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# **2016-2017 Biennial Report to the Minnesota Legislature**

10/15/2018

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## Letter from the Board Chair

Dear Friends and Colleagues,

The mission of the Minnesota Board of Water and Soil Resources is to improve and protect Minnesota's water and soil resources by working in partnership with local organizations and private landowners. Over the course of the 2016-2017 biennium we have worked in close partnership with the local governments and private landowners we serve to implement conservation programs that are making a difference for our state's soil and water resources.

In January 2017, years of work resulted in a signing ceremony in the Capitol Rotunda to kick off a federal-state partnership known as the Minnesota Conservation Reserve Enhancement Program (Minnesota CREP). This agreement, between the United States Department of Agriculture Farm Service Agency and the State of Minnesota, will result in the permanent protection of up to 60,000 acres of our state's most environmentally sensitive lands. These critical lands will provide benefits for water quality, habitat, and wildlife in perpetuity.

Our Clean Water Fund Competitive Grant program continues to deliver local conservation through local government implementation. Additional Clean Water Fund investment in Soil and Water Conservation District capacity funding means that every part of the state benefits from more boots-on-the-ground conservation.

This biennium also saw significant progress in the water management transition to *One Watershed, One Plan*. The goal of aligning local planning and implementation with state strategies into plans built largely around the state's major watersheds is closer to reality with four approved plans and more in the works. As we approached the Public Waters deadline of the state's buffer law on November 1, local governments and landowners have made tremendous progress in meeting this law.

Working together with our federal, state, and local partners, we continue to work toward better outcomes. We're proud to share some of the highlights of those efforts with you, our legislative partners, as we work together to protect and restore Minnesota's natural resources.

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

## Executive Summary

Over the 2016-2017 biennium, our agency worked diligently to continue good stewardship of the funds entrusted us by Minnesotans. Through close working relationships with government at the local, state, and federal, and the private landowners we serve, we have worked to advance the state toward its natural resource goals. As directed by Minnesota State Law, this report, which covers agency work between July 1, 2015 – June 30, 2017, contains several recommendations for program or policy changes to improve state and local efforts in water and soil resources management. Those recommendations include:

- 1) Secure federal match by achieving the state's funding commitment for the Minnesota CREP through all available legislative sources such as: The Legacy Outdoor Heritage Fund and Clean Water Fund, Capital Investment Fund, and Environment and Natural Resources Trust Fund.
- 2) Develop, implement, and support a locally-based MN CREP program (in the designated 54-county area) with local governments, farmers, and other landowners.
- 3) Continue providing riparian aid to local governments electing enforcement of the buffer law and ensure compliance in those counties who defer enforcement to the state.
- 4) Identify alternative practices and other proactive opportunities to support landowners and ditch authorities.
- 5) Engage partners to pursue Section 404 Assumption (including any necessary statute changes), which would make state wetland regulation more efficient and cost-effective.
- 6) Develop and provide a needed option for landowners to participate in the Wetland Bank by establishing an In-Lieu Fee program statewide.
- 7) Identify ongoing, stable funding source to fulfill the state's statutory requirement for the Local Roads Wetland Replacement Program, which mitigates wetland impacts of road projects.
- 8) Accelerate the pace of progress for the transition to watershed-based management planning through the *One Watershed, One Plan* program.
- 9) Work with our local soil and water conservation district partners to develop strategies that ensure their funding is predictable and stable.
- 10) Engage local government and other partners to design transition from competitive grant funding to targeted watershed-based grant funding
- 11) Support statutory adjustments that increase water management efficiencies between state agencies.
- 12) Facilitate the development of practical solution-based recommendations about drainage law to the legislature with a broad array of agricultural, conservation, government, and other groups.
- 13) Build a skilled work force, capable of meeting the challenges and opportunities of technical conservation practice survey, design, and construction.

- 14) Increase capabilities to help farmers, landowners, and local governments tell the story of the Legacy Funds' impacts.
- 15) Pursue mentorship-based and other programs that support a diverse workforce.
- 16) Increase base General fund appropriations so that the agency can meet its statutory requirements and deliver services expected by our local government partners.

## Agency Profile

### Mission

*The mission of the Minnesota Board of Water and Soil Resources (BWSR) is to improve and protect Minnesota's water and soil resources by working in partnership with local organizations and private landowners. The board is the state's administrative agency for 90 soil and water conservation districts, 46 watershed districts, 23 metropolitan watershed management organizations, and 80 county water managers. It sets a policy agenda designed to enhance service delivery through our local government partners.*



*BWSR Board members hear project highlights during a summer board tour.*

### Business Model

Our agency has a unique business model that is designed to:

- Operate as an efficient state-level source of technical and financial assistance to local government delivery systems.
- Emphasize implementation of conservation practices and projects that meet state objectives.
- Focus on Minnesota's private lands.

### Statewide Outcomes

We contribute to the statewide outcome of “a clean, healthy environment with sustainable uses of natural resources” by providing for targeted resource planning, protecting and restoring important water and habitat resources, and ensuring compliance with environmental laws, rules, and regulations.

We also contribute to the statewide outcome of “efficient and accountable government services” by maximizing local and federal partnerships and evaluating the effectiveness of local governments and conservation outcomes.

### Strategies

Our mission is implemented through the following core functions:

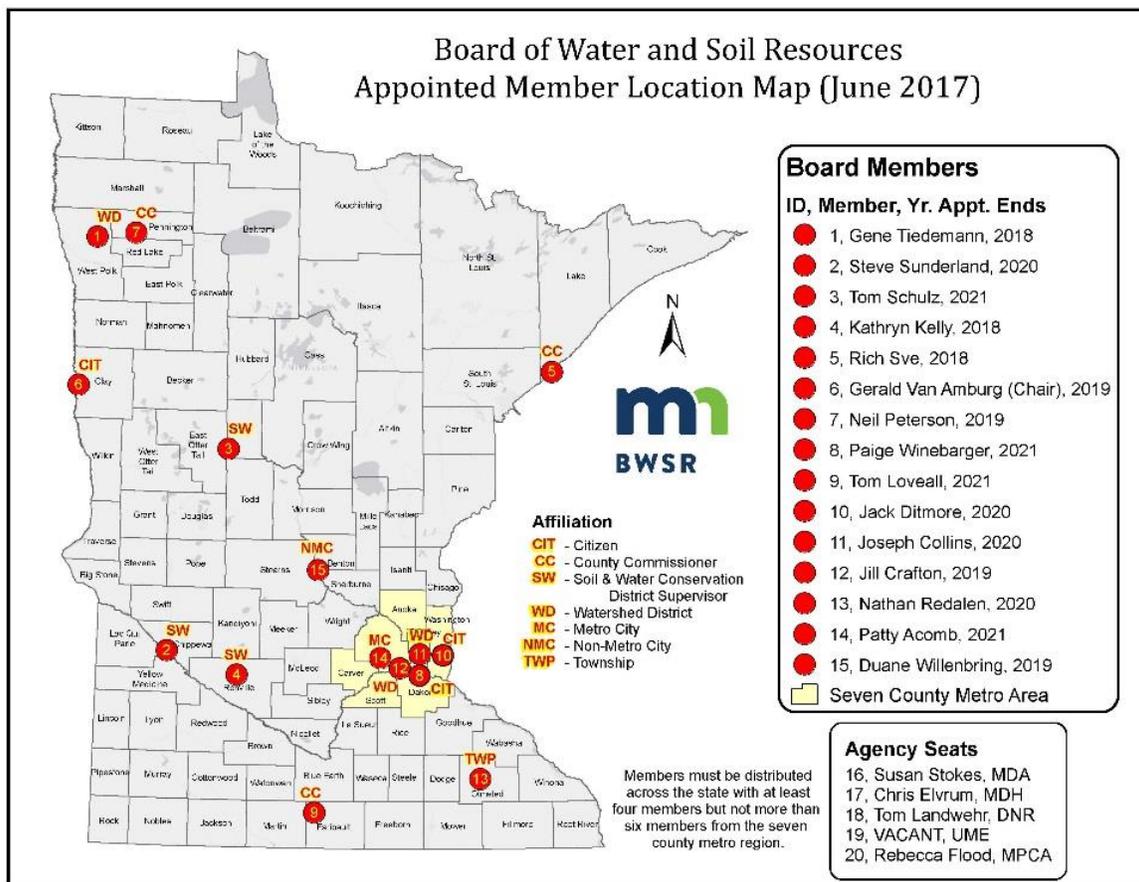
- Serve as the state soil conservation agency.
- Direct private land soil and water conservation programs through the actions of soil and water conservation districts, counties, cities, townships, watershed districts, and water management organizations.
- Link water resource planning with comprehensive land use planning.
- Provide resolution of water policy conflicts and issues.
- Oversee comprehensive local water management.
- Provide the forum (through the board) for local issues, priorities, and opportunities to be incorporated into state public policy.
- Coordinate state and federal resources to realize local priorities.
- Administer implementation of laws: Wetland Conservation Act, Riparian Protection

We accomplish our mission through these key strategies:

- Developing programs that address priority state and local resource concerns (such as keeping water on the land; maintaining healthy soils; reducing pollutants in ground and surface water; assuring biological diversity; and reducing flood potential).
- Prioritizing on-the-ground conservation projects in the best locations to achieve multiple benefits and measurable improvements to water and habitat resources.
- Ensuring compliance with environmental laws, rules, and regulations.
- Implementing agency operations through board and administrative leadership, internal business systems, planning and effectiveness evaluation, and operational support. This includes the board and board management, financial and accounting services, legislative and public relations, communications, and human resources.

## Board Membership

Our Board consists of 20 members, including local government representatives, state agencies, and citizens, that deliver BWSR programs. The makeup of the board is set by Minnesota statute, and includes three county commissioners; three soil and water conservation district supervisors; three watershed district or watershed management organization representatives; three citizens; one township officer; two elected city officials, one of whom must be from the metro area; and Commissioners or designees from the Minnesota Department of Agriculture, Minnesota Department of Health, Minnesota Department of Natural Resources, Minnesota Pollution Control Agency, and the University of Minnesota Extension Services. Board members, including the board chair, are appointed by the governor to four-year terms.



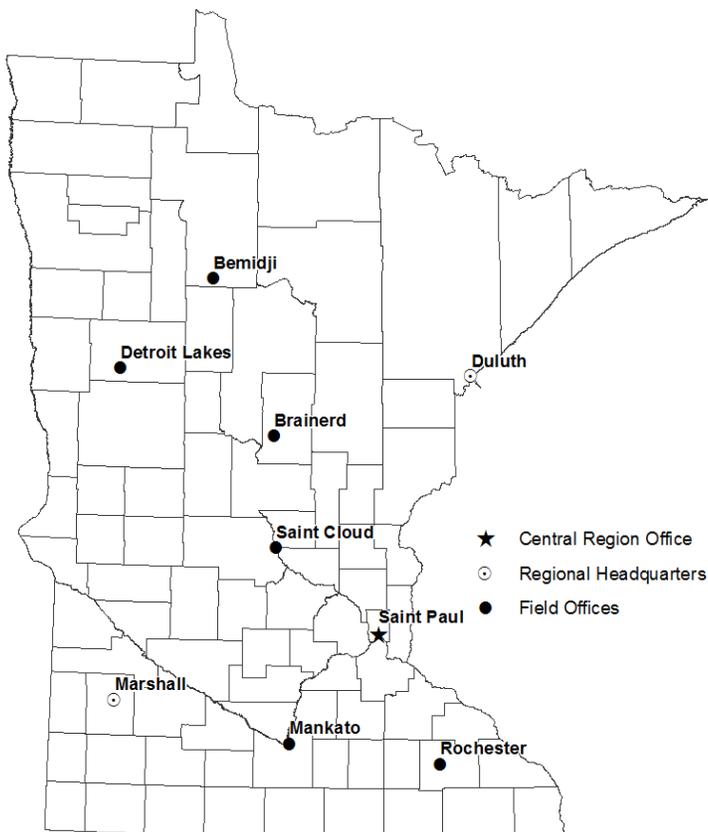
During the biennium, the board managed their work through eleven program and region-based committees. Those committees are:

- Administrative Advisory Committee
- Audit and Oversight Committee
- Buffers, Soil and Drainage Committee
- Dispute Resolution Committee
- Grants Program and Policy Committee
- RIM Reserve Committee
- Water Management and Strategic Planning Committee
- Wetland Conservation Committee
- Northern Region Committee
- Metro Region Committee
- Southern Region Committee

The board sets a policy agenda designed to enhance service delivery through the use of local government.

