2014-2015 Biennial Report to the Minnesota Legislature





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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. We take that mission seriously, and over the course of the 2014-2015 biennium we have worked closely with our government partners and the private landowners we serve to implement conservation programs that are making a difference for our state's soil and water resources.

Our conservation easement programs continue to put critical land in permanent protection, providing benefits for water quality, habitat, and wildlife. Over 18,500 acres of vulnerable land now enjoy these protections through the work of this program. Our Clean Water Fund Competitive Grant program continues to empower local governments to implement projects that are moving the needle at the local level. Over the course of the biennium those investments resulted in over 1,300 best management practices keeping an estimated 43,000 tons of sediment and 39,000 pounds of phosphorus from entering our waterways.

This biennium also saw significant progress in the development of *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 occurring through five pilot plans underway around the state. The passage of Governor Dayton's buffer initiative at the end of the 2015 legislative session creates new opportunities to work with local government partners and landowners to meet the state's water quality needs.

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.

Brian Napstad, Chair Minnesota Board of Water and Soil Resources

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BWSR is an equal opportunity employer.

Information contained in this report is available in an alternative format upon request.

Pursuant to Minn. Stat. § 3.197, the cost of preparing this report was approximately \$4,495.

October 2016

Executive Summary

Over the 2014-2015 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 our natural resource goals. As directed by Minnesota State Law, this report contains several recommendations for program or policy changes to improve state and local efforts in water and soil resources management. Those recommendations include:

- Build an interagency proposal for the Governor to submit to the US Department of Agriculture for a new Minnesota Conservation Reserve Enhancement Program (CREP).
- 2) Establish stewardship investment accounts for all sources of easement funding.
- Seek state funding commitment for a Minnesota CREP through Outdoor Heritage Fund, Clean Water Fund, Bonding, and LCCMR.
- 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.
- 5) Work with stakeholders and other state and federal agencies to complete WCA rulemaking and implement new statutory authorities and requirements.
- 6) Pursue In Lieu Fee Program for wetland replacement.
- Reorganize BWSR's staffing approach for wetlands to meet evolving needs of local government partners and landowners.
- Increase the pace of conservation implementation by expanding CWF efforts for Targeted Watershed, Projects and Practices, RIM, and Accelerated Implementation grants.
- 9) Provide a status update for the Nonpoint Priority Funding Plan.
- 10) Rollout One Watershed, One Plan program statewide and develop training to support a successful transition for local governments.

- 11) Develop policies and guidance to successfully implement buffer law.
- 12) Support mechanism for stable and predictable capacity funding for SWCDs.
- 13) Work with governor's office, partners, to develop a state-based pollinator approach.
- 14) Develop a Climate Change Action Plan
- 15) Pursue cost-share to help drainage authorities modernize drainage records.
- 16) Update and transition the Drainage Manual to an online format.
- 17) Develop a tracking system to record agencywide training efforts.
- 18) Pursue LCCMR funding for the Conservation Apprentice Academy Program.
- 19) Develop a Grants Monitoring and Reconciliation Policy.
- 20) Pursue mentorship-based and other programs that support a diverse workforce.
- 21) Use partnership approach to complete and implement a statewide technical training strategy.
- 22) Expand Human Resources capacity to adequately support the agency.
- 23) 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.
- 24) Update the BWSR Strategic Plan.

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.

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 a local government delivery system.
- 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.



This map reflects Board composition at the end of the FY2014-15 biennium.

During the biennium, board work was divided between eleven 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, 2015), our 92 staff members were located in ten field offices throughout the state in Bemidji, Brainerd, Detroit Lakes, Duluth, Mankato, Marshall, New Ulm, Rochester, St. Cloud, and St. Paul (central office and metro field 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.

Revenue for FY14-FY15 Biennium		
General Fund	\$25,282,000	
Clean Water Fund	\$65,429,000	
Outdoor Heritage Fund	\$21,690,000	
Bonding*	\$18,120,000	
ENRTF	\$4,083,000	
Other	\$5,994,000	
Total	\$140,598,000	

*This is the Bonding appropriated during the biennium. Our agency's Bonding expenditures span individual time frames of 4 to 6 fiscal years





Expenditures for FY14-FY15 Biennium		
Grants to local governments	\$120,042,000	
Capital Bonding projects*	\$17,150,000	
Agency Operations	\$20,556,000	
Total	\$157,748,000	

*The difference in revenue vs. expenditures is the \$17 million in Capital Bonding projects received in previous fiscal years but expended in the biennium.



Expenditures, 2014-2015 Biennium

Breakdown of Expenditures: Grants		
Natural Resources Block Grants	\$6,846,000	
SWCD General Services Grants	\$6,232,000	
State Conservation Cost-Share Grants	\$3,120,000	
Clean Water Fund Grants	\$63,127,000	
Easements	\$36,277,000	
Other Grants	\$4,440,000	
Total	\$120,042,000	



Breakdown of Expenditures: Grants

Breakdown of Expenditures: Capital Bonding Projects		
Reinvest in Minnesota Program (RIM)	\$13,377,00	
Local Government Road Wetland Replacement Program (LGRWRP)	\$2,744,000	
Other	\$1,029,000	
Total	\$17,150,000	





Breakdown of Expenditures: Agency Operations		
Personnel (Salary, benefits, etc.)	\$18,554,000	
Occupancy (Rent)	\$512,000	
Information Technology (IT)	\$522,000	
Travel	\$597,000	
Other Administrative Costs	\$371,000	
Total	\$20,556,000	



Breakdown of Expenditures: Agency Operations

RIM

Other

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 FY14-15 biennium totaled \$4.08 million and funded the projects in the table below.



AND NATURAL RESOURCES

ENRTF Projects, FY14-FY15 Biennium		
Drainage Records Modernization	\$230,000	
Farm Bill Assistance	\$1,500,000	
Minnesota Conservation Apprentice Academy	\$85,000	
NE MN White Cedar Plant Community Restoration	\$85,000	
LeSeuer County Lakes Restoration	\$463,000	
Reinvest in Minnesota Wetlands Reserve Acquisition & Restoration	\$1,645,000	
Lake Heron Lakes Sediment Reduction	\$122,000	
Total	\$4,083,000	

Conservation Easements

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 nonfederal 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

Conservation Easements FY14-FY15 Funding Sources		
Outdoor Heritage Fund	\$21,690,000	
Clean Water Fund	\$16,625,000	
Bonding	\$6,000,000	
Environmental and Natural Resources Trust Fund	\$950,000	
Total	\$45,265,000	

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. Based on a report from the Natural Resources Conservation Service (NRCS), for every \$100,000 in RIM funding, \$160,000 is leveraged in federal funds, \$128,000 is generated in total economic output, and one new job is created or maintained.

Working 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.



