

Clean Water Council Meeting Agenda

Monday, April 15, 2024

9:00 a.m. to 2 p.m.

IN PERSON with Webex Available (Hybrid Meeting)

9:00 Regular Clean Water Council Business

- **(INFORMATION ITEM)** Introductions
- **(ACTION ITEM)** Agenda - comments/additions and approve agenda
- **(ACTION ITEM)** Meeting Minutes - comments/additions and approve meeting minutes
- **(INFORMATION ITEM)** Chair and Council Staff update
 - Policy & Budget and Outcomes Committee Updates
 - Staff update
 - Status of Supplemental Clean Water Fund Recommendations

9:30 Agency Presentations for FY26-27 Clean Water Fund Recommendations

EASEMENTS

- Critical Shoreland Protection - Permanent Conservation Easements (BWSR)
- Wetland Restoration Easements (BWSR)
- Working Land and Floodplain Easements (BWSR)
- Targeted Wellhead/Drinking Water Protection (BWSR)

TECHNICAL ASSISTANCE

- Buffer Law Implementation (BWSR)
- Nonpoint Source Restoration and Protection Activities (DNR)

10:45 BREAK

11:00 Agency Presentations Continued

TECHNICAL ASSISTANCE

- Technical Assistance (MDA)

FINANCIAL ASSISTANCE

- Conservation Equipment Assistance (MDA)
- AgBMP Loan Program (MDA)

STATE CAPACITY

- Mussel Restoration Pilot Program (DNR)
- Water Storage (DNR)
- Expand Weather Station Network (MDA)

12:00 LUNCH

12:30 Agency Presentations Continued

STATE CAPACITY

- Great Lakes Restoration Projects (MPCA/BWSR)

GROUNDWATER/DRINKING WATER IMPLEMENTATION

- Irrigation Water Quality Protection (MDA)

- Nitrate in Groundwater (MDA)
- Future of Drinking Water (MDH)
- Metropolitan Area Water Sustainability Support (Met Council)
- Enhanced County Inspections/SSTS Corrective Actions (MPCA)
- National Park Water Quality Protection Program (St. Louis County Commissioner Paul McDonald and Jason Chopp)

1:45 Public Comments

2:00 Adjourn

Immediately after: Steering Committee

FY26-27 CLEAN WATER FUND PROPOSAL

Critical Shoreland Protection – Permanent Conservation Easements	
BWSR	Program Number: 21
Program Contact Name: Sharon Doucette	Phone: 651-539-2567
Contact E-mail Address: Sharon.doucette@state.mn.us	
Person filling out form: Marcey Westrick	Phone: 651-284-4153
Person filling out form e-mail address Marcey.westrick@state.mn.us	

Purpose

To purchase permanent conservation easements to protect lands adjacent to public waters with good water quality but threatened with degradation. Easement focus has been in the headwaters of the Mississippi River for protection of tributaries and the Mississippi River, to provide source water protection for the Twin Cities and other communities along the Mississippi River.

Webpage

[Critical Shorelands: Rum River Conservation Easements | MN Board of Water, Soil Resources \(state.mn.us\)https://bwsr.state.mn.us/node/8926](https://bwsr.state.mn.us/node/8926)

(Website will be updated to the more general “Critical Shorelands” title with largely the same materials and text)

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

Historically, protects high quality public waters in the Upper Mississippi Basin including the Mississippi and its tributaries using the Reinvest in Minnesota (RIM) easement process.

Historically, each biennium of funding was designated to a specific high priority subwatershed within the larger upper Mississippi River area. The FY 16/17 funds were used exclusively in the Pine River Watershed, FY 18/19 funds were used in the Crow Wing River Watershed, FY 20/21 and 22/23 were used in the Rum River Watershed. Based on feedback from partners in the area, FY 24/25 funds are not focused on a specific watershed but is accepting easement applications from all previous focus areas, the Pine, Crow Wing and Rum, as well as adding the connecting watershed – Mississippi River, Brainerd.

Parcels are selected by local technical committees composed of SWCD, BWSR and other agency/partner staff. The technical committees use a scoring system that includes specific criteria – for example, the number of feet of shoreline, parcel size, percent forested, and RAQ score (RAQ stands for Riparian, Adjacency, Quality - a model run for the major watershed),

among other criteria. Scoring is not directly linked to 1W1P because it has not been completed in all watersheds in this part of the state. However, most technical committee members have also been involved in WRAPs, Landscape Stewardship Plans and 1W1Ps and bring that knowledge to team meetings. That information is also used in targeting outreach efforts to specific landowners. Watersheds are prioritized based on the US Forest Service publication “Forests, Water and People: Drinking water supply and forested lands in the Northeast and Midwest United States.” The publication identified the most important watersheds for protecting source water for communities in the Twin Cities.

Typical landowner easement payment for this program is \$2,000/acre currently. If counties closer to the metro secure more easements, that will almost double the per acre rate (Anoka and Isanti both have significantly higher assessed land values than other counties that are part of the program).

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	
FY16-17	\$2,000,000
FY18-19	\$2,000,000
FY20-21	\$2,550,000
FY22-23	\$2,468,000
FY24-25	\$3,000,000
TOTAL APPROPRIATED TO DATE	\$12,018,000

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

Alignment with Clean Water Council Strategic Plan

Please indicate which strategy in the Clean Water Council's most recent Strategic Plan applies to this proposal.

Surface Water Protection and Restoration Vision: Minnesotans will have fishable and swimmable waters throughout the state.

Goal 2: Protect and restore surface waters to achieve 70% swimmable and 67% fishable waters by 2034 via by prioritizing and targeting resources by major watershed.

Strategy: Prioritize waters for protection and restoration using comprehensive watershed management plans (One Watershed One Plan or other approved plans) updated every ten years.

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

Permanent protection around high quality public waters in the Mississippi Headwaters.

4,000 acres under easement or in process in the program. Currently on track with demand.

There are several remaining Mississippi watersheds above the Twin Cities that could be made eligible for the program, both upstream and downstream of the current eligible areas.

Appropriation language states: *“to protect lands adjacent to public waters that have good water quality but that are threatened with degradation”*. There are other areas of the state, outside of the Mississippi Headwaters, where the funds could be used for protection easements.

Long-term funding vision

If this proposal is funded, should the Clean Water Council expect future requests to increase, decrease, stay about the same, or not be needed? (Do not factor inflation into your answer.)

Stay the same

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? If so, please describe. If not, leave blank.

Much of this same area is within the Mississippi Headwater Board’s (MHB) jurisdiction. MHB and BWSR have a partner project, funded by Outdoor Heritage Fund, for protection easements with a focus on protection of existing high-quality habitat corridors in the area.

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that “any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.” **Indicate if this proposal will supplement or supplant previous funding.**

Supplement

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

NA

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

Annual FTE numbers

FY10-11	
FY12-13	
FY14-15	

FY16-17	0.6
FY18-19	0.6
FY20-21	0.6
FY22-23	0.6
FY24-25	0.6
FY26-27	

FY26-27 CLEAN WATER FUND PROPOSAL

Wetland Restoration Easements	
BWSR	Program Number: __
Program Contact Name: Sharon Doucette	Phone: 651-539-2567
Contact E-mail Address: Sharon.doucette@state.mn.us	
Person filling out form: Marcey Westrick	Phone: 651-284-4153
Person filling out form e-mail address Marcey.westrick@state.mn.us	

Purpose

The purpose of the RIM Wetlands Program is to restore and protect previously drained and altered wetlands and adjacent grasslands and other important vegetated buffers using permanent RIM conservation easements across the state. Restoring and protecting wetlands provides many water quality, habitat and climate mitigation benefits.

Webpage

[RIM Wetlands | MN Board of Water, Soil Resources \(state.mn.us\)https://bwsr.state.mn.us/node/8926](https://bwsr.state.mn.us/node/8926)

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

Funds will acquire permanent conservation easements and restore wetlands in priority areas statewide.

Easement applications are accepted statewide on a quarterly basis. Applications are reviewed together based on scoring criteria to determine funding. Scoring criteria includes, but is not limited to, acres of restorable wetland, upland acres, total easement size, proximity to other protected land or public water and wetland restoration/protection being identified as a priority in a Comprehensive Watershed Management Plan.

To date, the average landowner payment for submitted applications is \$6,200/acre. Statewide average of the new RIM 2024 RIM rates is \$5,500/acre. Reviewing the 2024 rate update in counties where wetland restoration applications frequently are submitted, the average is almost \$8,000/acre for landowner easement payment as many counties in the prairie pothole region of the state had between 20 to 30% increase in the tax assessed value of land as reported to the Minnesota Department of Revenue over the last year. This does not include restoration costs.

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	
FY16-17	
FY18-19	
FY20-21	
FY22-23	\$5,660,000
FY24-25	\$10,000,000
TOTAL APPROPRIATED TO DATE	\$15,660,000

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

Alignment with Clean Water Council Strategic Plan

Please indicate which strategy in the Clean Water Council's most recent Strategic Plan applies to this proposal.

Surface Water Protection and Restoration Vision: Minnesotans will have fishable and swimmable waters throughout the state.

Goal 2: Protect and restore surface waters to achieve 70% swimmable and 67% fishable waters by 2034 via by prioritizing and targeting resources by major watershed.

Strategy: Prioritize waters for protection and restoration using comprehensive watershed management plans (One Watershed One Plan or other approved plans) updated every ten years.

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

Increase in restored and protected wetland acres and associated water quality and habitat benefits.

Program totals with RIM Wetlands funding from both OHF and CWF since 2022 (the most recent version of the RIM Wetlands program): 2,400 acres (approximately half from CWF, half from OHF) with some Clean Water funding available from FY24-25 still for landowner payments. Most easements are in southern or western Minnesota. Le Sueur County has submitted the most applications to date.

Clean Water funds have contributed to many more wetland restorations via past CREP appropriations.

Long-term funding vision

If this proposal is funded, should the Clean Water Council expect future requests to increase, decrease, stay about the same, or not be needed? (Do not factor inflation into your answer.)

Increase

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? If so, please describe. If not, leave blank.

The RIM Wetlands restoration program is also funded through the Outdoor Heritage Fund. General fund dollars were also appropriated to RIM last year specifically for peatland restoration to support the Governor’s Climate Initiative.

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that “any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.” **Indicate if this proposal will supplement or supplant previous funding.**

Supplement

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	
FY12-13	
FY14-15	
FY16-17	
FY18-19	
FY20-21	
FY22-23	0.8
FY24-25	0.9
FY26-27	

FY26-27 CLEAN WATER FUND PROPOSAL

Riparian and Floodplain Restoration Easements [formerly Riparian Buffer-Permanent Conservation Easements]	
BWSR	Program Number: 25
Program Contact Name: Sharon Doucette	Phone: 651-539-2567
Contact E-mail Address: Sharon.doucette@state.mn.us	
Person filling out form: Marcey Westrick	Phone: 651-284-4153
Person filling out form e-mail address Marcey.westrick@state.mn.us	

Purpose

Easements to restore sensitive land in riparian corridors and floodplains to address water quality issues. Landowners have the option to select a perpetual easement or a limited-term easement. In addition, landowners have options to restore the easement to native vegetation or continue to generate income through uses that do not include row crop agriculture, for example: haying/grazing, silviculture, silvopasture, and/or agroforestry. Easement payment structure is based on the proposed easement length and use.

Webpage

[RIM Riparian and Floodplain Restoration](#)

<https://bwsr.state.mn.us/rim-riparian-and-floodplain-restoration>

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

The program focus is to restore and protect sensitive marginal land within the floodplain or riparian area of public waters to improve water quality by establishing permanent vegetative cover on these areas. This work will reduce the direct water quality impacts of these areas when flooded and provide a buffer for surface water flows from adjacent areas to the public waters.

Easement applications are accepted statewide three times a year. Applications are reviewed together based on scoring criteria to determine funding. Scoring criteria includes several categories including: total easement size, land in an existing CRP contract, proximity to other protected land or public water, frequency of flooding and the area being identified as a priority in a locally adopted Comprehensive Watershed Management Plan.

Currently, the average landowner payment for applications submitted for this program is \$7,500/acre.

PRIOR APPROPRIATIONS	
FY10-11	\$6,900,000
FY12-13	\$12,000,000
FY14-15	\$13,000,000
FY16-17	\$9,750,000
FY18-19	\$9,750,000
FY20-21	\$9,500,000
FY22-23	\$3,872,000
FY24-25	\$5,000,000
TOTAL APPROPRIATED TO DATE	\$69,772,000

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

Alignment with Clean Water Council Strategic Plan

Please indicate which strategy in the Clean Water Council's most recent Strategic Plan applies to this proposal.

Surface Water Protection and Restoration Vision: Minnesotans will have fishable and swimmable waters throughout the state.

Goal 2: Protect and restore surface waters to achieve 70% swimmable and 67% fishable waters by 2034 via by prioritizing and targeting resources by major watershed.

Strategy: Prioritize waters for protection and restoration using comprehensive watershed management plans (One Watershed One Plan or other approved plans) updated every ten years.

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

Since FY10-11, Clean Water "buffer" funding has protected over 26,000 acres. Many of the easements are in the SW portion of the state with Redwood and Renville counties having the most individual easements funded.

Long-term funding vision

If this proposal is funded, should the Clean Water Council expect future requests to increase, decrease, stay about the same, or not be needed? (Do not factor inflation into your answer.)

Increase

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? If so, please describe. If not, leave blank.

The Riparian and Floodplain Restoration program also receives funding from Outdoor Heritage Fund.

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that “any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.” **Indicate if this proposal will supplement or supplant previous funding.**

Supplement

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	1.5
FY12-13	2.6
FY14-15	2.8
FY16-17	2.0
FY18-19	2.0
FY20-21	2.0
FY22-23	1.0
FY24-25	1.0
FY26-27	

FY26-27 CLEAN WATER FUND PROPOSAL

Targeted Wellhead/Drinking Water Protection	
BWSR	Program Number: 37
Program Contact Name: Sharon Doucette	Phone: 651-539-2567
Contact E-mail Address: Sharon.doucette@state.mn.us	
Person filling out form: Marcey Westrick	Phone: 651-284-4153
Person filling out form e-mail address Marcey.westrick@state.mn.us	

Purpose

For conservation easements on wellhead protection areas under Minnesota Statutes, section 103F.515, subdivision 2, paragraph (d), or for grants to local units of government for ensuring long-term protection of groundwater supply sources in wellhead protection areas. Priority to be placed on land that is located where the vulnerability of the drinking water supply is designated as high or very high by the commissioner of health, where the drinking water supply is identified as Mitigation Level 1 or 2 by the Minnesota Groundwater Rule, where monitoring has shown elevated nitrate levels, where drinking water protection plans have identified specific activities that will achieve long-term protection, and/or on lands with expiring Conservation Reserve Program contracts. Slight changes to appropriation language will increase flexibility of funding. These changes would include replacing “grants” with “contracts”, removing “permanent” in the type of easement the state can hold, expanding to the whole RIM statute rather than specifically listing 103F.515, and allowing tribal government partnership rather than just LGUs to be eligible under the existing grant program.

Webpage

[RIM Groundwater \(Wellhead\) Protection Easements | MN Board of Water, Soil Resources](https://bwsr.state.mn.us/node/8926)
<https://bwsr.state.mn.us/node/8926>

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

Implements long-term land management protection in wellhead protection areas.

Easements and grants are determined by the current appropriation language that states projects must be selected using the following criteria: vulnerability of the drinking water supply is designated as high or very high by the commissioner of health through an approved Wellhead Protection Plan, the drinking water supply is identified as Mitigation Level 1 or 2 by the Minnesota Groundwater Rule, monitoring has shown elevated nitrate levels, drinking water protection plans have identified specific activities that will achieve long-term protection, and/or on lands with expiring Conservation Reserve Program contracts.

2,400 acres via 40 RIM easements and 360 acres via Wellhead Protection Partner Grant. As a voluntary program, specific DSWMAs are not targeted outside of meeting the above criteria. Example counties of easement location include Cottonwood, Rock, Watonwan, and Winona.

PRIOR APPROPRIATIONS	
FY10-11	\$2,300,000
FY12-13	\$3,600,000
FY14-15	\$2,600,000
FY16-17	\$3,500,000
FY18-19	\$3,500,000
FY20-21	\$4,000,000
FY22-23	\$5,000,000
FY24-25	\$5,000,000
TOTAL APPROPRIATED TO DATE	\$29,500,000

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

Alignment with Clean Water Council Strategic Plan

Please indicate which strategy in the Clean Water Council's most recent Strategic Plan applies to this proposal.

Drinking Water Source Protection Vision: Drinking water is safe for everyone, everywhere in Minnesota.

Goal 1: Public Water Systems - Ensure that users of public water systems have safe, sufficient, and equitable drinking water.

Strategy: Support prevention efforts to protect groundwater in DWSMAs.

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

Permanent or long-term protection in highly or very highly vulnerable wellhead protection areas.

The current appropriation language requires the easements to be secured on MDH approved wellhead protection areas (public water supplies). Appropriation language could be modified to strategically place RIM easements targeted in the southeast to provide land protection for other groundwater uses.

Long-term funding vision

If this proposal is funded, should the Clean Water Council expect future requests to increase, decrease, stay about the same, or not be needed? (Do not factor inflation into your answer.)

Increase

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? If so, please describe. If not, leave blank.

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that “any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.” **Indicate if this proposal will supplement or supplant previous funding.**

Supplement

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

Past grant recipients include City of Adrian, Okabena-Ocheda WD, City of Edgerton, and Rock SWCD.

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	0.5
FY12-13	0.8
FY14-15	0.6
FY16-17	0.6
FY18-19	0.7
FY20-21	0.7
FY22-23	0.8
FY24-25	0.8
FY26-27	

FY26-27 CLEAN WATER FUND PROPOSAL

Buffer Law Implementation	
BWSR	Program Number: 24
Program Contact Name: Tom Gile	Phone: 507-206-2894
Contact E-mail Address: tom.gile@state.mn.us	
Person filling out form: Marcey Westrick	Phone: 651-284-4153
Person filling out form e-mail address Marcey.westrick@state.mn.us	

Purpose

Provides program oversight and grants to support local governments in their implementation of the statewide buffer law.

Webpage

[Grant Profile: Buffer Law Implementation | MN Board of Water, Soil Resources \(state.mn.us\)](#)

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

Funds are made available on a non-competitive, formula-based basis to SWCDs to support their local implementation of the buffer law.

There are approximately 500,000 or so parcels subject to the buffer law and in any given month there will be buffers out of compliance for one reason or another. This program is designed to support the SWCD role in providing landowners with technical assistance, planning assistance and implementation assistance as well as tracking progress for compliance. The buffer law requires SWCDs to track progress towards compliance and SWCDs regularly review parcels in their respective districts to ensure they stay in compliance. When landowners are identified as no longer being in compliance the SWCDs will often work with the initially to take steps to get back into compliance prior to sending them to the County, Watershed District or BWSR for enforcement. It is very important to stress that "enforcement" comes out the General Fund from the tax bill (a Riparian Aid payment from the state to the entities tasked with the enforcement) and not the CWF. This funding supports the SWCDs in the monitoring and implementation aspects of the law and associated BWSR oversight, while the GF dollars support the Counties, Watershed Districts and BWSR work for enforcement.

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	
FY16-17	\$5,000,000
FY18-19	\$5,000,000
FY20-21	\$5,000,000
FY22-23	\$3,872,000
FY24-25	\$4,000,000
TOTAL APPROPRIATED TO DATE	\$22,872,000

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST
\$2,000,000	\$2,000,000	\$4,000,000

Alignment with Clean Water Council Strategic Plan

Clean Water Council Strategic Plan Goal #3.

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

Continued implementation and monitoring of compliance status for the Minnesota Buffer Law.

- CWF Dollars go to the SWCDs at between 80-90% pass through from BWSR to support the SWCDs monitoring and implementation work.
- BWSR funding covers administrative costs for grants and associated staffing components for continuing education for SWCD staff.
- SWCDs should typically be reviewing about 1/3 of their parcels subject to the law annually. With full review accomplished on 3-year cycles. In addition, they would inspect parcels where complaints or other communications are needed/requested by landowner/operators.
- General Fund Riparian Aid dollars go to Counties Watershed Districts and BWSR to support the development and implementation of local official and/or Administrative Penalty Order plans to provide the framework for the enforcement of cases which are not in compliance. In addition, these funds support staff time and resources associated with compliance actions and communications, legal costs to defend the official controls and court fees or collection fees.
- A number of Counties and Watersheds also work in partnership with the SWCDs to provide resources such as aerial photography, riparian cost share programs and other related support which goes above and beyond the costs provide by the CWF dollars to the SWCDs (This work is optional and in no way expected of the Counties or WDs nor is it consistently provided across the state)

Long-term funding vision

If this proposal is funded, should the Clean Water Council expect future requests to increase, decrease, stay about the same, or not be needed? (Do not factor inflation into your answer.)

Stay about the same

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? If so, please describe. If not, leave blank.

Enforcement awards are issued annually and range from \$40,000 to \$160,000 per County. Funds are then split between County and WD based on their responsibilities.

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that “any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.” **Indicate if this proposal will supplement or supplant previous funding.**

Supplement

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

FY24/25 Buffer Program Implementation Grant Allocations

SWCD	Proposed FY 24/25 Allocation
AITKIN	\$8,500
ANOKA	\$8,500
BECKER	\$21,500
BELTRAMI	\$17,000
BENTON	\$17,000
BIG STONE	\$21,500
BLUE EARTH	\$25,500
BROWN	\$25,500
CARLTON	\$2,500
CARVER	\$17,000
CASS	\$8,500
CHIPPEWA	\$25,500

CHISAGO	\$8,500
CLAY	\$30,000
CLEARWATER	\$17,000
COOK	\$2,500
COTTONWOOD	\$25,500
CROW WING	\$8,500
DAKOTA	\$17,000
DODGE	\$21,500
DOUGLAS	\$17,000
FARIBAULT	\$25,500
FILLMORE	\$25,500
FREEBORN	\$25,500
GOODHUE	\$21,500
GRANT	\$21,500
HENNEPIN COUNTY	\$8,500
HUBBARD	\$8,500
ISANTI	\$8,500
SWCD	Proposed FY24/25 Allocation
ITASCA	\$2,500
JACKSON	\$25,500
KANABEC	\$8,500
KANDIYOHI	\$25,500
KITTSOON	\$30,000
KOOCHICHING	\$2,500
LAC QUI PARLE	\$25,500
LAKE	\$2,500
LAKE OF THE WOODS	\$8,500
LE SUEUR	\$21,500
LINCOLN	\$21,500
LYON	\$25,500
MAHNOMEN	\$17,000
MARSHALL	\$38,500
MARTIN	\$30,000
MC LEOD	\$17,000
MEEKER	\$21,500
MILLE LACS	\$8,500
MORRISON	\$21,500

MOWER	\$25,500
MURRAY	\$25,500
NICOLLET	\$17,000
NOBLES	\$30,000
NORMAN	\$30,000
OLMSTED	\$21,500
OTTER TAIL E	\$21,500
OTTER TAIL W	\$21,500
PENNINGTON	\$21,500
PINE	\$8,500
PIPESTONE	\$21,500
POLK E	\$21,500
SWCD	Proposed FY24/25 Allocation
POLK W 45	\$38,500
POPE	\$21,500
RAMSEY	\$2,500
RED LAKE	\$17,000
REDWOOD	\$30,000
RENVILLE	\$38,500
RICE	\$17,000
ROCK	\$21,500
ROOT RIVER	\$17,000
ROSEAU	\$30,000
SCOTT	\$8,500
SHERBURNE	\$8,500
SIBLEY	\$21,500
ST. LOUIS N	\$2,500
ST. LOUIS S	\$2,500
STEARNS	\$30,000
STEELE	\$21,500
STEVENS	\$25,500
SWIFT	\$25,500
TODD	\$17,000
TRAVERSE	\$25,500
WABASHA	\$17,000
WADENA	\$8,500
WASECA	\$17,000

WASHINGTON	\$8,500
WATONWAN	\$21,500
WILKIN	\$30,000
WINONA	\$17,000
WRIGHT	\$17,000
YELLOW MEDICINE	\$30,000
	\$1,698,500

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	
FY12-13	
FY14-15	
FY16-17	3.0
FY18-19	3.0
FY20-21	3.4
FY22-23	3.0
FY24-25	3.0
FY26-27	

FY26-27 CLEAN WATER FUND PROPOSAL

Nonpoint Source Restoration and Implementation	
DNR	Program Number: 34
Program Contact Name: Barbara Weisman	Phone: 651-259-5147
Contact E-mail Address: barbara.weisman@state.mn.us	
Person filling out form: Jason Moeckel	Phone: 651-259-5240
Person filling out form e-mail address Jason.moeckel@state.mn.us	

Purpose

The DNR supports local planning and implementation work for clean water. This includes four main activities: providing technical assistance with water quality implementation projects; contributing to Comprehensive Watershed Management Plans under the One Watershed, One Plan (1W1P) program; promoting higher water quality standards in local shoreland ordinances; and forest stewardship planning to protect water quality in at-risk watersheds.

Webpage

A DNR Clean Water Fund website is being developed to provide more information about DNR's technical assistance with implementation projects and links to information related to other activities described above. Meanwhile, the following sites provide additional information:

[DNR Legacy Funded Projects](#): See "Protecting and restoring lakes, rivers, and groundwater" on this site for stories about some of the implementation projects DNR staff have assisted.

DNR's [Innovative Shoreland Standards Showcase](#) website describes the higher standards we promote to communities interested in going beyond state shoreland rules to better protect water quality. See also the [Shoreland Higher Standards](#) training video.

BWSR's [forest land conversation website](#) describes the main elements of DNR's role in forest stewardship planning to protect water quality: [woodland stewardship plans](#) for privately owned land (see also [Private Forests, Pristine Waters](#)) and Landscape Stewardship Plans including links to completed plans.

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

Technical assistance with implementation projects:

DNR staff offer stream geomorphology survey data and results of completed projects to support systemic solutions to erosion problems in stream systems where most of the excess sediment is from streambanks or streambeds rather than upland or overland sources. DNR stream

geomorphology experts work with local partners to target, select, and find funding for streambank stabilization and stream restoration projects that not only meet water quality goals holistically but are also more durable in the long-term and provide a multitude of additional ecological benefits, by addressing the root causes of the erosion problem. DNR staff help design projects, oversee construction, and offer training to Technical Service Authority (TSA) engineers and local government technicians.

Contributing to Comprehensive Watershed Management Plans under 1W1P:

The DNR assigns one staff person to each 1W1P watershed-based planning area. This person consults with staff in multiple DNR disciplines (Ecological and Water Resources, Forestry, Fish and Wildlife, Park and Trails, Lands and Minerals) to offer DNR input that is coordinated, integrated, relevant, and useful. Typically, this includes information related to watershed hydrology, geomorphology, connectivity, and biology – key aspects of watershed health in which DNR staff have a great deal of expertise.

Higher water quality standards in local shoreland ordinances and related lake protection work: Staff in DNR's Land Use unit and area hydrologists work with local governments to help them incorporate standards that go beyond state shoreland rules (last updated in 1989) to better protect water quality as communities face modern shoreland development pressures and climate change. A DNR website shares 13 fact sheets with 84 specific examples of higher standards in local shoreland ordinances from all across Minnesota. In related work, DNR Ecological and Water Resources staff annually update and distribute GIS data layers that MPCA and local governments use to help prioritize lake water quality protection work. (These data layers also factor into the DNR's Watershed Health Assessment Tool or WHAF.) Typically, well over 100 local government staff attend DNR trainings or presentations on higher shoreland standards and/or lake water quality prioritization data and methods every year.

Forest stewardship planning to protect water quality:

This program was developed in partnership with the Minnesota Forest Resources Council, BWSR, DNR Forestry, and DNR Fisheries. DNR contracts with SWCDs to write and help private landowners implement woodland stewardship plans to help protect water quality in high-priority waters in sensitive or at-risk subwatersheds identified in Comprehensive Watershed Management Plans for watersheds in forested regions of the state. Initially, this focused on lakes that support tullibee (cisco), an important cold-water fish eaten by walleye and other game fish. Healthy forests are a key to clean water, including conditions that support these sensitive species.

Forest stewardship plans create a relationship between the field forester and the landowner, and that relationship is often long-term. Often a landowner will immediately begin conducting activities in the plan such as tree planting, timber stand improvement, and shoreland stabilization. DNR utilizes CWF and/or other funding to cost-share those activities. Additionally, with the stewardship plan, the landowner becomes eligible to enroll the land in long-term protection programs including perpetual easements via the Reinvest in Minnesota (RIM) or Forest Legacy programs or 8-, 20- or 50-year covenants under the Sustainable Forest Incentives Act (SFIA). Clean Water Fund money for this activity has also supported the development of landscape-scale plans for five Upper Mississippi River Basin watersheds, with specific subwatershed goals and strategies that have been incorporated into Comprehensive Watershed

Management Plans. Landscape-level plans are now being developed for other watersheds with other funding. These plans help local forestry teams plan their landowner outreach based on highly targeted subwatershed-scale strategies and goals.

PRIOR APPROPRIATIONS	
FY10-11	\$500,000
FY12-13	\$2,400,000
FY14-15	\$2,000,000
FY16-17	\$2,000,000
FY18-19	\$1,900,000
FY20-21	\$2,000,000
FY22-23	\$2,500,000
FY24-25	\$3,200,000
TOTAL APPROPRIATED TO DATE	\$16,500,000

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST
TBD	TBD	TBD

Alignment with Clean Water Council Strategic Plan

Please indicate which strategy in the Clean Water Council's most recent Strategic Plan applies to this proposal.

This program supports the following strategies under the Clean Water Council's Strategic Plan.

- **Surface Water Protection and Restoration Vision:** Minnesotans will have fishable and swimmable waters throughout the state:
 - **Goal 2:** Protect and restore surface waters to achieve 70% swimmable and 67% fishable waters by 2034 via by prioritizing and targeting resources by major watershed.
 - **Strategy:** Prioritize waters for protection and restoration using comprehensive watershed management plans (One Watershed One Plan or other approved plans) updated every ten years. (All actions in this strategy except the last.)
 - **Goal 3:** Protect and restore surface waters to achieve 70% swimmable and 67% fishable waters by 2034 via through statewide, regional, or issue-specific programs that help meet water quality goals but are not necessarily prioritized and targeted according to geography
 - **Strategy:** Support competitive grants for protection and restoration activities.
- **Vision: All Minnesotans value water and take actions to sustain and protect it:** Minnesotans will have fishable and swimmable waters throughout the state:
 - **Goal 1:** Build capacity of local communities to protect and sustain water resources.
 - **Strategy:** Maintain and increase capacity of Minnesotans to improve water quality.
 - **Action:** Support local efforts to engage lakeshore property owners and private landowners.

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

Technical assistance with implementation projects:

DNR regional and field staff will continue providing technical assistance on 70 to 90 proposed, planned or actual implementation projects each year. These are mostly multi-year efforts to address erosion and excess sediment in impaired streams using Natural Channel Design principles and features to stabilize stream channels or more fully restore stream functions and add ecological benefits. As more such projects are implemented, we will have more and better project effectiveness monitoring data to measure water quality and ecological benefits. This data will be directly applied in designing future projects.

Contributing to Comprehensive Watershed Management Plans under 1W1P:

DNR regional and field staff will continue contributing to Comprehensive Watershed Management Plan development, updates, and implementation efforts. Plans are strengthened by multidisciplinary input, data, and information from DNR. Engaging in these planning efforts enhances later collaborations to implement high-priority projects identified in plans. Staff have developed poster-style handouts for 20-plus watersheds to synthesize and plainly communicate key takeaways from otherwise complex information on hydrology and geomorphology conditions and trends, and their potential impact on top local watershed management concerns. We anticipate developing more such watershed posters. Regional staff also anticipate developing more products like a recent DNR Wells Creek Sediment Strategies report which recommends strategies for highly targeted stream reaches where DNR surveys show excess sediment is mainly from streams. For each set of recommended strategies, the report includes expected sediment load reductions and scalable project cost estimates.

Higher water quality standards in local shoreland ordinances and related lake protection work: DNR Land Use Unit staff will continue promoting the higher standards documented on the Innovative Shoreland Standards Showcase website via training events and technical assistance. DNR Lake Ecology Unit staff will also continue annually updating and distributing essential GIS layers used to help prioritize lake water quality protection efforts. We anticipate reaching well over 100 local government staff, lake association members and lakeshore property owners per year in trainings and presentations about these information resources and how to apply them.

Forest stewardship planning to protect water quality:

To date, DNR forestry staff have collaborated with BWSR and SWCDS to fund the development of at least 317 forest stewardship plans covering 37,687 acres of privately owned forest in targeted watersheds. More than 20,000 acres of this land was subsequently enrolled in SFIA. The program to date has also provided more than \$200,000 in cost-share to help 70 landowners implement practices identified in their plans. Finally, the program has funded the development of five (5) landscape-level (watershed-scale) forest stewardship plans for watersheds in the Upper Mississippi River Basin—which, together with landscape-level plans for other watersheds in this basin, developed with other funding—will help protect St. Cloud and Twin Cities drinking water.

Keeping forested lands forested and enhancing their management protects water quality in at-risk subwatersheds. In FY24-25, the program will fund the development of landowner stewardship plans and provide plan implementation cost-share funding in four (4) southeastern Minnesota watersheds (Cannon, Root, Winona-LaCrescent, and Root), with a goal of reaching 1,100 highly acres in bluff lands targeted based on separately developed landscape-level forest stewardship plans for those watersheds. In future years, this work might continue here and/or in other forested regions depending on the capacity of SWCDs in a given year.

Long-term funding vision

If this proposal is funded, should the Clean Water Council expect future requests to increase, decrease, stay about the same, or not be needed? (Do not factor inflation into your answer.)

Stay about the same

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? If so, please describe. If not, leave blank.

Technical assistance with implementation projects:

The projects we assist often involve funding from a variety of sources in addition to the Clean Water Fund, such as state bonding funds, the Outdoor Heritage Fund, US Fish & Wildlife Service funds, federal Farm Bill conservation programs, and the MPCA/EPA 319 Small Watersheds Program.

Forest stewardship planning to protect water quality:

DNR's forest stewardship planning program helps local forestry technical teams develop budgeting tools to leverage private, local, state and federal funds, such as US Forest Service Landscape-Scale Restoration Program funding to write landscape-level (watershed-scale) forest stewardship plans (additional to the five such plans developed with CWF money); state and federal funds for additional cost-share money to implement practices in forest stewardship plans; and state and federal funding for enrolling forestland in the long-term covenant and perpetual easement programs mentioned earlier.

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that "any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose." **Indicate if this proposal will supplement or supplant previous funding.**

Supplement

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

Of the \$13.3 million appropriated from FY10 through FY23, 6% has been passed through, mostly for the forest stewardship planning activity (in contracts with SWCDs and cost-share to landowners to implement practices in those plans). In FY24-25, 100% of the \$500,000 allocated for forest stewardship planning will be passed through in this way, and the same or nearly the same is anticipated in FY26-27.

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	1.0
FY12-13	7.0
FY14-15	6.5
FY16-17	6.3
FY18-19	7.7
FY20-21	8.5
FY22-23	7.7
FY24-25	TBD
FY26-27	TBD

Le Sueur River Watershed: Hydrology & Stream Stability

Contact: Erynn Jenzen, DNR Area Hydrologist, (507) 389-8809, erynn.jenzen@state.mn.us



The Le Sueur River is a leading contributor of sediment and nutrients to the Minnesota River. With the goal of improving watershed health and building resiliency in the system, DNR specialists have assessed watershed hydrology trends and stream channel stability. Stream stability assessments examine physical characteristics of streams and rivers, based on how they formed over time and how they are responding to changes. Results can be used to understand current conditions, changes and trends, and to develop targeted strategies to restore and protect watershed health.

Erosion and Sedimentation

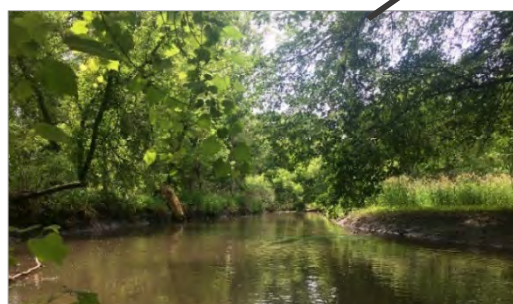
The Le Sueur River and many of its tributaries are impaired for turbidity or total suspended solids (sediment). Recent research shows the largest sources of sediment are from channel, bank and bluff erosion. The geologic history of the watershed leaves certain areas naturally vulnerable to erosion. Watershed-wide, however, stream and river instability is resulting in high erosion rates, poor habitat, loss of land, degraded water quality, and impacts to nearby infrastructure.



The lowest reach of the Le Sueur is relatively flat and excess sediment is clogging the stream channel. High flows have widened the streambed and formed sand and gravel bars, burying habitat for fish and aquatic organisms.



Steep eroding bluffs are common in the lower portions of the watershed within the Cobb, Maple, and Le Sueur river channels.



Rice Creek is still a well-functioning river channel with a connected, natural floodplain in its mid-to-lower reaches to absorb flooding, although most of the headwaters have been artificially straightened and ditched.

Increased Flows and Flooding

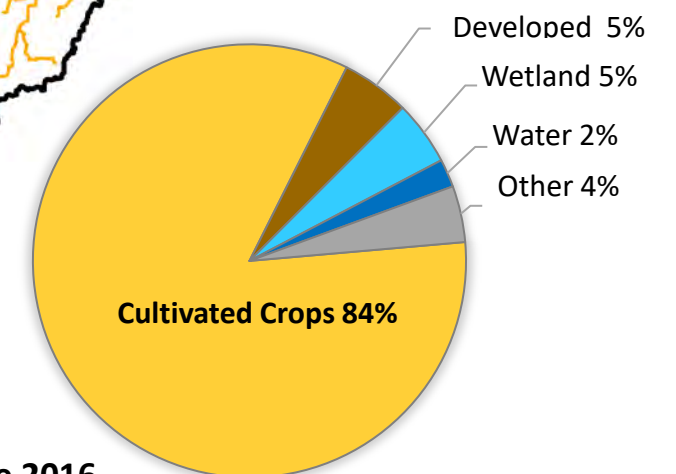
Since 1990, stream channel-forming flows have **almost doubled**, causing massive stream bank and streambed erosion. Recent flooding has severely impacted the communities of St Clair, New Richland, and areas near Mankato. High flows impact homes, roads, private property, and recreational activities. Aquatic life and instream habitat changes from seasonal flow alterations. Fishing, paddling, and other outdoor activities are popular, but opportunities decrease due to dramatic flow alterations.



Around 60% of all watercourses in the watershed have been modified for drainage improvements. This changes the movement, duration, and flow paths of water, accelerating flows so they reach the major rivers sooner.



The majority of headwaters streams have been channelized or ditched.



Land Use 2016

Cultivated crops, primarily corn and soybeans, are the dominant land use in the watershed.

Causes of Change & Potential Solutions

Changes in Precipitation and River Flow

Evidence in DNR's hydrologic change assessment show 1990 as a significant breakpoint. Changes in precipitation and flow throughout the watershed are evident when comparing pre-1990 to post-1990 data (see graph below):

- Annual precipitation is up 21%
- All seasonal flows have intensified, with the greatest increases in summer and fall
- High flows in the Le Sueur River are up 92%
- 1.5-year recurrence interval flows have almost doubled; this is the channel-forming bankfull flow

Changes in Land Use

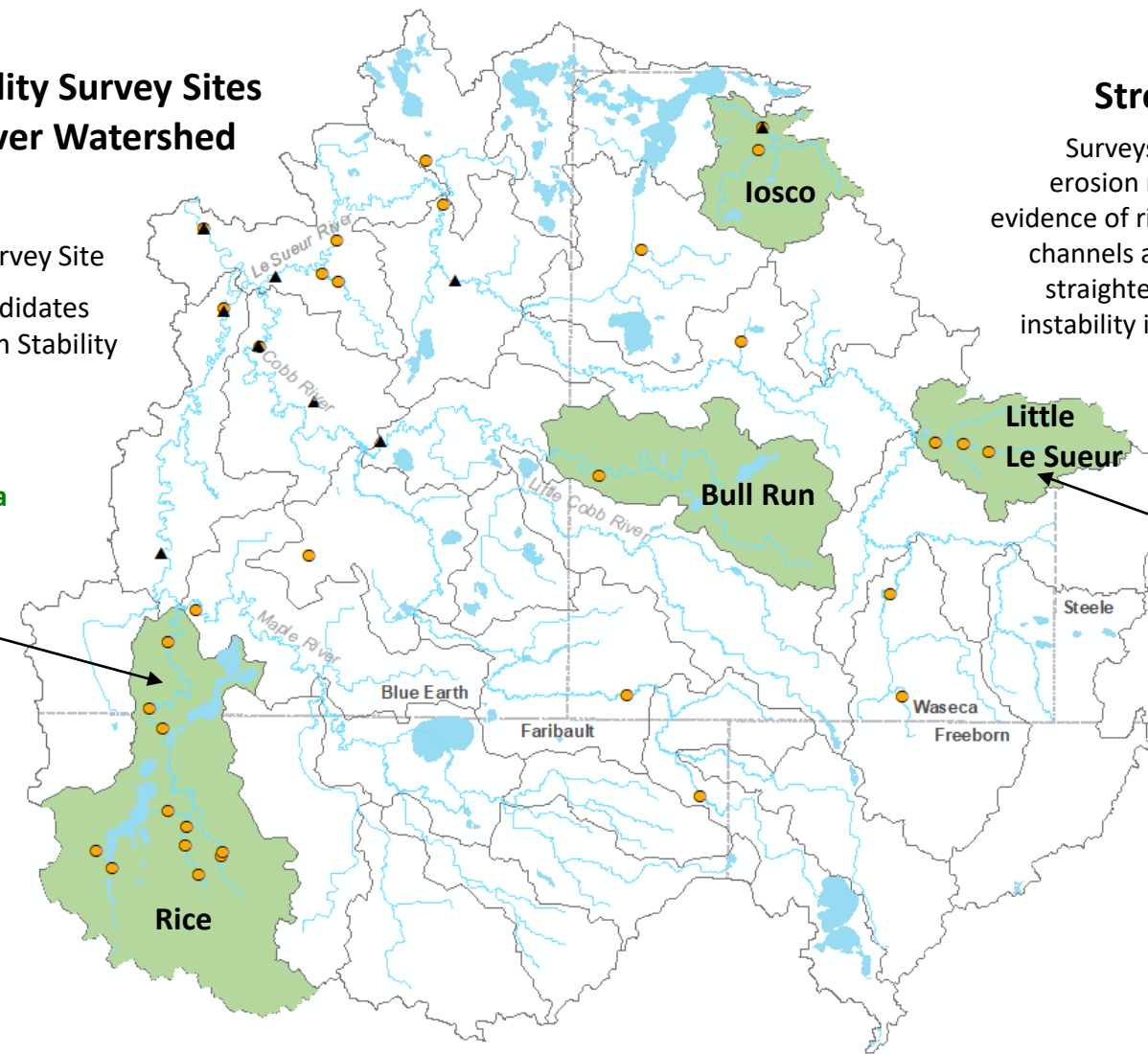
In the 1940-50s, agricultural land in the watershed began shifting from a mix of crops, including early season varieties, to predominantly corn and soybeans, which use water mainly in the summer. Agricultural and urban land use alterations, drainage projects, and past wetland loss have reduced water holding capacity on the land and in the soil.

DNR Stream Stability Survey Sites in the Le Sueur River Watershed

- River Flow Gage
- Stream Stability Survey Site
- Subwatershed Candidates for Detailed Stream Stability Analysis

Rice Creek is a focus area for stream monitoring & potential restorations.

The Rice Creek watershed is 82 square miles. The headwaters lie in Faribault County. From there, the creek flows north to the Maple River in Blue Earth County.



