BOARD OF WATER AND SOIL RESOURCES 520 LAFAYETTE ROAD NORTH ST. PAUL, MN 55155 WEDNESDAY, MAY 24, 2023

AGENDA

9:00 AM CALL MEETING TO ORDER

PLEDGE OF ALLEGIANCE

ADOPTION OF AGENDA

MINUTES OF APRIL 26, 2023 BOARD MEETING

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

INTRODUCTION OF NEW STAFF

- Laura DeBeer, Southern Region Buffer and Soil Loss Specialist
- Ethan Dahl, Northern Region Buffer and Soil Loss Specialist

ADMNISTRATIVE ITEM

• 2023 Legislative Summary Overview; Andrea Fish, Assistant Director for Strategy and Operations – Information Item

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 Katie Smith
- Minnesota Extension Joel Larson
- Minnesota Pollution Control Agency Katrina Kessler

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

COMMITTEE RECOMMENDATIONS

Northern Region Committee

- 1. Rainy-Rapid Comprehensive Watershed Management Plan LeRoy Ose and Ryan Hughes **DECISION ITEM**
- 2. Red River Basin Commission Supplemental Grant Funding Ryan Hughes and Henry Van Offelen *DECISION ITEM*

Administrative Advisory Committee

- 1. Board Per Diem Policy Update John Jaschke **DECISION ITEM**
- 2. Bylaws Update John Jaschke DECISION ITEM

UPCOMING MEETINGS

- Central Region Committee meeting is scheduled for 2:30 PM, June 1, 2023 in St. Paul and by MS Teams.
- Next BWSR meeting is scheduled for 9:00 AM, June 28, 2023 in St. Paul and by MS Teams.

ADJOURN



BOARD OF WATER AND SOIL RESOURCES

BWSR 2023 Legislative Summary

May 23, 2023

This document provides a comprehensive summary of 2023 legislation impacting BWSR's work – including the work of our external partners statewide, particularly Soil and Water Conservation Districts and Watershed Districts.

In 2023, BWSR and partners are impacted by new laws contained largely in the following bills:

- 1. Environment, Natural Resources, Climate, and Energy Omnibus (HF2310)
- 2. Legacy Finance and Policy (which includes Clean Water Fund and Outdoor Heritage Fund appropriations) (HF1999)

Language contained in the state's Omnibus Tax bill also includes an ongoing state aid to Soil and Water Conservation Districts.

Minnesotans value their natural resources and care about clean water, climate impacts, and productive use of their land and infrastructure. We appreciate legislation this year that provides support for environment and natural resources issues and that helps to improve the important work of locally-led conservation. This year provided a historic investment in climate initiatives and natural resource preservation across the state.

This year also provided a unique opportunity through the Federal Inflation Reduction Act (IRA), as there is a significant opportunity to leverage federal funds for efforts such as water storage, soil health practices, and enhancing and expanding conservation easements. Setting up our local governments and landowners to implement these voluntary programs can help our environment and maximize dollars that come to Minnesota.

By providing resources and technical assistance for local partners - and by clarifying opportunities to work with Tribal Nations and others – we can increase Minnesota's capacity to improve and protect all our water and soil resources.

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Executive Summary

May 23, 2023

Before adjourning on May 22, 2023, the legislature passed bills containing a number of BWSR-related budget and policy provisions. Overall, the session concluded with significant investments in conservation that help support the

Governor's Climate Action Framework for natural and working landscapes and our continued efforts to improve and protect Minnesota's water and soil resources. BWSR received appropriations from the General Fund, Legacy Funds, and Environment and Natural Resource Trust Fund. These provisions are outlined below.

General Fund

BWSR's general fund budget for fiscal years 2024 and 2025 (FY24-25) includes several ongoing grant programs (as shown at right) along with agency operations, easement stewardship, and wetland conservation act implementation. Many of these were funded at the same levels from the previous biennium.

Changes include a one-time increase for the county Natural Resources Block Grants; a one-time increase for Southwest Minnesota Area II floodplain management; and on-going funding for a BWSR Tribal Liaison.

In addition, significant one-time general fund appropriations this biennium include: \$21M for soil health efforts, \$17M for water quality and storage, \$4M for Lawns to Legumes, \$1M for Habitat Friendly Utilities, \$4M for the Habitat Enhancement Landscape Program, \$21M for grassland easements, \$9M for Peatland Easements, \$4M to enhance existing easements, \$2M for Reinvest in Minnesota Easements, and \$3M for Conservation Reserve Program (CRP) State incentives. These programs are described at length later in this document.

FY24-25 General Fund Grants/Programs	Appropriation \$
County Natural Resources Block Grants	9,346,000
SWCD Conservation Delivery Grants	6,232,000
SWCD Program and practices	2,920,000
WCA Implementation/Oversight	1,522,000
Cooperative Weed Mgt. Grants	200,000
Drainage Tech Assistance	332,000
Conservation Easement Stewardship	250,000
Lower MN WD dredge spoil sites (pass-through)	480,000
SW MN - Area II Floodplain (pass-through)	380,000
Red River Basin Commission (pass-through)	200,000
BWSR Tribal Liaison	265,000
RIM Easements – MN CREP	2,000,000
CRP State Incentives	3,000,000
Soil Health Practices (103C.501)	406,000
Climate - Soil Health Activities (103F.06)*	21,114,000
Climate - Water Quality and Storage Practices*	17,000,000
Climate - Lawns to Legumes*	4,000,000
Climate - Habitat Friendly Utilities*	1,000,000
Climate - Habitat Enhancement Landscape Program*	4,000,000
Climate – Grassland Easements*	21,000,000
Climate – Peatland Easements*	9,000,000
Climate – Existing Easement Enhancements*	4,000,000

*Indicates new, one-time funding

Clean Water Fund (Legacy fund)

The success of Clean Water Fund (CWF) efforts relies on a highly integrated and collaborative system for water resource management and comprehensive planning that supports local implementation

This year's Legacy bill appropriates over \$318 million from the Clean Water Fund (CWF) in the 2024-25 biennium. Reflecting the recommendations of the Clean Water Council, BWSR will receive over \$155 million with nearly 90% going out to local governments for conservation implementation.

New this year: Instead of being funded through the Clean Water Fund as it has been in recent years, Soil and Water Conservation District (SWCD) Aid has been established as a direct payment from the Minnesota Department of Revenue to SWCDs through the 2023 Tax Omnibus Bill.

Clean Water Fund Programs	Previous FY22-23	New FY24-25		
Comprehensive Local Watershed Management				
Water Management Transition (1W1Ps)	5,808,000	3,500,000		
Nonpoint Source Impl	Nonpoint Source Implementation			
Watershed-based Implementation Funding	43,564,000	79,000,000		
Accelerated Implementation	9,682,000	11,000,000		
Surface and Drinking Water Protection/ Restoration Grants (Projects and Practices)	22,266,000	17,000,000		
Conservation Drainage Management	1,700,000	2,000,000		
Critical Shoreland Protection	2,468,000	3,000,000		
Wetland Restoration Easements	5,660,000	10,000,000		
Measures, Results, and Accountability	2,500,000	2,500,000		
Riparian Protection & Soil Loss Assistance	3,872,000	4,000,000		
Working Lands Floodplain Easements	3,872,000	5,000,000		
Enhancing Adoption of Soil Health for Drinking Water Protection/Restoration Grants	4,000,000	12,077,000		
Watershed Partners Legacy Grants Program	1,000,000	1,000,000		
Groundwater/Drinking Wate	er Implementation	ı		
Targeted Wellhead Easements	5,000,000	5,000,000		
Research, Evaluation	and Tools			
Tillage and Erosion Survey	724,000	850,000		
Technical Evaluation	84,000	200,000		
Other items to note				
MN CREP	5,600,000	0		
Riparian Buffer Easements	9,500,000	0		
SWCD Capacity Funding	24,000,000	Tax Bill*		
Total		\$156,127,000		

Outdoor Heritage Fund (Legacy fund)

Through the approved Legacy Bill, BWSR was awarded funding for 6 projects as recommended by the Lessard-Sams Outdoor Heritage Council:

\$4,122,000 for RIM Reserve - Wetlands	to acquire permanent conservation easements and to restore and protect wetlands and native grassland habitat.
\$2,747,000 for RIM Reserve - Grasslands	to acquire permanent conservation easements and to restore and enhance grassland habitat.
\$3,269,000 for RIM Reserve – One Watershed One Plan	to acquire permanent conservation easements and restore and enhance wildlife habitat identified in One Watershed, One Plan for stacked benefit to wildlife and clean water.
\$2,709,000 for RIM Reserve – Working Lands for Habitat	to acquire permanent conservation easements that allow long-term grazing while also protecting wildlife habitat and water quality.
\$2,133,000 for Camp Ripley ACUB Protection (partner project)	to acquire permanent conservation easements and restore and enhance forest wildlife habitat within the Camp Ripley Sentinel Landscape Army Compatible Use Buffer.
\$1,498,000 for Buffalo-Red River Watershed District Stream Habitat (partner project)	to acquire permanent conservation easements and restore and enhance aquatic and upland habitat associated with the Red River and Buffalo River watershed.

Environment and Natural Resources Trust Fund (Lottery proceeds)

The Environment Omnibus bill passed this year included funds from the Environment and Natural Resources Trust Fund (ENRTF). These funds have been appropriated to projects recommended by the Legislative-Citizens Commission on Minnesota Resources (LCCMR). BWSR is listed as a collaborator with three projects including Statewide Forest Carbon Inventory and Change Mapping, Conservation Cooperative for Working Lands, and Increasing Diversity for Environment Careers. Updated language to a 2022 BWSR appropriation to reflect efforts for Watershed and Forest Restoration: What a Match was also included.

Capital Investment (Bonding)

The Legislature approved \$2.6 billion of capital investment in two bills – one containing general obligation bonds and another for general fund spending. These bills included three BWSR appropriations and additional DNR flood hazard mitigation projects. For the DNR provisions listed below – to the extent practicable and consistent with the project – recipients shall create wetlands that are eligible for wetland replacement credit in BWSR's Local Government Road Wetland Replacement Program (103G.222).

BWSR Appropriations	HF669 General Obligation Bonds	HF670 General Fund
Local Government Roads Wetland Replacement Program	\$12,000,000	
Reinvest in Minnesota (RIM) Reserve Program	\$10,700,000	
Minnesota River Basin Area II Flood Damage Grants		\$1,500,000
DNR Appropriations - Flood Hazard Mitigation		
Red River Watershed Management Board Watershed Districts (not Moorhead)	\$5,000,000	
City of Moorhead	\$8,144,000	\$11,000,000
City of Carver	\$6,000,000	\$6,000,000
Traverse County – Toelle Coulee Phase II		\$3,300,000

Summary of New Programs and Law Changes

Since 2023 represented a major investment under various Climate initiatives, and a unique opportunity to leverage federal funds through the federal Inflation Reduction Act, many new programs were created by legislation. Existing programs were clarified or enhanced under new legislation as well. The rest of this document is dedicated to summarizing these new programs and other law changes impacting the work of BWSR and our partners across the state.

New Program Funding

Soil Health Practices Appropriated Amount: over \$21 million Creates new M.S. §103F.06

Funding will be used by BWSR in fiscal years 2024 and 2025 to fully implement the cover crop and soil health program developed after legislation in 2021. Funding will be made available to more Minnesota landowners to derive soil productivity, water management, and carbon sequestration benefits.

