



Clean Water Fund Appropriations

2016-2017 Biennial Report to the Legislature

March 1, 2018



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Contents

Introduction.....	5
Clean Water Fund Appropriation Summary	5
Clean Water Fund Conservation Easement Programs	9
The Minnesota CREP	9
Clean Water Fund Competitive Grants Program.....	11
FY 2016-2017 Clean Water Fund Competitive Grant Awards	13
Projects and Practices Grants: Outstate.....	13
Projects and Practices Grants: Metro.....	14
Accelerated Implementation Grants: Statewide.....	15
Community Partners Grants: Statewide.....	16
Multipurpose Drainage Management Grants: Statewide	17
Outcomes and effectiveness	18
Clean Water Fund in Action.....	19
Linking Outcomes to Goals	19
Telling the Story.....	20
Red Lake County SWCD makes strides using Clean Water Funds	20
Cascading Success: On a former golf course, a Rochester stream, floodplain restoration.....	21
Conservation in the Glacial Hills	23
Directed BWSR Clean Water Fund Expenditures	26
One Watershed, One Plan	26
Supporting Local Government Technical Capacity.....	26
Local SWCD Capacity	27
Technical Service Area (TSA) Funding	28

Technical Training and Certification	28
Minnesota’s Buffer Law	30
Tillage and Erosion Survey Program	30
Conservation Corps of Minnesota and Iowa	30
BWSR Administration of Clean Water Fund Expenditures	31
Appendix A: BWSR Clean Water Fund Competitive Grant Ranking Criteria	32
Appendix B: FY2016-17 Competitive Grant Outcomes	34

Introduction

Clean water matters to Minnesotans. It matters to the Minnesota Board of Water and Soil Resources, whose mission is to improve and protect Minnesota's water and soil resources by working in partnership with local organizations and private landowners. Our agency's unique mission and structure provides for effective and efficient use of Legacy dollars with proven results. Working through Minnesota's local governments enables our agency to be strategic in granting funds to meet locally-identified water quality goals within the larger scope of Minnesota's clean water efforts. Our reporting and tracking requirements ensure measurable and specific results.

The goal of our Clean Water Fund (CWF) Program is to help meet statewide water quality goals through the prevention and reduction of non-point source pollution. BWSR's Competitive Grants program works through the local conservation delivery system to fund projects that are prioritized and targeted to the most critical source areas. Our CWF easements provide permanent protection of private land in riparian and groundwater locations, resulting in improved surface and ground water quality and the health and security of community water supplies.

Working in combination, and with the critical support of the Legacy Fund, these programs support progress towards meeting Minnesota's natural resource goals.

This report has been prepared for the Minnesota State Legislature by BWSR in fulfillment of the requirements of Laws of Minnesota 2015, 1st Special Session, Chapter 2, Article 2, Section 7. This requires BWSR to submit "to the legislature by March 1 each even-numbered year a biennial report prepared by the board, in consultation with the commissioners of natural resources, health, agriculture, and the pollution control agency, detailing the recipients and projects funded" with Clean Water Funds. This report outlines BWSR's comprehensive strategy to implement the Fiscal Year (FY) 2016-2017 appropriations from the Clean Water Fund – one of four funds established through the Clean Water, Land and Legacy Constitutional Amendment approved by voters in 2008.

Clean Water Fund Appropriation Summary

BWSR was appropriated \$112.6 million in Clean Water Fund dollars for the implementation of nonpoint source pollution reduction programs. As of March 1, 2017:

- The State signed an agreement with the United States Department of Agriculture in January 2017 to launch the Minnesota Conservation Reserve Enhancement Program (CREP). The \$500 million program will use \$150 million in state commitment to leverage \$350 million in federal funding to permanently protect 60,000 acres in 54 counties. Our agency partners with Soil and Water Conservation Districts (SWCDs) to implement this conservation easement program.
- We oversee \$1,000,000 of contracted services with the Conservation Corp of Minnesota and Iowa for installing and maintaining conservation practices.
- We awarded approximately \$25.3 million through a competitive grant process for high priority projects and practices that protect and improve water quality. Projects that receive awards are required to be prioritized, targeted, and able to achieve measurable outcomes. Each grant applicant must meet various

reporting requirements to demonstrate the effectiveness of these expenditures. These requirements are found in Minnesota Statutes 114D.50, Subdivision 4 and 3.303, Subdivision 10. Table 1 summarizes the programs and funding allocated under the appropriations.

- \$22 million was appropriated over the FY16-17 biennium to supplement, in equal amounts, each soil and water conservation district to support local capacity and delivery of soil and water conservation programs and projects. Each district will receive \$200,000 over the biennium because of this appropriation.

Table 1: Summary of FY 2016 Clean Water Fund Appropriations to BWSR

Program	FY16 -17 Appropriation	Description
Accelerated Implementation*	\$11.5M	Funds grants for projects and practices that supplement or exceed current State standards for protection, enhancement, and restoration of water quality in lakes, rivers and streams or that protect groundwater from degradation, including compliance.
Community Partners Conservation Program*	\$ 1.5M	Funds grants to be used for community partners within an LGU's jurisdiction to implement structural and vegetative practices to reduce stormwater runoff and retain water on the land to reduce the movement of sediment, nutrients and pollutants.
Conservation Reserve Enhancement Program (CREP)	\$18.0M	Purchases permanent conservation easements aimed at restoring surface water quality in areas targeted for nutrient reductions and protecting sensitive groundwater and drinking water resources.
Critical Shoreland Protection-Permanent Conservation Easements	\$ 2.0M	Purchases permanent conservation easements to protect lands adjacent to public waters with good water quality but threatened with degradation (Pilot program).
Local Capacity	\$22.0M	Provides grants to SWCDs to supplement, in equal amounts, each district's general service grant to provide increased technical and

		financial assistance, including buffer law implementation, to private landowners statewide.
Multipurpose Drainage Management*	\$ 1.5M	Provides funding for implementation of a conservation drainage/multipurpose drainage water management program to improve surface water management under the provisions of 103E.015.
One Watershed, One Plan	\$ 4.2M	Accelerates implementation of the State's Watershed Approach through the statewide development of watershed-based implementation plans and is synchronized with Watershed Restoration and Protection Strategies (WRAPS) and Groundwater Restoration and Protection Strategies (GRAPS).
Oversight, support, accountability reporting	\$ 1.9M	Provides State oversight and fund accountability, collects results and measure the value of conservation program implementation by local government units and to prepare an annual report detailing recipients, projects funded, and environmental outcomes.
Projects and Practices*	\$20.37M	Protects and restores surface water and drinking water through grants to local government units to keep water on the land; to protect, enhance and restore water quality in lakes, rivers and streams; and to protect groundwater and drinking water, including feedlot water quality and subsurface sewage treatment system projects and stream bank, stream channel, shoreline restoration and ravine stabilization projects.
Restoration Evaluations	\$ 168K	Provides a technical evaluation panel to conduct up to ten restoration evaluations required under Minnesota Statutes, Section 114D.50, Subdivision 6.
Riparian Buffer or Alternate Practices	\$ 5.0M	Provides ongoing oversight and grants to enhance compliance with riparian water quality protection buffer law.
Riparian Buffer Conservation Easements	\$ 9.75M	Purchases permanent conservation easements on riparian lands adjacent to public waters, except wetlands. Establish buffers of native vegetation that must be at least 50 feet where possible. Used as part of state commitment to the MN CREP.

Targeted Watershed Demonstration Program*	\$ 9.75M	Provides grants to local government units organized for the management of water in a watershed or subwatershed that have multiyear plans that will result in a significant reduction in water pollution in a selected subwatershed.
Tillage and Erosion Transects	\$ 1.0M	Systematically collects data and produces statistically valid estimates of the rate of soil erosion and tracks the adoption of high residue cropping systems in the 67 counties with greater than 30% of land in agricultural row crop production.
Washington County Grey Cloud Slough Habitat Improvement	\$520K	Funds a water quality improvement project in Washington County that will improve water quality and restore an essential backwater aquatic area by reconnecting Grey Cloud Slough to the main channel of the Mississippi River Area.
Wellhead Protection Conservation Easements	\$ 3.5M	Purchases permanent conservation easements on wellhead protection areas under MS 103F.515 Subd. 2, paragraph (d). Must be in drinking water supply management areas designated as high or very high by the Commissioner of Health. Used as part of state commitment to the MN CREP.

**Competitive grant process*

Clean Water Fund Conservation Easement Programs

BWSR's clean water easement programs are a part of a comprehensive, statewide clean water strategy to prevent sediments and nutrients from entering Minnesota's lakes, rivers and streams; enhance fish and wildlife habitat; and protect wetlands, groundwater and drinking water supplies. These programs focus on permanent protection of private land to address clean water in key riparian and groundwater locations. This results not just in improved surface water quality, but benefits the health and security of community water supplies and wildlife habitat.

Targeting Critical Lands

Minnesota is experiencing a significant loss of grasslands – further complicated by the expiration of over 598,000 acres of Minnesota Conservation Reserve Program (CRP) contracts over the next five years. The Reinvest in Minnesota (RIM) Reserve program aims to slow down the loss of these acres, targeting the most critical CRP land – those areas at risk for soil erosion, those most affecting water quality, and those lands that have high wildlife habitat quality.