Our biennial accomplishments include:

- Securing 498 easements through six different programs, protecting almost 15,500 acres across the state of Minnesota.
- Protecting 8,127 acres adjacent to rivers, lakes, streams and ditches through 247 riparian buffer easements. A majority of these acres are currently in USDA CRP contracts that will expire, so these acres will provide permanent water quality protection and wildlife habitat benefits.
- 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. Forty-one easements were funded during the biennium, protecting over 3,740 acres.

Program Components

The primary components of our Conservation Easements program are:

- Riparian Buffers
- RIM Wetlands
- Wellhead Protection
- Army Compatible Use Buffer (ACUB) Program
- RIM Shallow Lakes Shoreland Protection, Wild Rice Lakes

Program	Reports
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Riparian Buffers

Our riparian buffer initiative has been our largest, most successful easement program over the last two fiscal years. This program is part of a strategic approach to prevent pollutants from entering our lakes and streams. Demand for the program continues to exceed available funding.

Easement Program	Number of Easements	Acres Protected
Riparian Buffers	257	11,219
RIM-WRP/RIM Wetlands	146	8,127
Army Compatible Use Buffer Program	41	3,742
RIM - Shallow Lakes, Wellhead, Prairie, Red River Valley Restoration Initiative	49	2,014
RIM Flood Response	5	376
Total	474	18,504

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

Over the biennium, the RIM-WRP Program transitioned to the RIM Wetlands Program. These 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 ability to use 100% state RIM funds for this program has positioned BWSR to be more readily able to protect these important resources.



The Ellefson Wetland Restoration in Norman County.

Wellhead Protection

Legislative appropriations for RIM easements in community wellhead protection areas totaled \$3.6 million. These 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. Funding for thirteen easements protected 725 acres over the biennium.

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.

RIM Shallow Lakes Shoreland Protection, Wild Rice Lakes

This subprogram focuses on protection of shoreland habitat on wild rice lakes in the northern forested region of Minnesota. We worked with Ducks Unlimited (DU) and the MN DNR to acquire land on wild rice lakes in Aitkin, Carlton, Cass, Crow Wing, Hubbard, and Itasca counties. 19 projects on 18 wild rice lakes are protecting 10 miles of wild rice shoreland.

Featured Project: Redwood County buffer a legacy in the making

For the Jensen sisters, conservation is part of their family farming tradition. Their parents believed strongly in being good stewards of the land, and that legacy lives on in their daughters. Even though they don't farm the land themselves, the conservation practices they've installed have been beneficial both to the farmer they rent to and to the surrounding land and water. The Jensen farm has used buffers to slow erosion and benefit water quality through the Reinvest in Minnesota (RIM) Reserve Buffer Program, which provides critical support in advancing the state's goals to protect and improve water quality, protect and enhance wildlife habitat, and reduce flooding.



The Jensen sisters: Norma Schlemmer, Linda Nesburg, and Diane Jensen.

A small stream on their farm outlets into the Redwood River just a few hundred feet from their property boundary. Efforts by the Redwood Soil and Water Conservation District (SWCD) to protect the river had already led to multiple easements in the area, establishing a corridor with a highly functional ecosystem.

In 2013 the sisters installed an 18.5 acre easement on their property that has a 100-foot Clean Water Fund buffer (pictured right in blue) that provides water quality benefits to a tributary that outlets into the Redwood. That buffer is matched by 100 feet of Outdoor Heritage Fund buffer (pictured right in tan), providing more acreage for wildlife habitat. The RIM program in the state that uses both Clean Water and Outdoor Heritage fund to maximize benefits for water and wildlife.

"The farm's location meant that their buffer application was a great candidate because it provided both clean water benefits and habitat benefits for wildlife," Kristy Zajac, Redwood SWCD Conservation Specialist explained.

"Five years ago, we proposed expanding the RIM program to include wildlife buffers to the Lessard Sams Outdoor Heritage Council and this is exactly the kind of project we had in mind," Tabor Hoek, BWSR Private Lands Program Coordinator said. "It directly ties the clean water and wildlife components of the Legacy Amendment together."

Landowner Diane Jensen – one of the three sisters - is actively involved in seeding the easement with a diverse group of vegetation. She manages for pollinators, removes buckthorn by hand, and has used other practices to manage her land. It's a success story, and a clear demonstration of how both funds - and the enthusiasm and commitment of local landowners - can be leveraged to maximize benefits for water and wildlife.



Recommendations

FY2012-2013 Recommendation	Status
Evaluate how we can manage resources to achieve the full value of the RIM program as a versatile, multi- benefit tool that has the potential to achieve water quality, wildlife habitat, and flood attenuation benefits. Available funding is not adequate to meet goals and landowner interest in the program.	✓ We have undergone a risk assessment and evaluated fund accountability to make sure the RIM program is meeting its potential.
Explore methods to ensure state-funded conservation easements have long-term stewardship plans and funding identified for monitoring and enforcement.	 ✓ The Legislature approved the creation of easement stewardship investment accounts for Outdoor Heritage Fund-funded easements.
Explore opportunities to leverage funding from the new Federal Farm Bill programs.	 ✓ Convened an interagency task force to develop ideas to secure federal leverage.

FY2014-2015 Recommendations

- 1) Build an interagency proposal for the Governor to submit to the US Department of Agriculture for a new Minnesota Conservation Reserve Enhancement Program (CREP).
- 2) Establish stewardship investment accounts for all sources of easement funding.
- 3) Seek state funding commitment for a Minnesota CREP through Outdoor Heritage Fund, Clean Water Fund, Bonding, and LCCMR.

Wetland Conservation Act

The Wetland Conservation Act (WCA) was enacted 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;
- Increase the quantity, quality, and biological diversity of Minnesota's wetlands by restoring or enhancing diminished or drained wetlands;
- 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.

Program/Policy Changes

In the 2014-15 biennium, several changes were made to program statutes (MN Stat. § 103G). The primary changes were:

- Formation of a wetland stakeholder group to provide recommendations and foster cooperation and understanding related to the WCA.
- Establishment of authority to collect fees to fund the long-term monitoring and enforcement of wetland mitigation sites.
- Requirement that BWSR identify high priority areas for wetland mitigation.
- Expanded ability of BWSR to establish In-Lieu Fee (ILF) programs for wetland mitigation purposes.
- Establishment of new actions to provide wetland mitigation in northeastern Minnesota.
- Establishment of authority to collect fees to fund easement acquisition for private wetland banks.
- Requirement for BWSR and the DNR to complete a feasibility study on assuming the Federal wetland regulatory program in the state.
- Requirement that BWSR report to the legislature on policy development progress and authority to pursue rulemaking to incorporate statute changes.

