

CLEAN WATER COUNCIL

FY26-27
Clean Water
Fund and Policy
Recommendations
Report



Biennial Report to the Legislature
January 2025



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LEGISLATIVE CHARGE AND COUNCIL MEMBERSHIP

Minn. Stat. § 114D.30, Subd. 7, of the Clean Water Legacy Act (CWLA) requires the Clean Water Council (Council) to submit a biennial report to the Legislature by January 15 of each odd-numbered year. The CWLA also requires the Council to recommend to the Governor and the Legislature the manner in which money from the Clean Water Fund (CWF) should be appropriated for the purposes stated in Article XI, Section 15, of the Minnesota Constitution and Minn. Stat. § 114D.50.

Voting members appointed by the Governor serving in 2024:

- John Barten, Lakes & Streams Non-Profit, Chair
- Steven Besser, Fishing Organizations, Chair, Budget & Outcomes Committee
- Rich Biske, Environmental Organizations, Vice-Chair and Chair, Policy Committee
- Richard Brainerd, City Governments, Vice-Chair, Budget & Outcomes Committee
- Gary Burdorf, Township Officers
- Steve Christenson, Business Organizations
- Warren Formo, Farm Organizations
- Brad Gausman, Hunting Organizations
- Kelly Gribauval-Hite, Business Organizations
- Holly Hatlewick, Soil and Water Conservation Districts
- Annie Knight, Environmental Organizations
- Ole Olmanson, Tribal Governments
- Peter Schwagerl, Farm Organizations
- Jessica Wilson, City Governments
- Marcie Weinandt, Watershed Districts, Vice-Chair, Policy Committee
- Vacant—County Governments (Rural)
- Vacant—County Governments (Metro)

Non-voting members appointed by state agencies and the University of Minnesota Board of Regents:

- Gail Cederberg, Metropolitan Council
- Tannie Eshenaur, Minnesota Department of Health
- Justin Hanson, Board of Water and Soil Resources
- Peder Kjeseth, Minnesota Department of Agriculture
- Jason Moeckel, Minnesota Department of Natural Resources
- Jeff Peterson, University of Minnesota
- Glenn Skuta, Minnesota Pollution Control Agency

Non-voting members appointed by the Legislature:

- Rep. Josh Heintzeman, Minnesota House of Representatives
- Sen. Nicole Mitchell, Minnesota Senate
- Rep. Kristi Pursell, Minnesota House of Representatives
- Sen. Nathan Wesenberg, Minnesota Senate

Council Administrator and Principal Author: Paul Gardner

Council Administrative Support: Brianna Frisch

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EXECUTIVE SUMMARY

The Council's Clean Water Fund recommendations for FY26-27 total \$310,752,000. In addition to maintaining support for important programs, the Council would like to highlight the following funding and policy recommendations for FY26-27.

1. Increased support for private well users:

Beginning in southeastern Minnesota, the Minnesota Department of Health (MDH) will provide free well testing for all private well users over ten years, continue building a private well inventory, and educate residents on their options for mitigation if needed.

2. Recommendations for a more comprehensive approach to protecting public and private wells:

In addition to existing Clean Water Fund programs, the Council requests additional funding from the Legislature for more frequent feedlot inspections, more compatible land use that protects drinking water, technical and financial assistance, and additional funding for private well mitigation that cannot be paid for with the Clean Water Fund.

3. Recommendations for drainage:

The Council supports identifying more opportunities for multi-purpose drainage management that add water quality benefits to the existing drainage system management process. Modest technical and financial assistance can reduce peak flows compared to standard drainage improvement, which leads to higher water quality.

4. Continued progress in meeting land protection and restoration goals in key areas:

The Clean Water Fund supports easements that protect and restore shoreline in the Upper Mississippi River Headwaters Basin. These easements protect drinking water quality downstream and maintain healthy surface waters.

5. Completion of watershed plans and increased funding to science- and watershed-based projects:

In FY26-27, all watersheds in Minnesota will have an approved watershed plan under the One Watershed One Plan and Metropolitan Surface

Water Management programs. These units will all receive implementation grants every two years through the Watershed-Based Implementation Funding (WBIF) program.

6. Boosting support for the Lake Superior basin:

The Council is making support for local partners in the Lake Superior Basin part of its base recommendations. These soil and water conservation districts (SWCDs) will have the capacity to apply for and manage additional federal funds that support the Great Lakes.

7. Increased funding for soil health and continuous living cover (CLC):

Assisting farmers with introduction of best practices like no-till, strip-till, and cover crops will help water quality in the years to come. The Council's support for the Forever Green Initiative will prepare Minnesota for a future with income-producing crops with multiple benefits like sustainable aviation fuel.



GLOSSARY

1W1P – One Watershed, One Plan, also known as Comprehensive Watershed Management Plan

AgBMP – Agricultural Best Management Practices

AMT – Alternative Management Tools

AOC – St. Louis River Area of Concern

BMP – Best Management Practices

BOC – Budget and Outcomes Committee

BWSR – Board of Water and Soil Resources

Council – Clean Water Council

CEC – Contaminants of Emerging Concern

CREP – Conservation Reserve Enhancement Program

CWC – Clean Water Council

CWF – Clean Water Fund

CWLA – Clean Water Legacy Act (state)

DNR – Minnesota Department of Natural Resources

DWSMA – Drinking Water Supply Management Area

EJ – Environmental Justice

EPA – U.S. Environmental Protection Agency

FTE – Full Time Equivalent

FY – Fiscal Year

GRAPS – Groundwater Restoration and Protection Strategies

IBI – Index of Biological Integrity

IWM – Intensive Watershed Monitoring

LCC – Legislative Coordinating Commission

LGU – Local Government Unit

LiDAR – Light Detection and Ranging

LLBO – Leech Lake Band of Ojibwe

LLR – Leech Lake River

MAWQCP – Minnesota Agricultural Water Quality Certification Program

MDA – Minnesota Department of Agriculture

MDH – Minnesota Department of Health

Met Council – Metropolitan Council

Minn. – Minnesota

MOSH – Minnesota Office of Soil Health

MPCA – Minnesota Pollution Control Agency

MS4 – Municipal Separate Storm Sewer Systems

NRS – Nutrient Reduction Strategy

PFA – Public Facilities Authority

PFAS – Per- and Polyfluoroalkyl Substances

PSIG – Point Source Implementation Grants

RCPP – Regional Conservation Partnership Program (Natural Resources Conservation Service)

RLDNR – Red Lake Department of Natural Resources

RUSLE2 – Revised Universal Soil Loss Equation

SSTS – Subsurface Sewage Treatment System

Stat. – Statute

Subd. – Subdivision

Subp. – Subpart

SWCD – Soil and Water Conservation District

SWP – **Source Water Protection**

TMDL – Total Maximum Daily Load

UMN – University of Minnesota

WRAPS – Watershed Restoration and Protection Strategies

INTRODUCTION

The Clean Water Fund (CWF) uses 1/3 of the sales tax revenue increase approved by Minnesota voters in 2008 through the Clean Water, Land, and Legacy Amendment (CWLLA) to the state constitution. The Clean Water Council is charged with recommending how the CWF should be used (Minn. Stat. § 114D.50), and the Legislature considers these recommendations as it appropriates funding.

The CWF was created to improve water quality in ways that were beyond the state's existing funding capacity in 2008. The result has been a comprehensive statewide approach that prioritizes, targets, and measures results for improved water quality, as well as other impressive accomplishments detailed elsewhere in this report.

Statutory guidance

The statute governing the CWF specifies these purposes (Minn. Stat. § 114D.50):

- (a) The clean water fund may be spent only to protect, enhance, and restore water quality in lakes, rivers, and streams, to protect groundwater from degradation, and to protect drinking water sources by:
- (1) providing grants, loans, and technical assistance to public agencies and others testing waters, identifying impaired waters, developing total maximum daily loads, implementing restoration plans for impaired waters, and evaluating the effectiveness of restoration;
 - (2) supporting measures to prevent surface waters from becoming impaired and to improve the quality of waters that are listed as impaired, but do not have an approved total maximum daily load addressing the impairment;
 - (3) providing grants and loans for wastewater and stormwater treatment projects through the Public Facilities Authority;
 - (4) supporting measures to prevent the degradation of groundwater in accordance with the groundwater degradation prevention goal under section 103H.001; and
 - (5) providing funds to state agencies to carry out their responsibilities, including enhanced compliance and enforcement.

(b) Funds from the clean water fund must supplement traditional sources of funding for these purposes and may not be used as a substitute.

State law (Minn. Stat. § 114D.30) also specifies what type of spending the Council must recommend:

(a) The Clean Water Council shall recommend to the governor and the legislature the manner in which money from the clean water fund should be appropriated for the purposes stated in article XI, section 15, of the Minnesota Constitution and section 114D.50.

(b) The Council's recommendations must:

(1) be to protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation and ensure that at least five percent of the clean water fund is spent only to protect drinking water sources;

(2) be consistent with the purposes, policies, goals, and priorities in this chapter; and

(3) allocate adequate support and resources to identify degraded groundwater and impaired waters, develop TMDLs, implement restoration of groundwater and impaired waters, and provide assistance and incentives to prevent groundwater and surface waters from becoming degraded or impaired and improve the quality of surface waters which are listed as impaired but have no approved TMDL.

(c) The Council must recommend methods of ensuring that awards of grants, loans, or other funds from the clean water fund specify the outcomes to be achieved as a result of the funding and specify standards to hold the recipient accountable for achieving the desired outcomes. Expenditures from the fund must be appropriated by law.

In response, the CWC has recommended spending over several biennia that creates a comprehensive approach to accomplish the objectives in statute.

The Clean Water Fund was created to improve water quality in ways that were beyond the state's existing funding capacity in 2008.

INTRODUCTION – SURFACE WATERS

Surface waters

The state has used a watershed-based approach for improving or protecting the quality of Minnesota surface waters. It adheres to the Minnesota Water Management Framework developed in 2014.

The state has used a watershed-based approach for improving or protecting the quality of Minnesota surface waters.

Identifying what's wrong (or healthy) with the water: monitoring, assessment, and characterization

State agencies and local government partners test the state's surface waters in our 80 major watersheds. They determine initial water quality, assess water quality compared to the state's water quality standards to determine if waters are supporting their goals or are impaired, and evaluate other factors impacting water quality such as land use. This initial intensive baseline monitoring approach has been completed in a ten-year cycle that ended in 2019 and is more than halfway through the second monitoring cycle. This funding also supports some evaluation of the presence and levels of contaminants of emerging concern in the state's surface waters. (Monitoring is covered in detail later in the report.)

Figure 1: Water management framework



Blueprint for improvement: watershed restoration and protection strategies

The MPCA, working with local water resource managers, develops a blueprint for each watershed (called a Watershed Restoration and Protection Strategies, or WRAPS report) that identifies what actions will be required to meet water quality goals and how much those actions will cost. The MPCA also determines Total Maximum Daily Loads (TMDLs) for contaminants in water.

Prioritizing projects: One Watershed One Plan

BWSR supports local partnerships of local and tribal governments in each major watershed to develop a comprehensive watershed management plan under the One Watershed One Plan program. These plans identify local concerns which, along with strategies in the WRAPS, guide funding priorities.

INTRODUCTION – SURFACE WATERS

Funding the priorities: implementation

The CWF provides financial support via BWSR for priority projects in watershed plans. The CWF has also supported capacity building for local governments to implement projects (“accelerated implementation”) as well as competitive grants to watersheds that do not yet have an approved plan (“projects and practices”).

The CWF is also a source of funds for “protection” strategies such as easements that maintain or improve water quality through less intensive land use. “Restoration” projects help waterways and surrounding land mimic natural functions for improved water quality.

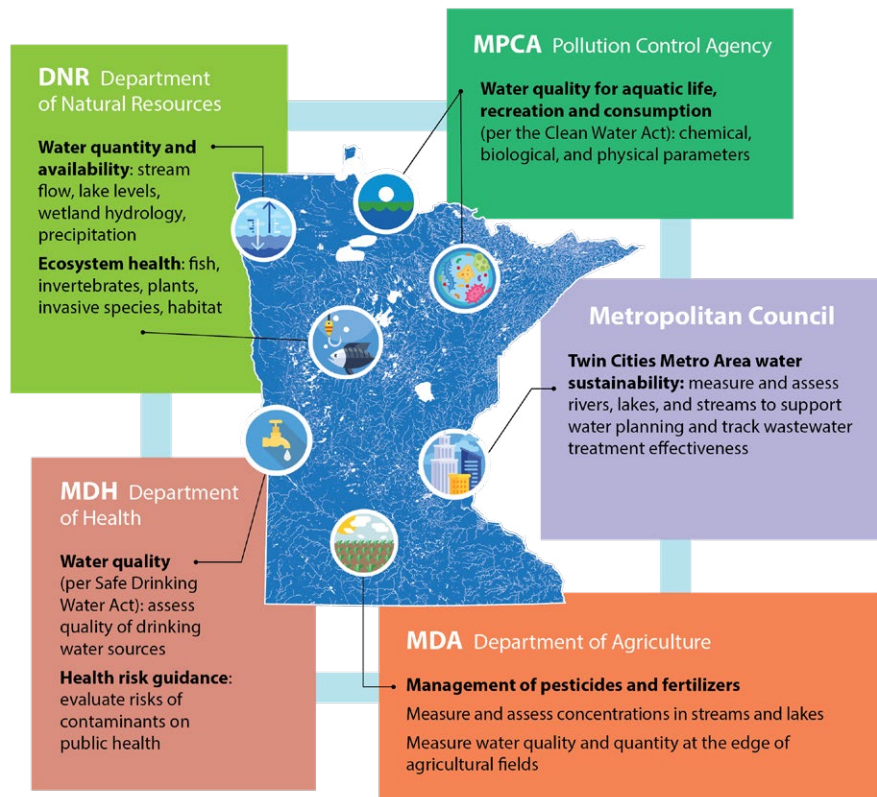
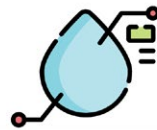
The DNR, MDA, and MDH provide technical assistance to landowners and local governments to ensure project success.

The CWF supports implementation in several other ways that are mentioned later in the report:

- The CWF funds the MPCA subsurface sewage treatment system (SSTS) enhanced compliance program to improve septic system performance.
- BWSR is supporting the capacity of soil and water conservation districts in the Lake Superior Basin so that they can manage more projects with matching federal funding.
- A group of local governments in St. Louis County use the CWF to reduce the amount of sewage entering Voyageurs National Park.
- The PFA receives CWF support for water treatment facility upgrades through the Point Source Implementation Grant (PSIG) program.

Figure 2: Surface water monitoring in Minnesota

These agencies, along with their many local partners, work together and share responsibilities for monitoring water bodies in the state, from edge of agricultural fields, to streams and rivers, wetlands and lakes. Each agency plays an important role with a distinct focus.



Measurement and evaluation

The MPCA is now carrying out a targeted second ten-year monitoring cycle using a reduced set of monitoring sites and a strategy to measure progress for projects completed during the process listed above.

The DNR, MDA, and MDH provide technical assistance to landowners and local governments to ensure project success.

INTRODUCTION – DRINKING WATER

Drinking water

Minnesota’s approach to protecting drinking water sources has been comprehensive and often aligns with the watershed-based approach for surface waters.

(A more detailed description of how the CWF programs protect and restore sources of drinking water can be found later in the report.)