Minnesota CRP Status	
Acres expiring over next 5 years	- 598,000
Expected acres retained based on recent average	+ 299,000
Minnesota CREP	+ 60,000
Projected net loss of acres*	- 239,000

*2015-2019

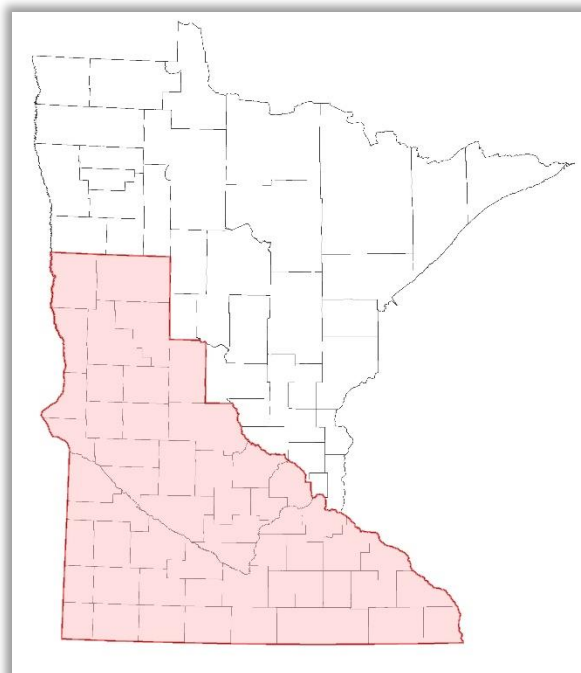
The Minnesota CREP

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

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

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

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



CREP Funding

Over the FY2016-17 biennium, \$18 million in CWF appropriations were designated for CREP. \$9.75 million in funding for RIM riparian buffer easements and \$3.5 million in funding for wellhead protection easements will also be used as part of the CREP program.

CREP Overall Outcomes

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

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

Additional benefits include enhanced habitat for resident and migratory wildlife.

Other Easement Program Outcomes

BWSR's ReInvest in Minnesota (RIM) Reserve program creates multiple benefits by targeting lands with a cropping history and new or existing USDA Conservation Reserve Program contracts. Participating landowners receive a payment to retire land from agricultural production and to establish permanent buffers of native vegetation. While most of BWSR's CWF appropriations were held to support the MN CREP, during the FY2016-17 biennium four easements were funded through the Critical Shoreland Protection Conservation Easement Program permanently protecting 138 acres. BWSR's Wellhead Protection Conservation Easement Program funded two easements protecting 154 acres.



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

Clean Water Fund Competitive Grants Program

Interest in our Clean Water Fund Competitive Grants Program has always exceeded available funding, as demonstrated in Figures 1 and 2. Our local government partners are engaged and invested in protecting and restoring Minnesota's lakes, streams, rivers and groundwater. Their ability to do so is significantly limited by the State dollars that are available to award.

Given the demand, BWSR works to fund the best projects that make the biggest difference in water quality. Our agency allocates CWF resources through a decision-making process based on sound science, prioritized local planning and a commitment to identify projects that will be the most effective. Projects that lack source assessments, clear connections to water plans or an adequate description of overall impact to the water resource of concern do not compete well under this program.

In the FY16-17 biennium, our agency's Competitive Grants Program included Projects and Practices, Accelerated Implementation, Community Partners, and the Multipurpose Drainage Management Program. Funding for these programs was provided under Laws of Minnesota 2015, 1st Special Session, Chapter 2, Article 2, Section 7 and Laws of Minnesota 2016, Chapter 172, Article 2, Section 7.

The Clean Water Fund Competitive Grants Program also incorporated requirements of M.S. 114D.20, which directs the implementation of Clean Water Funds to be coordinated with existing authorities and program infrastructure. Those requirements are referenced in the Clean Water Fund Grants Policy adopted by the BWSR Board on June 17, 2015.

Competitive Grant Process

BWSR allocates Clean Water Funds through an interagency decision-making process that includes the Minnesota Department of Agriculture, the Department of Natural Resources, the Minnesota Pollution Control Agency, and the Minnesota Department of Health with the goal of effectively coordinating water quality projects and practices. The criteria (Appendix A) used in this process is based on sound science, prioritized local planning and commitment to identify projects that will be the most effective.

The BWSR Senior Management Team reviews the recommendation provided by the interagency and BWSR staff teams and then forwards those recommendations on to the BWSR Board. The BWSR Board Grants Program and Policy Committee reviewed these recommendations before full board approval.

Figure 1. 2016-2017 CWF Applications

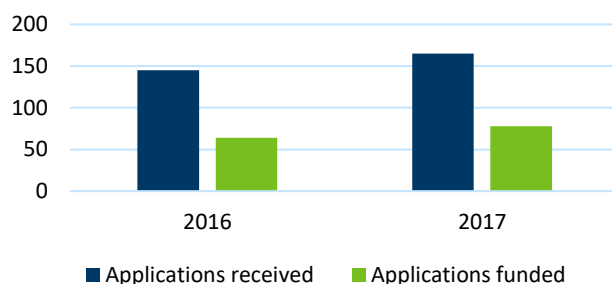


Figure 2. FY2016-17 CWF Dollars

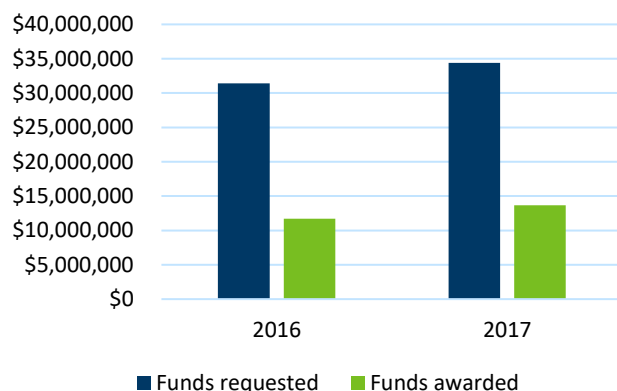
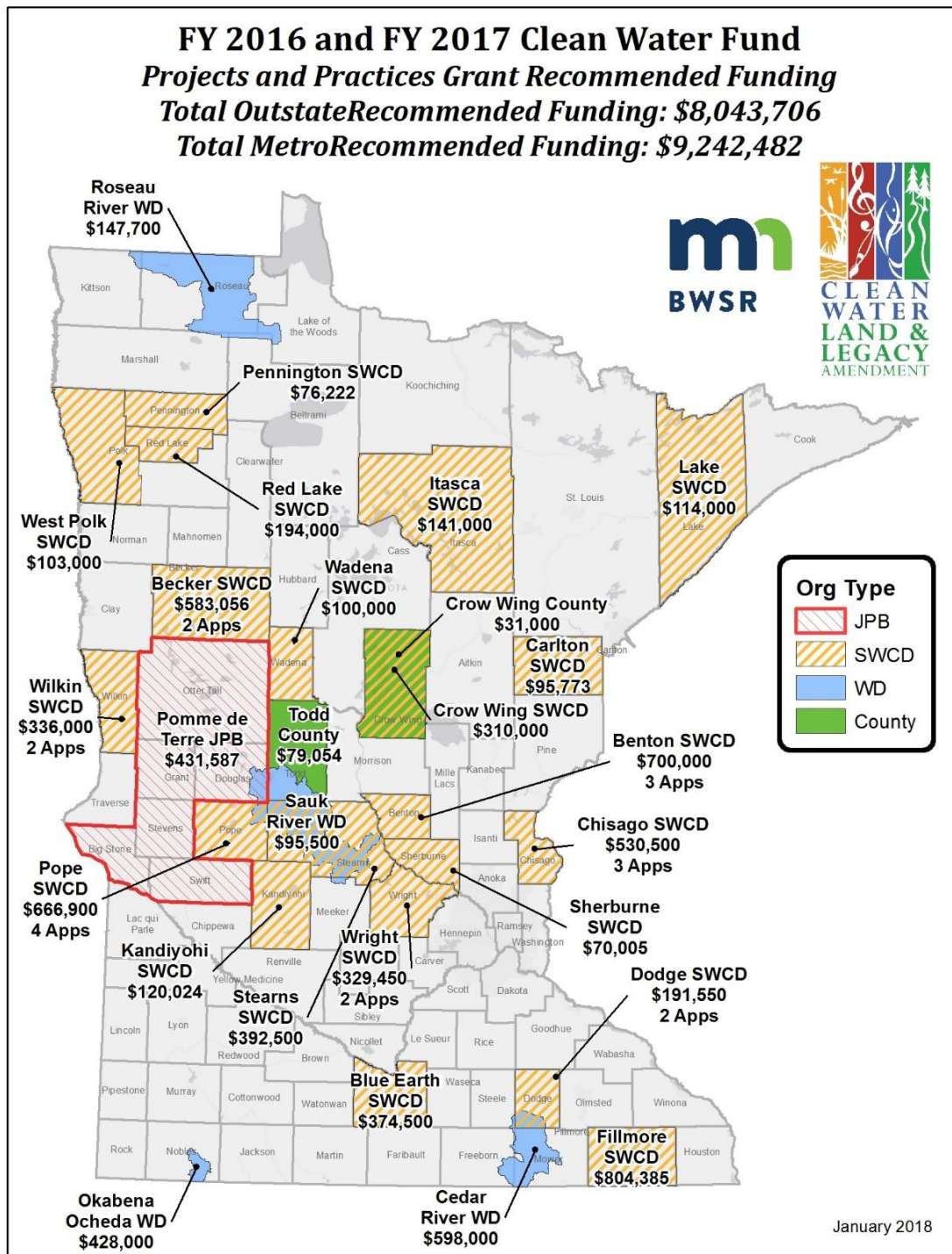