More information about the 2015 statute changes can be found at: <u>http://www.bwsr.state.mn.us/wetlands/index.html.</u>

Working for Minnesota

Our biennial accomplishments include:

- Significant progress in coordination with our federal, state and local partners including new agreements, initiatives and cooperative efforts.
- Continued success in agricultural wetland banking including more than 390 credit acres used to offset agricultural wetland loss.

Increased monitoring and compliance of state-held easements including monitoring of 94 wetland bank easements in the biennium.

Program Components

The primary components of the Wetland Conservation Act program are:

- Local Government Unit Implementation
- Wetland Banking and Long-term Bank Site Monitoring
 - Minnesota Wetland Bank
 - Minnesota Wetland Bank for Agriculture
 - Local Government Roads Wetland Replacement Program
 - Long-term Monitoring of Wetland Bank Sites
- BWSR Oversight and Appeals
- BWSR Program Administration and Coordination
 - 2015-2016 Rulemaking

Program Reports

Local Government Unit Implementation

There are more than 380 local governments units (LGUs) implementing the Wetland Conservation Act in Minnesota. In the 2014-15 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 3,800 applications for activities in wetlands.

Wetland Banking

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 lost due to unavoidable wetland impacts. Using a privatemarket 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 400 wetland bank accounts in the system with a current balance of over 3,800 credits, making Minnesota the state with the largest number of wetland banks. In 2014-15 approximately 2,000 credits were deposited into the system and another 1,250 were used to offset impacted wetlands.

BWSR continues to vigorously pursue interagency coordination to more efficiently and effectively implement wetland regulatory programs in the State. In the 2014-15 biennium, BWSR entered into two formal agreements with the St. Paul District U.S. Army Corps of Engineers (Corps) to coordinate wetland mitigation reviews and standards, three separate interagency personal agreements to fund joint wetland bank specialist positions with the Corps and a multi-agency agreement to facilitate the review, approval and monitoring of one of the largest wetland banks in the country. Additionally, our agency embarked on a long-term plan to come to agreement on

several technical guidance documents with the Corps related to wetland mitigation. Two jointly issued guidance documents were completed in the biennium and several others are nearing completion.

Minnesota Wetland Bank for Agriculture

The Minnesota Wetland Bank for Agriculture was initiated in the 2012-13 biennium via a partnership with the Natural Resource Conservation Service (NRCS) to provide wetland mitigation for agricultural producers in the federal farm program. This new program provided a better way to connect agricultural production benefits and ecological benefits by offsetting mitigation needs on similar types of land. This initiative resulted in the establishment of agricultural wetland banks as a user-specific subset within the wetland banking system. The initiative exceeded expectations with over 400 agricultural wetland credits generated and deposited into the banking system and over 250 credits used to offset wetland impacts resulting from agricultural projects. In the 2014-15 biennium an additional 390 credits were deposited and 310 were used. Another significant development in the program were coordination efforts with the Corps resulting in the first Federally-approved agricultural bank credits in the country. We continue to work with our federal partners to develop common standards and joint approvals for agricultural wetland banks.

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 4,300 credits to compensate for over 2,900 acres of wetland impact since program inception, including approximately 272 mitigation credits in the 2014-15 biennium, we are faced with a current credit deficit of approximately 32 credits and a debt of 350 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 recently developed a 5-year funding plan that would meet program obligations for the 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 2018 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 2014-15 our staff inspected 46 privately held wetland bank sites to perform long-term monitoring and monitored 11 BWSR-sponsored road mitigation bank sites to direct adaptive management efforts for successful restoration and credit allocation. In addition, three final delineations were completed on BWSR-developed road banks, guidance was developed for the inspection of construction components on wetland restorations, and improved follow-up communication mechanisms were developed to better connect with landowners.

BWSR Oversight and Appeals

Enforcement of WCA is provided for primarily by the Department of Natural Resources (DNR) Water Resources Enforcement Officers and other licensed peace officers. Local government units and soil and water conservation districts also have important roles in enforcement. BWSR is responsible for the administrative appeals process. There are two main categories of appeals: 1) appeals of LGU decisions and 2) appeals of replacement or restoration orders.

Applicants and certain other parties may appeal local government decisions regarding replacement plans, public road project notices, banking plans, exemptions, no-loss, and wetland boundary or type. In addition, a landowner or responsible party may appeal the terms and conditions of a replacement and restoration order. Appeals must be filed with our agency within the specified time period.

An individual aggrieved by a BWSR decision on an appeal may request judicial review through the State Court of Appeals (MN Statute 14.63 to 14.69). While the numbers of submitted appeals are often relatively low, they are

significant due to the inordinate amount of local and State staff time and board member involvement required to process each appeal. The table at right summarizes the appeals submitted to our agency in 2014 and 2015.

Year	Appeals of Restoration Orders	LGU Appeals of Decisions	Total Appeals to BWSR
2014	7	3	10
2015	3	1	4

Featured Project: Establishment of One of the Nation's Largest Wetland Banks

The Lake Superior Wetland Bank encompasses approximately 23,000 acres of a partially drained peatland known internationally as the Sax-Zim bog, which is a mecca for birding enthusiasts. The land was a mix of State, County and private holdings. Interagency coordination efforts were crucial to assembling the land, identifying restoration strategies and providing effective regulatory review. BWSR, the Minnesota DNR, Saint Louis County and the Corps jointly reviewed the private wetland bank application and were able to approve a restoration plan and the associated mitigation crediting that meets State, Federal and local requirements. Such coordination efforts are necessary in order to attract large projects that provide meaningful and substantial wetland mitigation in Minnesota.



Filling of old drainage ditch to restore hydrology.

Recommendations

FY2012-2013 Recommendation	Status
Pursue additional funding for the Local Government Roads Wetland Replacement Program so that projects can be developed at the pace necessary to meet the State's statutory obligation to provide replacement credits.	 BWSR received \$2 million in funding in 2014, which falls short of the amount needed to meet the State's obligations.
Work with stakeholders and other state and federal agencies to prioritize and implement recommendations contained in Executive Order 12-04 and the Siting of Wetland Mitigation in NE MN.	 Convened a roundtable of agricultural, business, government and other stakeholders to produce a prioritized list.
Determine if there are structural and funding changes in WCA that would make implementation and oversight more effective.	 Analysis resulted in several suggestions which will be included in future legislative pursuits.

FY2014-2015 Recommendations

- 4) 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.
- 5) Work with stakeholders and other state and federal agencies to complete WCA rulemaking and implement new statutory authorities and requirements.
- 6) Pursue In Lieu Fee Program for wetland replacement.
- 7) Reorganize BWSR's staffing approach for wetlands to meet evolving needs of local government partners and landowners.

Local Projects and Practices

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 two of our major programs: Clean Water Fund Competitive Grants and Natural Resources Block Grants.