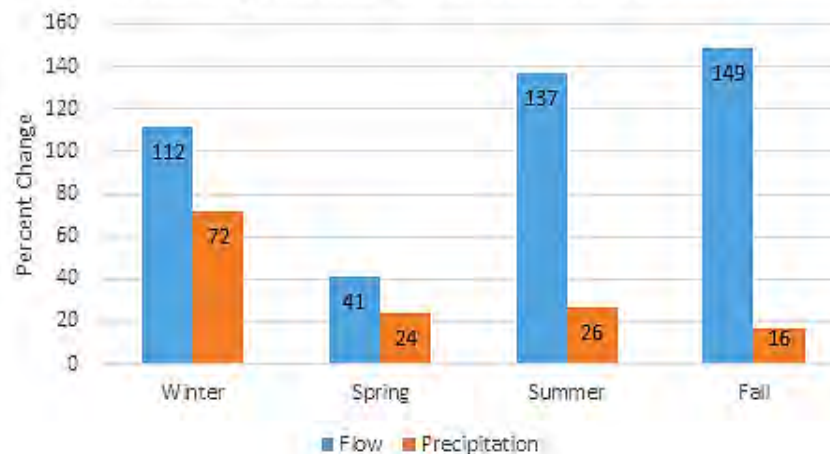
Stream Stability Assessment Sites

Surveys sites for channel stability and streambank erosion reflect widespread changes, instability, and evidence of rivers evolving to changing conditions. Most channels are incised through downcutting or channel straightening. Accelerated bank erosion and stream instability is a factor leading to sediment impairments and aquatic habitat loss.



Example of a healthy, meandering stream and floodplain in the headwaters of the Little Le Sueur River in Waseca County.

Hydrology Increases Post 1990 vs Pre 1990



The volume of water flowing through the Le Sueur River and precipitation in the watershed, as well as the ratio of discharge to precipitation, increased notably after 1990. Changes are greatest in fall (Sept, Oct, Nov) and summer (June, July, August).

Why Focus on Rice Creek?

After evaluating watershed health conditions and talking with local and state partners, Rice Creek rose to the top as a candidate for detailed stream stability assessment. Primary reasons include:

- It is impaired for turbidity (sediment) and for habitat (poor fish and macroinvertebrate communities)
- There is local interest in restoring Bass, Lura, and Rice lakes
- Healthy stream reaches and connected floodplains are found in the middle and lower portions of the watershed—making it more likely that projects in other portions will be highly effective in restoring water quality and health to the entire subwatershed
- It includes areas of high quality aquatic habitat & rare natural features

Rice Creek Stream Stability & Sediment Study

Local DNR staff are assessing stream stability to quantify sediment coming from within the channels, and are using this data to identify stream reaches for potential restoration. They have also completed a culvert inventory as part of the study. The study results can serve as a starting point for further collaboration with local communities and interests.

Potential Solutions to Restore Watershed Health

Take advantage of **systems solutions** – those that address the root cause of the problem and result in multiple benefits – to protect and restore ecosystem functions and increase resiliency. Productive agricultural landscapes with a diversity of crops, grasslands, riparian forests, and wetlands can serve as a foundation for creating and maintaining healthy watersheds.

Water Storage: Keeping the water close to where it falls, both on and in the ground, can help reduce runoff and lower the overall amount of water flowing through our waterways. Promote practices to increase infiltration, storage, and evapotranspiration, and restore and protect areas that naturally store water.

Invest in Soil Health: Establishing cover crops, reducing tillage, adding perennial and winter-annual crops to crop rotations, and establishing buffers throughout the watershed are economical ways to build soil organic matter and increase water retention and infiltration. Taking marginal land out of production through public conservation programs is also an effective strategy.

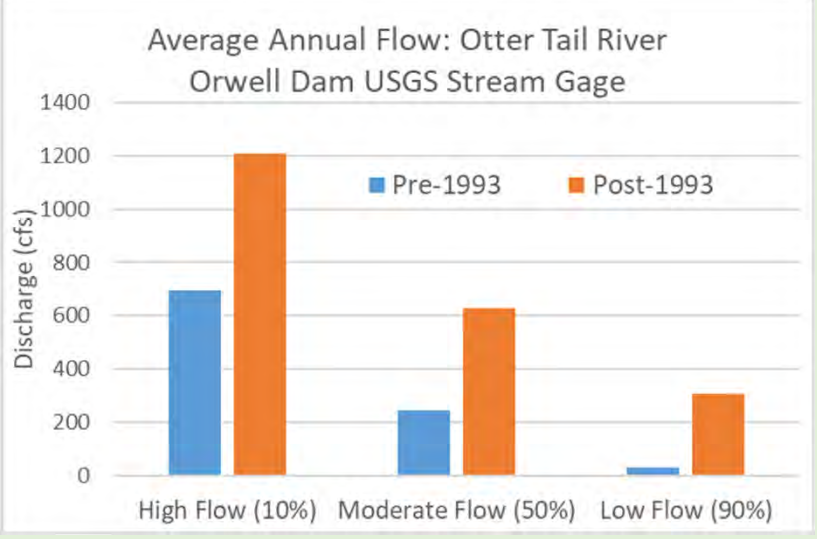
Build Resiliency: Reconnecting floodplains, re-meandering streams, managing stormwater, and restoring wetlands and lakes can make the watershed more resilient to the impacts of increased runoff and frequent high intensity rain storms.

Otter Tail River Watershed Hydrology & Stream Stability

Staff Contact: Ryan Bjerke, DNR Area Hydrologist, (218) 770-1480, Ryan.Bjerke@state.mn.us

Changes in precipitation and flow are evident when comparing pre-1993 to post-1993 data:

- Average yearly water flow has more than doubled (113%)
- Precipitation has increased (12%)
- Amount of water flowing during low and high flow events has increased
- Speed with which a flood rises and falls has **not** increased dramatically
- Dramatic decrease in dry conditions (94%) and a doubling of very wet conditions



Landlocked Lakes

Some lakes are closed basins and do not have natural outlets. Increases in precipitation and decreases in drought condition can create flooding of these systems.



In-channel Erosion

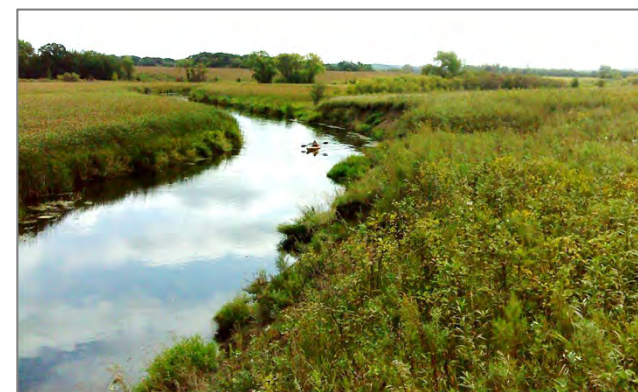
Higher flows are occurring more often in the watershed, **potentially increasing in-channel erosion**. In the Otter Tail River there has been a 75% increase in stream channel-forming flows.

Channel Forming Flow (Before 1993) = 703 cfs
 Channel Forming Flow (1993 and later) = 1227 cfs

Water is flowing onto floodplains more frequently. After 1992, 703 cfs is exceeded 43% of the time but only 10% prior to 1993.

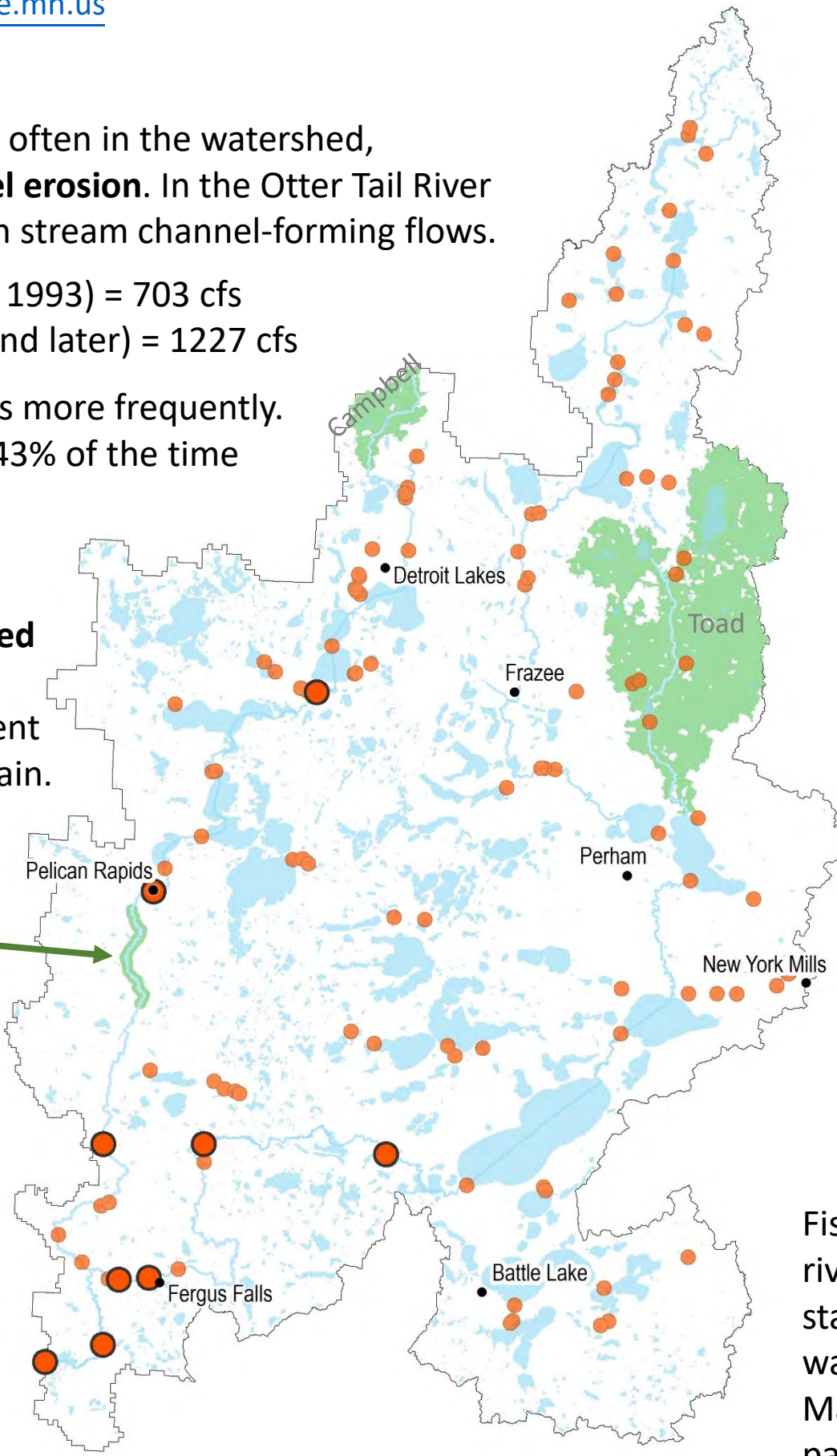
Floodplains

Rivers running at higher flows need **more room**. The Pelican River is a good example of a river in a resilient condition with access to a floodplain.



Floodplains:

- Reduce the depth and power of a river during high flows
- Provide habitat for aquatic and upland species
- Trap sediment
- Promote nutrient cycling
- Improve bank stability



Detailed summary of 2020 channel assessment available - <https://arcg.is/GL85z>

Campbell Creek and Toad River are exhibiting symptoms of unstable systems.



With limited access to disperse flow during higher flood events, these systems will need to widen and possibly deepen more. This will result in channel erosion.

Connectivity

- Identified Culvert Concern
- DNR Connectivity Priority

Fish utilize different portions of a river system for different life stages and can move to deeper water in times of drought. Maintaining or increasing fish passage supports a healthy fishery.

Watershed Highlights: Otter Tail River

Lakes of Outstanding Biology

 Lakes of Biological Significance

Lakes of Biological Significance identifies basins where high quality fish, aquatic plants, birds, or amphibians reside. The presence of any one of these categories triggers a basin to be included.



Wild Rice

 Wild Rice Lake

Minnesota has more acres of natural wild rice than any other state in the country. Wild rice is an important social and cultural component for Native American tribes and rural Minnesota communities.

Concerns

Cold water habitat protection

Maintaining water storage for resilience to altered hydrology

Dams and culverts that block fish movement

Protection of habitat along state water trail

Impact of development on water quality and habitat

Protection of wild rice lakes

Recreation

 State Water Trail

There is an abundance of recreational opportunities in this watershed. Citizens and tourists alike can choose from fishing, hunting, biking, paddling, bird-watching, hiking, and more. The **Otter Tail River is a State Water Trail**, starting at County Road 29, near the community of Rochert.

Coldwater Resources

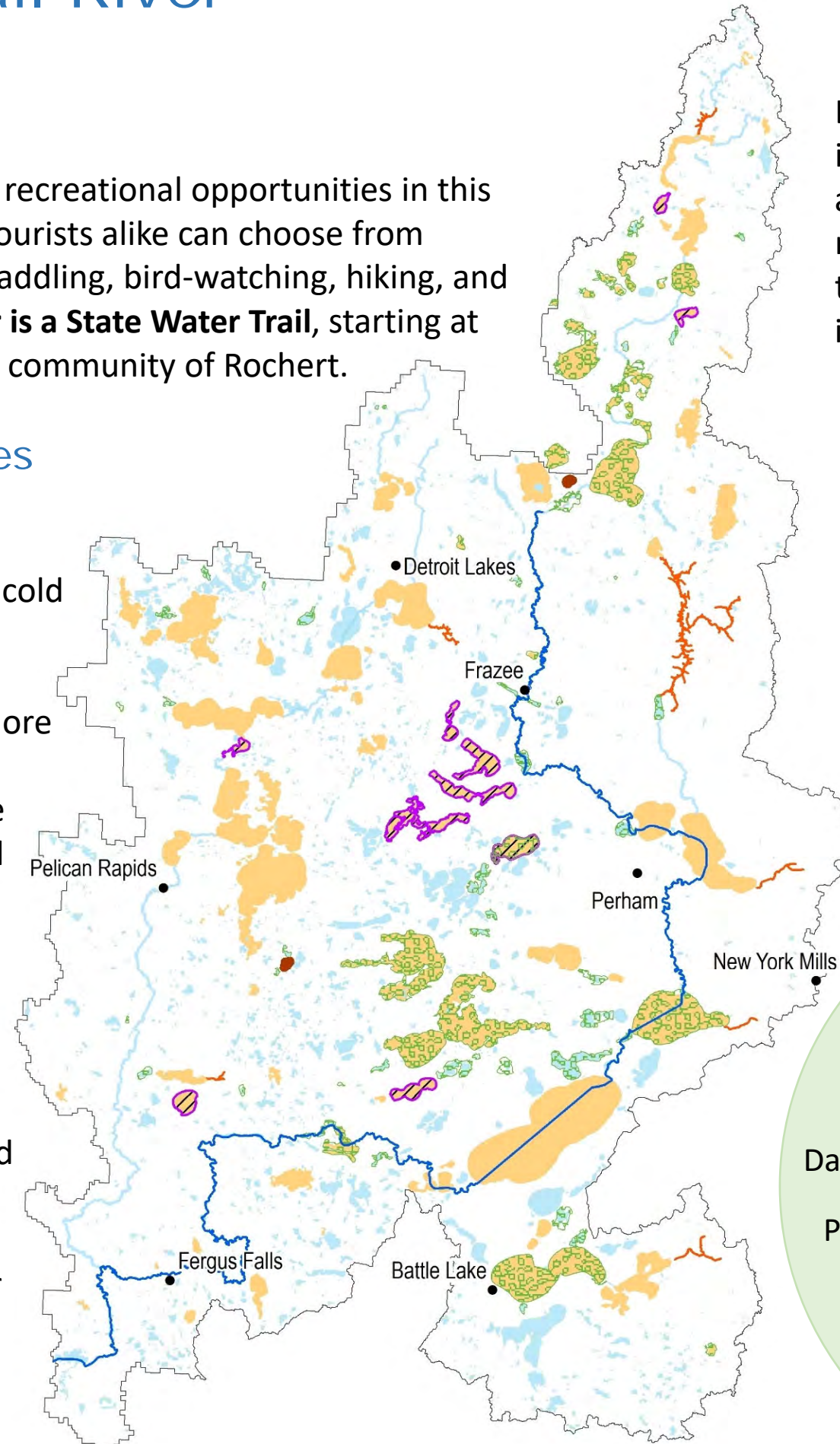
 Cisco Lake

Within the watershed are cold water lakes that support native cisco. With high temperatures occurring more often, these lakes will be stressed and require more protection to support cold water species.

 Trout Lake

 Trout Stream

Cold water streams may support trout. Altered cold water streams and their tributaries lack habitat, may have degraded water quality, and contribute excess sediment to downstream waters.



The Otter Tail River is the headwaters of the Red River. Its 192 river miles supports **the most biologically diverse fishery** in the basin.

Lake Sturgeon, once locally extinct, are being restored to lakes and streams. Removing or modifying dams helps these and other fish populations thrive.

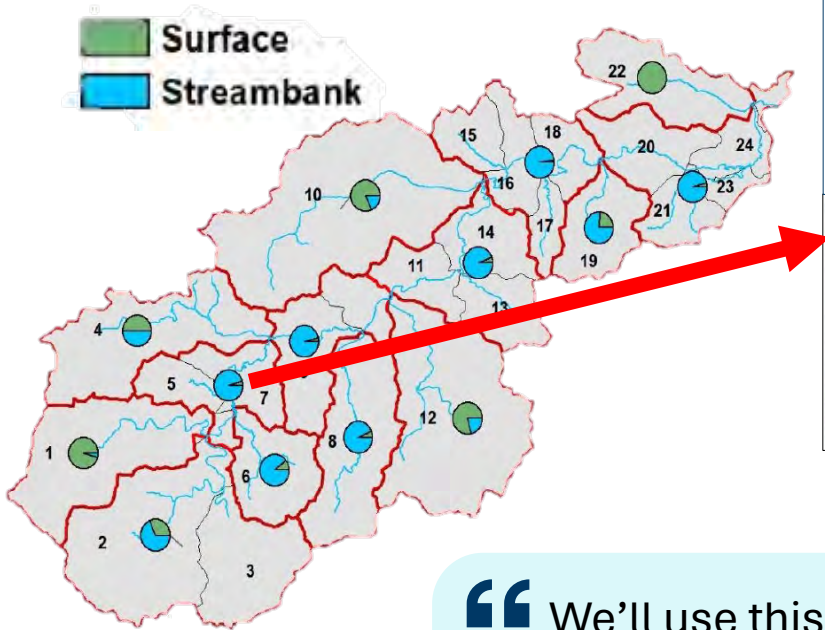
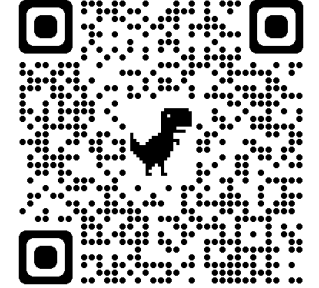


Freshwater mussel populations are some of the most diverse and dense in the state.



DNR Wells Creek Sediment Reduction Strategies report

A **ready-to-apply** set of 20 or so recommended, scalable strategies with specific restoration goals, estimated load reductions and estimated cost based on DNR stream surveys that determined the amount of sediment coming from streambank erosion vs. overland runoff from surface sources



Example for a stream reach in a catchment with one of the highest rates of streambank erosion in the watershed



Strategy for this reach (abbreviated)

- Restore up to 4,600 ft., increase floodplain access, reduce bank height, add pasture BMPs
- Could reduce streambank erosion by 394 tons/yr
- Estimated cost depending on project scope and scale: \$460K to \$1.38M

“ We’ll use this to help establish a work plan for 16 years of dedicated federal funding in the Wells Creek Watershed. **Beau Kennedy, Goodhue SWCD** ”

“ Without this analysis, we may miss the mark on targeting primary sources of sediment. It helps us make data-driven decisions. **Kristen Dieterman, MPCA** ”

FY26-27 CLEAN WATER FUND PROPOSAL

Technical Assistance	
MDA	Program Number: 15
Program Contact Name: Margaret Wagner	Phone: 651-201-6488
Contact E-mail Address: Margaret.wagner@state.mn.us	
Person filling out form: Margaret Wagner	Phone: 651-201-6488
Person filling out form e-mail address Margaret.wagner@state.mn.us	

Purpose

Funding supports on-farm demonstrations and enhances outreach and education to the agricultural community and local government partners. Demonstration projects evaluate the effectiveness of conservation practices and support collaboration with agricultural stakeholders and peer-to-peer learning among farmers. Includes activities such as Discovery Farms MN, Root River Field to Stream Partnership, Red River Valley Drainage Water Management, and support for evaluation of best management practices (BMPs) and scaling-up adoption.

Webpage

- [Root River Field to Stream Partnership](#)
- [Discovery Farms Minnesota](#)
- [Nutrient Management Initiative](#)
- [Red River Valley Drainage Management](#)

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

Technical assistance activities are a primary vehicle to work with the agricultural community to promote best management practices. This funding is used to evaluate the effectiveness of conservation practices, demonstrate practices that protect water, and enhance outreach and education to the agricultural community and local government partners.

PRIOR APPROPRIATIONS	
FY10-11	\$2,665,000
FY12-13	\$1,550,000
FY14-15	\$3,000,000
FY16-17	\$2,250,000
FY18-19	\$2,250,000
FY20-21	\$3,000,000
FY22-23	\$3,000,000

FY24-25	\$3,000,000
TOTAL APPROPRIATED TO DATE	\$20,715,000

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

Alignment with Clean Water Council Strategic Plan

Please indicate which strategy in the Clean Water Council's most recent Strategic Plan applies to this proposal.

Groundwater Vision: Groundwater is clean and available to all in Minnesota.

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

- Action: Reduce nitrate contamination of groundwater.
- Action: Reduce risk of pesticide contamination in groundwater.

Drinking Water Source Protection Vision: Drinking water is safe for everyone, everywhere in Minnesota.

Goal 1: Public Water Systems--Ensure that users of public water systems have safe, sufficient, and equitable drinking water.

- Action: Fund protective actions that assist public water suppliers in meeting safe drinking water levels

Surface Water Protection and Restoration Vision: Minnesotans will have fishable and summable waters through the state.

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

- Action: Support local efforts to support those impaired waters that are closest to meeting water quality standards
- Action: Support efforts to support those high-quality unimpaired waters at greatest risk of becoming impaired waters that are closest to meeting water quality standards

Vision: All Minnesotans value water and take action to sustain and protect it.

- Action: Support local efforts to engage farmers in water quality efforts.
- Action: Engage water managers statewide.
- Action: Support innovative efforts that accelerate progress toward clean water goals.

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

As of 2024, the MDA has engaged more than 20,000 ag producers, crop advisors and local partners at more than 500 education and outreach events. The MDA supports approximately 100 nutrient management initiative on-farm plots each year engaging 100 farmers and 30 crop advisers.

The MDA maintains more than 25 active edge-of-field water quality monitoring stations around the state. Edge-of-field data have been used for education/outreach and for a variety of computer simulations including PTMApp, Adapt-N, SWAT, and the Runoff Risk Advisory Tool. Data are used to support the State’s Watershed Approach and referenced in numerous WRAPs reports. MDA and project partners have shared edge-of-field monitoring data more than 50 times to support modeling and research (peer reviewed journal articles and large meta-analysis) by other research organizations.

Long-term funding vision

If this proposal is funded, should the Clean Water Council expect future requests to increase, decrease, stay about the same, or not be needed? (Do not factor inflation into your answer.)

Stay about the same

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? If so, please describe. If not, leave blank.

Yes, staff have leveraged federal EQIP dollars for implementation in the Root River watershed and applied for small grants to enhance demonstration sites. A total of \$3.5M has been leveraged in grants from Fishers and Farmers Partnership, MN Corn Growers, Legislative Commission on Minnesota Resources (LCCMR), investments from private industry and project partners at edge-of-field monitoring sites, and federal cost share.

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that “any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.” **Indicate if this proposal will supplement or supplant previous funding.**

Supplement

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

In FY14-FY23, ~20% was passed through in grants and contracts. Recipients include local project partners, farmers, and landowners. For example, partners included Fillmore County SWCD, Mower County SWCD, Wilken County SWCD, and individual participants in on-farm research and demonstration sites.

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	1.0/3.95
FY12-13	5.2/5.85
FY14-15	8.5/6.85
FY16-17	6.85
FY18-19	7.00
FY20-21	7.00
FY22-23	6.00
FY24-25	6.00
FY26-27	6.00

FY26-27 CLEAN WATER FUND PROPOSAL

Conservation Equipment Assistance	
MDA	Program Number: __
Program Contact Name: Brad Jordahl Redlin	Phone: 651-200-5307
Contact E-mail Address: brad.jordahlredlin@state.mn.us	
Person filling out form: Brad Jordahl Redlin	Phone: 651-200-5307
Person filling out form e-mail address brad.jordahlredlin@state.mn.us	

Purpose

Funding will provide assistance to both Soil and Water Conservation Districts (SWCDs) and farmers to purchase equipment or items to retrofit existing equipment that has climate and water quality benefits including conservation tillage equipment and cover crop seeding equipment.

Some of the methodologies and equipment needed to implement soil health practices are not part of existing farm management practices and a change in how a farm is operated and/or different equipment may be needed. There are federal and state programs that assist with soil health practices. This proposal would complement cost-share programs by providing the equipment needed to implement practices.

Webpage

<https://www.mda.state.mn.us/soil-health-grant>

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

Funding will provide financial assistance to local governments or farmers to cover the costs of specialized equipment and technology necessary to implement and sustain soil health practices, including conservation tillage and seeding equipment, purchases or subscriptions of equipment technology, services to landowners, and other equipment purchases or financial assistance to promote healthy soil.

In order to facilitate adoption of practices that benefit water quality while delivering climate change mitigation through carbon emission reductions and sequestration, the proposal would provide financial assistance to acquire machinery needed for seeding cover crops and for no till/strip till planting. Examples could include a SWCD partnering with a Co-op where the Co-op holds and provides the machinery for custom application and the SWCD promotes the use,

provides clients, and givesg those clients financial and technical assistance to adopt cover crops or strip till. Partnerships could also exist between a consortium of SWCDs with machinery crossing county lines and other local groups or partnerships promoting the availability and use the machine(s).

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	
FY16-17	
FY18-19	
FY20-21	
FY22-23	
FY24-25	\$3,500,000
TOTAL APPROPRIATED TO DATE	\$3,500,000

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST
tbd	tbd	tbd

Alignment with Clean Water Council Strategic Plan

Please indicate which strategy in the Clean Water Council's most recent Strategic Plan applies to this proposal.

Groundwater Vision

- Goal 1; Strategy 2; Action 3
- Goal 2; Strategy 2; Action 1; Strategy 3; Action 1

Drinking Water Source Protection

- Goal 1; Strategy 2; Action 1; Strategy 3; Action 1

Surface Water Protection and Restoration Vision

- Goal 2; Strategy 2; Actions 1, 3, 4
- Goal 3; Strategy 3; Action 1

Vision: All Minnesotans...

- Goal 1; Strategy 1; Actions 7

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

The Minnesota Department of Agriculture (MDA) will track appropriate performance measures such as: number of grants awarded; types of equipment requested and funded; and number of acres with soil health practices implemented, as a result of the new equipment.

FY24 Applications	Awards	\$ Awarded	Average Award	\$ Requested	Affected Acres (annually)
284	81	\$2,358,861.51	\$28,547	\$8.4 million	141,741

Equipment	Count
Air seeder	4
Calmer stalk rolls	1
Cover crop seeder	2
Fertilizer applicator for compost extract	1
Fertilizer/seed tender	1
High boy floater for cover crop seeding	1
Interseeder	4
Liquid fertilizer applicator	2
No-till drill	21
No-till drill and UAV	1
No-till planter	6
No-till planter retrofit	3
No-till planter w/liquid application, cone-bottom tanks, transfer pump	1
Roller crimper	1
Portable fence (Rotational grazing)	1
Row cleaners	1
Row cleaners & seed openers	1
Row units for roller crimper	1
Seed cleaner	1
Seed units for cover crop seeder	1
Seeder	2
Seeder & fertilizer applicator	1
Strip tillage unit	12
Swather	1
UAV for cover crop seeding	5
Vertical manure applicator	1
Vertical tillage equipment (for cover crops)	4



Soil Health Financial Assistance Program

Fiscal Year 2024 Legislative Report

1/08/2024

Minnesota Department of Agriculture
Soil Health Financial Assistance Program
625 Robert Street North
Saint Paul, MN 55155
Phone: 651-201-6489
Brad.JordahlRedlin@state.mn.us
www.mda.state.mn.us



This report cost approximately \$300 to prepare, including staff time, printing, and mailing expenses (MINN. STAT. 3.197).

Upon request, this material will be made available in an alternative format such as large print, Braille, or audio recording. Printed on recycled paper.

In accordance with the Americans with Disabilities Act, this information is available in alternative forms of communication upon request by calling 651-201-6000. TTY users can call the Minnesota Relay Service at 711. The MDA is an equal opportunity employer and provider.

Contents

Executive Summary1

Program Operations1

 Grant awards1

 Table 1: FY24 General Fund appropriation only SHFAP awards by county2

 Table 2: FY24 Grant awards for the SHFAP with General Fund appropriation3

 Table 3: FY24 Grant awards for the SHFAP with Clean Water Fund appropriation4

Executive Summary

Building soil health is key to facilitating resiliency across Minnesota’s working lands in the face of a changing climate and optimizing fertility to reduce nutrient loss. However, soil health practices typically require specialized, expensive equipment that many producers do not own. To meet this challenge, the Soil Health Financial Assistance Program (SHFAP) was established to provide grants to individual producers, groups of producers, and local government units to purchase soil health equipment. Initially established as a \$500,000 pilot appropriation in the 2022 legislative session, the SHFAP received additional funding in the 2023 legislative session. The additional funding includes a General Fund appropriation that allocates \$625,000 in Fiscal Year (FY)24 and \$625,000 in FY25, with \$639,000 in FY26 and each year thereafter. In addition to the General Fund appropriation, the Minnesota Department of Agriculture received a Clean Water Fund appropriation of \$1,750,000 in FY24 and FY25 for the SHFAP, bringing the total annual funds available for grants and administration of the SHFAP to \$2,375,000 in FY24 and FY25.

Program Operations

A request for proposals for the SHFAP was open from July 31 to September 15, 2023, and generated 284 applications for more than \$8.4 million in requested support from across Minnesota. Applications were competitively reviewed by an external review committee which scored and ranked applications based on their soil health benefit, financial need, potential for conservation practice co-benefits, and other factors. Grant award decisions were announced by December 30, 2023.

Grant awards

Using the General Fund appropriation, a total of 24 awards were made across 20 counties amounting to \$590,093.75. Of the \$625,000 available, up to 6.5% or \$40,625 can be reserved for program administration. Table 1 shows grant awards under the General Fund appropriation by county. The equipment purchased through these grant awards will be used to implement a wide range of soil health practices on a minimum of 57,756 acres annually.

Tables 2 and 3 show the individual awards made under the General Fund and Clean Water Fund appropriations, respectively. Combined, these two pools of funding allowed a total of \$2,312,352.51 in SHFAP grant awards in FY24 to 81 grant recipients. The equipment purchased with these grant awards will affect an estimated 153,032 acres annually.

Table 1: FY24 General Fund appropriation only SHFAP awards by county

County	Number of Awards	Total \$ Awarded per County
Aitkin	1	\$ 9,250.00
Chippewa	1	\$ 35,140.00
Clay	1	\$ 49,032.50
Clearwater	2	\$ 43,750.00
Freeborn	1	\$ 7,780.00
Grant	2	\$ 58,500.00
Martin	1	\$ 13,000.00
McLeod	1	\$ 30,000.00
Morrison	2	\$ 66,717.25
Murray	1	\$ 50,000.00
Olmsted	1	\$ 10,065.50
Rock	1	\$ 30,000.00
Scott	2	\$ 65,914.50
Stevens	1	\$ 30,000.00
Traverse	1	\$ 35,000.00
Wadena	1	\$ 8,750.00
Waseca	2	\$ 12,900.00
Wilkin	1	\$ 20,294.00
Yellow Medicine	1	\$ 14,000.00
SUBTOTALS	24	\$ 590,093.75

Table 2: FY24 Grant awards for the SHFAP with General Fund appropriation

County	Equipment	Grant Award	Estimated Acres Affected Annually
Aitkin	Seeding UAV	\$9,250.00	1,500
Chippewa	No-till drill	\$35,140.00	350
Clay	No-till drill	\$49,032.50	2,000
Clearwater	High-boy floater for seeding with drop tubes and GPS	\$23,750.00	3,000
Clearwater	Drone for cover crop seeding	\$20,000.00	2,100
Freeborn	Strip till unit	\$7,780.00	3,100
Grant	Strip till unit	\$50,000.00	850
Grant	Cover crop seeder	\$8,500.00	5,000
Martin	Sprayer for compost tea extract application	\$13,000.00	1,250
McLeod	Fertilizer/seed tender	\$30,000.00	3,500
Morrison	Dual wheel zone cleaners for strip till bar	\$16,717.25	3,250
Morrison	Vertical tillage tool (for cover crop seeding)	\$50,000.00	3,500
Murray	No-till planter and attachments	\$50,000.00	3,000
Olmsted	Air seeder	\$10,065.50	1,450
Rock	No-till drill	\$30,000.00	1,600
Scott	Clean sweep trash whippers and individual row flow sensing w/ VRT	\$23,414.50	800
Scott	No-till drill	\$42,500.00	2,000
Stevens	Inter-seeding planter	\$30,000.00	5,000
Traverse	Air seeder	\$35,000.00	778
Wadena	No-till drill & bale unroller	\$8,750.00	478
Waseca	Coulter conversion kit	\$4,900.00	4,000
Waseca	No-till drill	\$8,000.00	2,000
Wilkin	Attachments for liquid fertilizer application	\$20,294.00	4,250
Yellow Medicine	Nitrogen/seed applicator	\$14,000.00	3,000
	SUBTOTALS	\$590,093.75	57,756

Table 3: FY24 Grant awards for the SHFAP with Clean Water Fund appropriation

County	Equipment	Grant Award	Estimated Acres Affected Annually
Big Stone	No-till drill	\$35,000.00	1,100
Cass	Drone for cover crop seeding	\$17,710.00	3,500
Clay	No-till drill	\$9,250.00	12
Cottonwood	Cover crop spreader	\$36,500.00	2,600
Cottonwood	Row units for crimper	\$12,050.00	400
Dakota	Air seeder	\$50,000.00	2,710
Douglas	No-till drill	\$5,300.00	120
Faribault	Strip till unit	\$20,000.00	2,500
Freeborn	No-till drill	\$15,000.00	1,200
Goodhue	No-till drill	\$26,392.00	600
Hennepin	Strip till unit	\$23,296.00	605
Houston	No-till drill	\$12,500.00	200
Isanti	No-till drill	\$21,250.00	500
Jackson	Strip till unit	\$7,500.00	152
Kanabec	Roller crimper retrofit	\$3,928.00	80
Kandiyohi	Air seeder	\$12,800.00	591
Lac qui Parle	Air seeder	\$50,000.00	2,000
Lac qui Parle	Seed cleaner and conveyor	\$19,000.00	2,000
Lac qui Parle	No-till planter	\$50,000.00	800
Lac qui Parle	Mower/conditioner/swather/windrower	\$40,000.00	2,200
Lac qui Parle	No-till drill	\$45,000.00	12,000
Le Sueur	Drone for cover crop seeding	\$33,000.00	2,600
Lincoln	Cone-bottom tanks, transfer pump, and no-till planter for compost extract application	\$50,000.00	2,700
Lincoln	Portable corral system for livestock grazing	\$14,250.00	600
Lyon	Vertical tillage tool (for cover crop seeding)	\$50,000.00	2,500
Marshall	No-till drill	\$50,000.00	3,800
Martin	Air seeder	\$50,000.00	2,582
Meeker	Vertical tillage tool (for cover crop seeding)	\$40,000.00	1,600
Mille Lacs	Cover crop seeder	\$25,000.00	1,200
Morrison	Vertical tillage tool (for cover crop seeding)	\$8,186.06	400
Morrison	No-till planter	\$11,750.00	400
Mower	No-till drill & parts	\$20,000.00	560
Mower	Montag Mount for Vertical tillage tool (for cover crop seeding)	\$19,500.00	1,500
Murray	Strip till unit	\$50,000.00	3,500
Murray	No-till planter	\$50,000.00	3,750
Murray	Materials to update strip till bar	\$50,000.00	1,285
Murray	Calmer stalk rolls	\$12,028.00	350
Olmsted	No-till drill and drone for cover crop seeding	\$27,500.00	545
Olmsted	No-till drill	\$50,000.00	2,200
Otter Tail	Hydraulic down force system for planter	\$17,237.00	1,500
Pipestone	Strip/no-till planter and attachments	\$50,000.00	2,500
Pipestone	Drone for cover crop seeding	\$19,345.00	750
Pope	Pneumatic row cleaners	\$11,000.00	800
Pope	No-till drill	\$16,000.00	693
Redwood	Air seeder	\$50,000.00	10,000
Renville	Seed units for cover crops	\$15,294.50	500

County	Equipment	Grant Award	Estimated Acres Affected Annually
Renville	No-till drill	\$50,000.00	480
Rice	Inter-seeder	\$40,710.00	500
Rock	Strip till unit	\$50,000.00	2,000
Rock	No-till drill	\$24,000.00	2,500
Stearns	No-till drill	\$50,000.00	650
Stearns	Strip till unit	\$22,000.00	900
Winona	Vertical tillage tool (for cover crop seeding)	\$49,500.00	800
Winona	Row cleaners and seed openers	\$4,982.20	300
Wright	Manure spreader (vertical beater)	\$28,500.00	522
Yellow Medicine	Strip till unit	\$50,000.00	730
Yellow Medicine	Low-disturbance manure spreader	\$50,000.00	1,200
	SUBTOTALS	\$1,722,258.76	95,267

representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.” **Indicate if this proposal will supplement or supplant previous funding.**

Supplement

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

In FY24, the first year of the appropriation, there were 81 of 284 applications competitively awarded with the funding available. The recipients consisted of agricultural operators, agricultural operators in partnership, and six Soil and Water Conservation Districts.

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	
FY12-13	
FY14-15	
FY16-17	
FY18-19	
FY20-21	
FY22-23	
FY24-25	-
FY26-27	1

FY26-27 CLEAN WATER FUND PROPOSAL

Agricultural Best Management Practices Loan Program	
MDA	Program Number: 33
Program Contact Name: Richard Greunes	Phone: 651-201-6609
Contact E-mail Address: Richard.greunes@state.mn.us	
Person filling out form: Margaret Wagner	Phone: 651-201-6488
Person filling out form e-mail address Margaret.wagner@state.mn.us	

Purpose

This program provides revolving low-interest loans for the implementation of activities that reduce, prevent, or eliminate water pollution. The program is administered by local governments, has very low transaction costs, and repayments fund additional projects. Additional funding would allow for more projects or practices that help reduce, eliminate, or prevent water pollution to be funded each year as the local demand for AgBMP loans greatly exceeds available funding.

Webpage

[Agriculture Best Management Practices \(BMP\) Loan Program | Minnesota Department of Agriculture \(state.mn.us\)](#)

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

AgBMP loans can be used for the implementation of any practice that reduces water pollution. The purpose is to encourage agricultural best management practices that prevent or reduce runoff from feedlots, farm fields, and other pollution problems identified by the county in local water plans. The program is administered by local governments and local loaning institutions and has extremely low administration costs. Loans are repaid into the corpus of the account and will be available for future clean water projects regardless of the renewal of the clean water fund. A 2024 “program review” revealed there are over \$20M dollars of water quality projects that farmers and rural landowners are waiting to complete due to limited funding.

The AgBMP Loan program is supported through multiple funding sources. The program tracks each loan by funding sources, in separate accounts. This ensures practices supported meet the eligibility of the selected funding sources. As established in Statute, the interest rate assessed to an outstanding loan balance must not exceed 3%. Some counties offer lower interest rates, including a few as low as 0% on some loans.

PRIOR APPROPRIATIONS	
FY10-11	\$4,500,000
FY12-13	\$9,000,000
FY14-15	\$400,000
FY16-17	\$150,000
FY18-19	\$150,000
FY20-21	\$150,000
FY22-23	\$150,000
FY24-25	\$9,598,000
TOTAL APPROPRIATED TO DATE	\$24,098,000

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

Alignment with Clean Water Council Strategic Plan

Please indicate which strategy in the Clean Water Council's most recent Strategic Plan applies to this proposal.

Groundwater Vision: Groundwater is clean and available to all in Minnesota.

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

- Action: Reduce risk of bacteria in groundwater.
- Action: Reduce nitrate contamination of groundwater.
- Action: Reduce risk of pesticide contamination in groundwater.
- Action: Reduce risk of stormwater contaminants entering groundwater.

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

- Action: Implement water efficiency BMPs, water use reduction, and irrigation water management in areas of high water use intensity by agricultural irrigators, highly sensitive areas, Groundwater Management Areas (GWMAs), and highly vulnerable Drinking Water Source Management Areas (DWSMAs).

Drinking Water Source Protection Vision: Drinking water is safe for everyone, everywhere in Minnesota.

Goal 1: Public Water Systems--Ensure that users of public water systems have safe, sufficient, and equitable drinking water.

- Action: Support implementation funding and technical assistance to reduce nitrate in DWSMAs that are Level 1 and Level 2 under the GPR.

Goal 2: Private Water Supply Wells—Ensure that private well users have safe, sufficient, and equitable access to drinking water.

- Action: Assist qualifying low-income households and households with vulnerable populations to mitigate contaminants, such as well replacement, water treatment systems, etc.

Surface Water Protection and Restoration Vision: Minnesotans will have fishable and swimmable waters throughout the state.

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

- Action: Support local efforts to support those impaired waters that are closest to meeting state water quality standards.
- Action: Support efforts to protect those high-quality unimpaired waters at greatest risk of becoming impaired.
- Action: Restore and protect water resources for public use and public health, including drinking water.

Goal 3: Protect and restore surface waters to achieve 70% swimmable and 67% fishable waters by 2034 via through statewide, regional, or issue-specific programs that help meet water quality goals but are not necessarily prioritized and targeted according to geography.

- Action: Maintain compliance rates for subsurface sewage treatment systems (SSTS) at 80 percent with a stretch goal of 90 percent.
- Action: Reduce risk of stormwater contaminants entering surface water.
- Action: Support small unsewered or under-sewered communities for long-term wastewater solutions.

Vision: All Minnesotans value water and take actions to sustain and protect it.

Goal 2:

- Action: Support local efforts to engage farmers in water quality efforts.
- Action: Support local efforts to engage lakeshore property owners and private landowners.
- Action: Engage water managers statewide.
- Action: Support innovative efforts that accelerate progress toward clean water goals.
- Action: Plan for funding resilience after expiration of Legacy Amendment in 2034.

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

As of June 2023, the AgBMP Loan Program used Clean Water Fund dollars to support 2,253 loans totaling an amount of \$33,941,191. By practice type, 212 loans were for agricultural waste

management projects, 92 for conservation tillage equipment, 981 for structural erosion control, 881 for septic systems upgrades or relocations, and 87 for all other types of practices.

Long-term funding vision

If this proposal is funded, should the Clean Water Council expect future requests to increase, decrease, stay about the same, or not be needed? (Do not factor inflation into your answer.)

Increase

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? If so, please describe. If not, leave blank.

All dollars are available as loans. This is a revolving loan program so as loans are repaid they go back into the corpus of the program and are used again for additional loans. As of June 2023, the AgBMP Loan Program has received \$86.5 million, primarily from Minnesota’s Clean Water State Revolving Fund (SRF). AgBMP funds are available in all counties. Because of the revolving loan structure, the appropriations have been reused 3.58 times to finance 18,308 projects with total loans of \$329.0 million. The AgBMP Loan Program has leveraged over \$414.1 million from other funding sources as of June 2023.

The following are a list of the types of projects or practices the AgBMP Loan Program has been able to assist with through all funding sources: 3,118 agricultural waste management practices, 2,671 structural erosion control practices, 4,226 conservation tillage practices, 7,623 sewage treatment systems, and 670 other practices (i.e., wells, chemical application equipment, alternative energy practices).