Table 2: Clean Water Fund Applications Funded per Grant Program				
Grant Program	Applications Funded		Total Funds Awarded	
BWSR Board Approval, Jan. 2015, Dec. 2016	FY16	FY17	FY16	FY17
Projects and Practices	35	35	\$8,895,255	\$8,371,511
Accelerated Implementation	19	31	\$2,006,078	\$3,383,882
Community Partners	4	6	\$403,000	\$765,000
Multipurpose Drainage Management	6	6	\$675,000	879,109
Total	64	79	\$11,979,333	\$13,399,502

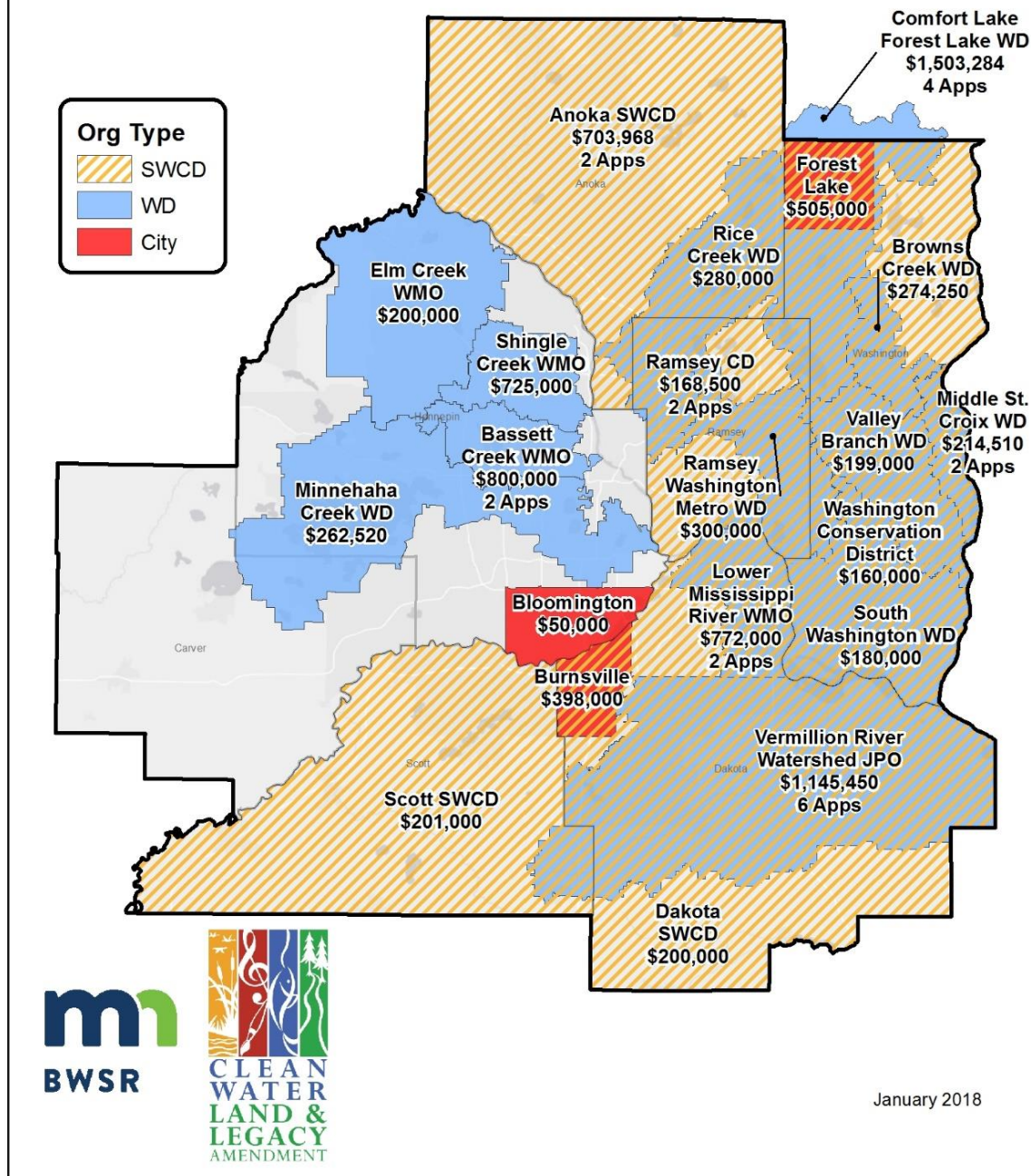
FY 2016-2017 Clean Water Fund Competitive Grant Awards



Projects and Practices Grants: Outstate

Funds are used to protect, enhance and restore water quality in lakes, rivers and streams and to protect groundwater and drinking water. Activities include structural and vegetative practices to reduce runoff and retain water on the land, stream bank, stream channel and shoreline protection projects.

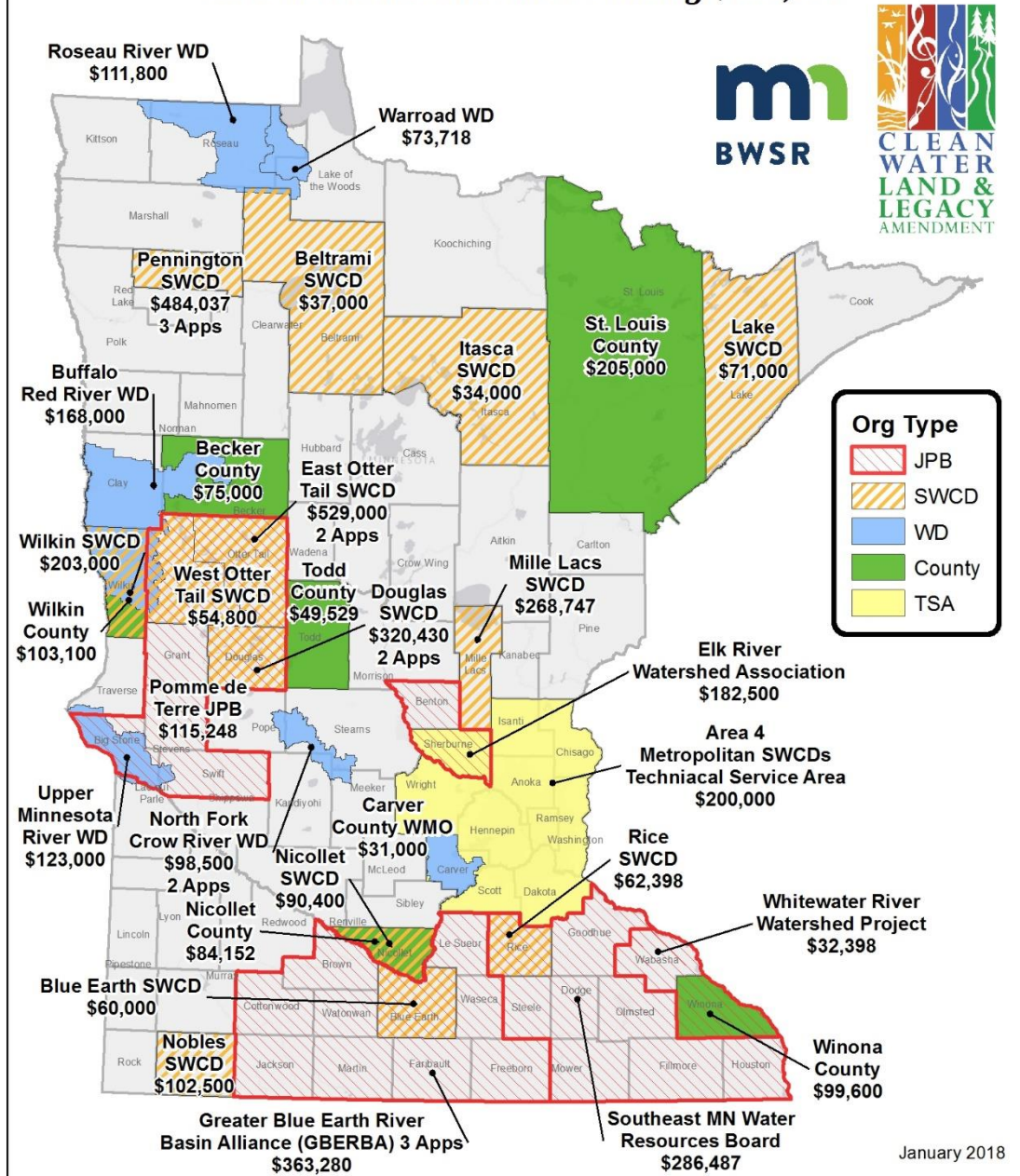
**FY 2016 and FY 2017 Clean Water Fund
Projects and Practices Grant Recommended Funding
Total Outstate Recommended Funding: \$8,043,706
Total Metro Recommended Funding: \$9,242,482**



Projects and Practices Grants: Metro

Funds are used to protect, enhance and restore water quality in lakes, rivers and streams and to protect groundwater and drinking water. Activities include structural and vegetative practices to reduce runoff and retain water on the land, stream bank, stream channel and shoreline protection projects.

