WORK GROUP: More than \$25,000; the DNR and the Red River Basin Watershed Management Board co-chair the group; it recommends funding for projects from bond funds administered by the DNR's Flood Hazard Mitigation program

Water Quality Initiative (NWQI) award from NRCS leveraged federal, state and local funds — including \$1 million in U.S. Environmental Protection Agency (EPA) grants available through the Minnesota Pollution Control Agency (MPCA), \$2 million in Outdoor Heritage Funds via the Minnesota Department of Natural Resources (DNR), and \$660,000 in Clean Water Fund grants from the Minnesota Board of Water and Soil Resources (BWSR).

Combined funding sources reduced landowners' share to less than 10%.

"Overall, we have had really supportive landowners. A lot of them saw the success of (the <u>Wolverton Creek</u>) project," said BRRWD Administrator Kristine Altrichter. "I think they see it as an opportunity to accomplish the goals that they have for their land."

Pat Freese said he looked forward to work slated for 2024, which could restore to its historic channel the 0.75-mile-long stretch of Whiskey Creek that is encroaching on the buildings in his Nordick Township farmyard.

Last summer, he watched the Whiskey Creek project take shape about a mile to the south. He has seen drone



From left: Quast, Waller and Melton took a closer look at a buffer bordering Whiskey Creek on Aug. 2, 2022, near Breckenridge.

footage of the Wolverton Creek restoration and has seen that project's mature buffer plantings.

"As time goes along, hopefully the rest of the Whiskey Creek project will be undertaken, it will be cleaned up, and it will look similar in nature to what they did there," Freese said.

"It's going to clean out the sediment that has built up over the past 50 to 100 years, and allow the creek to flow better," Freese said.

The BRRWD formed a water management district through which benefiting landowners are assessed.

"The benefit to the landowner is not only a reduction in annual flooding across their cropland and (a reduction in) crop loss. It also reduces soil erosion from their land, and head-cutting when those waters rise rapidly in the spring," Quast said.

By reducing field and streambank erosion, the targeted best management practices landowners are implementing throughout the Whiskey Creek watershed will curb sediment- nitrogen- and phosphorus-loading. Whiskey Creek is impaired for turbidity, bacteria, dissolved oxygen and macroinvertebrates.

Clean Water Fund grants

66 The remeander of Whiskey Creek is going to create miles-long wildlife habitat in the corridor, basically leading from the head of Whiskey Creek all the way to the Red River.

-Jon Quast, NRCS district conservationist

supported the two-stage channel construction, and the practices landowners installed

to reduce

sediment

Altrichter

and pollutants. The NWQI funding supported practices landowners installed related to channel restoration, streambank restoration and buffer strips.

Quast, who has since taken a job with NRCS in North Dakota, elaborated on the buffers' wildlife benefits:

"This is a fairly large increase in the available amount of habitat that we have in this area. We're talking acres and acres of thoroughfare," Quast said. "You're talking deer, pheasants, turkeys, fox, your aquatic species in the stream, your invertebrates, water birds, herons — you name it. Anything that you can think of that's in the western prairie will probably end up



Freese

making its way through here."

> SWCD staff will inspect and maintain the buffers and the riparian

corridor, which ranges from 250 to 770 feet wide, depending upon how much land property owners wanted to enroll in permanent easements.

Voluntary <u>Minnesota</u> <u>Conservation Reserve</u> <u>Enhancement Program</u>

easements were available for cropped land. By making easements available on the non-cropped land, the BRRWD made it possible for landowners to receive compensation for all of the buffered acres.

"The benefits to having CREP easements is the land is permanently protected," said Craig Lingen, Wilkin SWCD district manager. "With the CREP easement,

Related Work

Nine property owners on an unnamed Whiskey Creek tributary saw the benefits of the Phase 1 restoration, and approached NRCS and SWCD staff about implementing additional projects on their land.

