



Clean Water Fund Appropriations

Annual Report to the Legislature



February 28, 2014

Prepared by Angie Becker Kudelka, Celi Haga, Polly Remick, Aaron Spence, Sarah Strommen, Seth Weeks and Marcey Westrick.

This document was developed in consultation with Department of Agriculture, Department of Health, Department of Natural Resources and the Minnesota Pollution Control Agency. The estimated cost of preparing this report (as required by Minn. Stat. 3.197) was:

Total staff time:	\$2,228
Production/duplication:	<u> \$34 </u>
Total:	\$2,262

BWSR is reducing printing and mailing costs by using the Internet to distribute reports and information to wider audiences. This report is available at www.bwsr.state.mn.us/cleanwaterfund and available in alternative formats upon request.

Minnesota Board of Water and Soil Resources
520 Lafayette Road North
St. Paul, MN 55155-4194
651-296-3767

BWSR is an equal opportunity employer

Table of Contents

Introduction	3
Clean Water Fund Appropriation Summary	3
Clean Water Fund Easement Programs	5
Riparian Buffer Easement Program	5
Outcomes and Effectiveness.....	6
Wellhead Protection Conservation Easement Program	8
Outcomes and Effectiveness.....	8
Clean Water Fund Competitive Grant Program.....	9
FY2014 Process	10
Targeted Watershed Demonstration Program.....	11
Statewide Funding Maps per Grant Program	13
Outcomes and Effectiveness.....	20
Directed Clean Water Fund Expenditures.....	24
One Watershed, One Plan	24
Conservation Corps of Minnesota and Iowa	25
BWSR Administration of Clean Water Fund Expenditures	26
Appendix A: BWSR Clean Water Fund Ranking Criteria.....	27
Appendix B: One Watershed, One Plan Guiding Principles	30

Introduction

As Minnesota's soil and water conservation agency, the mission of the Board of Water and Soil Resources (BWSR) is to improve and protect the state's water and soil resources by working in partnership with local organizations and private landowners. BWSR works with these partners on prioritized projects that will protect and restore Minnesota's waters. Using a wide range of conservation practices and tools, critical water quality problems are targeted and addressed through on-the-ground, local projects.

Local government partners have developed project goals and outcomes. BWSR's reporting and tracking requirements ensure verification of results. The right projects, at the right time, in the right places: BWSR, through its local partners, is working to improve water quality throughout Minnesota.

This report has been prepared for the Minnesota State Legislature by BWSR in fulfillment of the requirements of Laws of Minnesota 2013, Chapter 137, Article 2, Section 7. This requires BWSR to submit "to the legislature by March 1 each year an annual 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 Fund. This report outlines BWSR's comprehensive strategy used to implement the Fiscal Year (FY) 2014 appropriation 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

The 2013 Legislative Session passed FY 2014 Clean Water Fund appropriations of \$30,689,000 to BWSR for implementation of nonpoint source pollution reduction programs. As of March 1, 2014:

- BWSR is in the process of allocating up to \$6.5 million for permanent conservation easement projects to establish buffer strips adjacent to public waters and \$1.3 million for conservation easements in wellhead protection areas. BWSR partners with Soil and Water Conservation Districts (SWCDs) to implement these conservation easement programs.
- BWSR oversees \$500,000 contracted with the Conservation Corp of Minnesota and Iowa for installing and maintaining conservation practices that are consistent with the goals of the Clean Water Fund.
- BWSR has awarded approximately \$14 million through a competitive grant process for high priority projects and practices that protect and improve water quality. 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.

Clean Water Fund Performance Report

The Minnesota State agencies receiving funding through the Clean Water Fund, including the Board of Water and Soil Resources, Department of Agriculture (MDA), Department of Health (MDH), Department of Natural Resources (DNR) and the Pollution Control Agency (PCA) have released the Clean Water Fund Performance Report. For further information on the connections between funds invested, actions taken and clean water outcomes achieved, please reference the Performance Report at:

<http://www.legacy.leg.mn/funds/clean-water-fund>.

Table 1: Summary of FY 2014 Clean Water Fund Appropriations to BWSR		
Program	Allocation FY14	Description
Riparian buffer conservation easements	\$6.5M	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.
Wellhead protection conservation easements	\$1.3M	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.
Projects and Practices*	\$9.705M	Protects and restores surface water and drinking water through grants to local government units and joint powers organizations of 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.
Accelerated Implementation *	\$3.5M	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 a 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.
Soil Erosion and Drainage Law Compliance*^	\$1.7	Restores and protects surface water quality, particularly impaired waters by supplementing local efforts to apply existing soil erosion reduction and drainage statutes across Minnesota.
One Watershed, One Plan	\$.45M	Establishes a framework for comprehensive local watershed plans and funds local governments through assistance and grants to transition local water management plans to a watershed approach as provided for in Minnesota Statutes, chapters 103B, 103C, 103D, and 114D.
Targeted Watershed Demonstration Program*	\$5M	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.
Oversight, support, accountability reporting	\$.95M	Provides State oversight and accountability, evaluate results and measure the value of conservation program implementation by local government units and to prepare an annual report detailing recipients and projects funded.
Restoration Evaluations	\$.084M	Provides a technical evaluation panel to conduct up to ten restoration evaluations under Minnesota Statutes, Section 114D.50, Subdivision 6.

*Competitive grant process

^Of this amount \$235,000 in the first year is to update the Minnesota Public Drainage Manual and the Minnesota Public Drainage Law Overview for Decision Makers.

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 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.

In FY 2014, BWSR fully allocated the \$6.5 million in Clean Water funding for buffers and is still currently accepting applications for the remainder of the \$1.3 million in Clean Water Fund wellhead funding. BWSR staff provided enrollment guidance on January 15, 2013 and February 5, 2014 to SWCD staff statewide to address changes to the eligibility and funding of this program.

Targeting Critical Lands

At its highest point, landowners in Minnesota enrolled 1.7 million acres in the federal Conservation Reserve Program (CRP). Today, that number has dropped to around 1.3 million acres and in the next five years another 500,000 acres of Minnesota conservation lands enrolled in CRP will expire. Unless action is taken to continue protection of these lands, they will likely be converted back into cropland, and the benefits to both water quality and wildlife will be largely lost. The Reinvest In Minnesota (RIM) Reserve program focuses on 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.

Riparian Buffer Easement Program

BWSR received \$6.5 million in FY 2014 to acquire permanent RIM conservation easements on riparian lands adjacent to public waters, except wetlands. Using an innovative approach, the RIM easement program connects both Clean Water and Outdoor Heritage Funds (\$2.09 million in FY 2013 from OHF) to expand buffers beyond clean water minimums in order to provide additional wildlife habitat benefits.

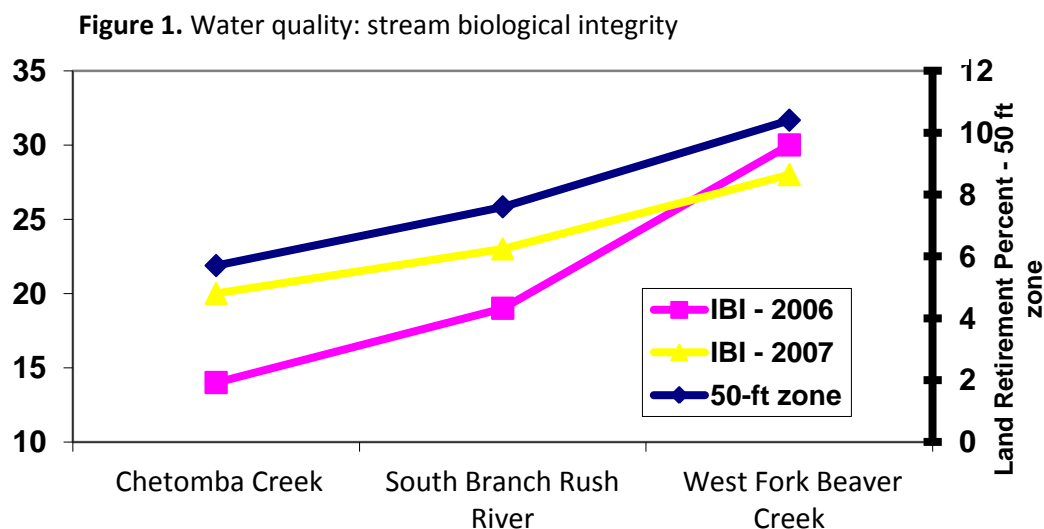
The program creates multiple benefits by targeting lands with a cropping history and new or existing USDA Conservation Reserve Program (CRP) contracts. Participating landowners receive a payment to retire land from agricultural production and to establish permanent buffers of native vegetation.