Gathering groundwater and drinking water information: monitoring, assessment, and characterization

The state compiles data on our groundwater, both quality and quantity, from multiple sources that work together to provide a comprehensive picture. This includes county geologic and groundwater atlases from the Minnesota Geological Survey and the DNR, respectively. In addition, the DNR also maintains a network of aquifer level monitoring wells. The MDA samples for pesticides and nitrate in private wells in areas with vulnerable groundwater and analyzes pesticides statewide with some of the most sophisticated laboratory capability in the country. The MPCA monitors groundwater quality in non-agricultural parts of the state. The MDH develops health-based guidance for selected contaminants that are anticipated to be found in state’s waters and federally regulated, as well as contaminants that are not regulated by the federal government.

Blueprint for improvement: drinking water source protection planning

The MDH works with public water suppliers to develop plans to protect community drinking water wells. The MDH funds many of the activities required to fulfill the plans ensuring the wells are protected indefinitely.

The state compiles data on our groundwater, both quality and quantity, from multiple sources that work together to provide a comprehensive picture.

Watershed-based planning: Groundwater Restoration and Protection Strategies (GRAPS)

An interagency team led by the MDH completes Groundwater Restoration and Protection Strategies (GRAPS) that align with the MPCA’s Watershed Restoration and Protection Strategies (WRAPS). The GRAPS identify which steps need to happen to protect groundwater in major watersheds. The GRAPS assist in the development of Comprehensive Watershed Management Plans (One Watershed One Plan).

Funding priority projects: implementation

The MDH provides source water protection grants that help keep contaminants out of community water supplies. BWSR uses easements, grants, and technical assistance to protect drinking water sources through better land use. The MDA works with farmers and agronomists to adopt practices that protect groundwater. The Metropolitan Council (Met Council) works with businesses and households to reduce their groundwater use in the seven-county metro area to accommodate future population growth. The MPCA’s Subsurface Sewage Treatment System program supports enhanced inspection of septic systems and grants for selected low-income households.



INTRODUCTION – VALUE OF THE CLEAN WATER FUND

The Value of the Clean Water Fund

The CWF has given the state of Minnesota new tools and resources that empower it to identify impaired waters and then protect and restore them in a way not possible before 2008 when the Legacy Amendment passed. Prior to the passage of the Legacy Amendment, there were several barriers preventing the state from achieving its goals of protecting and improving Minnesota's water.

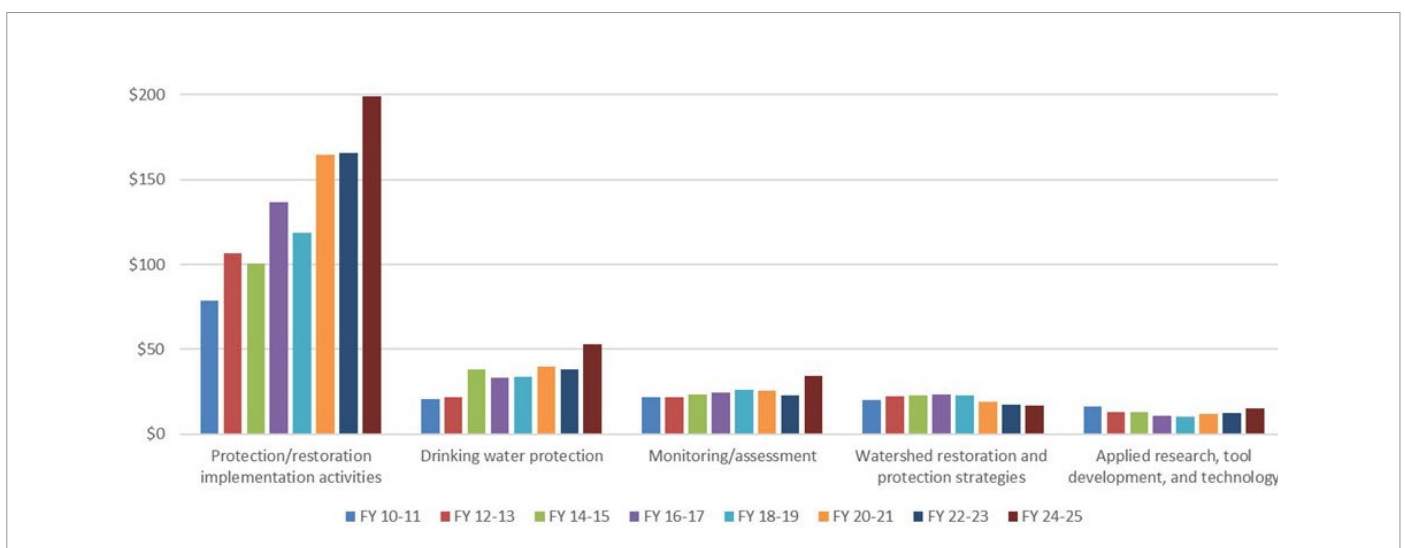
- The U.S. Environmental Protection Agency (EPA) requires that the state develop Total Maximum Daily Load (TMDL) reports to determine how much of a particular contaminant would cause a body of water to be impaired. Prior to 2008, the state lacked the funding to do this in a systematic fashion and on a reasonable time frame. The state has greatly accelerated progress and is exceeding EPA expectations.
 - Accurate data and information, such as that provided by the MPCA's intensive watershed monitoring approach and water quality models, is needed to support development of effluent limits and other discharge permit requirements. Permit holders such as municipal wastewater treatment plants rely on accurate data and information to make appropriate investments to meet the requirements in discharge permits. Regulatory agencies may need to be more conservative, resulting in more expensive fixes, if accurate information is lacking.
 - State agencies only had the funding to sample a small amount of the state's waters infrequently, and in response to complaints, before the Legacy Amendment. They could not determine in most places which waters were healthy and in need of protection, or see if protection and restoration efforts were working. This resulted in long delays to develop and issue discharge permits and ultimately led to legal challenges from communities where economic and population growth was limited because of the delay. Minnesota now has a world-class monitoring system.
 - There was little coordination among various local government units on local nonpoint water plans, and quality varied. Planning is now conducted on a coordinated, watershed basis, rather than discreetly along political boundaries.
- The predictable and long-term funding from the Legacy Amendment has overcome these obstacles.
- The state has completed intensive water monitoring and assessment for every watershed in the state over ten years. The MPCA knows which waters are impaired, and which are not but could be without action. In a second ten-year monitoring cycle, the state is now targeting its efforts to determine whether protection and restoration activities are working, while preserving the overall data record to continue monitoring overall conditions over time.
 - The MPCA completed all Watershed Restoration and Protection Strategies (WRAPS) reports for all 80 major watersheds in the state in 2023. The WRAPS incorporates all the monitoring and assessment work as well as the TMDLs for each watershed.
 - BWSR supports partnerships of local and tribal governments developing plans based on major watershed boundaries.
 - CWF investments in water treatment facilities through the PSIG program make it possible for the state to leverage more federal investments from the Clean Water Revolving Fund.
 - The MDH coordinates with the agencies charged with protecting groundwater by producing Groundwater Restoration and Protection Strategies for the One Watershed One Plan watersheds. In addition, the MDH has delineated all areas around public water supply wellheads that require protection—a Drinking Water Supply Management Area (DWSMA).
 - CWF investments have allowed the MDA to revise and implement the Nitrogen Fertilizer Management Plan and create the Groundwater Protection Rule to address nitrate from fertilizer in groundwater.
- Beyond identifying impaired waters, the CWF is now supporting an increasing number of projects that are designed to remove these impairments in a way that could not be done without the CWF.
- BWSR provides grants to watersheds to fulfill priority activities in watershed plans. These targeted efforts—based on the water monitoring, assessment, and characterization supported by the CWF—speed up priority projects and avoid “random acts of conservation.”

INTRODUCTION – VALUE OF THE CLEAN WATER FUND

- The CWF is the catalyst that allows high-impact projects to happen more quickly. The CWF is often the seed funding that attracts matching local, state, federal, and/or private dollars. An example is the St. Louis River Area of Concern (AOC). In and upstream from the Duluth harbor, the CWF supported MPCA staff who administer a complex set of clean-up projects. These projects brought in state bonding dollars, other Legacy Amendment support for outdoor habitat (Outdoor Heritage Fund), and federal Great Lakes Restoration Initiative funding. Other prominent examples include the Forever Green Initiative and the Minnesota Agricultural Water Quality Certification Program, both of which attract significant private and federal financial support, respectively.
- The 2024 Clean Water Fund Performance Report estimates that for the period 2010-2023, other funding sources provided \$1.06 for every dollar spent from the CWF, totaling \$630 million.
- Smaller amounts of CWF funding—such as BWSR Accelerated Implementation grants—help local governments increase their capacity to handle bigger projects.
- The federal Safe Drinking Water Act requires that public water suppliers prepare a source water assessment of potential threats to drinking water from surface waters. The CWF allows the MDH to go beyond just an assessment by supporting a source water protection plan that identifies what activities will protect the source.
- The CWF has developed tools that few other states have. For example, Minnesota is the first state to create a statewide chloride management plan. The plan, which includes some new elements to the statewide general storm water permit, will help reduce impairments for chloride. The MPCA’s Smart Salting Assessment Tool is something used by many other states.
- By supporting key staff and equipment, clean water funding has allowed the MDA to increase the number of detectable pesticides, increase the sensitivity of detection of certain pesticides and increase the overall number of samples that can be analyzed on an annual basis.

The Clean Water Fund is often the seed funding that attracts matching local, state, federal, and/or private dollars.

Figure 3: Clean Water Fund appropriations by category



FUNDING RECOMMENDATIONS

These recommendations for fiscal years 2026-2027 apply for the period beginning July 1, 2025 and ending June 30, 2027.

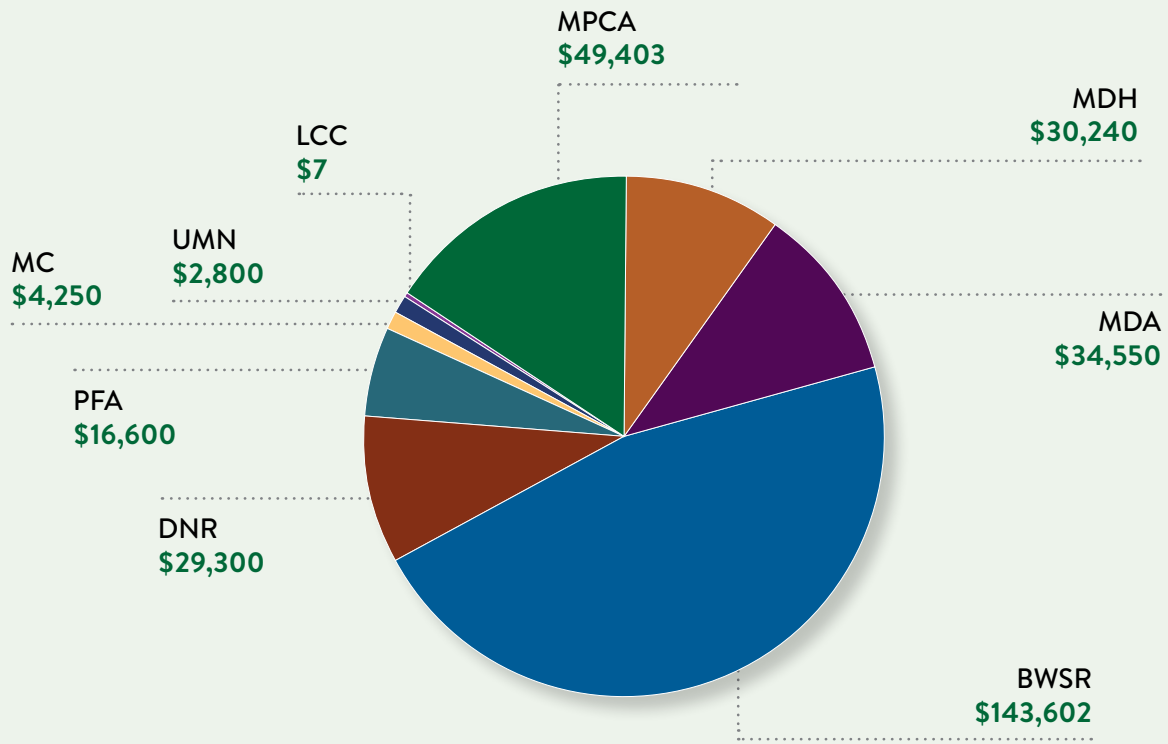
The Council's Budget & Outcomes Committee (BOC) developed its recommendations over the course of six months, first beginning with presentations from applicants. The Council then requested that state agencies and the University of Minnesota adhere to the objectives in the Council's 2024 Strategic Plan when submitting proposals for CWF funding.

The Council requested public input in writing and received comments from the following organizations and individuals:

- AgCountry Bank
- Anoka Conservation District
- Ash River Sewer District
- Bassett Creek Watershed Management Commission
- Bois de Sioux Watershed District
- Carver County
- Chippewa River Watershed Association
- City of Avon
- City of Bayport
- City of Chanhassen
- City of Cold Spring
- City of Darwin
- City of Eden Prairie
- City of Gibbon
- City of Glenwood
- City of Goodhue
- City of Grey Eagle
- City of Lake Elmo
- City of Le Center
- City of Little Falls
- City of Luverne
- City of Mankato
- City of Milaca
- City of Minnetonka
- City of Moorhead
- City of Mora
- City of New Brighton
- City of North St. Paul
- City of Ogilvie
- City of Onamia
- City of Pipestone
- City of Prior Lake
- City of Randall
- City of Robbinsdale
- City of Shoreview
- City of St. Hilaire
- City of St. Louis Park
- City of Waconia
- City of Woodbury
- Coalition of Greater MN Cities
- Conservation Minnesota
- Cook County
- Coon Creek Watershed District
- David Craig
- Crane Lake Water & Sanitary District
- Dakota County
- First Farmers and Merchants Bank Cannon Falls
- Forever Green advocates
- Freshwater
- Friends of the Mississippi River
- Goodhue County
- Senator Grant Hauschild
- Kabetogama Township
- Koochiching County
- Lower St. Croix Watershed Partnership
- Tom Lynch
- Lyon County
- Senator Jen McEwen
- Middle-Snake-Tamarac Rivers Watershed District
- Mille Lacs SWCD
- Minnesota Center for Environmental Advocacy
- Minnesota Corn Growers Association
- Minnesota Crop Production Retailers
- Minnesota Department of Transportation, Erosion and Stormwater Management Unit
- Minnesota River Watershed Drainage Collaborative
- Minnesota Water Well Association
- Minnesota Well Owners Association
- Mississippi River St. Cloud Watershed Partnership
- Mississippi Water Management Organization
- MN Environmental Partnership
- Moose Track Adventures, Ely
- Mower County
- Mustinka River Watershed Districts
- Nature Conservancy
- North Fork River Watershed Collaborative
- Oakwood Bank
- Olmsted County
- Bruce M. Olson
- Pope County SWCD
- James Raymond, farmer
- Rock County
- Roseau River Watershed District
- John Rud
- Rum River Watershed Partnership
- Sauk River Watershed Collaborative
- Scott County Water Management Organization (WMO)
- Simple Harvest Farm Organics
- South Washington Watershed District
- SRF Consulting Group
- Jeffrey Stoner, retired hydrologist
- West Otter Tail SWCD
- WinLAC Partnership (Winona-La Crescent One Watershed One Plan)
- Winona County Coalition for Clean Water