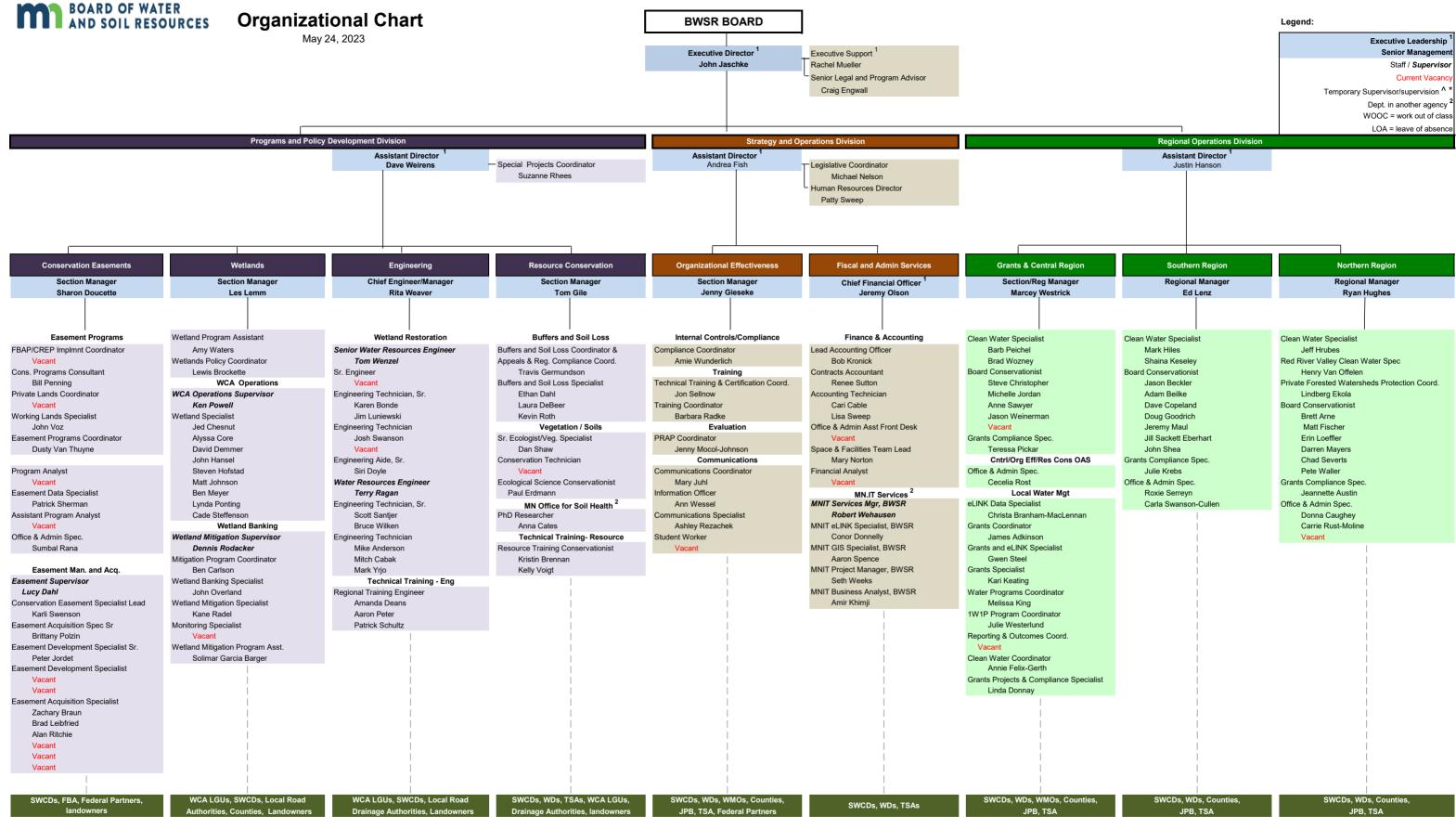
"They have a lot of issues with sedimentation backing water up onto their property and eroding some of their cropland," Quast said. "We want to put more conservation on the ground and help them out as well as long as we have that funding available."

Work to reshape that channel could begin as early as this year, depending upon site conditions.

NWQI funding from NRCS supports work on the channel, and upland treatments — such as reduced tillage, no-till, strip-till and cover crops — that contribute to water quality within the watershed.

Conservation practices that complement the Whiskey Creek channel restoration include 30-plus acres of completed and planned riparian and upland wildlife plantings; more than 20 gradestabilization structures; 800-plus acres of reduced-tillage practices such as strip-till or no-till; and 1,500-plus acres of cover crops. The conservation practices landowners within the watershed have adopted on their own augment the NWQI-supported water-quality improvements.

down the road if the land gets sold, the easement goes with the land. So that area will never be farmed again, which permanently protects the land for the creek."



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EMPLOYEE EXPENSE REPORT (Instructions)

DO NOT PAY RELOCATION EXPENSES ON THIS FORM.

See form FI-00568 Relocation Expense Report. Relocation expenses must be sent to Minnesota Management & Budget, Statewide Payroll Services, for payment.

USE OF FORM: Use the form for the following purposes:

- 1. To reimburse employees for authorized travel expenses.
- 2. To request and pay all travel advances.
- 3. To request reimbursement for small cash purchases paid for by employees.