Additionally, ongoing funding of \$203,000 in fiscal year 2024 and thereafter were also appropriated for soil health practice adoption purposes consistent with the cost-sharing provisions of Minnesota Statutes, section 103C.501, and for soil health program responsibilities in consultation with the University of Minnesota Office for Soil Health.

"Soil health" refers to the soil's ability to sustain agricultural crop productivity while providing essential functions such as controlling water, filtering and buffering pollutants, and cycling nutrients without resulting in soil degradation or otherwise harming the environment. A long-term strategy to build soil health will foster more productive crops, improve water quality, and create better resilience during extreme weather events.

The existing statutory definition under M.S. 103C.101 provides that soil health "means the continued capacity of soil to function as a vital living system that sustains plants, animals, and humans. Indicators of soil health include water infiltration capacity; organic matter content; water holding capacity; biological capacity to break down plant residue and other substances and to maintain soil aggregation; nutrient sequestration and cycling capacity; carbon sequestration; and soil resistance."

Increasing adoption of these five principles will build soil by protecting it from erosion and providing a constant food source to the microorganisms that play an essential role in soil health.

- Keep the soil covered.
- Minimize disturbance.
- Keep living roots in the ground.
- Diversify rotations.
- Integrate livestock.

Improving soil health on agricultural land is a process that takes time. Financial assistance, technical support, agronomic support, and farmer-to-farmer information exchange are just some of the key

aspects needed for a robust soil health program. Providing these supports will build farmers' confidence in adapting their operating systems around soil health principles, resulting in large-scale changes over time. Providing these support components to build farmers' confidence as they adapt their operational systems to incorporate soil health principles is a key to seeing systematic, large-scale change over time.

Landowners with questions about this program or their eligibility should contact their local Soil and Water Conservation District (SWCD) office for current and future opportunities.

Accelerated Water Storage and Treatment Funds application of M.S. §<u>103F.05</u> Appropriated Amount: \$17 million

BWSR will make state funding available to more Minnesota landowners to improve water management across the state, building off a pilot program that legislature required be developed as part of 2021 law addressing Minnesota's expanding needs in this area. Minnesota is experiencing larger and more frequent and intense rainfall events, resulting in negative impacts to agriculture and infrastructure, significant erosion along riverbanks, and declining water quality.

This program provides financial assistance to local government units (LGUs) to control water rates and/or volumes to protect infrastructure, improve water quality and related public benefits, and mitigate climate change impacts. Water storage projects are designed and located to slow down or temporarily hold back water from reentering a stream or river. Water storage includes retention structures and basins, soil and substrate infiltration, wetland restoration, creation, or enhancement, channel restoration or enhancement, and floodplain restoration or enhancement.

Funds will be allocated for high priority projects through a competitive process to request applications from local governments (counties, soil and water conservation districts, watershed districts, cities) that will control water rates and/or volumes to protect infrastructure, improve water quality and related public benefits, and adapt to the impacts of climate change.

Successful applicants will be required to have a state approved and locally adopted water management plan, a feasibility study showing the project will result in changes to the rate and volume of water movement, provide a match, be able to demonstrate meeting environmental and public benefits, and operate and maintain the project for its estimated lifespan.

The funds appropriated for these easements are available until June 30, 2029. The board must also prioritize its ability to leverage non-state funding, such as federal funding.

Lawns to Legumes Creates new M.S. §103B.104 Appropriated Amount: \$4 million

The award-winning Lawns to Legumes program offers a combination of workshops, coaching, planting guides, and cost-share funding (individual support grants) for installing pollinator-friendly native plantings in residential lawns. Since the program launched as a pilot in 2019, it has supported more than 2,200 residential pollinator projects in 87 Minnesota counties. Funding for the pilot phase was provided by the Minnesota Environment and Natural Resources Trust fund.

Minnesota is home to more than 450 native bee species. Pollinators also include butterflies, moths, beetles, and native flies. All play a key role in pollinating many food crops and native plants, but populations have significantly declined worldwide in recent years. Population decline can be attributed to habitat loss and lack of related nutrition for pollinators, as well as climate change, pesticide use, and pathogens. Lawns to Legumes provides options for Minnesotans to put conservation on the ground in a way that works for them. Even relatively small plantings of native flowers can help create conditions that are highly valuable to pollinators and can help build important habitat corridors.

In addition to offering grant opportunities, Lawns to Legumes seeks to bring public and private partners together to build a movement to support Minnesota pollinators. BWSR partners with Blue Thumb — Planting for Clean Water and Metro Blooms to administer the program, and receives support from the University of Minnesota, Monarch Joint Venture, the U.S. Fish and Wildlife Service, Xerces Society, and others.

Lawns to Legumes offers two types of grants:

- Individual Support Grants: Minnesota residents can apply during active signup periods to be reimbursed for up to \$350 in costs associated with establishing pollinator habitat in their yards. Individual Support grant recipients must provide at least a 25% match for their total reimbursement request. Grant recipients are required to map their projects to provide valuable data about the location and type of pollinator habitat found throughout the state.
- 2. Demonstration Neighborhood Grants: Demonstration neighborhoods are community projects intended to enhance pollinator habitat in key corridors, raise awareness about residential pollinator protection and showcase best practices.

Funding for this program is available to BWSR until fiscal year 2027. Information about Lawns to Legumes, property owner resources, and applications for this program can all be found on the BWSR Lawns to Legumes website.

Habitat Friendly Utilities Creates new M.S. §103B.105 Appropriated Amount: \$1 million

BWSR will provide financial and technical assistance to promote the successful establishment of native vegetation as part of utility projects including solar, wind, pipelines, and electrical transmission corridors to ensure the integrity and resiliency of Minnesota landscapes and protection of habitat and water resources. This program involves collaboration between federal, state and local agencies, tribes, utility companies, non-profit organizations, and contractors.

This program builds off the Habitat Friendly Solar Program that was launched in 2016 to establish a set of standards used to certify individual projects as complying with state requirements to provide habitat benefits alongside solar installations. BWSR will expand the Habitat Friendly Solar Program to additional types of utility projects such as wind turbines, pipelines, and electrical transmission corridors.

Successfully revegetating these project sites helps ensure landscape resiliency, protects water and soil resources, and provides essential wildlife habitat. The program also offers project managers and landowners technical assistance – such as recommending seed mixes and restoration guidance. With a

cover of native vegetation planted underneath, the soil under these utility corridors also improves soil health, providing long term benefits.

Stakeholder meetings will be held in the summer of 2023 to receive input about this new program and use of the funding to maximize landscape benefits.

Habitat Enhancement Landscape Program Creates new M.S. §103B.106 Appropriated Amount: \$4 million

The new Habitat Enhancement Landscape Program (HELP) to be administered by BWSR will provide financial and technical assistance to establish or enhance areas of diverse native vegetation to support declining populations of bees, butterflies, dragonflies, birds, and other wildlife species essential for ecosystems and food production across conservation lands, open spaces, and natural areas and provide additional benefits for carbon sequestration, water quality improvement and landscape resiliency. The program expands on a pilot effort funded by the Environment and Natural Resources Trust Fund.

The program offers cost-share grants for projects on lands that are a priority for the protection of endangered or threatened pollinators and other wildlife species. Eligible lands include existing natural areas, conservation plantings, and open spaces. Current eligible applicants include soil and water conservation districts, watershed districts, watershed management organizations and counties; grant opportunities may be expanded to additional organization types in the future.

Funding is available to BWSR for this program until fiscal year 2027. Organizations will be able to apply for this program through a request for proposals later in 2023.

Easements

Reinvest In Minnesota (RIM) Clarification Amends M.S. §103F.505 and §103B.103

New language clarifies that RIM easements may be used for "restoration and protection of marginal, highly erodible land, particularly land adjacent to public waters, drainage systems, wetlands, and locally designated priority waters... and protection of environmentally sensitive areas, including wellhead protection areas, grasslands, peatlands, shorelands, karst geology, and forest lands in priority areas."

Additional language clarifies BWSR's ability to repair and replace structures on existing easements to continue to address our state's changing climate and emergent needs.

RIM Grassland and Working Land Easements

Amends M.S. §103F.511 by adding subdivision 5a and 8d; funds application of M.S. §103F.501 to 103F.531; creates new M.S. §103F.519 Appropriated Amount: \$21 million

BWSR will fund conservation easements to restore privately-owned grasslands and working lands in fiscal years 2024 and 2025. Of this amount, up to \$423,000 is for deposit in the water and soil conservation easement stewardship account established under M.S. 103B.103. These initiatives align

with the Minnesota Climate Action Framework's natural and working lands initiative to sequester and store carbon in grasslands, wetlands, and other landscapes with high conservation value.

Grasslands comprised of native species provide habitat for a wide range of grassland-dependent wildlife including endangered plants, birds, and butterflies. Traditionally, easement programs have focused on retired cropland. In 2019, BWSR extended its Reinvest in Minnesota (RIM) Reserve Program to include grasslands; this shift allows the state to protect high-value remnant prairies.

For purposes of these easements, grasslands and restored prairie are given the following definitions in statute:

- **Grasslands**: "landscapes that are or were formerly dominated by grasses, that have a low percentage of trees and shrubs, and that provide economic and ecosystem services such as managed grazing, wildlife habitat, carbon sequestration, and water filtration and retention."
- **Restored prairie**: "a restoration that uses at least 25 representative and biologically diverse native prairie plant species and that occurs on land that was previously cropped or used as pasture."

This change also establishes a new Minnesota Statute, section 103F.519, for a RIM Working Lands Program. "Working lands" in this case includes grasslands that are used for managed haying, managed livestock grazing, perennial or winter cover crop production, forest management, or related activities. Historically, RIM easements for agricultural land uses were targeted toward retired croplands. The ability to provide RIM easements on working lands allows the agency and landowners to maximize opportunities for soil and water conservation on more farmlands across the state.

Funding for RIM grassland easements under this section is available until 2029. The board must also prioritize its ability to leverage non-state funding, such as federal funding.

Property owners will be able to apply for grassland easements after the program becomes available by contacting their SWCD.

RIM Peatland Easements

Funds application of M.S. § <u>103F.501 to 103F.531</u> and adds peatland to M.S. § <u>103F.505</u> Appropriated Amount: \$4 million

BWSR received one-time funding to create a program that will help restore valuable peatlands in Minnesota. Of this amount, up to \$299,000 is for deposit in the water and soil conservation easement stewardship account established under M.S. 103B.103. The program will pursue a high-priority goal identified in the Minnesota Climate Action Framework. Peatlands (bogs and fens) hold some of Minnesota's largest carbon reserves but emit large quantities of carbon when ditched and drained. Protecting existing peatlands and other wetlands, and restoring drained, farmed, or pastured peatlands and wetlands will increase carbon storage.

Peatlands are a type of wetland. These carbon-rich ecosystems store and sequester more carbon than any other type of terrestrial ecosystem. According to the Minnesota Department of Natural Resources, Minnesota contains approximately 6 million acres of peatlands – more than any other U.S. state except Alaska. Peatlands in their natural state play a key role in storing carbon, preserving biodiversity, and improving water quality. However, when peatlands are drained for agricultural purposes or otherwise disturbed, they release harmful levels of greenhouse gases. According to the Minnesota Pollution Control Agency, disturbed peatlands are the state's fourth-highest source of emissions.

The proposed Private Lands Peatland Restoration Program would take peatlands out of agricultural production and place them into permanent conservation easements via BWSR's Reinvest in Minnesota (RIM) Reserve Program. Protecting and restoring these areas will help reduce emissions released by disturbed peatlands. This proposal will also create an interactive map application that helps identify peatlands with potential for restoration and protection. The map application utilizes peatland mapping layers developed by The Nature Conservancy. The application would be refined by state agencies (such as BWSR and DNR) and supportive non-governmental organizations (such as The Nature Conservancy) before being shared more broadly with University of Minnesota researchers, The U.S. Fish & Wildlife Service, the Minnesota Pollution Control Agency, the Minnesota Department of Agriculture, and other partners.