## Staff

At the end of the biennium (June 30, 2017), our 101 staff members were located in nine field offices throughout the state in Bemidji, Brainerd, Detroit Lakes, Duluth, Mankato, Marshall, New Ulm, Rochester, St. Cloud, and St. Paul (central office and easement section office). Agency staff provide technical, financial and administrative assistance to local governments to plan and implement agency policy and programs on private lands.

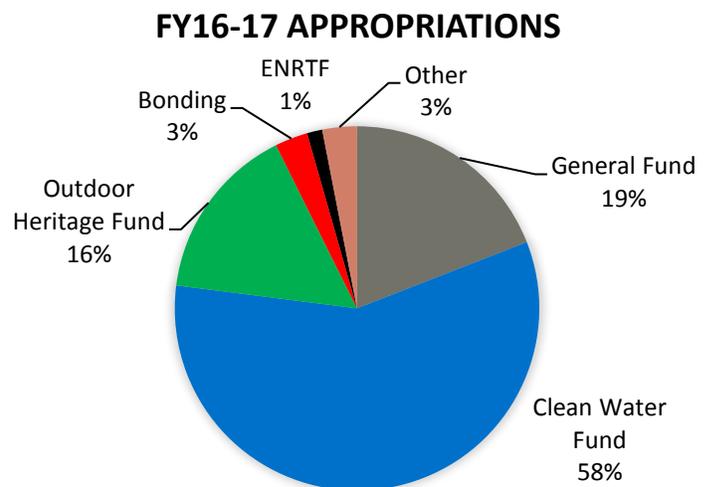


## Budget Overview

Our funding is from Legislative appropriations through the biennial budget process. Our appropriations come from four major sources: General Fund, Bonding, Clean Water Fund, and Outdoor Heritage Fund.

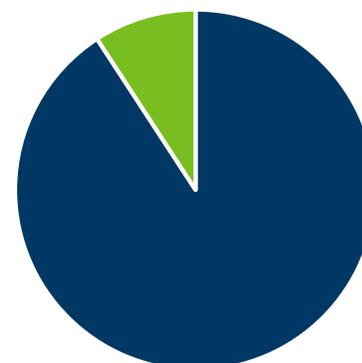
We also have statutory authority to receive funds from other state agencies, the federal government and others. The Other funds category includes such interagency transfers, federal funds, and special revenue funds.

Appropriations for FY16-FY17 Biennium	
General Fund	\$37,252,000
Clean Water Fund	\$113,163,000
Outdoor Heritage Fund	\$30,574,000
Bonding*	\$5,700,000
ENRTF	\$2,636,000
Other	\$5,982,000
<b>Total</b>	<b>\$195,307,000</b>



Pass-through for FY16-FY17 Biennium	
Grants to local governments	\$177,339,117
Agency Operations	\$17,967,883
<b>Total</b>	<b>\$195,307,000</b>

## FY16-17 PASS-THROUGH



■ Grants ■ Agency Operations

## Other Funding Sources

### Minnesota's Environment and Natural Resources Trust Fund

Funding for these projects was provided by the Minnesota Environment and Natural Resources Trust Fund as recommended by the Legislative-Citizen Commission on Minnesota Resources (LCCMR). These appropriations span two years (generally). Appropriations for the FY16-17 biennium totaled \$2.64 million and funded the projects in the table below. THIS PART IS RIGHT.

<b>ENRTF Projects, FY16-FY17 Biennium</b>	
Southeast Minnesota Cover Crop Initiative	\$253,000
Farm Bill Assistance	\$1,000,000
Minnesota Conservation Apprentice Academy	\$433,000
North-Central Lakes Multi-benefit Watershed Scale Conservation	\$950,000



## Conservation Easements

### Overview

The Reinvest in Minnesota (RIM) Reserve Program is a critical component to meeting the state’s goals to protect and improve water quality, protect and enhance wildlife habitat, and reduce flooding. RIM focuses on restoring drained wetlands, protecting important riparian and groundwater areas, and establishing native vegetation.

We acquire, on behalf of the state, conservation easements to permanently protect, restore, and manage resources while private ownership of the land continues. Today, RIM is the largest non-federal private lands permanent protection program in the country.

Anchored in the work of local soil and water conservation districts, the program uses an effective system of local delivery and key partnerships, tied to both state and local priorities. It is unique in funding, leveraging local, state, and federal resources such as the Outdoor Heritage Fund, Clean Water Fund, Conservation Reserve Program, and Wetlands Reserve Program.

RIM is also an economic driver. Easement programs that restore wetlands and grasslands require a broad range of skilled workers in the public and private sectors throughout Minnesota.

Conservation Easements FY16-FY17 Funding Sources	
Outdoor Heritage Fund	\$30,574,000
Clean Water Fund	\$33,250,000
Bonding	\$4,700,000
Environmental and Natural Resources Trust Fund	\$1,950,000
<b>Total</b>	<b>\$70,474,000</b>

### Results that work for Minnesota

Studies show increased land retirement results in increased environmental benefits, from reductions in soil erosion and decreased phosphorus and nitrogen loading to greater biological diversity in these areas. Buffers are a key strategy for nitrogen reduction, as confirmed by a MPCA study showing the two most effective treatments for nitrogen reduction are converting riparian land currently planted in corn into grass and putting perennials in those areas where corn grows only marginally.

Almost 180 conservation leaders, media, elected officials and farmers joined Governor Dayton in the Capitol Rotunda on Tuesday, January 17 as he signed the Minnesota Conservation Reserve Enhancement Program (MN CREP) agreement. The agreement, which came after two years of work and deliberations between the USDA and BWSR, will target 60,000 acres in areas of southern and western Minnesota facing significant water quality challenges, to protect and improve our natural resources for future generations.



Additional biennial accomplishments include:

- Securing 264 easements through six different programs, protecting over 18,450 acres across the state of Minnesota.

- Protecting almost 4,870 acres adjacent to rivers, lakes, streams and ditches through the riparian buffer and critical shoreland easement programs.
- In 2015, the Camp Ripley Army Compatible Use Buffer Program (ACUB) was designated part of the federal Sentinel Landscapes program, a federal, state, local, and private sector collaboration that preserves agricultural lands and restores and protect wildlife habitat while helping to sustain military readiness. Sixty-three easements were funded during the biennium, protecting almost 5,640 acres.

## At-a-Glance

The primary components of our Conservation Easements program are:

- Army Compatible Use Buffer (ACUB) Program
- MN CREP
- RIM Critical Shorelands
- RIM Riparian Buffers
- RIM Wetlands
- Wellhead Protection

Easement Program	Number of Easements	Acres Protected
Riparian Buffers	46	2,220
RIM-WRP/RIM Wetlands	84	6,528
Army Compatible Use Buffer Program	63	5,639
RIM - Wellhead, Prairie	18	1,416
RIM Critical Shorelands	53	2,649
<b>Total</b>	<b>264</b>	<b>18,452</b>

### Army Compatible Use Buffer (ACUB) Program- Little Nokassippi Wildlife Area

We provide easement acquisition service in the Little Nokassippi River Wildlife area on a fee-for-service basis to the Army National Guard for their ACUB Program area in Camp Ripley. Participating landowners in the project area keep the land in an undeveloped, non-residential state, which avoids future interference with troop training activities at Camp Ripley. BWSR receives funds from both the federal government and the Lessard-Sams Outdoor Heritage Council for this initiative.

The collaboration between the State, Minnesota Guard, Morrison County, and National Guard Bureau continues to provide results: over 5,600 of acres were protected over the biennium.

### The Minnesota CREP



Launched in 2017, the Minnesota Conservation Reserve Enhancement Program (MN CREP) is an important, bipartisan initiative focusing on the highest priority areas for reducing nitrogen, phosphorus and sediment; protecting vulnerable drinking water; and enhancing grassland and wetland habitats. BWSR acquires, on behalf of the state, conservation easements to permanently restore and enhance land while local ownership continues. The \$500 million agreement between the State and the United States Department of Agriculture will use \$150 million in state funding to leverage \$350 million in federal funding, used as direct payments to landowners and farmers who enroll in the program.

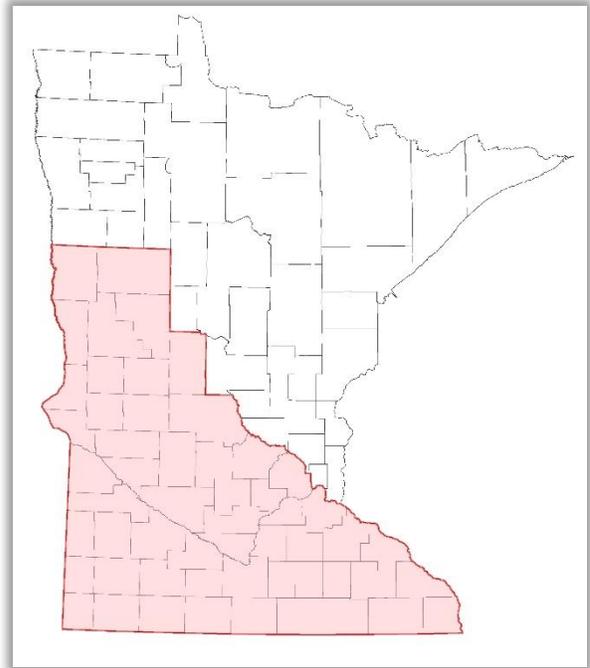
MN CREP uses the nationally recognized state Reinvest in Minnesota (RIM) easement program and the USDA Farm Service Agency (FSA) Conservation Reserve Program (CRP). A five-year program, it will enroll 60,000 acres prioritized and targeted for water quality and habitat.

The MN CREP will implement four water quality conservation practices over the 54-county program area, pictured right.

- Riparian Lands - Grass Filter strips
- Wetland Restoration – non- floodplain
- Wetland Restoration - Floodplain Wellhead Protection Areas

### CREP Funding

Over the FY2016-17 biennium, \$18 million in Clean Water Fund appropriations were designated for CREP. \$9.75 million in funding for RIM riparian buffer easements and \$2 million in funding for wellhead protection easements will also be used as part of the CREP program. \$25.060 million in Outdoor Heritage Fund appropriations were designated for CREP in the biennium.



### CREP Overall Outcomes

Sign-ups for the MN CREP began in May 2017, so specific outcomes are not yet available for the FY16-17 biennium. Changing the land cover of 60,000 acres of annual cropland to perennial vegetation will take up to five years, ultimately providing significant nitrogen, phosphorus, and sediment load reductions, including:

- 19,000 pounds of total phosphorus per year
- 1,200,000 pounds of total nitrogen per year
- 123,000 tons of sediment per year

Additional benefits include enhanced habitat for resident and migratory wildlife.

### RIM Critical Shorelands Easement Protection

This subprogram focuses on protection of shoreland habitat on wild rice lakes in the northern forested region of Minnesota and along the Pine River. During the biennium, 53 easements protecting almost 2,650 acres were secured.

### RIM Riparian Buffers

Our riparian buffer program is part of a strategic approach to prevent pollutants from entering our lakes and streams. Buffer easement sign-ups were suspended over the biennium to maximize the amount of state funds available to use for federal leverage in support of the Minnesota CREP. Forty-six in-process easements were recorded during the biennium, protecting 2,220 acres.