As of February 1, 2014, 100% of the available \$6.5 million has been encumbered. Landowner demand for this program greatly exceeds current resources. There is an estimated \$10 million in pending landowner interest.



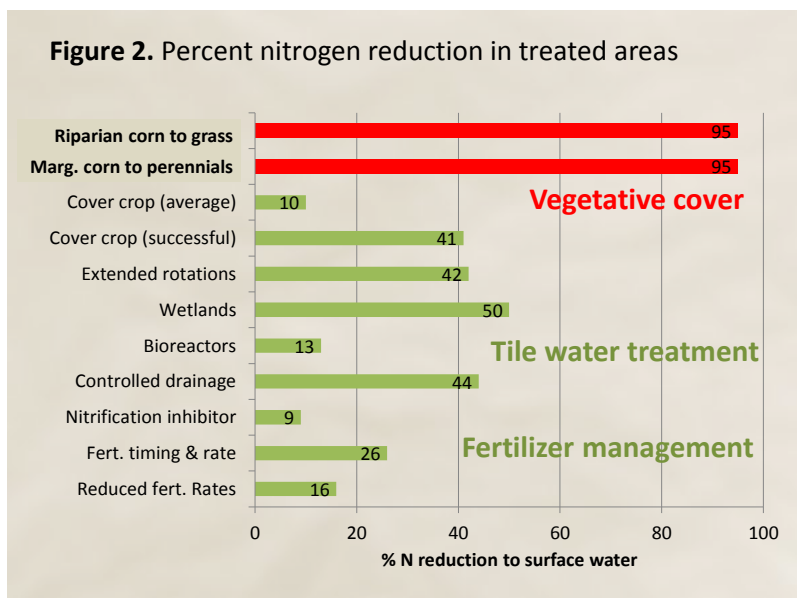
Outcomes and Effectiveness

In the first half of FY 2014 (July 1st 2013 – Dec. 31st 2013) 564 acres were funded in CWF buffers and 176 acres were funded using Outdoor Heritage Funds for wildlife habitat. In a 2008 paper titled *Effects of Agricultural Land Retirement in the Minnesota River Basin*, USGS and BWSR scientists concluded that conservation easements provide clear water quality benefits, including increasing Index of Biotic Integrity scores with increasing percentage of retired land; decreasing total nitrogen concentrations with increasing percentage of retired land; and lowest nitrogen and phosphorus concentrations in the sub-basin with the highest retired land percentage, as identified in Figure 1. The study also showed that as the percentage of retired land increases, so does its biological diversity.



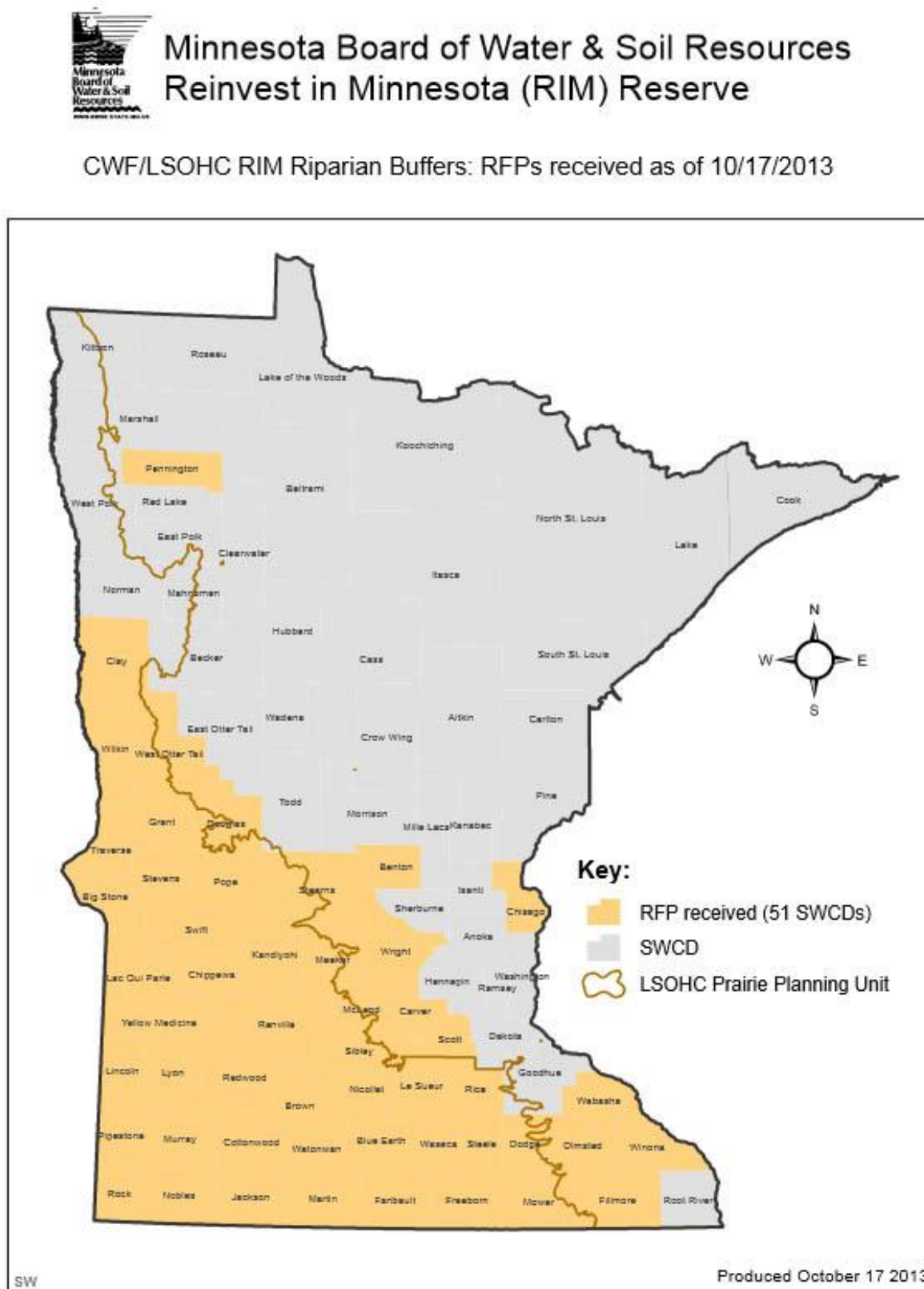
Source: *Effects of Agricultural Land Retirement on the Minnesota River Basin*, 2008 USGS

A 2013 MPCA study, *Nitrogen in Minnesota Surface Waters*, also shows significant benefits to this approach to conservation. The two most significant treatments for reducing nitrogen are putting riparian land that is currently in corn into grass and putting into perennials those areas where corn grows only marginally, as seen in Figure 2.



Source: *Nitrogen in Minnesota Surface Waters*, 2013 MPCA study

Figure 3. Clean Water Fund/Lessard-Sams Outdoor Heritage Council RIM Riparian Buffer Request For Proposals (RFP) received



Wellhead Protection Conservation Easement Program

There are currently over 250 identified and approved Wellhead Protection Areas in Minnesota. BWSR received \$1.3 million in FY 2014 appropriations for RIM easements under this program. The Wellhead Protection program is targeted to areas where the vulnerability of the drinking water supply management area (as defined by Minnesota Rules, part 4720.5100, subpart 13) is designated as High or Very High by the Minnesota Department of Health (MDH). Applications are being accepted on an ongoing basis.

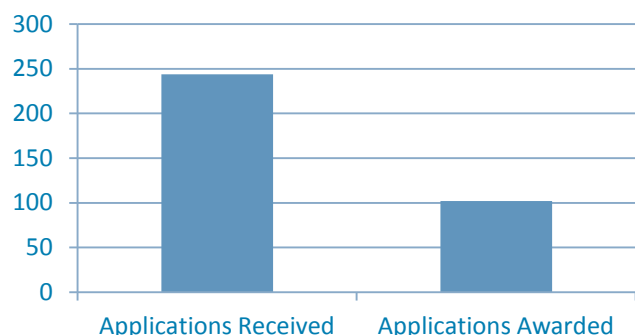
It is anticipated that enough applications will be secured to encumber all of the allocated funds for this program.

Outcomes and Effectiveness

Restoring grasslands within affected wellhead protection areas can produce dramatic, measurable improvements in water quality. Since the beginning of the RIM Wellhead Protection Program in 2010, BWSR has funded 16 easements totaling 1,018 acres. These acres will be restored to native perennial vegetation and will have little to no negative impacts on groundwater quality as compared to pre-easement conditions. This is a new program with few acres funded compared to the amount of acres identified as High or Very High vulnerability so landscape scale benefits have not yet been achieved. However, as an example of potential, the Red Rock Rural Water System – Great Bend Wellhead Protection Area is 415 acres with a total of 114 acres enrolled into a perpetual RIM Wellhead easement. This reduces the number of surface acres currently being impacted by yearly applications of agricultural chemicals by 27%.