FUNDING RECOMMENDATIONS

Figure 4: Spending breakdown by agency (000's)

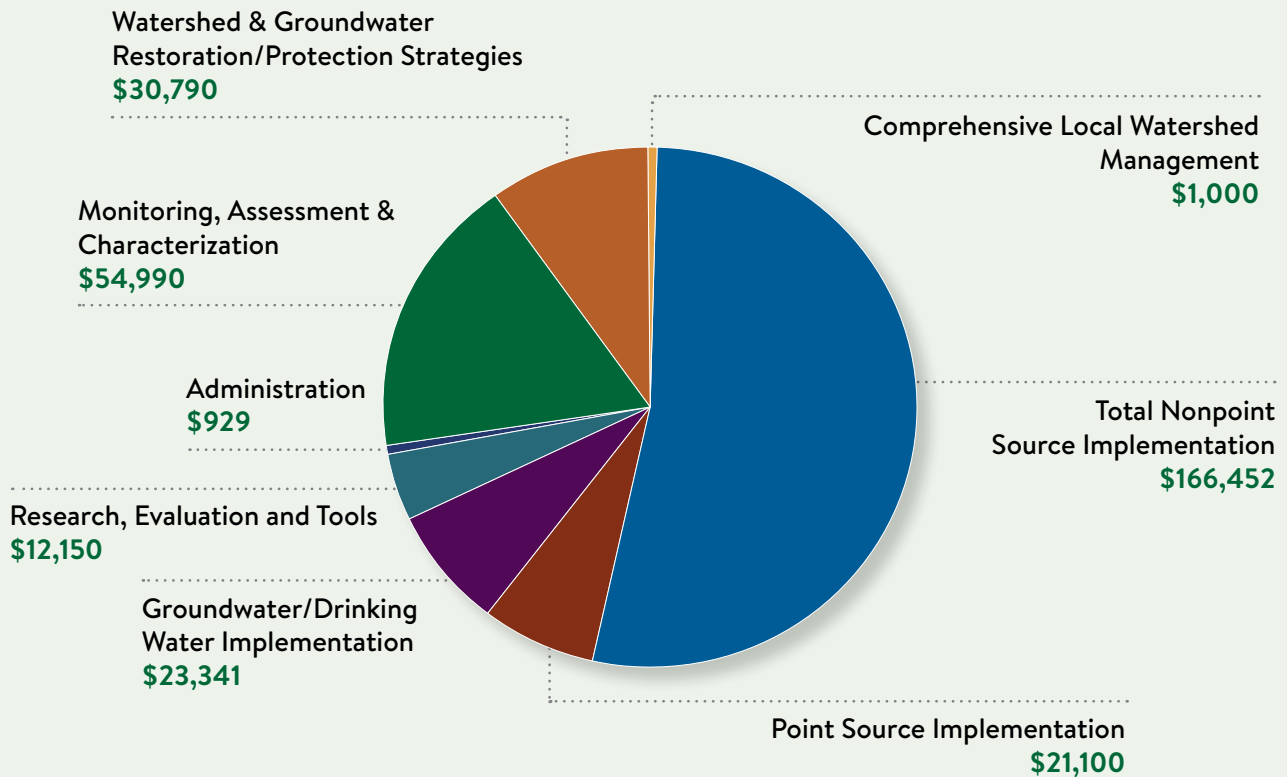


Agency Acronyms

- | | |
|--|---|
| BWSR – Board of Water & Soil Resources | MDA – Minnesota Department of Agriculture |
| DNR – Department of Natural Resources | MDH – Minnesota Department of Health |
| LCC – Legislative Coordinating Committee | MPCA – Minnesota Pollution Control Agency |
| MC – Metropolitan Council | PFA – Public Facilities Authority |

FUNDING RECOMMENDATIONS

Figure 5: Spending breakdown by water management framework category (000's)



- Nonpoint source implementation:** Programs and projects that address pollution from nonpoint sources – storm sewers, failing septic systems, and runoff from construction sites, agricultural runoff, paved surfaces, and lawns.
- Point source implementation:** Programs and projects that address pollution from a single location such as a wastewater treatment plant.
- Groundwater/drinking water implementation:** Projects that address water quality and quantity needs in groundwater and drinking water.
- Monitoring, characterization, and assessment:** Programs that determine the condition of ground and surface waters, and analyze and synthesize data so that key interactions, stressors, and threats are understood.
- Watershed and groundwater restoration and protection strategies:** Development of science and strategies that help identify priorities in each of the state’s 80 major watersheds.
- Comprehensive local watershed management:** Planning for prioritized, targeted, and measurable actions for each major watershed (“One Watershed One Plan”).

FUNDING RECOMMENDATIONS

Monitoring, Assessment, and Characterization

Agency	Activity	Summary of Program	Recommendations (000's)
DNR	Stream Flow Monitoring Program	Continuously monitors 172 sites for volume, chemistry, and sediment.	\$5,650
DNR	Lake Index of Biological Integrity	Surveys fish and aquatic plants in 495 lakes for stressors. Results serve as proxy for “fishable” waters.	\$3,050
DNR	Fish Contamination Assessment	Tests fish for mercury, PCBs, and PFAS for 1385 lakes and 114 rivers.	\$1,100
DNR	Aquifer Monitoring for Water Supply Planning	Monitors 1,250 wells statewide and installs 25 new wells annually from the CWF. Provides planning and technical assistance to water suppliers and LGUs.	\$4,700
MDA	Monitoring for Pesticides in Surface Water and Groundwater	Added over 140 additional pesticide analytes and analyzes about 400 additional pesticide water quality samples annually at MDA lab for risk assessment, planning, and BMPs.	\$740
MDA	Pesticide Testing in Private Wells	Provides free pesticide testing for vulnerable wells in agricultural regions around the state, and has completed free pesticide testing for 6,100 vulnerable wells in 344 priority townships.	\$1,000
MDH	Contaminants of Emerging Concern	Develops health-based drinking water guidance for about five contaminants annually, with PFAS efforts to increase with this new recommendation.	\$11,850
MDH	Private Well Initiative	Will offer free private well testing for five contaminants to 10 percent of Minnesota's private well owners annually for ten years. Adds to private well inventory and supports education.	\$6,000
MPCA	River and Lake Monitoring and Assessment	Completes intensive monitoring in about eight watersheds per year, and annual pollutant monitoring at 197 sites annually. New recommendations will support regular PFAS monitoring.	\$18,900
MPCA	Groundwater Monitoring and Assessment	Performs water quality sampling & data analysis from network of 270 ambient wells.	\$2,000

Monitoring, Assessment, and Characterization Total – \$54,990



FUNDING RECOMMENDATIONS

Watershed & Groundwater Restoration/Protection Strategies

Agency	Activity	Summary of Program	Recommendations (000's)
DNR	Watershed Restoration and Protection Strategies–DNR Portion	Adds geomorphology, hydrology, and connectivity data to WRAPS process, and supports Watershed Health Assessment Framework (WHAF) tool.	\$5,000
MDH	Source Water Protection	Assists public water systems in the management of over 500 source water protection plans statewide. Completes new or updated planning and data driven strategies for 60 systems during the biennium. Provides grants for implementation activities. Collaborates with other local planning efforts and develops and coordinates water quality surveillance activities.	\$7,790
MDH	Groundwater Restoration and Protection Strategies	Completes GRAPS for six to eight major watersheds annually in alignment with comprehensive watershed management plans (One Watershed One Plan). Also provides training and makes groundwater data public.	\$3,500
MPCA	Watershed Restoration & Protection Strategies (includes TMDL development)	Develops and updates data-driven strategies to meet water quality goals in each of 80 watersheds. Also completes required TMDLs for impaired waters. Evaluates effectiveness of efforts over time.	\$14,500

Watershed & Groundwater Restoration/Protection Strategies Total – \$30,790

Comprehensive Local Watershed Management

Agency	Activity	Summary of Program	Recommendations (000's)
BWSR	Watershed Management Transition (One Watershed, One Plan)	Maintains completed comprehensive watershed management plans through plan assessments and amendments, and provides ongoing program support.	\$1,000

Comprehensive Local Watershed Management Total – \$1,000

FUNDING RECOMMENDATIONS

Nonpoint Source Implementation

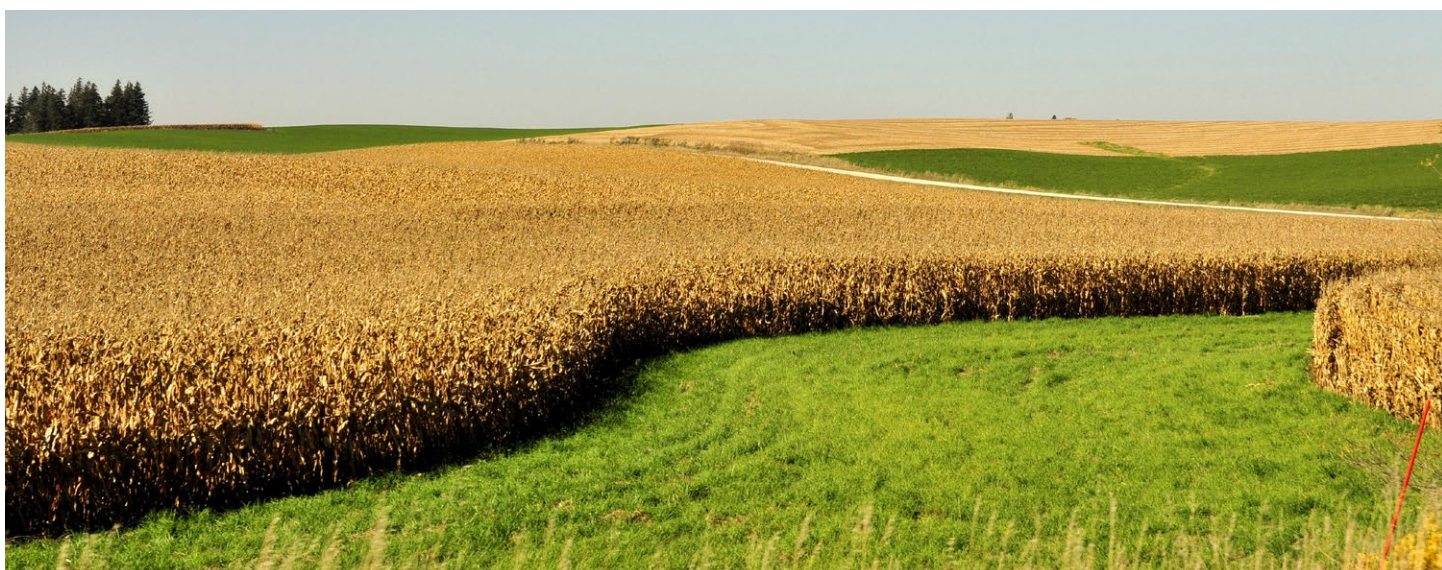
Agency	Activity	Summary of Program	Recommendations (000's)
BWSR	Grants to Watersheds with Approved Comprehensive Watershed Plans (Watershed-based Implementation Funding)	Makes non-competitive grants to fulfill projects in approved comprehensive watershed management plans (One Watershed One Plan) and plans developed under the metro surface water and groundwater programs.	\$90,000
BWSR	Surface and Drinking Water Protection/Restoration Grants: (Projects and Practices)	Makes competitive grants for high priority conservation BMPs in local water plans. Up to twenty percent must support drinking water.	\$6,000
BWSR	Accelerated Implementation	Builds technical skills through Technical Service Areas and technical trainings. This grant program builds the capacity of local governments to accelerate on-the-ground projects that improve or protect water quality and perform above and beyond existing standards.	\$8,700
BWSR	Measures, Results and Accountability	Supports grants management, reporting, and oversight.	\$2,500
BWSR	Buffer Law Implementation	Supports oversight and grants to SWCDs for implementation of the buffer law. Does not include enforcement.	\$4,000
BWSR	Working Lands Floodplain Easements [formerly Riparian Buffer-Permanent Conservation Easements]	Establishes and restores easements in floodplains and riparian areas.	\$2,000
BWSR	Conservation Drainage Management and Assistance	Provides grants and technical assistance to SWCDs/drainage authorities for water quality BMPs.	\$2,000
BWSR	Critical Shoreland Protection-Permanent Conservation Easements	Protects threatened shoreline with easements to protect good water quality.	\$1,000
BWSR	Watershed Partners Legacy (WPL) Grants	Makes small grants to tribal governments and nonprofit organizations.	\$1,000
BWSR	Wetland Restoration Easements	Creates permanent easements for de-nitrification and rate and volume control.	\$5,000
BWSR	Enhancing Soil Health and Landowner Adoption of Cover Crops for Drinking Water & Groundwater Protection	Supports Minnesota Office of Soil Health (MOSH). Makes grants to SWCDs for cover crop and conservation tillage demonstration projects. Supports Governor's climate initiative.	\$11,852
BWSR	Great Lakes Restoration LAMP	Supports SWCD capacity in Lake Superior Basin in order to seek out and implement matching Great Lakes Restoration Initiative (GLRI) funds.	\$1,000
BWSR	MN & IA Conservation Corps	Supports Conservation Corps' work on water quality projects supported by the Clean Water Fund.	\$1,500
DNR	Non-point Source Restoration and Implementation	Provides technical assistance for 85 projects annually that are prioritized in comprehensive watershed management plans.	\$4,500

FUNDING RECOMMENDATIONS

Nonpoint Source Implementation Cont'd

Agency	Activity	Summary of Program	Recommendations (000's)
DNR	Freshwater Mussel Restoration	Will increase native mussel production at Lake City facility and field test restoration in three major watersheds for water quality.	\$700
DNR	Culvert Replacement Cost Share	Will provide financial and technical assistance for 20 local government projects to replace culverts that support floodplain connectivity, biological connectivity, and channel stability.	\$3,000
MC	Water Demand Reduction-Efficiency – Grant Program	Makes grants to metro cities to replace inefficient residential fixtures/sprinklers to reduce groundwater demand.	\$1,500
MDA	AgBMP Loan Program	Loan program to provide low or no interest financing to farmers, agricultural businesses, rural landowners and others for the implementation of best management practices that prevent, reduce or eliminate environmental pollution.	\$4,000
MDA	Technical Assistance	Supports work with farmers and the agricultural community including 25 edge-of-field water quality monitoring sites, 100 farm demonstration plots, and 30 field days and other events annually.	\$3,200
MDA	MN Agricultural Water Quality Certification Program	Provides technical and financial assistance for farmers to adopt water quality BMPs with verified results. Matched with federal Regional Conservation Partnership Program (RCPP) grant.	\$7,000
MDA	Conservation Equipment Assistance	Assists SWCDs and farmers with new or retrofitted equipment for implementing soil health practices, such as conservation tillage and cover crops.	\$3,500
MDA	Expand MN Ag Weather Station Network	Will expand network to optimize timing of irrigation, fertilizer, pesticide, and manure applications.	\$2,500

Nonpoint Source Implementation Total – \$166,452



FUNDING RECOMMENDATIONS

Point Source Implementation

Agency	Activity	Summary of Program	Recommendations (000's)
MPCA	NPDES wastewater/stormwater point-source implementation (combined from 2 previous programs)	Provides technical assistance to cities to help them comply with state stormwater permit. Integrates stormwater and wastewater data with WRAPS and includes TMDLs in permits. Supports pollutant trades. Maintains Minnesota Stormwater Manual.	\$3,200
MPCA	Chloride Reduction	Provides technical assistance and grants to public entities to meet chloride TMDLs, mostly from road de-icers and water softening.	\$1,300
PFA	Point Source Implementation Grant (5G) Program	Upgrades municipal water treatment facilities to comply with TMDLs.	\$16,500
PFA	Small Community Wastewater Treatment Program	Makes grants & loans to replace failing community SSTS.	\$100