Of all the projects listed above as of June 2023, \$14,350,000 invested from the Clean Water Fund has resulted in \$33,941,191 in loans. The Clean Water Funding has also been able to leverage an additional \$34,449,275 from other funding sources to help with projects or practices that have been funded. The Clean Water Fund is responsible for growing the corpus of the loan program and supporting new and additional practices.

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that “any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.” **Indicate if this proposal will supplement or supplant previous funding.**

Supplement

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

All dollars are available as loans. This is a revolving loan program so as loans are repaid they go back into the corpus of the program and are used again for additional loans. As of June 2023, \$14,350,000 invested has resulted in \$33.941,191 in loans.

Funding can assist all rural landowners, farmers, farm supply businesses, and water quality cooperatives throughout Minnesota to help prevent, reduce or eliminate water quality concerns. Local Government Units use their local water plans to prioritize their funding if additional funding

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	0.75
FY12-13	0.5
FY14-15	0.3
FY16-17	0.5
FY18-19	0.5
FY20-21	0.5
FY22-23	0.5
FY24-25	0.5
FY26-27	0.5

Gardner, Paul (MPCA)

From: Anita M. Cauwels <AnitaCauwels@co.lyon.mn.us>
Sent: Wednesday, April 10, 2024 1:03 PM
To: Gardner, Paul (MPCA); Wagner, Margaret (MDA)
Cc: Gruenes, Richard (MDA)
Subject: Ag BMP Loan Program Funding Opportunity

This message may be from an external email source.

Do not select links or open attachments unless verified. Report all suspicious emails to Minnesota IT Services Security Operations Center.

Good Afternoon!!

My name is Anita Cauwels and I work for the Lyon Soil and Water Conservation District and Lyon County Planning and Zoning Offices. I currently administer the Ag BMP Loan Program at our Local level. We work closely with area applicants and lenders to enhance their productivity and improve the land with their purchases. Typically some of our biggest purchases are for Ag Water Management and Conservation Tillage Equipment.

Since 2021, we have helped fund \$2,819,183.55 in purchases with the Ag BMP Loans. Many of the applicants that I have spoken with have begun doing reduced or no till acres, to improve their soil and preserve drinking water and reduce ground water contaminants. Most have noticed above average yields, surprisingly with the drought/excessive heat in the last few years, so we know their practices are working.

There is currently \$2,352,637.50 on our waiting list. Three projects this spring will potentially be funded, but the other 17 applicants on the list will be waiting for loan repayments. With these delays/lack of funding for the program, they either do not purchase the equipment or choose not to do certain practices as the interest rates for an average bank loan are too high. We are beginning to incorporate One Watershed One Plans in our county and are seeing nutrient reductions with the practices that are funded. Collaborating with Ag BMP Loans and others Cost Share opportunities, we are seeing more reductions than in years past. We are also starting to see an increase in continuous living cover.

Below is a measurable breakdown of all of our conservation tillage funds(Calculated using MPCA Watershed Pollutant Load Reduction Calculator).

Applicant	Conservation Tillage Acres	Year Purchased/Completed	N (lbs./yr) reductions achieved	P (lbs./yr) reductions achieved	TSS(tons/yr) reductions achieved
BP	210	2021	72.71	12.42	3.576
DL	1100	2021	1147	304.5	3.327
CS	400	2021	370.7	53.61	5.293
CS	1900	2021	1761	254.6	25.14
BT	680	2022	560.9	155.5	4.789
DW	1600	2022	1320	365.9	11.27
TW	1800	2022	3508	647.6	52.91
BF	1250 (Cover Crops)	2023	3831	91.27	34.61
JL	800	2023	446.1	88.86	6.699
VB	1800	2023	1764	245.8	34.99

As you can see by the table above, there is definitely a huge reduction factor on the practices that are being done. With the Ag BMP Loan program, securing funds for equipment and other practices, we will continue to see the program grow and flourish for years to come.

Thank you!

Anita Cauwels



Anita Cauwels
Lyon Soil and Water Conservation District
Lyon County Planning and Zoning
Technical Assistant
507-532-8207 x 3
anitacauwels@co.lyon.mn.us

Gardner, Paul (MPCA)

From: Kennedy, Beau <bkennedy@goodhueswcd.org>
Sent: Wednesday, April 10, 2024 11:51 AM
To: Gardner, Paul (MPCA); Wagner, Margaret (MDA); MN_MDA_ Ag BMP Loans
Cc: Delane Krier; Ed McNamara; Mark Comstock; Don Schliep; John Beck; Christopher Hinck; cvrangus@yahoo.com
Subject: RE: AgBMP Loan Program Funding Opportunity - Goodhue

This message may be from an external email source.

Do not select links or open attachments unless verified. Report all suspicious emails to Minnesota IT Services Security Operations Center.

Good Morning Richard

A note for public input on the AgBMP Loan Program for the Clean Water Council....

Over the past 13 years, the Goodhue SWCD has assisted over 120 landowners with funding through the MDA's AgBMP Loan Program. The primary use of these funds in Goodhue County have been used for assisting landowners with AgWaste and Septic improvement projects; both reduce the amount of Nitrogen leaching to our groundwater.

Goodhue SWCD AgBMP Loans (2011-2024)		
Project Type	Loans	Total Amt.
AgWaste	48	\$ 5,297,980.91
Septic	30	\$ 447,223.00

Bruce Waugh owns and operates the Canon Valley Ranch just west of Goodhue. They market top grade angus beef products to local markets and restaurants. <https://www.cannonvalleyranch.com/>
The Waugh's have utilized various conservation programs with the USDA/SWCD in the past to help their grazing operation become more sustainable and environmental friendly. Bruce utilized the AgBMP Loan Program to help with their manure handling systems. He mentioned the AgBMP loan process was easy to use and a great way to make equipment, such as a manure spreader, more attainable for his operation at the time. Bruce is willing to chat with Clean Water Council folks if they are interested in his experience with the program. (cc'd to the email/#507-381-1570)

The Goodhue SWCD is likely not alone when stating that our county has a continual list of landowners interested in AgBMP Loan funds. We have wait periods from several months to years depending on the landowner's funding request. When funded at an adequate level, this program can help landowners implement the conservation practices that the we've been preaching for years at the federal, state and local levels. With increased awareness of Nitrates in SE MN additional funding for this program in NEEDED. Specifically, funding directed towards assisting with manure handling and septic system replacements which play a significant role in mitigating nitrate pollution in SE MN

Thank you for your time and consideration.

Beau Kennedy
Goodhue SWCD
651-923-5286

From: MN_MDA_ Ag BMP Loans <AgBMP.Loans@state.mn.us>
Sent: Monday, April 8, 2024 11:32 AM
To: MN_MDA_ Ag BMP Loans <AgBMP.Loans@state.mn.us>
Subject: FW: AgBMP Loan Program Funding Opportunity



Public Services Division
Carver County Government Center
600 East 4th Street
Chaska, MN 55318-2102

**CARVER
COUNTY**

April 9, 2024

Minnesota Pollution Control Agency
Clean Water Council
520 Lafayette Road North
St. Paul, MN 55155-4194

Dear Paul Gardner and Margaret Wagner,

On behalf of the Carver County Public Services Division, I would like to express Carver County's support for the continuance of the Minnesota Department of Agriculture's Agricultural Best Management Practices (AgBMP) Loan Program, funded by the Clean Water Council.

With the rising costs of septic system construction, the replacement of a septic system can cost as much as \$30,000. Carver County is committed to providing grants and affordable financing options to homeowners faced with this financial burden of upgrading or replacing their septic system. Since 2019, Carver County has provided 49 AgBMP loans for septic system replacement, totaling more than \$869,000.

The continued funding of this program by the Clean Water Council will ensure many more residents can afford the replacement costs for their non-compliant septic systems, while improving and protecting our water resources for future generations.

Please contact me at (952) 361-1805 if you have any questions about the support for this program.

We appreciate the opportunity to provide comment.

Sincerely,

Brad Hanzel
Environmental Services Interim Department Manager

Gardner, Paul (MPCA)

From: Cody Fox <cody@mowerdistrict.org>
Sent: Monday, April 8, 2024 2:10 PM
To: Gardner, Paul (MPCA); Wagner, Margaret (MDA)
Cc: Gruenes, Richard (MDA)
Subject: Ag Bmp

You don't often get email from cody@mowerdistrict.org. [Learn why this is important](#)

This message may be from an external email source.

Do not select links or open attachments unless verified. Report all suspicious emails to Minnesota IT Services Security Operations Center.

Paul and Margaret-

Richard Gruenes (cc'ed) asked any of us to follow up with you if we have farmers who are planning or have reduced their nitrogen usage due to the bmp funding.

We recently funded a strip till rig in Mower County. I'm very proud of this one because it took 3,000+ acres of conventional tillage and is now strip tilled. On top of that, I know they are reducing or will reduce their nitrogen application due to the banding.

I think these funds have a great place and can be a major benefit to surface and groundwater as we move ahead.

Thanks for your time.

--

Cody Fox
Mower SWCD & Cedar River WD
Direct #: 507-460-4582
Cell: 507-276-8475

Check out the progress on our CIP for water quality improvement and flood reduction below!
<https://www.pca.state.mn.us/news-and-stories/how-climate-resilience-grants-prevent-flooding>

Gardner, Paul (MPCA)

From: James Vrchota <jvrchota@oakwoodbank.net>
Sent: Friday, April 5, 2024 10:48 AM
To: Gardner, Paul (MPCA); Wagner, Margaret (MDA)
Subject: FW: AgBMP Loan Program Funding Opportunity

Some people who received this message don't often get email from jvrchota@oakwoodbank.net. [Learn why this is important](#)

This message may be from an external email source.

Do not select links or open attachments unless verified. Report all suspicious emails to Minnesota IT Services Security Operations Center.

Dear Paul & Margaret,

I'm responding to your e-mail to encourage you to push for additional funding for the AgBMP program. I know down here in Winona County, our funds went fast, and some of the projects that were badly needed to fund projects that had to do with improving water quality were not funded. These customers are now waiting for the next funding availability, and their failing manure handling systems continue to impact water quality here in Winona County. Getting these projects funded is very important to the quality of life out here in rural Winona County.

Thank you for taking the time to listen to this request.

Best Regards,

Jim Vrchota



Jim Vrchota | Market President

Oakwood Bank

P.O. Box 125

140 Main Street

Rollingstone, MN 55969

Ph: 507-410-2220

Cell: 763-377-2658

Fax: 507-410-2525

E-mail: jvrchota@oakwoodbank.net

NMLS #1369212

Confidentiality Notice: This email contains confidential information of the sender which is legally privileged. The information is intended only for the use by the direct addresses of the original sender of this email. If you are not an intended recipient of the original sender, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this information is strictly prohibited. If you have received this email in error, please immediately notify the sender and delete any copies of this email in your possession. Since emails can be lost, intercepted, or corrupted, Oakwood Bank accepts no liability for damages caused by viruses transmitted via this email.

From: MN_MDA_ Ag BMP Loans <AgBMP.Loans@state.mn.us>

Sent: Friday, April 5, 2024 9:21 AM

To: MN_MDA_ Ag BMP Loans <AgBMP.Loans@state.mn.us>

Subject: AgBMP Loan Program Funding Opportunity

Gardner, Paul (MPCA)

From: Scott Anderson <Scott.Anderson@AgCountry.com>
Sent: Friday, April 5, 2024 9:58 AM
To: Gardner, Paul (MPCA)
Subject: AgBMP Public Input

You don't often get email from scott.anderson@agcountry.com. [Learn why this is important](#)

This message may be from an external email source.

Do not select links or open attachments unless verified. Report all suspicious emails to Minnesota IT Services Security Operations Center.

Paul,

I want to give you success stories and request to increase funding to the AgBMP revolving fund from the Clean Water Council for the next Biennium.

I am a loan officer for AgCountry Farm Credit Services in the Marshall office. I have been very active promoting and utilizing the AgBMP loan program in my 20 year career.

I have utilized the program to replace old hog facilities on open lots with poor manure management to upgrading to a pit barn which provides better manure management, erosion, and overall improved water management.

I have utilized the program to assist a farmer in purchase a piece of vertical tillage equipment for better crop residue management, less soil disturbance, improved soil health, and improved water management with less runoff and better filtration.

Other projects include sprayers with reduced drift nozzles and automatic shutoffs, planters with trash whippers allowing for reduced tillage, feedlot cement/monoslope barn for water management and manure management, strip till machines, manure spreaders, hoop barns for manure management and storage, berms and erosion control land projects, and many more.

I have done hundreds of AgBMP loans in my career, but lack of funding has limited my ability to promote the programs leaving many farmers unable to make changes in their operation that would greatly improve water quality in my area. If adequate funding were available, I would be sending requests to the local soil and water district office weekly. I believe in the program, promote the program, and have used the program myself as a farmer.

This is a very important program, and the limited funds have turned away many projects. I hope more funds become available so projects can be done and purchases made to benefit water quality today and far into the future.

Thank you for your time.

Scott D. Anderson

VP Loan Officer

302 O'Connell St, Marshall, MN 56258

Phone: 507-532-5751 | **Mobile:** 507-828-1971

Email: scott.anderson@agcountry.com

Web: www.AgCountry.com

Gardner, Paul (MPCA)

From: Mason Bucher <mbucher@oakwoodbank.net>
Sent: Friday, April 5, 2024 12:20 PM
To: Gardner, Paul (MPCA); Wagner, Margaret (MDA)
Subject: AgBMP Loan Program Funding Opportunity

Some people who received this message don't often get email from mbucher@oakwoodbank.net. [Learn why this is important](#)

This message may be from an external email source.

Do not select links or open attachments unless verified. Report all suspicious emails to Minnesota IT Services Security Operations Center.

Good afternoon,

I am emailing you today because I would like to see the AgBMP program get the funding it needs and deserves. Here at Oakwood Bank we service a multitude of agricultural customers in the southeastern section of Minnesota. With that area being an active karst region we feel strongly that this program is needed to provide affordable financing that helps maintain clean water and quality soils. Please consider this email as my support and call for the continued funding of the Ag BMP Loan Program.

Thank you,



Mason Bucher | Loan Processor

Oakwood Bank

2901 Mall Drive

Eau Claire, WI 54701

715.514.2327 Ext. 405

mbucher@oakwoodbank.net

Confidentiality Notice: This email contains confidential information of the sender which is legally privileged. The information is intended only for the use by the direct addresses of the original sender of this email. If you are not an intended recipient of the original sender, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this information is strictly prohibited. If you have received this email in error, please immediately notify the sender and delete any copies of this email in your possession. Since emails can be lost, intercepted, or corrupted, Oakwood Bank accepts no liability for damages caused by viruses transmitted via this email.

Gardner, Paul (MPCA)

From: Josh Rud <josh.rud@mykindofbank.com>
Sent: Friday, April 5, 2024 5:03 PM
To: MN_MDA_ Ag BMP Loans; Gardner, Paul (MPCA)
Subject: RE: AgBMP Loan Program Funding Opportunity

You don't often get email from josh.rud@mykindofbank.com. [Learn why this is important](#)

This message may be from an external email source.

Do not select links or open attachments unless verified. Report all suspicious emails to Minnesota IT Services Security Operations Center.

Hi Paul, Just wanted to state we have used the program many times for new septic and wells and also a few runoff programs for farms and other scenarios. We love the program at the banking level. Gives good rate and terms to borrowers that we can offer with some security in the loans. We need this program and hope to see it continue in the future.

Thanks,



JOSH RUD

MARKET PRESIDENT

NMLS #697484

Evansville

Address: 303 Kron St. • PO Box 100 • Evansville, MN 56326

Office: (320) 834.4659 • (218) 948.2259

Direct: (320) 391.0038



This email message (and any attachments) may contain confidential information. If you are not the intended recipient, you cannot use, distribute, or copy the message or attachments. In such a case, please notify the sender by return email immediately and erase all copies of the message and attachments. Opinions, conclusions, and other information in this message and attachments that do not relate to official business are neither given, nor endorsed by The First National Bank of Henning. In order to help prevent identity theft and fraud, The First National Bank of Henning will never request you to provide personal or financial information via unsecured email. Please report to us any suspicious emails you receive claiming to be The First National Bank of Henning and requesting personal or financial information.

From: MN_MDA_ Ag BMP Loans <AgBMP.Loans@state.mn.us>
Sent: Friday, April 5, 2024 9:17 AM
To: MN_MDA_ Ag BMP Loans <AgBMP.Loans@state.mn.us>
Subject: AgBMP Loan Program Funding Opportunity

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

As the AgBMP Loan Program is planning for the next Biennium we are requesting additional program funding for all AgBMP Loan Budgets across the state through the [Clean Water Council](#) this year for funding for 2025 and 2026. The AgBMP Loan Program is currently estimating an additional need for funding for the next biennium in the amount of \$73.3 million. Clean Water Funding is reviewed by the Clean Water Council and then our state legislators. The Clean

Gardner, Paul (MPCA)

From: Ilena Hansel <ilena.hansel@co.cook.mn.us>
Sent: Monday, April 8, 2024 8:06 AM
To: Gardner, Paul (MPCA); Wagner, Margaret (MDA)
Cc: braidy.powers@co.cook.mn.us; stanley tull
Subject: AgBMP Loan Budgets

Some people who received this message don't often get email from ilena.hansel@co.cook.mn.us. [Learn why this is important](#)

This message may be from an external email source.

Do not select links or open attachments unless verified. Report all suspicious emails to Minnesota IT Services Security Operations Center.

Hello,

Cook County SWCD is in support of the additional funding for the AgBMP Loan Program. The program is beneficial to Cook County in assisting landowners with upgrading failing septic systems. Maintaining septic systems is identified in both the Lake Superior North Watershed Plan and Rainy River/Vermillion Watershed Plan, both adopted by the County and the SWCD.

Septic systems that are not in compliance are a threat to both surface and ground water. Due to a lack of resources for septic system materials, along with other factors, septic system costs have increased drastically over time, some reaching over \$40,000/system. The costs of the systems make it difficult for many landowners to fix their systems. The loan offers the landowners an option to improve their system and protect water quality. To reach the same number of current landowners and additional landowners, additional funding will be needed in the future.

Thank you for considering the need to increase funding for the AgBMP Loan Program.

I can be reached at 218-387-3648 if you have additional questions.

Sincerely,

Ilena Hansel

District Manager

Cook SWCD

411 West 2nd Street

Grand Marais, MN 55604

218-387-3648

Gardner, Paul (MPCA)

From: Mary Thompson <mary.thompson@co.rock.mn.us>
Sent: Wednesday, April 10, 2024 5:52 PM
To: Gardner, Paul (MPCA); Wagner, Margaret (MDA)
Cc: Gruenes, Richard (MDA)
Subject: Ag BMP

You don't often get email from mary.thompson@co.rock.mn.us. [Learn why this is important](#)

This message may be from an external email source.

Do not select links or open attachments unless verified. Report all suspicious emails to Minnesota IT Services Security Operations Center.

Hello Paul and Margaret –

I wanted to touch base with both of you regarding the Ag BMP program. Unfortunately, we do not have actual outcomes at this time but I thought I would at least share how much the Ag BMP program is used here in Rock County and continues to have a need for further funding.

We have been able to fund 13 loans thus far in 2024 with 9 of them being for Ag Waste, 1 Conservation Tillage, 1 Septic and 1 new well totaling \$1,054,065.00.

We currently have allocated funds for 10 more projects totaling \$590,000.00 and have a wait list of 12 that have applied for funding totaling \$740,000.00.

Needless to say, the high interest rates have driven the demand for funding in this program to an all time high in the 18 years I have worked with it.

This program is important to our producers in making upgrades to feedlots, manure management and conservation tillage more affordable with the 3% interest rate and we continue to receive more requests.

We did have a producer purchase a late season nitrogen application sprayer to help manage nitrogen applied on fields in the wellheads. They have also used this sprayer to custom apply for other producers wanting to better manage their nitrogen application.

Thank you for all your work with and for the Clean Water Funds – we appreciate it out here at the local level and the fact that it allows us to help our producers improve not only their operations but improve water quality for everyone in the process!!

Mary Thompson
Rock SWCD

FY26-27 CLEAN WATER FUND PROPOSAL

Freshwater Mussel Restoration Pilot Program	
DNR	Program Number: __
Program Contact Name: Jason Moeckel	Phone: 651-259-5240
Contact E-mail Address: Jason.moeckel@state.mn.us	
Person filling out form: Jason Moeckel	Phone: 651-259-5240
Person filling out form e-mail address jason.moeckel@state.mn.us	

Purpose

The DNR has developed the expertise to hatch and grow freshwater mussels and restore populations in Minnesota rivers. We propose to improve techniques and scale up production of native mussel species and place them into their natural habitats. Funding would support collection, rearing, distribution, monitoring costs, and identification of new species and locations for restoration.

Webpage

Minnesota DNR's Mussels webpage: <https://www.dnr.state.mn.us/mussels/index.html>

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

Freshwater mussels play a key role in contributing to fishable and swimmable waters in Minnesota. They are nature's water filter, removing bacteria and excess nutrients. They also provide habitat and food resources for sportfish and other aquatic organisms. However, freshwater mussels have declined largely because of anthropogenic impacts such as historical overharvest, construction of dams and pollution from urban and agricultural runoff. Even after efforts to improve the condition and connectivity of Minnesota waters, many mussel species are no longer present in sufficient numbers to repopulate rivers and streams. This restoration program would alleviate this constraint by restoring mussels in sufficient numbers to become self-sustaining populations.

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	
FY16-17	

FY18-19	
FY20-21	
FY22-23	
FY24-25	\$600,000
TOTAL APPROPRIATED TO DATE	\$600,000

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST
TBD	TBD	TBD

Alignment with Clean Water Council Strategic Plan

Please indicate which strategy in the Clean Water Council's most recent Strategic Plan applies to this proposal.

Surface Water Protection and Restoration Vision: Minnesotans will have fishable and swimmable waters throughout the state.

Goal 2: Protect and restore surface waters to achieve 70% swimmable and 67% fishable waters by 2034 via by prioritizing and targeting resources by major watershed.

Strategy: Identify and refine strategies required to meet water quality standards in each HUC-8 watershed

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

Expected outcomes for this proposal include restored populations of freshwater mussels, improved water quality and delisting of impaired waters. This restoration would affect 2-3 sites in each of the following: Cannon watershed and Cedar, Mississippi, and Minnesota rivers. To date, our current grant supported us moving into a new facility and building custom mussel propagation ponds, both of which will allow us to increase and improve our mussel propagation efforts. We also reintroduced a total of about 3,300 juvenile mussels representing four sensitive species into the Cedar (3 sites), Cannon (2 sites), Straight (1 site), and Mississippi (3 sites) rivers. Previously reintroduced juvenile mussels were found to be healthy and showing signs of reproduction, suggesting the mussels are moving toward self-sustaining populations.

Long-term funding vision

If this proposal is funded, should the Clean Water Council expect future requests to increase, decrease, stay about the same, or not be needed? (Do not factor inflation into your answer.)

We expect future Clean Water Council requests to remain about the same.

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? If so, please describe. If not, leave blank.

Yes. Our program is funded through a combination of federal and state grants. Federal grants typically include State Wildlife Grants and Competitive State Wildlife Grants; state funding typically includes Minnesota Environment and Natural Resources Trust Fund as recommended by the Legislative-Citizen Commission on Minnesota Resources (LCCMR). We hope that the Clean Water Fund can support about 30% of our annual budget with this proposal and into the future.

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that “any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.” **Indicate if this proposal will supplement or supplant previous funding.**

Supplement.

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

Minnesota DNR’s Center for Aquatic Mollusk Programs (2111 N. Lakeshore Dr., Lake City, MN) received \$600,000 for fiscal years 2024 and 2025.

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	
FY12-13	
FY14-15	
FY16-17	
FY18-19	
FY20-21	
FY22-23	
FY24-25	2.5
FY26-27	

FY26-27 CLEAN WATER FUND PROPOSAL

Water Storage	
DNR	Program Number: __
Program Contact Name: Jason Moeckel	Phone: 651-259-5240
Contact E-mail Address: jason.moeckel@state.mn.us	
Person filling out form: Jason Moeckel	Phone:
Person filling out form e-mail address same	

Purpose

This proposal for \$1.0 million will design and implement projects in Wildlife Management Areas (WMAs) or other state administered lands that increase water storage, while also stabilizing streambanks in impaired watersheds where Watershed Restoration and Protection Strategies (WRAPS) or One Watershed, One Plans (1W1Ps) have identified the need for water storage and water quality improvements. Initially, these funds would be used to design and construct water storage projects on state administered Wildlife Management Areas in Southern Minnesota. The foundation of the effort is comprehensive assessments of water pollution and supply problems within the state’s 80 major watersheds and prioritized strategies to address these problems.

Webpage

NA at this time

Rationale/Background

The Minnesota DNR administers a large number of acres across 408 Wildlife Management Areas across southern Minnesota. There are about 813 miles of altered natural watercourses on these WMA's. Many of them are potential candidates for restoration efforts that enhance water storage, restore river functions, floodplain connectivity, improved water quality, fish and other aquatic species passage and greater resiliency to climate change. The DNR has identified pilot project sites to demonstrate these benefits, in watersheds where water storage was identified as a strategy to improve water quality.

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	
FY16-17	
FY18-19	
FY20-21	
FY22-23	

FY24-25	\$1,000,000
TOTAL APPROPRIATED TO DATE	\$1,000,000

+

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST
TBD	TBD	TBD

Alignment with Clean Water Council Strategic Plan

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

Strategy: Identify and refine strategies required to meet water quality standards in each HUC-8 watershed.

Action: Quantify water storage needs and opportunities within each HUC 8 watershed.

- Measure: Acre feet storage goals are set for each watershed by 2026.
- Measure: Storage opportunities and hydrograph estimates are complete by 2028.

Outcomes

These pilot projects will enhance water storage, restore river functions and floodplain connectivity, improve water quality, fish and other aquatic species passage, and provide greater resiliency to climate change. Increased water storage can be estimated from computer modeling simulations and calculations of additional floodplain area on a project-by-project basis during the design stage.

Long-term funding vision

The DNR envisions continuing to explore and implement water storage projects of this nature, however as this is the first year of the pilot it's too early to know if future requests will increase or stay at a similar level. We are currently assessing our capacity to take on additional projects.

Non-CWF Funding

This program is leveraging other DNR funding sources for staff time and expertise, while relying on Clean Water Funds for much of the design and construction costs.

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that “any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.” **Indicate if this proposal will supplement or supplant previous funding.**

Supplement

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	
FY12-13	
FY14-15	
FY16-17	
FY18-19	
FY20-21	
FY22-23	
FY24-25	0
FY26-27	0

FY26-27 CLEAN WATER FUND PROPOSAL

Expand Ag Weather Station Network	
MDA	Program Number: __
Program Contact Name: Margaret Wagner	Phone: 651-201-6488
Contact E-mail Address: margaret.wagner@state.mn.us	
Person filling out form: Margaret Wagner	Phone: 651-201-6488
Person filling out form e-mail address	margaret.wagner@state.mn.us

Purpose

Funding to expand the existing Minnesota Ag Weather Network and provide accurate local weather data across agricultural areas of Minnesota. Accurate and timely weather data will help farmers optimize the timing of irrigation, fertilizer, manure, and pesticide applications and help support the adoption of environmentally friendly practices to promote water quality, soil health and vegetative cover. There are other beneficial uses of the weather data such as managing pesticide applications to reduce pesticide drift to protect pollinators, and the National Weather Service and municipalities use of precipitation data to better predict flood conditions. This proposal was developed at the request of the agricultural community in Minnesota.

Webpage

[Minnesota Ag Weather Network | Minnesota Department of Agriculture \(state.mn.us\)](#)

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

The Minnesota Department of Agriculture (MDA), along with key partners, are expanding the existing Minnesota Ag Weather Network statewide. The Minnesota Ag Weather Network provides access to real-time local weather data at 5-minute intervals including precipitation, temperature (avg/max/min), wind direction and speed, peak gust, air humidity, dew point, solar radiation, four-inch bare and turf soil temperature, and soil water content to 48 inches and soil temperature to 7 feet at each weather station. This information allows farmers to more effectively manage water usage, reduce leaching, and appropriately time crop nutrient and chemical applications. Accurate local weather data is necessary to support the adoption of many recommended soil health and nutrient management practices.

Establishing weather station coverage for all agricultural areas in the state will give farmers the local information they need to make the best possible agronomic decisions regarding planting dates, crop protection chemical application timing, water management, and other in-field activities. This detailed local information will create opportunities to reduce nutrient and chemical applications. More accurate information on disease risk due to weather conditions

means farmers can delay disease prevention applications until risk is high in their area. The inversion alert system will help private and commercial pesticide applicators respond quickly to changing local conditions and minimize risk of spraying in adverse weather conditions which can cause pesticide drift and impact water resources and pollinators. Evapotranspiration data is vital to determining crop water needs and scheduling timely irrigation applications. Accurate soil temperature data is used for determining when to apply fertilizer to minimize leaching. Good weather data is critical to effective management practices to protect surface water and groundwater resources.

The Minnesota Ag Weather network will expand through a partnership between the MDA and the North Dakota Ag Weather Network (NDAWN). The partnership with NDAWN will reduce costs and reduce the time needed to build a statewide network.

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	
FY16-17	
FY18-19	
FY20-21	
FY22-23	
FY24-25	\$3,000,000
TOTAL APPROPRIATED TO DATE	\$3,000,000

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

Alignment with Clean Water Council Strategic Plan

Please indicate which strategy in the Clean Water Council's most recent Strategic Plan applies to this proposal.

Groundwater Vision Goal 1

- Goal 1, Strategy: Develop and carry out strategies that will protect and restore groundwater statewide.

Drinking Water Source Protection Vision Goal 1

- Goal 1, Strategy: Support prevention efforts to protect groundwater in Drinking Water Supply Management Areas (DWSMAs)

Surface Water Protection and Restoration Vision Goal 2

Goal 2, Action: Restore and protect water resources for public use and public health, including drinking water

Vision: All Minnesotans value water and take actions to sustain and protect it.

- Goal 1, Action: Support local efforts to engage farmers in water quality efforts
- Goal 1, Action: Engage water managers statewide
- Goal 1, Action: Support innovative efforts that accelerate progress toward clean water goals

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

Performance measures will include the number of weather stations, number of websites and mobile apps that utilize data from the weather stations, number of counties where weather data is used for irrigation or to inform other agronomic management, number of farmers and farm organizations that utilize this data for more precise nutrient management, and other uses of the data.

The MDA has purchased weather station equipment and constructed one station (indoors) for training purposes. The MDA established siting criteria and solicited interest from private landowners. The MDA has received 75 suggested locations for new weather stations from landowners across Minnesota. The MDA has also been working with the University of Minnesota to establish locations at the Universities Research and Outreach Centers for the installation of new weather stations. Installation will begin as weather permits in Summer 2024.

Long-term funding vision

If this proposal is funded, should the Clean Water Council expect future requests to increase, decrease, stay about the same, or not be needed? (Do not factor inflation into your answer.)

Current, Phase 1, funding will establish and bring on-line 40 new weather stations. Phase 2 funding will be needed for up to 40 additional stations to complete the weather network expansion statewide. After sites are constructed and installed, funding to support ongoing maintenance and operation of the network will be needed.

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? If so, please describe. If not, leave blank.

This program may seek funding from the National Mesonet Program once the weather network expansion is completed. Funding from the National Mesonet Program can assist with ongoing operations and maintenance costs once the weather network data is available to be ingested into the National Mesonet.

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that “any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous

funding that was not from a legacy fund and was used for the same purpose.” **Indicate if this proposal will supplement or supplant previous funding.**

Supplement

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

Yes, a portion of funding (\$150,000/year) will be passed through to the North Dakota Ag Weather Network (NDAWN) for upgrading and programming the weather station network platform to incorporate new weather stations and ongoing programming support.

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	
FY12-13	
FY14-15	
FY16-17	
FY18-19	
FY20-21	
FY22-23	
FY24-25	2
FY26-27	3

[MANAGEMENT](#)[FARM BUSINESS PLANNING](#)[TECHNOLOGY](#)

TheFarmer.

Building Minnesota's ag weather network

Minnesota farmers soon will have a more robust system of information about weather conditions to help make agronomic decisions.

April 2, 2024

4 Min Read



WHERE YOU NEED IT: The plan to enhance Minnesota's agricultural weather network would ideally place a station within 20 miles of most farmland. COURTESY OF STEFAN BISCHOF

by **Dan Lemke**

Farmers can't control the weather, but they can use information about weather conditions to make decisions. Minnesota farmers soon will have a more robust system of information from which to draw.

During the 2023 session, the Minnesota state Legislature allocated \$3 million from the Clean Water Fund to the Minnesota Department of Agriculture to enhance the state's agricultural weather network. The state currently has 14 weather stations operated by the MDA and 24 managed by the North Dakota Agricultural Weather Network, but the state funding should help the state install dozens of additional sites.

"With this first round of funding, we hope to install about 40 weather stations in the next two to three years," says Stefan Bischof, an MDA hydrologist. "Our ultimate goal is to have a weather station within about 20 miles of most agricultural lands in Minnesota to be able to provide that local weather information."

Bischof says the sites will gather basic data like temperature, wind speed and direction, rainfall, humidity, dew point, soil temperature, solar radiation and other weather metrics, but farmers and others will be able to glean from a much wider array of information.



SPONSORED CONTENT

Managing weed resistance: 5 expert tips

Mitigating and preventing herbicide resistance is key to effective long-term weed control. Find strategies for your acres with expert advice.

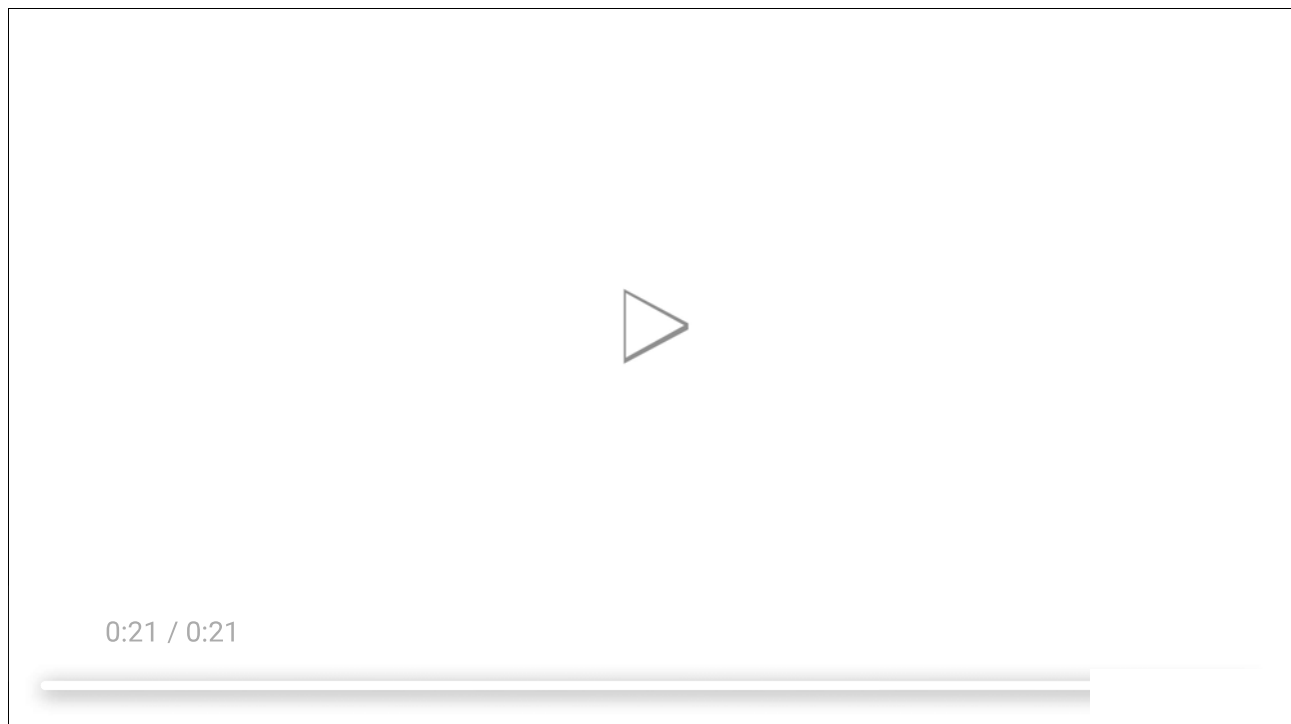
Brought to you by **Corteva Agriscience**

Minnesota is partnering with NDAWN, which manages a system of about 200 weather stations across North Dakota, Montana and western Minnesota. The NDAWN network began operating widely in 1990.

Don't reinvent the wheel

By teaming with NDAWN, the MDA will be able to tap into a system that's already developed.

ADVERTISING



[Learn More >](#)

“Our information will be integrated into their weather-related ag tools such as crop water use, growing degree days, crop modeling, disease forecasting, irrigation scheduling, temperature inversion alerts for applicators and a number of different ag tools that people can use to guide agronomic decisions,” Bischof says.

“NDAWN is a weather risk-management tool,” NDAWN Director Daryl Ritchison explains. “We use weather to help forecast crop growth, for crop guidance, disease guidance, to help determine when insects are going to emerge — a whole number of things. Our uses also go far beyond agriculture.”

Bischof says Minnesota’s agricultural weather network will partner with what NDAWN already has developed so that more resources can be put toward constructing weather stations. Since North Dakota already has the technology and computer programs needed to gather and analyze the weather data, it made sense to focus on getting more stations sited.

“NDAWN has a tried-and-true system. They have a lot of online resources, websites and mobile applications,” Bischof says. “Being able to utilize the tools and infrastructure that they have will really save us a lot of time and a lot of money through this partnership.”

MDA is in the process of identifying potential sites for weather stations in Minnesota’s farm country. Ritchison says sites require only about a 10-square-yard footprint and space for about a 30-foot-tall tower. Preferred sites should be relatively flat, away from trees and be accessible year-round. Bischof hopes to get 10 to 15 installed this summer.

Broad impact

While the information gathered at the stations will be focused on agriculture, other entities such as government agencies use the information for making decisions, including when to put on or lift road weight restrictions.

Bischof says the effort to expand Minnesota’s network has received wide ranging support. Many people see the utility of having local weather information to help guide agronomic decisions. Some of those farming choices have far-reaching implications.



SPONSORED CONTENT

How do nitrogen stabilizers benefit the environment?

Get the data on environmental benefits of nitrogen stabilizers. See how an Iowa farmer helps protect local air and water quality.

Brought to you by **Corteva Agriscience**

“We have a benefit to the farmers and also a benefit to water resources,” Bischof says. “With the money coming from the Clean Water Fund, information from these weather stations will

help guide agronomic decisions that not only benefit the farmer but also minimize the impacts to water resources by helping those growers better utilize crop inputs and water.

“The optimization of agronomic decisions protects surface water by preventing off-site movement of pesticides that can drift to nearby surface water, preventing loss of manure and crop chemicals in runoff to surface water; minimizing leaching of nitrate, manure and crop chemicals to groundwater; and maximizing irrigation water usage efficiency.”

Bischof says weather stations at the University of Minnesota’s research and outreach centers will be upgraded and tied into the NDAWN system. MDA also is accepting applications from farmers and landowners who are interested in hosting a weather station on their land. Information on how to apply is available at mda.state.mn.us/weather-station-host.

Lemke writes from Madison Lake.

Subscribe to receive top agriculture news

Be informed daily with these free e-newsletters

SIGN ME UP

You May Also Like

Management

FY26-27 CLEAN WATER FUND PROPOSAL

Leveraging the Great Lakes Restoration LAMP Program and Other Federal Funds	
MPCA	Program Number: NEW
Program Contact Name: Glenn Skuta	Phone: 651-757-2730
Contact E-mail Address: glenn.skuta@state.mn.us	
Person filling out form: Glenn Skuta	Phone:
Person filling out form e-mail address:	

Purpose

Modeling the approach Minnesota took with leveraging federal dollars to clean up the St. Louis River Estuary Area of Concern, it is time to leverage Clean Water Funds to obtain federal funds to implement Minnesota's Watershed Approach. The purpose of this proposal is to leverage Clean Water Funds to obtain federal funds (i.e., Great Lakes Restoration Initiative (GLRI) funds or other federal funds) to implement Minnesota's clean water strategies through water quality work being implemented by local governments in the Lake Superior Basin. With dedicated state matching funds and resources for applying for and managing federal funds such as GLRI, Minnesota can increase federal funding received for implementing projects that work toward Lake Superior's Lakewide Action Management Plan (LAMP) objectives and local water plan strategies and priorities to continue and enhance water quality protection and restoration work.

Webpage

[Great Lakes Restoration Initiative | Great Lakes Restoration Initiative \(glri.us\)](#)

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

The five SWCDs (North and South St. Louis, Cook, Lake, Carlton) in the Lake Superior Basin have participated in the development of Watershed Restoration and Protection Strategies (WRAPS) reports and comprehensive local water plans based on them through the One Watershed One Plan (1W1P) process in their areas to protect unique resources in the watersheds of Lake Superior and to restore ecological resources that are impaired. In the four counties, there are approximately \$36M of prioritized watershed restoration, protection and enhancement opportunities such as stream channel restoration, fish passage improvement, coastal habitat enhancement, and protection strategy implementation. These projects will not only better the ecological resources of Lake Superior but will also benefit the local communities and citizens. At this time, funding is provided through federal non-competitive processes and competitive

processes. While SWCDs have been successful in securing some Great Lakes federal funds, their lack of capacity has prevented them from seeking all that could be available to them. It is important to understand that at this time EPA is making more money available than ever before for watershed work in the Great Lakes Basin due to passage of federal infrastructure bills.

Further, many of the LAMP objectives are in alignment with our 1W1P and WRAPS. This planning work provides a strong case for leveraging state funds to bring more resources to western Lake Superior, making Minnesota one of the most competitive states in the Great Lakes. The resulting opportunity to restore and protect Lake Superior Basin resources from this commitment will make lasting impacts to water quality and ecosystem services. In addition, it will save the state millions of dollars by leveraging federal funds, and free up resources to be applied in other places.

The state Clean Water Funds for this effort would be administered by the Board of Water and Soil Resources (BWSR) and directed to the SWCDs, since the capacity funding infrastructure is already in place. A dedicated match for the next biennium would help the Lake Superior Basin SWCDs take greater advantage of the federal funding. SWCDs should be authorized to use the funds for a range of needs including staffing, administration, and implementation. This flexibility will initially provide the capacity to put together project proposals and more aggressively and competitively pursue federal funding opportunities, while also improving staff retention, and eventually supporting the greater project management needs as projects begin to be funded.

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	
FY16-17	
FY18-19	
FY20-21	
FY22-23	
FY24-25	(\$1,000,000 supplemental budget recommendation of the CWC)
TOTAL APPROPRIATED TO DATE	(proposed supplemental CWF \$1,000,000)

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

Alignment with Clean Water Council Strategic Plan

Please indicate which strategy in the Clean Water Council's most recent Strategic Plan applies to this proposal.

Surface Water Protection and Restoration Vision: Minnesotans will have fishable and swimmable waters throughout the state.

Goal 3: Protect and restore surface waters to achieve 70% swimmable and 67% fishable waters by 2034 via through statewide, regional, or issue-specific programs that help meet water quality goals but are not necessarily prioritized and targeted according to geography.

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

Funding for this initiative was first appropriated for FY25 (assuming passage of CWC supplemental budget request). Expected results include increasing capacity for local governments in the Lake Superior Basin to apply for and manage federal funds to implement actions that result in water quality improvement.

Long-term funding vision

If this proposal is funded, should the Clean Water Council expect future requests to increase, decrease, stay about the same, or not be needed? (Do not factor inflation into your answer.)

It is anticipated that the requested amount will stay about the same.

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? If so, please describe. If not, leave blank.

Yes, the purpose of this program is to request federal funding. The CWF will provide capacity to local governments to leverage federal funding opportunities that they would otherwise not be able to obtain.

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that “any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.” **Indicate if this proposal will supplement or supplant previous funding.**

This request is supplemental, and does not substitute for or supplant previous funding. It is to increase capacity of local governments to enable them to obtain more federal implementation funding.