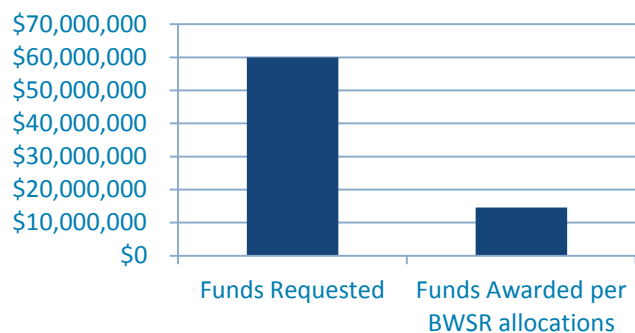
Clean Water Fund Competitive Grant Program

Figure 4. 2014 CWF Competitive Grant Applications



BWSR's goal for the Clean Water Competitive Grants process is to fund the best projects that make the biggest difference in water quality. BWSR asks for projects that are prioritized, targeted, and capable of achieving measurable results. 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. As in previous years, the demand for BWSR's Clean Water Fund Competitive Grant Program greatly outpaced the funds available, with less than half of applications being funded. The engagement of BWSR's local partners in protecting and restoring Minnesota's streams, rivers, lakes and groundwater is only limited by the dollars the agency has available to award.

Figure 5. 2014 CWF Competitive Grant Funding



In FY 2014, BWSR Competitive Grant Programs included Projects and Practices, Accelerated Implementation, Community Partners, Soil Erosion and Drainage Law Compliance and the Targeted Watershed Demonstration Program. Funding for these programs was provided under Laws of Minnesota 2013, Chapter 137, Article 2, Section 7. BWSR distributed appropriated program funds as indicated in Table 2.

Clean Water Fund Competitive Grant 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 August 29, 2013:

http://www.bwsr.state.mn.us/cleanwaterfund/FY14_CWF_Competitive_Grants_Policy_Final%20.pdf

Table 2: Clean Water Fund Applications Funded per Grant Program		
Grant Program	Applications Funded FY14	Total Funds Awarded FY14
BWSR Board Approval, January 2014		
Projects and Practices	40	\$8,417,364
Accelerated Implementation	20	\$2,206,956
Accelerated Implementation: Shared Services*	8	\$2,000,000
Community Partners	8	\$862,500
Soil Erosion and Drainage Law Compliance	26	\$1,054,098
Total	102	\$14,540,918
Pending BWSR Board Approval, March 2014		
	Funding Available	Funding Requested
Targeted Watershed Demonstration Program	\$5,000,000**	\$46,380,000

*Under Minnesota Laws, Chapter 137, Article 2, Section 7(L), BWSR has the authority to shift grant or cost-share funds between fiscal years. This authority was used in FY 2014 for Shared Services.

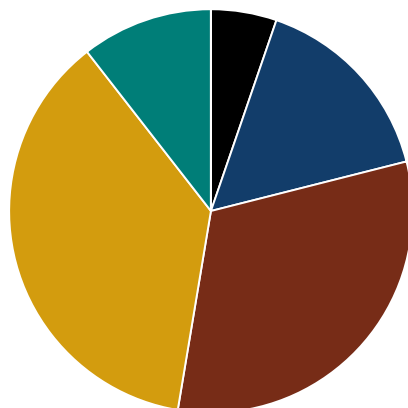
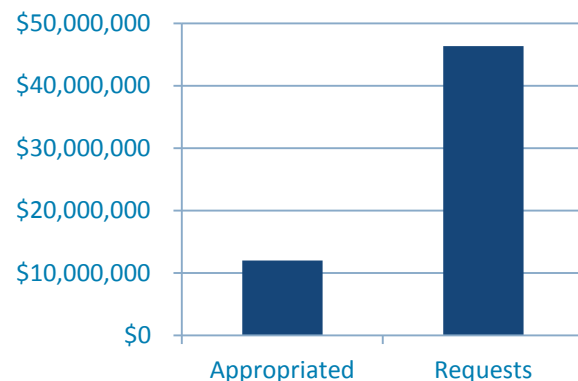
**The Targeted Watershed Demonstration Program has \$5M available in FY2014 and an additional \$7M available in FY 2015.

FY 2014 Process

The FY 2014 Competitive Grant application was open from September 3, 2013 through October 4, 2013. BWSR staff conducted three information and outreach sessions to review the grant programs and criteria. These sessions were held on September 4, 5, and 10 of 2013. In addition, BWSR created a Frequently Asked Questions document and posted it on the BWSR website to provide updated information to potential applicants.

Local government units throughout the State submitted 244 applications for these competitive grants and the total amount requested was more than \$52 million. BWSR staff initially reviewed and assessed applications. This assessment resulted in the separation of applications into high – medium – low groupings using the criteria for evaluation identified in the Clean Water Fund Request for Proposals. Those Projects and Practices, Accelerated Implementation, and Community Partners Conservation Programs applications ranked “high” or medium” were then reviewed by an interagency team, consisting of staff from MDA, DNR, MPCA, MDH and BWSR. Applications were scored using points-based criteria to rank the proposals (Projects and Practices pictured in Figure 6, p. 11, more detailed information and other specific program criteria are found in Appendix A, Tables 1-6). As shown in Figure 6, the ranking criteria placed a strong emphasis on projects that were targeted and measurable.

The interagency team leaders combined and averaged all scores to produce a numerical “rank” or order of projects. Projects were recommended for funding based on their rank order and eligible grant category until available funds were expended. Ranked applications that targeted specific water resources or priority conservation practices, but did not identify precise locations for installation of those practices, were recommended for a maximum of 50 percent of requested funding to begin implementation and development of more specific project lists for future applications.

Figure 6: Projects and Practices**Figure 7. Targeted Watershed Demonstration Program Response**

Under the Accelerated Implementation-Shared Services, applications were scored separately from the competitive grant process. BWSR staff first assessed proposals for program eligibility and then evaluated and scored eligible applications, based on the criteria found in Appendix A, Table 3. Soil Erosion and Drainage Law Compliance applications identified as high or medium were also scored separately by BWSR staff. These applications were scored based on the criteria found in Appendix A, Tables 5 and 6.

The BWSR Senior Management Team reviewed the recommendation provided by the interagency and BWSR staff teams on January 6, 2014 and recommended it be forwarded to the BWSR Board. The BWSR Board Grants Program and Policy Committee reviewed the funding recommendation on January 10, 2014. The BWSR Board approved the final funding recommendations for the FY 2014 Clean Water Fund Competitive Grants on January 22, 2014, 102 projects totaling \$14,540,918 in grant funding. In late January, BWSR notified all applicants of approval status.

The BWSR Board specified a deadline for completion and approval of the work plans by March 17, 2014 and grant execution by April 1, 2014. Once work plans are approved and the grant agreements executed, projects will begin implementation in the spring of 2014. Maps detailing FY 2014 project locations follow. Additional narrative detail regarding FY 2014 projects can be found on the BWSR website: www.bwsr.state.mn.us.