Point Source Implementation Total – \$21,100

Groundwater/Drinking Water Implementation

Agency	Activity	Summary of Program	Recommendations (000's)
BWSR	Targeted Wellhead/Drinking Water Source Protection	Makes easements and grants to LGUs in priority wellhead protection areas.	\$5,000
MC	Metropolitan Area Water Sustainability Support Program	Provides technical support to communities and businesses to use groundwater more efficiently.	\$2,750
MDA	Nitrate in Groundwater	Supports implementation of the new Groundwater Protection Rule and Nitrogen Fertilizer Management Plan to reduce nitrate from fertilizer to groundwater. Working with 38 local government units on nitrate monitoring and reduction activities.	\$6,200
MDA	Irrigation Water Quality Protection	Funds irrigation UMN extension staff to educate on agricultural irrigation and nitrate BMPs.	\$310
MDH	Future of Drinking Water (formerly Drinking Water Protection)	Will develop a statewide Drinking Water Plan that will include public health policies and will address threats to public and private drinking water supplies.	\$500
MPCA	Enhanced County inspections/SSTS corrective actions	Provides county grants for more SSTS inspections and income based assistance to maintain 80 percent compliance.	\$7,081
MPCA	National Park Water Quality Protection Program	Replaces failing septic systems polluting Voyageurs National Park. Matched by local, state, and federal sources.	\$1,500

Groundwater/Drinking Water Implementation Total – \$23,341

FUNDING RECOMMENDATIONS

Research, Evaluation, and Tools

Agency	Activity	Summary of Program	Recommendations (000's)
BWSR	Technical Evaluation [restoration evaluation]	Conducts up to 10 technical evaluations of CWF projects annually. Required by law.	\$200
BWSR	Tillage, Cover Crop and Erosion Evaluation	Estimates soil erosion and tracks use of tillage BMPs and cover crops.	\$850
DNR	Tool Development and Evaluation [Formerly Applied Research and Tools]	Evaluates water flow ("digital dams") and forestry BMPs throughout the state, and develops fine-scale watershed models using LiDAR.	\$1,400
DNR	County Geologic Atlas Part B	Develops Part B county level groundwater atlases.	\$200
MDA	MN Water Research Digital Library [aka Research Inventory Database]	The MN Water Research Digital Library is a one stop to find water related research and reports in Minnesota.	\$100
MDA	Forever Green Agricultural Initiative (UMN)	Supports competitive R&D grants for crops providing continuous living cover, and implementation of those crops.	\$6,000
MDH	Recreational Water Portal	Will develop a statewide portal for beach monitoring results, closures, and public health notifications.	\$600
UMN	County Geologic Atlas Part A	Develops Part A county-level geologic atlases.	\$800
UMN	Stormwater Research and Technology Transfer Program	Makes competitive grants to research and evaluate stormwater BMPs.	\$2,000

Research, Evaluation, and Tools Total – \$12,150

Administration

Agency	Activity	Summary of Program	Recommendations (000's)
LCC	Legislative Coordinating Commission Website	Supports upkeep of LCC site with CWF project information. Required by law.	\$7
MPCA	Clean Water Council	Funds two FTEs, communications, planning, and Council member expenses.	\$922

Administration Total – \$929

Total Clean Water Fund Recommendations FY26-27 – \$310,752

POLICY RECOMMENDATIONS

Policy Recommendations

The Council recognizes that CWF dollars alone will not meet the expectations of Minnesotans for clean water. The Council, through its Policy Committee, has revised its standing platform with several updates and new policies for FY26-27 on the following topics:

- **Advanced drinking water protection**
- **Multi-purpose drainage management**
- **Minnesota underground utilities mapping project**
- **Pharmaceutical product stewardship**
- **PFAS**
- **Chloride reduction (de-icer)**
- **Chloride reduction (water softening)**

Advanced drinking water protection

The state of Minnesota should ensure that private well users have safe, sufficient, and equitable access to drinking water. Priority contaminants are nitrate, bacteria, arsenic, manganese, lead, and pesticides. The Clean Water Fund combined with other funding sources (including fees), and appropriate policy should be used to support the following:

- Completion of a private well inventory, starting in southeastern Minnesota, as well as timely updates to the Minnesota Well Index
- Information to well users to reduce their risk, including well testing
- Local and state capacity to manage testing, mapping, and education
- Stable, reliable funding of cost-effective strategies for private well users to mitigate wells that do not meet Minnesota health-based guidance for five contaminants, with a particular focus on low-income households
- Publication of aggregate and anonymized well data
- Land use compatible with private well protection (e.g., forage, continuous living cover, working lands easements, etc.), including the prioritization of areas draining to vulnerable private wells

- Adequate technical and financial assistance for fertilizer and pesticide management, irrigation education, and manure storage and use
- Development and adoption of local government ordinances that require well testing and a disclosure of the testing at the time a property is transferred
- Financial support for regulation of feedlots and the land application of manure
- Evaluation of current programs for efficacy in meeting drinking water source protection goals
- Consider designating acreage that drains to the most vulnerable private wells for protective practices like Drinking Water Supply Management Areas (DWSMAs).

Multi-purpose drainage management

The state of Minnesota should:

1. Identify more opportunities for multi-purpose drainage management and water storage that improve water quality and complement Watershed Restoration and Protection Strategies (WRAPS) and One Watershed One Plan (1W1P)
2. Request data to quantify the effectiveness of Multi-Purpose Drainage Management relative to nutrient transport and hydrologic changes compared to traditional drainage systems, and an estimate of the hydrologic impact of drainage projects on downstream rivers and streams
3. Support opportunities for training of drainage engineers, drainage authorities, and other relevant professionals on the benefits of MDM and resources available, to encourage line-item estimates for conservation practices, and to encourage cost-benefit analysis of water storage and its resulting impact on drainage system and maintenance costs
4. Develop a drainage endorsement for the Minnesota Agricultural Water Quality Certification Program (MAWQCP) with the input of the Drainage Work Group and other stakeholders.

POLICY RECOMMENDATIONS

Minnesota underground utilities mapping project

To create an accurate inventory of Minnesota’s underground utility infrastructure, the Council recommends that the state of Minnesota develop an accurate map of all underground utilities installed in the state and require Minnesota’s public and private sectors to support sharing of necessary data in a secure and confidential manner.

The underground utility infrastructure mapping project supports the Council’s efforts to reduce the risk to drinkable, fishable, and swimmable water.

Pharmaceutical product stewardship

The Council recommends that the state establish the following to reduce the discharge of pharmaceuticals into the waters of Minnesota:

1. Fund research on the pathways of pharmaceuticals into surface water and groundwater, identify priority pharmaceuticals that pose the greatest risk to human health and aquatic life, identify and support practicable solutions to reduce their entry into Minnesota waters, and recoup reasonable costs through an industry-funded safe medication return program.
2. Adopt a “Safe Medication Return Program.” This legislation should provide flexibility by:
 - Utilizing the current collection infrastructure
 - Requiring manufacturers to support public education and outreach activities; and to cover all administrative and support costs including, but not limited to: collection, compensation to authorized collectors, transportation, secure receptacles, and environmentally sound disposal of covered pharmaceuticals

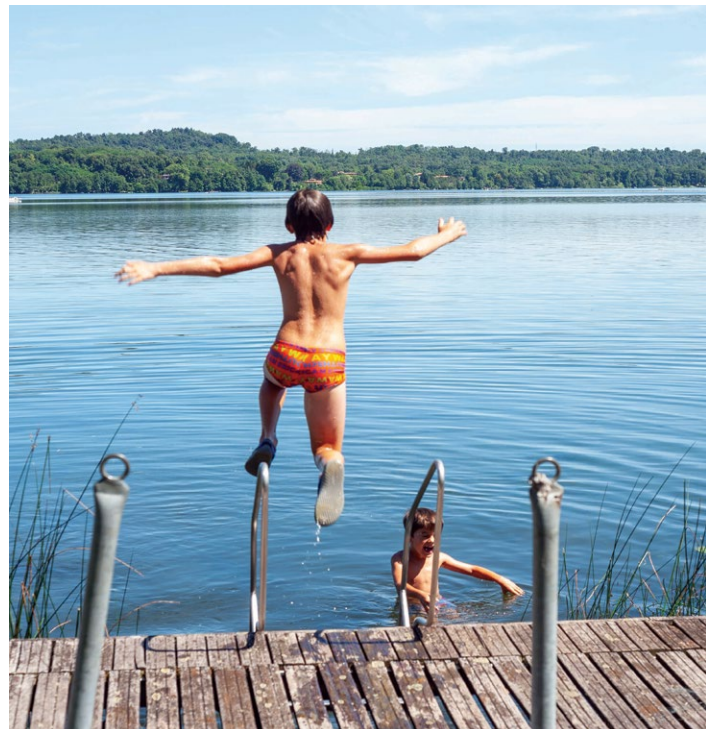
The underground utility infrastructure mapping project supports the Council’s efforts to reduce the risk to drinkable, fishable, and swimmable water.

- Allowing residents to take unused medications to drop-off locations or use a mailing envelope, both for free
 - Providing drop-off locations that are “equitable and reasonably convenient.”
3. Require the words or symbols for “do not flush” be printed on all prescription pharmaceutical labels and remove any existing instructions to flush unused portions.

PFAS

The Council recommends that the CWF be a partial source of funding to implement Minnesota’s comprehensive PFAS Blueprint. Of the ten key issue areas prioritized in the Blueprint, there are three in which the CWF would fulfill both the Clean Water Legacy Act and the Blueprint:

- Quantifying PFAS risk to human health
- Limiting PFAS exposure from drinking water
- Reducing PFAS exposure from fish and game consumption.



POLICY RECOMMENDATIONS

Chloride reduction (de-icer)

The Council recommends that the state of Minnesota implement the following actions to reduce chloride in Minnesota surface and groundwater:

- Fund the Smart Salting applicator training and certification program and the MPCA's chloride reduction budget to support the development and maintenance of tools, resources, policies, trainings, and assistance programs to reduce chloride pollution
- Provide liability protection for the Smart Salting program certified private winter de-icing applicators for reduced salt applications
- Provide research funds to develop new technology and alternatives to chloride-containing de-icing chemicals and best management practices
- Encourage and support the adoption of the MPCA's Chloride Reduction Model Ordinance Language by local governmental entities
- Have the MPCA convene and lead a stakeholder process to develop recommendations for new labelling requirements on bags of de-icing chemicals sold in Minnesota.

The Council recommends that the state of Minnesota provide research funds to develop new technology and alternatives to chloride-containing de-icing chemicals to reduce chloride in Minnesota surface and groundwater.

Chloride reduction (water softener)

The Council recommends that the state of Minnesota implement the following actions to reduce chloride in Minnesota surface and groundwater:

- Provide financial support and technical assistance to municipalities to reduce chloride discharges and allow flexibility for how municipalities achieve these reductions
- Update the state plumbing code to effectively prohibit the installation of new water softeners in Minnesota that use timers rather than on-demand regeneration systems
- Fund a program for activities, training, and grants that reduce chloride pollution. Grants should support upgrading, optimizing, or replacing water softener units management practices.



HIGHLIGHTED PROGRAMS

Drinking water

Protecting drinking water is one of the key objectives of the CWF and the Clean Water Legacy Act.

As described in a previous section, the state approach to protecting drinking water sources is to:

- Gather and share important information about groundwater resources and drinking water wells as well as surface water drinking water sources
- Learn more about the health risks from chemicals, pathogens, and naturally occurring elements in water
- Assist communities to protect their drinking water.

The primary contaminants of concern in private wells are nitrate, bacteria, arsenic, manganese, and lead. Nitrate in groundwater can come from several sources including septic tanks but a significant source is leaching from fertilizer or manure infiltrating below the crop root zone. Bacteria can reach wells mostly from leaking septic systems and animal waste. Arsenic and manganese already exist in the soil, while lead comes from lead drinking water pipes and on-premise plumbing.

While the MDH has the largest role, other agencies have active parts in drinking water source protection.

Monitor, assess, and characterize

- **Nitrate and pesticide testing in private wells** – The MDA has offered free nitrate testing to 90,000 well owners in priority townships where groundwater is particularly vulnerable to contamination. Free pesticide testing was available when nitrate was detected. The MDA has tested 32,217 wells in 344 vulnerable townships across 50 counties.
- **Groundwater quality monitoring** – The MPCA monitors ambient groundwater quality in non-agricultural parts of the state using a network of 270 wells.
- **Aquifer monitoring for water supply planning** – The DNR uses a network of 1,250 water quantity monitoring wells statewide (with plans for 1,500) and provides planning and technical assistance for local government units.
- **County geologic atlas part A** – The Minnesota Geological Survey (MGS) at the University of Minnesota completes county-level geologic atlases.

- **Root River Field to Stream Partnership (RRFSP)** – Funded under the MDA's Technical Assistance program, RRFSP is a unique water monitoring project located in southeast Minnesota. The RRFSP project uses both edge-of-field and in-stream monitoring to characterize water quality in three study areas within the Root River watershed. Through outreach activities and one-on-one meetings, the results are discussed with farmers, landowners, fertilizer dealers, water managers, and community leaders to promote an advanced level of conservation planning and delivery.

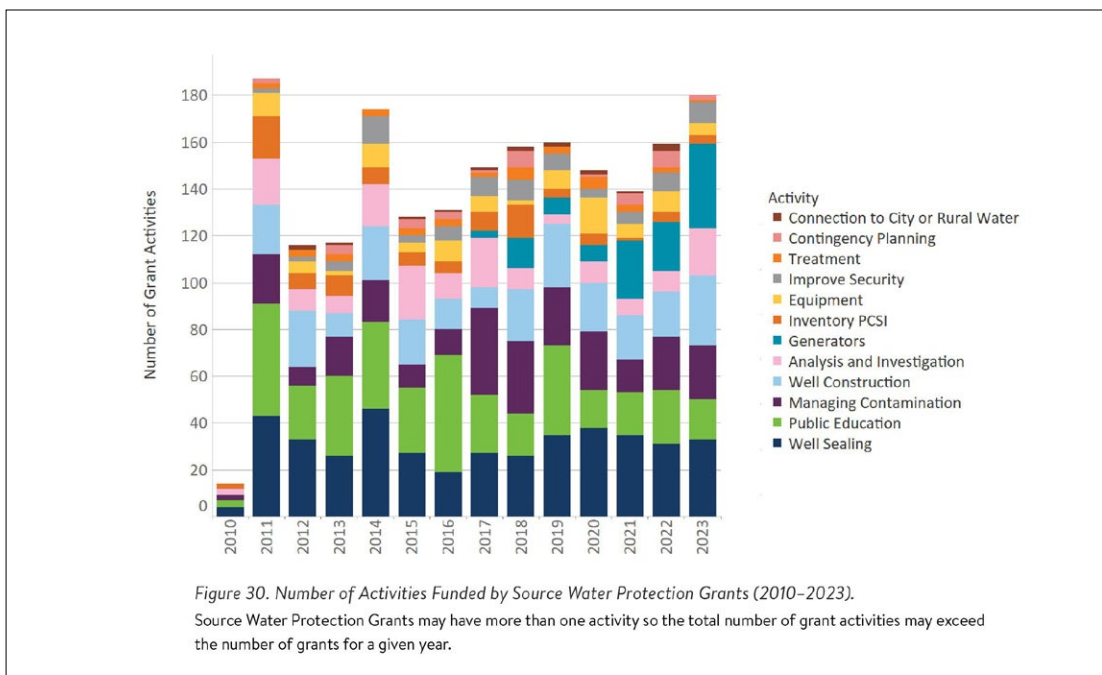
Protect

- **Source water protection** – The MDH carries out numerous activities to protect drinking water sources with the CWF:
 - Delineate Drinking Water Supply Management Areas (DWSMAs) around 500 vulnerable public water supplies and 420 non-vulnerable public water supplies
 - Help public water suppliers develop a wellhead protection plan within the DWSMA
 - Provide planning and surveillance assistance to public water suppliers
 - Monitor possible threats from newly identified pathogens
 - Encourage water suppliers to engage their communities
 - Send fliers to property owners in vulnerable DWSMAs on ways to protect the drinking water source
 - Share tips about source water protection, water use, and conservation on city websites
 - Hosts free nitrate testing clinics and loans nitrate testing equipment for free to support clinics by local partners
 - Distribute fliers for farmers and companies about underground tank management within the DWSMA.
- **Drinking water protection** – The MDH has developed a draft State Drinking Water Plan to carry out priorities in the previously published Future of Drinking Water report.