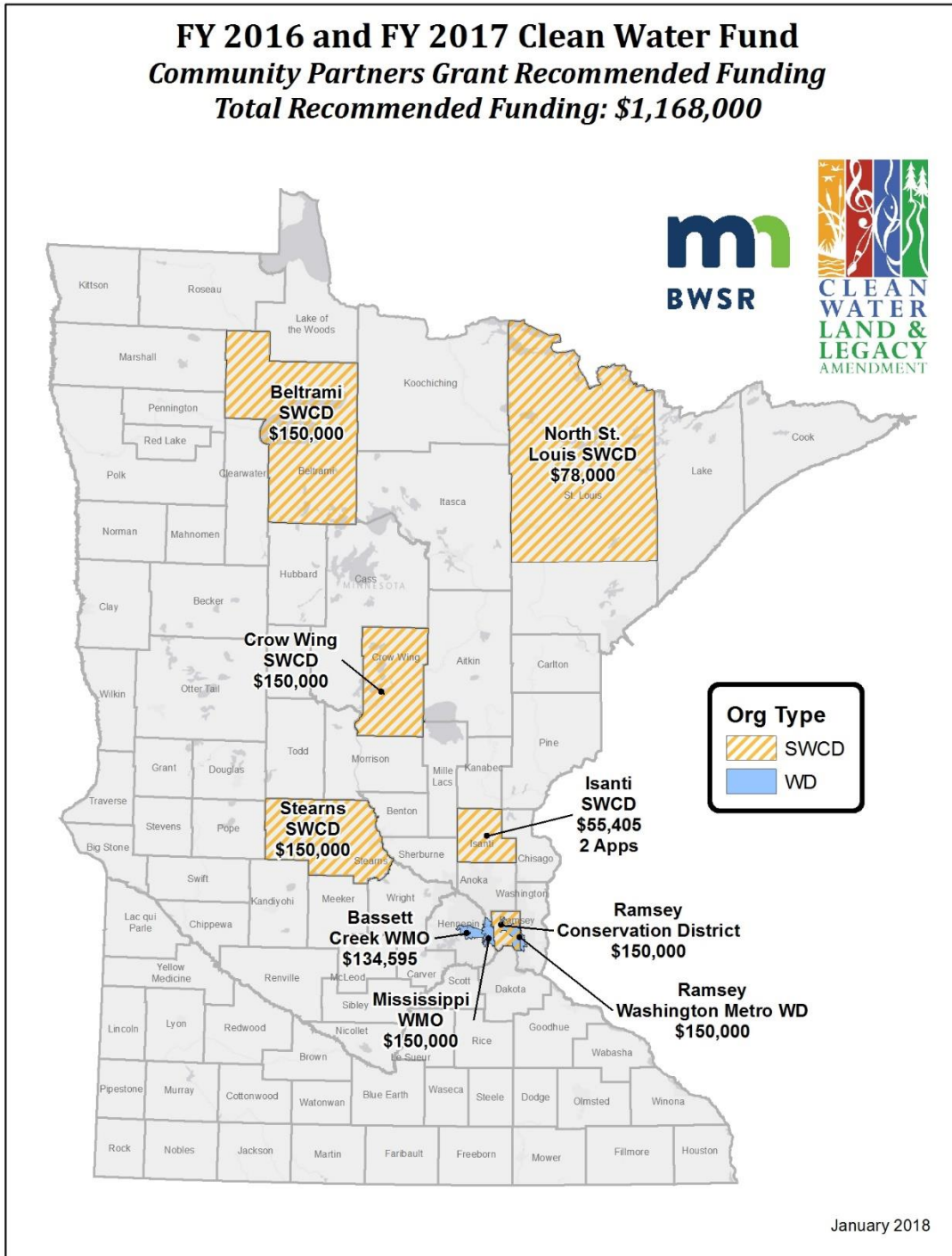
**FY 2016 and FY 2017 Clean Water Fund
Accelerated Implementation Grant Recommended Funding
Total Outstate Recommended Funding: \$4,719,786
Total Metro Recommended Funding: \$664,096**



Accelerated Implementation Grants: Statewide

Funds are used for projects and activities (such as ordinances, organization capacity and state of the art targeting tools) that complement, supplement or exceed current State standards for protection, enhancement and restoration of water quality in lakes, rivers and streams or that protect groundwater from degradation.

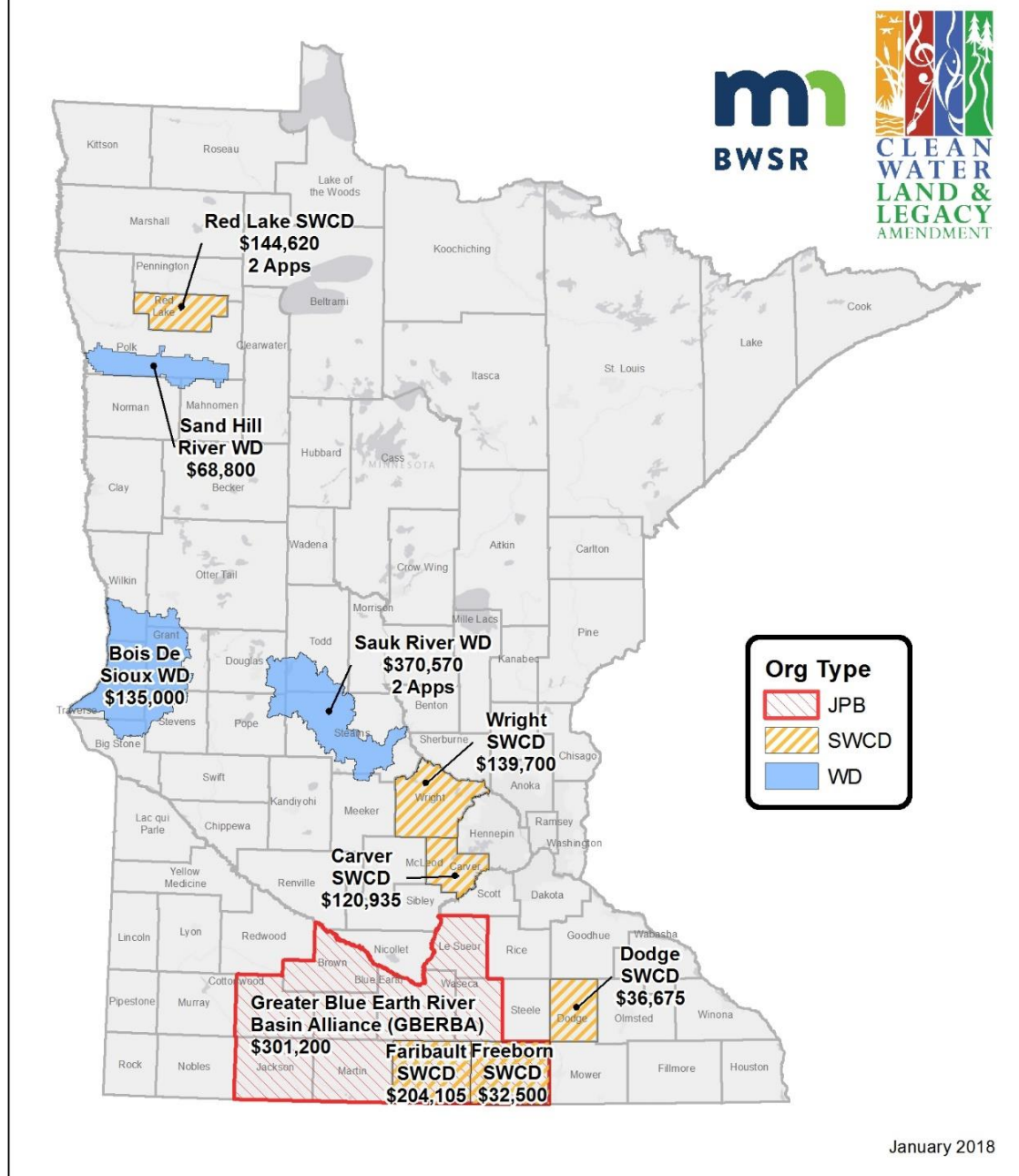
**FY 2016 and FY 2017 Clean Water Fund
Community Partners Grant Recommended Funding
Total Recommended Funding: \$1,168,000**



Community Partners Grants: Statewide

Funds are used for community partners (i.e. non-governmental organizations) within a local government unit's jurisdiction to implement structural and vegetative practices to reduce stormwater runoff and retain water on the land to reduce the movement of sediment, nutrients and pollutants. LGUs will be the primary applicant and provide sub-grants to community partners who are implementing practices to protect and improve water quality in lakes, rivers and streams and/or protection of groundwater and drinking water.