Targeted Watershed Demonstration Program

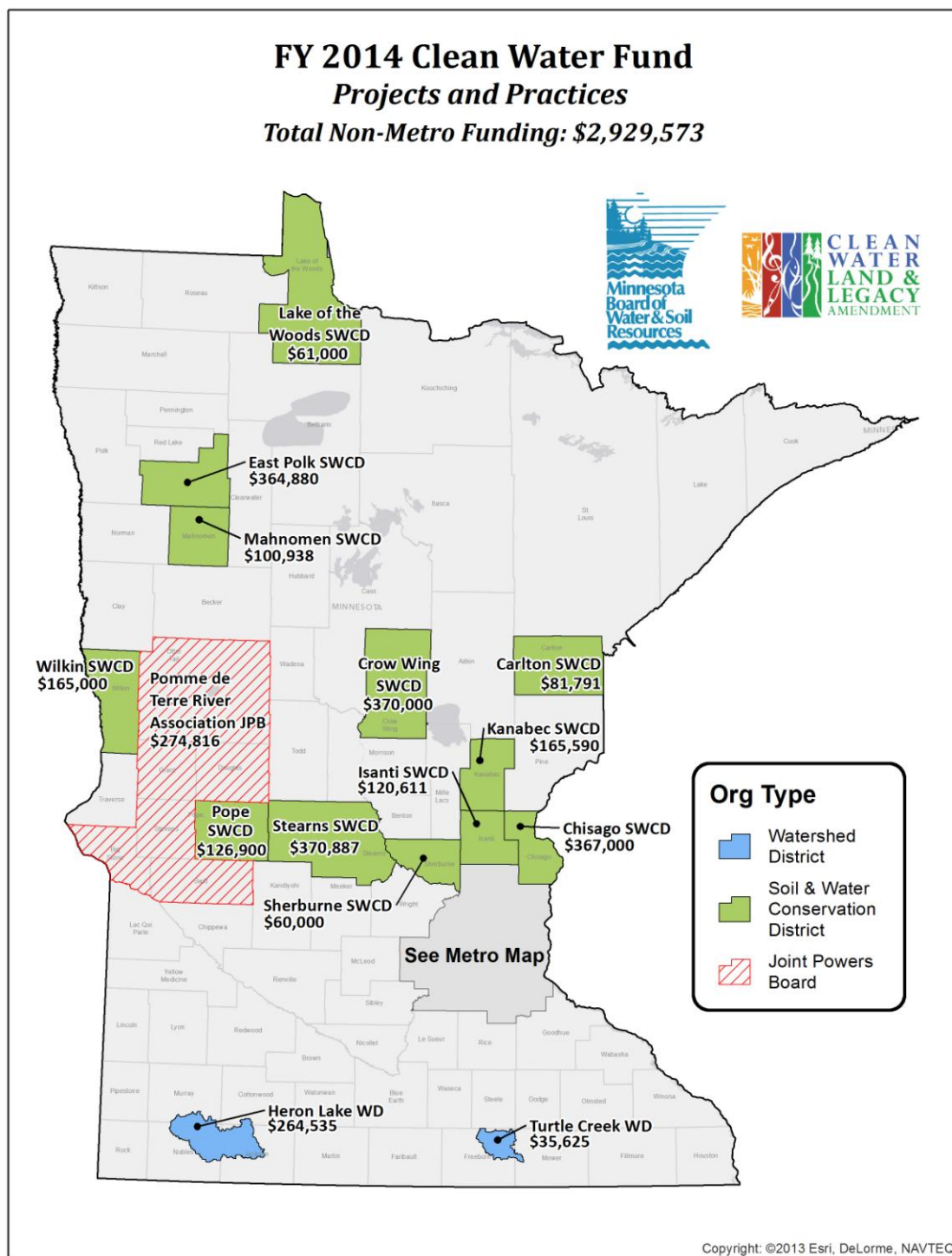
In 2013, the Minnesota Legislature created a new appropriation to BWSR to *award grants to local government units organized for the management of water in a watershed or subwatershed that have multiyear plans that will result in a significant reduction in water pollution in a selected subwatershed. Priority in making grants must be given to the three to six best designed plans each year.* (Laws of Minnesota 2013, Chapter 137, Article 2, Section 7)

Based on this legislation, BWSR created the Targeted Watershed Demonstration Program and sought nominations for three to six project watersheds to participate. Eligible watersheds are those where the amount of change to achieve a water quality improvement is known, the types of actions required to achieve those results have been identified, and a significant amount of those actions can be implemented within a four-year timeframe.

Priority will be given to watersheds where there are current water quality impairments or priority water resources near the tipping point of becoming impaired. Proposed watersheds have the threat to the water resource clearly identified, a thorough understanding of the pollution sources and pathways within the watershed, and baseline water quality data against which change can be assessed. Preference will be given to watersheds that are 10 or 12-digit Hydrologic Unit Codes. While protection of high quality resources is important and a critical part of the

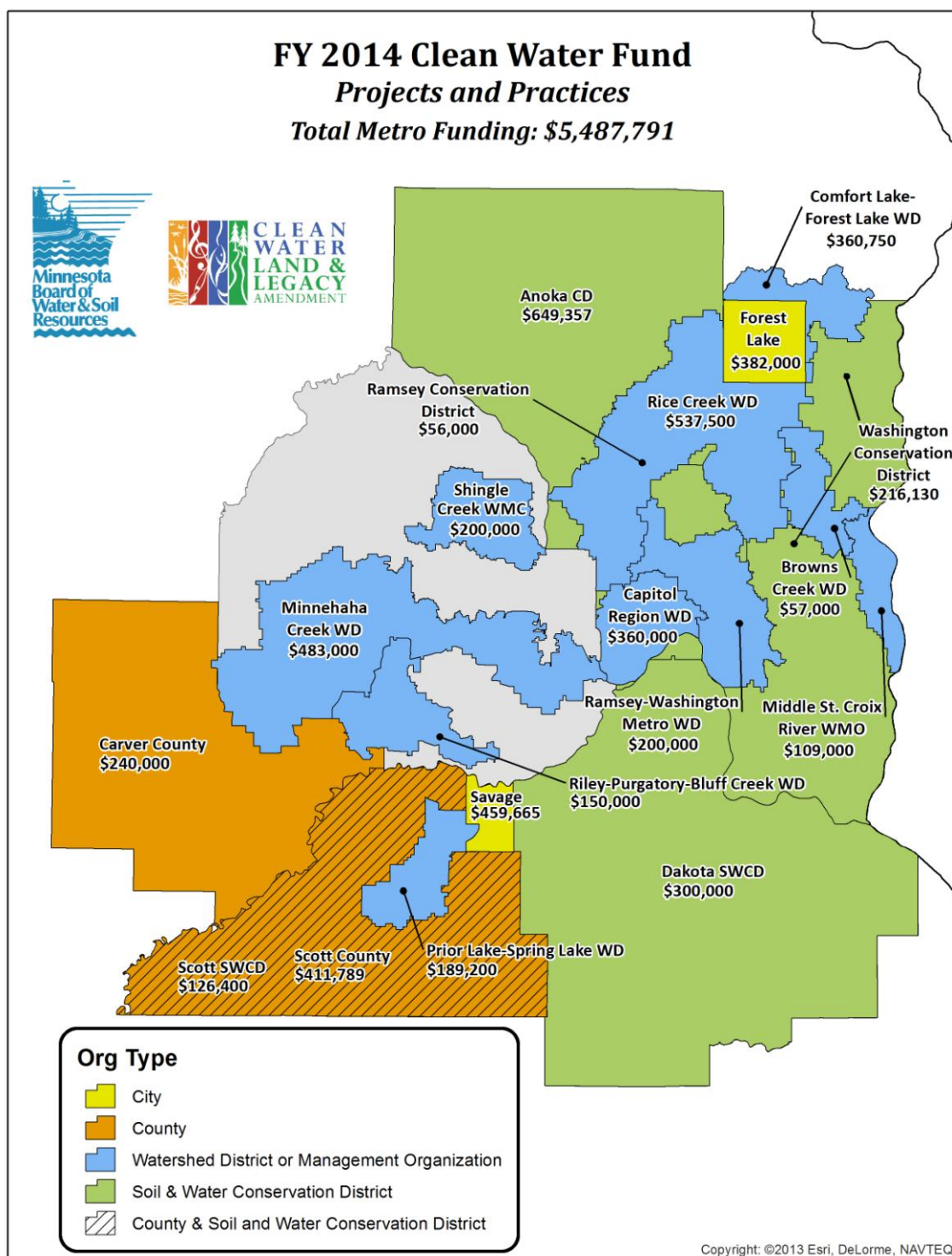
Clean Water effort, this program focuses on demonstrating water quality improvements, not on sustaining high quality systems.

The BWSR Board approved the program on October 23, 2013. Nominations for the program then opened, and closed in December 2013. Twenty-five submittals were received requesting a total of \$46,380,000 in FY 2014 funding. Interviews were conducted in February 2014, with Board action on grant awards expected in March 2014. Up to \$12,000,000 is available for the Targeted Watershed Demonstration Program over the FY14-15 biennium through the Clean Water Fund.