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

Having funds for each SWCD for each year of the biennium would provide funds to help develop projects and proposal to acquire federal funds and implement projects.

It is anticipated that the funding will go to five Lake Superior Basin SWCDs including the following: N and S St. Louis County SWCDs, Lake County SWCD, Cook SWCD, and Carlton SWCD.

The following describes the current prioritized implementation project funding need by each SWCD:

County	Plan Cost
Cook	\$11,000,000
Lake	\$10,000,000
St. Louis	\$10,000,000
Carlton	\$5,000,000

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	
FY12-13	
FY14-15	
FY16-17	
FY18-19	
FY20-21	
FY22-23	
FY24-25	0
FY26-27	0

FY26-27 CLEAN WATER FUND PROPOSAL

Irrigation Water Quality Protection	
MDA	Program Number: 17
Program Contact Name: Margaret Wagner	Phone: 651-201-6488
Contact E-mail Address: margaret.wagner@state.mn.us	
Person filling out form: Margaret Wagner	Phone: 651-201-6488
Person filling out form e-mail address	margaret.wagner@state.mn.us

Purpose

Funding supports an irrigation water quality specialist who develops guidance and provides education on irrigation and nitrogen best management practices and supports the development of irrigation scheduling guidance for Minnesota irrigators. This helps reduce nitrate leaching losses from irrigated crop production. The irrigation specialist is located at University of Minnesota - Extension.

Webpage

[Irrigation Specialist Position | Minnesota Department of Agriculture \(state.mn.us\)](#)

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

Much of Minnesota's crop irrigation takes place on coarse textured soils. When irrigated, these soils are highly productive and produce crops of exceptional quality. At the same time, these soils are also at higher risk for leaching nitrate to the groundwater compared to finer textured soils. There are also some differences in nitrogen management between irrigated and rainfed crops. Coupled with the rapid development of new technology related to irrigation water and nitrogen management, there is a need to further develop and advance best management practices (BMPs) and guidance for irrigated crop production. Adopting the BMPs will help optimize the water use efficiency (more crop per drop) of the irrigation water and synchronize nitrogen application with crop uptake by applying the nitrogen at the right time and place, in the right amount, and from the right source. The result is less water runoff (including movement of excess water through the soil), higher water use efficiency, and reduced nitrate contamination of groundwater. This funding supports an irrigation water quality specialist at the University of Minnesota. The position develops guidance and provide education, outreach and promotion of irrigation and nitrogen fertilizer BMPs. The need for an irrigation specialist at University of Minnesota-Extension has been identified as a critical need by the irrigation community and other agricultural stakeholders.

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	\$220,000
FY16-17	\$220,000
FY18-19	\$220,000
FY20-21	\$300,000
FY22-23	\$270,000
FY24-25	\$300,000
TOTAL APPROPRIATED TO DATE	\$1,530,000

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

Alignment with Clean Water Council Strategic Plan

Please indicate which strategy in the Clean Water Council's most recent Strategic Plan applies to this proposal.

Groundwater Vision Goal 1 and 2

- Goal 1, Action: Reduce nitrate contamination of groundwater
- Goal 2, Action: Implement water efficiency BMPs, water use reduction, and irrigation water management in areas of high water use intensity by agricultural irrigators, highly sensitive areas, Groundwater Management Areas (GWMAs), and highly vulnerable Drinking Water Source Management Areas (DWSMAs).

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

This position provides direct support to irrigators regarding BMPs, irrigation scheduling, and soil water monitoring. This position has active research trials which provide information to update BMPs. Revisions to current Irrigation BMPs for Minnesota are being updated and published. In FY22-23, the position reached 1,350 farmers, crop consultants and co-op dealers at field days and events. The position further gave 25 presentations, wrote 11 new blog posts through the University of Minnesota Crop News site, was interviewed on four podcasts, and wrote articles for the Irrigators Association newsletter which reached over 3,200 irrigators.

The participant evaluation of the 2022 Minnesota Irrigator Program, which is organized by this position, serve as an example of the outcome and impact of the position’s outreach activities. Key points reported by the attendees were:

- 1) Participants indicated that they either help manage or directly manage more than 84,200 irrigated acres.

- 2) The survey indicated that over 95% of the attendees would increase their use of/or start a new irrigation management practice based on this class.
- 3) Respondents indicated they would increase the use of soil moisture monitoring by 48%, variable rate irrigation (VRI) by 29%, and remote sensing by 35% of the 84,200 acres under their management.
- 4) Participation in the course makes participants eligible for the Irrigation Endorsement under the Minnesota Ag Water Quality Certification Program through the MDA

Long-term funding vision

If this proposal is funded, should the Clean Water Council expect future requests to increase, decrease, stay about the same, or not be needed? (Do not factor inflation into your answer.)

Stay about the same.

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? If so, please describe. If not, leave blank.

Yes, this position and related research is supported with other funding including grants obtained by the irrigation specialist position. Sources include the Ag Fertilizer Research and Education Council (AFREC), Corn Research and Promotion Council, Legislative and Citizen Commission on Minnesota Resources (LCCMR), United States Department of Agriculture (USDA), United States Environmental Protection Agency (USEPA), Irrigators Association of Minnesota, University of Minnesota, Minnesota Department of Agriculture, and others. The position will continue to seek external funding for research activities.

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that “any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.” **Indicate if this proposal will supplement or supplant previous funding.**

Supplement

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

100% of funding was passed through to support a position at the University of Minnesota-Extension.

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	
---------	--

FY12-13	
FY14-15	0.0
FY16-17	0.0
FY18-19	0.0
FY20-21	0.0
FY22-23	0.0
FY24-25	0.0
FY26-27	0.0

FY26-27 CLEAN WATER FUND PROPOSAL

Nitrate in Groundwater	
MDA	Program Number: 15
Program Contact Name: Margaret Wagner	Phone: 651-201-6488
Contact E-mail Address: margaret.wagner@state.mn.us	
Person filling out form: Margaret Wagner	Phone: 651-201-6488
Person filling out form e-mail address	margaret.wagner@state.mn.us

Purpose

Funding to implement Minnesota's Nitrogen Fertilizer Management Plan (NFMP) and Groundwater Protection Rule for preventing and responding to nitrate contamination of groundwater from nitrogen fertilizer use. Includes support for: promotion, demonstration, and adoption of best management practices for nitrogen fertilizer and to promote vegetative cover in vulnerable areas; staffing at University of Minnesota Extension to update, educate on and promote fertilizer BMPs; support for conducting local advisory teams to work with farmers and crop advisors to reduce nitrate loss in areas with elevated nitrate in groundwater; conducting computer modeling to evaluate the impacts of specific agricultural and land management practices in local areas; and, technical support and demonstration projects such as Rosholt Farm. Funding will support implementation of the NFMP in townships and the Groundwater Protection Rule in Drinking Water Supply Management Areas (DWSMAs) with elevated levels of nitrate in groundwater.

Webpage

- [Groundwater and Drinking Water Protection](#)
- [Groundwater Protection Rule](#)
 - [Plan for City of Adrian DWSMA](#)
 - [Plan for City of Verndale DWSMA](#)
 - [Plan for City of Hastings DWSMA](#)

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

Nitrate-nitrogen (nitrate) is one of the contaminants of greatest concern for groundwater in Minnesota. In some vulnerable areas of the state a significant percentage of private wells have nitrate levels which exceed the drinking water health risk limit. The MDA has developed the Nitrogen Fertilizer Management Plan (NFMP) which outlines a process to prevent or minimize the impact of nitrogen fertilizer on groundwater and emphasizes promoting nitrogen fertilizer best management practices, vegetative cover, and other advanced nitrogen management

practices in areas vulnerable to groundwater contamination. The MDA also developed the Groundwater Protection Rule as an outcome from the NFMP, which outlines a process for working with local farmers and crop advisors to adopt practices that can reduce nitrate within Drinking Water Supply Management Areas (DWSMAs) for public wells that have elevated levels of nitrate. Together the NFMP and Groundwater Protection Rule represent a voluntary and regulatory framework to address nitrate in groundwater.

The MDA works with local partners to monitor groundwater, implement prevention strategies, respond in areas with elevated nitrate in groundwater and provide education on nitrogen fertilizer best management practices. Primary partners include counties, soil and water conservation districts, agri-businesses, University of Minnesota researchers, and individual farmers.

PRIOR APPROPRIATIONS	
FY10-11	\$1,125,000
FY12-13	\$1,700,000
FY14-15	\$5,000,000
FY16-17	\$5,171,000
FY18-19	\$4,171,000
FY20-21	\$5,170,000
FY22-23	\$5,170,000
FY24-25	\$6,000,000
TOTAL APPROPRIATED TO DATE	\$33,507,000

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

Alignment with Clean Water Council Strategic Plan

Please indicate which strategy in the Clean Water Council's most recent Strategic Plan applies to this proposal.

Groundwater Vision: Groundwater is clean and available to all in Minnesota.

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

- Action: Characterize nitrate and pesticide contamination in vulnerable aquifers
- Action: Reduce nitrate contamination of groundwater.
- Action: Reduce risk of pesticide contamination in groundwater.

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

- Action: Implement water efficiency BMPs, water use reduction, and irrigation water management in areas of high water use intensity by agricultural irrigators, highly sensitive areas, Groundwater Management Areas (GWMAs), and highly vulnerable Drinking Water Source Management Areas (DWSMAs).

Drinking Water Source Protection Vision: Drinking water is safe for everyone, everywhere in Minnesota.

Goal 1: Public Water Systems--Ensure that users of public water systems have safe, sufficient, and equitable drinking water.

- Action: Support implementation funding and technical assistance to reduce nitrate in DWSMAs that are Level 1 and Level 2 under the GPR.
- Action: Fund protective actions that assist public water suppliers in meeting safe drinking water levels

Goal 2: Private Water Supply Wells- Ensure that private well users have safe, sufficient, and equitable access to drinking water

- Action: Assist all well users with information on how to achieve safe drinking water

Vision: 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

- Action: Support local efforts to engage farmers in water quality efforts.
- Action: Engage water managers statewide.
- Action: Support innovative efforts that accelerate progress toward clean water goals.

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

The Nitrogen Fertilizer Management Plan and Groundwater Protection Rule are being implemented. Partnerships have been established in vulnerable areas in support of groundwater protection including working with 38 local government units on nitrate monitoring and reduction activities and working with local farmers at thirteen (13) regional on-farm nitrogen fertilizer BMP evaluation sites. Local advisory teams have been formed in three (3) townships.

Approximately 34,818 private well owners have participated in either a one-time (snap shot) or long-term nitrate testing.

- 700-900 private well owners have participated in long-term nitrate testing annually, since 2011 in the Central Sands Private Well Network, and since 2009 in the Southeast Network.
- 32,217 wells private wells in vulnerable townships have been tested through MDA's Township Testing Program (2013-2019). Work completed in 344 vulnerable townships within 50 counties.

As part of the Groundwater Protection Rule, eighteen (18) local advisory teams have been formed in Level 2 Drinking Water Supply Management Areas (DWSMAs) with elevated nitrate. Each team has 7-8 members; teams are working together to identify a list of best management practices for cropland in the DWSMA. Farmer surveys have been completed in most Level 2 DWSMAs and computer modeling has been completed in eight (8) DWSMAs and underway for

another four (4). Three DWSMAs have specific BMP lists that have been published with input from local advisory team members and five (5) additional lists will be published in summer 2024.

Long-term funding vision

If this proposal is funded, should the Clean Water Council expect future requests to increase, decrease, stay about the same, or not be needed? (Do not factor inflation into your answer.)

Increase.

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? If so, please describe. If not, leave blank.

General Fund and dedicated funds from the Fertilizer Account generated from fertilizer sales support salary and staff expenses not covered by the Clean Water Fund. Funding from FY20-FY23 is provided as an example below.

Account	2020	2021	2022	2023
General Funds	545,512	490,083	581,609	592,993
Dedicated Funds	109,912	104,185	109,757	127,105
Grand Total	655,424	594,268	691,366	720,098

The MDA leverages CWF dollars with other state and federal grant applications. In 2021, the MDA along with 30 local and tribal partners secured a \$3.5M Regional Conservation Partnership Program (RCPP) grant from the USDA to implement conservation measures and all funds have been allocated (high demand for cost-share).

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that “any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.” **Indicate if this proposal will supplement or supplant previous funding.**

Supplement

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

In FY14-FY24, 35% of funding was passed through in contracts to local partners (SWCDs, counties, etc.), University of Minnesota researchers, University of Minnesota-Extension, and analytical laboratories.

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	0.2/3.2
FY12-13	4.0
FY14-15	8.2
FY16-17	13.45* (* 2.7 FTEs for FY16 is for pesticide sampling of private wells that is now a separate allocation)
FY18-19	10.4
FY20-21	11.0
FY22-23	11.0
FY24-25	11.0
FY26-27	11.0

FY26-27 CLEAN WATER FUND PROPOSAL

Future of Drinking Water (formerly Drinking Water Protection)	
MDH	Program Number: 40
Program Contact Name: Tannie Eshenaur and Frieda von Qualen	Phone: 651.201.4074
Contact E-mail Address: tannie.eshenaur@state.mn.us	
Person filling out form: Tannie Eshenaur	Phone: 651.201.4074
Person filling out form e-mail address	tannie.eshenaur@state.mn.us

Purpose

This is a Clean Water Council initiative arising out of a 2016 policy recommendation and companion appropriation. While the federal Safe Drinking Water Act provides a basic level of protection for customers of public water systems, this activity engages local and national experts to develop an action plan and policies that go beyond current regulatory requirements to address emerging threats and ensure long-term safe public and private drinking water in Minnesota.

Webpage

We do not currently have a webpage for the Future of Drinking Water efforts. However, the reports below are results of Future of Drinking Water Funding:

- [Lead in Minnesota Water: Assessment of Eliminating Lead in Minnesota Drinking Water \(PDF\)](https://www.health.state.mn.us/communities/environment/water/docs/leadreport.pdf) (<https://www.health.state.mn.us/communities/environment/water/docs/leadreport.pdf>)
- [The Future of Minnesota Drinking Water: A Framework for Managing Risk \(PDF\)](https://conservancy.umn.edu/handle/11299/212014) (<https://conservancy.umn.edu/handle/11299/212014>)
- [Lessons from Drinking Water Professionals: An Assessment of Drinking Water Governance in Minnesota \(PDF\)](https://conservancy.umn.edu/handle/11299/259166) (<https://conservancy.umn.edu/handle/11299/259166>)
- Clean River Partners: [State Drinking Water Action Plan](https://www.cleanriverpartners.org/state-drinking-water-plan) (<https://www.cleanriverpartners.org/state-drinking-water-plan>). Webpage includes links to the full community engagement report and infographic.

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

Continue development of public health policies and implement recommendations that address individual emerging threats and ensure long-term safe drinking water in MN by engaging local and national experts as outlined in the University of Minnesota's Future of Drinking Water report. The next phase of this initiative will focus on four projects:

- A cost/benefit analysis of interventions for private well users and reductions in health risks from arsenic, nitrate, and manganese.

- Assessment of need, development of process, and potential implementation of enforceable state standards for public water systems (Minnesota Maximum Contaminant Levels).
- A comparative risk assessment for commonly detected contaminants in public water systems and private wells to determine public health priorities for source water protection and other risk management strategies.
- Evaluation of outputs and outcomes from the first two years of implementing the state Drinking Water Action Plan to determine needed modifications in actions and resources.

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	
FY16-17	
FY18-19	\$300,000
FY20-21	\$500,000
FY22-23	\$500,000
FY24-25	\$500,000
TOTAL APPROPRIATED TO DATE	\$1,800,000

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

Alignment with Clean Water Council Strategic Plan

Please indicate which strategy in the Clean Water Council's most recent Strategic Plan applies to this proposal.

Vision: Drinking water is safe for everyone, everywhere in Minnesota.

- **Goal 1: Public Water Systems**--Ensure that users of public water systems have safe, sufficient, and equitable drinking water.
- **Goal 2: Private Water Supply Wells**—Ensure that private well users have safe, sufficient, and equitable access to drinking water.

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

Completed:

- A report describing the sources of lead in drinking water, cost and benefits of removing lead in lead service lines and premise plumbing, and potential strategies to reduce exposure to lead. This report was foundational to the Minnesota Legislature establishing a 10-year goal to remove every lead service line and a 240-million-dollar appropriation targeting the privately owned portions.

- A University of Minnesota report on the Future of Drinking Water that includes recommendations from a stakeholder group and expert panel on actions needed to protect Minnesota's drinking water.
- An external review of MDH's public water system section's actions to protect public water systems during the COVID response.
- An external review of the organization of the Community Water System unit with recommendations on actions to increase the efficiency and effectiveness for responding to new demands for protecting public drinking water, including risk management actions for emerging contaminants such as PFAS and manganese.
- An assessment of how public water systems and private wells are integrated into overall water resource management in Minnesota using a Governance Assessment Framework outlined in the *The Future of Drinking Water Report*.
- A community engagement process with focus groups comprised of customers of community water systems and private well owners to discover Minnesotans priorities for drinking water protection activities and actions.

Future:

- The state *Drinking Water Action Plan* will be completed this summer. The plan contains measurable outputs and outcomes that will be tracked over the 10-year course of implementation, from 2024 to 2034. This effort will need to report to and be monitored by a public body such as the Clean Water Council or a new Drinking Water Advisory Council.
- A systematic and comparative risk assessment of the public health burden of morbidity and mortality for various contaminants will guide state protection actions for drinking water.
- The state will have a process for developing and enforcing state drinking water standards for federally unregulated contaminants in public water systems.
- There will be a report containing a cost benefit analysis of interventions to protect private well users that can guide future program development.

Long-term funding vision

If this proposal is funded, should the Clean Water Council expect future requests to increase, decrease, stay about the same, or not be needed? (Do not factor inflation into your answer.)

Level funding.

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? If so, please describe. If not, leave blank.

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that "any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose." Indicate if this proposal will supplement or supplant previous funding.

Supplement

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

Past funding has gone to the Humphrey School of Public Affairs (\$250K), the Water Resources Center (\$194K), Board of Water and Soil Resources (\$30K), and the Management Analysis Division of Minnesota Management and Budget (\$52K).

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	
FY12-13	
FY14-15	
FY16-17	
FY18-19	
FY20-21	0.25
FY22-23	0.7
FY24-25	0.7
FY26-27	

FY26-27 CLEAN WATER FUND PROPOSAL

Metropolitan Area Water Supply Sustainability Support	
Metropolitan Council	Program Number: 42
Program Contact Name: Judy Sventek	Phone: 651-602-1156
Contact E-mail Address: judy.sventek@metc.state.mn.us	
Person filling out form: Judy Sventek	Phone: 651-602-1156
Person filling out form e-mail address judy.sventek@metc.state.mn.us	

Purpose

The current program Implements projects that address emerging drinking water supply threats, provides cost-effective regional solutions, leverages inter-jurisdictional coordination, supports local implementation of water supply reliability projects, and prevents degradation of groundwater resources.

Webpage

[Water Supply Sustainability Program - Metropolitan Council \(metro council.org\)](http://metro council.org)

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

The region’s steady population growth, increased groundwater pumping, changing land use, and variable weather and climate is challenging some communities’ ability to meet current and future water demand. This program also supports investigation into groundwater and surface water interaction and looks at ways to minimize impacts from this on both our drinking water and surface waters. Finally, this program supports efforts to ensure supplies of potable water are adequate for the region’s current and projected population; to ensure uninterrupted economic growth and prosperity; to avoid competition and conflict over water supply; and to foster regional collaboration to address water supply challenges and limitations in a manner that takes advantages of regional and sub-regional resources.

PRIOR APPROPRIATIONS	
FY10-11	\$800,000
FY12-13	\$1,000,000
FY14-15	\$2,000,000
FY16-17	\$1,950,000
FY18-19	\$1,900,000

FY20-21	\$2,000,000
FY22-23	\$1,838,000
FY24-25	\$3,750,000
TOTAL APPROPRIATED TO DATE	\$15,238,000

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST
		Increase

Alignment with Clean Water Council Strategic Plan

Please indicate which strategy in the Clean Water Council's most recent Strategic Plan applies to this proposal.

This program supports the Clean Water Council's Strategic Plan's Groundwater Vision: Groundwater is clean and available to all in Minnesota and the following goals and strategies for that vision.

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

- Strategy: Develop baseline data on Minnesota's groundwater quality, including areas of high pollution sensitivity.
- Strategy: Develop and carry out strategies that will protect and restore groundwater statewide.

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

- Strategy: Develop a cumulative impact assessment and support planning efforts to achieve a sustainability standard for groundwater.
 - Action: Prioritize areas of high-water use intensity.
- Strategy: Develop and carry out strategies that promote sustainability of groundwater use.
 - Action: Implement water efficiency BMPs, water use reduction, and irrigation water management in areas of high-water use intensity by agricultural irrigators, highly sensitive areas, GWMA's, and highly vulnerable DWSMA's.
- Strategy: Identify options that will accelerate progress to achieving a sustainable groundwater standard in line with circular water economy principles

Clean Water Council's Strategic Plan's Drinking Water Source Protection Vision: Drinking water is safe for everyone, everywhere in Minnesota.

Goal 1: Public Water Supply Systems – Ensure that users of public water systems have safe, sufficient, and equitable drinking water.

- Strategy: Identify and reduce risks to drinking water sources by investing in technical training, planning, coordination, and source water protection grants.

- Strategy: Support prevention efforts to protect DWSMAs.
- Strategy: Support prevention and management of newly identified contaminant risks. (PFAs, selenium, radium, and manganese)

Goal 2: Private Water Supply Wells—Ensure that private well users have safe, sufficient, and equitable access to drinking water.

- Strategy: Identify risks to and fund testing of private well water.

Clean Water Council's Strategic Plan's Vision: 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.

- Strategy: Maintain and increase capacity of Minnesotans to improve water quality.
 - Action: Support local efforts to engage farmers in water quality efforts
 - Action: Engage non-traditional audiences with water planning and implementation
 - Action: Engage chloride users.
 - Action: Engage water managers statewide (regional-wide)
 - Action: Support innovative efforts that accelerate progress toward clean water goals.

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

Recommend measures to improve use of groundwater, enhance groundwater quality and surface water features, highlight groundwater-surface water interaction risk factors for communities and provide recommendations to prevent and address these risks and achieve water security through integrated water management, conservation, and reuse. The success indicators are increased number of communities that have received technical support from the Met Council; number of subregional meetings held throughout the region to gather input to develop the new Metro Area Water Supply Plan; that sub-regional workgroup projects are and continue to be implemented based on the subregional input; that the region has achieved the intended long-term outcomes to sustainably use groundwater in a reliable approach and reduction of groundwater use in the region.

From 2005 to 2023, numerous communities received technical support from the council through facilitated sub-regional workgroups. In particular, in 2023 and 2024 we held 2-3 subregional meetings with each of the 7 subregions in the metro area to get their input on water supply/drinking water related problems, issues and needed support for solutions for those subregions as part of our work to update our Metro Area Water Supply Plan. We now have a list of projects and concerns to work on within each subregion to help implement solutions to address drinking water and sustainable water resource issues by the 7 subregions.

The legislative appropriation language for our FY24/25 funding request was modified from what was submitted by the Clean Water Council. The legislature added rider language that directs us to cover selenium, manganese, and radium contamination in addition to the PFAs contamination we had included in the original language. We will include these contaminants of concern in future projects in areas where there is an identified need to address.

Long-term funding vision

If this proposal is funded, should the Clean Water Council expect future requests to increase, decrease, stay about the same, or not be needed? (Do not factor inflation into your answer.)

Increase

We intend to continue to fund sustainability work with increased input now from our 7 subregional work groups in addition to MAWSAC and MAWSAC TAC. We are in the early stages of defining a new program within this funding for water reuse. The reason for the increase would be to set up a new water reuse grant program with part of the sustainability funding to help offset the costs of treatment needed/required for stormwater and other types of reuse based on any new guidance and/or regulation resulting from the current MDH stormwater reuse project. The intent of the reuse grants would be to help to implement projects that would reduce demand on the groundwater system in the metro area.

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? If so, please describe. If not, leave blank.

Up to 75% of the funds will be used to fund projects scoped by LGUs- Municipal Water suppliers who are part of our subregional planning process as well as for projects scoped by MAWSAC and

MAWSAC TAC. 100% of the funds for the water efficiency/demand reduction grant program which is part of this sustainability work is passed through to LGUs.

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that “any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.” **Indicate if this proposal will supplement or supplant previous funding.**

Supplement

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

In FY14-FY23, 60% of funding was passed through in contracts to local partners (cities, SWCDs, counties, etc.), University of Minnesota researchers, University of Minnesota-Extension, water efficiency grant partners, and analytical laboratories. For a complete list of projects funded, please refer to the Legacy Spending Website at:

- 1) Water Efficiency Grant Program: <https://www.legacy.mn.gov/projects/water-efficiency-grant-program>
- 2) Water Supply Sustainability Program: <https://www.legacy.mn.gov/projects/water-supply-sustainability-support-program>

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	1.5
FY12-13	2.0
FY14-15	3.0
FY16-17	3.0
FY18-19	3.0
FY20-21	3.0
FY22-23	3.5
FY24-25	4.5
FY26-27	4.5

FY26-27 CLEAN WATER FUND PROPOSAL

Enhanced County Inspections/SSTS Corrective Actions	
MPCA	Program Number: 43
Program Contact Name: Felicia Merkson	Phone: 218-316-3890
Contact E-mail Address: felicia.merkson@state.mn.us	
Person filling out form: Felicia Merkson	Phone: 218-316-3890
Person filling out form e-mail address felicia.merkson@state.mn.us	

Purpose

State and county SSTS program support: This is critical funding that supports SSTS programs at the state and county levels. State staff provide technical assistance to counties and support compliance for some of the most difficult enforcement cases that counties ask the MPCA to take over. Base funding is provided to support County implementation of their local SSTS program requirements (M.S. 115.55) including issuing permits, conducting inspections, identifying, and resolving non-compliant SSTS, and revising and maintaining SSTS ordinances. Additional funding is made available to counties for grants to homeowners to repair or replace noncompliant SSTS (septic systems).

Webpage

[SSTS annual report | Minnesota Pollution Control Agency \(state.mn.us\)](#)

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

Approximately 33% of Minnesotans rely on SSTS to treat their wastewater. Properly functioning SSTS help to ensure that our ground and surface waters are protected from pollutants such as bacteria, pathogens, and phosphorus. While the state provides the overarching rules and guidance for the SSTS program, our county partners are required to implement the SSTS program by MN Stat. 115.55. Without base funding, an extensive amount of county-level SSTS permitting and compliance work, that is critical to protect groundwater, would go undone (based on 2023 data): ~86 FTEs on the county level would be unfunded; 33% of wastewater, treated by septic systems in the state would be largely unmanaged; over 10,000 permits, soil verifications, and construction inspections for new and replacement systems would not be issued; and reviews of ~14,000 compliance inspections would not be completed.

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	\$6,900,000
FY16-17	\$7,245,000
FY18-19	\$6,870,000
FY20-21	\$6,750,000
FY22-23	\$5,824,000
FY24-25	\$7,100,000
TOTAL APPROPRIATED TO DATE	\$40,689,000

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

Alignment with Clean Water Council Strategic Plan

Please indicate which strategy in the Clean Water Council's most recent Strategic Plan applies to this proposal.

- Goal 1, strategy 2, action 2: Reduce risk of bacteria in groundwater. Action: Complete plans and fund activities for protection and restoration of groundwater statewide using a major watershed scale
- Goal 3, strategy 1, action 1: Enhance compliance for regulatory programs to accelerate progress. Action: Maintain compliance rates for subsurface sewage treatment systems (SSTS) at 80 percent with a stretch goal of 90 percent.

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

- Since FY13, when MPCA began receiving CWF for the SSTS program, it has distributed \$1,473,180 annually to counties for enhancing their SSTS programs, and we anticipate this continuing into the FY26/27 biennium. In addition to providing base funding, counties can apply for grant funds for low-income homeowners who have failing SSTS that need to be upgraded or replaced. The average distribution per county is \$26,885. The total amount of low-income funding distributed since FY13 is ~\$14,518,000.
- The demand from counties for funding the SSTS Low-Income Grant program continues to, on an annual basis, exceeded the amount of funding available by an average of over \$675,000/yr. Without continued funding, some homeowners would have to wait for future funds to become available before they can upgrade their septic systems, and this is a potential risk to groundwater and drinking water wells.

Long-term funding vision

If this proposal is funded, should the Clean Water Council expect future requests to increase, decrease, stay about the same, or not be needed? (Do not factor inflation into your answer.)

Stay about the same.

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? If so, please describe. If not, leave blank.

CWF supplements other state environmental funds. Base grants per county equal \$21,200. Of this amount, \$17,130 is CWF and \$4,070 is Environmental fund. An LCCMR grant of \$2 million was also awarded by the legislature in 2022 and expires in 2025. This money is being provided to counties as additional grant funding to put toward additional low-income SSTS fixes.

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that “any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.” **Indicate if this proposal will supplement or supplant previous funding.**

This proposal will supplement previous funding.

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

93% percent of the entire appropriation for this item is passed through to counties so they can implement their delegated SSTS programs and provide grants to homeowners for SSTS upgrades. Approximately 40% is distributed in base grants for each county and 60% is available to counties through competitive grants.

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	
FY12-13	1.4
FY14-15	2.1
FY16-17	3.0
FY18-19	3.0
FY20-21	1.8
FY22-23	1.4
FY24-25	1.4
FY26-27	1.4

FY26-27 CLEAN WATER FUND PROPOSAL

National Park Water Quality Protection Program	
MPCA	Program Number: 92A
Program Contact Name: Wade Pavleck	Phone: 218-244-6880
Contact E-mail Address: wade.carol@frontier.com	
Person filling out form: Keith Wiley	Phone: 218-725-5019
Person filling out form e-mail address wileyk@stlouiscountymn.gov	

Purpose

Continued efforts towards protecting the waters of VNP at the four main public access points of the park.

Webpage

[Voyageurs National Park Clean Water Projects \(sehinc.com\)](http://sehinc.com)

Rationale/Background

Please describe how this program will protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation, or protect drinking water sources.

Development of sanitary sewer infrastructure the eliminates failed septic systems.

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	\$3,500,000
FY16-17	\$0
FY18-19	\$2,000,000
FY20-21	\$1,550,000
FY22-23	\$1,400,000
FY24-25	\$2,000,000
TOTAL APPROPRIATED TO DATE	\$10,450,000

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

Alignment with Clean Water Council Strategic Plan

Please indicate which strategy in the Clean Water Council's most recent Strategic Plan applies to this proposal.

Outcomes

Describe the likely measurable outcomes of this proposal. (If this program has been funded previously by the Clean Water Fund, please describe the measurable outcomes, outputs, or results achieved to date and how close the program is to a goal, when applicable.)

Creation of Sanitary Sewer Districts in Koochiching County, Crane Lake, Kabetogama, and recent formation of a district in Ash River. Additional funds will be allocated by the VNPCWJPB to further develop the 4 sewer districts as part of the Sanitary Sewer Comprehensive Plan.

Long-term funding vision

If this proposal is funded, should the Clean Water Council expect future requests to increase, decrease, stay about the same, or not be needed? (Do not factor inflation into your answer.)

Stay about the same.

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? If so, please describe. If not, leave blank.

Yes [Can you give some details on sources and amounts?]

Supplement vs. supplant

Minnesota Statutes 114D.50 Subd. 3 requires that “any state agency or organization requesting a direct appropriation from the clean water fund must inform the Clean Water Council and the house of representatives and senate committees having jurisdiction over the clean water fund, at the time the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.” **Indicate if this proposal will supplement or supplant previous funding.**

Increase

Past Funding Recipients

If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

All of the funding will be allocated to the VNPCWJBP and distributed the the 4 Sanitary Sewer Districts.

State Employees

Indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	0.0
FY12-13	0.0
FY14-15	0.0
FY16-17	0.0

FY18-19	0.0
FY20-21	0.0
FY22-23	0.0
FY24-25	0.0
FY26-27	0.0

VOYAGEURS NATIONAL PARK CLEAN WATER JOINT POWERS BOARD

MINNESOTA CLEAN WATER COUNCIL - April 2024

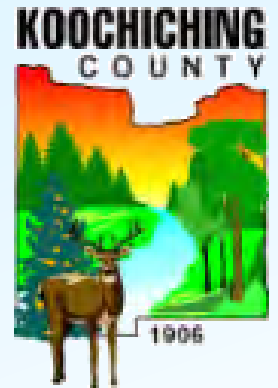


VOYAGEURS NATIONAL PARK CLEAN WATER JOINT POWERS BOARD

Presented By:

Paul McDonald, Voyageurs National Park Clean Water Joint Powers Board & St. Louis County Commissioner

Jason Chopp, Short Elliott Hendrickson, Inc.



Protecting America's Only Water Based National Park

- Voyageurs National Park is America's only water based national park located in northern Minnesota between the communities of International Falls and Crane Lake.
- The Voyageurs National Park Clean Water Joint Power Board, along with many project partners, has been working diligently to make sure the water in the Park is clean and safe for visitors and residents alike.



Project History

- Voyageurs National Park (VNP) deserves our attention and protection.
- VNP Clean Water Joint Powers Board
 - St Louis and Koochiching County
 - 4 Sewer Districts
 - VNP, MPCA, DNR
- Since 2009, nearly \$35 million has been spent improving sanitary sewer systems adjacent to the National Park.
- 2022 Updated VNP Comprehensive Sewer Plan

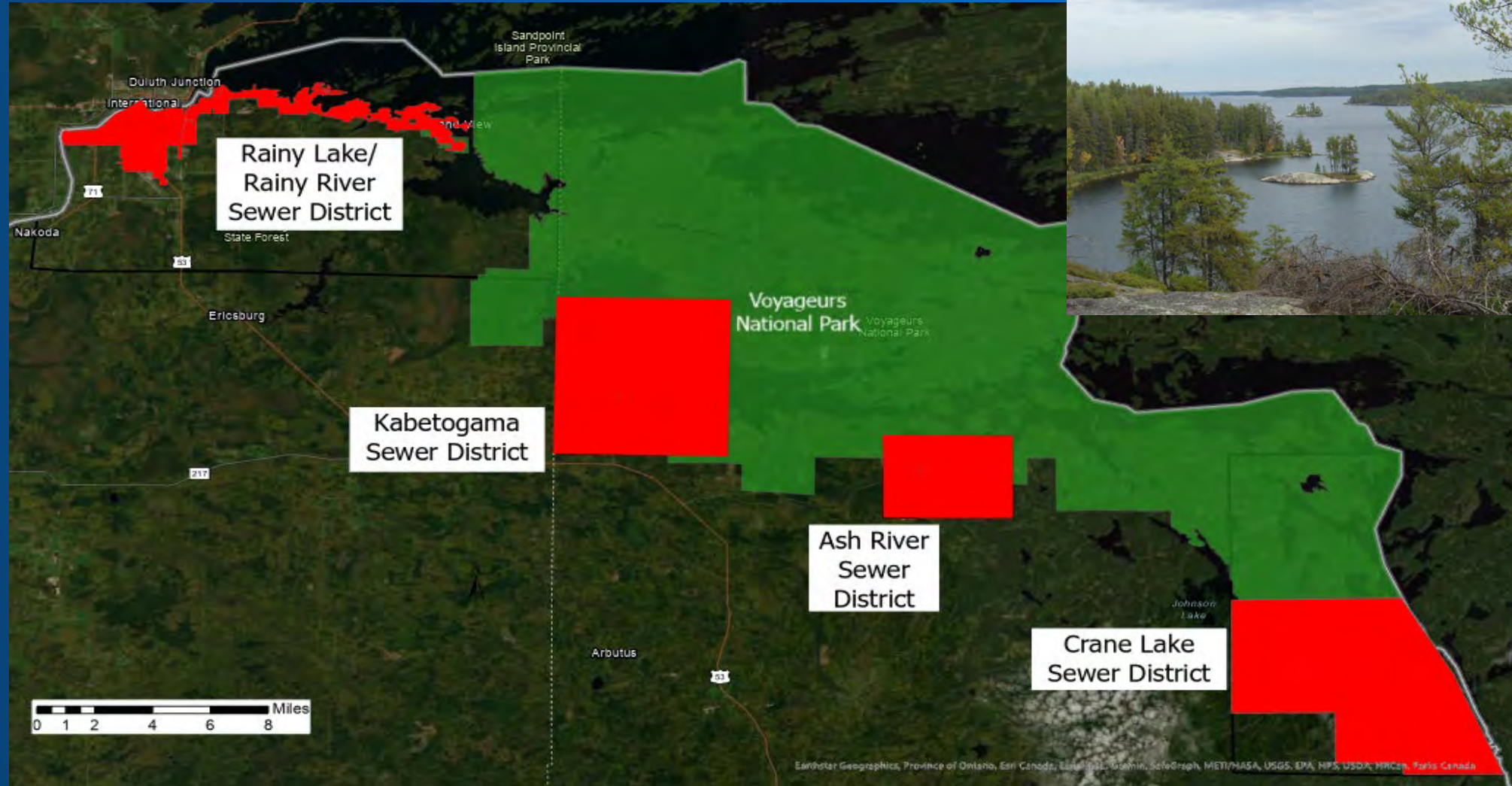


Project Overview

- Voyageurs National Park is the nation's only water-based national park, with more than 84,000 acres of water and 134,000 acres of land. The interconnected waterways of the Park provide an unparalleled opportunity to explore the north woods lake country.
- Unfortunately, those waters are being negatively affected by human impact such as wastewater generation and disposal from existing developments throughout the region.
- Priority for improvements in these areas was established based on age and condition of existing septic systems, among other factors. Projects that would address the most issues and immediately improve water quality were chosen to be constructed first.

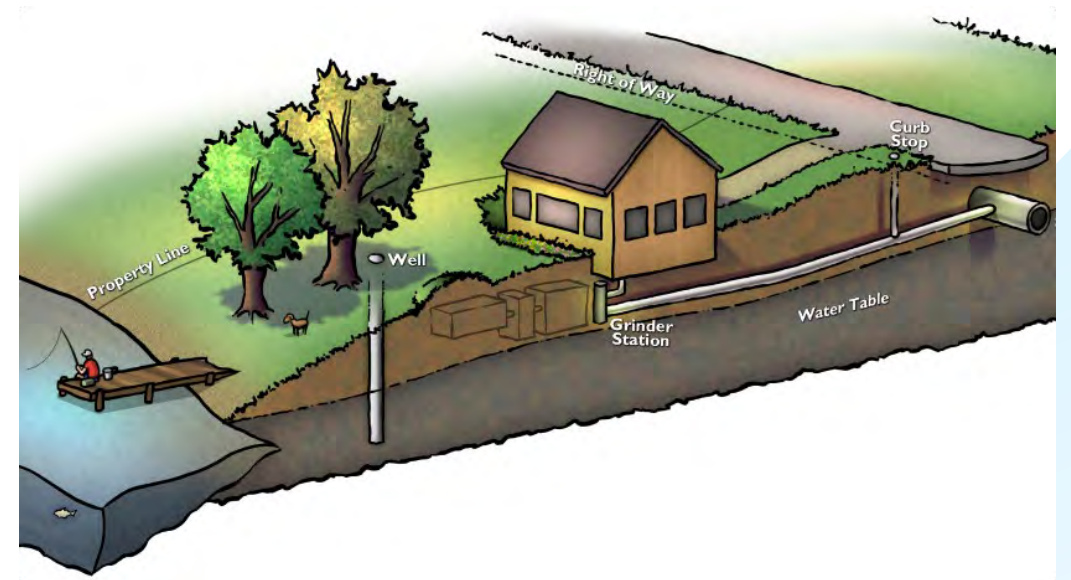


VNP Service Areas



What is the problem

- Non-complying/failing Septic Systems
- Study Results -64% non-conformance rate.
- Island View Project - 64% non-conformance rate.
- Kabetogama Project – 77% non-conformance rate.
- Crane Lake Water & Sanitary District – 41% non-conformance rate.
- Ash River – 73% non-conformance rate.
- Nearly 900 individual septic systems in these four areas alone





Ash River

“Having a sewer system would allow landowners and businesses to fully utilize their properties. A sewer system would encourage more investment and development to the area. Ash River is a very important gateway to the Voyageurs National Park. The resorts and businesses would be able to increase their capacity and offer new opportunities to the thousands of visitors to the area and to the park.”

~Deb Sanders, Ash River Sanitary District (Owner Frontier Resort)

Accomplishments

- VNPCWJPB has completed approximately \$35,000,000 in clean water projects for the 4 Sewer Districts adjacent to the VNP Boundary.
- Updated 2022 Sanitary Sewer Comprehensive Plan identifies future district needs.
- What projects did the last CWC funds accomplish:
 - Facility Planning and Design of Ash River
 - Facility Plan for Kabetogama Phase 2
 - Continued ISTS and WWTP Upgrade in Crane Lake
 - Sewer Expansion in Rainy Lake



Voyageur's National Park Clean Water Joint
Powers Board
Comprehensive Wastewater Plan

STLES 165737 | March 2022



Building a better world
to live in™

Engineering | Architecture | Interiors | Sustainability

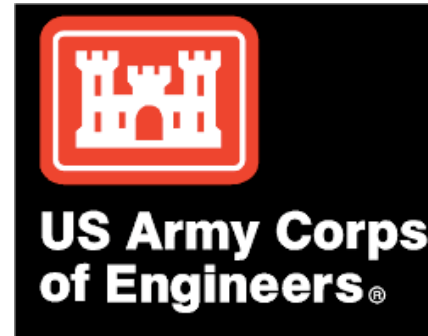
Future Needs

\$4,000,000 request for FY26(\$2M) and FY27(\$2M) to continue with critical projects.

- **Ash River Sanitary District**
 - System Construction Phase
- **Kabetogama Phase 2**
 - Land Acquisition and System Design
- **Crane Lake Managed ISTS**
 - Current application backlog of 15 systems
- **Rainy Lake Expansion**
 - Whispering Pines
 - County Road 96



Thank you to our project partners! Together we are keeping the water clean for our visitors and residents in America's only water based National Park!



Comment Sheet
for Clean Water Fund Requests

April 15, 2024

Please share any comments you have on the programs presented today.

Any comments you have on these programs will be passed along to the Budget and Outcomes Committee on May 3rd.

Critical Shoreland Protection - Permanent Conservation Easements (BWSR)

Wetland Restoration Easements (BWSR)

Working Land and Floodplain Easements (BWSR)

Targeted Wellhead/Drinking Water Protection (BWSR)

Buffer Law Implementation (BWSR)

Nonpoint Source Restoration and Protection Activities (DNR)

Technical Assistance (MDA)

Conservation Equipment Assistance (MDA)

Agricultural Best Management Practices Loan Program (MDA)

Mussel Restoration Pilot Program (DNR)

Water Storage (DNR)

Expand Weather Station Network (MDA)

Great Lakes Restoration Projects (BWSR/MPCA)

Irrigation Water Quality Protection (MDA)

Nitrate in Groundwater (MDA)

Future of Drinking Water (MDH)

Metropolitan Area Water Sustainability Support (Metropolitan Council)

Enhanced County Inspections/SSTS Corrective Actions (MPCA)

National Park Water Quality Protection Program (MPCA/Voyageurs National Park program team)

Other Comments



Reinvest in Minnesota (RIM) Conservation Easements

Sharon Doucette | Easement Section Manager

Board of Water and Soil Resources

RIM Conservation Easements

Reinvest In Minnesota (RIM) easements are used by the State to secure certain land rights through voluntary agreements with landowners to restore agricultural land and protect environmentally sensitive areas with the goals of:

- enhancing soil and water quality
- minimizing damage to flood-prone areas
- sequestering carbon
- supporting native plant, fish, and wildlife habitats
- establishing perennial vegetation

An easement may be permanent or of limited duration (minimum of 20 years).