**FY 2016 and FY 2017 Clean Water Fund
Multipurpose Drainage Management Grant Recommended Funding
Total Recommended Funding: \$1,554,105**



Multipurpose Drainage Management Grants: Statewide

The purpose of these funds are implementation of a conservation drainage/multipurpose drainage water management program in consultation with the Drainage Work Group to improve surface water management under the provisions of 103E.015.

Outcomes and effectiveness

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

BWSR required grant applicants to estimate anticipated outcomes for proposed projects during the application process. Applicants used pollution reduction calculators, such as the Revised Universal Soil Loss Equation (RUSLE2), and similar tools for estimating effectiveness of keeping water runoff on the land through infiltration, diversion or collection. Based on projected outcomes, projects funded in FY 2016-17 will remove 45,000 pounds of phosphorus and 49,000 tons of sediment from Minnesota waters.

Appendix B (p. 34) lists all estimated outcomes for FY2016-17 Clean Water Fund competitive grant projects.

Clean Water Fund in Action

BWSR works hard to tie Clean Water Fund project pollution reduction estimates to local and State water quality goals. From 2010-2017, through 1,487 CWF awards, more than 6,872 conservation practices have been installed to reduce erosion, stormwater runoff, and to keep water on the land. These awards include public and private projects and involve Minnesotans who voluntarily engage in these activities.

These conservation practices are estimated to reduce **121,000** tons of sediment per year and prevent **116,000** pounds of phosphorus per year from entering Minnesota waters. That work helps move Minnesota closer to its statewide water quality goals. It works toward State waters that are fishable, swimmable and drinkable, important measures for all Minnesotans.

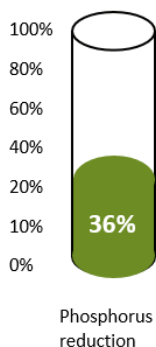
Linking Outcomes to Goals

When analyzing progress toward goals, scale is critical. It is important to understand that project impacts can vary depending on the pollutant, reduction goals, scale and scope of plan. For example, 1% progress toward goal in a large river system is going to look very different than 41% progress toward goal in a small lakeshed. If you start at the very local level, you can often begin to see the impact of this work in a relatively short time frame, but the larger the scale, the longer it takes to see outcomes.

Examples of Progress toward Goals

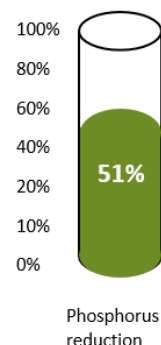
Mayhew and Big Elk Lake Phosphorus Reduction Program *Benton SWCD*

The district will work with livestock producers to implement best management practices like vegetated filter strips, nutrient management, and feedlot pollution control to reduce runoff and improve water quality within the Mayhew and Big Elk Lake watersheds. The district estimates this will reduce phosphorus by 6,486 pounds a year and sediment by 7,938 tons per year.



Moody Lake Wetland Rehabilitation *Comfort Lake-Forest Lake Watershed District*

This project will implement three wetland rehabilitations within the Moody Lake watershed. Rehabilitating the degraded wetlands in the northwest portion of the watershed is expected to achieve 80% of the watershed phosphorus load reductions needed for Moody Lake to meet water quality standards.



Gully Control and Buffer Implementation *Pennington SWCD*

This project will install conservation practices to stabilize three county ditch systems and reduce erosion. The district estimates that these practices will keep 2,428 tons of sediment from entering the Red Lake River near St. Hilaire, the point at which the river becomes impaired for turbidity.

Telling the Story

Red Lake County SWCD makes strides using Clean Water Funds

Prior to 2010, the Red Lake County SWCD completed on average about one erosion control project per year.

“Limited funding limited us to smaller projects, or we had to save State Cost Share funds for 2-3 years to do a larger project,” said Tanya Hanson, District Manager.

Because the project funding was so restrained, the District focused on other activities including education, technical assistance for field drainage, and administration of regulatory duties delegated from the County. While the district staff was doing what they could with the resources they had, they also knew there were erosion control issues that weren’t being addressed.



Erosion site identified and prioritized by the Erosion Site Inventory in 2010.

In March of 2010, the SWCD completed the latest generation of the Red Lake County Local Water Management Plan. This plan recognized the additional funding that the Clean Water Land & Legacy Amendment would provide, and put more emphasis on identifying priority erosion sites and completing projects to address them. Following adoption of the plan, the SWCD completed their first Erosion Site Inventory to identify areas of erosion, and then began grouping and prioritizing the sites by subwatershed. This inventory helped the District secure three Competitive Clean Water Fund grants in 2011.

Since 2011, the SWCD has received 13 Clean Water Fund grants totalling over \$1 million. In comparison, they received only a little over \$40,000 in State Cost Share over that same time period. Using this funding, the District has been able to work with many different landowners to fix erosion problems. These projects have reduced sediment loss by over 13,000 tons annually. Without the Clean Water Fund a vast majority of that sediment would still be entering the waters of Red Lake County today.

“We would never be where we are at now without the Clean Water Funds, Jim Hest (Red River Valley Conservation Service Area Engineer), and willing landowners,” Hanson said. “The County and the Red Lake Watershed District have also been instrumental in providing technical assistance and some of the required match, and those partnerships have been greatly enhanced through this experience.”



Grassed waterway and drop structure completed in 2012.

The SWCD has also looked to other outside funding sources to help provide the needed match for these grants, and received two grants from the Minnesota Association of Resource Conservation and Development's Enbridge Ecofootpring Grant Program totalling over \$150,000. All this additional funding has not only helped the soil and water resources, but also accounts for economic benefits by providing a hefty workload to the contractors in this small county in northwest Minnesota.

Even with all of the success, there is still plenty of work to be completed, but the SWCD feels they are ready to handle this workload. The District is a partner in the Red Lake River One Watershed, One Plan which used the Prioritize, Target, and Measure Application (PTMApp) to further prioritize and target their work, and they are excited about the opportunities to use non-competitive funding to fund the activities included in that plan. The District is also in the process of finalizing an inventory that identifies and prioritizes the buffer and side water inlet needs along all of the County's public drainage systems. The SWCD Capacity funding has provided a new level of stability that the SWCD has not had in the past and the Red Lake SWCD has put themselves in looking forward to putting projects on the ground for years to come.

Cascading Success: On a former golf course, a Rochester stream, floodplain restoration

South Branch Cascade Creek, once an erosion problem that sliced through a former golf course in Rochester, Minnesota, is being restored in a multi-year project that incorporates natural channel design and a planned floodplain.

The erosion issues at the site were caused by the creek being so incised that it could not access its own floodplain. Engineers from the Minnesota Department of Natural Resources were able to address that erosion by creating a new channel pattern and a floodplain. The three-part restoration also includes wetland creation.

Ultimately, the project is meant to create a stable channel, cut the amount of sediment carried downstream, and improve stream and upland habitat.

The project is made possible through three grants – two Clean Water Fund grants plus an Outdoor Heritage Fund grant – totaling nearly \$1.2 million.

The Clean Water Fund grants financed the first two phases of the project. They included \$575,000 awarded in 2012 (with \$250,000 city/county match) and \$400,000 awarded in 2015 (with \$100,000 city/county match). A \$198,800 Conservation Partners Legacy Grant was awarded in 2017 through the Outdoor Heritage Fund. It will complete the third and final phase of the project – creating five wetland complexes and 20 acres of native prairie seeding.



Skip Langer of the Olmsted County Soil & Water Conservation District, left, and Glen Roberson, Technical Service Area 7 Administrator Goodhue County Soil & Water Conservation District, made a site visit during construction of a project that will reroute a stream prone to erosion, and create a floodplain wetland habitat on the site of a former golf course in Rochester, Minnesota.

Partnerships among the City of Rochester, Olmsted County, the Minnesota DNR, the Minnesota Pollution Control Agency and the U.S. Geological Survey allowed the project to advance. Achieving each of the three major stream restoration goals involves several steps. The major elements include:

Construction of three off-channel basins – Led by the Olmsted County SWCD, this part of the project was completed in winter 2014-15 and included the construction of about 7 total acres of basins, creating a channel inside the basins to better distribute sediment.

The basins were selected based on landowner interest and site feasibility. The intent was to reduce the volume and velocity of runoff, stabilize the drainage and stream system, reduce sediment and flood damage, address Total Suspended Solids (TSS) impairments, and improve water quality immediately downstream, and increase flood attenuation.

Stream restoration – The DNR took the lead on design and construction oversight, sharing project management duties with the SWCD. The county secured a construction easement totaling nearly 40 acres. When the project is finished, the city of Rochester will become the fee-title owner.

The channel design replicated the dimensions, patterns and profiles at work in natural streams. The new channel and floodplain are meant to stop the erosion that was only getting worse. Natural materials such as toe-wood sod mats will stabilize the stream banks.

The restoration is meant to not only cut down erosion, but also stabilize the stream bank, improve water quality by reducing sediment and flood damage (which addresses TSS impairments), and enhance ecological function (which helps address fish impairment).

Wetlands creation – Construction began in spring 2016 with channel and floodplain work. Constructing wetlands and connecting the new channel was slated for 2017. Eventually, nongame species such as mussels and fish could be introduced.