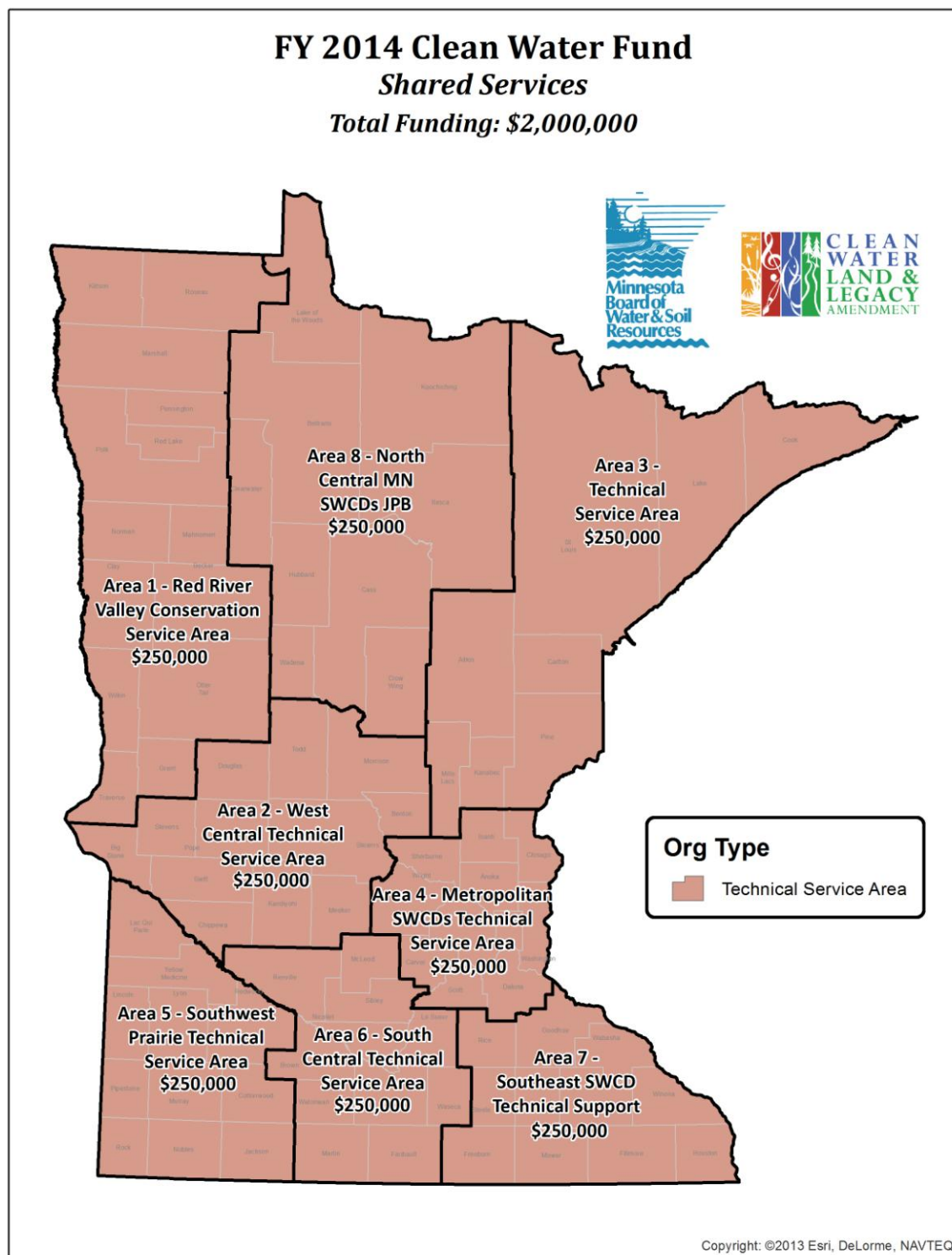
Projects and Practices Grants: Outstate

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.



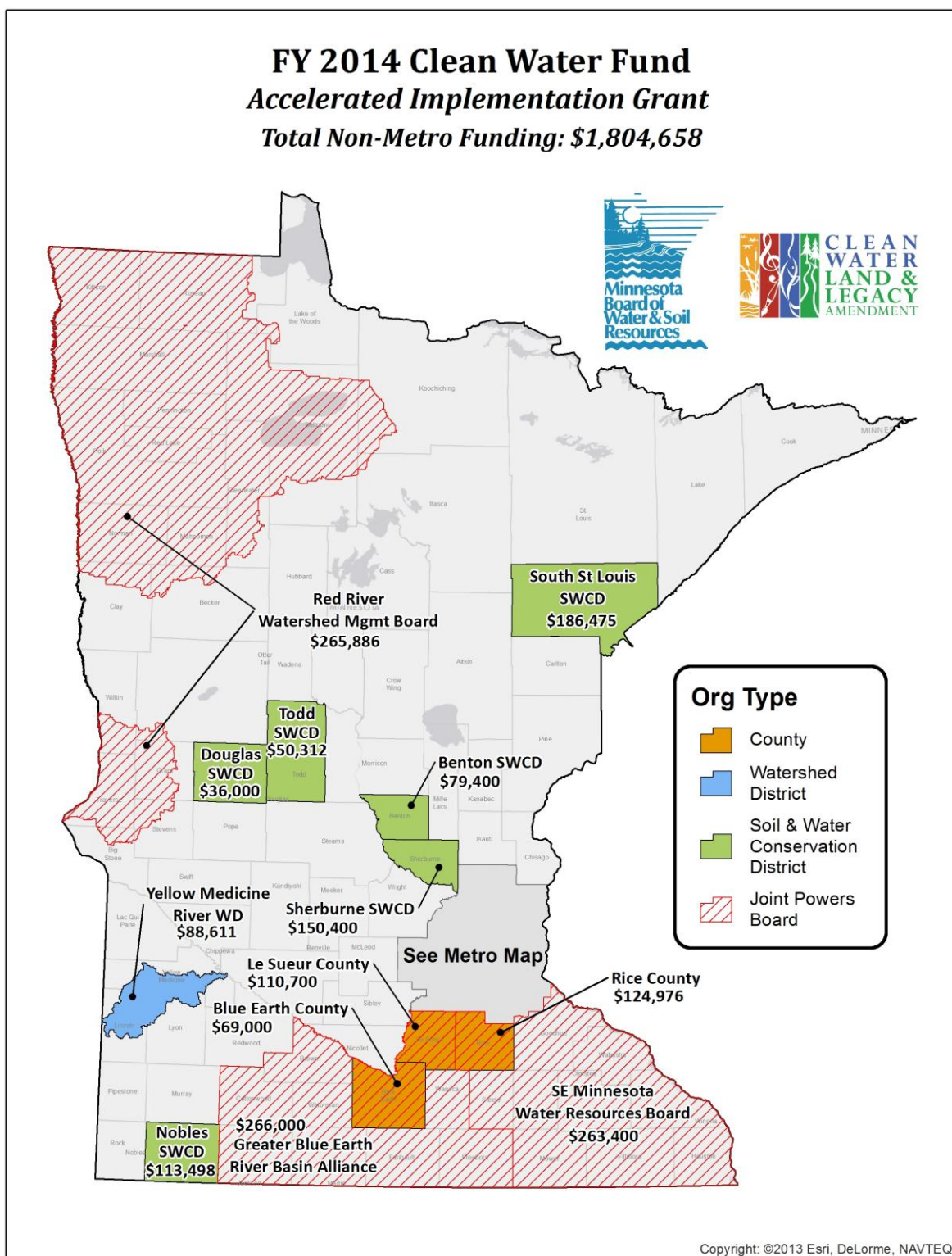
Projects and Practices Grants: Metro

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.