HIGHLIGHTED PROGRAMS

- Private well protection** – The MDH studies well contaminants and provides outreach to 1.2 million private well users to test and address contaminants. For example, the MDH creates handouts and fliers for private well owners on well water safety, operation and maintenance, and sealing abandoned wells. Beginning in 2023 as a response to a community petition to the U.S. EPA, the MDH is completing a private well inventory in eight counties in southeastern Minnesota, offering free well testing, and providing guidance to households with high nitrate levels in private wells.
- Metropolitan Area Water Sustainability Support Program** – The Met Council provides technical support to communities and businesses to use groundwater more efficiently.
- Contaminants of emerging concern** – Since the federal government only regulates for about 90 contaminants in drinking water, the MDH develops health-based guidance for drinking water for about five contaminants annually that either have been or could be expected to be detected in Minnesota’s groundwater. For example, the MDH has developed guidance for a number of PFAS chemicals that have no federal standards. That guidance is essential for determining what levels are safe to drink over a lifetime, how toxic mixtures are, and when treatment is needed.
- Easements** - BWSR helps landowners take selected lands out of production through easement programs. These easements will reduce nitrate in groundwater from agricultural practices in high risk areas such as DWSMAs.
- Irrigation water quality protection** – The MDA supports a University of Minnesota Extension specialist who educates farmers on best management practices (BMPs) for water and nitrogen management through irrigation.
- The MDA’s nitrate in groundwater program** funds applied nitrate research at Rosholt Farms in Pope County and other demonstration sites to help the University of Minnesota revise its widely-used nitrate application guidelines.

Figure 6: Source water protection grant activities 2010-2023



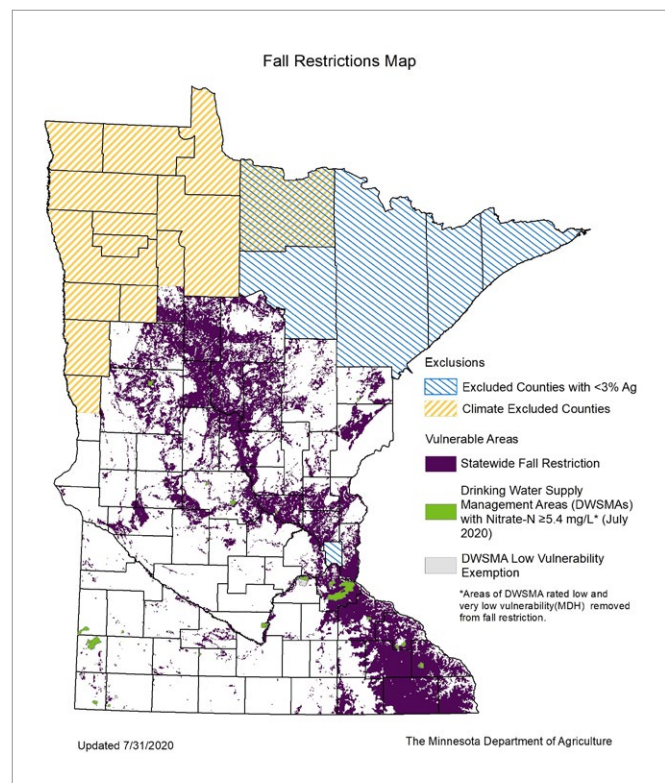
HIGHLIGHTED PROGRAMS

Restore/mitigate

- **Targeted wellhead/drinking water source protection** – BWSR supports easements and grants to local units of government for priority wellhead protection areas.
- **Nitrate in groundwater** – The MDA supports the new Groundwater Protection Rule as part of the state’s Nitrogen Fertilizer Management Plan (NFMP). The rule restricts fall application of nitrate fertilizer in areas vulnerable to contamination and outlines steps to reduce the severity of the problem in areas where nitrate in public water supply wells is already elevated. The CWF will support monitoring groundwater in vulnerable areas, University of Minnesota Extension staff to educate landowners on nitrate BMPs and support their adoption. The CWF will also fund local advisory teams and seven BMP demonstration sites.
- **Managing contamination** – Several agencies use the programs in this section to execute many different activities that eliminate or reduce contaminants in groundwater that is used for drinking water. These are several examples:
 - Planting native plant species in a stormwater basin
 - Establishing perennial crops in a DWSMA, such as introducing continuous living cover to landowners or renting land and planting Kernza® and cereal rye through the **Forever Green Initiative**
 - Incentivizing nitrate best management practices near the municipal well
 - Remediating a gravel pit site within a DWSMA
 - Removing leaking underground storage tanks within a DWSMA
 - Sealing old or abandoned wells and constructing new wells.
- **The MDA’s Minnesota Agricultural Water Quality Certification Program (MAWQCP)** engages farmers to employ best management practices for water quality. On average certified farms reduce nitrate loss by up to 49 percent. The most common new conservation practices implemented by MAWQCP certified producers include: cover crops, nutrient management, grassed waterways, irrigation water management, treating tile inlets, prescribed grazing, and water and sediment control basins.

- **Stormwater research and technology transfer program** – Minnesota’s Stormwater Research Council at the University of Minnesota provides competitive grants to research and evaluate stormwater BMPs, a portion of which have positive impacts on drinking water sources.
- **Grants to watersheds with approved comprehensive management plan (watershed-based implementation funding)** – BWSR makes grants to implement projects and activities in approved comprehensive watershed management plans (One Watershed One Plan).
- **Surface and drinking water protection/restoration grants (projects and practices)** - BWSR makes competitive grants for high priority conservation BMPs identified in local management plans. BWSR requires that up to 20 percent of funding support drinking water protection.

Figure 7: Vulnerable groundwater areas/Fall restrictions



HIGHLIGHTED PROGRAMS

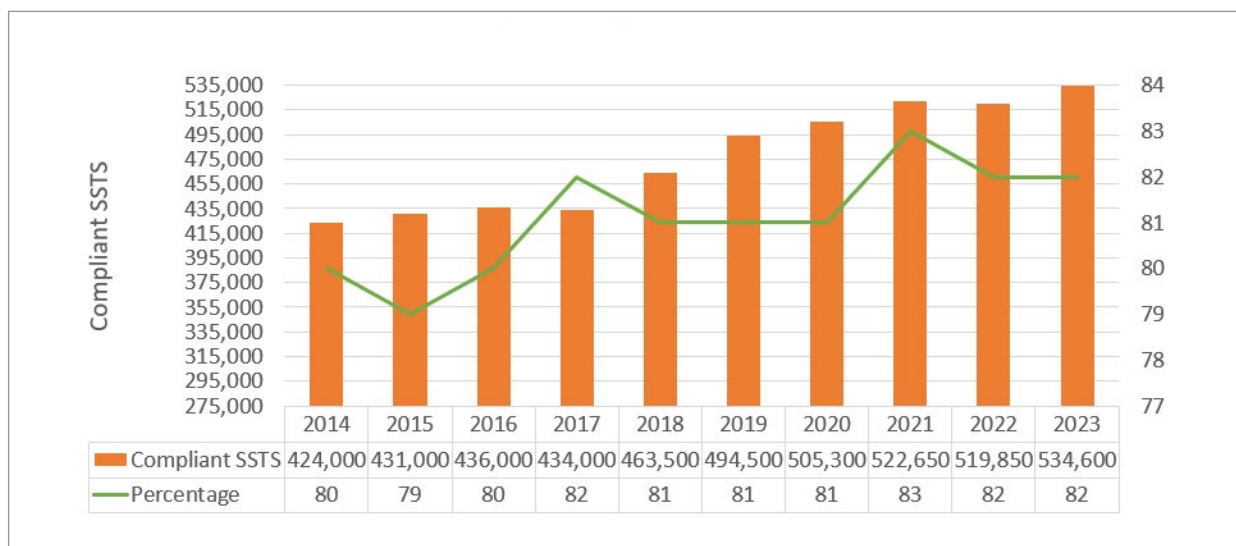
Enhanced compliance

Minn. Statute § 114D.50 Subd. 3 (5) permits the use of the CWF for enhanced compliance and enforcement—meaning work that could not be done before the creation of the CWF.

There are several activities in the Council’s recommendations that enhance compliance and enforcement:

- The MPCA’s **Enhanced Subsurface Sewage Treatment System (SSTS) Compliance and Corrective Actions** program supports a higher level of inspection for septic systems. The program also provides some support for replacement of SSTS systems for qualified low-income property owners. The MDA’s **Agricultural Best Management Practices Loan** program provides low-interest loans to farmers to get their septic systems into compliance.
- **Buffer Implementation** – All public waters require a vegetated buffer. The Clean Water Fund supports BWSR and soil and water conservation districts in their efforts to monitor compliance and to assist landowners who may have inadvertently come out of compliance. (The Clean Water Fund is not used for enforcement actions.)
- The MPCA’s program for **Wastewater/Stormwater TMDL Implementation** assists local government in their efforts to comply with the state’s general permit for municipal separate storm sewer systems (MS4). The permit requires municipalities to eliminate or reduce the flow of contaminants into their storm sewer system. A new general state MS4 permit went into force in the fall of 2020 and it includes some new requirements, especially on the use and storage of chlorides such as road de-icer. The CWF supports training and other assistance to permit holders to achieve compliance.
- The MPCA’s **Chloride Reduction Program** helps wastewater discharge permit holders, such as municipalities, to achieve compliance with chloride limits. Excessive chloride in wastewater discharge is usually due to inefficient or unnecessary residential water softeners. The MPCA works with the permit holder to educate residents on how to reduce their chloride use and occasionally provide incentives to upgrade their softeners.
- The Public Facilities Authority (PFA)’s **Point Source Implementation Grant (PSIG)** supports selective upgrades to water treatment facilities so that they comply with permit requirements based on the Total Maximum Daily Load (TMDL) for the waterway that receives the discharge and other regulatory requirements to improve water quality.

Figure 8: SSTS systems in compliance 2014-2023



HIGHLIGHTED PROGRAMS

Technical assistance

A large proportion of CWF spending supports technical assistance. Minnesota's landowners and local government units often cannot accomplish our water quality goals without expert help.

Regulation has provided measurable benefits for water quality. Empowering the public and private sectors as well as individuals with technical assistance multiplies its effects and increases the likelihood of success. Assistance comes in the form of demonstration sites to show the targeted audiences what is possible, interpretation of scientific data to guide projects, as well as training in best management practices.

Municipalities/townships

- **Source water protection** – The MDH delineates Drinking Water Supply Management Areas (DWSMAs) with local units of government; supports public water systems with planning for protection activities; and coordinates source water monitoring.
- **Wastewater/stormwater TMDL implementation** – The MPCA helps cities comply with the state's general stormwater permit. This MPCA program maintains the Minnesota Stormwater Manual, a resource used by thousands of public and private sector professionals to ensure compliance and encourage innovation for stormwater management.
- **Groundwater Restoration and Protection Strategies (GRAPS)** – An interagency team led by the MDH identifies risks to groundwater quality and quantity in watersheds and recommends targeted strategies for local partners to protect and restore groundwater.



Watershed districts/soil and water conservation districts/water management organizations

- **Non-point source restoration and implementation** – The DNR provides “cradle to grave” technical assistance for 85 projects annually that are prioritized in approved comprehensive watershed management plans. Assistance includes design help on streambank stabilization, culverts, side inlets, fish passage, forestry BMPs, and stormwater BMPs; coaching of local project managers; planning assistance; on-site construction; and oversight.
- **Accelerated implementation** – BWSR provides grants to build technical skills through Technical Service Areas (TSAs) and technical trainings. The program builds local government capacity to accelerate on-the-ground projects that improve or protect water quality and perform above and beyond existing standards.
- **Conservation drainage management and assistance** – BWSR provides grants and technical assistance to SWCDs/drainage authorities for water quality benefits beyond what is required in drainage law.

Farmers and other rural landowners

- **Irrigation water quality protection** – The MDA supports an irrigation specialist at the University of Minnesota-Extension who promotes best management practices (BMPs) that can reduce nitrate losses to groundwater from irrigated crops. This specialist provides direct support and education to irrigators, and collaborates with partners on applied research and demonstration.
- **Nitrate in groundwater** – The MDA supports the state's Nitrogen Fertilizer Management Plan and Groundwater Protection Rule. The MDA is working with 38 local government partners on nitrate monitoring and reduction activities including; private well testing; groundwater monitoring; nitrate fertilizer BMP promotion and adoption; local advisory teams to work with farmers; technical support; and demonstration projects. The CWF also supports two university extension staff who educate landowners on adoption of best management practices (BMPs).

HIGHLIGHTED PROGRAMS

- **Technical assistance program** – Technical assistance activities are a primary way to work with farmers and the agricultural community to promote conservation practices and vegetative cover. The MDA maintains 25 edge-of-field water quality monitoring sites and 100 farm demonstration plots per year, and results are shared at field days, workshops and other educational events (~30 events annually).
- **AgBMP loan program** – The AgBMP loan program provides low or no interest loans to individuals for best management practices that restore or protect water resources. These loans can be used for practices that prevent, reduce or eliminate pollution. The program is administered by local governments, has very low transaction costs, and repayments fund additional projects.
- **Minnesota Agricultural Water Quality Certification Program (MAWQCP)** – The MAWQCP is a whole-farm risk assessment that identifies the water quality risks anywhere on the farm and provides technical and financial assistance to mitigate all risks identified.
- **Enhancing soil health and landowner adoption of cover crops for drinking water and groundwater protection** – BWSR supports the Minnesota Office of Soil Health and makes grants to SWCDs for cover crop and conservation tillage demonstration projects.

Businesses

- **Chloride reduction** – The MPCA used the CWF to develop a Smart Salting Assessment Tool used by 1,000 salt de-icer consumers such as snow removal companies, commercial property owners, and public works departments. The tool complements the MPCA's Smart Salting training classes that have certified 40 entities. The tool and training help avoid additional chloride impairments in Minnesota's waters. The Mayo Clinic in Rochester used the assistance to reduce its salt use by 60 percent.
- **Metropolitan area water sustainability support program** – The Met Council supports businesses that seek to use groundwater more efficiently using university interns. This program meets the Council's Strategic Plan by reducing demand in the metro area by 150 million gallons a year.