Reinvest In Minnesota Resources Law - Minnesota Statute 103F.501-103F.535



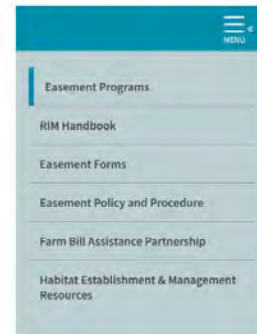
Funding Sources and Programs

- **Clean Water Fund**
- Outdoor Heritage Fund
- Bonding
- Environmental and Natural Resources Trust Fund
- General Fund



<https://bwsr.state.mn.us/what-programs-are-available>

What Programs are Available?



Reinvest in Minnesota Overview



Army Compatible Use Buffer Program

The ACUB easement program permanently protects private lands within a 3 mile radius around Camp Ripley from residential and commercial development.



Critical Shorelands: Rum River Conservation Easements

The Critical Shorelands: Rum River Conservation Easements Program protects sensitive shorelands on privately owned lands in Minnesota's Rum River watershed. This program is available in the following 10 counties: Aitkin, Anoka, Benton, Chisago, Crow Wing, Isanti, Kanabec, Mille Lacs, Morrison, Sherburne.



Minnesota Conservation Reserve Enhancement Program



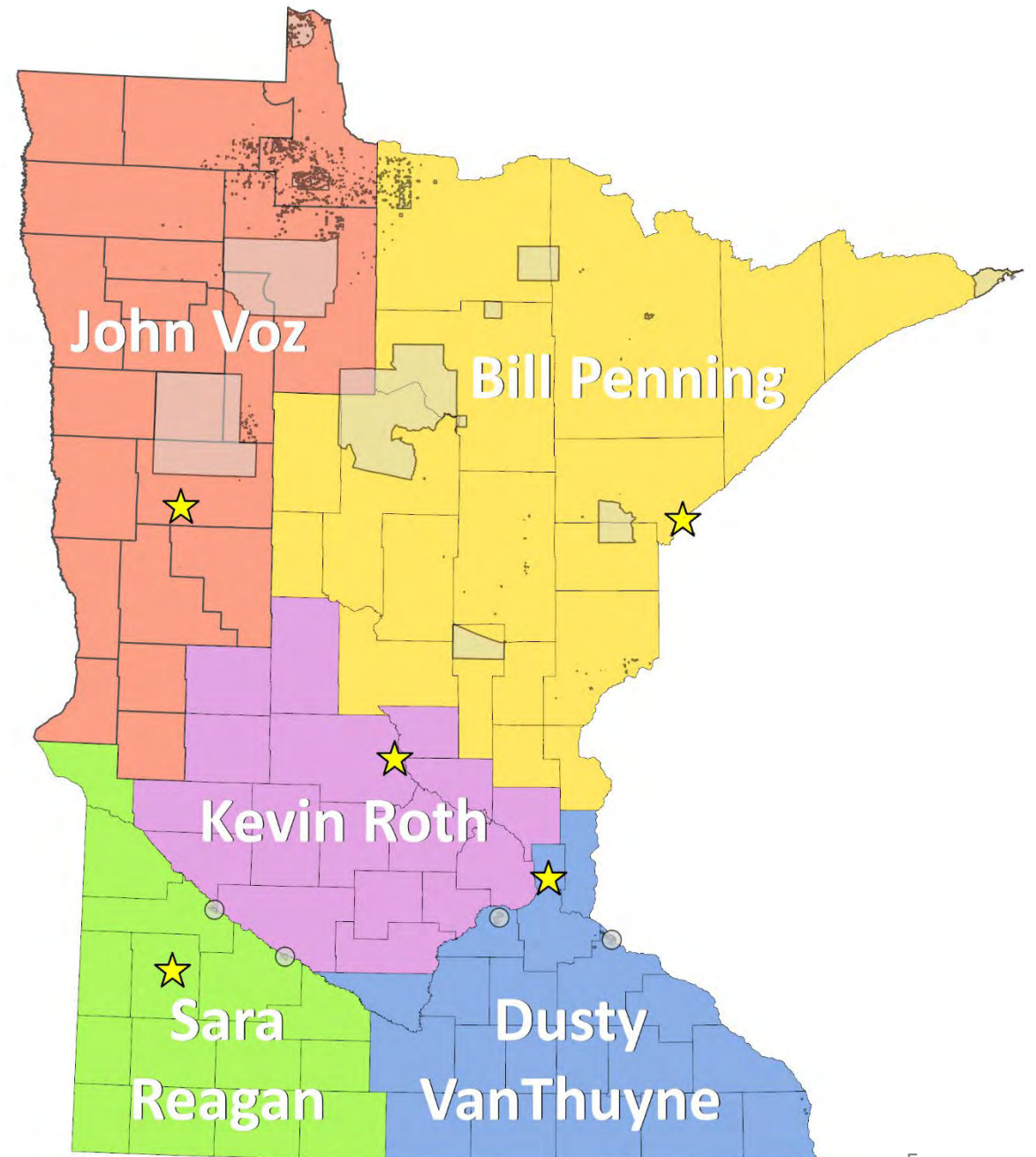
RIM CWF Conservation Easement Programs

- Conservation Reserve Enhancement Program (CREP) (restoration)
- Riparian & Floodplain Restoration
- Wetland Restoration
- Wellhead Restoration and Protection
- Critical Shoreland Protection



Easement Program Managers

- **Dusty VanThuyne – SE**
 - CREP, Riparian & Floodplain Restoration
- **John Voz – NW**
 - RIM Wetlands
- **Sara Reagan – SW**
 - Wellhead
- **Bill Penning – NE**
 - Critical Shorelands



CWC Strategic Plan and RIM Easements

Wellhead Easements:

Vision: Drinking water is safe for everyone, everywhere in Minnesota.

Goal: Ensure that users of public water systems have safe, sufficient, and equitable drinking water.

Strategy: Support prevention efforts to protect groundwater in DWSMAs.

Critical Shorelands, Wetland and Riparian and Floodplain Restoration Easements:

Vision: Minnesotans will have fishable and swimmable waters throughout the state.

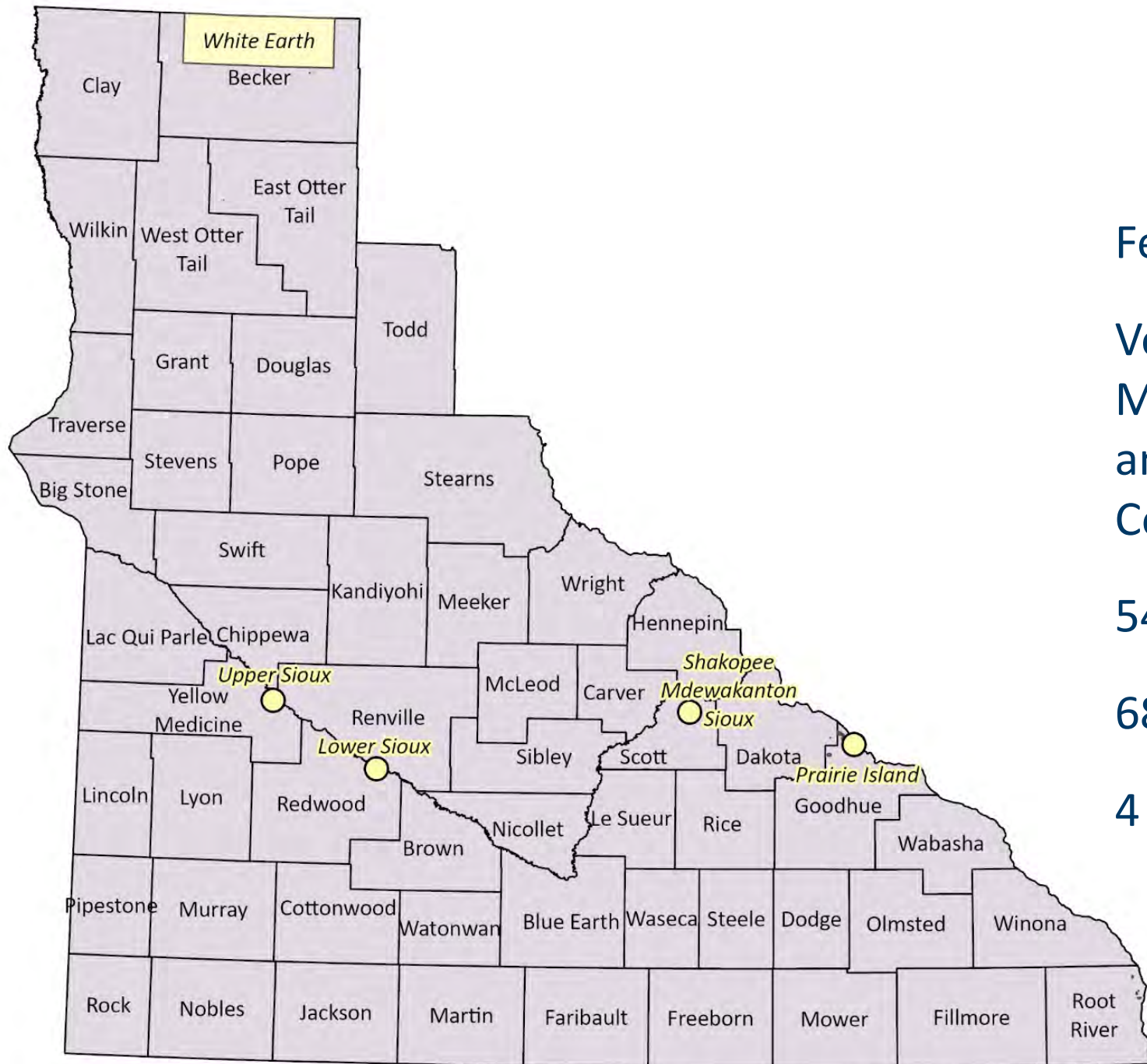
Goal: Protect and restore surface waters to achieve 70% swimmable and 67% fishable waters by 2034 via by prioritizing and targeting resources by major watershed.

Strategy: Prioritize waters for protection and restoration using comprehensive watershed management plans (One Watershed One Plan or other approved plans) updated every ten years.



Conservation Reserve Enhancement Program (MN CREP)

MN CREP



Federal partnership

Voluntary approach using Reinvest in MN (RIM) Reserve easement program and the USDA Farm Service Agency Conservation Reserve Program (CRP)

54 county CREP area

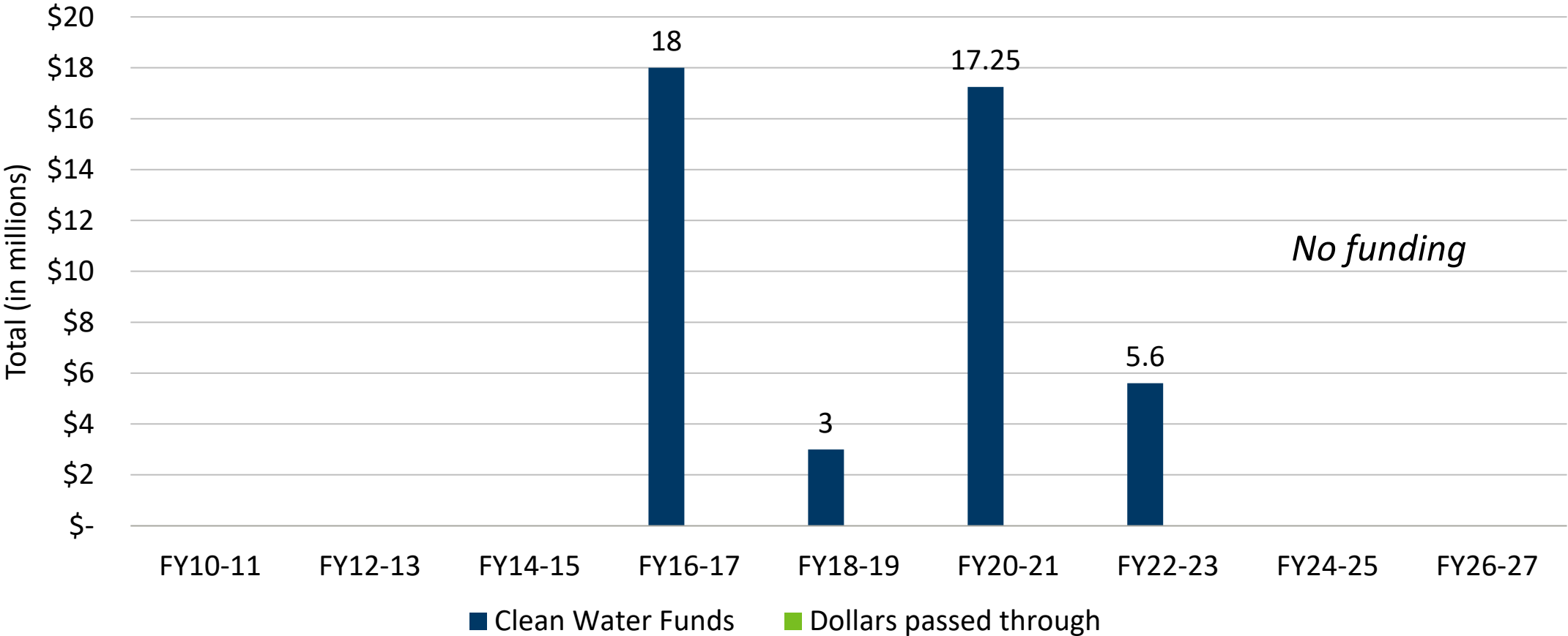
680 easements; 36,000 acres

4 conservation practices:

- buffers
- wetlands (2 types)
- wellheads

Clean Water Funds for CREP

Past Clean Water Fund appropriations and dollars passed through





Riparian & Floodplain Restoration

Riparian & Floodplain Restoration

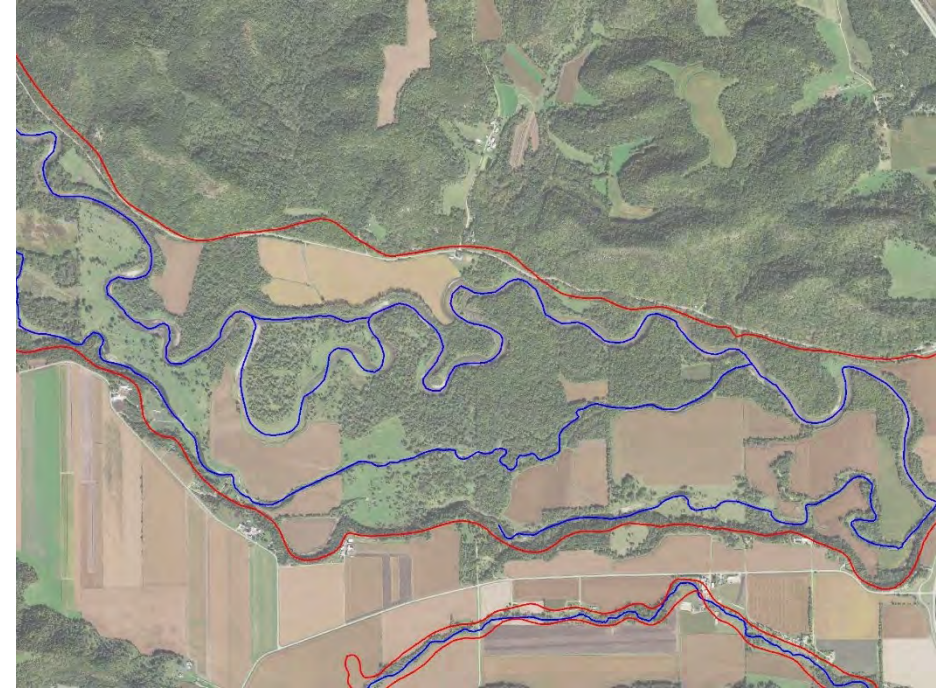
- Protect, restore, and enhance habitat and water quality – whole fields adjacent to public waters
- Statewide
- Land NOT eligible for CREP
- Current land use, erodibility, priority in plans, water quality impairments
- Scored and ranked
- Can be traditional RIM, **Working Lands, Limited-Term (30 years) or Working Lands AND Limited-Term**
- Leverages OHF for permanent easements



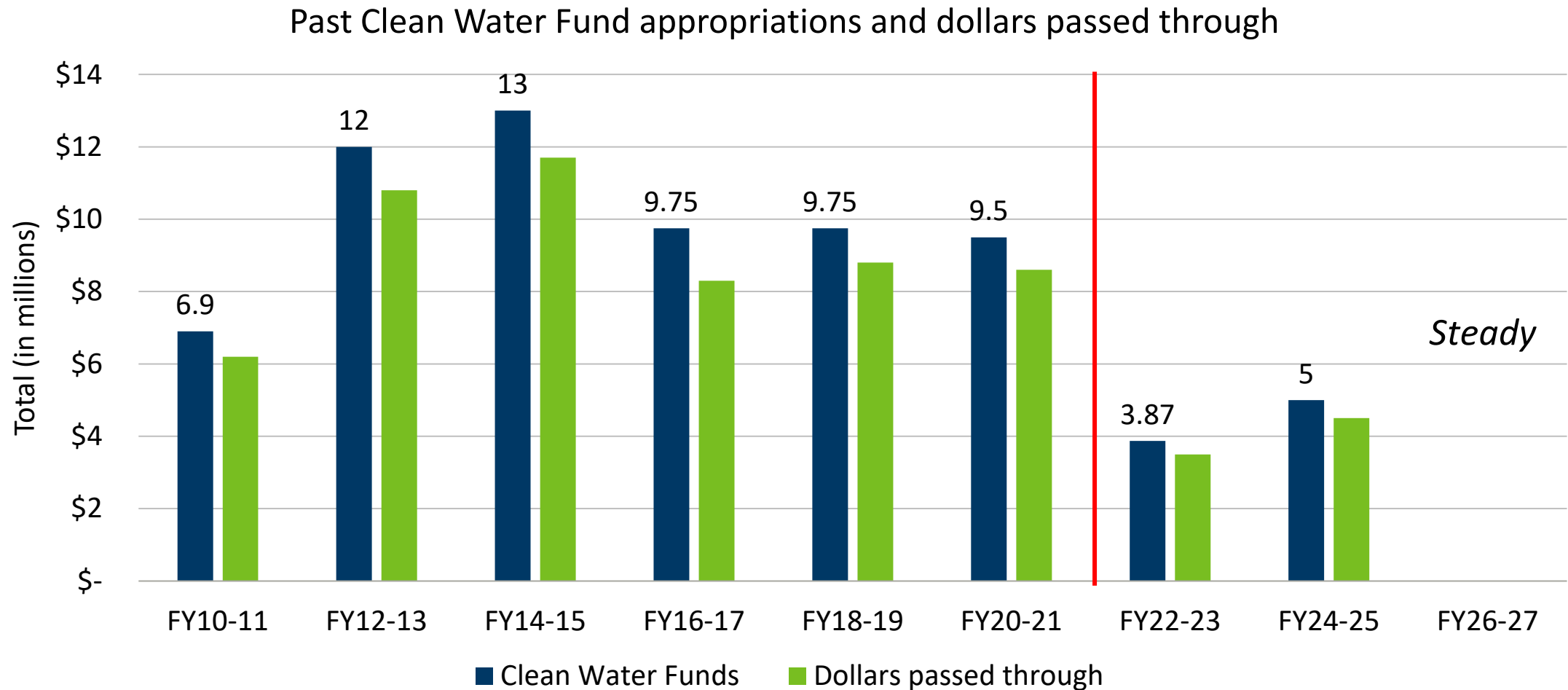
Riparian & Floodplain Restoration

Since 2010 (in whole or in combination with OHF)

- 850+ easements
- 26,000+ acres recorded or in process (including CREP and floodplain wetlands)



Clean Water Funds for Riparian & Floodplain Restoration





RIM Wetlands Restoration

RIM Wetlands Restoration

- Restores wetlands and adjacent native grassland habitat (by statute, must be permanent easement)
- Statewide
- Land NOT eligible for CREP
- Water quality and quantity benefits, restorability; priority in plans
- Scored and ranked
- Leverages OHF

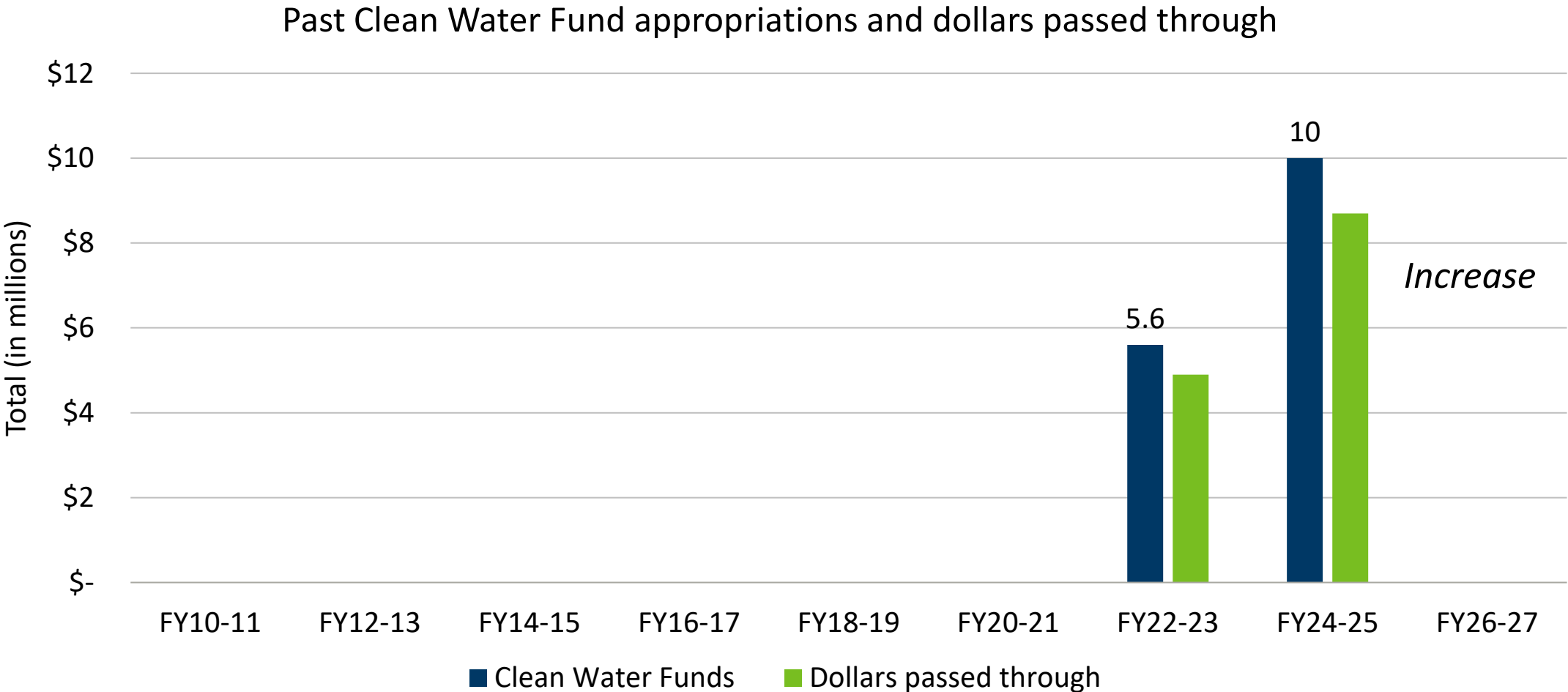


RIM Wetlands Restoration

- CWF appropriations have funded all or a portion of 250 wetland restoration easements (14,500 acres) as part of CREP
- 2,400 acres in current program – approximately half the acres funded by CWF



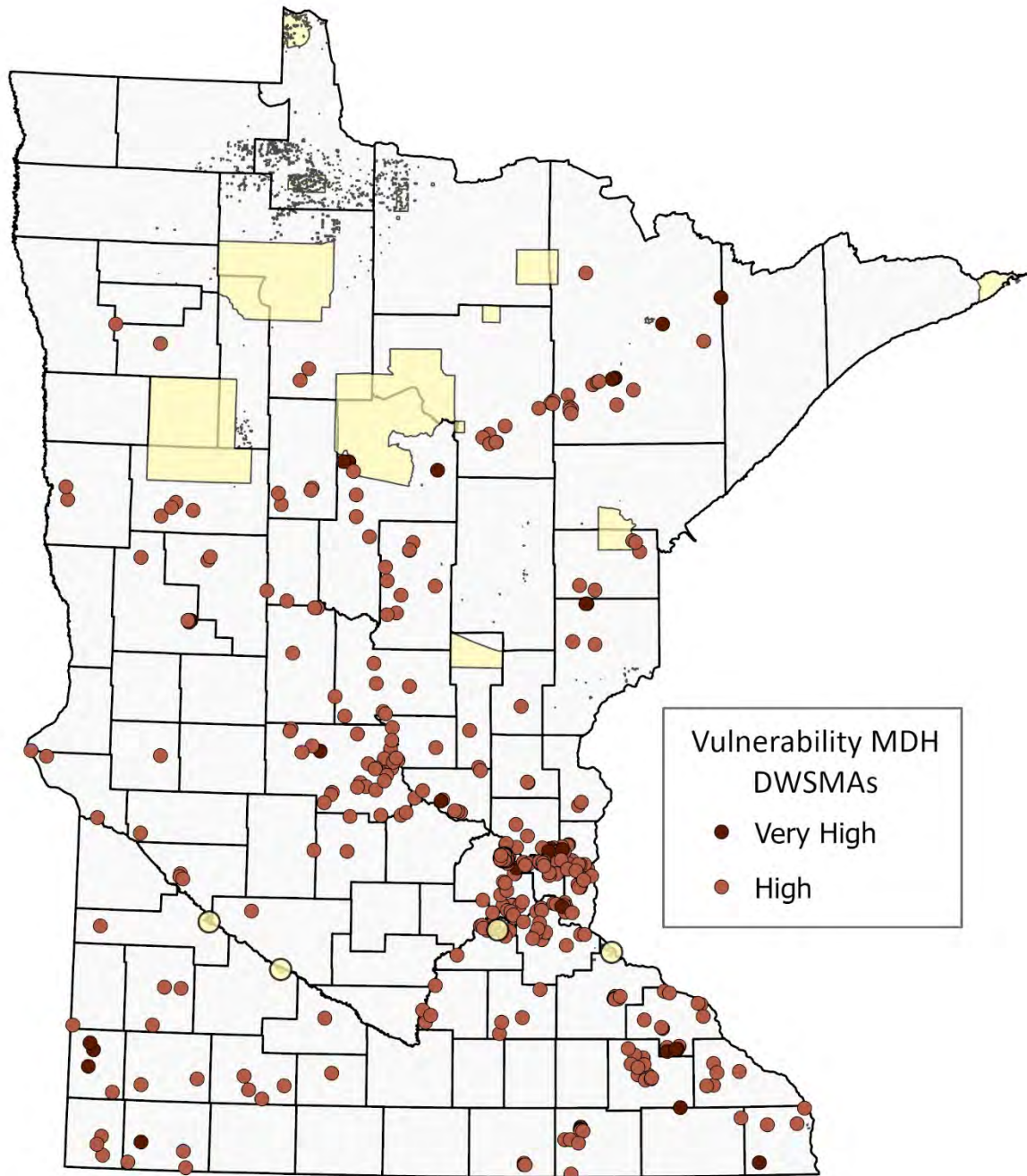
Clean Water Funds for RIM Wetlands Restoration





Wellhead/Drinking Water

Wellhead/Drinking Water

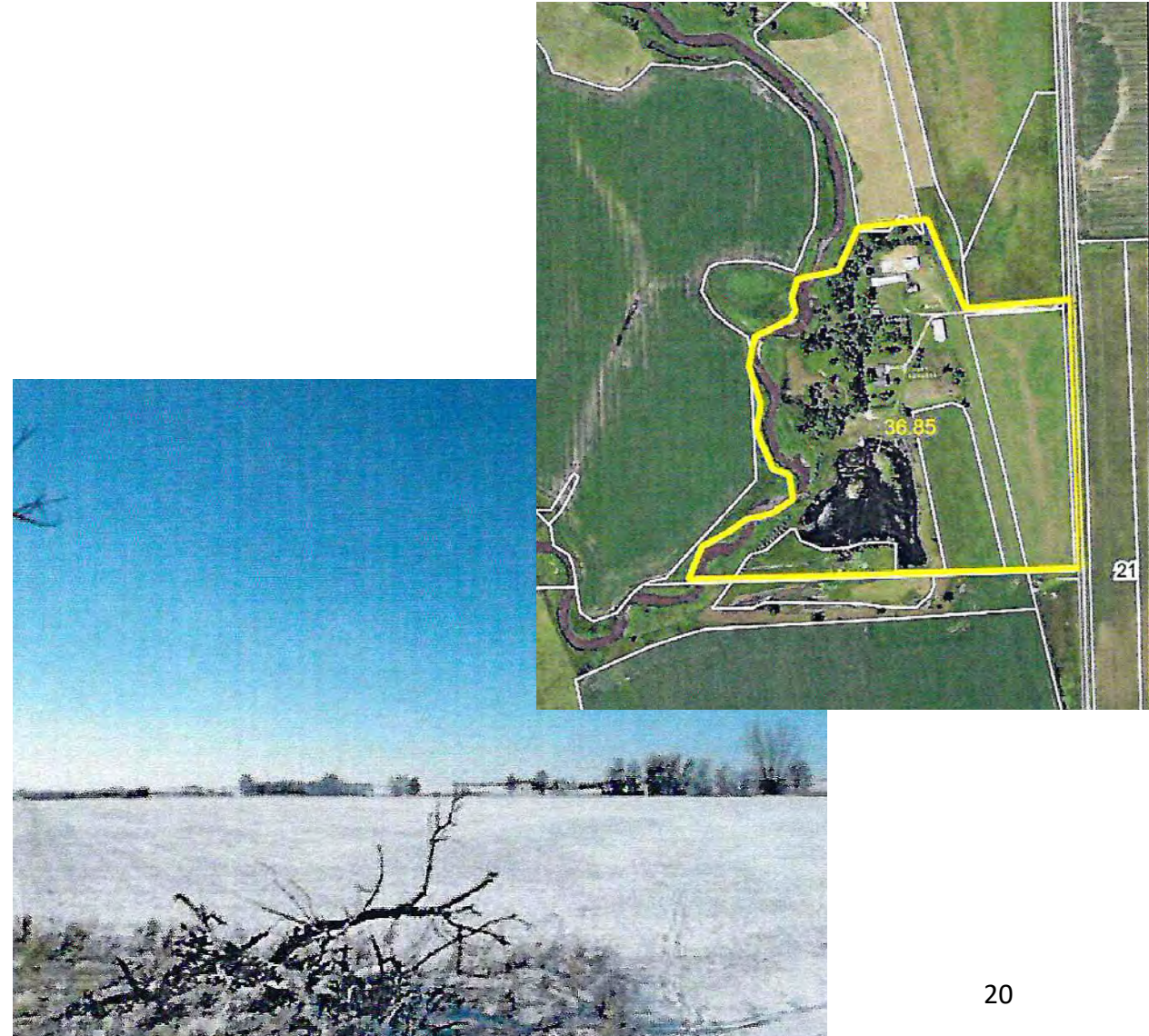


- Restore high and very high vulnerability DWSMAs (with limited protection) from MDH approved plans
- Wellhead Protection Partner Grant option
- Statewide
- 40 easements; 2,400 acres
- 5 grants; 360 acres

Wellhead/Drinking Water

Priority projects:

- WHPA vulnerability is High or Very High (required)
- Drinking water protection plan includes long-term protection activities
- Lands have expiring CRP contracts
- Mitigation Level 1 or 2 in Groundwater Protection Rule
- Nitrate concentration of more than 5.4 mg/l



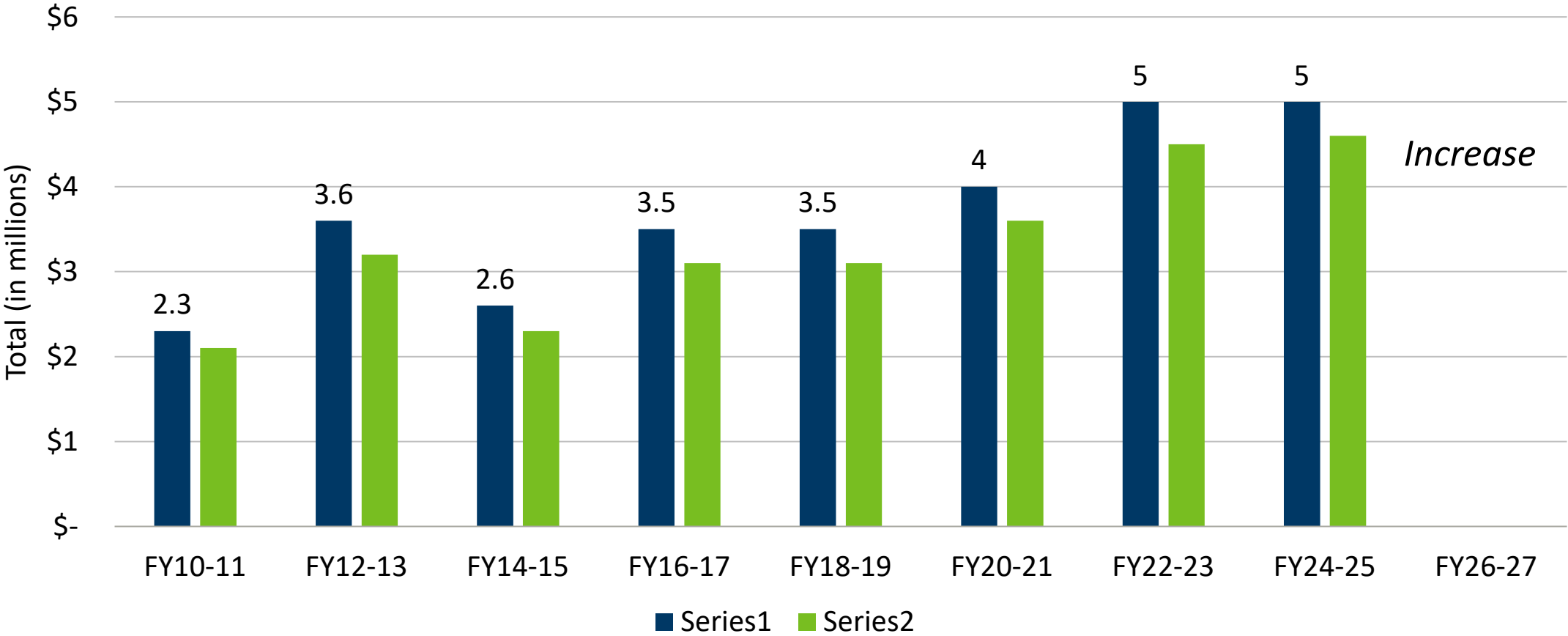
Wellhead/Drinking Water

- CREP easement
- RIM easement when CREP is not appropriate
- Wellhead Protection Partner Grant – landowner goals and LGU willingness to lead the project
- MDH, MDA and Minnesota Rural Water Association



Clean Water Funds for Wellhead/Drinking Water

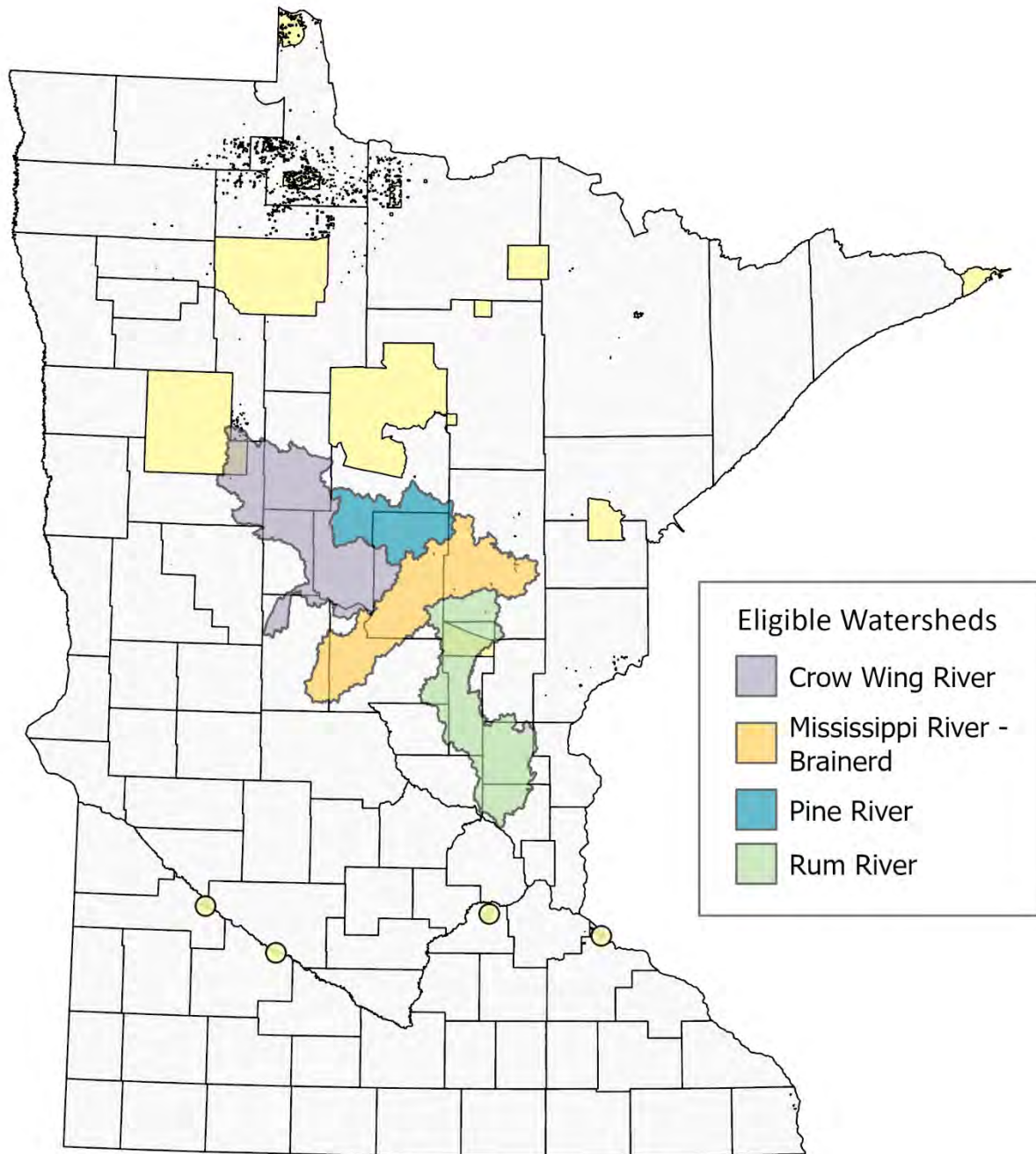
Past Clean Water Fund appropriations and dollars passed through





Critical Shoreland Protection Easements

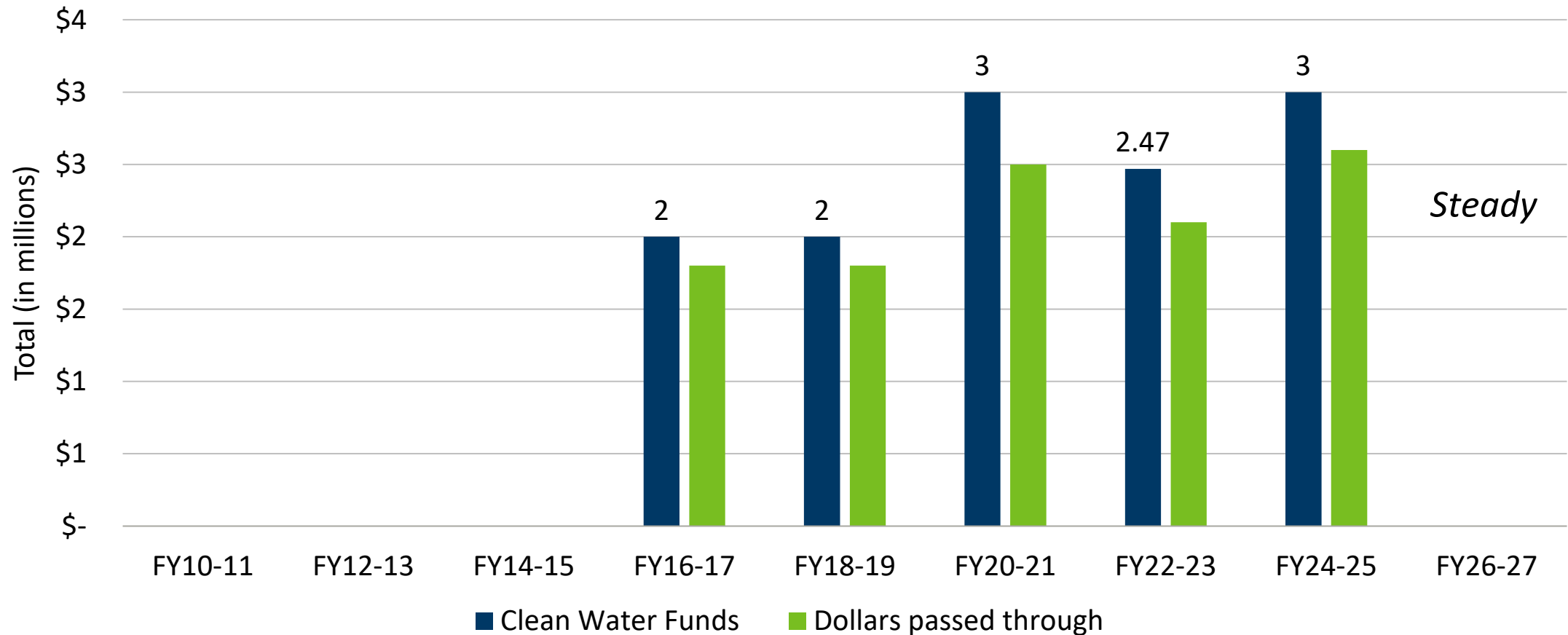
Critical Shoreland Protection Easements



- Protect the Mississippi, its tributaries and public waters as a drinking water source
- Source water protection for communities along the Mississippi River including the Twin Cities
- Perpetual
- Current focus areas: Pine, Crow Wing, Rum, Mississippi River - Brainerd watersheds
- 4,000 acres; 59 easements