Program/Policy Changes

In March 2014, we launched the Targeted Watershed Demonstration Program as a new component of our Clean Water Fund Competitive Grants program. A new approach to addressing water pollution, the program focuses funding on watersheds where actions needed for water quality improvement are known and can be achieved in a four-year window of time. A total of \$11.1 million was awarded to seven watersheds around the state during the program's demonstration phase.

We also launched the Shared Services grant program, a subset of the Accelerated Implementation funds available through our Competitive Grants program. Available only to Technical Service Areas, these funds are used to build regional capacity across the state to more efficiently accelerate on-the-ground projects and practices that improve or protect water resources.



Volunteers work on a project in Stearns County.

Working for Minnesota

Biennial accomplishments for our Clean Water Funds include:

- Leveraging approximately \$13 million in local and federal dollars. This increased the amount of on-theground implementation projects, helping accelerate work to restore and protect Minnesota's waters.
- Installing more than 1,300 best management practices.
- Implementing practices responsible for keeping an estimated 43,000 tons of sediment and 39,000 pounds of phosphorus from entering our waterways.

Program Components

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

Program Reports

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



Riffle was installed as part of the Shingle Creek restoration project.

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

Program	Number of Grants FY14-FY15	Total Funding FY14-FY15
Clean Water Fund Competitive Grants	192	\$38,888,945
Natural Resources Block Grants		
- Comp. Local Water Management	174	\$2,278,000
- Wetland Conservation Act	174	\$3,813,000
- Shoreland Management	170	\$755,000
 County Feedlot Permit* 	110	\$3,386,000
- SSTS*	220	\$4,255,000
SWCD Programs and Operations		
- Conservation Delivery	180	\$3,529,000
- Easement Delivery	156	\$582,000
- Nonpoint Engineering Assistance	16	\$2,120,000
Conservation Cost Share	179	\$3,103,000
Total	1571**	\$62,709,945

*Includes dollars transferred from MPCA for some of these programs. ** Grants are packaged into a grant agreement to support greater government efficiency.

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 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.

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.

Featured Project: Targeting Long Lake

Rice Creek Watershed District (RCWD) received a \$3 million Targeted Watershed Demonstration (Clean Water Fund) grant from BWSR in 2014 to reduce pollutants to Rice Creek, Pike Lake, and ultimately Long Lake in New Brighton. 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. The Rice Creek Watershed District grant is the largest competitive grant ever awarded by BWSR.

Long Lake is a high priority for RCWD and its residents. Long Lake Regional Park is located on its eastern shore. The park is visited by nearly 500,000 people annually and includes a busy boat ramp and swimming beach. The Rice Creek Regional Trail and Rice Creek Water Trail are two additional noteworthy resources for park visitors. Unfortunately, Long Lake is not meeting state water quality standards due to excess phosphorus and is subject to severe algae blooms each year, limiting recreational use.



Pictured top: A landscape architect's rendering of the proposed Iron-Enhanced Sand Filter at Hansen Park.

Pictured bottom: A new meandering creek channel is excavated (left) alongside the previously channelized Rice Creek (right) through the former TCAAP property. This grant will help fund some of the highest priority and largest impact projects identified in a decade's worth of reports and studies within the Rice Creek Watershed. The proposed projects are on public property and are estimated to provide 30-40% of the total phosphorus reductions needed, or 200-300 pounds, to meet water quality goals for the south basin of Long Lake; and a 25-35% sediment reduction, roughly equivalent to 230-340 pounds of phosphorus, to the north basin of Long Lake. Secondary benefits of these projects include increased wildlife and pollinator habitat, reduced frequency and duration of flooding after rainstorms, and improved aesthetics and recreation opportunities by reducing algae blooms.

"The District's goal with this initiative was to find high-impact, multi-purpose, regional projects to advance through the Targeted Watershed Demonstration Program that will have lasting and measureable improvements on Long Lake and the surrounding area," explained Kyle Axtell, RCWD Water Resource Specialist and Project Manager.

There are four major projects within this grant. The Middle Rice Creek Restoration Project will create nearly 2,000 feet of new stream within the former Twin Cities Army Ammunition Plant. Once completed, the project will reduce stream erosion, improve stream habitat, and decrease sediment and nutrient delivery to downstream Long Lake. Two large-scale stormwater management projects are planned in New Brighton (Hansen Park) and St. Anthony (Mirror Pond) to enhance flood storage



Harvesting large quantities of adult carp through winter netting is one of the several options being looked at to reduce the ecological damage caused by large numbers of carp in the Rice Creek Watershed.

and improve water quality treatment. This work will include removing contaminated sediment at both sites and constructing a large iron-enhanced sand filter in Hansen Park to remove additional phosphorus and suspended sediment from Pike and Long Lakes.

The RCWD is partnering with the University of Minnesota and Carp Solutions to conduct research that will inform development of a carp management plan. The project may include building barriers, aeration, adult removals, and/or other techniques determined by the study.

"This is a well-rounded effort including stream restoration, stormwater management and retrofit practices and even fisheries management," added Axtell, "all working together to meet multiple goals shared by the RCWD and its municipal partners. We are thrilled that BWSR has been able to support these projects through the Clean Water Fund."

All projects will be completed by the end of 2018.

Recommendations

FY2012-2013 Recommendation	Status
Evaluate and remodel the Clean Water Fund competitive grant funding to include a targeted watershed approach that has strong connections to goals in local plans and state strategies.	 Through Clean Water Fund appropriations, we created the Targeted Watershed Demonstration Program. Seven watersheds were funded in during the demonstration phase for a total of \$11 million.
Continue working with partner agencies to achieve the right balance between monitoring and implementation funding that maximizes measurable progress toward our shared goals	 Through the Clean Water Council, ICT, and other interagency work, BWSR continues to work collaboratively to implement the MN Water Management Framework.
After the Nonpoint Priority Funding Plan is completed per legislative requirement, establish an inter-agency task force to prepare guidance in the use of the plan's criteria.	✓ The plan was submitted in June 2014. We are using the WRAPS team as our interagency task force.

FY2014-2015 Recommendations

- 8) Increase the pace of conservation implementation by expanding CWF efforts for Targeted Watershed, Projects and Practices, RIM, Accelerated Implementation.
- 9) Provide a status update for the Nonpoint Priority Funding Plan.

Local Water Management

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.

Program/Policy Changes

One Watershed, One Plan

Major work began on development of "One Watershed, One Plan." The One Watershed, One Plan went from a vision in the 2012-13 biennium to a statutory program in the 2014-15 biennium. With adoption of guiding principles and implementation of a pilot program, the goal of aligning local planning and implementation with state strategies into plans built largely around the state's major watersheds is occurring.