The appropriation for this program is available until June 30, 2029. The board must also prioritize its ability to leverage non-state funding, such as federal funding.

Property owners will be able to apply for this program by contacting their SWCD.

RIM Existing Easement Enhancements Funds application of M.S. §103F.501 to 103F.531 Appropriated Amount: \$4 million

BWSR will fund enhancements to new and existing conservation easements under the Reinvest in Minnesota (RIM) Reserve Program. These initiatives align with the Minnesota Climate Action Framework's natural and working lands initiative to sequester and store carbon in grasslands, wetlands, and other landscapes with high conservation value.

BWSR intends to leverage the requested funding to inspect aging easement infrastructure and make repairs and improvements to practices on existing conservation easements so they will be more resilient to climate change. These projects will support local businesses and contractors needed to complete the work. Funding will also expand opportunities for landowners to enroll grasslands and working lands in RIM easement programs

The RIM Reserve Conservation Easement Program is BWSR's premier easement program, having successfully restored and protected more than 300,000 acres of private lands over the past 30 years.

The funds appropriated for these easements are available until June 30, 2029. The board must also prioritize its ability to leverage non-state funding, such as federal funding.

Conservation Easement Stewardship *Appropriated Amount: \$250,000*

The legislature appropriated \$125,000 in fiscal years 2024 and 2025 (\$250,000 total) to BWSR for conservation easement stewardship, for maintenance of existing easements.

Other Conservation Easement Funding *Appropriated Amount: \$5 million*

BWSR will use \$2 million dollars of this appropriation in fiscal year 2024 to acquire conservation easements from landowners to preserve, restore, create, and enhance wetlands and associated uplands of prairie and grasslands and to restore and enhance rivers and streams, riparian lands, and associated uplands of prairie and grasslands.

The board must prioritize its ability to leverage non-state funding, such as federal funding by enrolling targeted new lands or enrolling environmentally sensitive lands that have expiring federal conservation agreements.

The remaining \$3 million will be used in fiscal year 2024 for onetime state incentive payments to enrollees in the federal CRP program. This funding is available until June 30, 2027.

Clean Water Fund

Legacy Finance Omnibus Bill: Laws 2023, Chapter 40.

With more than 10,000 lakes and 100,000 river and stream miles, water is a major part of Minnesota's culture, economy, and ecosystems. Protecting and restoring riparian areas are one of the most effective and proven methods to address surface water quality degradation by establishing perennial cover on these environmentally sensitive and/or highly erodible soils along rivers and streams.

The Clean Water Council <u>recommendations</u> support various BWSR and partner efforts over the 2024-2025 biennium, including implementing One Watershed One Plans; soil health practices; Legacy Partners grants; and various easement programs.

Water Management Transition to One Watershed - One Plan (1W1P) Appropriated Amount: \$3.5 million

BWSR will continue to work with local units of government on the transition to watershed-based plans, leading to a reduction form 200+ geo-political boundary plan to 60+ comprehensive watershed management plans, adding future efficiencies that are both scientifically and economically sound, and targeting private, local, and state investments towards water quality and quantity problems that can demonstrate success.

Comprehensive watershed based implementation plans, developed under the One Watershed, One Plan program provide the best mechanism possible to build off current state investments being made in Watershed Restoration and Protection Strategies (WRAPS) and Groundwater Restoration and Protection Strategies (GRAPS) as well as other state studies and plans to inform the building of a focused watershed implementation plan that is science-based, spatially and numerically explicit, with an implementation plan that is prioritized, targeted and capable of achieving measurable improvement in water quality, flood control, and groundwater protection.

Watershed-based Implementation Funding (WBIF) Appropriated Amount: \$79 million

This funding will support non-competitive grants to implement priority projects identified in our One Watershed, One Plan program. Providing systematic Clean Water funding for the growing number of local water management authorities with developed comprehensive watershed reports identifying prioritized projects will increase achievement of Minnesota's water quality goals in addition to other water management outcomes. The efficiencies created by this change will benefit both organizations and landowners by streamlining processes, which will allow more projects to be implemented in a timely manner and ensure limited resources are spent where they are needed most. This funding may also provide greater opportunities for local governments to leverage federal and private funding.

Accelerated Implementation of Clean Water Strategies

Appropriated amount: \$11 million

BWSR will use these funds to enhance the capacity of local governments to accelerate implementation of water quality projects and projects and activities that supplement or exceed current state standards for protection, enhancement, and restoration of water quality in lakes, rivers, streams, and groundwater. This funding will support the completion of comprehensive watershed management plans for all 80 major watersheds, including those under One Watershed One Plan, by 2025.

Surface and Drinking Water Protection (Projects and Practices)

Appropriated amount: \$17 million

BWSR will fund Surface and Drinking Water Protection and Restoration Grants to local governments to support the implementation of high priority projects derived from state approved, locally adopted water management plans. Local governments use these funds to plan, design, and install conservation practices targeted to protect and restore water quality. Practices installed are designed to address water quality problems specific to the targeted water body, but generally retain rainfall and runoff on the land, and reduce the transport of sediment and nutrients to surface and ground waters.

Local governments have been aggressive in identifying projects to address water quality needs. For FY2022 local governments proposed more than \$25.8 million in projects under this program, while \$9.5 million of State Clean Water Funds were available, resulting in funding only 36% of project requests.

Conservation Drainage Management and Assistance

Appropriated Amount: \$2 million

BWSR will provide funding for Minnesota drainage authorities under M.S. 103E to plan and construct drainage water quality management practices into drainage system projects.

This program is a continuation from FY2022-2023 and provides for financial and technical assistance to Minnesota's Public Drainage Authorities and Soil and Water Conservation Districts to facilitate planning, design, and installation of conservation practices on drainage systems that will result in water quality improvements.

These practices promote retention of rainfall and runoff on the land, soil erosion reduction, and water quality improvement in drainage systems and receiving waters while maintaining agricultural

production. The program is implemented through partnering with the state's public drainage system authorities, principally counties and watershed districts. The state's investment leverages local investment as the grants require a 25% local match.

Critical Shoreland Protection

Appropriated Amount: \$3 million

These funds will be used for voluntary shoreland protection easements on water bodies, with an emphasis on shoreland in watersheds that are critical in protecting the Mississippi River as a drinking water source.

Wetland Easements

Appropriated Amount: \$10 million

BWSR will purchase permanent conservation easements to protect and restore wetlands and associated uplands. This funding works in tandem with the statutory authority of the Reinvest in Minnesota (RIM) Program.

For wetlands, the RIM program enrolls drained and farmed wetlands and associated uplands that offer no water quality benefits, and little or no habitat and ecological benefits in their current state. Through a combination of eligibility screening and a scoring and ranking process, the program evaluates applications and selects the applications that provide the greatest environmental and habitat benefits after enrollment in a BWSR RIM Reserve easement. These restored wetlands and grassland complexes will provide water quality improvements, and habitat for wetland-dependent wildlife.

BWSR Oversight and Accountability (Measures, Results, and Accountability) *Appropriated Amount: \$2.5 million*

BWSR will implement a comprehensive program of conservation quality control and assurance through oversight, assessment, assistance, and reporting and communication of local government performance and results.

With more than 10,000 lakes, 100,000 river and stream miles, and extensive groundwater systems, water is a major part of Minnesota's culture, economy, and natural ecosystems. Today, about half of Minnesota's surface waters have been assessed for water quality, and of those, about 40% do not meet basic water quality standards.

Local governments are foundational to delivering the results of the state's conservation programs that implement water quality solutions. BWSR provides accountability to the state while supporting and providing assistance to local governments implementing Clean Water projects by:

- 1. Building strong technical skills within the local government delivery system
- 2. Providing assistance to local governments for improved program implementation, streamlining reporting requirements, and providing transparency regarding local government performance in meeting clean water program goals
- 3. Evaluating the success and value of on-the-ground restoration and protection activities to better target implementation funds
- 4. Communicating information about its grants to local governments and the environmental outcomes achieved through multiple media venues

Riparian Protection and Soil Loss Assistance Appropriated Amount: \$4 million

BWSR will use this funding to support local government implementation of riparian buffer and alternative best management practice requirements for state required buffers and soil erosion prevention enacted into law in 2015. This funding helps protect the state's water resources from erosion and runoff pollution by establishing roughly 110,000 acres of buffer along waterways and supports soil and water conservation districts' technical assistance to landowners, on-going monitoring and tracking of compliance, and assistance in local enforcement of the buffer law. The CWF Shoreland Buffer Compliance funding is used for grantmaking to SWCDs and to support SWCD implementation. BWSR works to develop and maintain various aspects of program implementation guidance and support documents. BWSR also plays a role in assisting facilitation between local governments at the request of those looking for agency or state perspective.

Through this continued effort, as of January 2022, approximately 99% of all parcels adjacent to Minnesota waters were compliant with the Buffer Law.

Working Lands Floodplain Easements *Appropriated Amount: \$5 million*

The Floodplain Easement program is an expansion of the previous Buffer Easement program funded by the Clean Water Fund. This expanded program will continue to allow for enrollment of traditional lands that meet the riparian buffer criteria but will also allow for larger whole field enrollment. The whole field enrollment option allows landowners to continue income-producing conservation practices (e.g. silviculture, grazing, and/or haying) under a reduced easement payment rate or a traditional conservation easement. It also allows for a landowner to select a limited term easement option.

The purpose of this program is to remove riparian and frequently flooded lands from row crop production. These areas will either be placed into perpetual or long-term RIM Reserve conservation easements that will allow farmers to utilize these landscapes to provide a reasonable source of income while at the same time preventing additional water quality impacts which can occur in frequently flooded row crops.

This program is part of a comprehensive clean water strategy to prevent sediment and nutrients from entering Minnesota's lakes, rivers, and streams; reduce aquatic impairments; and protect wetlands. Studies show that perennial vegetation in riparian areas reduces sediment and nutrients entering waterways, stabilizes streambanks, and provides food and habitat for many species of wildlife.

Enhancing Adoption of Soil Health *Appropriated Amount: over \$12 million*

Funds will be used to enhance landowner adoption of soil health management practices as prioritized in comprehensive watershed management plans.

This program contributes to part of a comprehensive clean water strategy to reduce nutrients and sediment from entering drinking water supplies. Incorporating soil health management practices such as cover crops into row crop rotations can improve water quality by decreasing nitrogen losses, reducing runoff, and improving soil health.

Vulnerabilities of drinking water systems have come into the spotlight over the last several years. While Minnesota has not experienced a large-scale drinking water crisis, the risk of drinking water contamination is of particular concern in some areas of Minnesota. Several Minnesota communities have seen increased water treatment rates due to contamination of ground water from excess nitrate coming from agricultural areas. These incidents are indicative of the widespread vulnerability of many rural communities because much of Minnesota's rural landscape is heavily dominated by intensive rowcrop agriculture.

One way to address water quality in agricultural areas is recommended use of cover crops to remove excess nitrogen from the soil. Cover crops are known to be an effective means to reduce nitrogen loss.

This program provides both applied research by the Minnesota Office for Soil Health (MOSH) and implementation of soil health practices to improve groundwater and surface water quality. The MOSH is a collaboration between BWSR and the University of Minnesota Water Resources Center that works toward healthy farms and ecosystems by delivering soil education, promoting grower networks, and researching best practices.