## RIM Reserve – Wetlands Reserve Program (WRP) and RIM Wetlands

RIM Wetlands Program easements provide important waterfowl and upland wildlife habitat, help protect water quality by filtering runoff from adjacent farm lands, and provide for water treatment and storage. RIM easements, whether stand-alone or partnered with the United States Department of Agriculture's Wetlands Reserve Program, continue to be a popular and necessary mechanism for working towards the state's wildlife, habitat, and water quality goals. The last RIM-WRP funded easement was acquired during the biennium, with the focus moving forward on RIM wetland easements acquired through the MN CREP.

## Wellhead Protection

Community wellhead protection areas are highly susceptible to possible pollution by infiltration of surface waters through the overlying soil profiles and into the underlying wellhead aquifer. We have worked closely with the MN Department of Health and the MN Rural Waters Association to target our RIM easement acquisitions in areas where vulnerability of drinking water is classified as high or very high to maximize the ability to protect vulnerable drinking supplies in rural Minnesota. As with buffers and wetlands, most wellhead protection funds were held to secure federal leverage for the MN CREP. Eleven easements in-process easements were funded, protecting 743 acres.

## Featured Project: Where Water and Forests Meet

As much as lakes are a central part of our state's identity, the trees that line so many of those lakes are just as important. When we think about water quality, many conservation practices come to mind, but for many of us, forest management isn't one we'd naturally think about.

The truth is, trees help minimize erosion, keeping soil on the land and helping to filter pollutants out of the water supply. Urban forests can reduce annual stormwater by 2-7% and a mature tree can store 50 to 100 gallons of water during large storms. Annual phosphorus discharge from forested lands is estimated at just a tenth of a pound per acre per year. When that land is developed, no matter the use, discharge increases exponentially.

Private forested lands are the most vulnerable to these kinds of development concerns, and in the northeast and north central forest zones of the state, work is ramping up to conserve these lands and keep them forested. Dan Steward, a long-serving Board Conservationist at the Board of Water and Soil Resources, has shifted roles in recent months. In his new role, he is working closely with the Department of Natural Resources Forestry Division and the Forest Resources Council to build and establish a water quality and habitat protection strategy around private forest management and local water planning.

What does that mean? To start, it means working closely with the counties in the region, especially those in the Mississippi Headwaters, to help them work through what it means to establish a protection strategy and a forest cover-based minor watershed approach as part of their county water plan updates.



*Forested lands along the Mississippi will be targeted as part of this program.*

Increased capacity funding for soil and water conservation districts means that many of these counties now have staff who are able to focus more of their time working with landowners on forest management and conservation opportunities. The program helps align county water planning with the work being done by the DNR, using easements and other conservation practices to really help protect wildlife and water quality. Unlike more traditional agricultural easements, working forests easements allow landowners to continue to harvest and manage their timber under an approved Forest Stewardship Plan.

“Public interest is often greatest where the water and forest meet,” Steward said. “In many cases, your best habitat and biggest water quality impacts are there – that’s the sweet spot. All of these partners are working together to use the practices and resources available to make sure we are protecting these corridors and maximizing public benefit.”

## Status Report

Past Recommendations	Status
Build an interagency proposal for the Governor to submit to the US Department of Agriculture for a new Minnesota Conservation Reserve Enhancement Program (CREP).	✓ <i>Minnesota’s Plan to Improve Water Quality and Enhance Habitat</i> Conservation Reserve Enhancement Program (MN CREP) was signed by the USDA Farm Service Agency and Governor Dayton in January, 2017.
Establish stewardship investment accounts for all sources of easement funding.	✓ Easement stewardship corpus and spending appropriations have been established and are in place. Five percent of the investment, managed by the state Board of Investment, is returned to the agency annually to support easement stewardship.
Seek state funding commitment for a Minnesota CREP through Outdoor Heritage Fund, Clean Water Fund, Bonding, and LCCMR.	✓ During the biennium, the state committed \$25,060,000 from the Outdoor Heritage Fund and \$29,750,000 from the Clean Water Fund in support of the state funding commitment for the MN CREP.

### FY2018-2019 Recommendations

- 1) Secure federal match by achieving the state’s funding commitment for the Minnesota CREP through all available legislative sources such as: The Legacy Outdoor Heritage Fund and Clean Water Fund, Capital Investment Fund, and Environment and Natural Resources Trust Fund
- 2) Develop, implement, and support a locally-based MN CREP program (in the designated 54-county area) with local governments, farmers, and other landowners.

## Minnesota's Buffer Law

### Overview

Minnesota's buffer law establishes new perennial vegetation buffers of up to 50 feet along lakes, rivers, and streams and buffers of 16.5 feet along ditches. These buffers will help filter out phosphorus, nitrogen and sediment. The law established a deadline public waters buffer establishment of November 1, 2017 and a public ditches buffer establishment deadline of November 1, 2018. The law provides flexibility for landowners to install alternative practices with equivalent water quality benefits that are based on the Natural Resources Conservation Service Field Office Technical Guide.



The Buffer Law that was signed into law by Governor Dayton in June 2015 was amended in the 2016 and 2017 legislative sessions. The amendments enacted in 2017 clarify the application of the buffer requirement to public waters, provide additional statutory authority for alternative practices, address concerns over the potential spread of invasive species, including palmer amaranth, through buffer establishment, establish a Riparian Protection Aid Program to fund local government buffer law enforcement and implementation, and allow landowners to be granted a compliance waiver until July 1, 2018 when they have filed a compliance plan with the soil and water conservation district.

### Results that work for Minnesota

Over the biennium, the agency:

- Developed procedures and guidance to help landowners and local governments become compliant with the buffer law including “Common Alternative Practices”. In addition development has begun on an alternative practice Decision Support Tool (Developed by MN Corn Growers and the U of MN) and a Variable Width Buffer Tool (developed by Land O’ Lakes/Agren) to provide landowners with specific scenarios where alternative practices could achieve the outcomes defined by the law and reduce the buffer footprint.
- Built the Buffer Compliance and Tracking System, a statewide, GIS-based tracking system used by SWCDs to track their progress
- Participated in more than 50 landowner/public meetings which included more than 3,000 landowners around the state and held other meetings with local governments to answer questions, provide technical training, and give updates on program development.

### At-a-Glance

#### Program Development



Directed by the Buffer and Soil Loss Erosion Program Coordinator and working with local governments, procedures and guidance were developed for implementation and enforcement of the buffer law. As part of this process, technical guidance was issued for alternative practices. BWSR’s “Common Alternative Practices” includes seventeen landscape-specific scenarios which commonly occur and examples of practices landowners can use to provide comparable water quality benefits to buffers.

Development included input from local government staff, landowners, environmental advocacy groups, and agricultural groups.

### **Buffer Compliance and Tracking System**

Deployed in September 2016, this statewide GIS based tracking system is used by SWCDs to meet their statutory requirement to track progress towards compliance. Implementation of this tool led to submittal of digital parcel data by more than 30 counties who had never before provided this information. Information has been loaded into this tool by all 90 SWCDs, which we use to accurately estimate the level of compliance on multiple scales around the state.

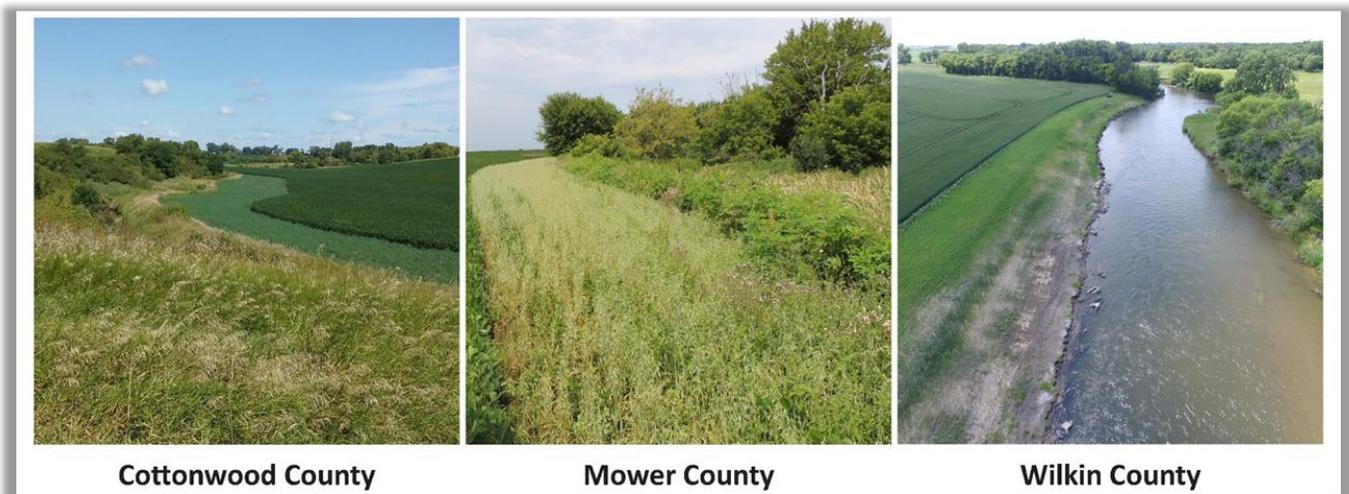
### **Enforcement**

2017 legislative action provided riparian protection aid for counties electing jurisdiction for enforcement of the buffer law. The Department of Revenue is charged with distribution of Riparian Aid resources to those local governments who elect to enforce this law. \$8 million in aid was distributed to eligible counties in 2017. By the end of June, 2017, 72 of 87 counties had elected to enforce the buffer law locally. Fourteen of 46 watersheds have done the same. BWSR enforces the provisions of the buffer law only on waters where no county or watershed district has elected jurisdiction.

### **Compliance**

Landowners across the state established buffers, resulting in 90% of parcels in preliminary compliance statewide (roughly 466,000 out of 512,000 parcels) at the end of the biennium. This increase from first reporting of 80% compliance means that nearly 55,000 parcels have been verified or brought into compliance since the preliminary inventories were completed by SWCDs in BuffCAT in January 2017.

\$5 million in Clean Water Fund appropriations in 2017 supported landowner implementation of buffers. The appropriation was split between those counties within the 54-county Minnesota Conservation Reserve Enhancement Program area and the 33 counties outside the program area. Funds were made available on a non-competitive, formula-based basis to SWCDs to support their local implementation.



## Featured Story: Preliminary estimates show promising progress on Buffer Law

In March 2017, Cottonwood SWCD's Becky Alexander joined Governor Mark Dayton and BWSR Executive Director John Jaschke at a press conference highlighting high preliminary compliance numbers in advance of the November 1, 2017 Public Waters Deadline. Alexander, praised the work of soil and water conservation districts in implementing the law. BWSR Executive Director John Jaschke also spoke at the press conference.



*Cottonwood SWCD's Becky Alexander talks about the role of SWCDs in implementing the Buffer Law.*

"SWCDs around the state have been working closely with landowners to help them understand the law and get practices on the ground and the results of that work are very encouraging," said BWSR Executive Director John Jaschke. "Our local government partners have the relationships with landowners and the knowledge of the landscape to get the job done."

The story of a Mower County landowner who has successfully implemented buffers was also shared. For the last three decades, the Gebhardt family has implemented conservation field practices on a 150-acre parcel of their farm operations. Jim Gebhardt worked with the Mower SWCD to determine whether these practices benefit water quality more than what would be provided by a 50-foot buffer required under the water quality buffer law. The district confirmed that the combination of practices meets – and goes beyond – the water quality benefits required to satisfy the buffer law.

## FY2018-2019 Recommendations

- 3) Continue providing riparian aid to local governments electing enforcement of the buffer law and ensure compliance in those counties who defer enforcement to the state.
- 4) Identify alternative practices and other proactive opportunities to support landowners and ditch authorities.

# Wetland Conservation Act

## Overview

The Minnesota Legislature enacted the Wetland Conservation Act (WCA) in 1991 to help stem the loss of wetlands in Minnesota. Our role is to implement the law to protect wetland resources, because it is in the public's interest to:

1. Achieve no net loss of Minnesota's existing wetlands;
2. Increase the quantity, quality, and biological diversity of Minnesota's wetlands by restoring or enhancing diminished or drained wetlands;
3. Avoid direct or indirect impacts from activities that destroy or diminish wetlands; and
4. Replace wetland values where avoidance of activity is not feasible and prudent.