In June 2014 the BWSR Board selected five watershed planning boundaries for piloting One Watershed, One Plan: Red Lake River, Lake Superior North, North Fork Crow River, Yellow Medicine River, and Root River. In September 2014, the BWSR Board adopted plan content requirements for the pilot areas. We anticipate the transition will occur over a tenyear period.



Participants in the Yellow Medicine One Watershed, One Plan pilot at work.

Rule Revision

Revised Rules governing Metropolitan Watershed Management Plans, Minn. Rules Chapter 8410 were adopted in 2015. The rule change is to build on our agency's experience implementing the Metropolitan Water Management program, moving away from an overly prescriptive, one-size-fits-all approach to a more results-oriented framework. With adoption of the revised rule future metropolitan watershed plans will consist of periodically updated inventories and goals and frequently updated implementation and capital improvement plan sections.

Working for Minnesota

Our biennial accomplishments include:

- Initiated five One Watershed, One Plan pilot projects
- Adoption of orders for approval of revisions and/or amendments to 45 local water management plans.
- Reduction in the number of overdue water plans from 22 to 7.

Program Components

- Water Management Planning and Implementation
- Conservation Delivery Grants
- Pass Through Grant Management

Program Reports

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 36 plan amendments and/or revisions
- Metro Area 4 plan amendments
- One Watershed, One Plan 5 pilots initiated

Conservation Delivery Grants

These grants represent a long-standing partnership between state, local and federal governments to provide base-level resources for operating expenses associated with the local delivery of state conservation programs by providing each soil and water conservation district with a certain degree of funding stability. During this biennium, 180 grants were issued, totaling \$3.6 million dollars. Funding for this area continues to decline, causing concerns about maintaining adequate local capacity to address soil and water resource issues.

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	FY2014-FY2015
Area II	General Fund	\$240,000
Red River Basin Commission	General Fund	\$200,000
Minnesota Conservation Corps	Clean Water Fund	\$500,000

Featured Project: Root River Watershed: Pioneering a new era in water management

In April 2014, Fillmore, Houston, Mower, Winona, Olmsted, and Dodge Counties and their Soil and Water Conservation Districts (SWCDs), along with the Crooked Creek Watershed District, submitted a nomination to be a part of a new era in water management in Minnesota: One Watershed, One Plan. The new program represents a shift in local planning from largely political boundaries to planning that follows watersheds.

One Watershed, One Plan has foundations in the Local Government Water Roundtable, in which the Association of Minnesota Counties (AMC), the Minnesota Association of Soil and Water Conservation Districts (MASCWD), and the Minnesota Association of Watershed Districts (MAWD) committed to collaboration. The One Watershed, One Plan program, developed in 2013 and funded by the Clean Water, Land and Legacy Amendment, offers grants and assistance to local governments charged with water management responsibility to help them make the transition to water planning on a watershed scale.

In June 2014, the BWSR Board approved the Root River Watershed 1W1P nomination, and the hardworking folks in the Root River Planning Boundary hit the ground running. In the last nine months, the group has worked collaboratively to identify priority concerns and finalize the project plan.



The Root River One Watershed, One Plan was one of the pilot projects.

"They've still got work ahead of them," said BWSR Board Conservationist Tom Gile, who is working with the group on their plan. "However, this collective group of local government staff and officials has already done a fantastic job of showing how a large group of diverse backgrounds and interests can come together for a common cause."

Root River Watershed hosted an official public kickoff and open house at the Fountain Community Center on April 8, 2015. Close to 100 engaged citizens attended the kickoff event, which was widely publicized in local and regional news outlets. Donna Rasmussen, the Fillmore SWCD Administrator, says the event



Residents sign-in at the April public kick-off.

generated some great discussion and the opportunity to help community members understand the benefits of this shift in approach.

"The timing was right for the counties in this watershed to come together and tackle this type of planning," Rasmussen said. "We're optimistic that by working together we'll be able to better coordinate and prioritize our work so that conservation practices on one end of the watershed complement work being done on the other end. Ultimately, that's a more efficient use of our resources and better for water management throughout the watershed."

More and more Minnesotans are starting to recognize the need to talk about water quality, quantity, and management. The Root River One Watershed, One Plan pilot project is pioneering Minnesota's water future, setting the groundwork to permanently improve water quality across Minnesota.

Recomm	endations
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FY2012-2013 Recommendation	Status
Work with local government partners to explore ways to increase the local conservation delivery system's capacity to meet heightened expectations around water quality outcomes.	 ✓ BWSR hosted a soil and water conservation district technical services summit and conducted a local technical capacity benchmarking study. ✓ BWSR's Executive Director held listening sessions for LGUs around the state to connect with partners.
Explore ways to accelerate the adoption of key water quality improvement practices across the state including riparian zone management, soil erosion management, and water storage and treatment.	 ✓ Clean Water Fund grants now include an Accelerated Implementation Grant to help local governments increase their capacity. ✓ Governor Dayton passed a buffer law at the end of the biennium to address water quality improvement. ✓ A bill providing increased local capacity funding to soil and water conservation districts was passed into law.
Pursue, in coordination with our local government partners, transition to the new One Watershed, One Plan initiative with the goal of completing plans over a ten-year period.	 ✓ Initiated pilot program with five initial pilot watersheds ✓ One Watershed, One Plan framework became statute (103F.801)

FY2014-2015 Recommendations

- 10) Rollout One Watershed, One Plan program statewide and develop training to support a successful transition for local governments.
- 11) Develop policies and guidance to successfully implement buffer law.
- 12) Support mechanism for stable and predictable capacity funding for SWCDs.

Technical Services

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.

Working for Minnesota

Our biennial accomplishments include:

- Completing 62 wetland restoration projects, providing substantial wildlife habitat, water quality, and water quantity management benefits in Minnesota. We provided engineering site investigation, design, coordination and construction services to advance 189 additional conservation easement program wetland restoration projects.
- Providing advisory review for approximately 14 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 14 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.



A BWSR hydrologist takes soil samples while preparing water monitoring equipment.

- Developing numerous resources for those interested in preserving and protecting pollinator habitat, including the *Pollinator Toolbox*.
- Coordinating with the Minnesota Recovers Task Force and its Natural Resources Committee in response to flooding disasters to help local government units assist private landowners with erosion control and water quality restoration and protection projects and practices.

Program Components

The primary components of the Technical Services Section are:

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

Program Reports

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.

Over the biennium, BWSR managed projects to investigate *Conservation-based approaches for assessing drainage system benefits* and *Side Inlets to Improve Water Quality*. We also initiated an ENRTF-funded project to develop a *Drainage Records GIS Database* and update the *Drainage Records Modernization Guidelines*, as well as Clean Water Fund-supported work to update the *Minnesota Public Drainage Manual*.

Soils

BWSR serves as the state soil conservation agency and provides soil science expertise to coordinate with the USDA-NRCS, SWCDs and others to use soils data and associated resources to help implement soil conservation practices on private lands.