This program is a continuation of a targeted effort to increase cover crop adoption and related soil health practices on highly erodible lands or in drinking water management areas. This funding, along with the newly established Soil Health Practices program, provide an opportunity for a large acre and participant increase in cover crop and soil health practice adoption. Cover crop adoption improves groundwater and surface water quality and benefits drinking water supply areas. Clean Water Funds will be made to eligible landowners and retailers to plant cover crops, provide payments to reduce risk, and purchase specialized inter-seeding equipment in one or two targeted areas within the state.

This initiative can leverage existing federal NRCS financial assistance programs and will be implemented by soil and water conservation districts (SWCDs).

Watershed Partners Legacy (Community Partners Program)

Appropriated Amount: \$1 million

Funding will support an existing Clean Water Fund grant program for small projects (Community Partners Program). This program ensures tribal governments and community groups such as non-governmental organizations wishing to implement projects, programs, community service, and education can be direct recipients of Clean Water Funds.

The Water Legacy Grants Program increases citizen participation in implementing water quality projects and programs to increase long term sustainability of water resources. The efforts and resources of active and engaged community groups, such as lake associations, non-profits, conservation groups and tribal government, will be supported through this program.

This program provides competitive grants or contracts to non-governmental and tribal governments for implementation projects that protect, enhance, and restore water quality or protect groundwater and drinking water sources from degradation. The state's investment leverages local and federal funds as the grants requires a match. The program will be administered through a competitive application process.

Targeted Wellhead Drinking Water Protection Easements *Appropriated Amount: \$5 million*

BWSR will support permanent conservation easements or grants to local government to protect land in vulnerable wellhead or source water protection areas to protect drinking water supplies.

This proposal is a continuation of a successful Clean Water Fund easement and grant program. The purpose of this targeted program is to ensure that the land use within a drinking water supply management area is conducive to protecting or improving the drinking water that is impacted by the land use in areas that are vulnerable to surface contamination and protect the land via RIM easement or grants to local governments. Priority is placed on land located where one or more of the following apply:

- the vulnerability of the drinking water supply is designated as high or very high by the Commissioner of Health
- the drinking water supply is identified as Mitigation Level 1 or 2 by the Minnesota Groundwater Rule
- monitoring has shown elevated nitrate levels
- drinking water protection plans have identified specific activities that will achieve long-term protection
- on lands with expiring Conservation Reserve Program contracts.

BWSR will continue to work with Minnesota Department of Health, Minnesota Department of Agriculture, and the Minnesota Rural Water Association to determine projects within targeted areas. BWSR also work s with soil and water conservation districts (SWCDs), LGUs, and other community partners in those areas to secure long -term protection on lands and reduce nitrates entering drinking water supplies. This work may include conservation easements, as well as grants for land acquisition via purchase, easement, or contract completed locally.

Tillage and Erosion Survey *Appropriated Amount: \$850,000*

BWSR will continue to systematically collect data and produce statistically valid estimates of the rate of soil erosion state-wide and tracking the adoption of high residue cropping systems in the 67 counties with greater than 30% of land in agricultural row crop production.

The Tillage and Soil Erosion Survey is a comprehensive long-term program to systematically collect data and produce county, watershed, and statewide estimates of soil erosion caused by water and wind along with tracking adoption of high residue cropping systems and implementation of cover crops. Tillage and cover crop trend data and soil erosion data are critical to measuring progress towards goals and recommendations set forth in Minnesota's Statewide Nutrient Reduction Strategy (2013, 2020), Sediment Reduction Strategy for the Minnesota River and 360South Metro Mississippi River (2014), Watershed Restoration and Protection Strategies (WRAPS), and Total Maximum Daily Loads (TMDL's). The data allow tracking of local trends in adoption of conservation practices, effectiveness of local targeting efforts, and to help set local and state priorities.

Technical Evaluation Appropriated Amount: \$200,000

BWSR will evaluate a sample of habitat restoration projects completed with Clean Water Funding.

State law requires restoration evaluations be conducted on habitat restoration projects completed with funds from the Clean Water Fund (M.S. 114D.50), Outdoor Heritage Fund (M.S. 97A.056), and Parks and Trails Fund (M.S. 85.53). As provided by law, BWSR is the responsible agency for Clean Water Fund restoration evaluations; DNR is the responsible agency for Parks and Trails Fund restoration evaluations; and DNR and BWSR are jointly responsible for Outdoor Heritage Fund restoration evaluations (M.L. 2010, Ch. 361, Art.1). These evaluations assess project performance to ensure and improve conservation outcomes across the State.

Other Clean Water Fund Legislation

In addition to BWSR specific appropriations, the 2023 Legacy Omnibus bill also contained provisions affecting all recipients of the Clean Water Fund (CWF).

Disability Access

Where appropriate, recipients should make progress toward providing people with disabilities greater access to programs, print publications, and digital media for projects funded through the CWF.

Increasing Diversity in Environmental Careers

Agencies should work to provide opportunities that encourage a diversity of students to pursue careers in environment and natural resources when implementing projects funded through the CWF.

Agency Initiatives, Oversight, and Miscellaneous Changes

Wetland Conservation Act (WCA) Enforcement *Appropriated Amount: \$761,000*

BWSR will implement, enforce, and oversee for the Wetland Conservation Act. This includes administration of the wetland banking program and in-lieu fee mechanism.

Clarifying ability to enter grants with tribal governments *Amends M.S. §103B.101*

New language specifies that the board may enter into agreements (including grant agreements) with Tribal Nations. This clarification will extend opportunities for collaboration with partners outside of BWSR's traditional clientele of local governments. Additional collaboration and partnerships between tribal governments and state governments will allow for the completion of more projects that protect and improve soil and water resources across Minnesota.

BWSR Tribal Liaison

BWSR received funding to staff an Agency Tribal Liaison, which aligns with Minnesota Statute 10.65 and other recently enacted laws that codify government-to-government relations and consultation between Minnesota state agencies and Tribal Nations.

BWSR's Tribal Liaison will initiate, develop, and maintain the agency's statutorily required tribal consultation and serve as an internal and external resource on state-tribal relations as they related to soil and water conservation efforts. Consultation duties will also include coordination with the governing bodies of Minnesota Tribal governments, such as the Minnesota Indian Affairs Council or the Minnesota Chippewa Tribe; interaction on legislative and fiscal matters that affect one or all Minnesota Tribal governments, and proactive engagement of legislative and fiscal proposals. The agency must consider input gathered from Tribal consultation into our decisions-making process, with the goal of achieving mutually beneficial solutions.

Board Member Per Diem

Amends M.S. §<u>103B.101</u>

The legislature changed the board member per diem from \$55 to \$125 per day. The \$55 per day rate of compensation has not been adjusted since enacted in 1990.

Conservation Practices Amends M.S. §103B.101, subdivision 16

A change to administrative guidance for BWSR describes the agency's overall work in conservation practices (rather than simply water quality practices). Under amended language, the board is required to work with partners including state and federal agencies, Tribal Nations, academic institutions, local governments, practitioners, and other stakeholders to develop recommendations for conservation practices and projects, and systems for:

- 1. erosion or sedimentation control
- 2. improvements to water quality or water quantity
- 3. habitat restoration and enhancement
- 4. energy conservation
- 5. climate adaptation, resiliency, or mitigation

Guidelines for Establishing and Enhancing Native Vegetation Amends M.S. §103B.101 by adding new subdivision 18

Language was added that addresses BWSRs authority to develop guidelines for establishing and enhancing native vegetation.

The new language requires the board to work with partners including state and federal agencies, Tribal Nations, academic institutions, local governments, practitioners, and other stakeholders to develop a shared understanding and to provide recommendations for native vegetation that are specifically to provide the benefits of:

- 1. water quality
- 2. soil conservation
- 3. habitat enhancement
- 4. energy conservation
- 5. climate adaptation, resiliency, or mitigation

This language also allows the board to convene work groups or teams to develop information, education, and recommendations to achieve these goals.

Natural Resource Block Grants

Appropriated Amount: \$2.5 million (for a total of \$9.346 million for the 2024-2025 biennium)

BWSR was allocated an additional one-time increase of \$1.25 million in each of fiscal years 2024 and 2025 to help counties implement statutorily mandated environmental programs including the Wetland Conservation Act and shoreland management program under M.S. Chapter 103F and local water management responsibilities under M.S. Chapter 103B.

The base funding for fiscal year 2026 and thereafter returns to \$3.423 million per year.

BWSR Ability to Allocate Funds

Amends M.S. §<u>103C.501</u>

This language clarifies BWSR's ability to provide funding to Soil and Water Conservation Districts to achieve shared missions – outside of simply cost-sharing programs. This language specifies that BWSR can provide both technical and financial assistance for practices, programs, and projects under its jurisdiction.

The language further clarifies the types of programs BWSR funds at state and local levels to achieve:

- 1. erosion or sedimentation control
- 2. improvements to water quality or water quantity
- 3. habitat enhancement
- 4. plant biodiversity
- 5. energy conservation
- 6. climate adaptation, resiliency, or mitigation

Drainage Work Group Report - Registry Portal Evaluation *Session Law*

The Board of Water and Soil Resources and the Drainage Work Group must evaluate and develop recommendations on the following, and submit a report to the legislature by February 1, 2024

- the definition and application of outlet adequacy as provided in Minnesota Statutes, section 103E.261
- 2. public notice requirements for proposed public drainage activities, including a drainage registry portal

Soil and Water Conservation District Aid Omnibus Tax Bill Creates new M.S. §477A.23

The omnibus tax bill included new aid for Soil and Water Conservation Districts.

The aid program is \$15 million in calendar years 2023 and 2024 and \$12 million annually after that.

Aid amounts for soil and water conservation districts are calculated based on three factors:

- 1. 80% of the appropriation would be split evenly between all soil and water conservation districts
- 2. 10% apportioned based on a soil and water conservation district's share of nonpublic lands
- 3. the remaining 10% would be based on a soil and water conservation district's share of adjusted state population.

BWSR is to calculate and certify aid payment amounts to the Commissioner of Revenue annually by June 1 so that payments can be made to Soil and Water Conservation Districts by July 20 of the same year.

SWCDs receiving this aid must use the proceeds to implement SWCD duties and services as prescribed by statute (Chapter <u>103C</u>).

The board of each soil and water conservation district must establish, by resolution, annual guidelines for using these payments and post current and prior-year guidelines on the district's website. SWCDs may use this aid directly, or the SWCD may appropriate a portion of the payment to a governmental unit with which the district has a cooperative agreement.

There are 88 soil and water conservation districts in Minnesota, with at least one district in each of the 87 counties except for Hennepin and Ramsey Counties. Three of the larger counties have two districts: Otter Tail, Polk, and St. Louis. Hennepin and Ramsey Counites have special legislative authority to carry out soil and water conservation district authorities and would therefore be included in aid payments.

Watershed Levy Authority Increase Omnibus Tax Bill Modifies M.S. §<u>103D.905</u>

The omnibus tax bill also increases the watershed district levy authority from 0.048 percent to 0.096 percent, or \$500,000, whichever is less. This additional funding can help provide needed local matching funds for implementing water quality improvement projects.

Highways for Habitat Creates new M.S. 160.2325 Omnibus Transportation Bill Appropriated amount (to MnDOT): \$1 million

The omnibus transportation bill included a new Highways for Habitat program to be administered by the Department of Transportation. This program is created to enhance the ability for state roadways to provide pollinator and wildlife habitat and vegetative buffers.