The Wetland Conservation Act regulatory program plays a key role in meeting these public policy objectives.

In the 2016-17 biennium, BWSR continued work on WCA rulemaking, including formation of technical review group to vet potential rule changes and coordination with the St Paul District U.S. Army Corps of Engineers (Corps) on major technical and policy issues affecting wetland regulatory programs.

BWSR received funding and support from the Environmental Protection Agency for:

- Development of a stream quantification tool to be used for wetland and stream mitigation in the state.
- Data collection on completed wetland mitigation projects to inform future restoration methods and mitigation policies.

The agency also began work on an in-lieu fee mitigation program, initiating the application process with the Corps. Associated compensation planning framework (CPFs) are in development for each watershed-based mitigation service area in the state.

An ILF provides landowners and local governments with another option for wetland mitigation under State and federal wetland regulations by allowing payment into a fund to be used to restore wetlands to meet the mitigation requirement. The availability of an ILF would increase regulatory certainty and efficiency for applicants, increase the likelihood of keeping mitigation within the watershed, and improve the targeting and quality of wetland mitigation.

BWSR also initiated regional training program for local government staff on WCA and wetland delineation. This means that local governments will better serve Minnesotans by providing consistent approaches to determining wetland boundaries.

## Results that work for Minnesota

Our biennial accomplishments include:

- Significant progress in coordination with our federal, state and local partners including new agreements, initiatives and cooperative efforts.
- Increased monitoring and compliance of state-held easements including monitoring of 100 wetland bank easements and seven road mitigation bank sites in the biennium.
- Deposited more than 1,000 credits into the wetland banking system, and supported approximately 1,000 withdrawal transactions used to offset impacted wetlands.
- Overhauled wetland bank fee policy to incorporate stewardship funding.
- Completed 404 Assumption feasibility study and assumable waters analysis.



## At-a-Glance

The primary components of the Wetland Conservation Act program are:

- Local Government Unit Implementation
- The Minnesota Wetland Bank
- Local Government Roads Wetland Replacement Program
- Long-term Monitoring of Wetland Bank Sites
- BWSR Oversight and Appeals

## Local Government Unit Implementation

There are more than 380 local governments units (LGUs) implementing the Wetland Conservation Act in Minnesota. In the 2016-17 biennium these local governments reported approximately 40,000 landowner contacts where they provided WCA compliance and wetland-related technical assistance. They also reviewed and processed approximately 4,000 applications for activities in wetlands. Substantial progress was also completed relating to policy development and technical resources. A few examples include:

- The Minnesota Federal Clean Water Act Section 404 Permit Program Feasibility Study (January 17, 2017)
- The Minnesota Wetland Conservation Act Report to the Legislature (March 15, 2016)
- 2017 Wetland Mitigation Fee Policy (June 1, 2017)
- Minnesota Wetland Restoration Guide (2017)

## The Minnesota Wetland Bank

Wetland banking provides a source of replacement wetlands - principally from restoring previously drained wetlands - that are used by individuals and road authorities to replace impacted wetlands as required by the



Wetland Conservation Act (WCA). The program has a goal of facilitating wetland mitigation to offset public values that are lost due to unavoidable wetland impacts. Using a private-market system of buying and selling credits, wetland banking provides an effective mechanism to replace lost wetland functions, which in turn allows necessary land uses and land use changes to occur.

Minnesota's wetland banking system is one of the largest and most active in the country. There are over 420 wetland bank accounts in the system with a current balance of over 3,000 credits, making Minnesota the state with the largest

number of wetland banks. In 2016-17 more than 1,000 credits were deposited into the system and approximately 1,000 withdrawal transactions were used to offset impacted wetlands. In addition, BWSR entered into an agreement with the Natural Resources Conservation Service to develop agricultural wetland bank credits as part of the wetland banking system.

### **The Local Government Roads Wetland Replacement Program**

A unique subset of the banking program is the local government road wetland replacement program. The program was developed in 1996 to meet the statutory obligations that transfer responsibility for replacing wetlands from the local road authority to our agency under certain circumstances. The program typically provides wetland mitigation for over 100 separate road projects requiring the generation of approximately 170 credits each year. We have effectively leveraged bond funds and a partnership with MNDOT to provide high quality wetland mitigation to replace impacts from local road projects.

Although we have provided over 4,500 credits to compensate for over 3,000 acres of wetland impact since program inception, we are faced with a current credit deficit and a substantial debt of credits to MNDOT due to inadequate bond funding, increased demand resulting from substantive road infrastructure improvements in recent years and increased land costs for mitigation. We have recently developed a 5-year funding plan that would meet program obligations for next 5 years, payoff the credit debt to MNDOT and provide a 2-year surplus of credits for contingencies related to unknown program demands and land costs. Without a continued state commitment to this funding, the program is projected to run out of credits by 2020 and likely sooner in certain geographic areas of the State. This would result in reduced or delayed completion of local government road projects and nullification of an agreement with the Army Corps of Engineers that allows this program to meet federal regulatory requirements.

### **Long-term Monitoring of Wetland Bank Sites**

We inspect wetlands in the Minnesota Wetland Bank to ensure that they continue to provide wetland functions and values according to their respective bank plan, and to ensure compliance with recorded easement restrictions and covenants. Our staff monitor the ecological integrity of privately held banking sites, and provide technical support during the establishment of BWSR-held accounts, including maintenance and monitoring of BWSR-held accounts after establishment.

In 2016-17 our staff inspected approximately 100 wetland bank sites to perform long-term monitoring and monitored seven BWSR-sponsored road mitigation bank sites to direct adaptive management efforts for successful restoration and credit allocation.

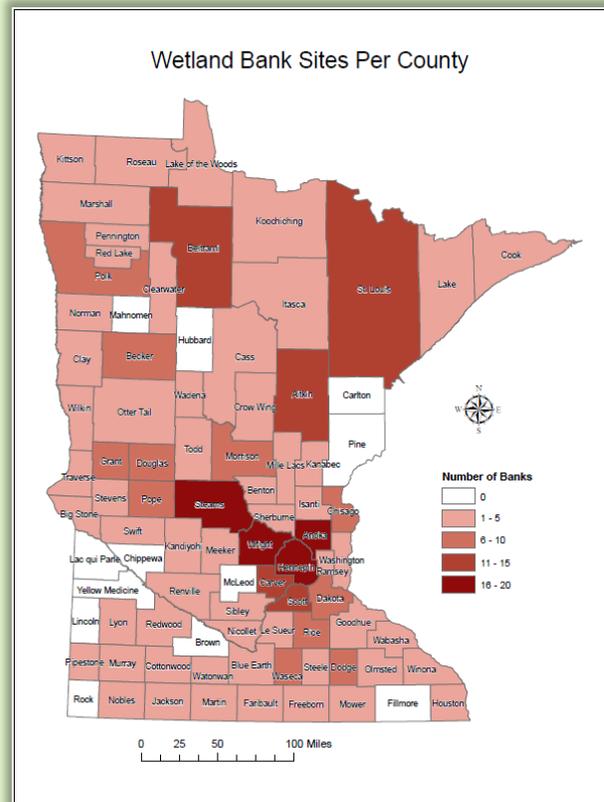
## Featured Story: The Minnesota Wetland Bank – A National Success

Launched in 1993, Minnesota’s wetland banking program has grown and evolved into one of the most advanced (if not *the* most advanced) wetland banking programs in the country. According to the U.S. Army Corps of Engineers which tracks banking activity nationwide, Minnesota has more wetland banks than any other state. The 405 Minnesota banks listed in the Corps’ database is nearly three times as many as the next highest state. With approximately 40,000 acres enrolled in the State Wetland Bank, Minnesota is also near the top in total acres. As for the largest wetland bank site in the nation, the Lake Superior wetland bank in northeastern Minnesota comes in a close second at 21,292 acres.

Landowners who gain approval to complete a project that impacts a wetland can establish a replacement wetland themselves (if they have a suitable opportunity), or use credits from the State Wetland Bank. When the mitigation consists of the use of wetland bank credits, those credits must be “withdrawn” from the bank before the project can begin.

The use of the State Wetland Bank fluctuates along with development, agricultural, infrastructure construction, and other activities, as well as the availability of credits and other factors. Withdrawals from the bank have ranged from a low of 5 during the program’s infancy in 1992, to a high of 860 during the development boom in 2005. According to BWSR’s database, there have been nearly 10,000 withdrawals from the bank since its inception, averaging 631 per year over the last decade.

Each of these withdrawals from the Bank represents a landowner or organization that was able to complete a project without having to construct their own, separate, replacement wetland concurrent with each wetland impact, instead withdrawing pre-established wetland credits from the Bank. Wetland banking provides a significantly more efficient process for landowners and project proponents, while at the same time ensuring high quality wetland replacement. It is a “win-win” for economic development and our natural resources.



*Wetland bank sites are distributed across the State, with approved bank sites in 75 of Minnesota’s 87 counties.*



*This diverse agricultural wetland bank site in western Minnesota provides high quality habitat and water quality benefits.*

## Status Report

Past Recommendations	Status
Seek stable funding for the Local Government Roads Wetland Replacement Program to meet the State's statutory obligation to provide replacement credits. In the absence of funding, set a plan for closing the program.	✓ Partial funding provided to prevent program shutdown. Funds have been used to purchase credits and procure mitigation projects.
Work with stakeholders and other state and federal agencies to complete WCA rulemaking and implement new statutory authorities and requirements.	✓ In process; rulemaking efforts include interagency coordination and formation of a technical advisory group.
Pursue In Lieu Fee Program for wetland replacement.	✓ Application has been initiated with the Corps; three compensation planning frameworks in process.
Reorganize BWSR's staffing approach for wetlands to meet evolving needs of local government partners and landowners.	<ul style="list-style-type: none"> <li>✓ Reorganization of wetland section staff completed.</li> <li>✓ Initiated local training program for local government staff on WCA and wetland delineation.</li> </ul>

### FY2018-2019 Recommendations

- 5) Engage partners to pursue Section 404 Assumption (including any necessary statute changes), which would make state wetland regulation more efficient and cost-effective.
- 6) Develop and provide a needed option for landowners to participate in the Wetland Bank by establishing an In-Lieu Fee program statewide.
- 7) Identify an ongoing, stable funding source to fulfill the state's statutory requirement for the Local Roads Wetland Replacement Program, which mitigates wetland impacts of road projects.

## Local Projects and Practices

### Overview

Local delivery of conservation practices is central to our work. Agency programs to assist landowners and local government have resulted in less sediment and nutrients entering our lakes, rivers, and streams; healthier fish and wildlife habitat; and the drastic slowing of wetland losses. These have been realized in spite of intensification of agriculture, greater demands for forest products, and rapid urbanization in many parts of the state. Local Projects and Practices highlights the work that is achieved through those partnerships in three major programs: Clean Water Fund Competitive Grants, Natural Resources Block Grants, and Soil and Water Conservation District Capacity Funding.

In the FY16-17 biennium, our agency's Competitive Grants Program included Projects and Practices, Accelerated Implementation, Community Partners, and the Multipurpose Drainage Management Program. Legislative action in 2015 included new state funding to support SWCD services and enhanced delivery of engineering and technical services to accelerate on the ground conservation projects. In May 2016, the BWSR Board approved FY 2016 and 2017 CWF non-competitive grant allocations developed to support SWCD local capacity to implement their authorities in Minn. Stat. sections 103C.321 and 103C.331 and to enhance technical assistance to deliver essential engineering and technical services through Technical Service Areas.

These funds invest in building the capacity of Non-Point Engineering Assistance TSA Joint Powers Boards to increase the capacity of soil and water conservation districts to provide highly skilled technical and engineering assistance to landowners. TSAs use these funds to invest in building regional capacity across the State to efficiently accelerate on-the-ground projects and practices that improve or protect water resources. In the FY2016-17 biennium BWSR's Board awarded each of the eight TSA areas \$482,000.