We helped secure funding for and develop an ENRTF project: *Southeast Minnesota Cover Crop and Soil Health Initiative*. Three primary objectives of this project are providing technical training, education, and outreach; conducting and disseminating a cover crop economic study; and establishing 700 acres of cover crop demonstration sites.

BWSR participated in Soil Health Partnership, comprised of state and federal agency staff, University of Minnesota researchers, Extension educators, and agricultural commodity group representatives, to share information and promote soil health practices, accelerate adoption of cover cropping and notill conservation practices in Minnesota.

Our agency developed a BWSR-specific *Climate Change Trends and Action Report* outlining how BWSR programs mitigate climate change, provide adaptation benefits, and where BWSR is heading with future efforts. BWSR staff also participated on the Interagency Climate Adaptation Team, which produced the 2013 report *Adapting to Climate Change in Minnesota*, to collaborate on climate adaptation efforts in the State.



Local government staff receive native vegetation identification training.

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 46 private wetland banks and 12 local road wetland replacement projects.

BWSR continued to develop and maintain many technical guidance documents for local government units and other conservation partners regarding establishment and maintenance of native vegetation, control of non-native

and invasive species, and implementation of associated landscape ecology practices. Due to an increasing decline of honey bees, butterflies and other pollinators, BWSR published the *Native Vegetation Easement Stewardship Guide* and launched a *Pollinator Toolbox*. The toolbox contains resources and outreach materials to ensure the effectiveness of BWSR's pollinator initiative.

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 conducted hydrologic monitoring for five wetland restoration projects associated with the Local Government Road Wetland Replacement Program, a necessary process for wetland credit certification through the Wetland Conservation Act.

Agency staff conducted hydrogeologic evaluations and monitoring in support of three RIM wetland restoration projects. Staff also provided technical input to local government and Technical Evaluation Panels in support of five Wetland Conservation Act appeals and regulatory issues.

BWSR staff participated in interagency efforts to monitor groundwater levels in the North and East Metro area, also related to White Bear Lake water level situation. Other efforts included the MDH Well Water Advisory Commission, the Clean Water Fund Interagency Groundwater and Drinking Water Team, and the Nitrogen Fertilizer Management Plan Advisory Committee, task force on refining criteria for groundwater sensitivity and the groundwater policy forum.

Featured Project: Partnering for Pollinators

Bees, butterflies, beetles and birds: a diverse group of species that all have at least one thing in common – they play an important role as pollinators. Pollinators have been in the spotlight lately because their declining populations have been met with great concern by conservation professionals, legislators, and the public. While

we sometimes think of bees and flies as a nuisance, the truth is the work they do provides the foundation for food production, food webs, and native plant populations. Simply put, we need pollinators for the continued health of our ecosystems.

In 2013, the Minnesota Board of Water and Soil Resources (BWSR) Technical Services staff started to develop resources to assist local government partners in supporting pollinator habitat in their areas. A Pollinator Plan was developed in April of 2014 that detailed our agency's efforts to date, and this month BWSR launched a pollinator initiative and webpage to provide additional pollinator resources for our conservation partners.

BWSR's Native Vegetation Specialist, Dan Shaw, who led the development of the resource, says the tools are the part of the agency's collaborative work with local partners. "The guidance and resources available through the website gives local conservation professionals



BWSR's Pollinator Toolbox has a number of resources for those interested in developing pollinator-friendly habitats.

another set of tools to help boost Minnesota's native pollinator populations. We worked closely with local partners to identify the information that would be most useful as they incorporate pollinator habitat into their restoration and conservation projects."

The new website provides guidance and support for incorporating native pollinator habitat into BWSR's existing programs. A new pollinator "toolbox" has a wealth of resources for local government partners – and interested members of the public – so that they can incorporate pollinator-friendly practices in their local conservation projects. It includes peer-to-peer resources, examples of success stories, and how-tos covering everything from selecting seed resources to planting to maintaining these vital pollinator habitats.

"BWSR's tools focus on the habitat needs of Minnesota's vulnerable native pollinator populations, an incredibly helpful resource for local conservation professionals," Stearns County Soil and Water Conservation District Urban Conservationist Carrie Raber said. "It's the first of its kind to combine all of these different pieces of the pollinator puzzle in one easily accessible place."

Incorporating pollinator-friendly habitat into new and existing conservation projects is an important step in helping to stabilize these populations. The webpage is a resource that will continue to expand and grow. Much like, we hope, Minnesota's pollinators.

You can find the new webpage at: <u>http://www.bwsr.state.mn.us/practices/pollinator/index.html</u>.

Recommendations

FY2012-2013 Recommendation	Status
Explore how emerging issues – such as climate change and threats to pollinators – are best incorporated and addressed within our existing wetland and land restoration programs.	 Staff developed Pollinator Toolbox to assist local governments with planning, implementation, and maintenance of pollinator habitat. Staff participated in the Interagency Climate Adaptation Team.
Promote multipurpose drainage water management in collaboration with the Drainage Work Group and the Interagency Drainage Management Team.	 Staff facilitated consensus recommendations from the DWG to revise section 103E.015 to better enable multipurpose drainage management. The Interagency Drainage Management Team coordinated investigation and shared technical understanding about pertinent drainage-related research for MDM practices.

FY2014-2015 Recommendations

13) Work with governor's office, partners, to develop a state-based pollinator approach.

- 14) Develop a Climate Change Action Plan.
- 15) Pursue cost-share to help drainage authorities modernize drainage records.
- 16) Update and transition the Drainage Manual to an online format.

Disaster Assistance

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

Disaster Assistance FY14-FY15 Funding Sources		
Bonding	\$4,700,000	
Special Flood Appropriations	\$2,476,000	
General Fund	\$10,600,000	
Total	\$17,776,000	

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.

Program/Policy Changes

In 2014, for the second time in three years, Minnesota experienced historic summer flooding. Above average snowfalls in the winter of 2014 set the stage for this most recent event; saturating soils, filling lakes, and causing lakes and streams to run at high levels even before the rains came. June 2014 was a record-setting month for rainfall in Minnesota. Statewide, it was the wettest June in recorded history and established a new high for total rainfall for any month. More than 100 daily record rainfalls occurred statewide, with 90 climate stations around the state reporting 10 inches or more of rain for the month.

What made this heavy rainfall event even more dramatic was just how widespread the effects were. Fifty-five of Minnesota's 87 counties reported damages and impacts from high rains and resulting flooding

On July 21, 2014, President Obama issued a disaster declaration that would eventually include 37 Minnesota counties and three tribal governments. On January 27, 2015, Governor Mark Dayton signed a disaster relief bill passed by the Minnesota State Legislature. Included in the bill was \$2.46 million to the Board of Water and Soil Resources (BWSR) to assist in flood recovery efforts focused on repair of damaged conservation practices. BWSR activated its DRAP and began immediately working with local governments to determine need and start the allocation process.