COMPLETION OF THE FORM: Employee: Complete, in ink, all parts of this form. If claiming reimbursement, enter actual amounts you paid, not to exceed the limits set in your bargaining agreement or compensation plan. If you do not know these limits, contact your agency's business expense contact. Employees must submit an expense report within 60 days of incurring any expense(s) or the reimbursement comes taxable.

All of the data you provide on this form is public information, except for your home address. You are not legally required to provide your home address, but the state of Minnesota cannot process certain mileage payments without it.

	Ea	rn Code		Ea	Earn Code			
Description	In State	Out of State	Description	In State	Out of State			
Advance	ADI	ADO	Membership		MEM			
Airfare	ARI	ARO	Mileage > IRS Rate	MIT*	MOT*			
Baggage Handling	BGI	BGO	Mileage < or = IRS Rate	MLI	MLO			
Car Rental	CRI	CRO	Network Services		NWK			
Clothing Allowance		CLA	Other Expenses	OEI	OEO			
Clothing-Non Contract		CLN	Parking	PKI	PKO			
Communications - Other		COM	Photocopies	CPI	CPO			
Conference/Registration Fee	CFI	CFO	Postal, Mail & Shipping Svcs.(outbound)	PMS				
Department Head Expense		DHE	Storage of State Property		STO			
Fax	FXI	FXO	Supplies/Materials/Parts	SMP				
Freight & Delivery (inbound)		FDS	Telephone, Business Use	BPI	BPO			
Hosting		HST	Telephone, Personal Use	PHI	PHO			
Laundry	LDI	LDO	Training/Tuition Fee	TRG				
Lodging	LGI	LGO	Taxi/Airport Shuttle	TXI	TXO			
Meals With Lodging	MWI	MWO	Vest Reimbursement		VST			
Meals Without Lodging	Is Without Lodging MEI* MEO* Note: * = taxable, taxed at supplemental rates							

Supervisor: Approve the correctness and necessity of this request in compliance with existing bargaining agreements or compensation plans and all other applicable rules and policies. Forward to the agency business expense contact person, who will then process the payments. Note: The expense report form must include original signatures.

Final Expense For This Trip?: Check this box if there will be no further expenses submitted for this trip. By doing this, any outstanding advance balance associated with this trip will be deducted from the next paycheck that is issued.

1-Way Commute Miles: Enter the number of miles from your home to your permanent workstation.

Expense Group ID: Entered by accounting or payroll office at the time of entering expenses. The Expense Group ID is a unique number that is system-assigned. It will be used to reference any advance payment or expense reimbursement associated with this trip.

Earn Code: Select an Earn Code from the list that describes the expenses for which you are requesting reimbursement. Be sure to select the code that correctly reflects whether the trip is in state or out-of-state. **Note**: Some expense reimbursements may be taxable.

Travel Advances, Short-Term and Recurring: An employee can only have one outstanding advance at a time. An advance must be settled before another advance can be issued.

Travel Advance Settlement: When the total expenses submitted are less than the advance amount or if the trip is cancelled, the employee will owe money to the state. Except for rare situations, personal checks will not be accepted for settlement of advances; a deduction will be taken from the employee's paycheck.

FMS ChartStrings: Funding source(s) for advance or expense(s)

Mileage: Use the **Mileage Reimbursement Calculation** table to figure your mileage reimbursement. Mileage may be authorized for reimbursement to the employee at one of three rates (referred to as the equal to, less than, or greater than rate). The rates are specified in the applicable bargaining agreement/compensation plan. Note: If the mileage rate you are using is above the IRS rate at the time of travel (this is not common), part of the mileage reimbursement will be taxed.

Vehicle Control #: If your agency assigns vehicle control numbers follow your agency's internal policy and procedure. Contact your agency's business expense contact for more information on the vehicle control number procedure.

Personal Travel Benefits: State employees and other officials cannot accept personal benefits resulting from travel on state business as their own. These benefits include frequent flyer miles/points and other benefits (i.e. discounts issued by lodging facilities.) Employees must certify that they have not accepted personal travel benefits when they apply for travel reimbursement.

Receipts: Attach itemized receipts for all expenses except meals, taxi services, baggage handling, and parking meters, to this reimbursement claim. The Agency Designee may, at its option, require attachment of meal receipts as well. Credit card receipts, bank drafts, or cancelled checks are not allowable receipts.

Copies and Distribution: Submit the original document for payment and retain a copy for your employee records.