Grants

Much of the CWF is used for grants. They range from support for research to grants to local governments that accelerate the state's ability to protect and restore water quality.

- **Private well protection** – The MDH promotes well stewardship strategies for 1.2 million private well owners, including grants to local partners for testing for contaminants and protection actions.
- **Forever Green Initiative** – Through the MDA, the University of Minnesota's Forever Green Initiative makes grants available to researchers. The program supports the development and increased adoption of perennial and winter annual crops that can improve water quality and provide economic benefits for farmers.
- **Stormwater research and technology transfer program** – The University of Minnesota's Stormwater Research Council supports competitive grants to evaluate stormwater BMPs. Successful research on enhanced street sweeping is an example of how this program helps local governments improve water quality in new ways.
- **Source water protection** – The MDH provides public water supplier grants for municipalities. These are most often small grants that help a city reduce risks to their drinking water sources, wells, lakes, or rivers.
- **Contaminants of emerging concern** – Outreach and education grants foster innovative actions that help keep CECs out of Minnesota's waters. Grants funded drug take back programs, culturally relevant outreach to Latinx communities, media ads, outreach toolkits for safe disposal options, and local collaborations on decreasing the use of toxic chemicals and pharmaceuticals.
- **Enhanced county inspections/SSTS corrective actions** – The MPCA makes grants to counties so that counties can increase inspections of septic systems. This program has led to an 80% compliance rate statewide, a goal in the Council's Strategic Plan. The program also allows counties to support replacement of SSTSs for qualified low-income property owners.

HIGHLIGHTED PROGRAMS

- **Point Source Implementation Grants (PSIG)** – The Public Facilities Authority (PFA) uses the CWF to assist municipal water treatment facilities through the PSIG program. In contrast to other PFA grants and loans supported by other funds, PSIG supports selected treatment upgrades to comply with Total Maximum Daily Load (TMDL) requirements and other regulatory requirements to improve water quality.
- **Small community wastewater treatment program** – The PFA makes grants and loans to replace failing SSTs with community SSTs. These modest grants from the CWF allow these very small communities to get started on the planning process. In the last decade the CWF has made loans and grants up to \$2 million for construction of publicly owned soil-based treatment systems.
- **Water demand reduction efficiency grant program** – The Met Council makes grants to municipalities in the seven-county Twin Cities metro area that defray resident expenses in replacing inefficient residential fixtures and sprinkler control systems.
- **Watershed management transition (One Watershed One Plan)** – BWSR provides support to approximately seven major watersheds a year (via a managing partner such as an SWCD or watershed district) to complete comprehensive watershed management plans. These plans use the data from the state’s Watershed Restoration and Protection Strategies (WRAPs) and Groundwater Restoration and Protection Strategies (GRAPS) to prioritize which projects should be funded first to achieve water quality goals. Plans for all 80 major watersheds have started as of 2024.
- **Targeted wellhead/drinking water source protection** – BWSR provides funding for local government units to set aside land in priority wellhead protection areas, including with easements.
- **Buffer law implementation** – BWSR provides grants to SWCDs for implementation of the buffer law. Projects support SWCDs for design and landowner assistance. Despite a high compliance rate for the state’s buffer law, some parcels out of the roughly 500,000 subject to the buffer law may fall out of compliance every year, requiring local government assistance.
- **Cost-share for geomorphic design for culverts** – The DNR is supporting a 25% cost-share grant to local units of government to replace bridges and culverts at river crossings. Funding is intended to offset potential increased costs associated with adopting a design that would aid water quality through reduced channel erosion and floodplain connectivity issues.
- **Accelerated implementation** – BWSR makes modest grants to local government units so that they can carry out more complex projects. Funding often supports equipment and analytical tools.
- **Surface and drinking water protection/restoration grants (projects and practices)** – BWSR distributes competitive grants to local government units for high priority conservation and urban BMPs identified in local management plans. Up to twenty percent of grant funding must be for drinking water protection activities.
- **Grants to watersheds with approved comprehensive watershed plans (watershed-based implementation funding)** – BWSR distributes grants to major watershed partnerships to carry out priority projects identified in locally developed, state-approved watershed plans. These are non-competitive grants distributed on a rotating basis. As more plans are complete, this pool of funding will increase over time.
- **Watershed partners legacy grants** – BWSR makes small grants to help non-governmental entities and tribal governments improve local water quality.
- **Enhancing soil health and landowner adoption of cover crops for drinking water and groundwater protection** – BWSR grants funding to selected local governments to demonstrate cover crops for local farmers. According to the state’s Nutrient Reduction Strategy (NRS) five-year progress report, “Since 2017, two programs supported by the CWF (MAWQCP and BWSR competitive grants) have provided the majority of non-federal cost-share funding that supports adoption of cover crops.”
- **The MPCA’s Chloride Reduction Program** mentioned previously occasionally provides incentives to upgrade water softeners to reduce chloride in wastewater.

HIGHLIGHTED PROGRAMS

Economic benefits

In the Clean Water Legacy Act, the Legislature in 2006 stated that “there is a close link between protecting, enhancing, and restoring the quality of Minnesota’s groundwater and surface waters and the ability to develop the state’s economy, enhance its quality of life, and protect its human and natural resources.”

In addition, the statutory requirement for this document (Minn. Stat. § 114D.30 Subd. 7) requires that it report on “the impact on economic development of the implementation of efforts to protect and restore groundwater and the impaired waters program.”

Many activities supported by the CWF provide economic benefits.

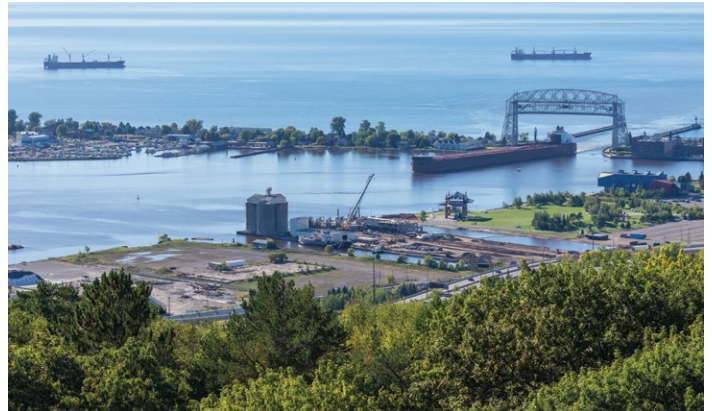
Accommodating economic growth

The CWF supports activities that help Minnesota de-couple economic growth and use of water. Examples include:

- The Metropolitan Area Water Supply Sustainability Support Program provides ongoing assistance supporting the Met Council’s efforts to reduce groundwater use in the Twin Cities by 150 million gallons a year to accommodate expected future population growth.
- The PFA’s PSIG program finances selective upgrades to wastewater treatment plants in Greater Minnesota when the plant might exceed permitted amounts of contaminants in wastewater effluent.
- A BWSR grant from the CWF supported a stormwater reuse/rainwater harvesting system at Allianz Field in St. Paul to supply water to future nearby buildings.
- The CWF provided \$7 million to the Public Facilities Authority to support stormwater improvements at the Highland Bridge development. This redevelopment of the Ford Motor Company plan site is resulting in cleaner water reaching the Mississippi River.

Enhancing tourism and other outdoor activities

- The CWF supported the staff who direct the St. Louis River area of Concern (AOC) and Lake Superior Lakewide Action and Management Plan (LAMP) programs and leverage millions of federal dollars to



restore Duluth’s harbor and other lakeshore and riparian water quality.

- Easements and other land protection strategies can create additional habitat that also protects public drinking water sources.

Financing

- Over time, the CWF provided \$18.6 million to the Agricultural Best Management Practices (AgBMP) Loan Program. This program provides low or no interest loans to farmers, rural landowners, water quality cooperatives and agricultural businesses to finance projects that help water quality such as drinking water improvements, septic system replacement, conservation tillage, agricultural waste management and erosion control measures. By recirculating the proceeds, the clean water portion of the program has financed 2,383 projects totaling \$40.5 million.

Reduced economic risk and greater resilience

- Farm Business Management Program data shows that farms that are in the Minnesota Agricultural Water Quality Certification Program are more profitable than non-certified farms.
- Certified farms have a higher net income, better term debt coverage and debt to asset ratios, and in most instances, higher yields.
- Certified farms average more than \$25,000 higher annual net income than non-certified. The net worth of certified farms is on average nearly 25% higher than non-certified.

HIGHLIGHTED PROGRAMS

Monitoring and assessment

After its passage in 2008, the CWF allowed the state of Minnesota to fulfill federal requirements to identify impaired waters. Waters are impaired when they exceed a water quality standard for certain contaminants.

The MPCA evaluates waters to see if they are impaired for the following uses: aquatic consumption; aquatic life; aquatic recreation; drinking water; and limited resource value. The MPCA tests for 31 specific impairments.

In 2019, the state completed a ten-year cycle of testing all waters in all 80 major watersheds and is now more than halfway through the second cycle. Other agencies complete additional testing (also supported by the CWF) including a **Fish Contamination Assessment**; **Lake Index of Biological Integrity**; **Stream Flow Monitoring**; and **Groundwater Monitoring**.

These monitoring results are combined with other testing and inform the creation of a **Watershed Restoration and Protection Strategies (WRAPS)** for each watershed. The WRAPS lists all impairments in the watershed and lists specific strategies for how to meet water quality goals. Local partnerships then produce a comprehensive watershed management plan (**One Watershed One Plan**) via BWSR using CWFs. The plan prioritizes which strategies get funded first.

The MPCA has now started a second cycle that targets resources at specific issues and at reduced levels compared to the first ten-year cycle. The second cycle will be different from the first.

- The MPCA has reduced the total amount of testing sites by one-third while still maintaining the minimum required by the U.S. EPA.
- One-third of this monitoring is committed to the requests of local or state agency partners in the second cycle. These partners may be looking to measure the impacts of specific projects such as stream restoration or drinking water protection activities.
- The MPCA also maintains 197 long-term stream pollutant monitoring sites that allow the state to identify trends and looming threats. Contractors like SWCDs take water chemistry samples 30 times a year.

Why keep monitoring? Targeted investment and progress tracking requires a comprehensive monitoring strategy to identify which waters are healthy, which are declining, and which are improving. Monitoring data make it

possible for state agencies and local partners to target CWF investments and other federal and state dollars to keep healthy waters healthy, stop declining trends, and make improvements where they would make the biggest impact. In addition, accurate TMDLs ensure that point source discharge sources such as wastewater treatment plants spend only the financial resources they need to in order to comply with their permits to keep healthy waters healthy, stop declining trends, and make improvements where they would make the biggest impact.

Monitoring data make it possible for state agencies and local partners to target CWF investments and other federal and state dollars to keep healthy waters healthy, stop declining trends, and make improvements where they would make the biggest impact.



HIGHLIGHTED PROGRAMS

Combined efforts with other sources of funding

State statute allows and gives priority to clean water projects that can leverage other sources of funding.

Money from the clean water fund may be used to leverage federal funds through execution of formal project partnership agreements with federal agencies consistent with respective federal agency partnership agreement requirements. – Minn. Stat. § 114D.50 Subd. 4 (h)

The Clean Water Council shall give priority in its recommendations for restoration funding from the clean water fund to restoration projects that most effectively leverage other sources of restoration funding, including federal, state, local, and private sources of funds. – Minn. Stat. § 114D.20 Subd. 6 (3):

The CWF is often the initial seed funding or is otherwise a partial source of funding for large and complex projects. The state has documented that every dollar from the CWF leverages another \$1.06 from other funding sources. Some other sources such as landowner contributions are not always documented, so the leverage is likely even higher.

Other funding sources leveraged by the CWF—either to assist a project or as direct payment to landowners—include the following.

Administered by the Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture

- Environmental Quality Incentives Program (EQIP)
- Conservation Stewardship Program (CSP)
- Regional Conservation Partnership Program (RCPP)
- Agricultural Conservation Easement Program (ACEP)
- Healthy Forests Reserve Program (HFRP)
- Conservation Innovation Grants (CIG)

Administered by the Farm Service Agency, U.S. Department of Agriculture

- Conservation Reserve Enhancement Program (CREP)

Administered by the U.S. Environmental Protection Agency

- Federal Clean Water Act Section 319 Grants
- Great Lakes Restoration Initiative/Area of Concern (AOC)
- Climate Smart Food Systems Initiative

Administered by the U.S. Fish and Wildlife Service

- Fishers and farmers partnership grants



State funding sources

- General obligation bonds
- Environment and Natural Resources Trust Fund
- Outdoor Heritage Fund

Local funding sources

- Watershed districts
- Water management organizations
- Soil and water conservation districts
- Counties, municipalities, and townships
- Landowners and property owners – Our current estimate of leverage funds does not include landowner contributions. Most support for landowners, such as agricultural BMPs, require initial investment by the individual.

HOW THE STATE MEASURES PROGRESS AND PROVIDES OVERSIGHT

Statutory requirements

There are several statutory reporting requirements on the CWF that measure certain activities.

- **Restoration evaluation** – The DNR and BWSR, as described in Minn. Stat. § 114D.30 Subd. 6, perform a biennial restoration evaluation. This report evaluates restoration projects supported by dedicated sales tax revenue derived from the Legacy Amendment, including the CWF.
- **Clean Water Fund recommendations** – This document is required to be submitted by the Council every odd-numbered year on January 15th, according to Minn. Stat. § 114D.30 Subd. 7.
- **Legacy website** – Minn. Stat. § 114D.50 Subd. 4(c) requires that agencies submit project information to the Legislative Coordinating Commission (LCC) for inclusion in a searchable database at <https://www.legacy.mn.gov/>. (The Council’s recommendations include partial support for website maintenance.)
- **Measurable outcomes** – “A project receiving funding from the Clean Water Fund shall include measurable outcomes, as defined in section 3.303, subdivision 10, and a plan for measuring and evaluating the results.” -Minn. Stat. § 114D.50 Subd. 4(a).
- **Performance report** – While not required, state agencies produce a biennial report on clean water outcomes. This document includes roughly 20 key measures on surface water quality, drinking water, and groundwater. A summary of these measures is included in a four-page CWF Report Card. These measures do not necessarily make a direct connection between CWF spending and environmental outcomes that are measured on a statewide level.

Dozens of programs supported by the CWF operate simultaneously, making it challenging to track progress in one place. Generally speaking, the larger the scale (e.g., statewide perspective), the more difficult it is to see trends influenced by the CWF. Smaller scale evaluation on a sub-watershed scale is more likely to connect results to the Fund.

Benefits of protection strategies, such as reducing the risk of future water impairments by reducing potential sources of pollution, are often hard to measure. This is because when they are effective, successful protection strategies keep water quality at a high level and therefore show no “improvement.”



HOW THE STATE MEASURES PROGRESS AND PROVIDES OVERSIGHT

Fishable, swimmable, drinkable standard

Among the broadest objectives of the CWF and state water policy are to have “fishable,” “swimmable,” and “drinkable” water. In 2014, Minnesota’s Clean Water Roadmap estimated goals that were realistic to meet by 2034.