Clean Water Funds for Critical Shorelands

Past Clean Water Fund appropriations and dollars passed through



TECHNICAL ASSISTANCE



Buffer and Soil Erosion Law Implementation

Annie Felix-Gerth | Clean Water Coordinator

Minnesota Board of Water and Soil Resources

Clean Water Council Strategic
Plan Goal 3

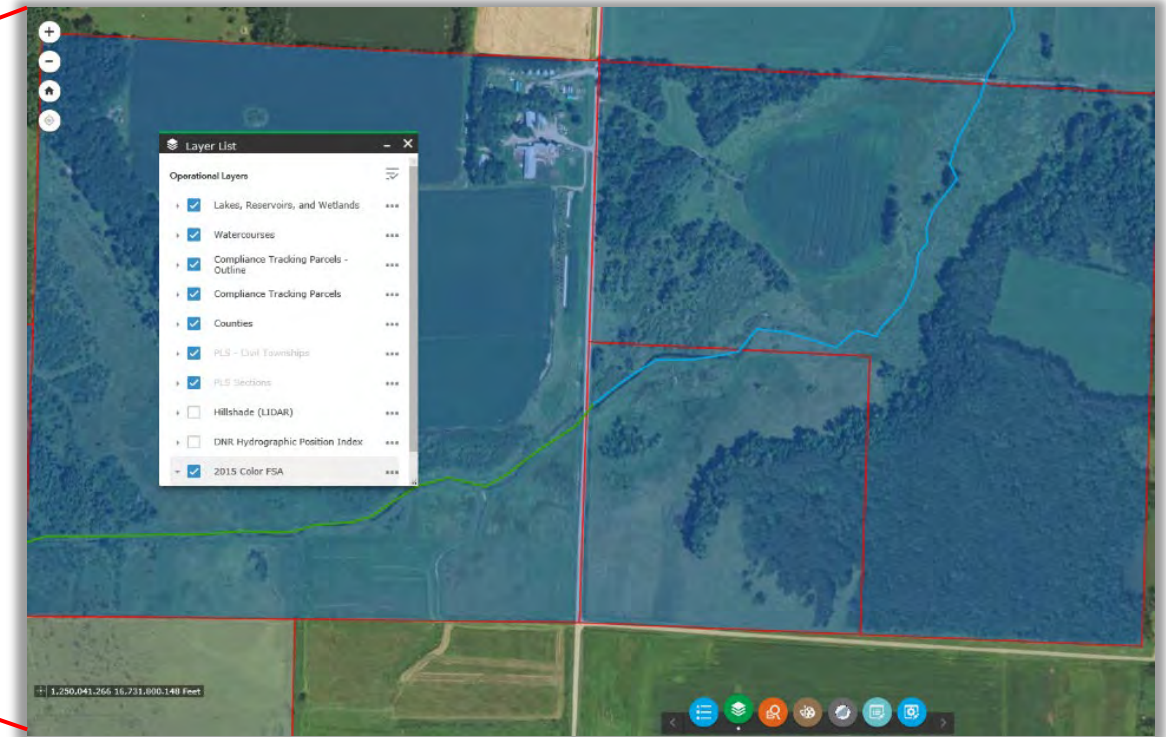
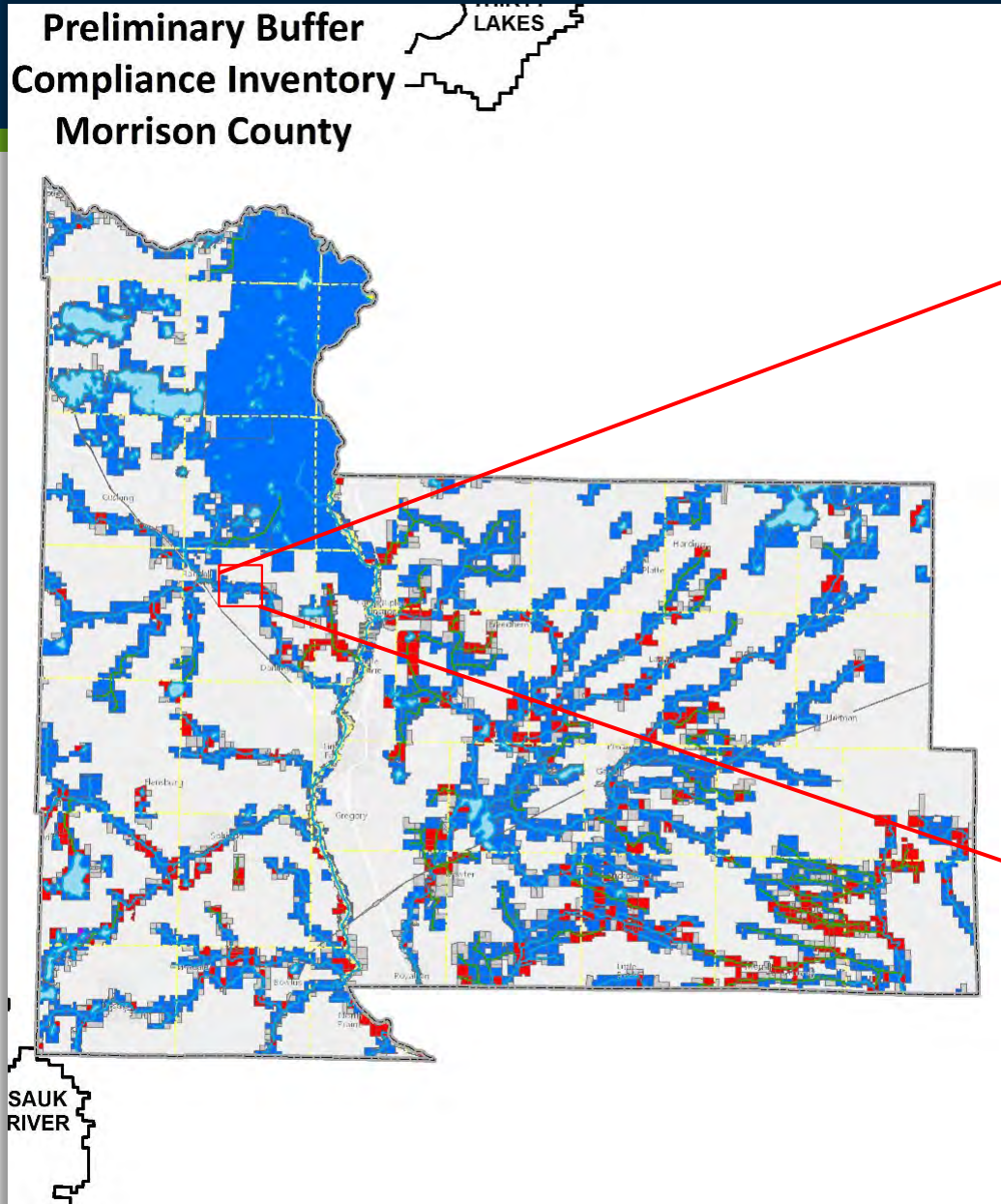
Buffer and Soil Erosion Law Implementation

SWCDs use buffer compliance funding for:

- Technical assistance to landowners
- Monitoring and tracking of progress/compliance of buffers
- Assistance in local enforcement action



Buffer Compliance and Tracking



All Waters Compliance (99.6%)



BUFFER COMPLIANCE ALL WATERCOURSES



JANUARY 2017

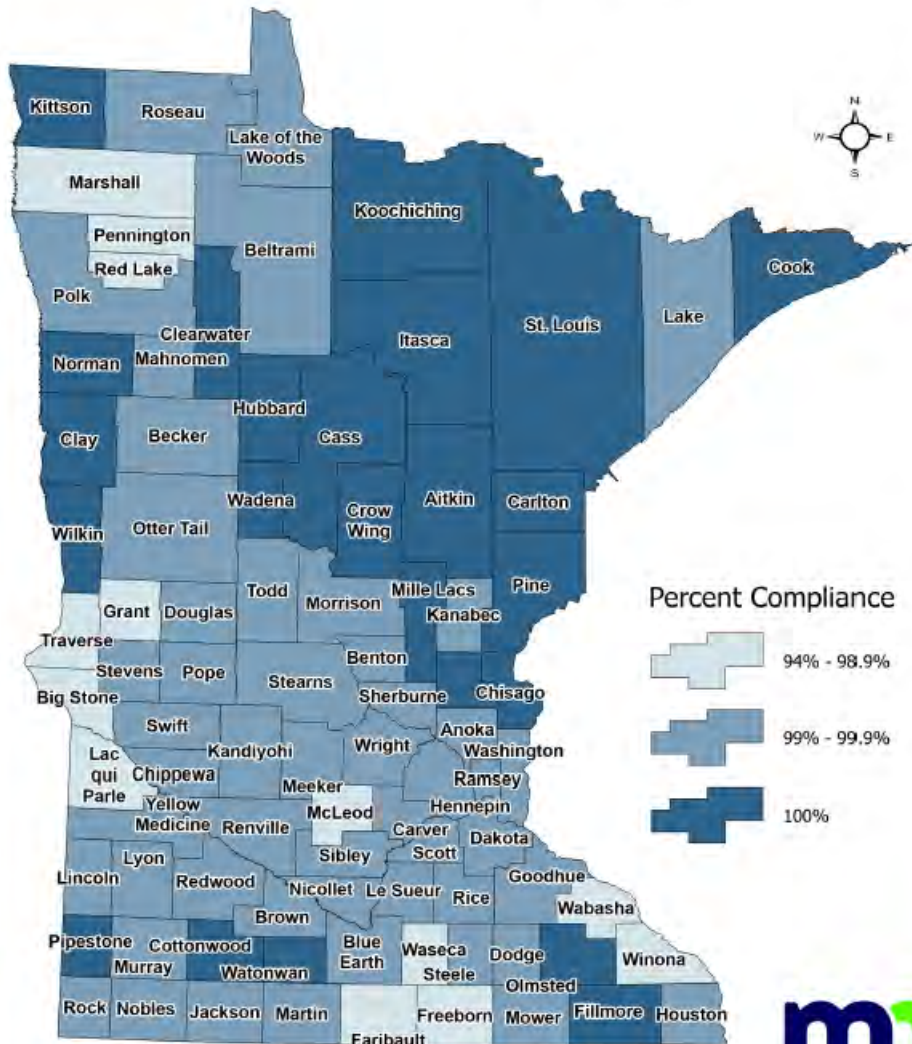
JANUARY 2018

JANUARY 2020

MARCH 2021



Estimated Percentage of Parcel Buffer Law Compliance All Applicable Parcels



2/1/2024

Implementation is ongoing

Work to Maintain is ongoing:

- Land changes hands
- CRP Expiration
- Perennial's come out of rotation
- Stream migration
- Encroachment

Buffer and Soil Erosion Law Implementation

	FY16-17	FY18-19	FY20-21	FY22-23	FY24-25	Total
Clean Water Funds	\$5M	\$5M	\$5M	\$3.87M	\$4M	\$18.87M
FTEs (state agency staff funded by CWF)	3	3	3.4	3	3	3
Dollars Passed Through to LGUs	\$4M (80%)	\$4M (80%)	\$4M (80%)	\$3.4M (88%)	\$3.6M (90%)	\$15.4M

Note: This appropriation began in FY16-17

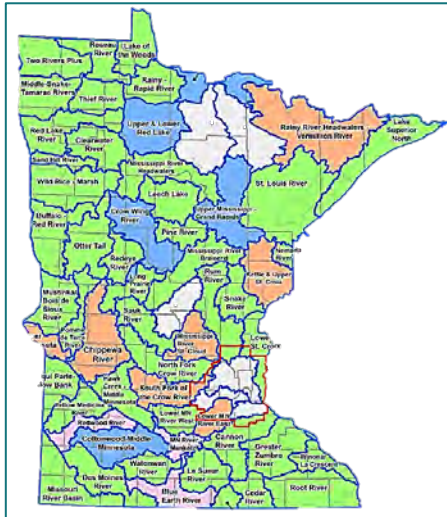


DNR Nonpoint Source Restoration and Protection

Barbara Weisman | Clean Water Operations Consultant

Minnesota Department of Natural Resources

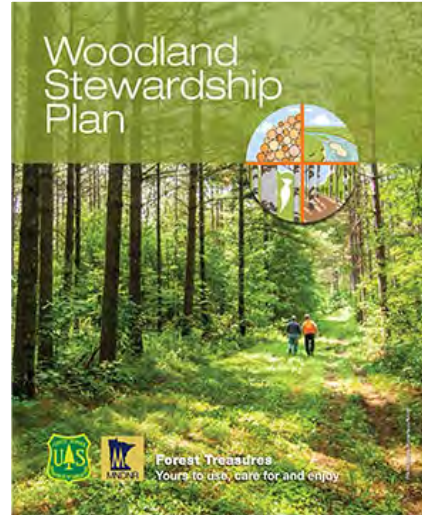
DNR Nonpoint Source Restoration and Protection



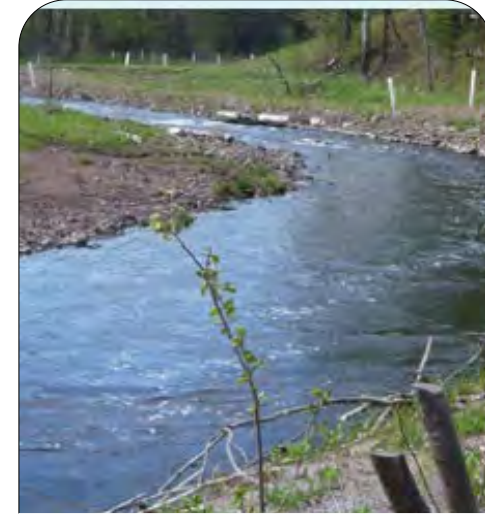
One Watershed, One Plan Support



Higher Standards in Shoreland Ordinances

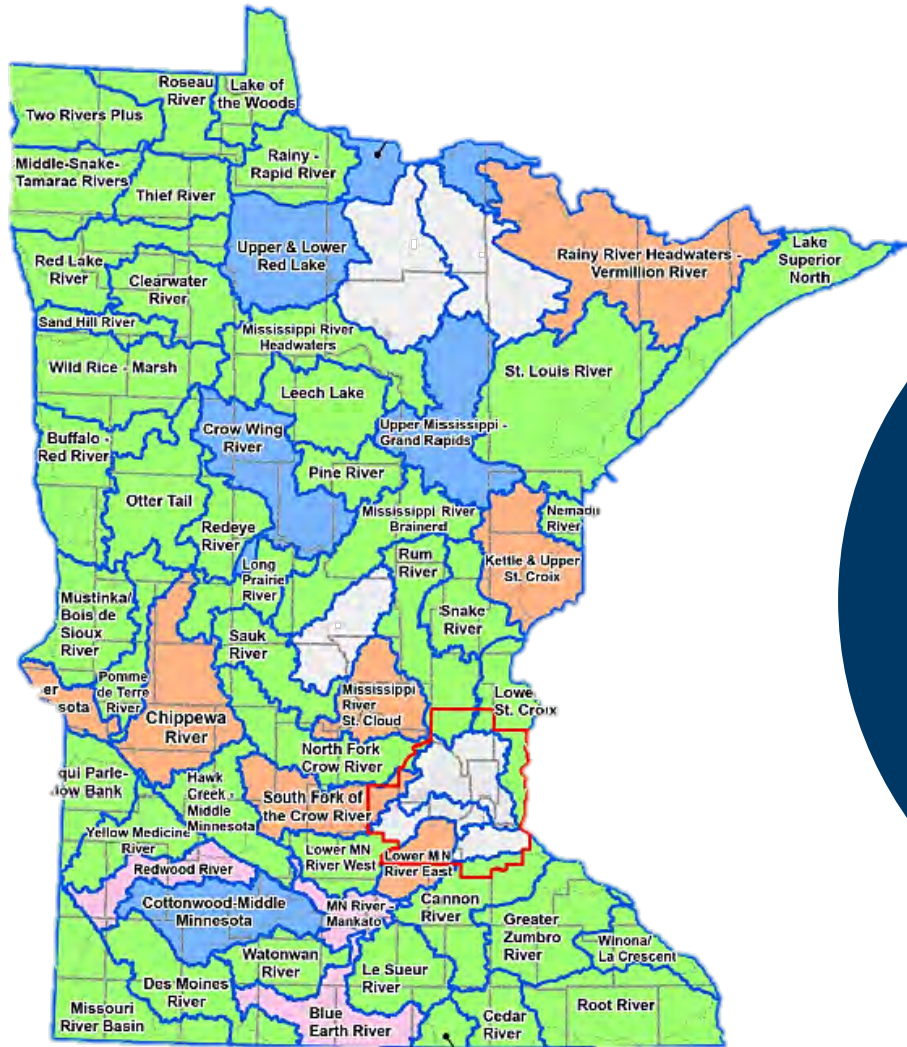


Forest Stewardship Planning in At-Risk Watersheds



Technical Assistance to Address Stream Erosion Problems

Contributing to One Watershed, One Plan



DNR staff
assigned
in every
watershed

Priorities
from all DNR
disciplines

At the table
throughout
planning

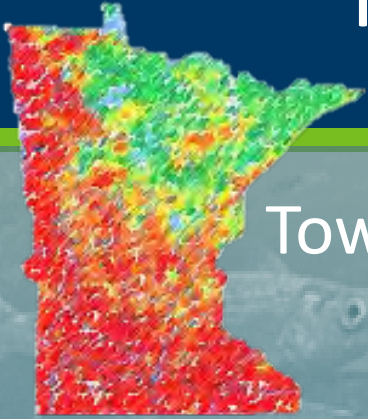
Enhancing
Relationships,
Coordination

Higher Water Quality Standards in Shoreland Ordinances

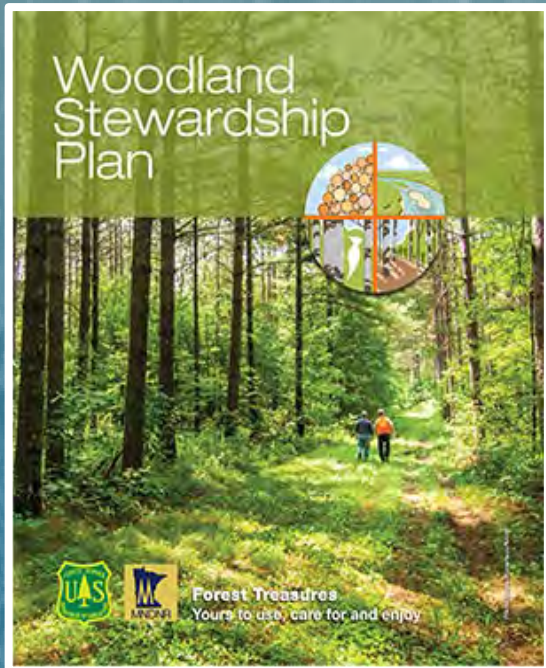


13 fact sheets covering 44 approaches with 84 real examples from > 35 LGUs

Forest Stewardship Planning in At-Risk Watersheds



Toward >75% protected land in at-risk watersheds

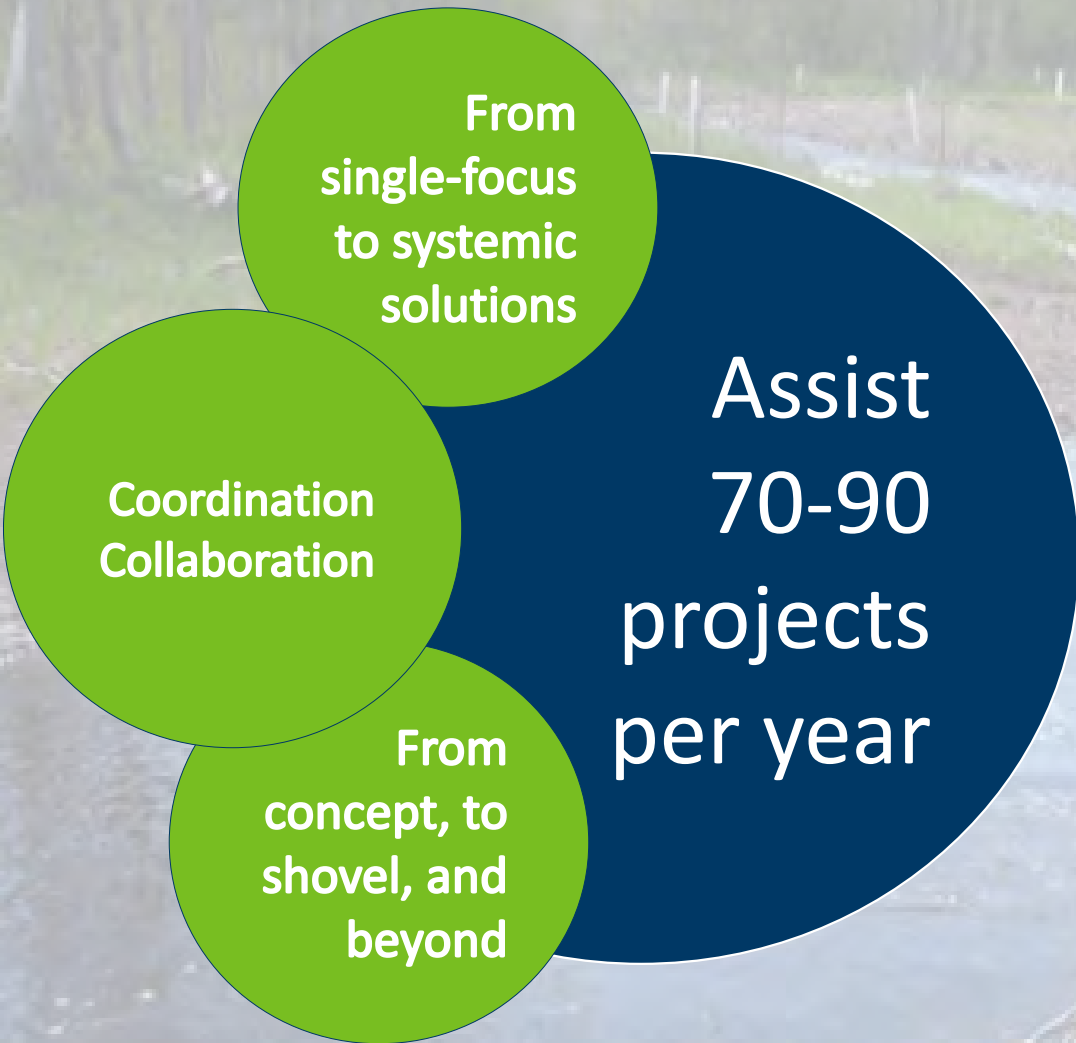


> 315 individual plans on 37,500 ac. private woodlands



Landscape-scale plans for five (5) Upper Mississippi Basin watersheds

Technical Assistance to Address Stream Erosion



- Natural Channel Design for multiple benefits
- Collaborate with LGUs over several years
- Assist in several ways:
 - Stream Survey Data
 - Project Design
 - Grant Applications
 - Construction Oversight
 - Monitor, Quantify Results
 - Train Partners

Technical Assistance: Cascade Creek in Rochester

Restored main channel withstood major floods and continues to perform well



Sept 2018 floodwater spreading across floodplain



Waters receded after Sept 2018 flood

Technical Assistance: Sand Creek in Coon Rapids

DNR involved at every step – survey, design, public buy-in, oversight, monitoring



Before: Bank stabilization was planned to address aquatic life impairment tied to sediment, hydrology



After: Project evolved to add Natural Channel Design features. Meets goals plus 3x more ecolog. benefits

Technical Assistance: Trout Brook at Afton Alps

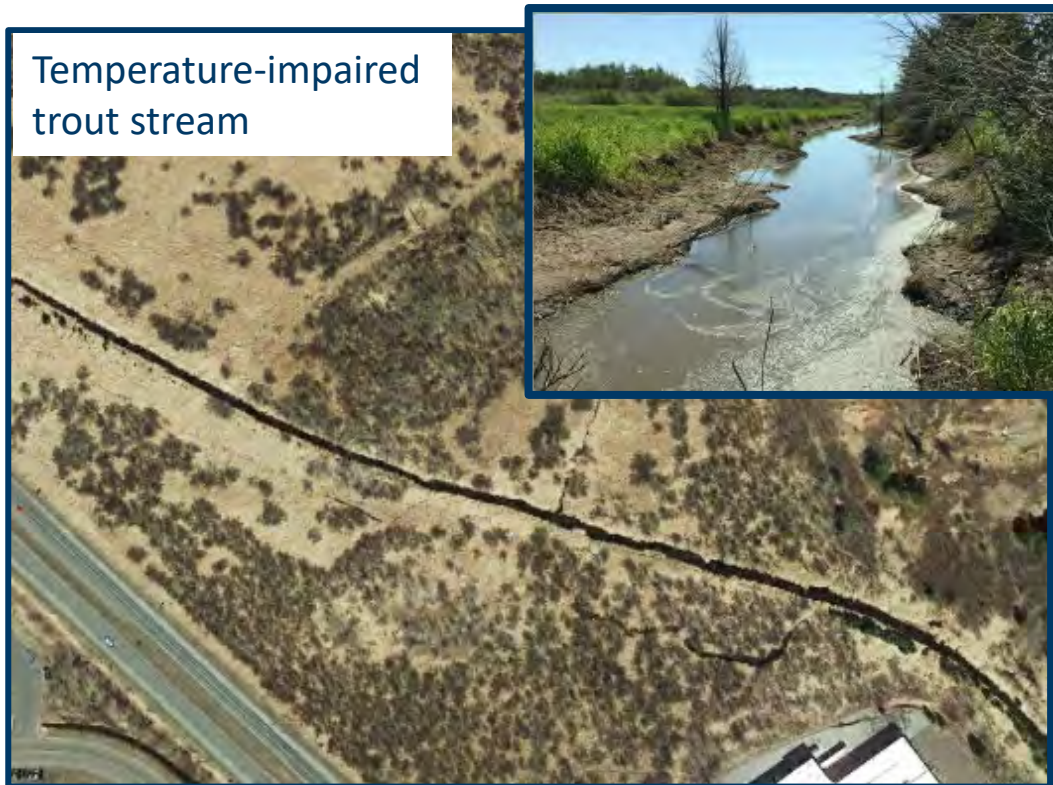


A decade of relationship-building bears fruit

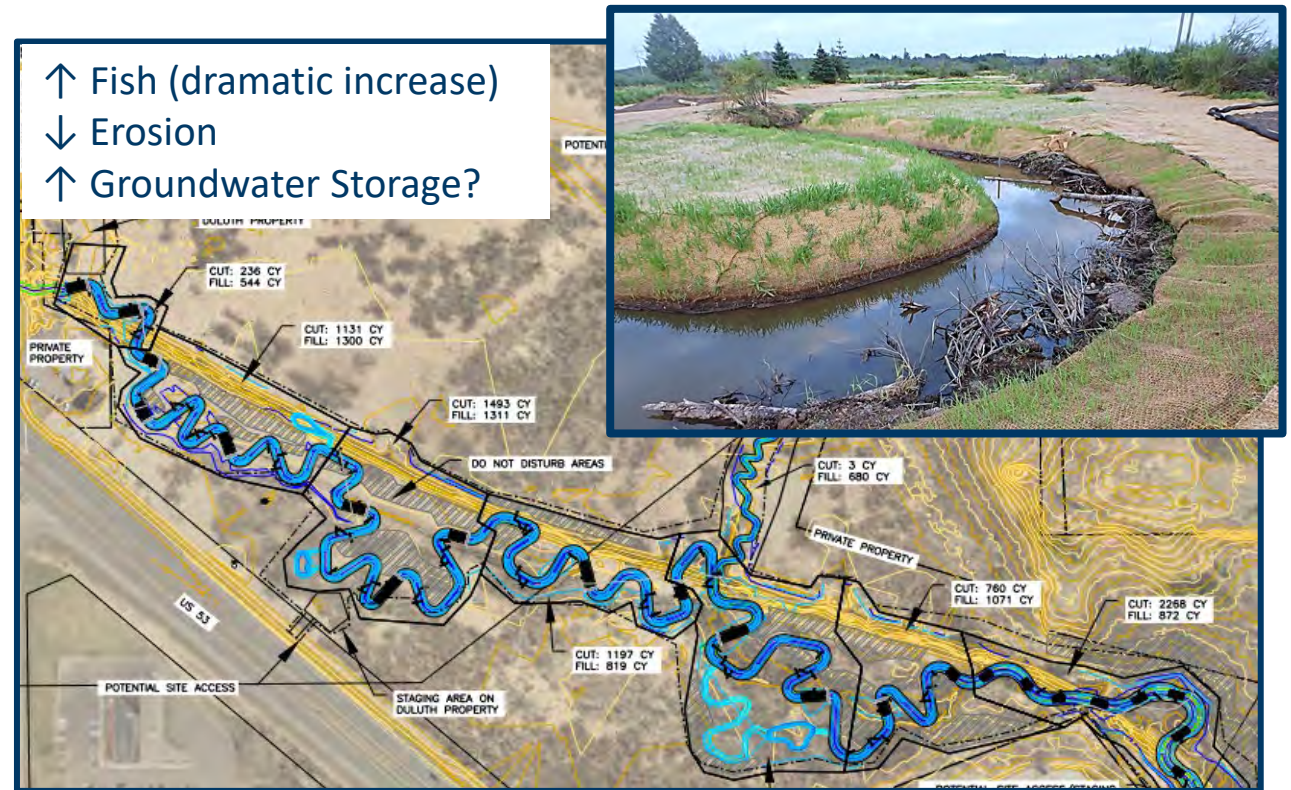
- With DNR survey data project changed from a sediment pond to a systemic restoration, reconnection
- From >5 to <1 dumptruck of sediment & supports trout
- MN Watersheds 2023 Project of the Year to South Washington Watershed District

Technical Assistance: Miller Creek in Duluth

Collaborative planning and design with South St. Louis SWCD for multiple benefits



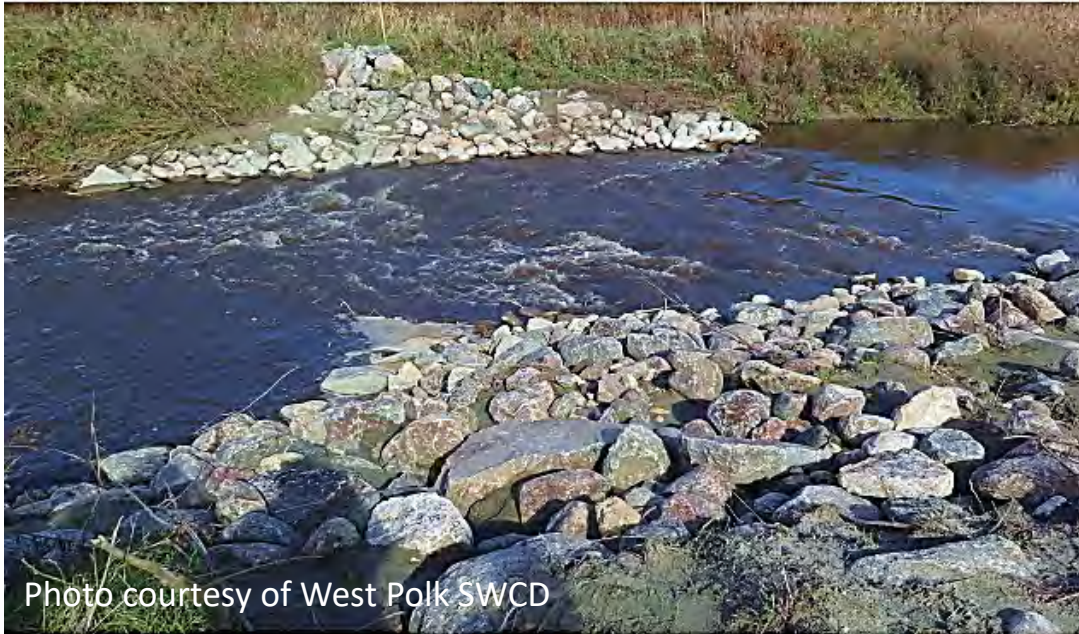
Before: ½-mi stagnant muddy ditch, eroding banks, lowered GW table, one fish



After: almost 1-mi. of re-meandered functional stream, stable banks, restored floodplain

Technical Assistance: Sand Hill River, West Polk County

DNR a key partner from the start: “Strong partnerships forged in the first project accelerated water quality work in the region” – BWSR Snapshots



First project: Rock riffles with CWF \$



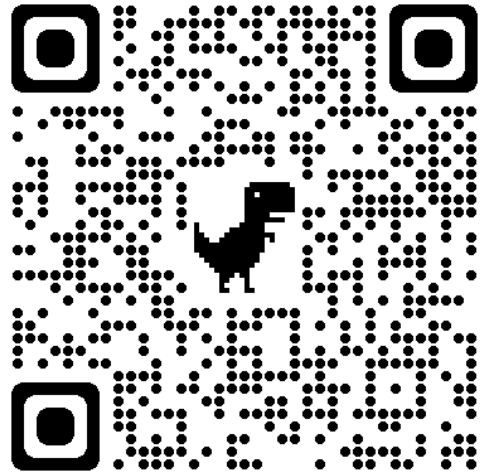
Later: Rock Arch Rapids with OHF \$

DNR Nonpoint Source Restoration and Protection

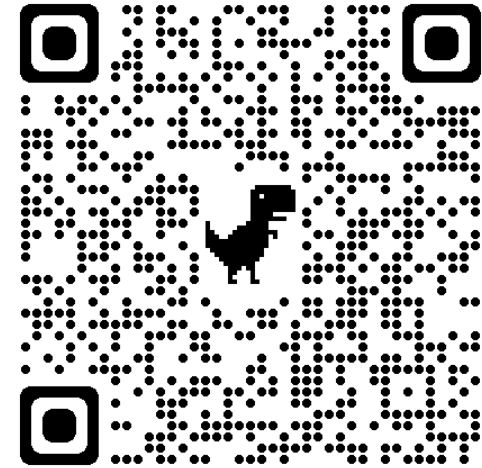
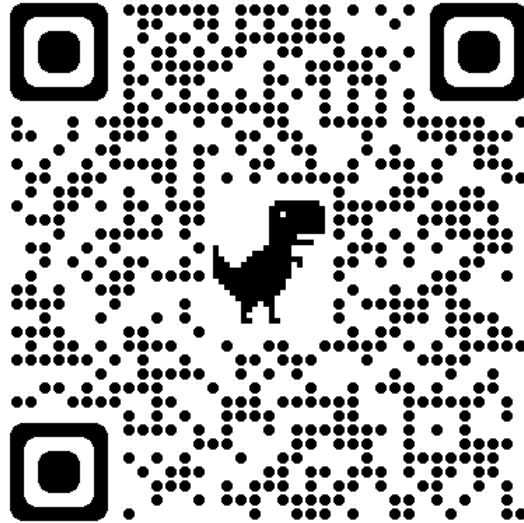
	FY10-21	FY22-23	FY24-25	FY26-27	Total since FY10
Clean Water Funds	\$10.8M	\$2.5M	\$3.2M	TBD	\$16.5M
FTEs (state agency staff funded by CWF)	6.6 (ave)	7.7	~8	TBD	n/a

More information & examples

[Forest Stewardship Planning](#)

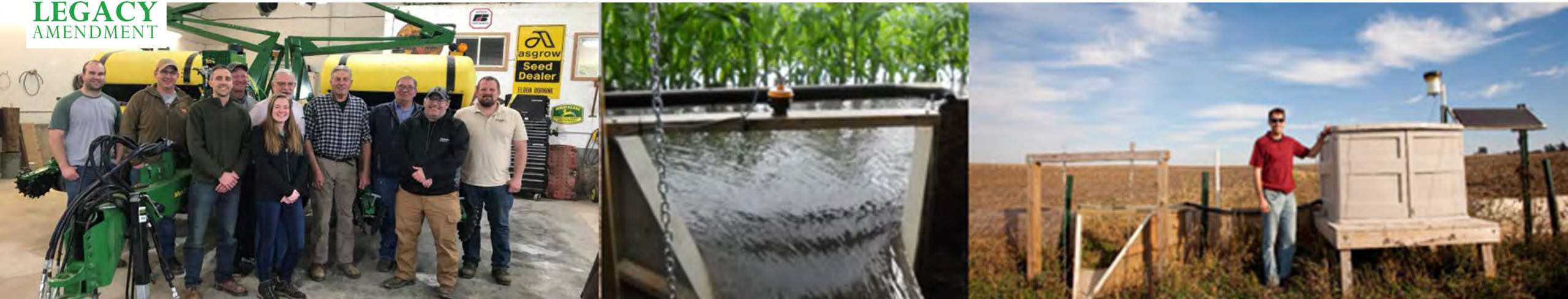


[DNR Legacy Funded Projects - examples in "Protecting and Restoring Lakes and Rivers"](#)



[↑ Showcase Innovative Shoreland Standards](#)
[↓ Training Video](#)





Technical Assistance Program

Margaret Wagner
Minnesota Department of Agriculture

Clean Water Council April 15, 2024

Technical Assistance

Technical assistance activities are a primary vehicle to work with the agricultural community to promote best management practices.

Funding is used to

- Evaluate conservation practices
- Demonstrate practices that protect water
- Enhance outreach and education
- Support peer-to-peer learning



Core Technical Assistance Activities

Edge-of-Field Monitoring

- Root River Field to Stream Partnership
- Discovery Farms Minnesota
- Red River Valley Drainage Water Management

On-Farm Trials

- Nutrient Management Initiative and Cover Crop Trials

Support for Impaired Water Process

- Provide input to local teams and work with partners
- Develop and share tools and technology

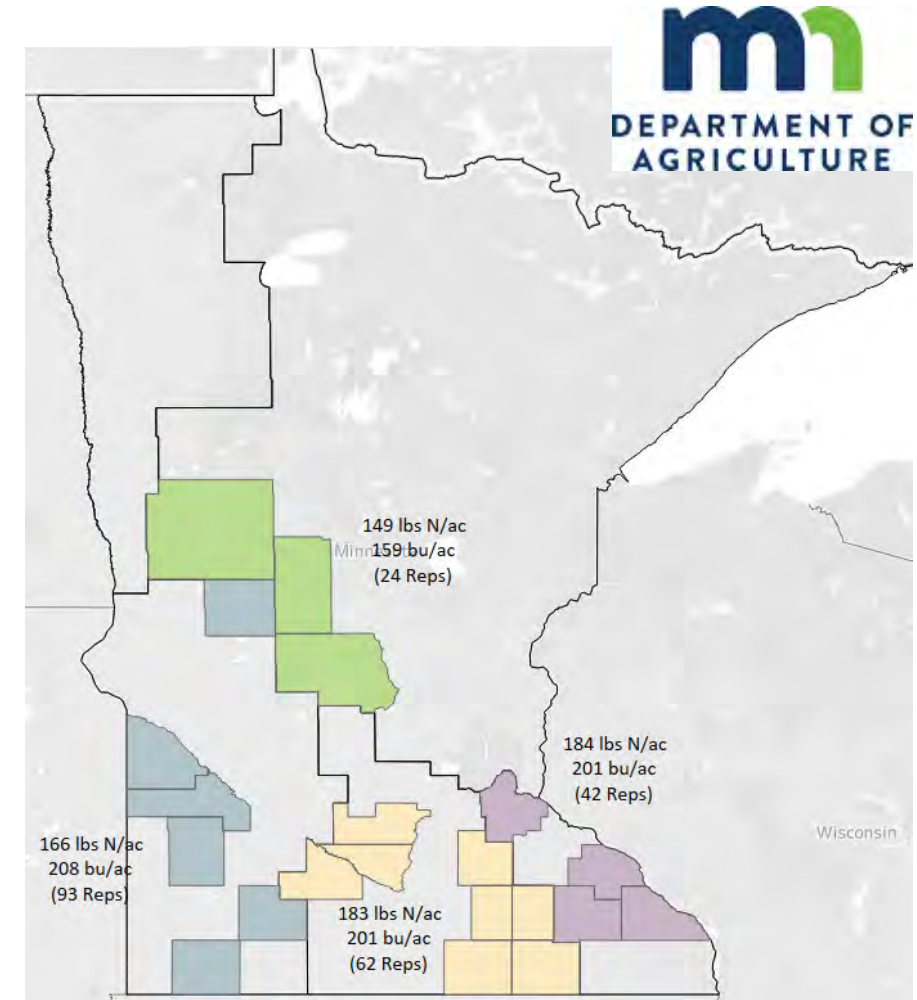
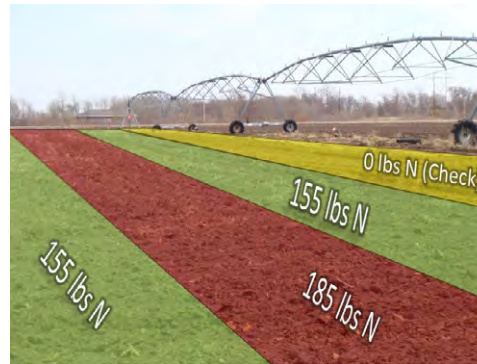
Runoff Risk Advisory Tool



Nutrient Management Initiative (NMI)

Value of the NMI Program

- ✓ Conversations about nutrient management
- ✓ Working directly with farmers and crop advisers
- ✓ Local data and learning from results
- ✓ Low cost



Root River Field to Stream Partnership

Purpose: Long-term study to evaluate agricultural practices and water quality at multiple scales and landscape settings.

- Edge-of field and in-stream water monitoring
- Farmer involvement and leadership
- Field walkovers
- Targeted practice implementation
- Outreach and education



Root River Field to Stream Partnership



Minnesota Department of Agriculture
Minnesota Agricultural Water Resource Center
The Nature Conservancy

Mower SWCD
Fillmore SWCD
Root River SWCD



100% field walkover rate
70% practice adoption rate

Targeted Implementation (2017-2020)

E3 flood control structure clean out in Crystal Creek Watershed. 20,000 cu. yds. Nov. 2017



Feedlot improvement/manure storage. Bridge Creek Watershed. 2019



**Grassed waterways
(over 100,000 linear ft.)**



**Targeted
perennials and
prairie strips
(200+ acres)**



**Water/sediment
control basins (16)**

Root River Field to Stream: Edge-of-Field Evaluations

- A twelve-year before/after study from 2012-2023 on a poorly drained 60-acre field in Mower County
- Split applying nitrogen and reducing nitrogen rates by 15% reduced nitrogen loss in sub-surface tile drainage by 29%.
- Economic performance also generally improved using reduced rate split applications. Additional years are needed to evaluate performance.
- An edge-of-field prairie strip was also installed to address surface runoff, sediment and attached nutrients, additional years are needed to evaluate performance.



Root River Field to Stream: Edge-of-Field Evaluations

- Switching to a low soil disturbance manure injection system has reduced surface runoff, sediment and soil-attached nutrients and greatly improved the ability to establish cover crops in a continuous corn silage system.
- Cereal rye cover crop dry matter biomass was rarely above 200 lbs/ac prior to termination in April.
- With the new low disturbance method, winter cereal rye biomass has increased to over 2,000 lbs/ac with over 100 lbs/ac of nitrogen uptake.



Red River Valley Drainage Water Management Project

- Seven years of data (2016-2023)
- Results show an average of 30% reduction in nitrate loss when using controlled drainage and a 24% reduction in tile drainage flow.
- Results show the saturated buffer removes an average 86% nitrate from drainage water passing through the buffer.
- Results shared at 87 outreach and educational events reaching more than 3,800 individuals

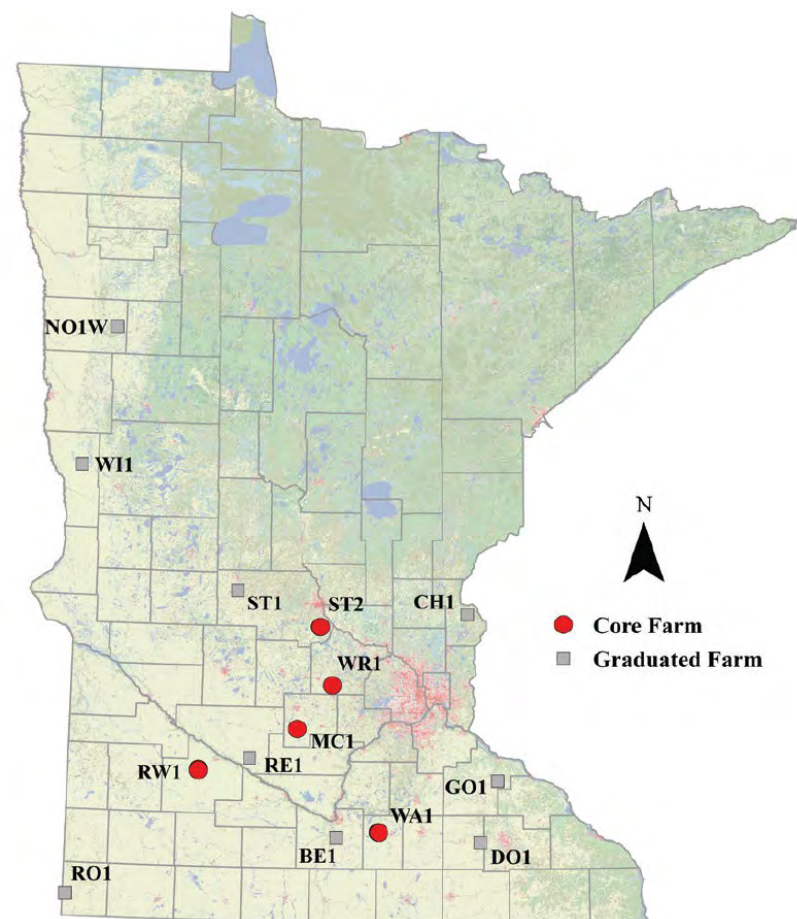


Discovery Farms Minnesota

Outcomes and Impacts

Mission: Gather water quality information under real-world conditions. The goal is to provide practical, credible, site-specific information to enable better farm management.