This program is created to establish maintenance approaches to highway right-of-way lands that are ecologically based. Practices may include limiting use of herbicides, limiting mowing, undertaking prescribed burning practices, erosion prevention, and other practices.

The commissioner of transportation is directed to consult with native habitat biologists and ecologists to develop standards and best practices and must also base seed and vegetation selection on Board of Water and Soil Resources guidelines.

BOARD OF WATER AND SOIL RESOURCES

BOARD OF WATER AND SOIL RESOURCES (BWSR) BOARD MEMBER PER DIEM AND EXPENSES POLICY Minn. Stat. § 103B.101, subd 2(d) (effective November 1, 2018 July 1, 2023)

- A. PER DIEM: (The per diem rate is set in statute per Minn. Stat. §15.0575, subd. 3. Per diem isat up to \$55125/day or what statute allows):. Per diem is authorized for Board members for the following:
 - <u>1.</u> One per diem fFor regular monthly and special Board meetings, meetings of committees to which members are assigned, and special meetings called by the Board Chair or
 - 1.2. For conferences and training sessions approved by the <u>Board Chair or</u> Executive Director. This does not apply to meetings of organizations, groups and local governments that are the primary responsibility of BWSR staff.
 - 2.3. One per diem fFor time spent in preparation time for each Board meeting, each committee meeting, or each special meeting of the Board.
 - 3.<u>4</u>. One per diem is <u>A</u>authorized for the day prior and the day after by Board members in travel status for board business when Board members travel more than 200 miles each way using vehicular transportation.
 - 4.<u>5.</u> One per diem is <u>A</u>authorized for the day prior or the day after by Board members in travel status for board business when Board members travel more than 100 miles each way using vehicular transportation
 - 5. Per diem incurred at other functions such as those sponsored or coordinated by the Association of Minnesota Counties (AMC), the Minnesota Association of Soil and Water Conservation Districts (MASWCD), the Minnesota Association of Watershed Districts (MAWD), the League of Minnesota Cities (LMC), or the Minnesota Association of Townships (MAT) under the conditions defined in items 1 through 4 if authorized by the Board, the Chair of the Board, or the Executive Director.
 - 6. Full-time employees of the State or one of its political subdivisions are not eligible to receive a per diem payment per Minn. Stat. § 15.0575, subd. 3.
 - 7. In no instances will more than one BWSR or other state agency issued per diem payment per day be permitted under this policy.
 - 8. Participation via conference call, videoconference, internet technology or

other similar means in regular monthly Board meetings, meetings of committees to which members are assigned, and special meetings called by the Board Chair or the Executive Director, is considered the same as participation in-person for per diem or expense purposes.

- B. EXPENSES: Expenses are authorized for Board members according to the following criteria:
 - Expenses incurred by Board members for attendance at meetings and events as described in items in Part AA1 – A5 will be reimbursed consistent with those authorized under the commissioner's plan adopted under Minn. Stat.§ 43A.18, subd. 2.

Reimbursable expenses may include, but are not limited to, the following: Commercial transportation (air, taxi, rental car, etc.); Meals including tax and a reasonable gratuity; Hotel and motel accommodations; Parking fees and toll charges.

Board members who use their personal office equipment, supplies and services in part for the purpose of receiving and generating telephone, faxmobile communications technology, email or other electronic messages communications related to Board activities, are eligible for a reimbursement for such equipment, supplies and services up to an amount not to exceed \$50-75 per month.

- Child care expenses incurred as a result of monthly Board meetings, special or committee meetings of the Board shall be compensated as defined in Minn. Stat. § 15.0575, subd. 3.
- 3. Vehicle travel will be reimbursed at the standard Federal IRS mileage rate in effect at the time of travel.
- 4. Board members who are employees of the State or one of its political subdivisions may receive payment for their expenses incurred in performing their board member activities,—unless those expenses are reimbursed by another source.
- 5. <u>Note:</u> The Internal Revenue Service (IRS) requires business expenses to be submitted for reimbursement within 60 days after the expense is incurred or the trip ends. If not submitted within 60 days, the reimbursement becomes taxable for federal, state, FICA and Medicare; and withholding tax must be taken.

C. MEETING COORDINATION: Committee chairs and staff shall schedule committee meetings to efficiently use board members' time and manage travel expenses.

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

Date



BOARD OF WATER AND SOIL RESOURCES BYLAWS October 24, 2018MayMONTH 24XX, 2023

(effective July 1, 2023)

ARTICLE I. Introduction

1. Purpose

The Board of Water and Soil Resources (BWSR) desires to conduct its business and perform <u>all of</u> its responsibilities and duties in an orderly, efficient, transparent, fair and lawful manner. These Bylaws are established for that purpose.

2. Application of Bylaws

Unless otherwise specifically indicated, these Bylaws shall apply to the transaction of all BWSR business and the conduct of all BWSR meetings and hearings.

3. Compliance with Applicable Law

It is the specific intent of the BWSR to perform all of its responsibilities and conduct all of its hearings and meetings in accordance with all applicable federal law and state statutes and regulations. The provisions of all such applicable law shall have control over anything to the contrary in these Bylaws.

ARTICLE II. Membership, Officers, Duties and Committees

1. Membership

The Board of Water and Soil Resources shall be composed of 20 voting members appointed by the Governor according to MN Statutes §103B.101.

Individual members shall not act to represent the Board on any given subject unless specific Board action/position has been determined/ruled and the individual action thus represents the Board as a whole.

MN Statutes §15.0575, subd. 4, provides that "[t]he chair of the board shall inform the appointing authority [i.e., the Governor] of a member missing three consecutive meetings. After the second consecutive missed meeting and before the next meeting, the chair of the board shall notify the member in writing that the member may be removed for missing the next meeting."

2. Officers Designated

The officers of the BWSR shall be the Chair and the Vice-Chair. The Chair is appointed by the Governor from the members of the Board. The Vice-Chair shall be elected to a two-year term by the members of the Board. The Vice-Chair shall be elected by majority vote at the first regularly scheduled meeting of every EVEN calendar year.

The Board shall employ an Executive Director, who is a salaried officer, consistent with MN Statutes § 103B.101, subd. 4.-

The Executive Director is responsible for the administrative and general operations of the BWSR. All <u>additional other</u> staff shall report to the Executive Director.

3. Duties of Officers

- a) Chair
 - The Chair shall have the following responsibilities:
 - Supervise the affairs of the Board and communicate such affairs to all board members.
 - 2) Preside at all Board meetings.
 - 3) Preside at Dispute Resolution Committee proceedings or appoint a presiding member.
 - May vote on all issues with the exception of the Dispute Resolution Committee unless as provided by MN Statutes § 1038.101 Subd. 10.
 - <u>5)4)</u> May schedule special meetings.
 - 6)5) Approves board meeting agendas.
 - 6) Establishes committee structure and appoints committee members.
 - 7) Serve on the Environmental Quality Board per MN Statutes Chapter 116C.
- b) Vice-Chair
 - The Vice-Chair shall have the following responsibilities:
 - 1) Perform those duties delegated by the Chair.
 - Act as Chair in the event of the Chair's illness, disability, absence from a meeting or not being readily able to function as Chair.

c) Executive Director

The Executive Director shall be responsible to the Board and communicate/report regularly to the Chair. The Executive Director or designee shall attend all Board meetings but shall not vote. The Executive Director shall have the following responsibilities:

- To see that all resolutions, rules, regulations and orders of the Board are carried out.
- 2) To present to the Board program plans, studies and reports prepared for Board purposes and action and recommend to the Board for adoption those measures deemed necessary and prudent to carry out the programs and duties of the Board or for the efficient administration of the affairs of the Board. The Executive Director shall have the authority to execute or officially sign on behalf of the Board on all actions approved, <u>fruied or</u> <u>delegated</u> by the Board.
- 3) To communicate and interact with the Governor's office, state and federal agencies, local governments, special districts, joint powers authorities, the legislature, and to participate in relevant meetings as well as provide such meeting knowledge to the Board.

- 4) To keep the Board fully advised as to its financial condition and to prepare and submit an annual Board budgets through the
- 5)4) processes established by the Governor's office or Minnesota Management and Budget (MMB).
- 6)5) To represent and implement the Board's orders, resolutions, and policies.
- 7)6) To record and maintain a record and minutes of the meetings and process and maintain all information relating to Board business.
- 8)7) To develop the proposed agenda for Board meetings, provide for meeting notices and handle all other administrative affairs.
- 9)8) To sign documents as designated by the Board.
- 10)9) To participate in an annual regular Personnel Review as directed by the Chair.

4. Vacancies and absences of Officers

- a) Chair: In the absence of the Chair, the Vice-Chair shall preside.
- b) In the event of a Chair vacancy the Vice-Chair will become the acting Chair.
- b)c) Vice-Chair: If a vacancy occurs in the office of Vice-Chair, the regular members shall elect an individual_acting Vice-Chair to fill the remaining term time.
- c)d) Chair, Vice-Chair: If at a Board meeting, neither the Chair nor Vice-Chair are present but a quorum exists, the members shall elect from within the membership an acting Chair to run the meeting.
- 5. Committees
 - a) The Board chair may establish committees. The Board Chair shall appoint committee members and shall be an ex-officio member of all committees to which the Board Chair is not appointed.
 - b) Unless otherwise prescribed by statute or rule, committees shall consist of three or more members of the Board for the purpose of gathering information, presiding over public hearings, making findings and bringing recommendations to the Board.
 - c) Certain duties may be delegated to committees by a majority vote of the board members.
 - d) When a member of the Dispute Resolution Committee or another committee has a conflict of interest or is otherwise unable to fully participate in consideration of a matter, the Board Chair may appoint a substitute to serve in place of that member with respect to that matter.
 - e) The Board Chair shall appoint committee chairpersons.
 - f) The Executive Director shall assign staff to facilitate and support the work of committees.
 - g) The membership of all committees shall be posted on the BWSR website or made available in alternate formats upon request.

3

ARTICLE III. Meetings and Hearings

1. Notice

Notices of all meetings and hearings of the BWSR shall be made in a manner in accordance with MNN Statutes Chapter 13D (*Open Meeting Law*). Notice shall be posted at the BWSR main office, posted on the BWSR website and reasonable effort shall be made to inform BWSR clientele by mail, electronic mail, delivery, telephone or other means of communication. Board meetings will be scheduled according to the current Board policy.

2. Open Meetings and Records

All meetings of the Board shall be open to the public as provided by law. The votes of the members shall be recorded by voice vote or by roll call if so called. The minutes shall be available to the public-during all normal business hours at the BWSR central office upon request made to the Executive Director. Minutes of Board meetings shall be preserved for at least ten years. Minutes of recent Board meetings shall be posted on the BWSR website once approved by the Board.

3. Closed Meetings

The Chair may call a closed meeting or close a meeting if the closure is authorized by statute or permitted by the attorney-client privilege. Specific applicable statutes in the Open Meeting Laws in Minnesota Statutes Chapter 13D include:

Preliminary consideration of allegations or charges against an individual subject to its authority, per Section 13D.05, subd. 2 or

Evaluating the performance of the Executive Director, per requirement in Section 13D.05, subd. 3, or

Exercising quasi-judicial functions involving disciplinary proceedings per Section 13D.01, subd. 2.

In all cases where a meeting is closed, the Board shall abide by the requirements for closed meetings in Chapter 13D.