Toe-wood sod mats and riffles are among the unique design elements. The toe-wood sod mats will help stabilize the bank by layering trees and branches on the outside bends of a river, and then creating a small, vegetated floodplain bench on top. The resulting structure lowers the erosion potential and gives the stream a place to deposit sediment flowing downstream. It also provides aquatic invertebrate and deep-pool fish habitat. The trees used came from Olmsted County's 55th Street extension project – providing a way to recycle that natural resource. Olmsted County helped get access to the woody materials at 55th Street.

The riffles will help hold the grade and increase habitat value. The riffle elements for this design will be spaced throughout the project, helping to hold the grade so the finished channel won't unravel, as well as providing habitat for the sorts of aquatic critters that require clean gravel to spawn, live and eat.

Once complete, the resulting restoration could see other recreational uses. The city of Rochester has expressed interest in using the land as green space with a bike path.

Conservation in the Glacial Hills

As he combined corn at night, Tom Beuckens anticipated the jolt that would indicate the spot where hard rains always cut a gully into the field.

“It was dark and I was waiting for my wheels to drop in, and nothing happened,” Beuckens said.

That’s when he knew the water and sediment control basins were working. He’d seen basins and berms on neighbors’ land, learned money was available, thought he might be able to fix the waterway that kept washing out.

“The projects got a little bigger than the one gully,” Beuckens said.

Seven basins constructed in that 94-acre field south of Starbuck plus two berms and a diversion on Beuckens’ home site are part of Pope Soil & Water Conservation District’s three-year, \$610,200 effort to clean up Lake Emily. The shallow fishing lake is impaired for nutrients.

The SWCD has worked with seven landowners on 67 practices since 2015. That year, it received a Clean Water Fund grant to identify sites with the greatest potential to cut the amount of phosphorus and sediment flowing in to Lake Emily. The SWCD is pursuing a third round of project funding for 2018, which would complete work that’s in the design stages and could involve more landowners. It works with willing landowners, who pay 25 percent of the cost.

Contractors finished \$130,690 in improvements on Beuckens’ land this spring. Outlet Creek runs through Tom Beuckens’ property south of Starbuck. Over the years, he’s planted trees, installed waterways and, more recently, added water and sediment control basins in an effort to curb erosion on his 850-acre farm.

“Dollars and cents – it’s not going to pay me back in that respect. I don’t know how that would pay back, other than keeping erosion down. I don’t see a big benefit in return on my dollar – just the knowledge that I’m keeping the sediment out of the creek and lakes,” Beuckens said.

Outlet Creek meanders through Beuckens 850-acre corn and soybean farm on its way from Lake Minnewaska to Lake Emily 6 miles to the southwest. Beuckens moved to the farm in 1959 from the place his father had rented 5 miles away. He initially signed up for the Conservation Reserve Program in the 1980s, and went on to install waterways, plant shelterbelts and enroll in the Minnesota Agricultural Water Quality Certification Program.



Outlet Creek runs through Tom Beuckens’ property south of Starbuck. Over the years, he’s planted trees, installed waterways and, more recently, added water and sediment control basins in an effort to curb erosion on his 850-acre farm.

Recognizing those continuing conservation efforts, Pope SWCD staff this fall nominated Tom and Ann Beuckens for the Minnesota Association of SWCDs' 2017 Outstanding Conservationist Award.

"On this farm, with the hills we have, you really have to watch so all the soil doesn't wash away," Beuckens said of the continuing conservation work. "I think if I was on flatter ground or didn't have the steepness of the hills I've got, it wouldn't be as much of a concern."

Pope County's rolling, glacial topography defines what sorts of projects work here: waterways, water and sediment control basins, and grade stabilization structures.

"We are predominantly an agricultural county, so most of the conservation work we're doing, we're working with agricultural landowners on active cropland," said Pope SWCD Manager Holly Kovarik.

Kovarik completed a post-construction check of the berms and diversion in mid-October with Minnesota Board of Water and Soil Resources staff and engineer Ross Reiffenberger of West Central Technical Service Area. Beuckens gave them a tour of his home site, which included a bird's eye view of Outlet Creek.

Directly across Pope County Road 18, Outlet Creek runs through Todd and Tom Johnshoy's field. With help from Todd's son, Cory, the Johnshoys run about 2,850 acres of corn and soybeans. In mid-October, contractor Rick Erickson and his excavating crew were moving clay down from the hilltop to construct some of the nine planned water and sediment control structures. The \$69,430 project will cut erosion in the 175-acre field and keep sediment out of the stream.

"We see the need for controlling erosion," Tom Johnshoy said.

He and Todd stopped by to see progress and talk about the site, where heavy rains used to cut washouts up to 18 inches deep.

"A lot of this soil ends up down here in the bottoms. With the river running this close, the big thing is to clean up the water," Todd Johnshoy said.

Among the Johnshoys' initial concerns: How to farm around the grassed basins, which are designed to retain and then slowly release water. The basins will take just over 2 acres out of production.

"The biggest thing was where the structures were and how they were designed," Tom Johnshoy said. "How it would affect our being able to farm the ground – what changes we would have to make."

Contractor Rick Erickson said the basins are designed to be compatible with farmers' use of GPS to work the fields.

"I think of this as infrastructure. These are investments in the infrastructure in their field," Kovarik said.

Without the Clean Water Fund grant, Tom Johnshoy said he and Todd, who previously constructed nine basins on another site without grant aid, wouldn't have tackled a project of this size. The Johnshoys – who, like Beuckens, covered the 25 percent grant match – are now considering a contract for additional work on another field. With one more 2016 project awaiting completion, to date the Natural Resources Conservation Service has provided about \$74,000 in cost-share and in-kind technical assistance.

Meeting Lake Emily's water quality goals would require cutting its annual phosphorus load by 35 percent – or 6,370 pounds. The 74 projects outlined in the 2016 and 2017 CWF grant applications would meet an estimated 98 percent of the Total Maximum Daily Load goal. The 26 planned projects in the 2017 grant would reduce 607 tons of sediment and 520 pounds of phosphorus annually, meeting an estimated 26 percent – or 2,000 pounds – of the annual phosphorous reduction goal.

"Looking at Lake Emily, are we going to be able to delist tomorrow? We have a lot of work to do. We know that," Kovarik said. "It's going to be over a series of years."

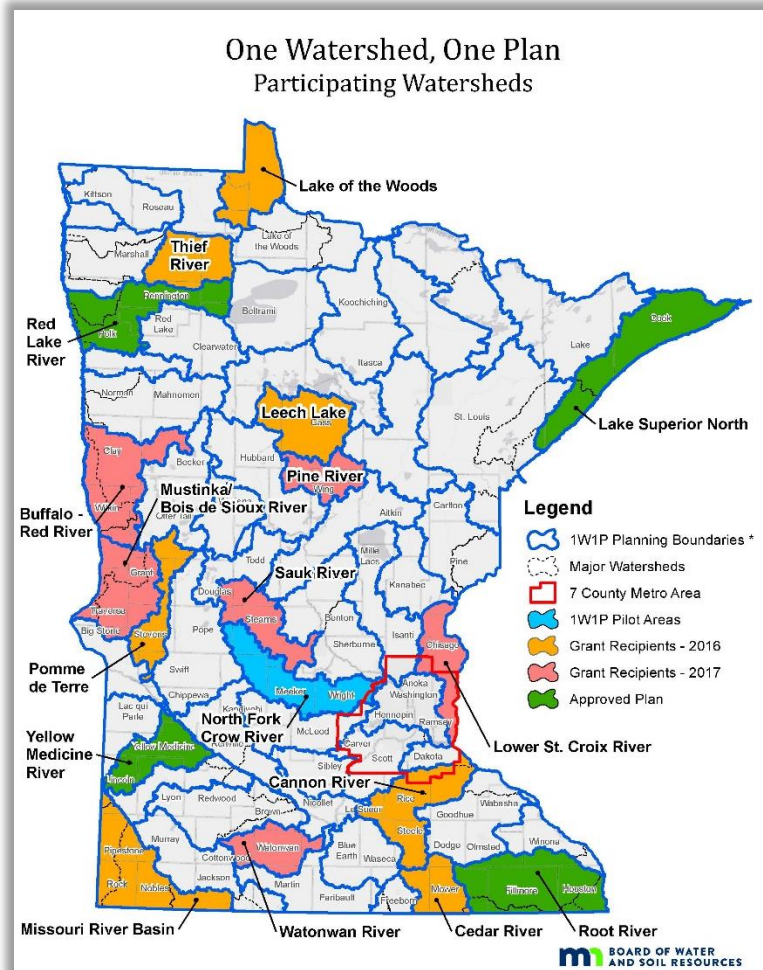
Directed BWSR Clean Water Fund Expenditures

Additional BWSR clean water programs, as mandated by Minnesota Legislature, provide other key components of the comprehensive, statewide clean water framework.

One Watershed, One Plan

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

In 2015, the Minnesota Legislature passed Minnesota Statutes § 103B.801, the Comprehensive Watershed Management Planning Program. This legislation defined the purposes and further outlined the structure for the One Watershed, One Plan Program. It also directed BWSR to develop a transition plan with a goal of completing a statewide transition to comprehensive watershed management plans by 2025. Achieving the goal will require starting approximately seven planning efforts each year.