BWSR staff met with Scott County Watershed Management Organization staff to survey flood damage after the 2014 rains.

Working for Minnesota

Our biennial accomplishments include:

- Distributing 26 grants totaling \$7.7 million in disaster assistance funding to local governments to fund 274 disaster recovery projects 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.
- Establishing four easements, permanently protecting 350 acres of cropland in critical riparian areas.

Program Reports

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.

Recommendation

FY2012-2013 Recommendation	Status
Develop guidance related to the newly adopted	✓ Guidance was developed and used to implement
Disaster Recovery Assistance Program policy.	the DRAP after the June 2014 floods.

Organizational Effectiveness

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.

Program/Policy Changes

In March 2014, staff developed, and the Board approved, a Data Practices Manual and Data Practices Policy to protect not public data collected and maintained by the agency. Our Internal Controls staff also developed an agency-wide risk assessment plan in November of 2014.

Over the biennium, the Performance Review and Assistance Program (PRAP) began assessing resource outcomes resulting from local government projects and programs.

Working for Minnesota

Biennial accomplishments include:

- Holding the 6th and 7th Annual BWSR Academies. With a 14% increase in LGU participation from 2012 attendance, 402 participants (including 270 Local governments) attended BWSR's key training event each year. An average of 88% of the attendees at the 2013 and 2014 Academies indicated that the sessions helped them meet their personal goals, which they were asked to identify as things they were looking to learn, apply or be better at as a result of attending the Academy.
- Successfully implementing BWSR's first external communications plan, generating over 10,435,900 media impressions, an earned media value of more than \$817,000 for BWSR and our local government partners.
- Conservation professionals from all over the state meet in October for professional development opportunities offered at the BWSR Academy.
- Tracking compliance of 240 local government partners with basic practice performance standards through our PRAP program. 80% of our partners have a perfect score on compliance, an increase of 8% over the last biennium. 25 standard Level II performance reviews were completed in the biennium. 23 watershedbased Level II performance reviews were completed using methodology developed during the FY2012-13 biennium.
- Verifying 180 grants in 19 counties totaling almost \$8.5 million in grant funds.
- Placing 67 Conservation Apprentice Academy apprentices with mentors in soil and water conservation district offices where they received hands-on training.

Program Components

Major programs include:

- Training
 - **BWSR** Academy
 - Minnesota Conservation Apprenticeship Program
- Communications
- Internal Controls/Risk Assessment
- Grants Monitoring, Reconciliation and Verification

Performance Review and Assistance Program (PRAP)

Program Reports

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 700 individuals during the biennium.

	2013	2014	Total
Number of Sessions	39	38	77
Number of Participants	1179	1154	2333
Learning hours (# of training hours x # of participants)	6,413	5097	11,510

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.

The academy planning is guided by these principles:

- To provide a *systematic training framework* allowing LGU staff to improve their performance in delivering local conservation
- To be *practical* for LGU use
- To be cost-effective for LGUs to attend
- To increase governmental *efficiency* in delivering BWSR programs
- To use *hands-on learning* and case studies to illustrate content
- To promote *peer-to-peer* learning
- To acquire LGU feedback on BWSR programs and overall operations

Minnesota Conservation Apprenticeship Program

The Minnesota Conservation Apprentice Academy Program provides the opportunity for college students and recent graduates to be mentored by experienced conservation professionals at Soil and Water Conservation Districts (SWCDs) across Minnesota. In return, the Apprentices bring knowledge of emerging technologies and other innovations to improve the quality and productivity of current conservation efforts. The Board of Water and Soil Resources serves as the project manager and fiscal agent for the Conservation Apprentice Academy, taking care of reporting and fiscal matters, and helping out with Apprentice orientation and program evaluation as needed. The Conservation Corps of Minnesota and Iowa implement the program through recruiting, screening and training both SWCDs and apprentices, and creating a



Students get on-the-job training through the Conservation Apprenticeship Program.

supportive cohort of apprentices throughout the field season. 98% of apprentices indicated the hands-on experience gained during the apprenticeship will enhance their future academic studies, and that they now have increased technical conservation skills and are more prepared for a future career in conservation.

During the 2014-2015 Biennium, Conversation Apprentices;

- Installed and maintained 157,947 square feet of rain gardens
- Installed erosion control and slope stabilization measures on 165 acres
- Seeded 82 acres of Prairie
- Managed invasive plant species on 1,066 acres
- Spent 3,591 hours working on GIS/GPS data mapping
- Took 3,554 water quality samples
- Planted 48,079 trees and shrubs.

Communications

In 2012, in order to present a clear, concise and consistent framework for communicating with our partners and to build greater agency public awareness and transparency, the Minnesota Board of Water and Soil Resources (BWSR) developed an external strategic communications plan that set measurable objectives and established a structure for how BWSR implements external communications work.

During the biennium, the Communications Department evaluated the performance of its first External Communications Strategy, demonstrating steady growth in terms of media impressions, newsletter clicks, and social media. Staff also interviewed internal BWSR staff and LGU partners as part of the analysis, and used those results to develop benchmarks and expectations for the second iteration of the strategy, which will be evaluated again in 2018.

Communications staff also conducted a review and assessment of the Internal Communications Strategy, deploying a new plan for the 2016-2018 period.

BWSR also developed training and support resources to promote the use of plain language in agency communications. 100% of BWSR staff were provided plain language training over the course of the biennium.

Internal Control/Risk Assessment

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.

Before this biennium, the Board of Water and Soil Resources (BWSR) had several individual risk assessments (dating from 2011) on file, but no systematic, agency-wide assessment of the most likely and/or most impactful risks associated with the agency's business processes. In August and September 2014, senior managers were surveyed to complete an agency-wide risk assessment. Specifically, they were asked to rank 14 BWSR business processes and the risks associated with them, according to the 1) impact those risks would have on BWSR and 2) likelihood of those risks occurring. The results of the survey were incorporated in a comprehensive risk assessment plan approved by the Senior Management Team in November 2014.

Grants Monitoring, Reconciliation and Verification

On June 22, 2011, to better demonstrate its commitment to administering its extensive grants portfolio in accord with the Department of Administration's Office of Grants Management (OGM) policies, the BWSR Board adopted

the Grants Monitoring, Reconciliation and Verification Policy (GMRVP). The two most essential parts of the policy call for the monitoring of all grants, and "financial verification" of ten percent of all BWSR grants, annually.

During this biennium, BWSR staff continued to implement this policy, into its third and fourth years. BWSR Board Conservationists annually monitored grants by reviewing required financial and progress reports via eLINK, BWSR's electronic reporting system; and by noting incidental contacts with local partners in an online eLINK journal. Various teams of BWSR staffers, led by two BWSR Grants Compliance Specialists (a new job classification for BWSR), financially reconciled or verified 10 percent of the BWSR grants from a designated fiscal year via site visits to the offices of those local partners.