4. Hearing Records

- a) When a public hearing on a matter has been held, whether by delegated committee that is to decide or recommend to the Board or by the Board, and the hearing record has been closed, the hearing record will not be reopened to receive additional written or oral submissions except by majority vote of the body considering the matter.
- All information submitted to BWSR for hearing purposes becomes the property of the BWSR.
- c) The BWSR shall maintain all records gathered during public hearings. The Executive Director shall not be required to maintain the records for more than three years after the close of a hearing.

5. Quorum

A majority of the Board or the majority of the committee is a quorum.

6. Voting

Each member shall have one (1) vote in the transaction of business of the Board. Agency members may designate an alternate to attend and vote on their behalf by notifying the Chair or Executive Director (or Committee Chair or lead staff for <u>Committee meetings</u>) in writing or via electronic communication-mail prior to the meeting. In order to vote, the member or designated alternate must be in attendance for the meeting. A vote will be recorded by voice vote unless a roll call vote is requested. A roll call vote may be requested by any member and a roll call vote will be used for teleconference meetings₇ per MN Statute <u>Chapter</u> 13D.015, subd. 2(4).

7. Meeting Arrangements

The Board shall normally meet the fourth Wednesday of the month so designated by action of the Board no earlier than 8:00 AM until agenda business is complete. The Chair may call for recess for appropriate breaks or for purposes of furthering the agenda orders of business.

The chair of the Board shall select a meeting location that is convenient and suitable for the members, staff and general public.

8. General Order of Business Elements

The general order of business <u>for regular of BWSR Board meetings typically</u> includes:

- a) Approval of agenda
- b) Approval of minutes of previous meeting
- c) Public Access Forum
- d) Chair's, Executive Director's, and Committee Reports
- Agency Reports
- Advisory Member Reports
- e) Committee Recommendations
- f) Old Business
- a) New Business
- h) Board issues and information
- i) Agency Reports
- i) Advisory Member Reports
- k) Upcoming Meetings
- I) Adjournment

Commented [JJ(1]: To be posted as informative on website.

A consent agenda may be developed at the discretion of the Chair. Items on a consent agenda may be removed for individual consideration upon the request of any board member and placed on a logical place on the regular agenda as determined by the chair.

9.8. Parliamentary Procedure

Robert's Rules of Order, Revised, shall govern the conduct of the meeting except when state statute, policies, and these bylaws state otherwise. The Chair shall make all parliamentary rulings. The Executive Director or meeting-designee shall serve as the parliamentarian advisor to BWSR.

10.9. Board Meeting Agenda Application Development

All matters for preliminary agenda consideration with pertinent information included shall be submitted to the Executive Director <u>and reviewed by the Chair</u> prior to the Board meeting. Placement of items on the <u>proposed</u> agenda will be at the discretion of the Chair and the Executive Director. The proposed agenda must have the approval of the Chair.

11.10. Conflicts of Interest

Each board member is obligated to determine whether he/she has a perceived, potential, or actual conflict of interest with respect to any matter before the BWSR and to comply with all requirements of law regarding any potential conflict. Board members who disclose an actual conflict of interest will not be allowed to participate in and vote on the agenda item for which they declared an actual conflict.

ARTICLE IV. Adoption and Amendments

1. Adoption

These Bylaws shall become effective immediately after approved by a majority vote of the Board. The effective date of bylaw changes shall be no sooner than the next regular meeting of the Board.

2. Amendments

These Bylaws may be amended by a two-thirds vote of the board members. All proposed amendments shall be presented in writing. The Board shall review the proposed changes at least one meeting prior to adoption.

Gerald Van Amburg, Board Chair

Date

Habitat Enhancement Landscape Pilot boosts biodiversity, benefits at-risk species



The Habitat Enhancement Landscape Pilot is made possible through an appropriation from the Environment and Natural Resources Trust Fund.



A new Minnesota Board of Water and Soil Resources (BWSR) program aims to improve habitat to address declining populations of pollinators.

The Habitat Enhancement Landscape

<u>Pilot (HELP)</u> program was funded through the Environment and Natural Resources Trust Fund in 2021 to restore and enhance strategically located, biodiverse native habitats on conservation lands, natural areas and open spaces throughout Minnesota.

The program emphasizes helping pollinators and other beneficial insects — plus plant species — that are in decline. Secondary benefits include carbon sequestration, improved soil health and water quality, increased landscape resiliency, and the establishment of habitat corridors. Another key benefit involves testing innovative methods of habitat establishment



and management, the positive results of which will be made widely available via BWSR's <u>What's Working</u> for Conservation webpage.

Among those eligible to apply for HELP are soil and water conservation

Above: A yellowbanded bumblebee, a declining Minnesota bumblebee species, clings to a goldenrod. Photo Credit: Tony Ernst

Left: A common Eastern bumblebee visits a New England aster. Photo Credit: Dan Shaw



At the Lake Middle School in Woodbury, a prairie bloomed, left; prairie violets sprouted, middle; and students collected seeds, right. Photo Credits: Tony Randazzo, SWWD

districts, watershed districts, watershed management organizations and counties. This costshare grant program provides funding for projects on conservation easements, nonprofit conservation preserves, city and county parks, and protected natural areas.

Declining numbers of bees, butterflies, dragonflies and other at-risk species that support ecosystems and crop production have raised significant concerns among scientists and conservation professionals both locally and globally. Minnesota's state bee the rusty patched bumblebee — has declined by about 80% over the past 20 years. Eight of the state's 24 bumblebee species are in significant decline, according to the Union of Concerned Scientists.

"We may be most concerned about what we don't know, which is the status of many of Minnesota's 500 native bee species and many other beneficial insects that support agriculture and ecosystems," said BWSR Senior Ecologist and Vegetation Specialist Dan Shaw.

The need to support at-risk species led to the <u>BWSR Living Landscapes</u> Initiative, which strives for innovative wavs to establish and enhance biodiversity across BWSR's programs. The **BWSR** Living Landscapes Initiative expands upon BWSR's 2016 Pollinator Initiative, recognizing that the state needs to address declines in a wide range of plant and animal species, build partnerships and establish important habitat corridors. New BWSR programs including HELP, Lawns to Legumes and Minnesota Habitat Friendly Solar now support the Living Landscapes Initiative.

To promote innovative approaches, the HELP program includes a wide range of habitat enhancement and restoration activities. Examples include site preparation, invasive species removal, seedling production, rescuing plants that would have been destroyed by development, inter-seeding, mowing, prescribed burning, conservation grazing and conservation having.

Non-herbicide methods of site preparation and management are preferred. The Xerces Society's "<u>Organic Site</u> <u>Preparation Methods</u>" guide serves as a key resource in that regard.

Locating projects away from pesticide exposure is also encouraged. Project leaders should consider ways to minimize the effects of pesticides by following the "Protecting Conservation Plantings from Pesticides" fact sheet produced by BWSR and the Xerces Society. Additional key resources being used for the program include a new HELP conservation plan template, BWSR's Native Vegetation Establishment and **Enhancement Guidelines** updated in fall 2022, and BWSR's Pollinator and Biodiversity Toolbox.

The 15 organizations currently funded through the program are working on many innovative approaches. In addition to enhancing larger natural areas, many projects are being implemented at parks, nature centers, schools and arboretums — where they will educate in addition to establishing habitat.

The HELP program was based, in part, on research that showed pockets of highly diverse habitat can have a significant benefit for pollinators and other wildlife.

"Nodes of high diversity are particularly beneficial when they are part of a matrix of habitat plantings across landscapes. This approach to sustaining biodiversity is particularly important at a time when we see decreasing plant diversity across our landscapes from climate change, invasive species, development and many other causes," Shaw said.

To accomplish the goals of boosting biodiversity, the program is funding new floral-rich plots or riparian plantings, converting existing non-native cover to native vegetation, and enhancing prairie, savanna, wetland and shoreline communities.

In Woodbury, a HELP grant is being used to enhance and diversify recently restored prairie and savanna areas at Lake Middle School.

The Campus Greening Program, a partnership between South Washington County Schools and the South Washington Watershed District (SWWD), is using an ecosystem approach to address stormwater quality by expanding natural areas on campuses. The program has converted, enhanced and restored approximately 50 acres of prairie, savanna and woodland on seven campuses including Lake Middle School.

The Lake Middle School prairie and savanna are in their fifth year of restoration and, like many urban restoration sites, could benefit from higher plant diversity. Project planners are using HELP funding to enhance the plantings with species that are most often found in remnant prairies, as well as species that support Species of Greatest Conservation Need (SGCN). The watershed and school district have installed greenhouse shelving in four classrooms. Students have grown more than 4,000 potted plugs of 34 different species of flowering plants to put in the ground this spring. Teachers, students and staff are collaborating to identify the best techniques and species. In 2024, they will refine the program to enhance the learning experience. Future steps for the project will include working with contractors to reduce weed competition through burning, mowing and integrated pest management; and further enhancing the natural areas to support the additional diversity added through the program.

"The HELP grant has provided the opportunity to support a wider range of pollinators through the enhancement of existing restored prairie, and to do so in a way that brings students and staff directly into the restoration



Above: A prescribed burn kick-started the restoration project at Grams Regional Park near Zimmerman in July 2022. **Below:** Goats grazed in Grams Regional Park to manage the park's overgrown understory. Conservation grazing eliminates the need for herbicide, reduces unwanted plants, recycles nutrients and helps reduce the quantity of invasive species. **Photos courtesy of Sherburne SWCD**



process," said SWWD watershed restoration specialist Tony Randazzo, who managed the Woodbury projects.

BWSR awarded a HELP grant to Sherburne Soil and Water Conservation District (SWCD) in partnership with Sherburne County Parks & Recreation to restore 24 acres of native prairie habitat at Grams Regional Park near Zimmerman. Grams Regional Park is one of the most visited in the county parks system.

"Since the first time I laid eyes on the landscape of Grams Park, I have wanted to find a way to establish native prairie on the rolling hills of this expansive field," Sherburne County Parks Coordinator Gina Hugo said. "The HELP grant provided us with the perfect opportunity to work with partners and develop a creative way to prepare the site without chemicals and threat of erosion."

The parks department and SWCD, with guidance from the Xerces Society, BWSR and the U.S. Fish & Wildlife Service, selected grazing as a non-chemical treatment before seeding with a diverse mix of native grasses, sedges and forbs.

"This approach may mean a slower establishment, but with the benefits of protecting people and pollinators, we are content to allow the prairie to evolve more slowly and implement management that makes sense based on how the system responds," Hugo said.

After a midsummer burn, sheep and goats were brought to the park in August and October 2022 to graze on the new flush of brome grass. The park was seeded in spring 2023; another grazing is planned to help ensure seed-to-soil contact, and to remove weeds.

"It has been encouraging to see excitement about this program across the state. We are facing big challenges, but strong partnerships and innovative approaches will help us support biodiversity and the species that need our help," Shaw said.

Nitrogen reduction, collaboration drive Dakota County's ACRE Plan



akota County is taking a water quality-focused, comprehensive approach to addressing groundwater concerns linked to agricultural chemicals.

The Agricultural Chemical Reduction Effort (ACRE) Plan is a collaborative effort involving Dakota County, the Dakota County Soil and Water Conservation District (SWCD), the University of Minnesota Extension — and other agencies, organizations, cooperatives, businesses and producers involved in the ag industry. The Dakota County Board adopted the plan in October 2022.

66 Farmers here have a history of embracing big challenges; (Dakota County) has a history of innovation regarding drinking water issues and diligence in protecting public **99** health. — Jill Trescott, recently retired,

Dakota County Groundwater Protection Unit

About 60% of Dakota County — roughly 227,000 acres — is farmland.