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

Supporting Local Government Technical Capacity

Legislative action in 2015 included new state funding to support SWCD services and enhanced delivery of engineering and technical services to accelerate on the ground conservation projects. In May 2016, the BWSR Board approved FY 2016 and 2017 CWF non-competitive grant allocations developed to support SWCD local capacity to implement their authorities in Minn. Stat. sections 103C.321 and 103C.331 and to enhance technical assistance to deliver essential engineering and technical services through Technical Service Areas.

Local SWCD Capacity

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

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

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

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

The results have been increased responsiveness of these local governments to their landowners, and more conservation on the ground. For Kandiyohi SWCD, that means expanding cost-share programs and creating a new cost share program to promote implementation of cover crops. For Grant SWCD, it's accelerated their implementation of conservation practices and allowed them to hire a Resource Conservationist who works on buffer and soil erosion laws, promotion of no-till and cover crop practices, and implementation of urban stormwater runoff control practices. For Clearwater SWCD, it's purchasing an aerator to promote soil health that's available for county residents.

Whether investing in staff or equipment or conservation funding, the capacity dollars have enabled these local governments – who have the closest connection to landowners – to be more proactive and responsive in meeting their needs.



Grant SWCD's Resource Conservationist discusses options with a landowner.

Technical Service Area (TSA) Funding

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

Technical Training and Certification Program (TTCP)

Establishing conservation practices on private lands in Minnesota is critical to achieving state and federal goals for clean and sustainable water resources, healthy and sustainable soil resources, and abundant fish and wildlife. Conservation Technical Assistance requires statewide, core technical assistance capabilities, as well as capabilities tailored to the local priority resource concerns and conservation practices found in the diverse landscapes of Minnesota. Training and certification are key quality assurance elements of an effective conservation delivery system.

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

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

BWSR, the Minnesota Association of Soil and Water Conservation Districts, the Minnesota Association of Conservation District Employees, and the Natural Resources Conservation Service (NRCS) have committed to providing resources for technical training and certification of local staff to maintain and enhance conservation delivery as laid out in the Technical Training and Certification Strategy. Next steps include the development of an implementation plan, establishment of a State Technical Training Committee, and the hiring of a State Technical Training Coordinator. NRCS and BWSR have committed resources to support the hiring of that position.

Significant progress has been made in the following areas:

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

Many elements of the program are currently being developed with input from the Area Technical Training Teams (ATTTs) and the Minnesota Technical Training Committee (MTTC). The ATTTs and the MTTC are comprised of peers, including SWCD, TSA, BWSR and NRCS staff, with unique areas of expertise covering multiple disciplines. Progress was made on the Individual Development Plan (IDP) templates and supplemental materials which are scheduled for distribution in 2018. An Individual Development Plan is a tool used to assist technical employees in career development. The IDPs created and used by the TTCP will document technical training needs and track credentials, and serve as the basis for an annual technical training needs

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

Technical Trainings Coordinated and Delivered

<i>Technical Training</i>	Sessions Delivered	Total Participants
<i>Comprehensive Nutrient Management Planning</i>	4	191
<i>Soil Mechanics</i>	2	45
<i>Basics of Forest Inventory</i>	1	18
<i>RUSLE2 & Tech Note 2</i>	6	84
<i>Basic Conservation Planning 4-day</i>	1	50
<i>JAA webinar</i>	1	120
<i>Filter Strip webinar</i>	1	150+

While staffing and funding of government agencies ebbs and flows due to circumstances out of our control, the TTCP strives to be the even keel providing consistency for Minnesota's conservation delivery system. Below are three examples of progress on improved consistency and coordination:

Expanding Cadre of Trainers The TTCP is expanding the cadre of technical trainers and mentors to include local, state, federal, and private expertise to meet training needs. BWSR is hiring 2 regional training conservationists and 2 regional training engineers to supplement the training roles of TSA and NRCS staff. These new BWSR positions will not only deliver training, but will also serve as mentors and assist in the credentialing process.

Training Needs and JAA Tracking NRCS has provided additional support to the TTCP for the creation of a database system to track training needs, Individual Development Plans, and credentials that is accessible by all partners.

Coordinated Training Assessment The TTCP will conduct a technical training needs assessment for all partnering organizations. This comprehensive needs assessment uses data from the Individual Development Plans for technical employees to document training needs for 2018. The Individual Development Plan templates and guidance are expected to be released in November.

Minnesota's future conservation accomplishments will depend on the skills and abilities of many experts to help landowners and their agents with projects and practices selection, design and installation. The Technical

Training and Certification Program is aimed at growing and enhancing the services you provide by investing in the necessary and systematic training and credentialing to make that happen.

Minnesota's Buffer Law

\$5 million was appropriated to BWSR for the FY 2016 – FY 2017 biennium for purposes of supporting local governments in their implementation of the new buffer law. Funds were made available on a non-competitive, formula-based basis to SWCDs to support their local implementation.

SWCD roles in buffer/soil erosion law eligible for funding include:

- Meeting/s with county and drainage authority (county or watershed district) to discuss year one implementation roles and responsibilities.
- Pass through funding to counties and/or drainage authority to support local implementation.
- Assistance to collect and provide drainage-system-benefitted-area maps, files, and/or GIS files to DNR to support mapping.
- Landowner outreach and information.
- Provide technical and financial assistance to landowners, e.g., seed cost-share, drill loan, etc.
- Purchase of equipment to support implementation, such as grass drill.
- Provide alternative practice validations, if requested, where the prescribed buffer may not be the right the water quality practice for a site.
- Review DNR maps and landowner outreach prior to finalization.
- Adopt buffer recommendations for waters not mapped by DNR for inclusion in local water management plans.
- Implement the now statewide excessive soil erosion provisions that protect downstream waters and property owners from negligent or absent soil and water conservation management practices.
- Inventory of baseline conditions.

SWCDs began tracking of implementation in late 2016 to assess readiness for the November 1, 2017 Public Waters deadline.

Tillage and Erosion Survey Program

\$1,000,000 was appropriated to this program in FY2016-17, which will “systematically collect data and produce county, watershed, and statewide estimates of soil erosion caused by water and wind along with tracking adoption of conservation measures to address erosion.”

BWSR is working with The University of Minnesota, Department of Soil, Water and Climate and the Iowa State University, Department of Agricultural and Biosystems Engineering to develop a long-term program to systematically collect tillage (crop residue after planting) data and soil erosion estimates to analyze trends in agricultural soil and water management in the 67-county area with greater than 30% of land dedicated to row crop production. Crop residue data was collected in the spring of 2016 and 2017 and cover crop data was collected in the fall of 2017. University staff are continuing to refine the data collection methods and remote sensing processes as well. Preliminary results will be made available in mid to late 2018.

Conservation Corps of Minnesota and Iowa

BWSR is required to contract with the Conservation Corps of Minnesota and Iowa (formerly Minnesota Conservation Corps) or CCMI, for installation and maintenance of conservation practices benefitting water

quality. The Board approved reserving \$500,000 in FY 2016 and FY 2017 Projects and Practices program funds (Table 1, p. 4) to comply with this appropriation.

BWSR Administration of Clean Water Fund Expenditures

BWSR's Clean Water Fund goal is to reduce non-point source pollution by providing Clean Water Fund dollars to local government units for on-the-ground activities, many installed on private lands, which will result in improved and protected surface and ground water. The BWSR Board uses existing authorities, policies, and staff, along with the processes outlined previously, to implement Clean Water Fund program activities.

For FY2016-17 BWSR received a \$1.9 million direct appropriation for Clean Water Program Oversight and Administration to provide for implementation and administration of Clean Water Fund dollars. Staffing of 32.5 FTE (full-time equivalent) in FY2016 and 40.95 FTE in FY2017 was supported, including positions charged with getting protection and TMDL-derived restoration strategies adopted into local water plans, directing over \$39 million of grant and easement funds to priority areas and activities, working with the One Watershed, One Plan program, assisting with implementation of the buffer and soil loss law, and aligning administrative procedures to optimize leveraging of non-State funds with low transaction costs.