- **Fishable** – The tool for measuring “fishability” of Minnesota lakes is the Fish-Based Index of Biological Integrity (IBI). The statewide goal was to increase the percentage of Minnesota’s rivers and streams with healthy fish communities, as measured by the IBI, from 60 percent in 2008 to 67 percent in 2034. Minnesota was at 62.2 percent in 2023.

- **Swimmable** – The indicator for “swimmability” is good water quality on the Trophic State Index (TSI). The statewide goal was to increase the percentage of lakes with a good quality on the TSI from 63 percent in 2008 to 70 percent in 2034. Minnesota was at 68 percent in 2023, the last year for which data is available.
- **Drinkable** – Drinkability is measured by water quality and water quantity indicators. The goal for water quality is twofold; to reduce the number of new wells with unsafe levels of arsenic by 50 percent and to reduce the number of wells with unsafe levels of nitrate by 50 percent in two regions of the state. The goal for water quantity is to have 90 percent of the monitoring sites have either a steady or increasing water level trend.



HOW THE STATE MEASURES PROGRESS AND PROVIDES OVERSIGHT

Strategic indicators

In order to give Minnesotans a better indication of the results achieved by the CWF, the Council established its latest Strategic Plan in 2023. The Plan includes strategies for the state to complete by 2034 using the CWF. These strategies, when fulfilled, would result in protected or improved water quality, although the ability to show trends will take place over many years. Here is a key sampling of these strategies:

Groundwater is clean and available to all in Minnesota.

GOAL 1: Protect groundwater from degradation and support effective measures to restore degraded groundwater

- **Geologic atlases** – The Minnesota Geological Survey expects all county geologic atlases for all Minnesota counties to be complete around 2035. This is a delay due to COVID and retirements. These are Part A of the County Geologic Atlas series.
- **Groundwater atlases** – The DNR expects to complete county groundwater atlases several years after 2035. These are Part B of the County Geologic Atlas series. Since Part B must be done after Part A, this is a delay.
- **Subsurface sewage treatment systems (SSTS)** – The MPCA estimates that the CWF can help to maintain a compliance rate for subsurface septic treatment systems (SSTS) at a minimum of 80 percent, and to attain a goal of 90 percent annually. The compliance rate will vary annually since there are always new systems failing every year. In 2023, compliance was just greater than 82 percent, which exceeds the minimum goal.

The CWF supports the MDA's implementation of the Groundwater Protection Rule, so that no additional existing municipal water supply wells exceed the drinking water standard for nitrate.

GOAL 2: Ensure groundwater use is sustainable and avoid adverse impacts to surface water features due to groundwater use

- **Nitrate reduction in groundwater** – The CWF supports the MDA's implementation of the Groundwater Protection Rule, so that no additional existing municipal water supply wells exceed the drinking water standard for nitrate. The state has identified all DWSMAs where nitrate is above or at risk of exceeding the drinking water standard of 10 mg/L. Beginning in 2019 with the adoption of the Groundwater Protection Rule, the CWF supports the mitigation activities that will reduce nitrate levels to acceptable levels. The state is on track in applying the initial voluntary mitigation actions under the rule. This includes voluntary adoption of best management practices (BMPs) and other recommended practices (called alternative management tools or AMTs), creation of local advisory teams that recommend uniform BMPs and AMTs, and conducting computer modeling of the water quality effects of current and recommended practices. As of December 15, 2024, there are: 10 level 1 DWSMAs; 22 at level 2; and four that need more information.
- **Metro groundwater use reduction (Met Council)** – To ensure sustainable groundwater supply for the metro region into the future, water must be used more efficiently in homes, businesses, and landscapes. Through two grant programs supported by the CWF, the Met Council is making significant progress in this effort. Clean Water Funds have supported water efficiency implementation projects that save an estimated 200 million gallons a year through the Met Council's Water Efficiency Grant Program, which exceeds the Council's goal. Additional yearly water savings resulting from the MnTap Intern program are also funded by CWF.
- **Groundwater Restoration and Protection Strategies (GRAPS)** – The MDH completes GRAPS for all major watersheds engaged in comprehensive watershed planning. The goal is to have GRAPS completed for all One Watershed One Plan boundaries by 2034.
- **Groundwater monitoring wells** – The DNR has a goal of having 1,500 state-owned and managed long-term groundwater monitoring wells statewide by 2034. The CWF supports 25 of 50 new wells a year in addition to the 1,250 current wells and DNR is on track to meet its goal.

HOW THE STATE MEASURES PROGRESS AND PROVIDES OVERSIGHT

Drinking water is safe for everyone, everywhere in Minnesota

GOAL 1: Ensure that users of public water systems have safe, sufficient, and equitable drinking water

- **Complete source water protection planning and implementation for 500 vulnerable community public water systems.** Delineation of DWSMAs for these systems was COMPLETED in 2020. Existing CWF support satisfies half of annual implementation activities through SWP Grants. The MDH is currently satisfying all demand for SWP Grants by using salary savings from vacant positions.
- **Complete first-generation source water protection plans for remaining 420 community public water systems by 2025.** Progress on this activity was delayed by COVID – completion will be delayed by 2 years. As of Sept 30, 2024, the MDH has completed about 335 and have about 85 remaining. There will be a delay to completion due to vacant positions.
- **Complete revised source water assessments for all 23 surface water systems by 2025.** Progress on this activity was delayed by COVID – completion will be delayed by 2 years. The MDH has completed seven assessments to date.
- **Complete source water intake protection planning by 2027.** Progress on this activity was delayed by COVID – completion will be delayed by 2 years. Five plans have been completed to date.
- **Complete pilot source water protection planning for 10 non-community public water systems with at-risk populations by 2027.** This program is on track. Three plans are now complete.
- **Protection of public wellheads** – Approximately 400,000 acres of land are within 500 vulnerable DWSMAs. The Council’s strategy is to protect these areas from threats to ensure safe drinking water no later than 2034. The MDH is on track to complete initial development of this measure.

GOAL 2: Ensure groundwater use is sustainable and avoid adverse impacts to surface water features due to groundwater use

- **Well testing** – The Council’s goal is to have MDH offer a free well test for five contaminants to ten percent of private well users every year for ten years. In addition, the MDH provides education to these users to help them determine mitigation options if necessary. The MDH is on track to meet this goal.
- **Mitigation** – The Legislature has indicated that the Council’s original intent to provide mitigation options for private well users is not consistent with the Legacy Amendment. The state no longer offers water treatment or well drilling for qualified low-income households from the Clean Water Fund.
- **Well inventory** – The MDH is in the process of updating its well index for private wells in southeastern Minnesota in response to a petition to the EPA. The Legislature appropriated the Council’s request for additional funds for this purpose in 2024.



HOW THE STATE MEASURES PROGRESS AND PROVIDES OVERSIGHT

Minnesotans will have fishable and swimmable waters throughout the state

GOAL 1: Monitor and assess, and characterize Minnesota’s surface waters

- **Monitoring and assessment** – In 2019, the state completed a ten-year cycle of intensive monitoring and assessment and is now more than halfway through the second cycle.
- **TMDL reporting** – WRAPS incorporate Total Maximum Daily Loads (TMDL), of which the MPCA has completed almost 2,000 (non-mercury) impairments.
- **Watershed Restoration and Protection Strategies (WRAPS)** – A WRAPS is like a blueprint for action in each of Minnesota’s 80 major watersheds. The MPCA compiles the science from other CWF activity to identify which actions are most likely to meet a watershed’s water quality goals. The first set of 80 WRAPS was complete in 2023.

Figure 9: BWSR grant funded project outcomes FY2010-23

Table 1. FY10-23 BWSR Grant Funded Project Outcomes

Major Basin	Number of Mapped BMPs	Sediment Reduction (T/yr)	Phosphorus Reduction (Lbs/yr)
Minnesota	5,320	77,613	99,421
Upper Mississippi	5,953	130,762	54,371
Missouri	682	17,706	14,767
Rainy River	103	1,103	1,435
Red River	6,348	111,287	89,596
St. Croix	948	27,569	15,488
Lower Mississippi	2,926	43,121	57,355
Lake Superior	155	2,653	2,512
TOTALS:	22,435	411,814	334,944

GOAL 2: Protect and restore surface waters to achieve 70 percent swimmable and 67 fishable waters by 2034 by prioritizing and targeting resources by major watershed

As described, previously, 62.2 percent of Minnesota waters met fishable criteria as of 2023, and 68 percent met swimmable criteria as of 2023. Numerous Clean Water Fund supported projects help the state reach these goals as outlined below:

- **One Watershed One Plan (1W1P)** – BWSR assembles local government units—watershed districts, soil and water conservation districts, and counties—to prioritize the projects identified in the WRAPS, GRAPS, and other local issues. Municipalities and tribal governments may also participate in the process. This results in a comprehensive watershed management plan. With an approved plan, that watershed will receive a defined amount of funding for high priority projects for the lifetime of the CWF. There are 60 planning units. As of December 2024, 48 plans are complete. Of the remaining 12, six have been submitted to BWSR’s board for final approval and six are in development.
- **Contaminants of emerging concern** – The MDH attempts to evaluate five contaminants annually. Due to additional funding in FY24-25, the MDH is EXCEEDING this goal.
- **BWSR competitive grants** – The Legislature in 2017 required BWSR to submit a biennial report on its CWF recipients, and the amount of pollution reduced by their projects. According to the report, “BWSR requires grant applicants to estimate anticipated outcomes for proposed projects during the application process. Applicants used pollution reduction calculators... and similar tools for estimating effectiveness of keeping water runoff on the land through infiltration, diversion, or collection.” Figure 9 shows the cumulative impacts of these activities from 2010 to 2023.

HOW THE STATE MEASURES PROGRESS AND PROVIDES OVERSIGHT

- Wastewater Treatment Plants (WWTP) and Small Community Wastewater Treatment** – The Public Facilities Authority (PFA) carries out the Point Source Implementation Grant (PSIG) that supports existing WWTPs to reach water quality standards. Phosphorus loads from these WWTP have plummeted when the Clean Water Fund is used. The PFA also makes modest grants available to small communities to plan for a broader wastewater solution.



Figure 10: PFA funding

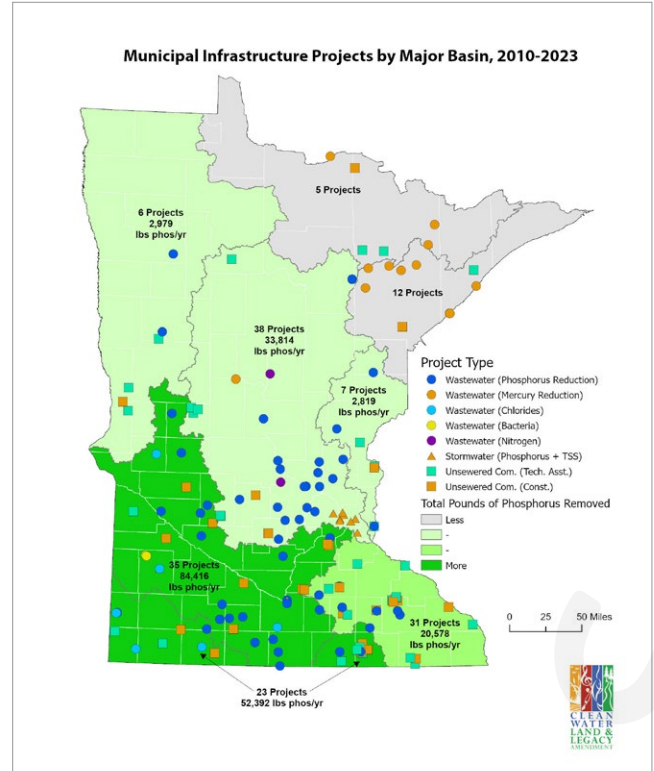
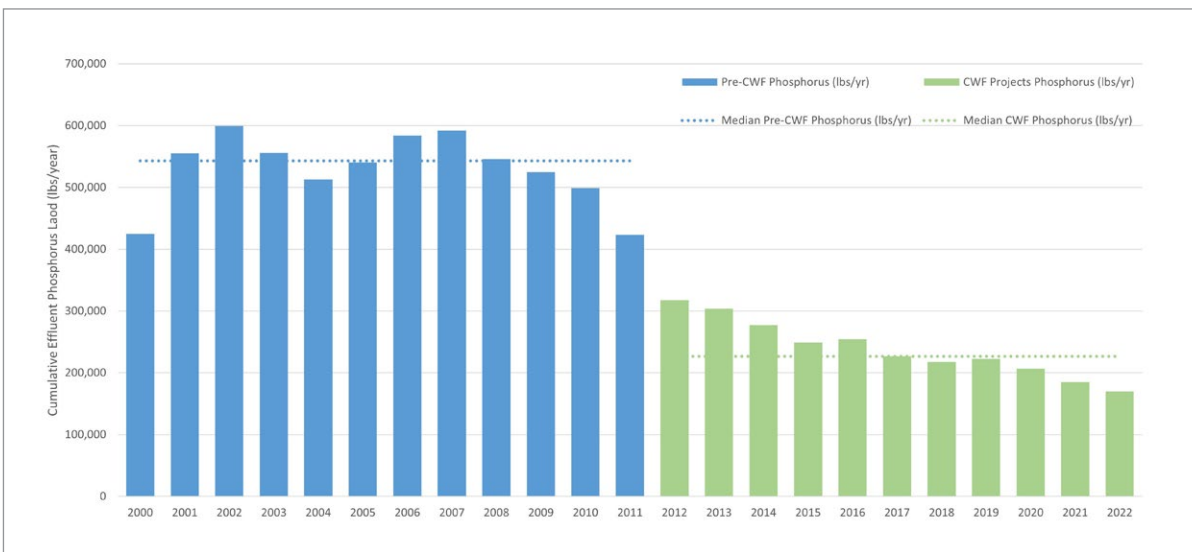


Figure 11: CWF and Phosphorus Load Reductions at WWTPs



HOW THE STATE MEASURES PROGRESS AND PROVIDES OVERSIGHT

All Minnesotans value water and take actions to sustain and protect it

GOAL 1: Build capacity of local communities to protect and sustain water resources

- **Cover crops/continuous living cover** – The council has a goal of five million acres of row crop agriculture that use cover crops or continuous living cover by 2034. BWSR and the Minnesota Office of Soil Health (MOSH) are working on ways to best measure progress. The 2022 U.S. Census of Agriculture recorded 760,423 acres in cover crops, or 4.1 percent of all cropland acres, but it was a 31 percent increase over 2017. If those trends have continued, Minnesota may have more than one million acres in cover crops in 2024.
- **Certified farms (cumulative benefits)** – The Council and MAWQCP estimates that 6,500,000 acres and 5,100 Minnesota farms will be enrolled in the program by 2030. This would constitute about one-third of cropland in Minnesota. MAWQCP is on track to meet this goal. As of December 2024, there are 1,140,281 certified acres in the program and 1,566 certified producers. MAWQCP documents water quality and climate benefits from certification, including how many new best management practices are employed. These are the cumulative benefits on an annual basis:
 - 2,968 new practices implemented
 - Keeps 49,477 tons of sediment prevented per year
 - 149,811 tons of soil saved per year
 - 62,236 lbs of phosphorous loss prevented per year
 - Up to 49% reduction in nitrogen loss
 - 54,816 metric tons of CO₂-equivalent GHG emission reductions per year (equal to removing 12,786 vehicles from Minnesota roads every year)
 - And 523 endorsements:
 - 107 integrated pest management endorsements
 - 87 wildlife endorsements
 - 142 soil health endorsements
 - 174 climate smart endorsements
 - 13 irrigation endorsements
- **Certified farms (marginal benefits)** – On average, each new 400 acre Water Quality Certified farm provides the following annual benefits:
 - Conserves 65 tons of soil and reduces sediment load into surface waters by 23 tons
 - Avoids 29 pounds of phosphorus (one pound of phosphorus can create 500 pounds of algae)
 - Reduces carbon emissions by 23 metric tons of CO₂ equivalent (equal to energy use of 3 homes)
 - Reduces nitrate loss by up to 49 percent (through Advanced Nutrient Management that exceeds best management practices set by the University of Minnesota).
- **Easements** – BWSR carries out several easement programs to improve water quality. From 2010 to 2023, BWSR used the CWF to permanently protect 23,830 acres along riparian corridors and within wellhead protection areas. The CWF also enabled BWSR to leverage additional funds to protect more than 22,000 additional acres.
- **Mississippi River headwaters** – The Council’s plan aligns with other public and private stakeholders seeking to protect 100,000 priority acres and restore 100,000 priority acres in the Upper Mississippi River headwaters basin by 2034 to ensure high water quality into the future. The Council is still working with stakeholders on the best way to measure this strategy.