The ACRE Plan aims to reduce ag-related nitrate contamination in groundwater, and address contaminants such as pesticides and chlorides "where practical to protect human health and the environment," the plan states. Its goal: Reduce agricultural chemicals in groundwater to levels that **From left:** Irrigation water management; perennial crop cover such as Kernza, being viewed here during a tour; and cover crops, such as the rye seen here, are examples of the type of practices supported by Dakota County's ACRE Plan. **Photo Credits:** Dakota County SWCD

do not threaten human health or the environment.

Nitrates exceed the 10 milligrams per liter health guidelines in about 25% of the Dakota County households that use private wells for their drinking water supply. Household treatment systems may cost as much as \$4,000, the ACRE Plan notes.

Within the <u>Vermillion River watershed</u>, the city of Hastings has spent \$3 million on a nitrate removal system.

The Minnesota Department of Health (MDH) has linked nitrates to blue baby syndrome. The sometimes-fatal condition reduces the blood's ability to deliver oxygen. Nitrates carry <u>other human</u> <u>health risks</u>, and are toxic to fish.

Concentrations can be higher in agricultural areas, shallow aquifers and sandier soils; all three exist in Dakota County.

Despite best management practices farmers have adopted since elevated nitrate readings appeared, nitrate levels in groundwater tapped by the city of Hastings have increased over the past 20

years, MDH data show.

The 2020-30 Dakota County Groundwater Plan, adopted in January 2021, identified the need to reduce agricultural chemicals. One of its priorities was to develop a plan of action. The Dakota County ACRE Plan is the result. It goes beyond previous efforts - which have included the Minnesota Department of Agriculture's nitrogen fertilizer management plan - to encompass all of Dakota County, including private and public water supplies. (Earlier efforts focused on the Hastings Drinking Water Supply Management Area [DWSMA].)

Chuck Clanton, who has a background in agricultural engineering, participated in ACRE planning as an educator, researcher and producer. Manure management associated with water quality was a focus of his research at the University of Minnesota, where he was a professor in the Department of **Bioproducts and Biosystems** Engineering. Now retired, he continues to operate a 150acre crop and beef farm near Hampton, where past projects have focused on controlling erosion and nutrient loss, eliminating conventional tillage, and reducing herbicide use. Through farm tours, he continues to show students conservation tillage and other practices.

"While my academic work at the University of Minnesota has often involved the theory behind agricultural production, participating in ACRE has helped me stay current with what works in the real world. As a producer, I have been able to contribute my hands-on experiences, while learning from others," Clanton said.

Clanton said his involvement with ACRE complemented



A Midwestern Drilling crew used a hollow-stem auger to drill one of Dakota County's ACRE monitoring wells in Hampton Township. Dakota County will use results from the rural monitoring well network and its private well sampling programs to track trends in groundwater and drinking water chemicals to evaluate progress of the ACRE program. **Photo Credit:** Dakota County staff

Measuring ACRE Plan Success

The <u>ACRE Plan</u> states it will define success by the following quantitative measures, which, it notes, it aims to make progress toward — but not fully achieve — within 10 years:

No more than 5% of households in every Dakota County city and township that use private drinking water wells exceed the suggested 10 mg/L guidelines for nitrates

No public water supply well will exceed — or be projected to exceed — the 10 mg/L guidelines in the

his work on the Vermillion River Watershed Planning Commission and the Minnesota Department of Agriculture's local advisory team for the Hastings DWSMA.

The ACRE Plan's strategies for dealing with agricultural chemicals include data collection, communication and education, technical assistance and financial incentives.

"We really can't do business like we've done in the last four decades," Clanton said. "This is going to be an awareness that next 10 years

Median nitrate levels in shallow groundwater in every township or city or smallest practical geographic area will be lower than 10 mg/L

No household with a private drinking water well will have pesticide concentrations exceeding 50% of drinking water guidelines

The contributions of chloride from crop fertilizer sources to groundwater will decrease compared with current baseline conditions

things are going to probably have to change in the future."

While nitrogen application rate tables have focused on fertility and economics, Clanton said he believed the next step could be to add a table focused on environmental friendliness.

Education is a primary strategy. The plan provides resources to raise public awareness among farmers and rural residents regarding groundwater conditions, practices to improve water quality, and funding opportunities. This is a key piece for a county with more than 8,000 private wells.

The Dakota County SWCD organized the Agricultural Advisory Group meetings. SWCD and Natural Resources Conservation Service staff provide technical assistance to farmers seeking ways to keep ag chemicals from reaching the groundwater. The ACRE Plan proposes partnering with the University of Minnesota Extension on large-scale plant tissue nitrogen testing, and on trainings such as the Nitrogen Smart program. Through the SWCD, the ACRE Plan proposes finding ways to implement practices on rented farmland.

To encourage participation, the plan identifies financial incentives for farmers who adopt best management practices. Cost-share options include Minnesota Board of Water and Soil Resources grant programs available through local government units for practices such as cover crops, nutrient management and integrated pest management — which reduce the use of ag chemicals and improve soil health and water quality.

"I'm proud that Dakota County is promoting agriculture that feeds the future while repairing the damage done by past and present practices. With the ACRE Plan, the county is continuing its leadership role in addressing this persistent groundwater issue," said Jill Trescott, who recently retired from the Dakota County Groundwater Protection Unit, where she led work related to the ACRE Plan.

"Farmers here have a history of embracing big challenges; (Dakota County) has a history of innovation regarding drinking water issues and diligence in protecting public health. I look forward to seeing the county's continued progress," Trescott said.

Root River SWCD project targets trout habitat, aims to curb flood damage and sedimentation





The Root River SWCD project in the Crooked Creek watershed drew from a Watershed-Based Implementation Funding grant. The Clean Water Fund supports WBIF. CALEDONIA — A \$700,000 Root River Soil and Water Conservation District (SWCD) flood- and erosioncontrol project nearly 10 years in the making finished in November 2022 with support from Watershed-Based Implementation Funding (WBIF) from the Minnesota Board of Water and Soil Resources (BWSR).

The 28-foot-high earthen dam constructed in the 70-square-mile Crooked Creek watershed, which begins in Caledonia and flows east toward the Mississippi River, is designed to reduce flood damage, curb sediment-loading to Crooked Creek, protect roads and agricultural land, and improve wildlife habitat.

Severe flooding that resulted from a 12-inch, single-day rainfall in August 2007 made the project a priority for the Crooked Creek Watershed District (CCWD), which sought to expand water storage, reduce sediment and improve downstream trout habitat. The 2007 flood caused damage to infrastructure, residential areas and public lands totaling nearly \$26,200 in Crooked Creek Township and nearly \$13,200 in Mayville Township.

In 2016, another round of heavy flooding cut a half-mile-long gully in Winnebago Township that reached 12 feet deep at its deepest point. The 2016 flooding damaged roads and culverts, wiped out agricultural crops, and deposited debris across farm fields, residential areas and public rights of way. Floodwaters carried thousands of tons of sediment into Crooked Creek. a designated trout stream with rainbow trout and brown trout. Settled sediment can clog pebbly streambeds where trout lay their eggs. Suspended sediment particles can block sunlight, killing important aquatic plants needed for a healthy habitat. Additionally, sediment absorbs warmth from the sun and increases the water temperature.

The project was a top priority in the Root River planning area's Comprehensive Watershed Management Plan developed under BWSR's One Watershed, One Plan program in 2016.

In November 2022, the SWCD finished work on the project within the Crooked Creek watershed. It involved two Winnebago Township landowners: Joe Hammel and Gary Klinski. Most of the project is on Klinski's land. The project will benefit downstream landowners.

While the site remains privately owned, the CCWD obtained an easement that allows access to maintain and inspect the structure. Left: Workers positioned an outlet pipe at the site of a flood- and erosion-control project in the Crooked Creek watershed near Caledonia in August 2021. Middle: A worker tested the tensile strength of heatsealed seams Right: A vacuum was used to check for leaks in the seams in September 2021. Photo Credits: Root River SWCD

The pond created by the dam is designed to hold back a 50-year flood event — one that has a 2% chance of occurring in that location in any year. The structure is projected to reduce by 56% the outflow across a 1,010acre area that includes cropland, pasture, forest and land enrolled in the federal Conservation Reserve Program. With about 110 acre-feet of storage, the structure helps to address the 10-year goals for the watershed in the Root River Comprehensive Watershed Management

Plan. The plan aims to curb sediment-loading by 5,393 tons a year, and provide 433 acrefeet of storage to handle two-year, 24-hour runoff events. The structure is expected to reduce sediment-loading by 1,226 tons per year.



An earthen dam is designed to reduce flood damage and sediment-loading to Crooked Creek, a Mississippi River tributary in Houston County. The site in Winnebago Township is seen here in November 2021, shortly after it was seeded. **Photo Credit:** Adam Beilke, BWSR

"It's a big relief finally having it completed after all the years of working on it," CCWD Treasurer Paul Fruechte said of the storage project.

The CCWD worked to identify funding sources for the project. Clean Water Funds available through Root River WBIF covered \$435,000 of the cost. The CCWD contributed \$220,000, money generated by its general levy, to engineering and construction costs. Houston County contributed \$40,000 in federal American Rescue Plan funds. The bulk of construction finished in summer 2021. The existing waterway continued to be used for about a year while the vegetation became established on the new structure. In November 2022 the SWCD removed a diversion, allowing the water to flow through the new waterway and connect to the outlet pipe.

The CCWD will reimburse the Root River SWCD for maintaining the structure. With an engineer from the USDA's Natural Resources Conservation Service, the CCWD inspects all structures within its boundaries once a year.

Root River SWCD staff members spearheaded the project, provided technical support, coordinated with the engineering firm, reviewed easements and obtained permits.



Flood damage from a single-day event in 2016 washed out part of a township road, **left**, and, elsewhere in the watershed, **middle and right**, carved a gully a half-mile long and 2 feet to 12 feet deep. **Photo Credits:** Root River SWCD

Coon Creek Watershed District links habitat, stormwater work









Clean Water Funds from BWSR backed three Coon Creekrelated projects:

\$376,090, 2019; CCWD and Coon Rapids; biocharand iron-enhanced sand filter to treat a tributary's runoff. Annual reduction estimates (ARE): 80% E. coli; 69 pounds phosphorus.

\$395,000, 2020; 1.1mile Coon Creek Park stream restoration, Andover. ARE: 237 tons sediment, 201 pounds phosphorus.

\$345,000, 2022; CCWD and Coon Rapids; biocharand iron-enhanced sand filter to treat a tributary's runoff. ARE: 23 pounds phosphorus, 404 billion organisms. OON RAPIDS — On a stream that carries stormwater runoff from a densely populated suburb, the Coon Creek Watershed District (CCWD) overcame constraints of its urban setting to improve habitat, reduce the likelihood of flash flooding, and curb pollution bound for the Mississippi River.

The two-phase, \$1.3 million Sand Creek restoration project leveraged \$577,930 in Clean Water Funds from the Minnesota Board of Water and Soil Resources (BWSR), and \$560,540 in U.S. Environmental Protection Agency funding through Section 319 of the Clean Water Act. Work focused on a 1.2-mile-long stretch.

"When we work to address our aquatic life impairments in these urban streams, it's really twofold. The heavy anthropogenic impact on the land has led to in-stream factors: poor habitat, straightened channels, a lot flashier water, altered hydrology," said Justine Dauphinais, CCWD water quality coordinator. "Also, you have to deal with all of the regulated urban stormwater that is washing off the landscape into the creek — and the quality of that water itself."

As space, partnerships and funding allow, the CCWD pairs in-stream restoration and bank stabilization to reduce sedimentloading with best management practices to reduce peak flows and filter out dissolved phosphorus and bacteria.