Appendix A: BWSR Clean Water Fund Competitive Grant Ranking Criteria

Table A-1 Projects and Practices Ranking Criteria	Maximum Points Possible
<u>Project Description:</u> The project description succinctly describes what results the applicant is trying to achieve and how they intend to achieve those results.	5
<u>Relationship to the Plan:</u> The proposal is based on priority protection or restoration actions listed in or derived from an approved local water management plan or address pollutant load reductions prescribed in an approved TMDL.	15
<u>Targeting:</u> The proposed project addresses identified critical pollution sources impacting the water resource identified in the application.	25
<u>Measurable Outcomes:</u> The proposed project has a quantifiable reduction in pollution and directly addresses the water quality concern identified in the application.	35
<u>Project Readiness:</u> The application has a set of specific activities that can be implemented soon after grant award.	10
<u>Cost Effectiveness:</u> The application identifies a cost effective solution to address the non-point pollution concern(s).	5
<u>Biennial Budget Request (BBR):</u> A BBR was submitted by the applicant organization in 2014.	5
Total Points Available	100

Table A-2 Accelerated Implementation Ranking Criteria	Maximum Points Possible
Clarity of project's goals, standards addressed and projected impact on land and water management and enhanced effectiveness of future implementation projects.	40
Prioritization and Relationship to Plan: The proposal is based on priority protection or restoration actions listed in or derived from an approved local water management plan or address pollutant load reductions prescribed in an approved TMDL.	25
Means and measures for assessing the program's impact and capacity to measure project outcomes.	20
Timeline for implementation.	15
Total Points Available	100

<u>Table A-3</u>	Maximum Points Possible
Community Partners Grant Ranking Criteria	
Clarity of project goals, projected impact and involvement with community partners.	40
Prioritization and Relationship to Plan: The proposal is based on priority protection or restoration actions listed in or derived from an approved local water management plan or address pollutant load reductions prescribed in an approved TMDL.	30
Plan for assessing the program's impact and capacity to measure project outcomes.	20
LGU capacity to implement the local grant program processes and protocols.	10
Total Points Available	100

<u>Table A-4</u>	Maximum Points Possible
<i>Soil Erosion and Drainage Law Compliance Ranking Criteria</i>	
<i>Subprogram 1: Soil Erosion</i>	
Anticipated water quality benefits relative to cost.	30
Relationship to a Plan: The proposal is clearly based on priority protection or restoration actions listed in, or derived from, an eligible water management plan.	15
% of LGU lands impacted by the eligible activity based on an accepted definition of high priority areas (e.g. map of highly erodible lands, definition of erosion problem areas via a TMDL, WRAPS, or other study) (i.e., total priority erosion area lands within the jurisdiction and % to be addressed by the activity)	20
LGU capacity to implement the local grant program processes and protocols.	10
Consistency with program purposes.	25
Total Points Available	100

Appendix B: FY2016-17 Competitive Grant Outcomes

Applicant	Grant Title	Outcomes (Sediment)	Outcomes (Phosphorus)	Outcomes (Nitrogen)
Crow Wing SWCD	Big Trout High Quality Lake: County Road 66 Stormwater Project	40	40	
Wilkin SWCD	Otter Tail River Streambank Restoration and Protection	440		
Becker SWCD	Becker County Targeted Phosphorus Reduction and Lake Protection Project	73	176	
Pope SWCD	2016 Lake Minnewaska Targeted Subwatershed Project Phase III	518	466	
Burnsville, City of	Keller Lake (Crystal Beach Park) Storm Water Quality Improvement Project		78	
Lower Mississippi River WMO	LMRWMO WRAPS Internal Phosphorus Loading Control: Lake Augusta and Sunfish Lake		317	
Middle St. Croix River WMO	Lake St. Croix Direct Discharge Stormwater Retrofit Phase II	2		
Lower Mississippi River WMO	Thompson Lake Water Quality Improvement and WRAPS Implementation	12	48	
Shingle Creek WMC	Becker Park Infiltration Project		118	
Cedar River WD	Cedar River Capitol Improvement Plan Implementation	338	168	
Sherburne SWCD	Birch Lake Stormwater Retrofits		3	
Comfort Lake-Forest Lake WD	Moody Lake Wetland Rehabilitation		445	
Bassett Creek WMC	Northwood Lake Improvement Project		22	
Benton SWCD	Mayhew and Big Elk Lake Phosphorus Reduction Program	7,938	6,846	337

Pope SWCD	2016 Lake Emily Watershed BMP Targeted Implementation Project	1,121	960	
Blue Earth County SWCD	Crystal Lake Watershed Phosphorus Reduction Project	1,638	2,209	
Wilkin SWCD	Ottertail River TMDL Water Quality Improvement Projects to Reduce Turbidity Phase V	1,375	1,870	
Dodge SWCD	Dodge Saturated Buffer Project Implementation			2,700
South Washington WD	SWWD Lakes Targeted Retrofit	21		
Chisago SWCD	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization	196	43	
Sauk River WD	Chain of Lakes Targeted Reduction	6	20	
Ramsey-Washington Metro WD	Spent Lime Treatment System for Wakefield Lake	9	45	
Comfort Lake-Forest Lake WD	Forest Lake Wetland Treatment Basin Implementation		56	
Valley Branch WD	Silver Lake Watershed Treatment Project		15	
Crow Wing County	Cost-Share Program to Seal Wells in Sensitive Groundwater Aquifers	Prevention : 80 wells sealed		
Red Lake SWCD	2016 Red Lake River Subwatershed (63025) Improvement Projects	690	590	
Kandiyohi SWCD	Kandi Creek Watershed	542	801	
Fillmore SWCD	Field to Stream Partnership Phase II Implementation	1,504	1,070	15
Itasca SWCD	2016 Itasca SWCD Stormwater Implementation grant	2	8	
Roseau River WD	CD 8 Subwatershed Sediment Reduction Project	275		

Vermillion River Watershed JPO	King Park Stormwater Reuse Project	1	4	
Dodge SWCD	Middle Fork Zumbro River Critical Source Area Restoration	49		
Washington Conservation District	Ag BMP Soluble P Reduction		50	
Bloomington, City of	2016 Anti-Icing Production Upgrades		300 (CHLORIDE)	
Pennington SWCD	CD-96-21-16 Gully Control and Buffer Implementation	2,428		
Dakota Soil and Water Conservation District	Trout Brook Watershed Initiative	2000		
Becker Soil and Water Conservation District	Upper Buffalo River Sediment Reduction Project	1386	1184	
Elm Creek Water Management Commission	Elm Creek WMC Internal Phosphorus Loading Control: Fish Lake, Hennepin County		310	
Pomme de Terre River Association Joint Powers Board	2017 - Pomme de Terre WRAPS Implementation Plan	15000	15011	
City of Forest Lake	Forest Lake High School Stormwater Reuse Project	2	20	
Stearns Soil and Water Conservation District	2017 Sauk River Targeted Feedlot Water Quality Reduction Project		200	
Middle St. Croix River Water Management Organization	Perro Creek Urban Stormwater Quality Improvements	1	6	
Vermillion River Watershed Joint Powers Organization	2017 CWF South Branch Vermillion River Nitrate Treatment Project			13600
Wright Soil and Water Conservation District	Crow River Gully Stabilization to Reduce Turbidity Phase Three	315	350	

Vermillion River Watershed Joint Powers Organization	2017 CWF South Creek Temperature Reduction Project	Temperature reduction of 11 degrees C		
Comfort Lake-Forest Lake Watershed District	Bone Lake Partially Drained Wetland Restorations		50	
Anoka Conservation District	Targeted Mississippi River Bank Stabilization with a Focus on Bioengineering	1250	1250	
Comfort Lake-Forest Lake Watershed District	Shields Lake Stormwater Harvest and Irrigation Reuse System and Alum Treatment		250	
Benton Soil and Water Conservation District	2017 - Big Elk - Mayhew Lakes Tier 1 and 2 BMP Implementation		926	
Anoka CD	Pump-controlled iron enhanced sand filter basin at the Golden Lake Stormwater Treatment Pond		40	
Okabena-Ocheda Watershed District	Prairie View Golf Course Pond Modification		945	
Benton Soil and Water Conservation District	2017 - Little Rock Lake TMDL Implementation Plan	1829	881	922
Vermillion River Watershed Joint Powers Organization	2017 CWF Phosphorus Treatment Enhancements at County Road 50		20	
Ramsey Conservation District	Ramsey Conservation District Well Sealing Cost-Share Program	Seal 100 wells		
Pope Soil and Water Conservation District	2017 Lake Emily Watershed BMP Targeted Implementation Project II	607	520	

Polk, West Soil and Water Conservation District	Red Lake Watershed District Project 134, Polk County Ditch 63	31		
Vermillion River Watershed Joint Powers Organization	2017 CWF Lakeville Stormwater Hydrodynamic Separator Retrofit	4		
Bassett Creek WMC	BCWMC Plymouth Creek Restoration	45	52	
Browns Creek Watershed District	McKusick Road Improvement Sediment Reduction Project	2		
Ramsey Conservation District	Sucker Lake Channel Restoration Project	6	8	
Carlton Soil and Water Conservation District	Red Clay Dam Phase III: Stream Restoration at Failed Red Clay Dam and Partner Prioritization	80		
Vermillion River Watershed Joint Powers Organization	2017 CWF Alimagnet Lake Stormwater Improvement Projects		62	
Chisago Soil and Water Conservation District	Water Quality Improvements on the Mallery Jersey Dairy Farm	18	18	
Todd County	City of Long Prairie DWSMA Septic Cost Share		99	188
Scott Soil and Water Conservation District	2017 Lower MN River Targeted Water Quality Practices Installation	7250	6670	
Minnehaha Creek Watershed District	Six Mile Creek - East Auburn Stormwater Enhancement Project	2	39	
Lake Soil and Water Conservation District	Landscape-scale forest stand improvements for water quality	300 acres of timber stand improvements		
Rice Creek Watershed District	Oasis Pond Iron-Enhanced Sand Filter Project		34	

Chisago Soil and Water Conservation District	2017 Rush Lake/Goose Lake TMDL Implementation Program		20	
Wadena Soil and Water Conservation District	Forestry Conservation Incentives to Protect the Crow Wing River	Complete 45 Forest Stewardship plans		