\$22 million was appropriated in this biennium through the Clean Water Fund to support Soil and Water District work and increase their capacity for on-the-ground conservation.

### Results that work for Minnesota

BWSR funded 70 grant applications through the Projects and Practices Grants over the FY2016-17 biennium: 56 are for water bodies listed as impaired that have a completed Total Maximum Daily Load study (TMDL); 12 are for either drinking water or water quality protection for water bodies that are not listed as impaired and are currently meeting State water quality standards. The remaining two are for water bodies that are listed as impaired but have no TMDL.



*Scott County Watershed Management Organization is taking a new approach to erosion control thanks to a CWF Targeted Watershed Demonstration Program grant benefitting the Minnesota River.*

Biennial accomplishments for our Clean Water Funds include:

- Installing more than 1,500 best management practices.
- Implementing practices responsible for keeping an estimated 49,000 tons of sediment and 45,000 pounds of phosphorus from entering our waterways.

## At-a-Glance

The primary components of the Local Projects and Practices are:

- Clean Water Fund Competitive Grants
- Natural Resources Block Grants
- SWCD Programs and Operations Grants
- Conservation Cost Share
- Soil and Water Conservation District Capacity Funding

### Clean Water Fund Competitive Grants

The goal of our Clean Water Fund (CWF) competitive grants program is to help meet statewide water quality goals through the prevention and reduction of non-point source pollution. These awards include public and private projects, and involve Minnesotans who voluntarily engage in these activities.

The Competitive Grants program works through Minnesota’s local governments to fund projects that are prioritized and targeted to the most critical source areas, allowing us to be strategic in granting funds that meet local water quality goals within the larger scope of Minnesota’s clean water efforts.

To receive BWSR Clean Water Funds, a project must meet one of the purposes specified in the Clean Water, Land and Legacy Amendment:

- protect, enhance, or restore water quality in lakes, rivers, and streams; and/or
- protect groundwater and drinking water sources from degradation.

### Natural Resources Block Grants

We recognize that meeting Minnesota’s land and water conservation goals relies on local governments having the capacity and skills to fulfill both state obligations and local expectations. The Natural Resources Block Grant programs provide state funding to ensure counties have the financial means to effectively implement state

Program	Number of Grants FY16-FY17	Total Funding FY16-FY17
Clean Water Fund Competitive Grants	214	\$40,691,967
Natural Resources Block Grants		
- Comp. Local Water Management	174	\$2,275,304
- Wetland Conservation Act	174	\$3,812,958
- Shoreland Management	170	\$754,738
- County Feedlot Permit	212	\$3,943,488
- SSTS	309	\$5,741,780
SWCD Programs and Operations		
- Conservation Delivery	180	\$3,530,002
- Easement Delivery	262	\$1,806,017
- Nonpoint Engineering Assistance	16	\$2,120,000
Conservation Cost Share	180	\$2,398,458
<b>Total</b>	<b>1891</b>	<b>\$67,074,712</b>
Soil and Water Conservation District Capacity Funding	89	\$22,000,000
<b>Total</b>	<b>198</b>	<b>\$89,074,712</b>

programs such as local water planning and the Wetland Conservation Act. This program is an umbrella under which five grants reside that help offset the costs to counties of the following state natural resource programs:

- Comprehensive Local Water Management
- Wetland Conservation Act
- Shoreland Management
- County Feedlot Permit
- Subsurface Sewage Treatment Systems (*Clean Water Funds*)

Counties must have a BWSR-approved and locally adopted Comprehensive Local Water Management Plan to be eligible. Bundling these grants into one grant agreement has allowed for a more efficient delivery mechanism between BWSR and counties.

### SWCD Programs and Operations Grants

These grant programs provide funding to soil and water conservation districts (SWCDs) for specific local natural resource needs.

- Conservation Delivery - These grants provide SWCDs with funds for the general administration and operation of the district.
- Easement Delivery – These grants provide a per-easement payment to offset the cost for easement inspections.
- Nonpoint Engineering Assistance – These grants support technical assistance and expertise to landowners, helping install 1,685 conservation practices over the biennium to protect and improve our state’s water quality.



*Buffalo-Red River Watershed District's Wolverton Creek restoration project – supported with Clean Water Fund dollars – will cut the cost of treating Fargo-Moorhead drinking water.*

SWCDs must provide our agency with annual plans and annual reports to be eligible to receive these grants.

### Conservation Cost-Share

These grants help conservation districts provide funding for a variety of on-the-ground projects that address state conservation objectives.

Specifically, these projects address:

- Keeping water on the land: restoring natural hydrology and reducing runoff is achieved by restoring wetlands, installing raingardens, constructing stormwater treatment ponds, and implementing conservation drainage practices.
- Maintaining healthy soils: healthy soils are supported through conservation tillage and erosion control projects.

- Reducing pollutants in surface and ground water: reducing pollution in sensitive ecological areas is accomplished by upgrading feedlots and subsurface sewage treatment systems, and sealing abandoned wells.
- Ensuring biological diversity: protection of native plants and animals and their habitats is accomplished through the installation of permanent buffers of native vegetation and cooperative weed management programs that address invasive species management.
- Maintaining stream integrity: healthy stream hydrology and abundant fish populations are achieved through streambank and shore stabilization.

### Soil and Water Conservation District Capacity Funding

\$22 million was appropriated over the biennium to support SWCDs. The increase recognizes the role these local governments play in providing technical assistance to private landowners. It also recognizes new demands for SWCD services from:

- 1) increases in CWF on-the-ground implementation dollars,
- 2) technical support for Minnesota’s buffer law,
- 3) expansion of soil loss limits law statewide,
- 4) implementation of the Agricultural Water Quality Certification Program, and
- 5) a growing role in land-related groundwater issues.

The funding focuses on increasing SWCD capacity to address four resource concern areas—soil erosion, riparian zone management, water storage and treatment, and excess nutrients. Eligible activity categories include staffing, cost share/incentives, and technology/capital equipment. In FY 2016, grantees completed an initial request identifying their funding needs and the connection to their State-approved, locally adopted plan. Aimed at achieving additionality, these funds are intended to fill gaps in local capacity, increase delivery of essential conservation services, and accomplish critical soil and water conservation goals consistent with the following principles:

#### Making a Difference

The availability of capacity funding has increased responsiveness of SWCDs to their landowners, and resulted in more conservation on the ground. For Grant SWCD, its accelerated their implementation of conservation practices and allowed them to hire a Resource Conservationist who works on buffer and soil erosion laws, promotion of no-till and cover crop practices, and implementation of urban stormwater runoff control practices.



*Grant SWCD’s Resource Conservationist discusses options with a landowner.*

- Expand the level and/or variety of technical services districts and TSAs are able to deliver.
- Increase the amount of existing, targeted, and priority services necessary to address outreach to landowners and assist landowners in meeting land and water regulatory requirements.
- Extend high priority programs funded by short-term grant funds that are expiring.
- Add to, improve, or develop, staff skills so that skills better align with resource priorities identified by the District Board.

The results have been increased responsiveness of these local governments to their landowners, and more conservation on the ground. For Kandiyohi SWCD, that means expanding cost-share programs and creating a new cost share program to promote implementation of cover crops. For Clearwater SWCD, it's purchasing an aerator to promote soil health that's available for county residents. Whether investing in staff or equipment or conservation funding, the capacity dollars have enabled these local governments – who have the closest connection to landowners – to be more proactive and responsive in meeting their needs.

### Featured Story: Public-Private Partnerships Benefit the Poplar River

Cook County Soil and Water Conservation District (SWCD) received an \$829,000 Clean Water Fund Targeted Watershed grant from BWSR in 2015 to reduce sediment to the Poplar River and ultimately Lake Superior. The Targeted Watershed Program focuses on watersheds where the amount of change necessary to improve water quality is known, the actions needed to achieve results are identified, and a majority of those actions can be implemented within a four-year time period.

Set among Lake Superior's unique mountain-like topography, the high profile Poplar River watershed is a vital natural area, trout fishery, and economic engine for the North Shore. Erosion along the Poplar River's stream banks and main tributaries are major contributors to its sediment issues, and the watershed was listed as impaired for turbidity in 2004.

Citizen interest in the river health is high with primary concerns about the native trout fishery and water quality. The Poplar River is a DNR Trout Stream that supports a spring-run of rainbow trout and a fall run of pink Chinook, Coho salmon, and coaster brook trout. In addition, the University of Minnesota has listed the Poplar River watershed as a sentinel watershed. In 2005, landowners within the watershed organized the Poplar River Management Board (PRMB) in response to the sediment impairment. For over a decade, the Cook County SWCD has been working in partnership with the PRMB and others toward the goal improving the water quality of the river.

The PRMB members represent over 90% of the private land in the lower watershed, which ensures landowner cooperation with projects. Since 2005, both public and private dollars have helped to leverage multiple grants that have been successfully awarded and managed within the watershed. Thus far, this implementation work has reduced sediment by approximately 35% of the 60% sediment reduction goal.



*Lutsen Mountains' Tom Rider, Cook SWCD staff, and BWSR staff review progress to date earlier this year.*

The Targeted Watershed grant represents the continuation of over ten years of private and public scientific investigations and on the ground projects designed to reduce non-point pollution entering the Poplar River and Lake Superior. While great strides in sediment reduction have taken place to date, the goal of the project is to have the Poplar River removed from the impaired waters list.

To help manage and control erosion along the Poplar, the SWCD is working collaboratively with the PRMB and considering conveyances that shift water away from failing slopes, stormwater basins, gully repairs, and revegetation in addition to the streambank restorations. Thanks to these Clean Water Fund dollars, the district has been able to target where practices should be installed – and which specific practices will be the most effective to help improve the Poplar River’s water clarity. The district estimates that through the practices implemented over the four year lifespan of this grant, they will reduce sediment in the watershed by 400 tons annually, 100% of their reduction goal.

## Status Report

Past Recommendations	Status
Increase the pace of conservation implementation by expanding CWF efforts for Targeted Watershed, Projects and Practices, RIM, Accelerated Implementation.	✓ \$8.17 million awarded for six watershed-approach projects: the Buffalo Red Watershed District (WD) for Wolverton Creek watershed, Capitol Region WD for its Urban Lake Renewal program, East Polk SWCD for the Sand Hill River watershed, Fillmore and Root River SWCDs for the Root River watershed, Pelican River WD for the Detroit Lakes watershed, and the Shell Rock River WD for the Shell Rock River Chain of Lakes watershed.
Provide a status update for the Nonpoint Priority Funding Plan.	✓ The plan was updated in June 2016, including case studies highlighting work.

## FY2018-2019 Recommendations

- 8) Work with our local soil and water conservation district partners to develop strategies that ensure their funding is predictable and stable.
- 9) Engage local government and other partners to design transition from competitive grant funding to targeted watershed-based grant funding.

## Local Water Management

### Overview

The goal of Local Water Management is to develop and maintain local capacity to protect and enhance Minnesota's water and soil resources. We do this by ensuring adequate technical resources and capacity are in place to implement protection and restoration projects at the local level and by providing adequate training, oversight, and accountability. This includes the capacity to develop and implement local water management plans. We have oversight responsibilities to ensure that local water plans are prepared and coordinated with existing local and state efforts and that plans are implemented effectively. These local plans focus on priority concerns, defined goals and objectives, and measurable outcomes.



*Capitol Region Watershed District staff talk local planning at a meeting with BWSR staff.*

*One Watershed, One Plan* went from a vision in the 2012-13 biennium to a statutory program in the 2014-15 biennium. In the 2016-2017 biennium, the program launched statewide. As part of that process, a transition plan was developed and implemented that guides the shift from political to watershed boundaries for watersheds around the state over a 10-year timeline. Content requirements were developed for these new water plans, as well as operating procedures.

### Results that work for Minnesota

Our biennial accomplishments include:

- Four *One Watershed, One Plan* pilots completed and plans approved by the BWSR Board.
- Adoption of orders for approval of revisions and/or amendments to 18 local water management plans.
- Reduction in the number of overdue water plans from eight to three.