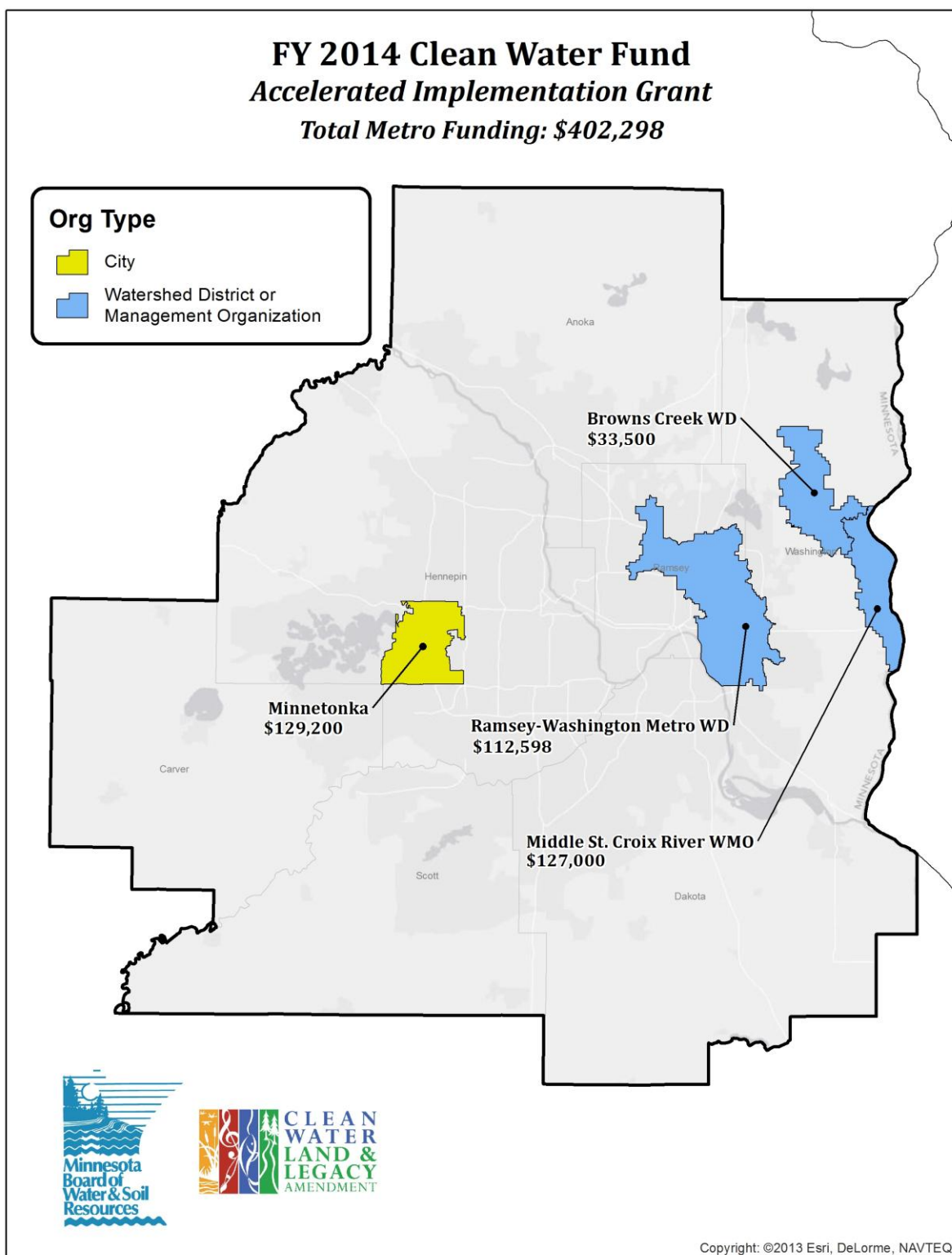
Accelerated Implementation Grants: Shared Services

Funds are used for Technical Service Areas to invest in building regional capacity across the state to efficiently accelerate on-the-ground projects and practices that improve or protect water resources.



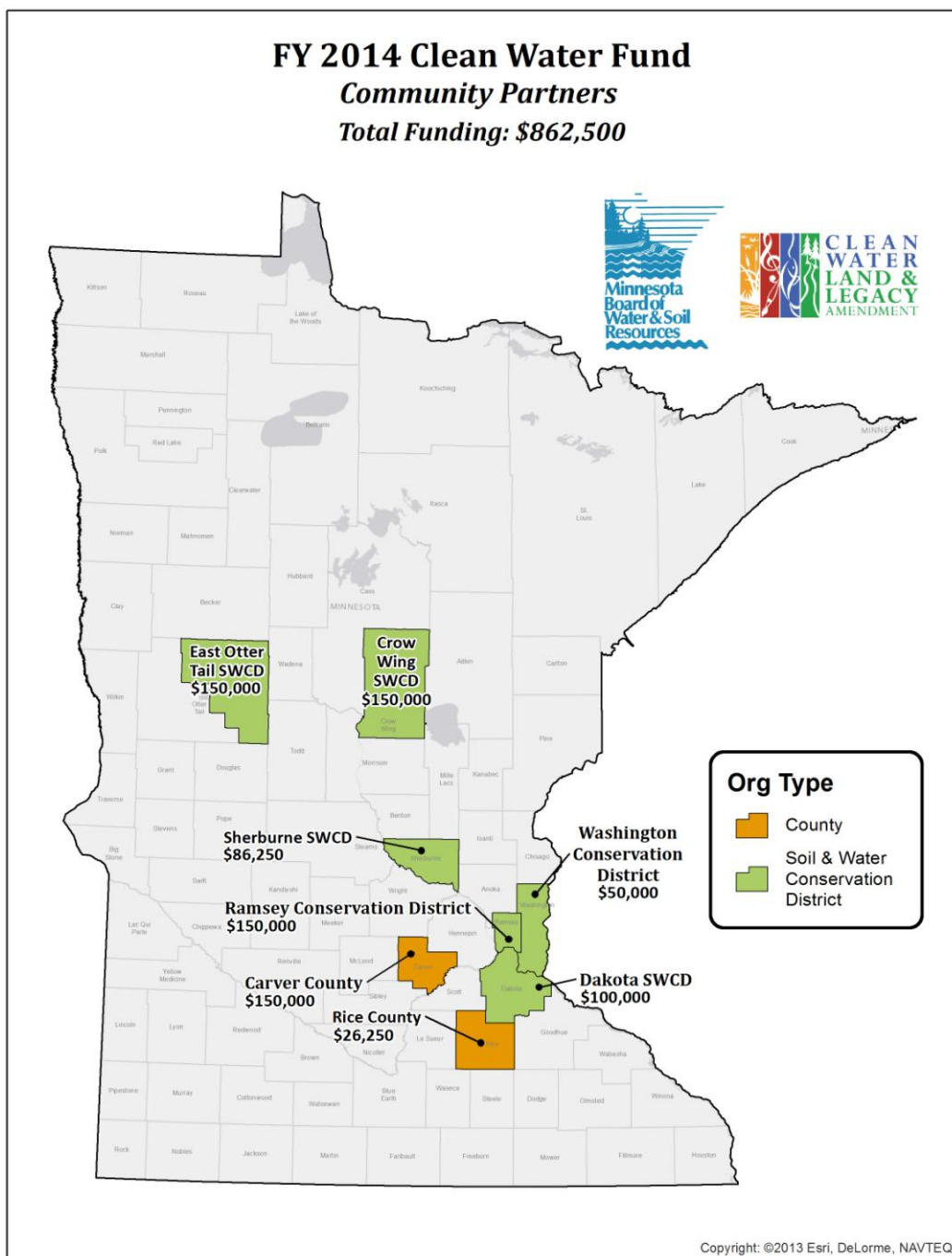
Accelerated Implementation Grants: Outstate

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.



Accelerated Implementation Grants: Metro

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.



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.

Minnesota Board of Water & Soil Resources • www.bwsr.state.mn.us

Outcomes and effectiveness

BWSR funded forty grant applications through the Projects and Practices Grants: 15 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 13 are for water bodies that are listed as impaired but have no TMDL completed.

BWSR required grant applicants to estimate anticipated intermediate 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 reducing pollutants and keeping water runoff on the land. Based on projected outcomes, projects funded in FY 2014 will remove over 18,000 pounds of phosphorus and 18,000 tons of sediment from Minnesota waters. Those projections for Projects and Practices grants can be found in Table 3. More information can be found regarding the projects on the BWSR website: <http://www.bwsr.state.mn.us/cleanwaterfund/>.

Some past examples of how these projects impact state waters follow.

Measurable Results: Benton County Phosphorus reduction project on Little Rock Lake: \$204,155

Clean Water Grant: \$163,639; leveraged funds: \$40,514



Toxins released by blue green algae blooms in the lake have been the highest ever measured by the Minnesota Department of Health.

Little Rock Lake (Benton County), negatively impacted for nutrients, is a significant regional recreational lake. Given the importance of this resource and the severity of the water quality problems, obtaining tangible water quality improvements is a high priority in the Benton and Morrison County local water management plans.

This project kicks off the implementation strategies set in the lake's TMDL to reduce phosphorus entering Little Rock Lake through a coordinated effort with local units of government and other partners – the Benton and Morrison SWCDs, the Natural Resources Conservation Service, the Little Rock Lake Association and the poultry and livestock

industry. Numerous conservation practices will be installed by providing financial and technical assistance to landowners within the watershed.

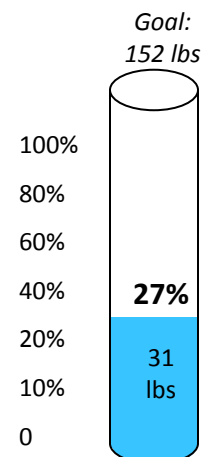
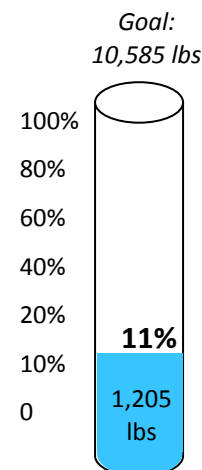
The Little Rock Lake TMDL sets an overall phosphorus reduction goal of 10,585 pounds. This project is estimated to reduce phosphorus in the watershed by 1,205 pounds per year, contributing 11 percent of the total targeted phosphorus reduction.