COOPERATION WITH TRIBAL GOVERNMENTS ON CWF PROGRAMS

Clean Water Council and tribal nations

Minnesota is home to 12 federally recognized tribal nations:

- Seven Anishinabe (Chippewa, Ojibwe) reservations
- Four Dakota (Sioux) communities
- The Minnesota Chippewa Tribe, composed of the Bois Forte, Fond du Lac, Grand Portage, Leech Lake, Mille Lacs and White Earth reservations.

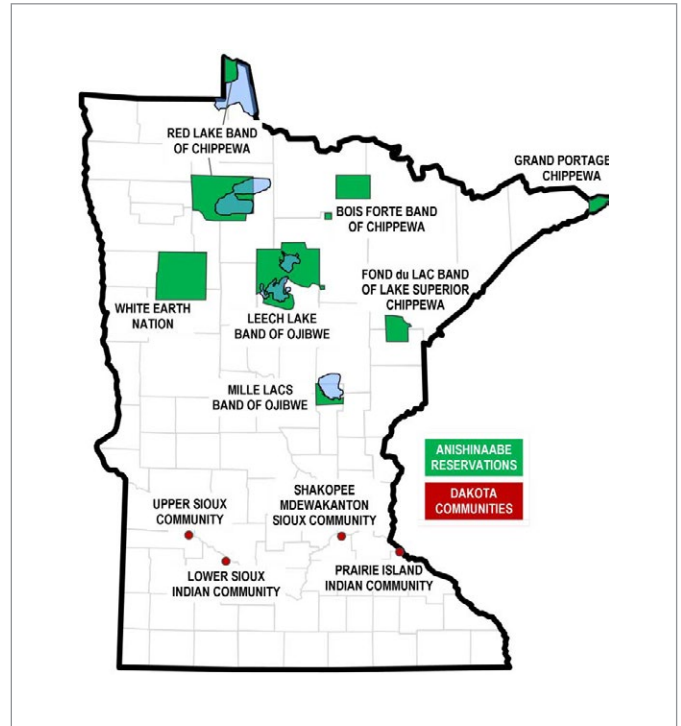
Each is a separate sovereign nation with its own government and is distinct from all other federally recognized tribes.

State agencies that use the CWF engage with many tribal nations to protect and restore Minnesota waters.

Red Lake Nation

- **Upper/Lower Red Lake Watershed Total Maximum Daily Load (TMDL) and Watershed Restoration and Protection Strategies (WRAPS)** – Partnership between the MPCA and the Red Lake Nation through the Red Lake Department of Natural Resources (RLDNR).
- **Upper/Lower Red Lake One Watershed One Plan** – Collaboration as member of policy committee on comprehensive watershed management plan with Beltrami County, Beltrami Soil and Water Conservation District, and Red Lake Watershed District.
- **Blackduck and Cormorant River Watershed Cattle Access Pilot** – A 2023 Clean Water Legacy Partners grant to the RLDNR is creating a pilot initiative to improve water resources in the Blackduck and Cormorant Watersheds that have stressors from pasturing cattle in riparian areas.
- **Monitoring assistance on Lake of the Woods** – Collaboration to collect water quality samples in 2019-2021 among the RLDNR, the Science Museum of Minnesota (SMM), and the MPCA on the Lake of the Woods (LOW).
- **Surface Water Assessment Grant** – Stream monitoring in 2014-2016 by the RLDNR for the Upper/Lower Red Lake Watershed monitoring and assessment report.

Figure 12: Minnesota tribal nations



Fond du Lac Band of Lake Superior Chippewa and the 1854 Treaty Authority

- **Cloquet River WRAPS** – Participation in the MPCA’s Core Team by the Fond du Lac Band of Lake Superior Chippewa and 1854 Treaty Authority.
- **Nemadji River Watershed Cycle 2 WRAPS Update** – Participation in Core Team by the Fond du Lac Band of Lake Superior Chippewa and the 1854 Treaty Authority, with a focus on wetland health and wild rice protection strategies.

Since 2021, BWSR required watersheds preparing a comprehensive watershed management plan to invite tribal governments within the planning boundary to participate.

COOPERATION WITH TRIBAL GOVERNMENTS ON CWF PROGRAMS

Bois Forte Band

Little Fork Watershed Sediment Project Team: Ongoing discussions on largest sediment contributor to the Rainy River and Lake of the Woods. Tribal members and staff have allowed the MPCA access to tribal property and have conversations about what and why the MPCA is doing their work. In turn, local MPCA staff have been supportive of tribal issues regarding water quantity and quality, specifically regarding the rebuild of the Nett River Dam and re-meandering of the Nett River project.

Minnesota is home to 12 federally recognized tribal nations, each a separate sovereign nation with its own government, distinct from all other federally recognized tribes.

Leech Lake Band of Ojibwe (LLBO)

- **Big Fork River Watershed Cycle 2 WRAPS** – Member of Core Team with the MPCA. The Band and MPCA staff recently completed a MN DNR Culvert Assessment. They also discussed wild rice protection strategies and the Band’s studies of impaired lakes wholly within the reservation.
- **Leech Lake River (LLR) WRAPS** – Formal cooperative agreement with the MPCA for the Intensive Watershed Monitoring (IWM) within the boundaries of the Leech Lake Reservation. The LLR WRAPS was one of the first protection WRAPS developed in the state of Minnesota.
- **Leech Lake River Cycle 2 WRAPS Update (2021 - 2022)** – The LLBO provided valuable input in the State and Local Needs (SLN) process in helping the MPCA/ watershed group plan for Cycle 2 of the IWM process.
- **Mississippi River Headwaters (MRH) WRAPS/TMDL** – Formal cooperative agreement with the MPCA for the Intensive Watershed Monitoring (IWM) within the boundaries of the Leech Lake Reservation. The MRH WRAPS/TMDL was successfully completed in 2018.
- **Report review and comment** – The MPCA review/ comment on various LLBO Natural Resource Management/Environmental Protection Strategy documents during public comment periods.
- **Surface Water Assessment Grant (2020)** – The MPCA grant to assess six Leech Lake Reservation lakes within the Big Fork Watershed.

- **Stony Point shoreline property riparian restoration and protection** – A 2023 Clean Water Legacy Partners grant is revegetating shoreline with a native seed mix and planting of native shrubs and plants to establish a healthy shoreline and riparian zone, provide habitat for wildlife and pollinators, prevent erosion and runoff into Cass Lake, and prevent invasive and nuisance plants from taking hold on the site.

Prairie Island Indian Community

- The MPCA’s Rochester office has worked closely with the Prairie Island Indian Community on engagement activities and meetings to address their concerns with the Impaired Waters List. MPCA staff has also been working with Prairie Island staff to discuss the Zumbro River Watershed’s State and Local Needs monitoring approach, and to bring in a native speaker to participate in the opening of “We Are Water” in Lake City.

Upper Sioux Community

- **Streambank Restoration Project** – Partnership with the U.S. Army Corps of Engineers to restore a streambank adjacent to the Minnesota River.

Fond du Lac Band of Lake Superior Chippewa

- **St. Louis River One Watershed One Plan:** A partner in the development of the comprehensive watershed management plan.
- **Mercury TMDL in St. Louis River:** Partial funding for determining mercury reductions needed in for lakes and rivers in the St. Louis River Watershed.
- **St. Louis River Area of Concern:** Partner in the restoration of the St. Louis River estuary from legacy pollutants.

Grand Portage Band of Lake Superior Chippewa and the 1854 Treaty Authority

- **Contaminants of emerging concern in inland lakes:** Partner and lead researcher with the MPCA and University of Minnesota in detecting unregulated contaminants in surface waters, with a focus on protecting subsistence fishing.

COOPERATION WITH TRIBAL GOVERNMENTS ON CWF PROGRAMS

Shakopee Mdewakanton Sioux Community

- **We Are Water Minnesota exhibit at Hočokata ȩi:** The We Are Water MN traveling exhibit examines water issues statewide and in local communities through personal stories, histories, and scientific information. It strengthens Minnesotans' relationships with water, exposes visitors to new perspectives, and increases participation in water stewardship activities. The exhibit was featured at Hočokata ȩi in Shakopee in the fall of 2024.

Multiple tribes

- **Indigenous water knowledge inclusion in WRAPS report:** Recently, a new project has developed in an indigenous knowledge section of the MPCA's anticipated revised WRAPS report for the Little Fork River Watershed and map of local water resources, which will span and be included in four to five major watersheds. This project will include Red Lake Band, Bois Forte Band, 1854 Treaty Authority, Treaty 3 Nations of Canada (including but not limited to Lac La Croix First Nations, Rainy River First Nations, Seine River, and Coochiching First Nations).

- **Invitation to participate in watershed planning:**

Since 2021, BWSR required watersheds preparing a comprehensive watershed management plan to invite tribal governments within the planning boundary to participate.

Clean Water Council opportunities

The CWF recommendations for FY22-23 and FY24-25 included \$1 million each biennium for the Water Partners Legacy (WPL) program with half set aside for tribal governments. A supplemental budget in 2024 added an additional \$2 million. Grant awards to date are noted above.

Minn Stat. § 114D.30 requires that a tribal nation representative be appointed to the Council.

The Council maintains contact with agency tribal liaisons and the Minnesota Indian Affairs Council. Minnesota state agencies funded by the CWF are required to engage in formal consultation with tribal nations.

State agencies that use the Clean Water Fund engage with many tribal nations to protect and restore Minnesota waters.



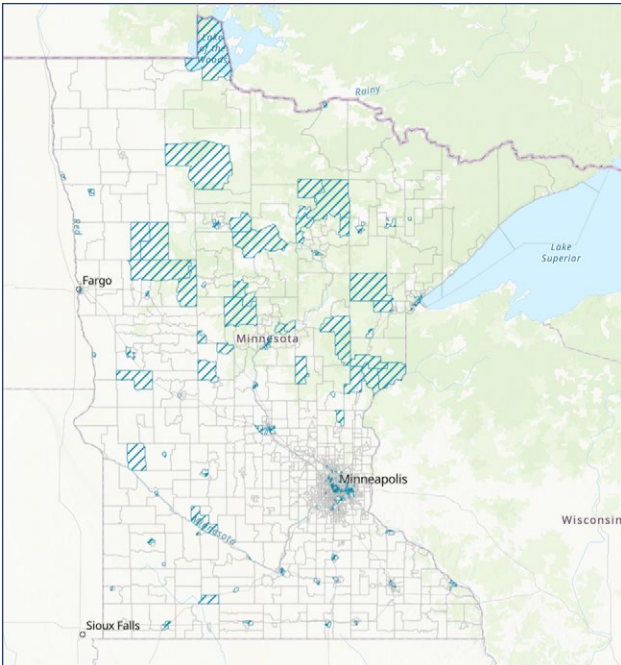
EQUITY ASSESSMENT

Equity and the CWF

New legislation requires reporting on equity and the Clean Water Fund.

- 2023 Session Laws, Chapter 40, Article 2, Section 16 made the following change to Minn. Stat. § 114D.50, subdivision 4:
 - A project receiving funding from the clean water fund shall include measurable outcomes, as defined in section 3.303, subdivision 10, and a plan for measuring and evaluating the results; and an assessment of whether the funding celebrates cultural diversity or reaches diverse communities in Minnesota, including reaching low- and moderate-income households.

Figure 13: Environmental justice (EJ) areas as delineated by the Minnesota Pollution Control Agency



EJ areas denote census tracts with a higher percentage of low-income households, households in tribal reservations and communities, and a higher percentage of people of color.

In addition to the list of collaborative activities with tribal governments, the Clean Water Council can report on the following activities supported by the Clean Water Fund.

- **Chloride Reduction Grants:** Chloride reduction grant applications to the MPCA in 2024 received a higher score if the project provides benefits in environmental justice areas. Lower income neighborhoods are less likely to be able to switch out inefficient water softeners, for example, and may be supported with rebates.
- **Enhanced County Inspections/SSTS Corrective Action**
 - The MPCA provides participating counties with grants to support the replacement of septic systems for eligible low-income households. In FY23, the MPCA distributed \$1.177 million to counties for this purpose. In the FY24-25 Clean Water Fund appropriation, \$900,000 per year was made available.
- **Clean Water Partners Legacy grants** – The Clean Water Fund has supported grants to tribal governments and 501(c)(3) nonprofits during the last two biennia as described in the tribal government section. Half the funding is set aside for competitive grants from tribal governments.
- **Private Well Initiative** – The MDH provides free private well testing regardless of income at a rate of 10 percent of well using households annually.
- **Recreational Water Quality Online Portal** – Lakes in many locations offer a free way to stay cool and recreate for households of any income level. The MDH is building an online platform so that Minnesotans can make sure their destination lake is safe to swim in on any given day due to low bacteria levels.
- **Lead report:** The Clean Water Fund supported the groundbreaking report, “Lead in Minnesota Water: Assessment of Eliminating Lead in Minnesota Drinking Water” from the MDH and the University of Minnesota in 2019. This report estimated the costs and benefits of removing lead service lines and other household sources of lead in contact with water. The Legislature in 2023 made historic investments in lead service line removal on the basis of this report.

EQUITY ASSESSMENT

- **Small Community Wastewater Treatment Program** – The Public Facilities Authority (PFA) makes CWF grants and loans to small communities (with populations usually in the dozens) so that they can plan to replace failing community SSTS systems. This program keeps household utility costs affordable.
- **Water Demand Reduction Grant Program** – The Metropolitan Council’s program to reduce household water use in the metro area includes grants to some low-income neighborhoods to reduce leaks and water demand overall in St. Paul.
- **Contaminants of Emerging Concern** – This MDH program determines health-based guidance for unregulated contaminants in Minnesota’s drinking water. The department has adjusted some guidance for fish consumption based on some immigrant populations consumed more fish per capita from Minnesota’s waters as a protein source.
- **We Are Water** – This program deepens connections between the humanities and water through a network of partnerships, a traveling exhibit, and public events. We Are Water MN helps communities, organizations, and individuals make better, more collaborative, and more relevant choices about water. Hosts of the program have included the Hmong-American Museum and the Hočokata ȩ cultural center in Shakopee.

With the help of numerous CWF supported projects, 62.2% of Minnesota waters met fishable criteria, and 68% met swimmable criteria as of 2023.