### At-a-Glance

- *One Watershed, One Plan*
- Water Management Planning and Implementation

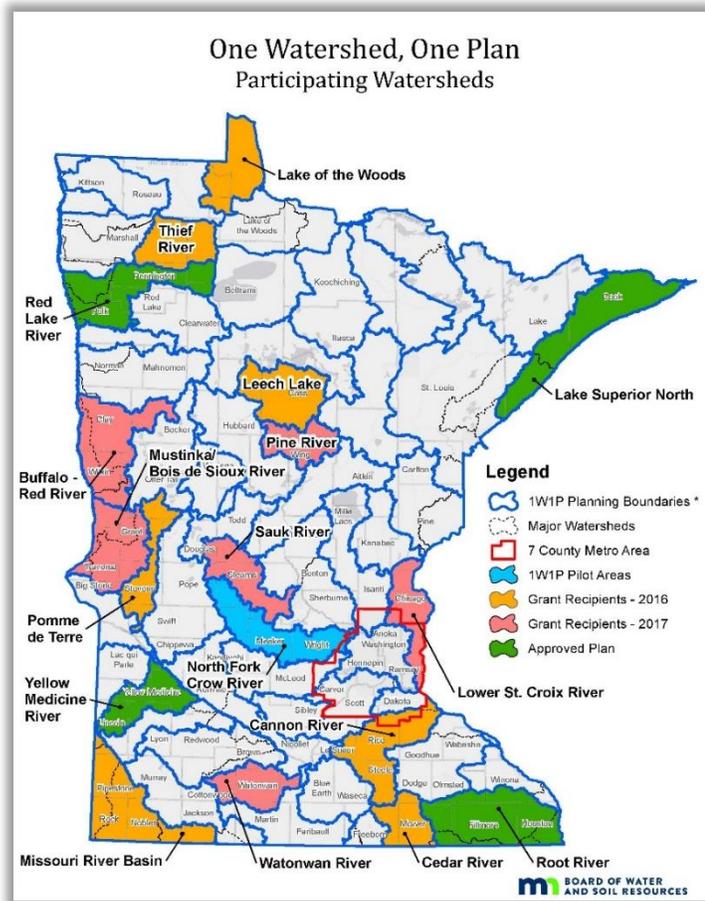
### One Watershed, One Plan

The vision of the *One Watershed, One Plan* program is to align local water planning on major watershed boundaries with State strategies towards prioritized, targeted and measurable implementation plans. This program builds on current local water plans, state and local knowledge, and a systematic, science-based approach to watershed management, resulting in plans that address the largest threats that provide the greatest environmental benefits to each watershed.

In 2015, the Minnesota Legislature passed Minnesota Statutes § 103B.801, the Comprehensive Watershed

Management Planning Program. This legislation defined the purposes and further outlined the structure for the One Watershed, One Plan Program. It also directed BWSR to develop a transition plan with a goal of completing a statewide transition to comprehensive watershed management plans by 2025. Achieving the goal will require starting approximately seven planning efforts each year.

In 2016, the BWSR board adopted policies for Operating Procedures and Plan Content Requirements, which were based on lessons learned from five pilot planning areas. The pilot groups started planning in 2014 and 2015; four of the five pilot plans have been approved by the BWSR board and the fifth is expected to be complete by June 2018. The board has also approved planning grants for 13 new watershed planning areas, bringing the total number of participating planning areas to 18. This is consistent with the pace of progress outlined in the One Watershed, One Plan Transition Plan.



### Water Management Planning and Implementation

Protecting and restoring Minnesota’s water resources relies on the knowledge, authorities, partnerships, commitment and resources of state and local governments. Working with local governments on their water management plans ensures the water resources of the state will be effectively managed. During this biennium, our staff and Board approved the following:

- Greater Minnesota – 13 plan amendments and/or revisions
- Metro Area – 5 plan amendments and/or revisions

In addition, staff:

- Adopted a Local Water Plan Extension and Amendment Policy on June 2016 to streamline the water plan review and approval process.
- Adopted a SWCD Conservation Delivery and Capacity Grants Policy on June 2017
- Adopted a revised Technical Service Grants Program Policy on June 2017
- Revised Local Water Plan Update documents:
  - Plan Update Process Overview (August 2015)
  - County Water Plan Update Guide (August 2015)
  - County Water Plan Amendment Guide (August 2015)
  - Routing Information (January 2017)
- Published Highlights of Changes to MN Rules, Chapter 8410 (December 2015)

### Pass-Through Grant Management

This area includes pass-through funding for local water entities, including Area II and the Red River Basin Commission. During this biennium, the following grants were issued:

Grant Recipient	Funding source	FY2016-FY2017
Area II	General Fund	\$280,000
Red River Basin Commission	General Fund	\$200,000
Minnesota Conservation Corps	Clean Water Fund	\$500,000

### Status Report

Past Recommendations	Status
Rollout One Watershed, One Plan program statewide and develop training to support a successful transition for local governments.	<ul style="list-style-type: none"> <li>✓ Four pilot plans completed, approved by Board.</li> <li>✓ Transition plan approved.</li> </ul>
Develop procedures and guidance to successfully implement buffer law.	<ul style="list-style-type: none"> <li>✓ Nine procedures were developed to guide program implementation.</li> <li>✓ Eleven guidance documents have been developed covering everything from vegetation to determinations.</li> </ul>
Support mechanism for stable and predictable capacity funding for SWCDs	<ul style="list-style-type: none"> <li>✓ Workgroup met three times and presented recommendations in a report to the BWSR board in June, 2017.</li> </ul>

#### FY2018-2019 Recommendations

- 10) Accelerate the pace of progress for the transition to watershed-based management planning through the *One Watershed, One Plan* program.
- 11) Work with our local soil and water conservation district partners to develop strategies that ensure their funding is predictable and stable.

## Technical Services

### Overview

The BWSR Technical Services Section provides engineering, soils, vegetation, landscape ecology, drainage management, hydrologic monitoring and groundwater expertise for a number of agency programs and functions. These services include: direct technical assistance for wetland and upland restorations and Wetland Conservation Act compliance, development of technical guidance documents and associated consultation, training provided to local government unit staff and other conservation partners, and involvement in technical and policy coordination for a wide range of water and soil resource management topics.



*BWSR technical staff consult with local government partners on native vegetation functions.*

### Results that work for Minnesota

Our biennial accomplishments include:

- Engineering investigation and design for 102 wetland restoration projects; construction engineering for 88 wetland restoration projects; and 57 native vegetation establishment consultation and/or planning, restoring wetland and associated upland functions (including native vegetation functions), for approximately 10,000 acres in Minnesota.
- Providing advisory review for approximately 15 watershed district projects involving Chapter 103E drainage systems, as well as flood damage reduction and natural resource enhancement projects involving floodwater impoundments, levees and/or stream restoration.
- Assisting 29 Cooperative Weed Management Areas in the state, some of which were newly established, enabling more efficient and effective control of invasive species and improvement of native vegetation on private and public lands.
- Coordinated and facilitated 17 stakeholder Drainage Work Group meetings and 12 Interagency Drainage Management Team meetings.
- Update of the Drainage Records Modernization Guidelines

### At-a-Glance

The primary components of the Technical Services Section are:

- Engineering
- Drainage Management
- Native Vegetation and Landscape Ecology
- Groundwater and Wetland Hydrology

### Engineering

BWSR engineering staff worked in a number of capacities, including wetland restoration site investigation, design and construction management in support of agency programs and initiatives; review and consultation for

all Wetland Banking Program private wetland banking projects; advisory review for watershed district projects, and consultation and coordination with local government partners around disaster relief response efforts to assist private landowners with erosion control and water quality restoration and protection projects and practices.

### **Drainage Management**

We facilitated the stakeholder Drainage Work Group (DWG), established in 2006, which works to build consensus recommendations around drainage law updates. We also facilitate the interagency Drainage Management Team (DMT) to coordinate sharing of drainage management information about pertinent research, reports and programs involving state and federal agencies, the University of Minnesota and Minnesota State University – Mankato.

An Environment and Natural Resources Trust Fund grant enabled BWSR to coordinate development of a Drainage Records GIS Database Template and update of the Drainage Records Modernization Guidelines, both published in December 2016 for use by up to 96 M.S. Chapter 103E public drainage authorities (counties and watershed districts).

### **Native Vegetation and Landscape Ecology**

Establishment of diverse native vegetation in wetlands and on associated upland buffers is a critical component of wetland restorations for the Local Road Wetland Replacement Program, as well as RIM conservation easement programs. During the biennium, we provided review and technical assistance for vegetation planning, establishment and maintenance for approximately 43 private wetland banks and 8 local road wetland replacement projects.

Discovery of the invasive weed Palmer Amaranth in Minnesota necessitated BWSR involvement in interagency responses, including development of guidance to local conservation practitioners, landowners and seed vendors about state seed and weed laws, and enhanced protocols to avoid, identify and eradicate this and other noxious weeds. The BWSR Native Vegetation Establishment and Enhancement Guidelines, June 2017, were updated accordingly.



*BWSR staff conduct a native vegetation training with local government partners at a wetland bank near Mankato.*

Governor Dayton’s Executive Order 16-07 Directing Steps to Reverse Pollinator Decline and Restore Pollinator Health in Minnesota, August, 25, 2016, accelerated BWSR’s native vegetation and landscape ecology coordination and technical assistance, including updating the BWSR Pollinator Toolbox, development of associated state seed mixes and other technical guidance, and participation in preparing the 2017 Minnesota State Agency Pollinator Report. BWSR also developed the Solar Site Pollinator Habitat Assessment Form and became a member of the Monarch Joint Venture.

## Groundwater and Wetland Hydrology

BWSR provides hydrogeology and wetland hydrology expertise to support local and state wetland replacement and conservation easement programs, WCA administration and enforcement, and other groundwater protection efforts by local and state government. We conduct wetland restoration projects associated with the Local Government Road Wetland Replacement Program, a necessary process for wetland credit certification through the Wetland Conservation Act.

Staff also provided technical input to local government and Technical Evaluation Panels in support of Wetland Conservation Act appeals and regulatory issues.

### Featured Story: Managing private land for climate adaptation

Did you know that Minnesota's row crop landscape is in many cases only fully covered by vegetation for three months out of the year? The soil is left bare, or nearly bare, after harvest (October) until the next year's crop emerges and forms a full canopy (July). Bare soils are susceptible to wind and water erosion, and eroded sediments and attached nutrients make their way to surface waterbodies. This makes the landscape vulnerable to climate impacts, particularly extreme precipitation. Programs implemented by BWSR have helped to restore vegetation and living cover to sensitive landscapes and protect soil and water quality from climate impacts.

Managing private lands for climate adaptation includes a wide breadth of conservation and working lands practices including: increasing perennial native vegetation, increasing pasture and haylands, cover crop adoption, decreased tillage, and retaining water on the landscape. BWSR has a number of programs and activities that provide climate adaptation benefits by helping landowners increase vegetative cover. Such programs include Reinvest in Minnesota (RIM), the buffer program, wetland restoration, and funding nonstructural management practices like cover crops.

The RIM program pays landowners to voluntarily enroll a number of land types in permanent conservation easements. These easements are managed under a conservation plan which includes items such as native grass plantings and tree plantings. Since these conservation easements are established in perpetuity, they help maintain vitally needed permanent, perennial cover. The network of permanent conservation easements helps build a landscape resilient to climate impacts.

The Statewide Buffer Program establishes new perennial vegetation buffers of up to 50 feet along rivers, streams, and ditches. These buffers increase living cover on the landscape while maximizing water quality and soil health benefits. Having buffer strips around waterways will help filter out phosphorous, nitrogen, and sediment while also helping to capture runoff in the event of a large precipitation event. Extreme weather events are on the rise as a result of climate change so having natural landscapes that can help reduce erosion and control runoff is a major adaptation with a number of benefits.