Measurable Results: Stubbs Bay ravine stabilization: \$205,432

Clean Water Grant: \$164,346; leveraged funds: \$41,086

Stubbs Bay on Lake Minnetonka is impaired for excess nutrients due to phosphorus loading. This impairment results in nuisance algae blooms that limit the recreational use of this water body.

This project stabilized an existing 500-foot-long ravine that had eroded to a depth of approximately 15 feet. The ravine was discharging a significant amount of sediment and phosphorus to the lake. To restore the problem, a series of cascades, riffles and pools were installed to step the flows down this steep ravine and control flow velocities.





Left: Before project, eroding bank slopes. Right: After project, bank slope is stabilized.

Native shrub plantings and seeding of deep rooting native vegetation further stabilized the ravine. The project reduced phosphorus loading to Lake Minnetonka by 31 lbs/year, which equates to 27 percent of the 152 lb/year goal set by the Minnehaha Creek Watershed District (MCWD) for the City of Orono.

Table 3: Estimated Pollution Reduction Outcomes for Projects and Practices

Applicant	Title	Total Phosphorus (lbs/ Yr)	Total Suspended Solids (Tons/Yr)	Nitrogen
Anoka CD	Coon Lake Area Stormwater Retrofits	4	1	
Anoka CD	Oak Glen Creek Stormwater Pond Expansion and Iron Enhanced Sand Filter Retrofit	109	24.5	
Anoka CD	Golden Lake Iron Enhanced Sand Filter - Treating Dissolved Phosphorus	21		
Browns Creek WD	Long Lake Neighborhood Retrofit	6	1.3	18.8
Capitol Region WD	Reduce, Reuse, Revitalize: Upper Villa Park Volume Reduction and Stormwater Reuse Project	45	49.7	
Carlton SWCD	Phase II Red Clay Dam: Deer Creek Tributary Restoration Through Aging Sediment Retention Structure Removal	90.2	78.4	
Carver County	Burandt Lake Stormwater Reuse System	4.8		
Carver County	Bevens and Carver Creeks Exclusion and Streambank Restoration Grant	60	50	
Chisago SWCD	Chain of Lakes Stormwater Retrofit Assessment Best Management Practices	40	10	
Chisago SWCD	St. Croix River Escarpment Gully Stabilization Implementation Program	52	152	
Comfort Lake-Forest Lake WD	Bixby Park Water Quality Improvement Project	206	550	
Crow Wing SWCD	Serpent Lake Protection: Deerwood Community Flood and Stormwater Control Project	27	4.7	
Dakota SWCD	2014 Clean Water Retrofit Partnership	40	6	

Applicant	Title	TP (lbs/ Yr)	TSS (Tons/Yr)	Nitrogen
Forest Lake, City of	Clear Lake Water Quality Treatment Project	60		
Heron Lake WD	Livestock Nutrient Reduction Project	120		461
Isanti SWCD	Stormwater Retrofit for City of Isanti, MN to Benefit the Rum River	12	3	
Kanabec SWCD	Ann River Watershed - Restoration Project	839	694	4250
Lake of the Woods SWCD	Zippel Watershed Sidewater Inlets	13	13	
Mahnomen SWCD	Wild Rice River Restoration Project	1,059	1,947	
Middle St. Croix River WMO	Lily Lake Stormwater Quality Retrofits	8	2	
Minnehaha Creek WD	Cottageville Park Water Quality Protection and Stream Restoration Project	36	20.6	
Polk , East SWCD	Phase III Sand Hill River Watershed Multi-County Erosion BMP's	1,397	1,262	
Pomme de Terre River Association JPB	Pomme de Terre River Watershed Targeted BMP Implementation Project	1,638	2,446	
Pope SWCD	Pope County Sub Watershed Water and Sediment Control Basin Project	600	700	
Prior Lake-Spring Lake WD	2013 - Fish Point Park Retrofits	34		
Prior Lake-Spring Lake WD	2013 - Arctic Lake Restoration	23		
Ramsey Conservation District	Wakefield Design and Implementation Project	10		
Ramsey-Washington Metro WD	Casey Lake Neighborhood Stormwater Retrofit	15		
Rice Creek WD	Middle Rice Creek Restoration	238	107	
Riley-Purgatory-Bluff Creek WD	Bluff Creek Bank and Habitat Restoration	20	20	
Savage, City of	Savage Fen Ravine Stabilization	520	500	
Scott County	Quarry Creek Collaborative		300	
Scott SWCD	Lower Minnesota River Watershed Targeted BMP Installations in Tributary and Near Channel Stream Watersheds, Scott County	7,600	6,600	
Sherburne SWCD*	Elk River Targeted Bacteria Reduction			
Shingle Creek WMC	Connections at Shingle Creek	2	11	
Stearns SWCD	Stearns County SWCD Stump and Sagatagan Lakes Subwatershed Stormwater Treatment Projects	286	336	

Applicant	Title	TP (lbs/ Yr)	TSS (Tons/Yr)	Nitrogen
Stearns SWCD	St. Cloud State University Q Parking Lot Pollution Reduction Project	19	2	120
Turtle Creek WD	CRP Incentives for Targeted Sediment Loading Reduction	1,954	1,188	
Washington Conservation District	Lake St. Croix Rural Subwatershed Project Implementation	160		
Wilkin SWCD	2014 Red River Sediment Reduction Project	900	1,200	

*Sherburne SWCD's Elk River Targeted Bacteria Reduction project estimates an overall reduction of 1.57×10^{13} CFU (colony forming units) of E.coli bacteria.

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 strategy.

One Watershed, One Plan

Minnesota has a long history of water management by local governments. One Watershed, One Plan is rooted in this history and in work initiated by the Local Government Water Roundtable (Association of Minnesota Counties, Minnesota Association of Watershed Districts, and Minnesota Association of Soil and Water Conservation Districts) in 2011. Roundtable members recommended that the local governments charged with water management responsibility should organize and develop focused implementation plans on a watershed scale.

The recommendation was followed by a funding appropriation in 2013 (Laws of Minnesota 2013, Chapter 137, Article 2, Section 7) that provided \$495,000 in FY 2014 Clean Water funding to BWSR for assistance and grants to local governments to transition local water management plans to a watershed approach as provided for in Minnesota Statutes, chapters 103B, 103C, 103D, and 114D. These watershed plans are referred to as One Watershed, One Plan. The appropriation also funds BWSR to establish a suggested watershed boundary framework for these plans.

The One Watershed, One Plan Boundary Framework further defines the planning boundaries included in the vision. The final framework will include both a map of suggested boundaries and procedures and criteria for establishing and modifying individual planning boundaries. A formal comment period for the boundary map was open from January 1 through February 28, 2014, and a final suggested boundary map is intended to be adopted by the BWSR Board in April 2014.

The BWSR Board began developing the structure in August 2013 and adopted Guiding Principles (Appendix B) on December 18, 2013. Operating procedures will be developed through the first half of 2014 and tested by pilot watersheds through 2015. BWSR released a Request for Interest for the purpose of selecting pilot watershed areas in early 2014, with an anticipated date of June 2014 for Board Approval of pilot watersheds.

One Watershed, One Plan is the next logical step in the evolution of water planning in Minnesota. The One Watershed, One Plan vision is to align local planning and implementation with state strategies over a ten year transition period into plans built largely around the state's major watersheds. This approach will address the need for focused watershed-based implementation plans that will be prioritized, targeted, and measurable.

BWSR has identified the following outcomes for the program:

- A shared understanding on the definitions of prioritized, targeted and measurable
- Be informed by existing science, studies and projects
- Establish water quality goals and targets by parameter of concern at the sub-watershed level
- Identify specific strategies and actions needed to achieve established restoration and protection targets
- Include short-term (10 year) and long-term (20 year) quantifiable milestones
- Identify the implementing authorities and establish timelines and cost estimates based on milestones
- May serve to coordinate the collection, ranking, and submission of requests for funding to the State and other sources.

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 (Laws of Minnesota 2013, Chapter 137, Article 2, Section 7). The Board approved reserving \$500,000 in FY 2014 Projects and Practices program funds (Table 1, p. 4) to comply with this appropriation.

As part of the process, BWSR staff has worked with the CCMI to ensure the following procedures are followed:

- Eligible local governments have an initial 30-day application period.
- CCMI has 30 days to review proposals and make a list of projects, consistent with the Clean Water Fund appropriation (Laws of Minnesota 2013, Chapter 137, Article 2, Section 7).
- CCMI sends the list of projects to the appropriate BWSR Clean Water Specialist for their review and approval before commitments are made to applicants. This will be accomplished within the 30-day CCMI review period.
- After initial allocations, any remaining funds are available on a first-come, first-served basis by any eligible local government.
- CCMI will report financial information on the use of State funds, and the local government will report outcome and match information in eLINK.