- Supports an educational environment where farmers learn from each other
- Sharing information on how farmers can adopt best practices
 - More than **250 outreach events**, reaching more than **9,000 individuals**.
 - Data referenced in **WRAPS** and **TMDL documents** and used for model calibrations

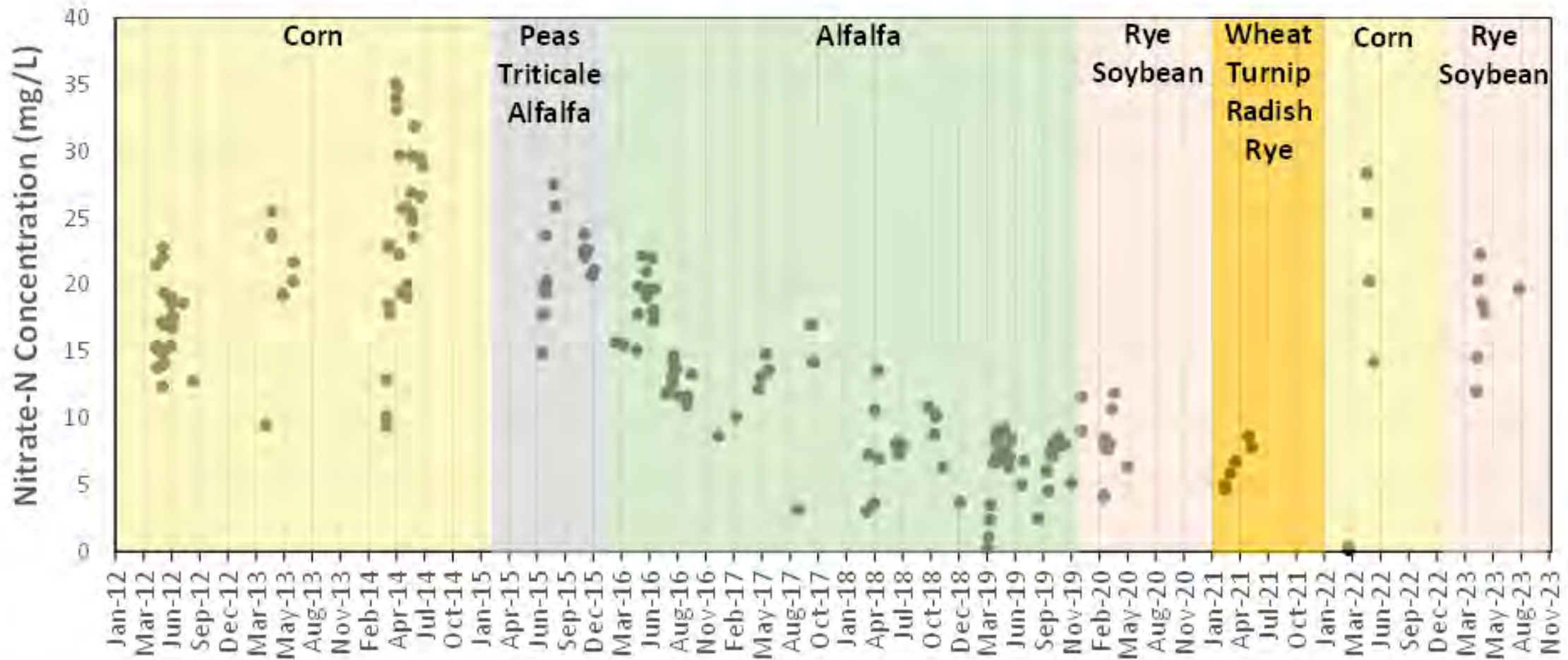


Data on nitrate loss under different cropping systems

WR1 Tile - Nitrate-N Sample Concentrations (2012-2023)



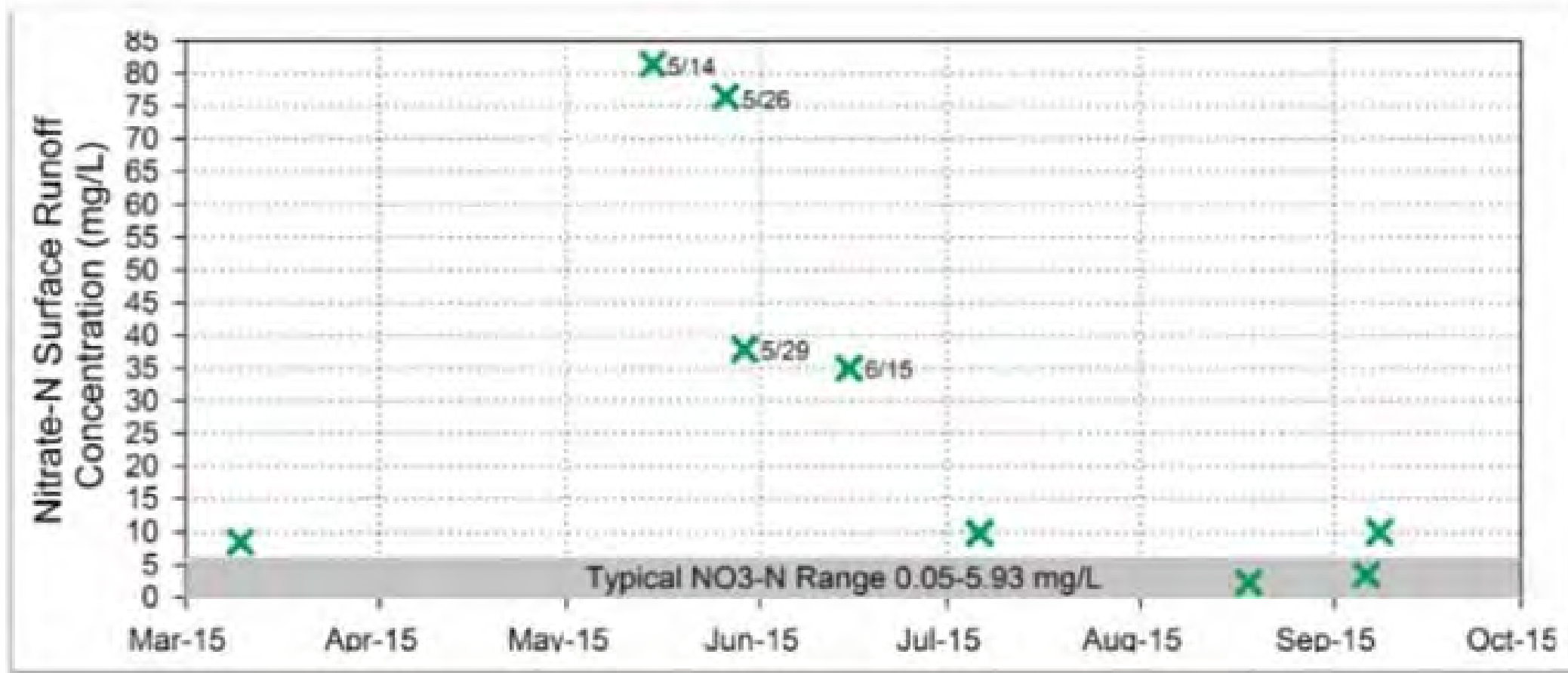
DISCOVERY FARMS
MINNESOTA



Data on BMP Effectiveness



DISCOVERY FARMS
MINNESOTA



Nitrate-nitrogen concentrations in surface runoff at one Discovery Farm location in 2015

Technical Assistance Program

	FY10-11	FY12-13	FY14-15	FY16-17	FY18-19	FY20-21	FY22-23	FY24-25
Clean Water Funds	\$2.265M*	\$1.55M	\$3.0M	\$2.25M	\$2.25M	\$3.0M	\$3.0M	\$3.0
Dollars Passed Through	\$1.7M	\$0.146M	\$0.281M	\$0.801M	\$0.496M	\$0.412M	\$0.458M	TBD

* FY10-11 included funding for Clean Water Research and the Research Inventory Database which are now part of separate allocations.



FINANCIAL ASSISTANCE



Conservation Equipment Assistance

Brad Jordahl Redlin

Minnesota Department of Agriculture

April 15, 2024



Soil Health

- Healthy soil is fundamental to economic and environmental resiliency of Minnesota's agricultural lands and industry
- Individual farmers, agricultural trade and member organizations, conservation interests, and prominent food-system corporations all seek greater emphasis on soil health
- Those groups specifically identified a primary **obstacle** to greater expansion of soil health in Minnesota is access to financial support for **specialized equipment**
- Existing financial assistance grants (USDA-NRCS, other cost-share) **actually prohibit** payments for equipment



Soil Health Financial Assistance Program Overview

- Available for purchase of new/used soil health equipment & parts to retrofit equipment
- Awards range from \$500-\$50,000 (up to 50% cost share)
- Individuals, producer groups, & local government units can apply (“...any owner or lessee of Minnesota farmland”)
- Competitive grants: how will equipment advance soil health in Minnesota?
- Awarded contracts last 12 months
- Cannot make any purchase prior to finalized, signed grant contract in place



Soil Health Financial Assistance Program Overview

- Established Soil Health Financial Assistance Program as a pilot in the 2022 legislative session (\$500,000)
- FY24-25 CWF \$3,500,000; GF \$625,000
- \$2.375 million were available in FY24
- \$2.375 million will be available in FY25
- \$639,000 GF baseline in FY26 & beyond



“We had a great year and are really thankful for the opportunity to be part of this. The tally ended up being over 3,000 acres that this piece of machinery covered. Of those, two-thirds were "for hire" and not my own acres. What a great item to have in [my county] for getting cover crops planted.”
FY23 SHFA recipient (purchased a no-till drill)

Soil Health Financial Assistance Program Outcomes

FY23: Soil Health Financial Assistance Pilot Program

Applications	Awards	\$ Awarded	Average Award	\$ Requested	Affected Acres (annually)
238	16	\$478,192.68	\$29,887	\$6.5 million	34,998

FY24: Soil Health Financial Assistance Program

Applications	Awards	\$ Awarded	Average Award	\$ Requested	Affected Acres (annually)
284	81	\$2,358,861.51	\$28,547	\$8.4 million	141,741

- Extremely Competitive
- Awards show good funding array and average
- Large impact

Takeaways & Lessons

- Highly competitive, only 7% to 29% funded with the money available
 - Likely to remain highly competitive despite increased appropriation
- Keeping equipment eligibility open makes grant more applicable to operations of different sizes and types
- Support across a broad coalition of ag groups is key
 - Stakeholders helped shape grants process
- Including local government units expands the reach of program dollars by providing access for multiple producers
 - FY24 saw more SWCD applications; 6 recipients
- Public financial assistance for equipment is a missing piece to get more soil health practices



Changes to FY24 RFP

- Pesticide application equipment and general use/utility vehicles made ineligible
- Exception to tillage ineligibility for minimum tillage implements used to incorporate cover crop seed
- Application period moved from winter to late summer (July 31 – September 15)
- Changes to application form based on feedback from external review committee



FY25 RFP

- Application will be available in late summer 2024



Thank you!

Brad Jordahl Redlin:

651-200-5307 | brad.jordahlredlin@state.mn.us

Jess Jurcek:

651-802-3059 | jessica.jurcek@state.mn.us





AgBMP Loan Program



Margaret Wagner
Minnesota Department of Agriculture
Clean Water Council April 15, 2024

AgBMP Loan Program | www.mda.state.mn.us/agbmploans

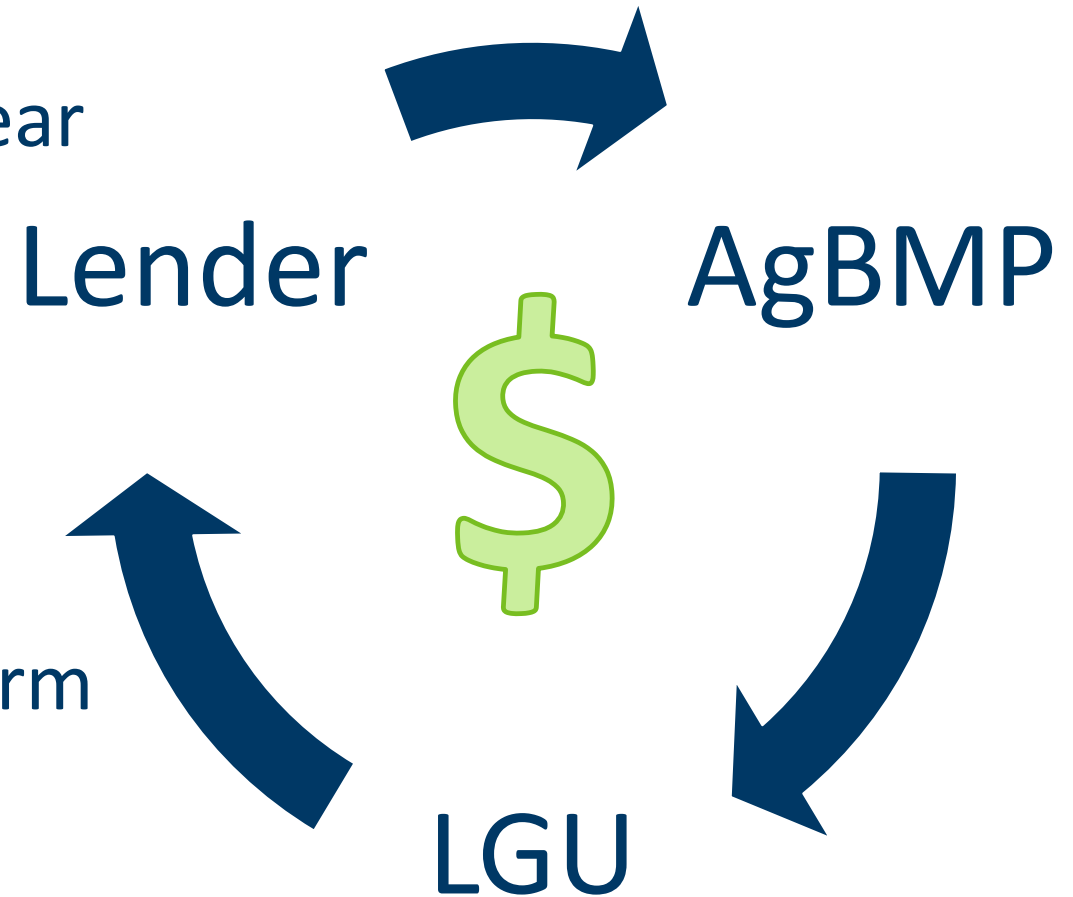


- **LGU approves effective projects**
- **LENDER evaluates creditworthiness**
- **MDA manages the funds**
- **The BORROWER implements the project**

Revolving Loan Account Structure and Terms

(Not a Grant Program)

- Approximately 15% revolving / year
- Loans must be repaid
(No prior default of repayments)
- Maximum \$200,000
- Up to a maximum of a 10-year term
- Maximum of 3% interest + fees



AgBMP Loans Support Local Water Plans and Funding Priorities

Examples of Plans LGUs Use to help Prioritize Local Concerns



Summary of CWF Accomplishments

Loans by Total Amount:
\$40,305,154



Loans by Number:
2,383

Leveraged Funds
\$40,547,880



Revolving Principal:
\$18,698,894



Clean Water Funding
Administrative Expenses:
\$252/Loan

FY26 & FY27 Funding Requests from LGUs

Loans by Category (2023 Activity)

Local Government Units (LGUs)

Previous 2-Years of Funding Requested:

- 2024 - Over \$54.2 million
- 2023 - Over \$46.4 million

Average Request = \$50.3 million / Year

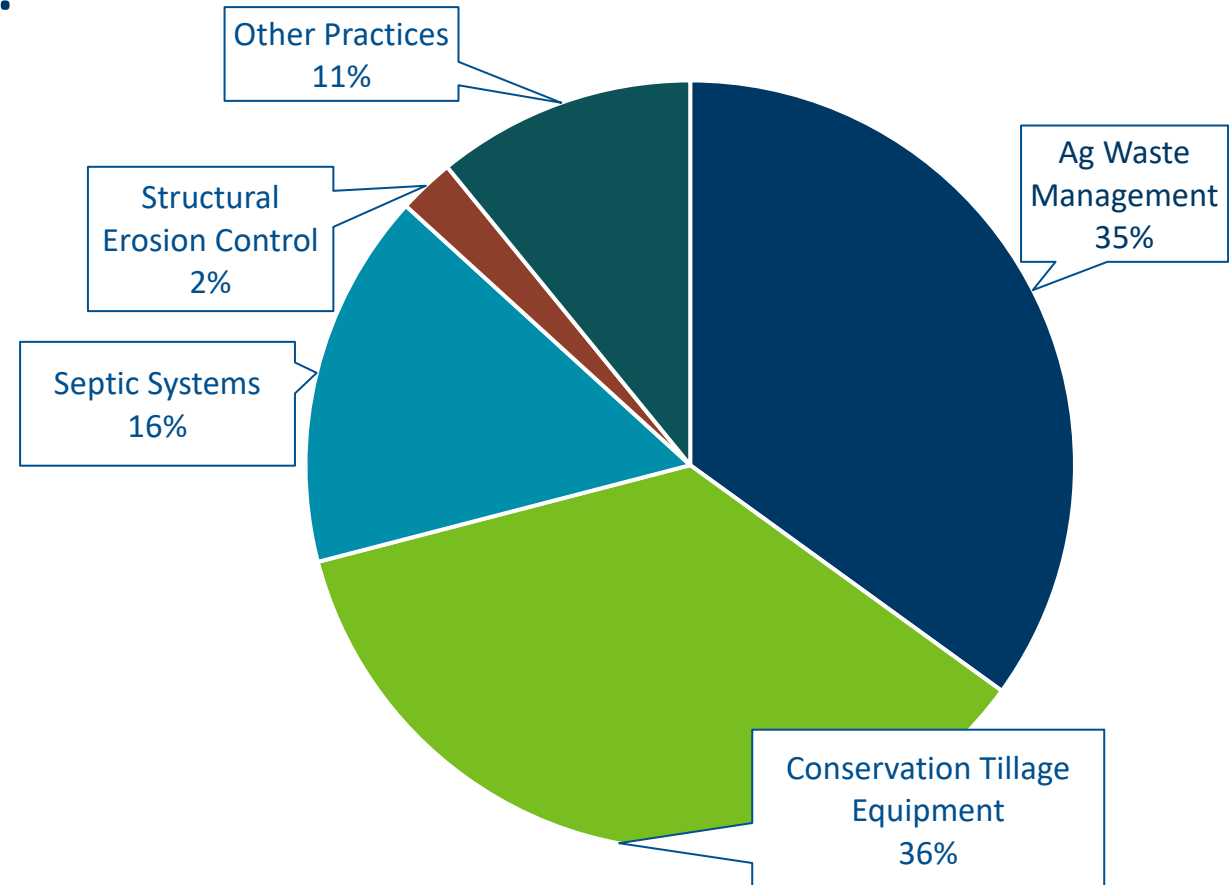
Projected Loan Repayment Totals:

(Next Biennium from All Funding Sources)

- 2026 - \$14,353,716
- 2027 - \$12,924,078

FY26-27 Estimated Need:

\$36.5 Million / Year



Estimated benefits following installation of AgBMP Loan practice



Feedlot and manure handling equipment

Time Period	Total N* (tons/year)	Total P* (tons/year)
FY23-24	8,000	4,000
All projects	106,000	55,000

*nutrients managed following installation



Conservation tillage

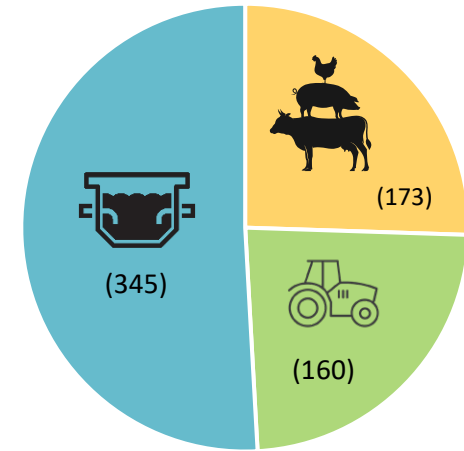
Time Period	Total acres	Sediment load reduction (tons/year)
FY23-24	237,000	912,000
10-year total	852,000	3,280,000



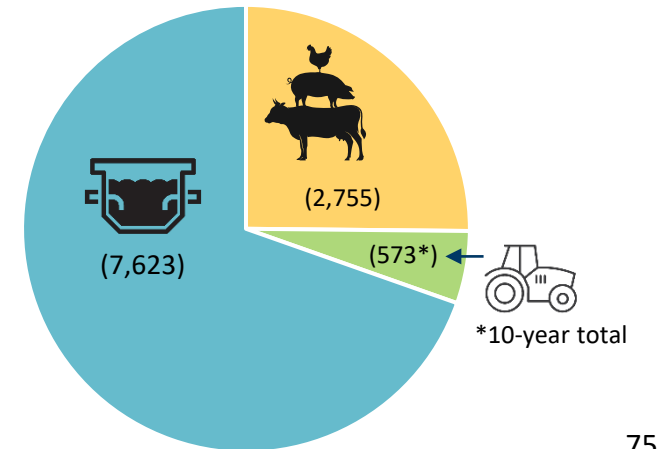
Septic systems

Time Period	P-Reduction (lbs./year)	N-Reduction (lbs./year)	TSS-Reduction (lbs./year)
FY23-24	2,000	6,500	27,600
Completed to date	44,600	142,600	610,100

FY23-24 AgBMP Projects



Total AgBMP Projects Funded



AgBMP Loan Program

	FY10-11	FY12-13	FY14-15	FY16-17	FY18-19	FY20-21	FY22-23	FY24-25
Clean Water Funds	\$4.5M	\$9.00M	\$0.40M	\$0.15M	\$0.15M	\$0.15M	\$0.15M	\$4.79M
Loan totals	\$1.42M	\$5.75M	\$3.83M	\$5.40M	\$6.84M	\$5.12M	\$5.60M	\$6.00M
Leveraged Funds	\$0.0M	\$0.32M	\$4.79M	\$6.35M	\$10.37M	\$5.90M	\$6.90M	\$5.70M



AgBMP Loan Program

Richard Gruenes and Diane Mitchell

651-201-6618

Richard.Gruenes@state.mn.us

Diane.Mitchell@state.mn.us

www.mda.state.mn.us/agbmploans

“STATE CAPACITY”



Freshwater Mussel Restoration

Center for Aquatic Mollusk Programs (CAMP), Lake City
River Ecology Unit – Ecological and Water Resource

Benefits to Ecosystem and People

Filtration

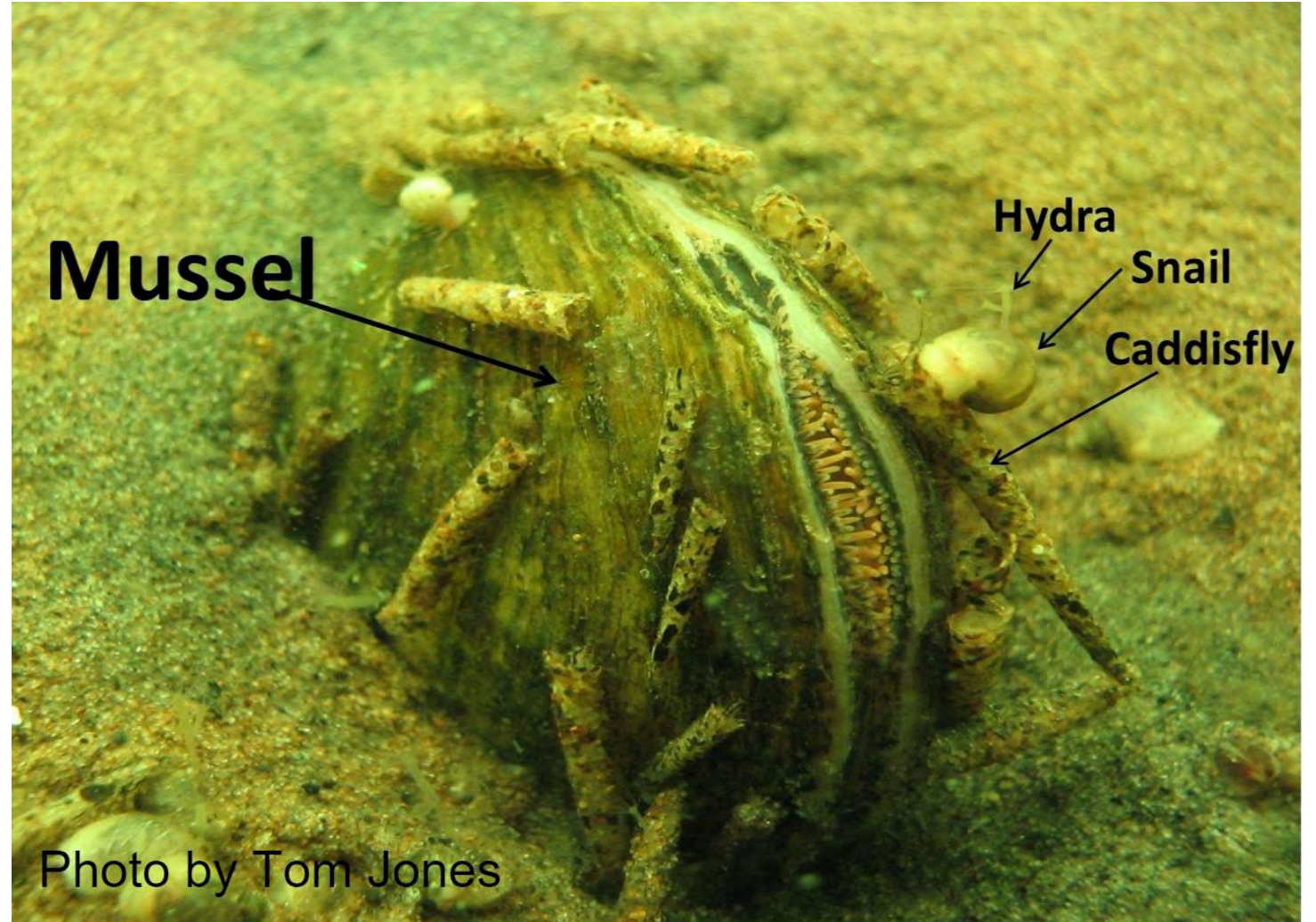
- Clean our waterways
- Recycle and store nutrients
- Capture and deposit food for other organisms

Habitat

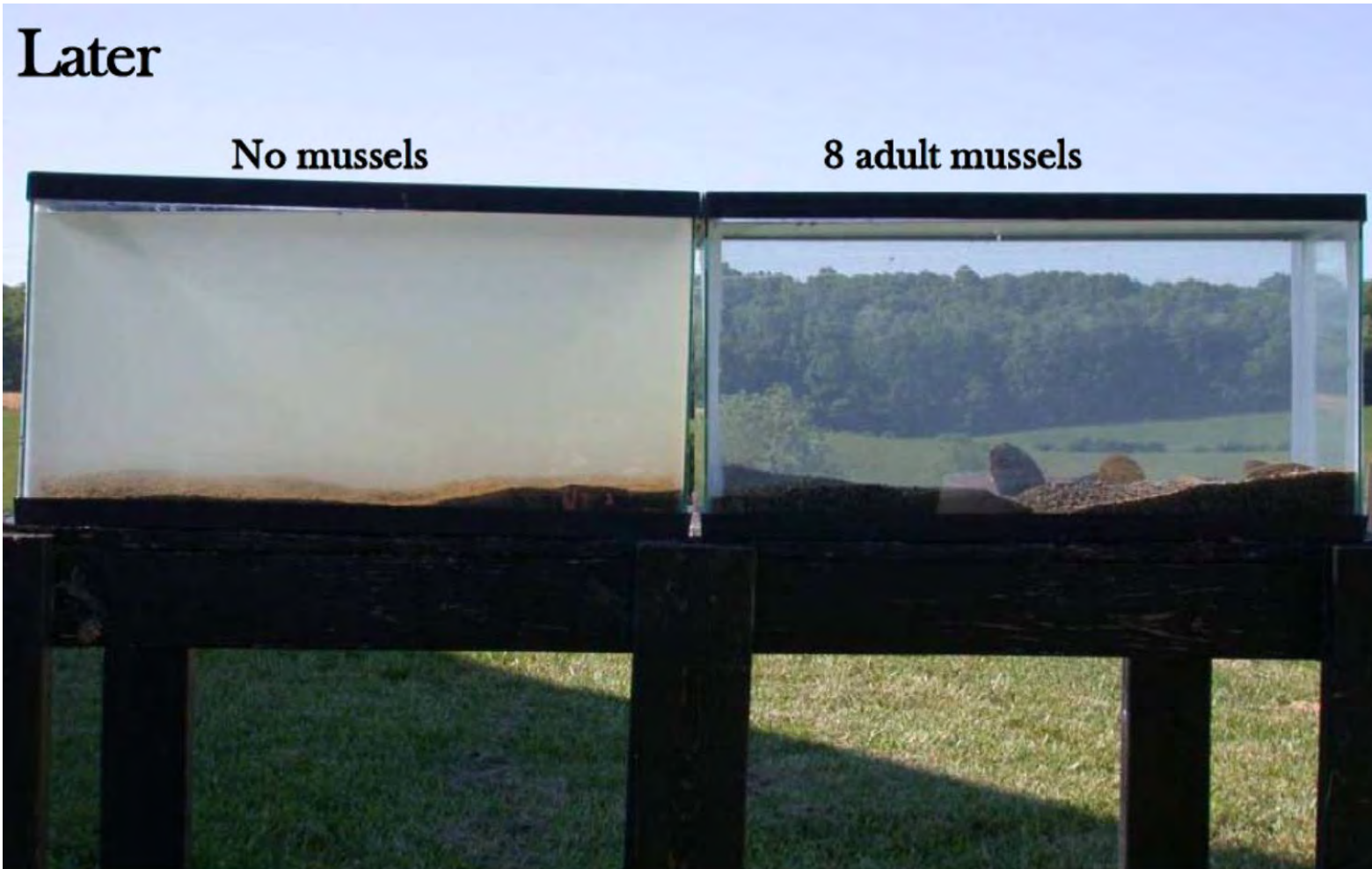
- Provide structural habitat
- Aerate sediment

Environmental monitors

- Indicator of water quality
- "*Canary in the coal mine*"



Impressive Filtering Capacity



Siphon tube



Project Update

- **Timeframe:** fiscal year 2024 and 2025
- **Budget amount:** \$600,000
- **Purpose:** Scale up production of native mussel species and place them into their natural habitats
- **Accomplishments**



Accomplishments



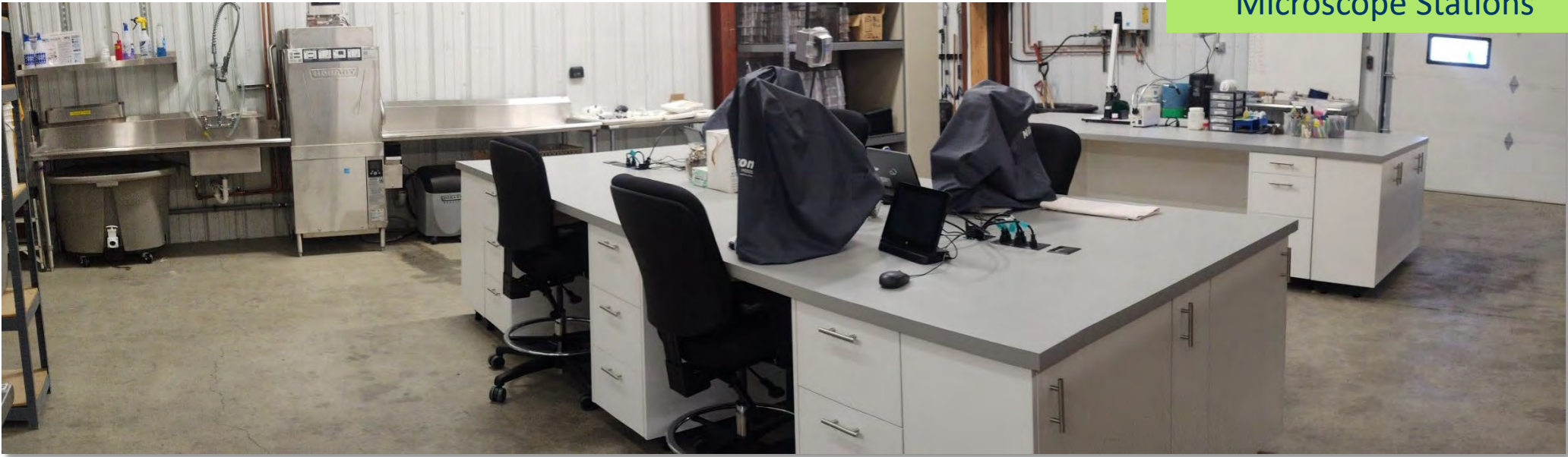
Mussel Rearing Systems



Fish Holding Systems

Accomplishments

New facility with more space and improved mussel propagation systems



Microscope Stations

Accomplishments

CAMP facility

~ 1,500 juveniles
3 species



Secondary grow-out

~ 41,300 juveniles
5 species



Reintroductions

~ 3,300 juveniles
4 species



Accomplishments

- Reintroduction watersheds: Cedar, Cannon, Mississippi
- Previously reintroduced mussels are healthy and show signs of reproduction



Progress toward new ponds

- Leveraging other funds
- Expect to break ground by spring 2025
- Custom ponds will expand and improve mussel propagation efforts

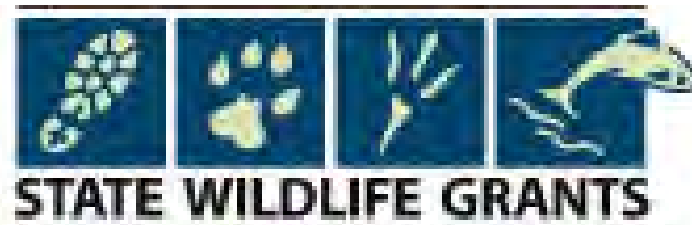
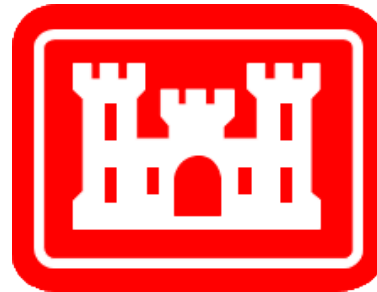


Freshwater Mussel Restoration

	FY10-23	FY24-25	FY26-27
Clean Water Funds	na	\$600K	TBD
FTEs (state agency staff and seasonals)	na	~2	~2

Collaborative support from:

Thank you
for your
support!



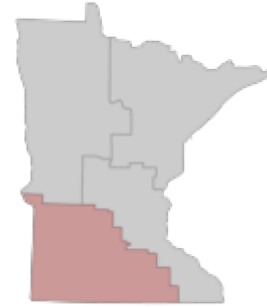


Water Storage on DNR-administered Public Lands

Working toward nature-based solutions for a more resilient future.

Background: Program Opportunities

- ❑ 408 Wildlife Management Areas (WMAs) and units with altered streams in DNR Region 4
- ❑ 813 miles of altered streams in WMAs
- ❑ 8 Scientific and Natural Areas (SNAs) with 17.8 miles of altered streams



Background: Prairies and Water Storage



Photo Credit: © Jim Richardson Photography

Background: Program Overview

- ❑ Restoring functions of river systems
 - ✓ Floodplain connectivity
 - ✓ Improved channel and bank stability
 - ✓ Improved water quality
 - ✓ Perennial cover
 - ✓ Fish and other aquatic species passage
 - ✓ Reduced flooding
- ❑ System resiliency to offset climate change impacts
- ❑ Pilot Projects: Skandia WMA and Devil's Run WMA



Background: Program Justification

- ❑ Opportunity to improve conditions on state administered public land
- ❑ Achieve goals of improving water storage, water quality and habitat on state administered lands.
- ❑ Incorporate holistic approach to restore ecological functions and water quality
- ❑ Projects are ready and achievable within the funding timelines

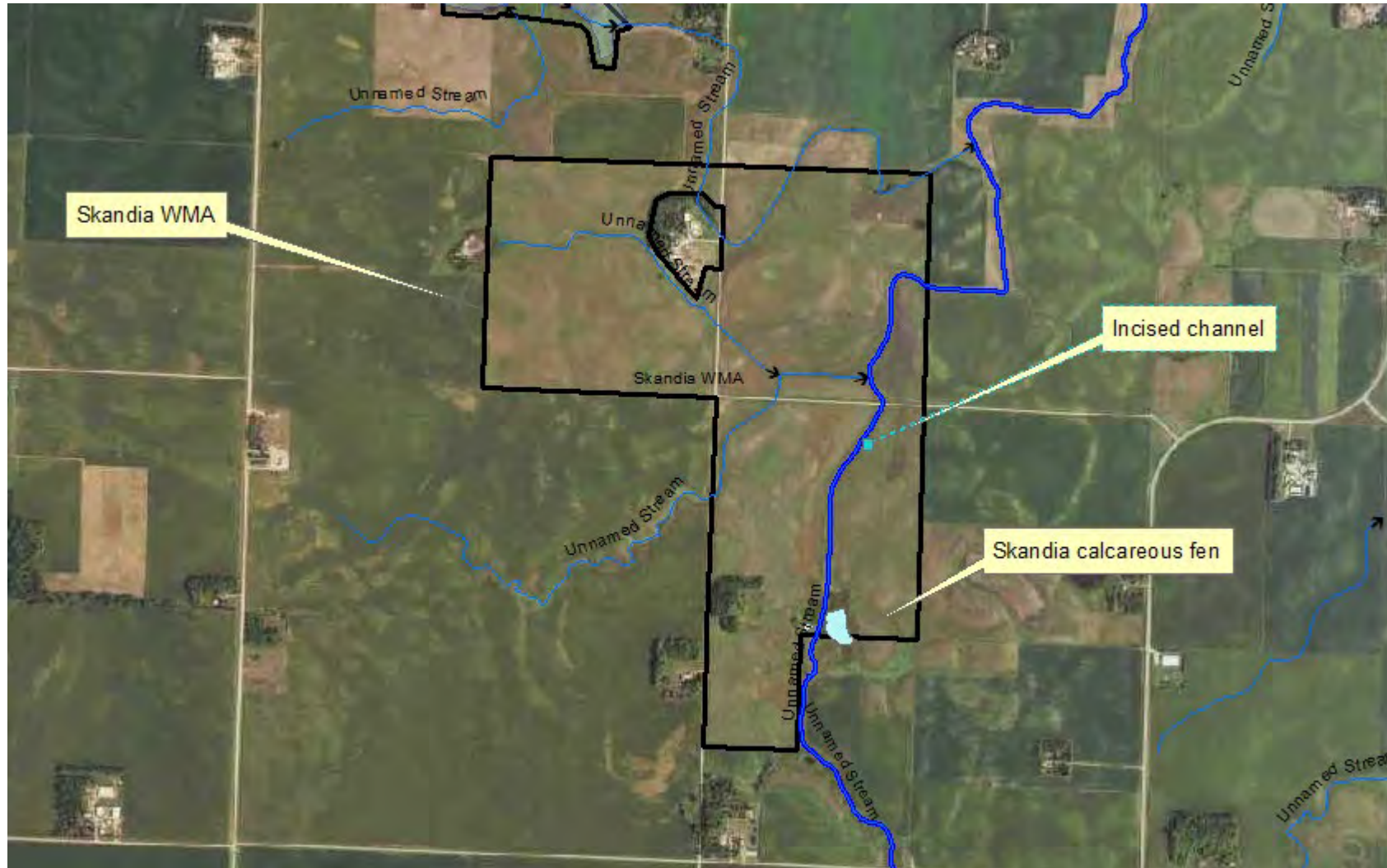


Calcareous fen located on Skandia WMA.

Pilot Project #1: Skandia WMA



Pilot Project #1: Skandia WMA



Pilot Project: Skandia WMA

☐ FY24 Update on Skandia WMA work:

- Currently working on feasibility study (survey, conceptual design, cost estimate)
- Potential for stream and wetland restoration
- Ultimate goal is to decrease flooding downstream to Lake Sarah, Lake Shetek, and the Des Moines River
- Protect & enhance the calcareous fen and native plant communities

☐ Project Timeline (Tentative):

- Spring/Summer 2024 – Feasibility study & hire engineer for design
- Winter 2024-2025 – Design
- Winter 2025-2026 - Construction

Pilot Project #2: FY25 start Devil's Run WMA



Looking Ahead: Future Water Storage Projects

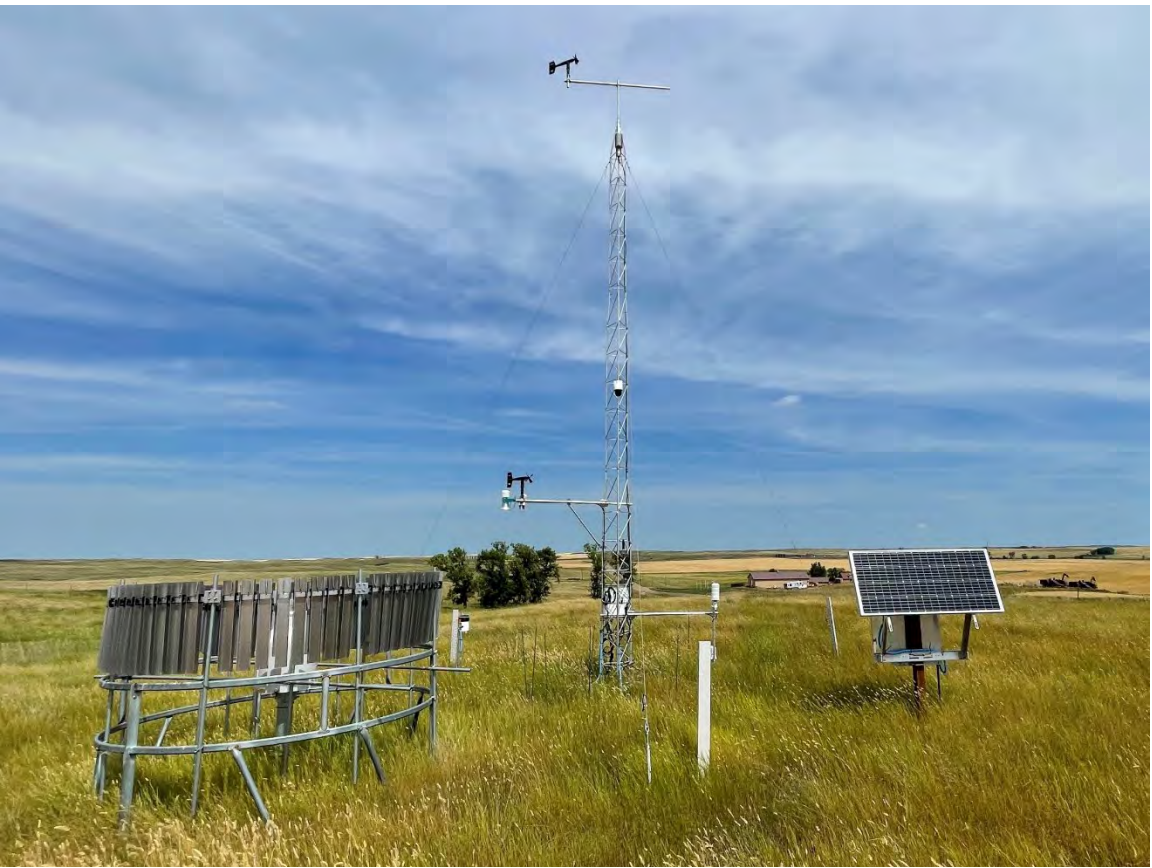
- **Considerations**

- Unprecedented funding in FY24
- Engineering unit is at capacity
- Construction projects often take several years from start to end
- FAW staff are at capacity for project workloads
- EWR has limited capacity through Clean Water Specialists

Water Storage

	FY10-23	FY24-25	FY26-27
Clean Water Funds	na	\$1M	TBD
FTEs (state agency staff and seasonals)	na	0	0

Questions?