Of the approximately 20 million acres of row crop agriculture in the State of Minnesota, only 1.5% is managed with cover crops. Cover crops are grasses, small grains, legumes and winter annuals that are provide cover before the primary crop establishes and after it is harvested. Cover crops are a key management tool to protect



*Cover crops are one way to protect soil and water quality from climate*

soil and water quality during extreme weather events. A recent change in Minnesota Statute now allows BWSR to provide cost share grants to local governments to support vegetative management practices like cover crops.

As a member of the Interagency Climate Adaptation Team, BWSR collaborates with other state agencies on climate adaptation efforts throughout the State. The Team provides leadership to state government on identification and implementation of measures to assist Minnesota in becoming more resilient and adapting to climate change. There is a lot of work to do but these existing BWSR programs help reduce vulnerability and increase resilience to climate impacts, allowing the landscape to be more resilient to climate change-induced events such as precipitation and heat. Over time, these programs and the practices implemented within them will help make the Minnesota landscape better suited to deal with the impacts of climate change.

## Status Report

Past Recommendations	Status
Work with governor's office, partners, to develop a state-based pollinator approach.	<ul style="list-style-type: none"> <li>✓ Helped prepare the 2017 Minnesota State Agency Pollinator Report</li> <li>✓ Updated the BWSR Pollinator Toolbox</li> <li>✓ Developed Solar Site Pollinator Habitat Assessment Form</li> <li>✓ BWSR became a member of the Monarch Joint Venture</li> </ul>
Develop a Climate Change Action Plan.	✓ Updated the BWSR Climate Change Trends and Action Report, December 13, 2016, in coordination with the Interagency Climate Adaptation Team
Pursue cost-share to help drainage authorities modernize drainage records.	✓ Applied for and received FY2018 LCCMR/ENRTF funding for drainage records modernization match grants using the 2016 GIS Database Template and updated Drainage Records Modernization Guidelines
Update and transition the Drainage Manual to an online format.	✓ Used a designated CWF appropriation to coordinate update of the Minnesota Public Drainage Manual and publish in an online, Wiki format in October 2016

### FY2018-2019 Recommendations

- 12) Facilitate the development of practical solution-based recommendations about drainage law to the legislature with a broad array of agricultural, conservation, government, and other groups.

## Disaster Assistance

### Overview

We provide disaster assistance funding through special appropriations for our local government partners to install, repair, or rehabilitate water quality and watershed protection projects on private lands in designated disaster areas. While Federal funding is often available to rebuild public infrastructure, our agency's disaster assistance resources help bridge the gap that exists to repair conservation projects damaged on private land. Our Disaster Relief Assistance Program (DRAP) focuses on providing recovery funding for projects that keep soil and water on the land, protecting these resources and supporting fish and wildlife habitat.

Over the biennium, BWSR revised its DRAP policy to reflect needed allocation priority changes and make revisions to easement implementation processes.

### Results that work for Minnesota

Our biennial accomplishments include:

- Distributing 56 grants totaling \$10.7 million in disaster assistance funding to local governments to fund 289 disaster recovery projects that protect human safety, property and infrastructure, and will also stabilize and protect areas that have already been repaired with city funds or Federal Emergency Management Agency (FEMA) funds. These grant funds were appropriated in the previous biennium for the Flood of 2014 (DR-4182).
- Establishing ten easements, permanently protecting 537 acres of cropland in critical riparian areas.

### At-a-Glance

#### Disaster Recovery Assistance Program

When disasters happen, government response must be both effective and nimble. BWSR created the Disaster Recovery Assistance Program (DRAP) to provide structure for both our staff and local government partners. This supports a disaster response effort that optimizes efficiencies, responsiveness, and the impact of legislative appropriations.

The program allocates appropriated funds to local government partners for erosion and sediment control, water quality and watershed protection projects, and RIM easements in disaster areas. It provides clear expectations for how funds received from BWSR can be used. The program is in place and ready to be activated once legislative appropriations are made. Step-by-step guidance and standardized reporting for all phases of disaster response make this work more efficient and effective for those involved.

#### Featured Story: Storm clouds with silver linings

When the waters receded from Rock County farmlands in June 2014, they left in their wake nearly 600 flood-damaged or heavily eroded conservation practices. Three years later, Rock County Soil & Water Conservation District staff reflected on some of the unforeseen challenges and resulting improvements.

"There were some places that recorded 22 inches of rain in eight days in the June '14 event," said Doug Bos, Rock County Soil & Water Conservation District assistant director.

Nearly 14 inches of rain fell in Luverne that June – nearly 10 inches more than the longtime monthly average, according to Midwestern Regional Climate Center data. Unofficial reports from other areas of Rock County showed higher rainfall totals. The federal disaster declaration named eight counties, including Rock.

In Rock County alone, more than 30 bridges and culverts washed out, as did numerous roads. Responding to disaster declarations, the Minnesota Legislature in 2015 appropriated funds implemented through the Minnesota Board of Water & Soil Resources' Disaster Recovery Assistance Program. DRAP aided 31 SWCDs, including Rock County.



*June 2014 flooding in Rock County caused erosion damage.*

Rock County staff from the Natural Resources Conservation Service, SWCD and Rock County Land Management Office surveyed the damage in June 2014. Besides the nearly 600 flood-damaged or heavily eroded conservation practices, they documented new areas requiring protective measures from gully erosion. The estimated cost to implement all of those projects topped \$4.2 million.

Through four rounds of DRAP requests, which listed projects and partner-fund contributions, Rock County SWCD garnered nearly \$1.5 million. The money would provide cost sharing to private landowners who implemented or repaired conservation projects, or implemented new erosion or sediment management practices.

As of May 2017, the ongoing DRAP framework has spent and/or contracted \$945,000 on private lands in Rock County. Those projects have included installing and/or engineered 45 waterways, 100 terraces/water and sediment control basins and two streambank and shoreland protections. The results came in spite of a few challenges.

Coordinating grant opportunities to address heavy erosion and damage has tested the limits of the Rock County SWCD technical and administrative staff, its partners and the Area 5 Technical Service Area, who already were administering programs and overseeing buffer activities. The volume of large-scale engineered projects in Rock and surrounding counties made it difficult to secure construction contractors and technicians for design and onsite work.

Wet conditions delayed implementation in a couple of different ways. They delayed harvest, which pushed construction back. They kept water-table levels high, which meant sites were too wet for construction. The flood also brought in landowners who usually declined to participate in cost-sharing for erosion control conservation strategies. At first, these folks had sought help when rains opened gullies in fields. As time passed, some landowners waited – or backed out of cost-share contracts – as fall 2014 and spring 2015 brought drier conditions. Everything seemed OK after fall tillage. Wet falls in 2015 and 2016 punctuated by storms that brought washouts inspired many of these folks to re-sign conservation contracts using the DRAP funding to conserve soil.

It's only two-thirds of the way through the first round of funding. But, Rock County SWCD staff are starting to see the effects of the 2014 DRAP process and how it affects district dynamics and on-the-ground conservation.

## Organizational Effectiveness

### Overview

The Organizational Effectiveness Division optimizes our overall agency effectiveness by supporting and leading staff innovation, intentional planning, accountability and process improvement efforts. It leads BWSR's training, communications, project management, internal controls, and organizational development efforts. We operate as a service bureau to help build consistency and effectiveness in the successful implementation of agency operations and programs.

Over the biennium, BWSR launched the Technical Training and Certification Program in partnership with the Minnesota Association of Conservation District Employees (MACDE), Minnesota Association of Soil and Water Conservation Districts (MASWCD), and Natural Resources Conservation Service (NRCS). This collaborative effort is designed to develop and maintain a highly trained, technically skilled workforce of natural resource professionals capable of meeting the conservation delivery needs of Minnesota.



### Results that work for Minnesota

Biennial accomplishments include:

- Providing high quality training for 420 local government staff each year at the annual BWSR Academy, which provides skills and opportunities for these partners to improve the delivery of conservation work in Minnesota.
- Using the Technical Training and Certification Program to increase the capacity of our local government partners to meet the needs of landowners through 22 training events for a total of 744 participants,
- Assessing basic performance standards of 239 local government partners. 87% of our partners have a perfect score on compliance, an increase of 7% over the last biennium. 57 standard Level II performance reviews were completed in the biennium.
- Generated over 68 million media impressions telling the story of meaningful stories landowners and local governments are taking to voluntarily implement conservation.
- Placing 63 Conservation Apprentice Academy apprentices with mentors in soil and water conservation district offices where they received hands-on training.

### At-a-Glance

Major programs include:

- Training
  - BWSR Academy
  - Minnesota Conservation Apprenticeship Program
  - Technical Training and Certification Program

- Communications
- Internal Controls/Risk Assessment
- Grants Monitoring, Reconciliation and Verification
- Performance Review and Assistance Program (PRAP)

## Training

BWSR defines training as the “systematic acquisition of knowledge, skills, or abilities that results in improved performance (outside the training environment).” Our program theory is grounded in the idea that if we provide high quality and intentional training to our local government partners, then training participants will be more effective in implementing their work to improve and protect Minnesota’s water and soil resources. BWSR provided over 6,000 learning hours to more than 873 individuals during the biennium.

### *Partnership Development*

Participating in *One Watershed, One Plan* brings together local governments with local water planning authority across a watershed to partner in creating a watershed plan and work with other stakeholders and agencies. Insight from the 1W1P pilots was that because the level of partnering for One Watershed One Plan development is often not to extent of other projects, it would be beneficial to provide training to support effective partnering.

Partnership Development was offered to the seven watersheds participating in the early stages of the program and reached 70 participants. Topics include effective collaboration, work team stages of development, communication, trust, network mapping stakeholder analysis, and techniques for focused conversations and gathering input.



*Attendees learn about soil identification during a training at BWSR Academy.*

## BWSR Academy

The academy goal: To provide high quality training for local government staff that maintains and improves the delivery of conservation work and meets the shared expectations of BWSR and local resource management boards.

Training Priorities: Our first priority is offering training sessions that improve technical skills and administrative expertise useful in implementing BWSR-sponsored programs or those activities directly related to BWSR programs. Additionally, we offer sessions dedicated to value-added skills as identified by our local government partners. A value-added training may not be commonly available to LGU staff and is not directly related to a BWSR program. However, these sessions focus on specific skills related to improving the functioning and success of local government organizations.

## Technical Training and Certification Program

Establishing conservation practices on private lands in Minnesota is critical to achieving state and federal goals for clean and sustainable water resources, healthy and sustainable soil resources, and abundant fish and wildlife. Conservation Technical Assistance requires statewide, core technical assistance capabilities, as well as capabilities tailored to the local priority resource concerns and conservation practices found in the diverse

landscapes of Minnesota. Training and certification are key quality assurance elements of an effective conservation delivery system.

The following principles guided the development of the new program for technical training and certification for conservation technical assistance in Minnesota:

- Integrates into a quality assurance framework for state-funded conservation practices.
- Addresses conservation planning, engineering practices and ecological sciences practices for agricultural, forested and urban lands.
- Coordinated with, but not duplicative of, nor dependent on, NRCS to meet requirements of both state and federal conservation programs.
- Does not preclude private technical assistance when available and cost effective.

BWSR, the Minnesota Association of Soil and Water Conservation Districts, the Minnesota Association of Conservation District Employees, and the Natural Resources Conservation Service (NRCS) have committed to providing resources for technical training and certification of local staff to maintain and enhance conservation delivery as laid out in the Technical Training and Certification Strategy. A jointly-funded state Technical Training Coordinator has been hired to implement the strategy. During this biennium, an implementation plan was developed and a State Technical Training Committee established. NRCS and BWSR have committed resources to support the hiring of that position.

Significant progress has been made in the following areas:

- developing and delivering initial training offerings,
- establishing workgroups to support the goals of the Technical Training and Certification Program, developing the Core Competency framework and training curricula, and
- Identifying solutions to expand the cadre of trainers capable of meeting the high demand for technical training.

Work continues on reviewing and updating the Job Approval Authority (JAA) review and credentialing process, as well as creating the database to track training needs and IDPs.