The main business of a verification site visit is to perform a financial reconciliation on the grant. Jill Carlier, Manager of the Pine County Soil and Water Conservation District, says that she found her verification site visit to be very interesting. "It makes you think about the process of getting funds in, spending them and tracking them in an entirely different light. It showed us areas where we need to do things better, and we were commended for things we are already doing really well."

Site visits can also be opportunities for BWSR teams to see the end results of grant programs: Best Management Practices, enhanced community engagement, and the promotion of conservation programs and practices.

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. 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 – a total of 240 distinct local government organizations. The legislative reports can be found here: http://www.bwsr.state.mn.us/publications/legislative.html.

Featured Project: PRAP Assistance Grant Supports Operational Effectiveness

After 34 years working for the Buffalo-Red River Watershed District (BRRWD), Administrator Bruce Albright sometimes felt like the district was an island. "You don't always get the chance to step back and look at operations and costs and compare them with other organizations," said Albright.



Members of the Buffalo-Red River Watershed District Board gather to kick off their strategic planning process, supported by a BWSR PRAP Assistance Grant.

The Buffalo-Red River Watershed District (BRRWD) has existed since 1960. After undergoing expansions in 1976 and 2012, which expanded the area it serves and also increased the amount of board members to seven, many felt the time was right for a strategic planning process. Following the board's recommendation, the BRRWD applied for and received a Performance Review and Assistance Program (PRAP) grant through BWSR to hire a strategic planning consultant.

The PRAP Assistance Grants program is available to agencies within BWSR's local government unit (LGU) delivery system – 240 soil and water conservation districts, watershed districts, water management organizations, and counties – that desire to improve their performance or operational effectiveness. The need-based grants are intended to assist partners with organizational improvement and can include activities such as staff capacity assessment, strategic planning, conflict resolution, and reorganization.

In the BRRWD's case, Albright said the process focused on immediate, short-term, and long-term needs, including catching up on annual reporting for BWSR and preparing for a smooth transition as Albright approaches retirement. At the end of the process, the BRRWD produced both strategic planning and succession planning documents.

Another key question the BRRWD wanted to tackle was rejoining the Red River Water Management Board. Strategic planning allowed the watershed district to begin the process of making this decision, including engaging county boards and citizens to consider pros and cons.

BWSR receives about \$50,000 annually for the grant assistance program, and has awarded 11 grants to local government partners so far. All grants are made on a cost-share basis, with a cap of \$10,000 per grant. While results vary depending on the LGU's goal, in general, participants have offered positive feedback about the program.

"I feel that it's very valuable," said Albright. "We look forward to doing it again."

The strategic planning process was so successful, the BRRWD plans to repeat the process every five or so years, building on past work.

"It's not that you do it once and it's good for 30 years – we'd like to do this on somewhat of a regular basis," said Albright. "We've got a good product, but we can only get better as we go on."

Recommendations

FY2012-2013 Recommendation	Status
Pursue ongoing funding for the Apprentice Program, which provides important job training for future conservation professionals.	✓ Received funding for the program for the FY14-15 biennium through the LCCMR.
Ensure a stable funding base for the Performance Review and Assistance Program, including restoration of funds from 2010.	 Secured a legislative change that enables BWSR to keep more returned cost-share dollars, used to fund this program.
Examine ways for the Organizational Effectiveness Division to help our agency and local government partners operate more efficiently.	 ✓ Established local government toolbox with communications resources for our partners. ✓ Established direct billing policy. ✓ Completed a technical training and credentialing work group process that culminating in a State Technical Training and Credentialing Strategy.

FY2014-2015 Recommendations

- 17) Develop a tracking system to record agency-wide training efforts.
- 18) Pursue LCCMR funding for the Conservation Apprentice Academy Program.
- 19) Develop a Grants Monitoring and Reconciliation Policy.
- 20) Pursue mentorship-based and other programs that support a diverse workforce.
- 21) Use partnership approach to complete and implement a statewide technical training strategy.

Other Policy and Administration

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.

Working for Minnesota

Our biennial accomplishments include:

- Partnering with multiple state agencies to develop the Non-Point Priority Funding Plan, designed as a criteria-based process to help state agencies prioritize Clean Water Fund (CWF) investments in nonpoint implementation. It signals the state's commitment to watershed-based, data-driven water management featuring prioritized and targeted actions that measurably address well-defined water quality problems and threats. The NPFP sets forth:
 - High-level state priorities for investing CWF nonpoint implementation dollars.
 - High-level keys to implementation.
 - Criteria for evaluating proposed nonpoint implementation activities.
 - Estimated costs for implementing nonpoint activities.
- Providing leadership in the development of the 2014 Clean Water Road Map. The Clean Water Roadmap is a set of goals for protecting and restoring Minnesota's water resources during the 25-year life of the Clean Water, Land and Legacy Amendment. This first edition of the Clean Water Roadmap lays out goals for four high-level indicators that describe surface water quality, groundwater quality, and groundwater quantity. These concrete measures mirror Minnesotans' desire for healthy lakes, rivers, streams, drinking water, and groundwater.

Program Components

Major programs within this section include:

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

Program Reports

Administrative Services

This program area provides human resource, labor relations, budgeting, payroll, purchasing, motor pool service, and financial reporting services to the agency. During FY2014-2015, these functions continued to support our agency's 92 staff in nine offices located throughout Minnesota.

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 2014-2015 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 the Legislature itself.

A focal point for FY2014 was Governor Dayton's "Unsession" agenda: an effort to make state government work better, faster, simpler, and more efficiently for Minnesotans. Unsession provisions brought forward by BWSR included SWCD voluntary consolidation, repeal of Star Lakes Board language, and repeal of Minnesota River Board language.

In 2015 BWSR received additional funding including an increase in Administrative Base Adjustment to help cover inflation-based administrative costs and an allocation of one-time support to help with known retirements and their associated costs.

Board Operations

During the 2014-2015 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.

Information Technology

This area provides technical expertise and technical support, develops and implements essential programming systems, coordinates geographic information systems, and manages telecommunication and network infrastructure. Efforts during FY 2014-2015 focused on building coordination between the IT services and BWSR business needs.

Recommendation

FY2012-2013 Recommendation	Status
Examine adequacy of General Fund support, and consider increases to ensure BWSR is able to meet all its statutory roles and responsibilities.	 We have undergone a risk assessment and evaluated fund accountability.

FY2014-2105 Recommendations

- 22) Expand Human Resources capacity to adequately support the agency.
- 23) 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.
- 24) Update the BWSR Strategic Plan.