BWSR Administration of Clean Water Fund Expenditures

BWSR's Clean Water Fund goal is to reduce nonpoint source pollution by providing Clean Water Fund dollars to local government units for on-the-ground activities, many installed on private lands, that 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 programmatic activities.

Dating back as early as 1986, BWSR has required reports from local units of government that indicate progress made in protecting the state's resources. Throughout the years, the method to complete this reporting has changed, first from paper reports (1986-1996), to floppy disk submission (1997-2002) and finally to the online eLINK database (2003-2012). In 2012, BWSR started development of a new web-based system to track statewide conservation to replace dated technology and address increased demands. Clean Water Fund Oversight appropriations supported development of this new eLINK system as well as a portion of ongoing maintenance and staff support. The BWSR Board requires Clean Water Fund awardees to use the eLINK reporting program to track all Clean Water Fund grant-related projects. One reporting section cycle is now complete in the system, and 319 different local government units use this database for grant reporting.

For FY 2014, BWSR received a \$950,000 direct appropriation for Clean Water Program Oversight to provide for implementation and administration of Clean Water Fund dollars. The FY 2014 initial spending plan has allocated \$2,200,000 for implementation and administration. Staffing of 22.1 (full-time equivalent) is supported in this spending plan, including five full-time positions charged with getting protection and TMDL-derived restoration strategies adopted into local water plans, directing over \$19 million of grant funds to priority areas and activities, and aligning administrative procedures to optimize leveraging of non-State funds with low transaction costs.

Appendix A: BWSR Clean Water Fund 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.	30
<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>Biennial Budget Request (BBR):</u> A BBR was submitted by the applicant organization in 2012.	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

Table A-3 Accelerated Implementation Shared Services Grant Ranking Criteria	Maximum Points Possible
Clarity of proposed activities and their effect on enhanced delivery of current or future implementation projects or practices, targeting activities or other essential conservation delivery services.	25
Relationship of proposed activities to identified needs from the Biennial Budget Request (BBR) and/or identified priorities associated with local water management plans or other strategic water quality assessments.	30
Means and measures for assessing performance, milestones for success, and capacity to measure outcomes.	25
Clarity of application activities to implement projects from other fund sources or from new partnerships within the Technical Service Area.	20
Total Points Available	100

Table A-4 Community Partners Grant Ranking Criteria	Maximum Points Possible
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 programs impact and capacity to measure project outcomes.	20
LGU capacity to implement the local grant program processes and protocols.	10
Total Points Available	100

Table A-5 Soil Erosion and Drainage Law Compliance Ranking Criteria Subprogram 1: Soil Erosion	Maximum Points Possible
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

Table A-6 Soil Erosion and Drainage Law Compliance Ranking Criteria Subprogram 2: Drainage Ditch Inventory and Inspection	Maximum Points Possible
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
Total miles of Chapter 103E drainage ditches under the drainage authority's jurisdiction that are public waters (Activity 2a.); miles of Chapter 103E drainage ditches to be inventoried that contribute substantially to water quality degradation (Activities 2b. or 2c.); or total miles of Chapter 103E drainage ditches under the drainage authority's jurisdiction (Activity 2d.).	15
LGU capacity to implement the local grant program processes and protocols.	10
Consistency with program purposes.	30
Total Points Available	100

Appendix B: One Watershed, One Plan Guiding Principles



One Watershed, One Plan

Guiding Principles



December 18, 2013

Vision: BWSR's vision for *One Watershed, One Plan* is to align local water planning on major watershed boundaries with state strategies towards prioritized, targeted and measurable implementation plans – the next logical step in the evolution of water planning in Minnesota.

Purpose: The purpose of this document is to further outline the *One Watershed, One Plan* vision through providing the guiding principles that will direct and influence the program's future policies and procedures.

One Watershed, One Plan will result in plans with prioritized, targeted, and measurable implementation actions that meet or exceed current water plan content standards.

One Watershed, One Plan will set standards for plan content that will be consistent with or exceed the plan approval standards currently in place for local water plans. Most existing water management plans contain adequate inventories of resources and assessment of issues. *One Watershed, One Plan* will build from this point, with an expanded focus on prioritized, targeted, and measurable implementation of restoration and protection activities. The intent is for these future water plans to use existing plans, local knowledge and other studies and planning documents—including Watershed Restoration and Protection Strategies developed through the Minnesota Pollution Control Agency—to establish plans with clear implementation timelines, milestones, and cost estimates that will address the largest threats and provide the greatest environmental benefit unique to each watershed.

One Watershed, One Plan is not an effort to change local governance.

Local governments have been at the forefront of water management dating back to 1937 with the formation of the State's first soil and water conservation district. *One Watershed, One Plan* is intended to utilize the existing structures of counties, soil and water conservation districts, watershed districts and Metropolitan watershed management organizations by increasing collaboration and cooperation across political boundaries.

One Watershed, One Plan will strive for a systematic, watershed-wide, science-based approach to watershed management; driven by the participating local governments.

It is important for all communities to take part in managing their watersheds through goal setting, monitoring, restoring and protecting water resources and local habitats and ensuring a good quality of life for all who live, work, and recreate in those spaces. A decided "bottom up" approach for water management—allowing the key discussions of major water resource issues, concerns, problems, goals and objectives and potential solutions to originate and be first fully vetted at the stakeholder level—is envisioned. Expanding involvement and collaboration at the ground-level creates greater buy-in and support at all levels of government.

One Watershed, One Plan will use the state's delineated major watersheds (8-digit hydrologic unit codes or HUC8) as the starting point for defining the preferred scale for local watershed management planning.

The Local Government Water Roundtable (LGWR), a collaboration between the Association of Minnesota Counties, the Minnesota Association of Watershed Districts, and the Minnesota Association of Soil and Water Conservation Districts, determined it is in the public interest to manage ground and surface water resources from the perspective of watersheds and aquifers and to achieve protection, preservation, enhancement, and restoration of the state's valuable water resources. This determination is consistent with the state's water management policy, furthered through legislation passed in 2012 that provided BWSR with: the authority to develop and implement a

comprehensive watershed management plan approach and to establish a suggested watershed boundary framework for implementing this planning approach. *One Watershed, One Plan* will transform the current system of water plans, largely organized on political boundaries, to one where plans are coordinated and consolidated largely on a watershed basis.

One Watershed, One Plan must involve a broad range of stakeholders to ensure an integrated approach to watershed management.

The underlying principle of watershed management is that people, land, and water are connected. People use land in a variety of ways, and affect ecosystems and ultimately their own communities for better or worse. Managing and protecting the environment while providing a high quality of life for people is a complex process that is most successful when governing bodies, community members, and experts in various fields are true partners in the planning process. *One Watershed, One Plan* envisions an approach that will pull parties together in every aspect of the water arena in a way that goes beyond the interests of any one government agency or stakeholder and in a way that has never been done before.

Plans developed within One Watershed, One Plan should embrace the concept of multiple benefits in the development and prioritization of implementation strategies and actions.

Prioritized, multi-benefit projects provide benefits to more than one group or interest and address more than one environmental resource within a watershed. These types of projects are necessary to build the support of citizens and agencies, achieve water quality and quantity goals, and produce the environmental goods and benefits that a healthy watershed provides. Examples of multiple benefits might include a combination of any of the following: flood control, water quality benefits, ecological benefits, administrative efficiencies, economic benefits, or others. Identification of and action on multi-benefit projects should be a priority in *One Watershed, One Plan* strategies and actions.

One Watershed, One Plan implementation will be accomplished through formal agreements among participating local governments on how to manage and operate the watershed.

Decision-making that spans political boundaries is essential to fully implement watershed management and achieve established goals for the watershed; therefore, formal agreements outlining the means and method for this decision-making are also essential.

One Watershed, One Plan planning and implementation efforts will recognize local commitment and contribution.

History shows us that when local water management programs and projects rely almost entirely on outside funding, they are unable to sustain themselves over time. Locally supported and funded technical, administration, support, and outreach activities that leverage funding from the State will be key to ensuring sustainable local government capabilities and long-term success on both the local level and watershed scale.

One Watershed, One Plan is not intended to be a one size fits all model.

One Watershed, One Plan must recognize that our local governments charged with water management are just as diverse as the water resources and landscapes that we have in the State. As such, the *One Watershed, One Plan* policies and procedures guided by this principle will be designed to provide options for local governments to choose from that can account for these differences while at the same time move forward in achieving the transition to comprehensive watershed management plans that blanket the State.

Minnesota Board of Water and Soil Resources
520 Lafayette Road North
St. Paul, MN 55155-4194
651-296-3767