*Lake County SWCD Conservation Corps crew members hard at work on the North Shore.*

### **Minnesota Conservation Apprenticeship Program**

Future conservation leaders need to be familiar with Minnesota’s widely varying land-use practices, water and soil resources, plant and animal habitats, and landowner concerns if we hope to maintain the capacity of local organizations to deliver conservation on the ground. While college graduates with conservation-related degrees are knowledgeable in technology, theory, and research methods, they still need to develop their on-the-ground skills. Communicating with landowners and implementing quality projects are vital to the success of conservation efforts and best learned from seasoned professionals. The Conservation Apprenticeship Academy transfers knowledge from experienced Soil and Water Conservation District professionals to the next generation of conservation managers. Real-world experience gained with Soil and Water Conservation Districts (SWCDs) during their busy season is experience that textbooks cannot convey.

This project funded the placement of 30 apprentices in 2015, 31 apprentices in 2016, and 32 apprentices for the first part of 2017. During this time the apprentices stabilized erosion on 916,318 square feet of slopes, planted 61,201 plants, trees, shrubs and seedlings, maintained 22.6 million square feet of restored areas, collected 3,505 water samples and impacted 2,451 people through environmental education and outreach. In addition to these environmental benefits, the program also has a positive impact on students and conservation districts. 100% of apprentices indicated they felt more prepared to work in the conservation industry as a result of the program, and would recommend it to others. 95% of the Districts were satisfied with the work their apprentices completed, and 99% said they would participate in the program again.

### Communications

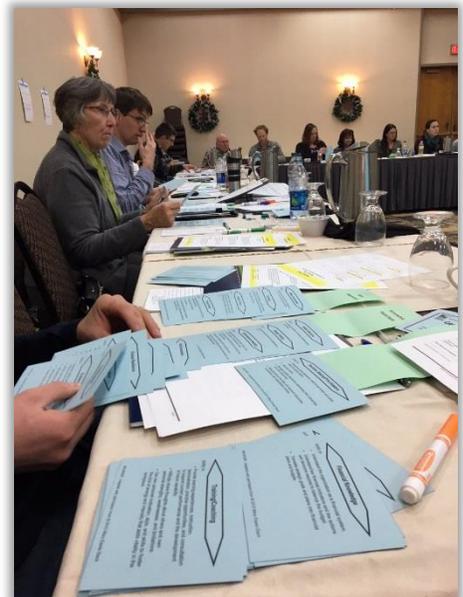
During the biennium, the Communications Department conducted a thorough website audit in anticipation of a website redesign. The audit included user experience, plain language, ADA accessibility, and mobile responsiveness to make sure the agency meets the needs of site visitors. Continued implementation of the External Communications Strategy resulted in over 68 million impressions from 2,037 stories, as well as a broader reach on social media channels.

### Internal Controls

The State of Minnesota’s internal controls standards require agencies to perform “risk assessments of their key business processes. These risk assessment include “the identification and analysis of the risks relevant to the achievement of the organization’s mission and objectives, which forms the basis for determining how the risks should be managed”. Risk assessments can help an agency focus its control efforts on those processes that are most critical to accomplishing its mission, or where the impact of something “going wrong” would be most felt. By taking apart a process or procedure to identify where the risks or gaps are, they can also help to speed up or fortify inefficient or ineffective processes.

Several updates were made to BWSR’s internal controls processes to make the agency stronger. BWSR’s Data Practice Manual was updated in 2015, reducing the risk of non-compliance with data practice laws and rules. During 2016, the agency developed risk assessment, monitoring and financial procedures for grants. Risk assessments procedures weigh the risk of grant noncompliance with BWSR’s capacity to reconcile and aligns with OGM guidance. In addition, these procedures increased transparency within the grants process and ensure expenditures claimed are in compliance with the grant agreements and BWSR policies.

Three risk assessments of funds were completed during the biennium. The completion of the risk assessments mapped BWSR’s internal process for receiving appropriations from various funds. It also identified potential events – and solutions to those events - that could prevent the agency from achieving its funding objectives.



*BWSR staff provided a training for attendees of the MN Association of Watershed Districts annual meeting.*

## Grants Monitoring, Reconciliation and Verification

During 2016, the agency developed a Grants Monitoring and Financial Reconciliation Policy in alignment with the Office of Grants Management (OGM) policy and guidance. One of the objectives of the policy was to move from the financial verification standard into a financial reconciliation standard. By moving into a reconciliation standard, the agency was able to focus its efforts on grants \$50,000 and over. This included developing the following procedures for grants: The financial reconciliation, the monitoring and the risk assessment procedures. The creation of these procedures provided a variety of tools to Board Conservationists that can be use when monitoring grants.

## Performance Review and Assistance Program

BWSR's Performance Review and Assistance Program (PRAP) was authorized by the legislature (Statute 103B.102) in 2007 as a means to monitor and assess the performance of local water management entities. In addition to conducting reviews, BWSR uses this program to provide organizational improvement or assistance grants to local government units (LGUs) in need, and prepares an annual report to the legislature outlining the work conducted under the program. In 2016 and 2017, all 239 LGUs were tracked for basic plan and reporting compliance. Level I Compliance is documented in the PRAP Legislative report. BWSR prepares an annual PRAP report for the Minnesota legislature containing the results of the previous year's program activities as well as a general assessment of the performance of LGUs that provide land and water conservation services and programs. The legislative reports can be found here: <http://www.bwsr.state.mn.us/publications/legislative.html>.

## Featured Story: BWSR tailors technical training to fit certification needs



*Willie Peters of Scott SWCD worked with Area 4 Technical Training Team during a grassed waterway training in Scott County. Participants included SWCD and NRCS staff.*

The Minnesota Board of Water and Soil Resources is tailoring its Technical Training and Certification Program (TTCP) to fit the needs of conservation workers throughout the state, based on data collected this spring from 106 Individual Development Plans (IDPs).

That data is the basis for the annual technical training needs assessment. It drives decisions on local and statewide training opportunities by focusing on real, documented training needs to achieve and maintain technical skills and credentials.

The process allows BWSR and the Natural Resources Conservation Service (NRCS) to deliver relevant, region-specific training to Soil & Water Conservation District (SWCD) and NRCS staff.

The Tech Training IDP includes a framework for SWCD and NRCS field offices to collaborate and prioritize resource concerns, conservation practices and credentialing needs within an entire county or work area. Staff can identify gaps in technical skills, and prioritize individuals’ training based on the partnership capability.

“We’re getting real data about what SWCD and NRCS employees’ goals are for credentialing, and what training they need to get there,” said Megan Lennon, BWSR technical training and certification coordinator. “What are the specific training needs that we need to meet in order to have the skill sets to put conservation practices on the ground?”

The resulting training will focus on critical needs and eliminate wish-list items. Pinpointing training needs starts with identifying priority resource concerns — such as soil erosion or water quality degradation — and then focusing on the conservation practices used to address them. Job Approval Authority (JAA), the ability to sign off on a completed conservation practice, is the most common form of credentialing.

The effort supports the training partnership among BWSR, NRCS and SWCDs. Financial support comes from the Clean Water Fund and a NRCS contribution.

Basic technical skills training designed for new employees might focus on surveying, hydrology, construction inspection, plant identification and soil health. Advanced training might include electronic surveying, integrated pest management or advanced soil mechanics.

“We’re trying to tailor the trainings that we deliver to specific needs. We know those are going to change demographically, and we know they’re going to change over time,” Lennon said. “The benefit of the Individual Development Plan is it will be able to capture training needs over space and time.”

## Status Report

Past Recommendations	Status
Develop a tracking system to record agency-wide training efforts.	✓ In process
Pursue LCCMR funding for the Conservation Apprentice Academy Program.	✓ Funding secured for FY2016-2017
Develop a Grants Monitoring and Reconciliation Policy.	✓ Completed and approved in 2016.
Pursue mentorship-based and other programs that support a diverse workforce.	✓ Partnering with DNR and MPCA on an ENRTF-funded grant to develop internship program.
Use partnership approach to complete and implement a statewide technical training strategy.	✓ Strategy Completed in September of FY 16, Technical Training and Certification Program established in March 2017 and coordinator hired.

### **FY2018-2019 Recommendations**

- 13) Build a skilled workforce, capable of meeting the challenges and opportunities of technical conservation practice survey, design, and construction.
- 14) Increase capabilities to help farmers, landowners, and local governments tell the story of the Legacy Fund impacts.

## Other Policy and Administration

### Overview

The goal of this program is to advance the agency mission by providing high quality, timely and cost-effective operational and administrative support. In addition to providing support to agency staff, we provide direct support to the 20-member Board, as well as support and information to external partners such as local governments, non-governmental and other community groups, businesses, legislators, and citizens. BWSR's agency operations have been historically lean with a focus on getting resources out to local governments.



*Board tour attendees learn about a water quality project in southwest Minnesota.*

### At-a-Glance

Major programs within this section include:

- Administrative Services (Human Resources and Financial Services)
- Legislative Relations
- Information Technology
- Board Operations

### Administrative Services

This program area provides human resource, labor relations, budgeting, payroll, purchasing, motor pool service, and financial reporting services to the agency. During the FY2016-2017, these functions continued to support our agency's 101 staff in nine offices located throughout Minnesota. In addition, the agency hired a dedicated, full-time human resources consultant to provide these critical services as the agency continues to grow.

### Legislative Relations

Implementation of Clean Water, Land and Legacy Amendment in 2008 has continued to increase our agency's responsibilities, as well as the expectations for BWSR to advise legislative decisions. During the 2016-2017 biennium, we continued to work with staff and members of the Clean Water Council, Outdoor Heritage Council, and Legislative-Citizen Commission on Minnesota Resources in addition to being a resource to the Legislature itself.

### Board Operations

During the 2016-2017 biennium, the BWSR Board continued to provide direction and oversight on policy development, grant funds to implement the state's conservation programs, and regulatory decisions. BWSR's goal is to operate transparently – and we take seriously our responsibility as stewards of state resources. As part of that responsibility, we reached out to our partners and asked them what was working well and what the agency could do better, and used that to take a look at our strategic plan. The process began in 2016.

The 2017 Refresh of the Strategic Plan maintains BWSR’s Mission, while updating and focusing in on eight Impact Areas BWSR must focus on to meet that mission. The Water Management and Strategic Planning Committee worked with a Core Team of BWSR staff to identify those impact areas, develop direction statements, and make revisions. Additional BWSR staff, and partners were also asked to provide input.

*Eight Impact Areas:*

- Pursue Organizational Excellence
- Enhance Local Government Unit Capacity
- Strengthen Local Governance
- Transition to Watershed Based Planning, Management and Funding
- Establish and Report Clear, Tangible Measures and Outcomes
- Broaden and Enhance Conservation Partnerships
- Integrate Human Dimensions into BWSR Planning and Programs
- Communicate Strategically

**Information Technology**

As required by statute, the agency contracts with MN.IT Enterprise for information technology operations and program support. During the FY 2016-2017, effort was made to evaluate infrastructure to determine IT and cybersecurity needs as the agency moves forward.

**Status Report**

Past Recommendations	Status
Expand Human Resources capacity to adequately support the agency.	✓ BWSR now employs one full-time Human Resources staff person, resulting in HR operations that now reflect a consistent approach to classification, affirmative action, recruiting, hiring, on- and off-boarding, and making sure our staff are properly trained on important topics such as sexual harassment prevention.
Review and modify the current Regional structure of field operations to ensure ability to assist and support Local Government partners in relation to BWSRs programs, policies and grants.	✓ To better serve our more than 250 local government units, we realigned our offices in these communities: North: (Bemidji, Brainerd, Detroit Lakes, Duluth); Central: (St. Cloud, St. Paul); and South: (Mankato, Marshall, and Rochester).
Update the BWSR Strategic Plan.	✓ Completed in 2017.

**FY2018-2019 Recommendations**

- 15) Pursue mentorship-based and other programs that support a diverse workforce.
- 16) Increase base General fund appropriations so that the agency can meet its statutory requirements and deliver services expected by our local government partners.