Annual reduction estimates show the Sand Creek project, which finished in 2021, will curb sediment-loading by 468 tons and cut phosphorus by 420 pounds. One pound of phosphorus can feed 500 pounds of algae.

Sand Creek starts in Blaine as a series of stormwater ditches, and flows 8.3 miles to Coon Creek, a Mississippi River tributary. The downstream 2.2 miles function as a stream. The rest, bordered by hundreds of private properties, functions as a ditch.

The Sand Creek work set the stage for projects on Coon Creek.

"We started our work in Sand Creek for a couple of reasons," Dauphinais said. "It's a bit closer to meeting water quality goals. It's nice to be able to move that needle. It buys momentum. We can receive this grant money, pair it with our own and make a measurable difference. It's realistic and it's within reach (of being removed from the state's impaired waters list).

"Second is it's a major tributary to Coon Creek, which has worse impairments. Anything we do in Sand Creek helps Coon Creek."

The two years of drought conditions that followed Sand Creek project construction allowed the bank-stabilizing native vegetation to grow deep roots. Accurately

Left: Contractors backfilled the existing Middle Sand Creek channel and restored the stream, following a natural, meandering channel design. Two BWSR Clean Water Fund grants supported the Sand Creek work: \$195.160 awarded in 2018 for Lower Sand Creek corridor restoration: and \$382,770 awarded in 2019 for Middle Sand Creek corridor restoration. Middle: An aerial view of the remeandered Middle Sand Creek looks upstream from the BNSF Railway stream crossing on April 1, 2021. Right: An upstream view from the pedestrian bridge at Sycamore Circle Northwest depicts native plants' growth the summer after work on a segment of Middle Sand Creek was complete. Photos courtesy of Coon Creek Watershed District VIDEO: Lower Sand Creek project



Left: The first stage of the CCWD's Clean Water Fund-supported work on Sand Creek in Coon Rapids focused on Lower Sand Creek corridor restoration. Construction included five backwater pools, and six rock cross vanes designed to control the grade and direct stream flow. The project incorporated toe wood protection, resloping, and vegetated rock riprap streambank stabilization techniques. Middle: CCWD Water Quality Coordinator Justine Dauphinais walked along Sand Creek in fall 2019. Right: Most of Sand Creek functions as a ditch; only the downstream 2.2 miles function as a stream. Photo Credits: Ann Wessel, BWSR

measuring the project's success will take about five years of phosphorus, sediment and E. coli sampling.

Anecdotally, Dauphinais said evidence of sedimentreduction already exists: After heavy rains, the water no longer resembles tea.

"Prior to this project we had a relatively straightened, shallow, over-widened channel with a sandy bottom, and not a lot of variety. So we're trying to encourage habitat variety and quality. Things like riffles, pools and runs, and then also cover and substrate variety. We want wood in the channel, and rocks along with the sand. And we want areas of fasterflowing water, areas of lowflowing waters, and then areas with overhanging vegetation and nooks and crannies for the macroinvertebrates to live in," Dauphinais said in fall 2019, when the Lower Sand Creek project was finished and the Middle Sand Creek project was being planned.

Dauphinais called the Middle Sand Creek project the "gold standard" in terms of maximizing the potential within urban constraints.

That two-thirds-mile-long segment used natural channel design methods to return the straightened stream to its winding course, adding 625 feet of length via curves that slow the velocity. The design created a 50-foot-wide floodplain, and lowered the floodplain level by as much as 2 feet.

One of the biggest challenges was explaining why it was necessary to thin the trees. The first step in the Sand Creek work — clearing, thinning and dirt-moving generated dozens of calls to the CCWD office.

"People appreciated this oasis in the middle of Coon Rapids," Dauphinais said.

But under the heavy shade of mature trees, invasive buckthorn crowded out native understory species, leaving bare soil that eroded easily.

"As they learned more about the projects and the benefits and ... the creek and the aquatic life, then things got better. We had a robust replanting plan with both seed and plugs and shrubs and trees," Dauphinais said. "When the leaves started budding and the plants started growing, then people really came around."

Dauphinais said a couple of residents who had opposed the project called the CCWD office to say they were happy with the results.

During the summer, lush vegetation now conceals bits of the narrowed, serpentine

stretch. A more open canopy allowed plants to flourish, and drew eagles and owls.

"The biggest challenge (was) the public perception, and trying to explain the need and the long-term benefit of the tree-clearing and the mass excavation," Dauphinais said.

The extensive excavation was necessary to ensure the project would not increase the flood risk to neighboring homes. The design had to avoid negatively affecting existing infrastructure or sensitive areas. Working in a heavily developed landscape required extensive planning and permits — including permits from the U.S. Army Corps of Engineers, the Minnesota Department of Natural Resources (DNR). and the Minnesota Pollution Control Agency.

"In an urban environment, there's a lot of constraints, whether it's utility companies, gas lines, sewer lines, fiber optic — you have the streets and the culverts and then you have private property and bridges and the railroad," Dauphinais said.

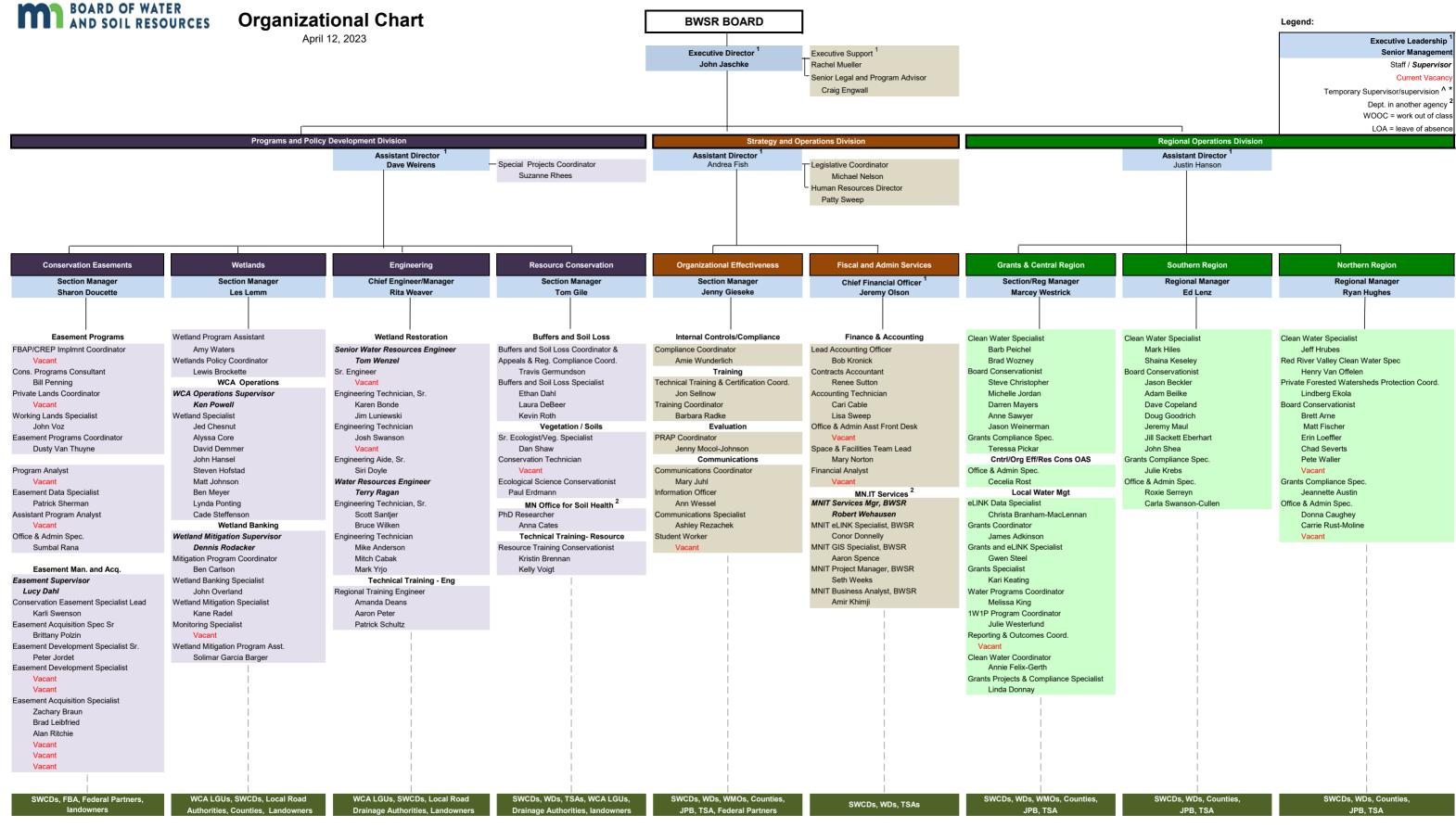
Dauphinais credited Nick Proulx, a stream restoration specialist on the DNR's Clean Water Team, with helping engineers to devise a project that adhered to natural stream design principles. "That was the biggest win working well with the DNR and building that relationship. That's going to pay off in all of our future projects and (in) training our engineers that don't do that kind of work in these methods," she said.

What CCWD staff learned from the Sand Creek project translated to its recently finished Coon Creek Park restoration on the main branch of Coon Creek in Andover.

A multi-year project situated on Public Ditch 57, a straightened segment of Coon Creek, it incorporated the principles of natural channel design. It considered what the stream would have looked like before European settlement, and then made adjustments based on how much water the stream receives today — including runoff from impervious surfaces. The existing ditch was oversized and too shallow.

The completed project incorporated a two-stage channel that provides better habitat.

"We're really grateful that there's state and federal funding available for this type of work, because to do it right, it's incredibly expensive and we wouldn't be able to do it with just local funds," Dauphinais said.



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-	miles from line 3.				0.000	0							Subto	otal Oth	ner Expenses:				(E	3)	0.00
8. Multiply line	e 6 by line 7. This is ta	able mileage	e.					0.00 (Copy to Box C)				_	Total	taxable	e mileage grea	ater than IRS rate	to be reimbu	rsed:	(0	C)	0.00 MIT or MOT
	ne 8 from line 4. If line 8 -taxable mileage.	is zero, ente	er mileage ar	mount from I	line 4.			0.00 (Copy to Box D)					Total	nontax	able mileage	ess than or equal	to IRS rate to	o be reimburs	ed: (D)	0.00 MLI or MLO
If using private	vehicle for out-of-state	travel: What	t is the lowes	st airfare to t	he destination?	Total Ex	penses for	this trip must not ex	ceed thi	is amount	-	F						Grand Tota	I (A + B +	+ C + D)	0.00
I declare, under any advance an	penalty of perjury, that th nount paid for this trip. I A	is claim is just UTHORIZE P/	t, correct and AYROLL DEI	that no part of DUCTION OF	of it has been paid or ANY SUCH ADVAN	reimbursed by CE. I have not	the state of l accepted pe	Minnesota or by anot ersonal travel benefits	her party	/ except wi	th resp	ect to				Tata		ss Advance is e reimbursed		•	0.00
Employee Circ	t				Data		14/-	ni Dhanai						Amou	nt of Advance	to be returned by					0.00
Employee Sigr Approved: Bas	nature sed on knowledge of ne	cessity for tra	avel and exp	pense and or	Date n compliance with a	Il provisions o		rk Phone: travel regulations.		Appointin	ig Auth	nority D	esigne			ing Advance and					
	-	-						-				-	-	-				-			
Supervisor Sig	inature				Date	Work F	hone.			Signature	•							Date			

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	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	s 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.