Expanding Minnesota Ag Weather Station Network



Margaret Wagner
Minnesota Department of Agriculture

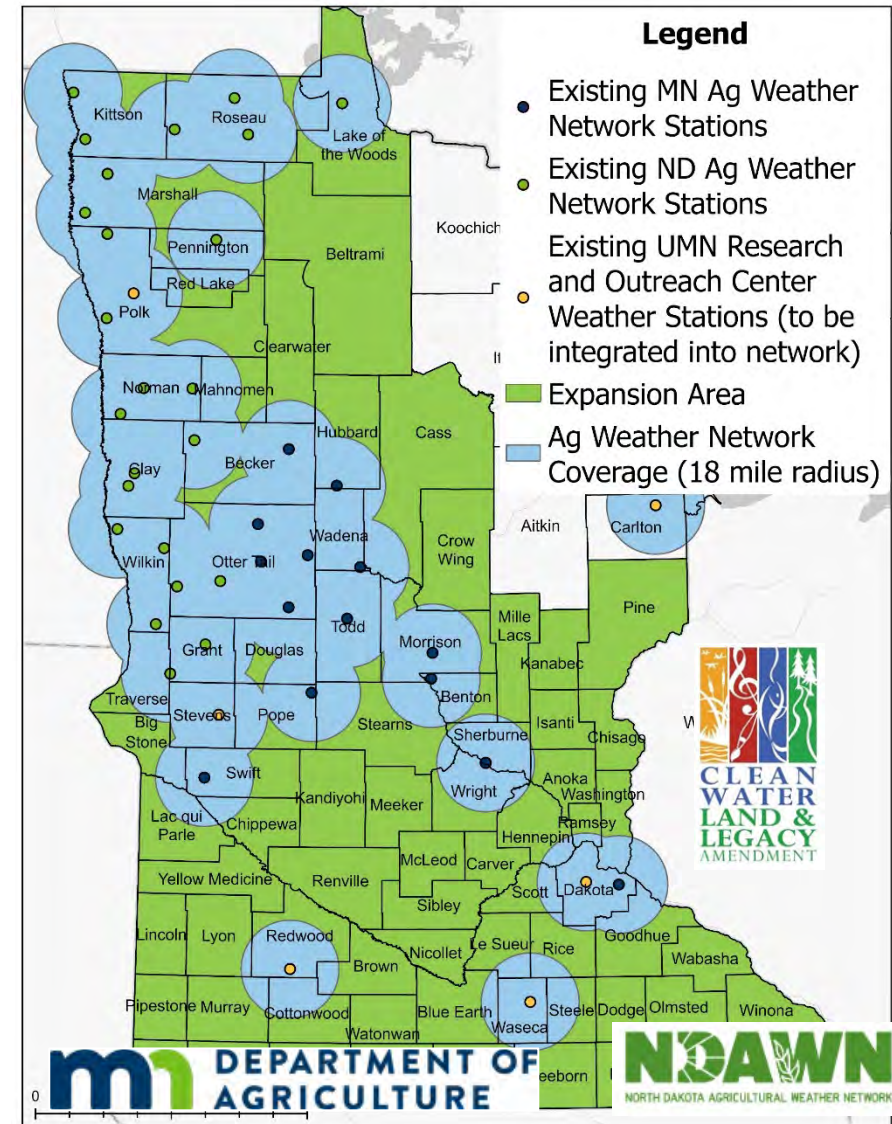
Clean Water Council April 15, 2024



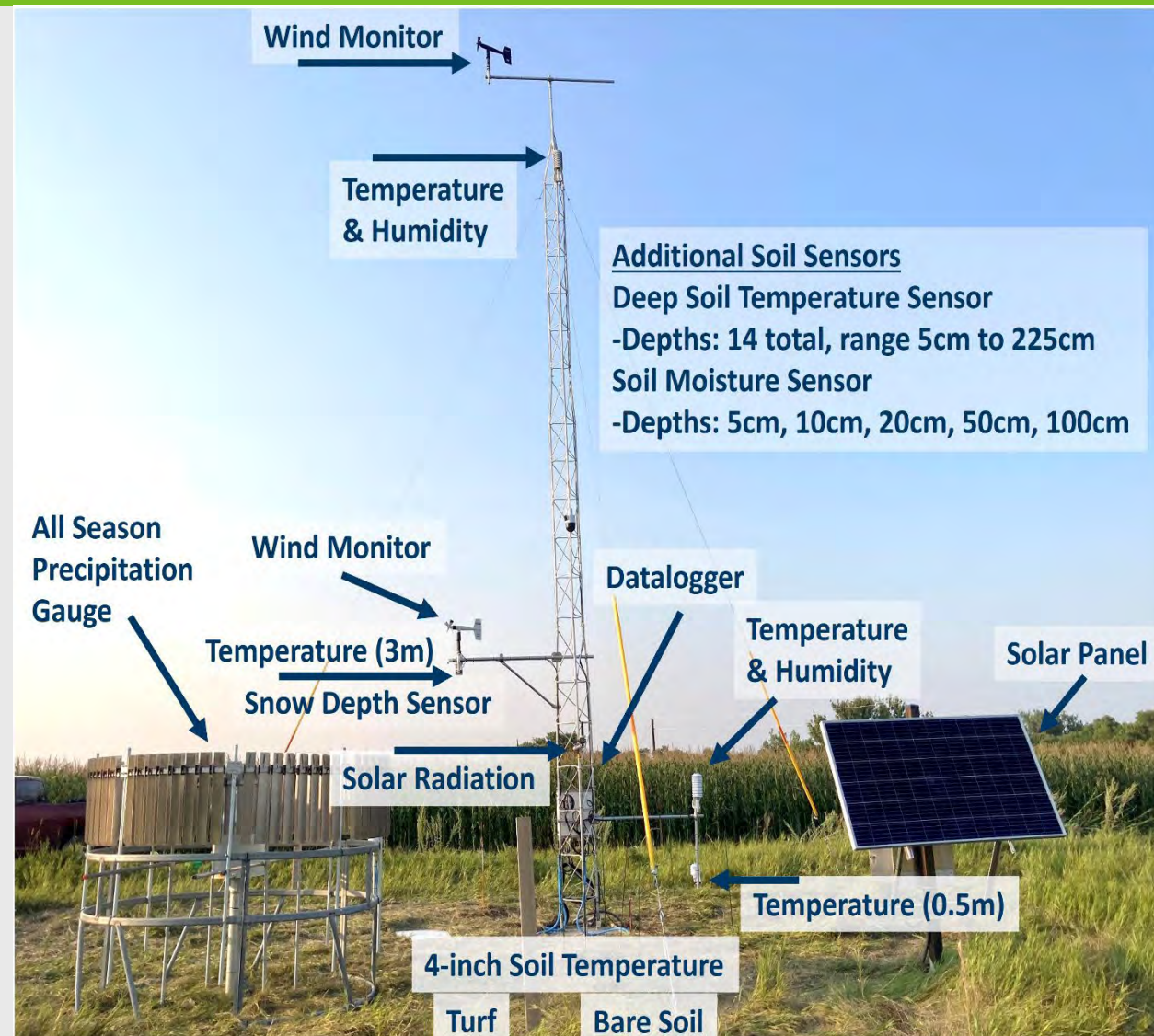
Expanding the Minnesota Ag Weather Station Network

The MDA is expanding the MN Ag Weather Network into agricultural areas statewide to provide real-time local weather data and tools to inform agronomic decision making and minimize impacts to water resources.

- Through partnership with the North Dakota Ag Weather Network (NDAWN) the MDA weather stations are fully integrated in the NDAWN platform.
- Weather data and weather-related ag tools are publicly available through two websites and two mobile applications.



Weather Station and Data



Weather data collected	Other information shared
Total rainfall, snow, or hail	NDAWN crop modeling
Air temperature (max/min)	Daily estimated crop water use
Wind direction & speed	Air temperature inversion
Deep soil temperature and moisture	Various disease risk modeling (potato blight, rust, cercospora, etc.)
Peak gust	Regional mapping applications
Relative humidity	Irrigation scheduling recommendation
Dew point temperature	Growing Degree Days
Four-inch turf & bare soil temperature	Frost Depth
Solar radiation	Snow Depth
Barometric pressure	

MN Ag Weather Network & Water Resources Benefit

Local Weather Data or Tool	Agronomic Use	Water Resources Benefit
Soil Temperature	Optimize the timing for fertilizer and manure applications, and termination of cover crops	Reduces loss of nutrients and minimizes leaching of nitrate to groundwater
Temperature Inversion Alerts & Wind Monitoring	Detect temperature inversions and changing weather conditions to guide pesticide applications	Minimizes off-site movement of pesticides that can drift to nearby surface waters
Irrigation Scheduling & Crop Water Use	Estimate evapotranspiration to determine crop water needs and optimize irrigation water usage	Optimizes amount and timing of irrigation and minimizes leaching of ag chemicals and manure to groundwater
Crop Disease Risk Forecasting	Determine periods of disease risk for pesticide application only when disease risk is high	Reduces unneeded preventive pesticide applications and potential water contamination
Runoff Risk Forecasting	Forecast periods of potential overland runoff to delay applications	Reduces loss of manure and other inputs to surface water

Minnesota Ag Weather Station Network

Initial funding will establish and link 40 new stations into a well-established and widely trusted source for accurate, detailed local weather data.

Goal: Accurate weather information within about 20 miles of agricultural areas to support more precise agronomic management decisions that can benefit water quality.

- Weather stations would be installed over time in a phased approach
- Equipment cost is a one-time request
- Need for funding to support ongoing maintenance and operation of the stations.



Update: MN Ag Weather Network

- MDA has received 75 suggested locations for new weather stations from local landowners across Minnesota
- Collaborating with the University of Minnesota Research and Outreach Centers to install new weather stations
- Partnerships with multiple soil and water conservation districts and state agencies
- Expanding the MN Ag Weather Network aligns Minnesota with the ongoing expansion efforts by neighboring states: North Dakota, South Dakota, and Wisconsin

	FY24-25	Total
Clean Water Funds	\$3M	\$3M
Pass through dollars	\$300,000	\$300,000



Leveraging Federal Funds in the Lake Superior Basin

Amy Adrihan, Northeast Watershed Unit Supervisor

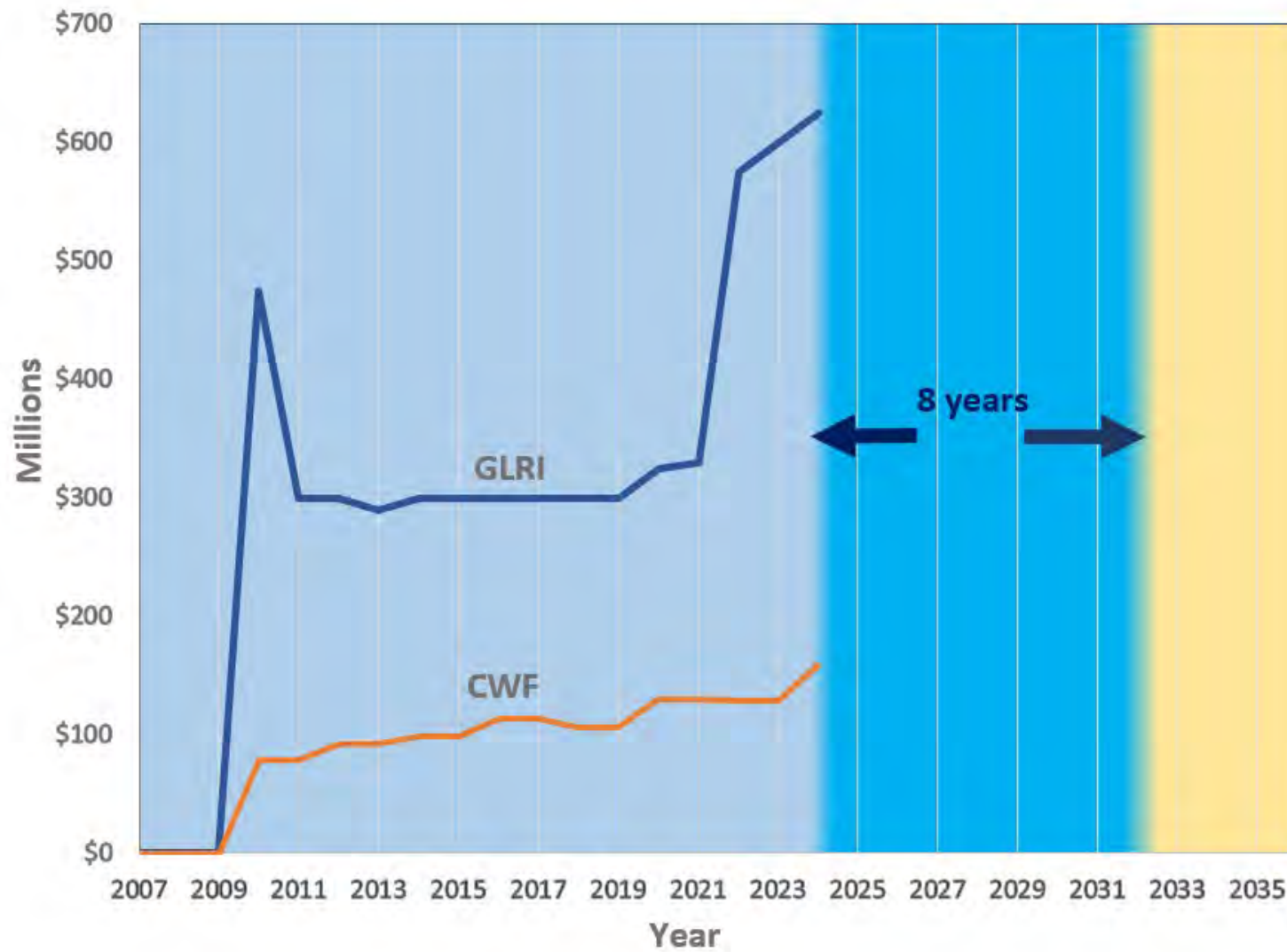
Minnesota Pollution Control Agency

Great Lakes Restoration Initiative (GLRI)

- Non-regulatory federal program
 - Accelerates efforts to protect/restore Great Lakes
- First funded in 2010
- \$330 million in 2021
- \$575 million in 2022
- \$625 million in 2024
- 5-year Action Plans direct priorities



A Unique Opportunity



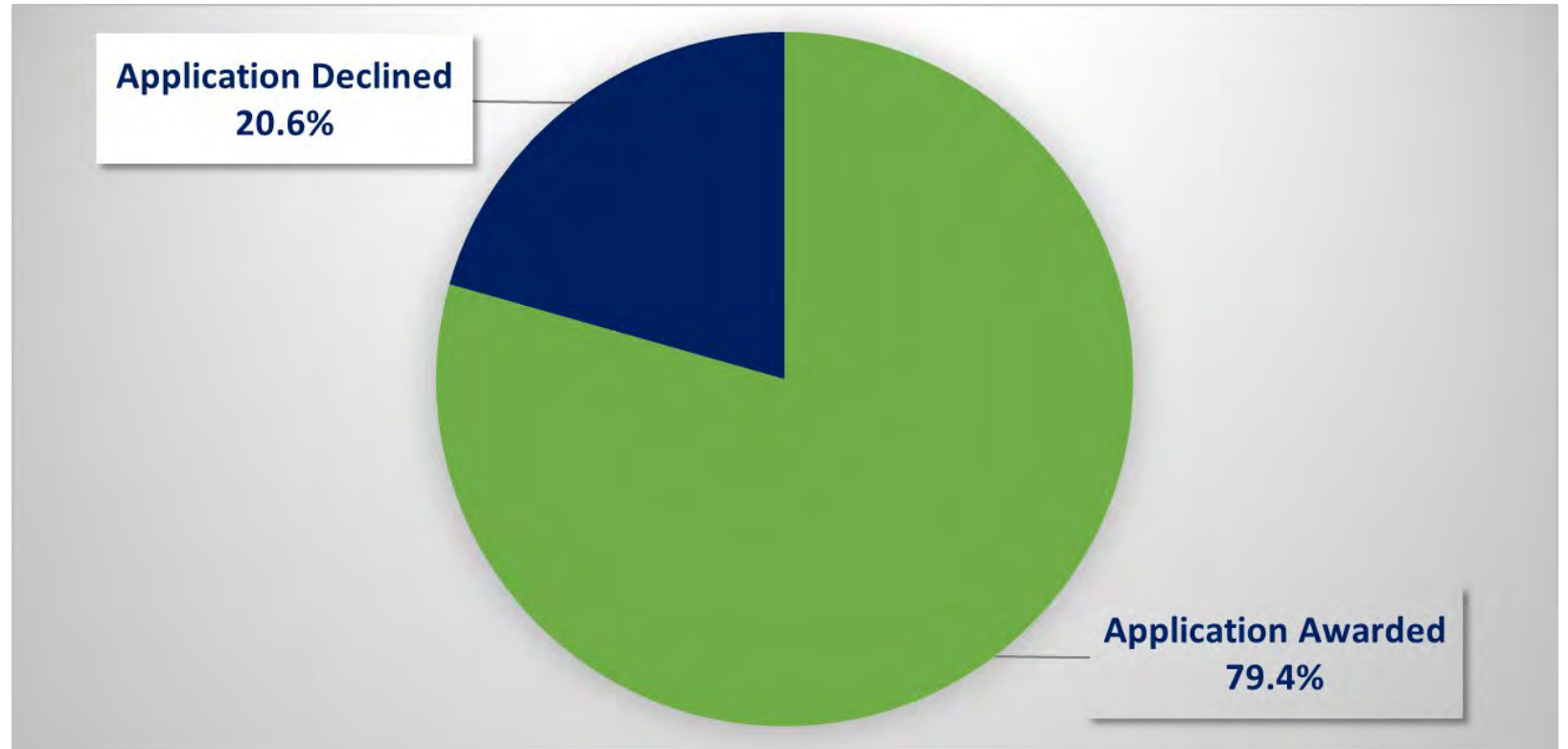
Great Lakes Funding Programs

Many different Federal Agencies/Programs grant GLRI Funds

- US Army Corps of Engineers 569 Program
- NOAA Great Lakes Fish Habitat Restoration Regional Partnership Grants
- US Fish and Wildlife Service Coastal Program
- National Fish and Wildlife Foundation- Sustain Our Great Lakes
- USDA/Great Lakes Commission Great Lakes Sediment and Nutrient Reduction Program
- US Forest Service GLRI Forest Restoration
- US Fish and Wildlife Service Fish Passage Program
- GLRI Focus Area direct funding through LAMP

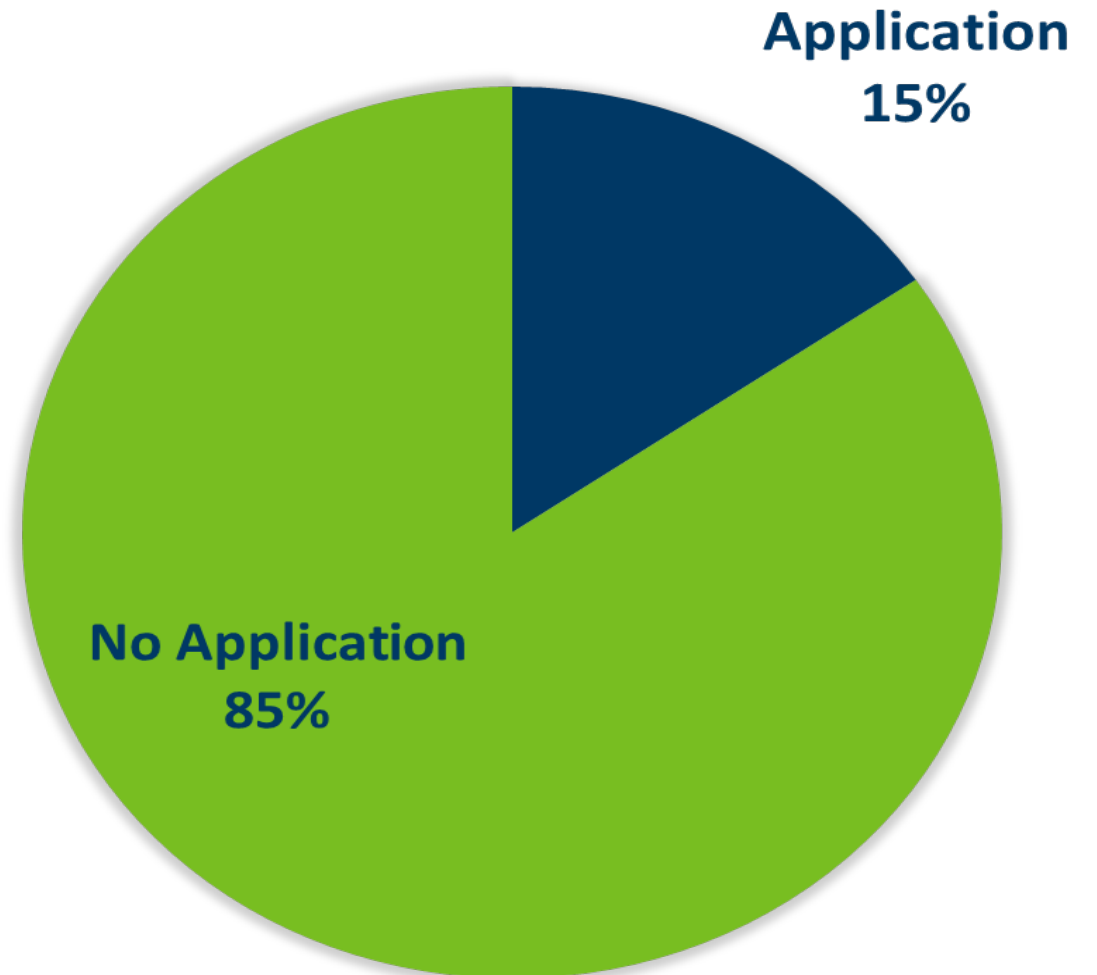
GLRI Funded Projects to Date

- 27 projects in 4 watersheds, total \$9.05M
- 79% Application Success Rate Since 2010

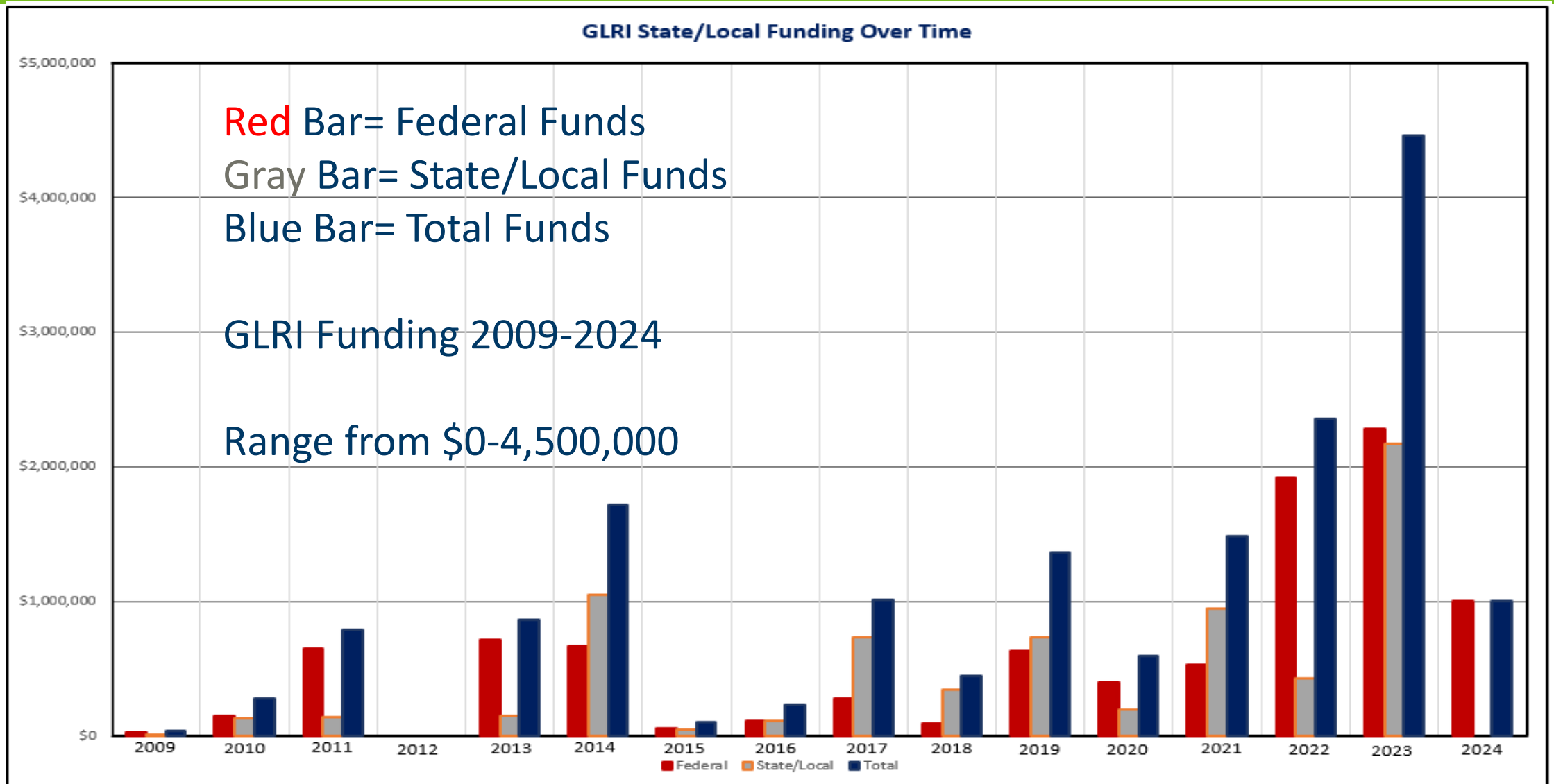


Federal Funding Opportunities since 2010

- Help the Lake Superior Basin SWCDs take greater advantage of the federal funding.
- Able to use the funds for a range of needs including staffing, administration, and implementation.
- Reasons for non-application: 81% said lack of staffing capacity and capital.



GLRI Funding Awards in Minnesota



Clean Water Funds for Great Lakes SWCDs

- New Funding* for Lake Superior SWCDs
- 5 SWCDs with the Lake Superior Basin - >\$34 million of watershed work
 - Developed and prioritized projects based on 1W1P and WRAPS
- \$2M dedicated match for biennium/\$200,000 per SWCD per year
 - Support SWCDs efforts to take advantage of increased GLRI funds
 - Use of funds to be used at the discretion of SWCDs based on their needs

Clean Water Funds for Great Lakes SWCDs

- Demonstrate **local cost-share preparedness** to give us a competitive edge.
- Provide critical **flexibility** to allow SWCDs to be nimble and apply for funds when opportunities arise.
- Allows the **leveraging of federal funds** to implement plans for projects that would be otherwise funded by CWF
- MN is **the only state** that has this potential of dedicated match, making us **more competitive** than other Great Lakes States for grant funding.

Alignment with Clean Water Council Strategic Plan

**Surface Water Protection and Restoration Vision:
Minnesotans will have fishable and swimmable waters
throughout the state.**



Goal 3: Protect and restore surface waters to achieve 70% swimmable and 67% fishable waters by 2034 via through statewide, regional, or issue-specific programs that help meet water quality goals but are not necessarily prioritized and targeted according to geography.



Track Record of Success

Before



After



Hockamin Creek at Breezy Lane

Track Record of Success

Before



After



Hockamin Creek at Hefflefinger Road

Track Record of Success

Before



After



Lindstrom Creek at Cooper Road

Funding Awarded/Construction Planned:

- Agate Bay Green Infrastructure, City of Two Harbors (2024)
- Hockamin Creek at Moose Junction (2024)
- Woodland Ave, St. Louis Co (2024)
- Lindstrom Creek at Lax Lake Rd (2024)
- Irving Park Green Infrastructure, Keene Creek, City of Duluth (2024)
- Keene Creek 59th Ave, City of Duluth (2026)
- Kingsbury Creek Green Infrastructure, City of Proctor (2026)
- Skunk Creek Green Infrastructure, City of Two Harbors (2024)
- Tisher Creek, City of Duluth (2024)



Thank you!

Groundwater/Drinking Water Implementation



Irrigation Water Quality Protection

Margaret Wagner
Minnesota Department of Agriculture

Clean Water Council April 15, 2024

Irrigation Specialist at University of Minnesota

- Position located at the University of Minnesota Extension
- Develops guidance and provides education on irrigation and nitrogen best management practices (BMPs) to protect groundwater
- Addressing needs identified within the agricultural community



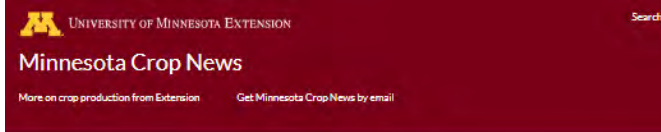
Irrigation Specialist at University of Minnesota

- Leads the annual Minnesota Irrigation Program
 - Train irrigators in advanced irrigation water management
 - Prerequisite for the Irrigation Endorsement under the MAWQCP
- Has developed new irrigation scheduling tool
 - Reduce nitrogen leaching losses
 - Available for use statewide
- Maintains an active research program
- Works closely with MDA, DNR, BWSR, NRCS and many local conservation and watershed districts



Dr. Vasu Sharma
University of Minnesota

Irrigation Water Quality Protection



Water management strategies to keep in mind while making irrigation decisions

June 05, 2023



By: Vasudha Sharma, Extension irrigation specialist

When making irrigation decisions, it is important to consider various water management strategies to ensure that water is used efficiently and sustainably. Also, to reduce nonpoint source pollution of ground and surface waters caused by irrigation it is important to operate

IRRIGATORS CLINIC

MONDAY, MARCH 6
9:00AM - 3:00PM

GREENWALD PUB
310 1ST AVE N
GREENWALD, MN 56335

Registration is required!
To register, scan QR code or go to:
<https://areg.is/OLSDbS>

• \$10 fee (includes meal ticket)
• Register by: February 21
• Checks payable to:
 o Stearns SWCD
• Mail payment (if paying by check):
 o Stearns SWCD
 Attn: Sharyn
 110 2nd St. S., Suite 128
 Waite Park, MN 56337

Registration at the door - \$20

For questions, contact Stearns County SWCD at (320) 251-7800 ext 3 or via email at info@stearnscountyswcd.net

CEFS FOR CERTIFIED CROP ADVISORS (APPROVAL PENDING)

Topics:

- Nitrogen Management for Irrigated Sands
- Irrigation RGP to Implement Innovative Irrigation Practices
- Soil Moisture Sensors for Irrigation
- Irrigation Research Management
- Crop Response to Extreme Temperatures
- Conservation Economics on MN Farms
- Local Farmer Perspective/Experience

Examples of Outreach and Education in FY22-FY23:

- Reached ~1,350 farmers, crop consultants and co-op dealers managing over 150,000 irrigated acres at field days and events
- Extension articles and blogs - 11 crop news posts and 4 podcasts
- Articles for the Irrigators Association of Minnesota newsletter, reaching over 3,200 irrigators
- *Draft* Irrigation BMPs currently under review

Irrigation Partnership for Groundwater Protection

Irrigation workshop introduces NRCS, SWCD staff to latest tech



Details

TTCP: The [Technical Training and Certification Program](#) is funded by a contribution agreement between BWSR (Clean Water Funds) and NRCS (Farm Bill dollars).

STAPLES — An irrigation workshop at Central Lakes College (CLC) this summer introduced Natural Resources Conservation Service (NRCS) and soil and water conservation district staff to an array of new technology, components of different irrigation systems — and some of the management decisions producers consider before making changes.

The two-day training prepared NRCS and SWCD technicians to plan, design and install practices supported by a \$3.5 million Regional Conservation Partnership Program (RCPP) grant focused on conservation work on irrigated lands within 20 central Minnesota counties. NRCS awarded the [five-year grant](#) to the Minnesota Department of Agriculture (MDA) in 2021.

Partners include 20 SWCDs, the Miller Center for Soil and Water Conservation,



Natural Resources Conservation Service website: www.nrcs.usda.gov

[AgCentric](#), plus industry representatives.

The RCPP goal: decrease water use, and improve groundwater and surface water by reducing sediment, nutrients and chemical contaminants.

The RCPP grant also supported the July 17-18 training, coordinated through the Minnesota Board of Water and Soil Resources' Technical Training and Certification Program (TTCP).

"The purpose of this workshop is really to help provide some advanced information about irrigation, irrigation technology and irrigation water management to help those staff to provide good technical assistance to irrigators," said Nancy

Left: Cory Detloff, Central Lakes College's Ag & Energy Center and Farm Business Management director, behind the table at left; and Keith Olander, executive director of AgCentric and Agricultural Partnerships with Minnesota State and CLC, led a discussion July 18 during the Irrigation RCPP Technical Training Workshop for NRCS and SWCD staff at Central Lakes College in Staples.

Center: Kelan Buchta of Grand Irrigation in Clear Lake, Calif., speaking at the

- MDA used \$1.2M and match from 33 partners to secure \$3.5M USDA grant
- Goal: Implement irrigation conservation practices to protect groundwater
- Overwhelming interest in the program among irrigators
 - High demand for cost-share, all funds allocated in one year.
- Build technical capacity among SWCD and NRCS technical staff (“train the trainer”)

Irrigation Water Quality Protection

	FY10-13	FY14-15	FY16-17	FY18-19	FY20-21	FY22-23	FY24-25	Total
Clean Water Funds	\$0	\$220,000	\$220,000	\$220,000	\$300,000	\$270,000	\$300,000	\$1,530,000
Pass through dollars		\$220,000	\$220,000	\$220,000	\$300,000	\$270,000	\$300,000	\$1,530,000

Leveraged ~\$5,039,000 in external research funding





Nitrate in Groundwater

Margaret Wagner

Minnesota Department of Agriculture

Clean Water Council April 15, 2024

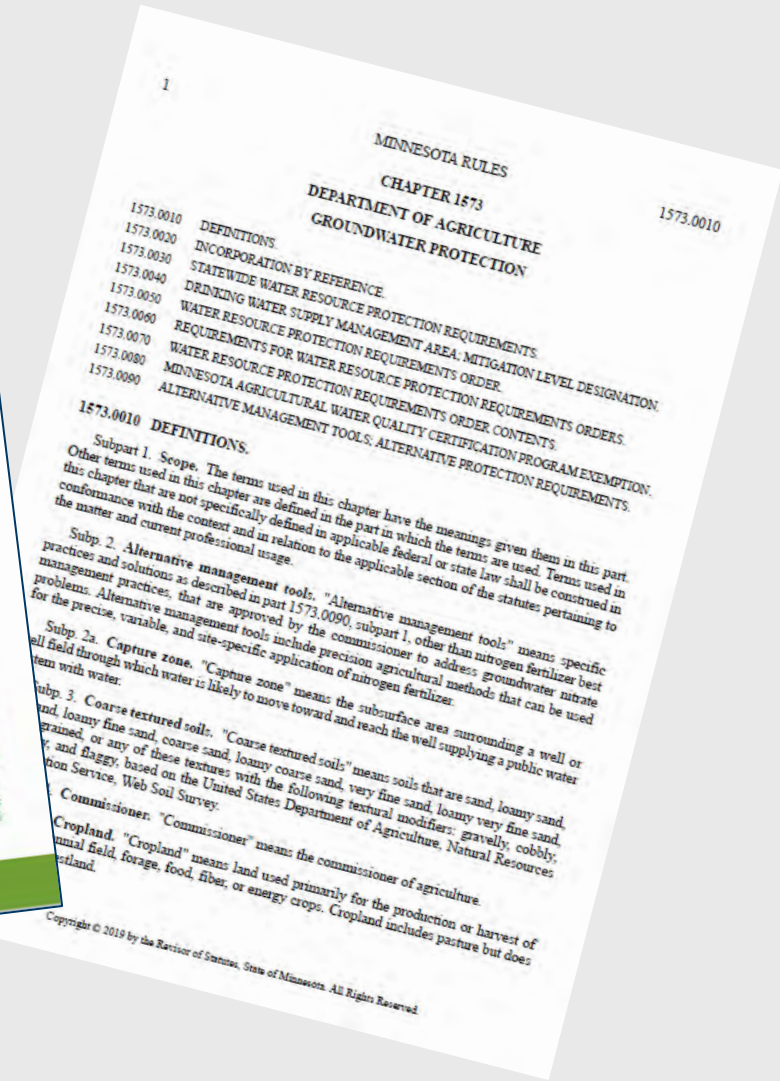


Nitrate in Groundwater

Promoting agricultural practices that will reduce nitrate in groundwater and drinking water statewide, with emphasis in vulnerable areas and areas with elevated nitrate.



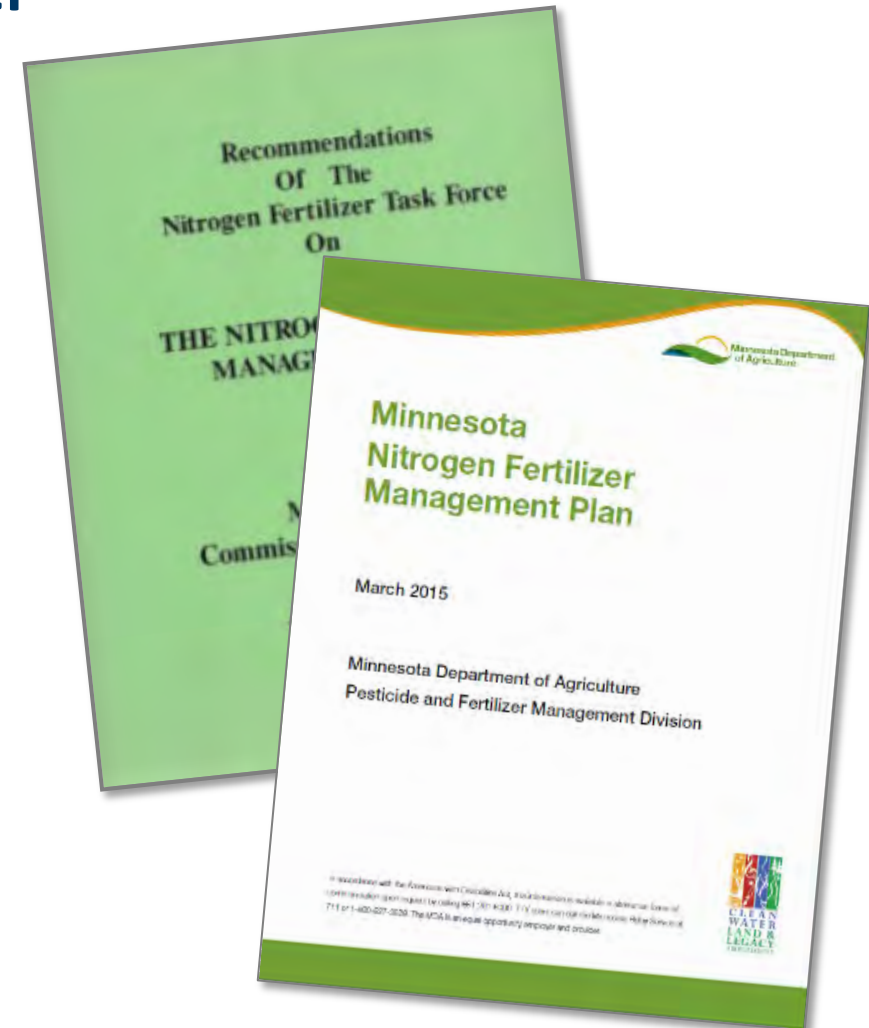
An Outcome of the 1989 Groundwater Protection Act- Nitrogen Fertilizer Management Plan (NFMP)



Nitrogen Fertilizer Management Plan (NFMP)

Minnesota's blueprint to minimize groundwater impacts from the use of nitrogen fertilizer

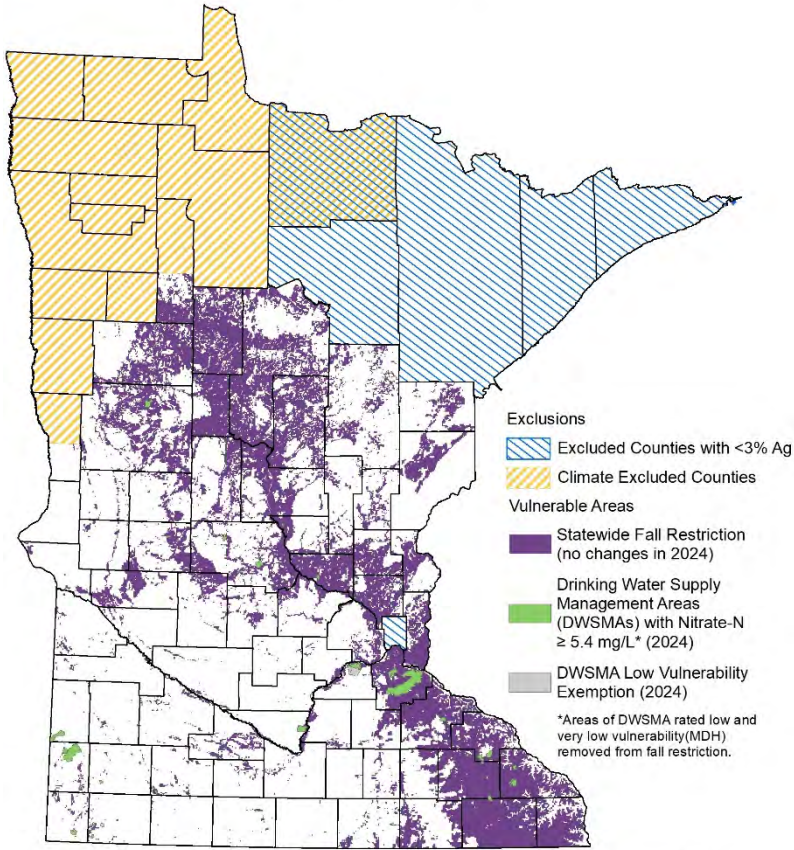
- Written in 1990 and updated in 2015
- Key outcomes:
 - Township Testing Program (2013-2019)
 - Prioritization of areas with elevated nitrate in groundwater
 - Engagement of local agricultural community in problem solving
 - Groundwater Protection Rule



Groundwater Protection Rule

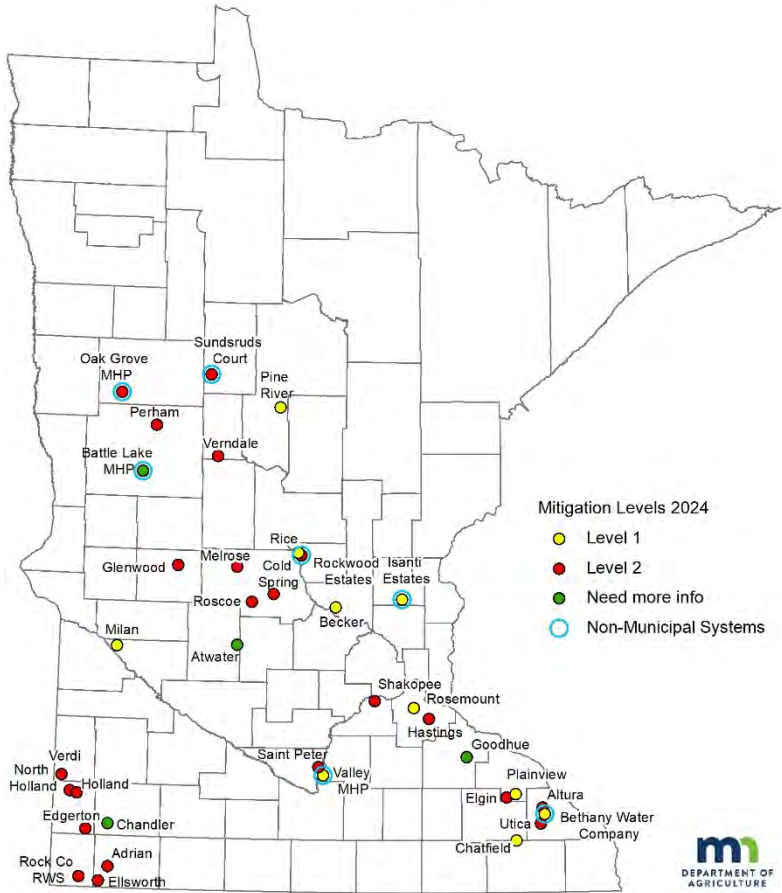
Part One restricts fall application in areas with vulnerable groundwater, or Drinking Water Supply Management Areas (DWSMAs) with high nitrate

Fall Restrictions Map 2024

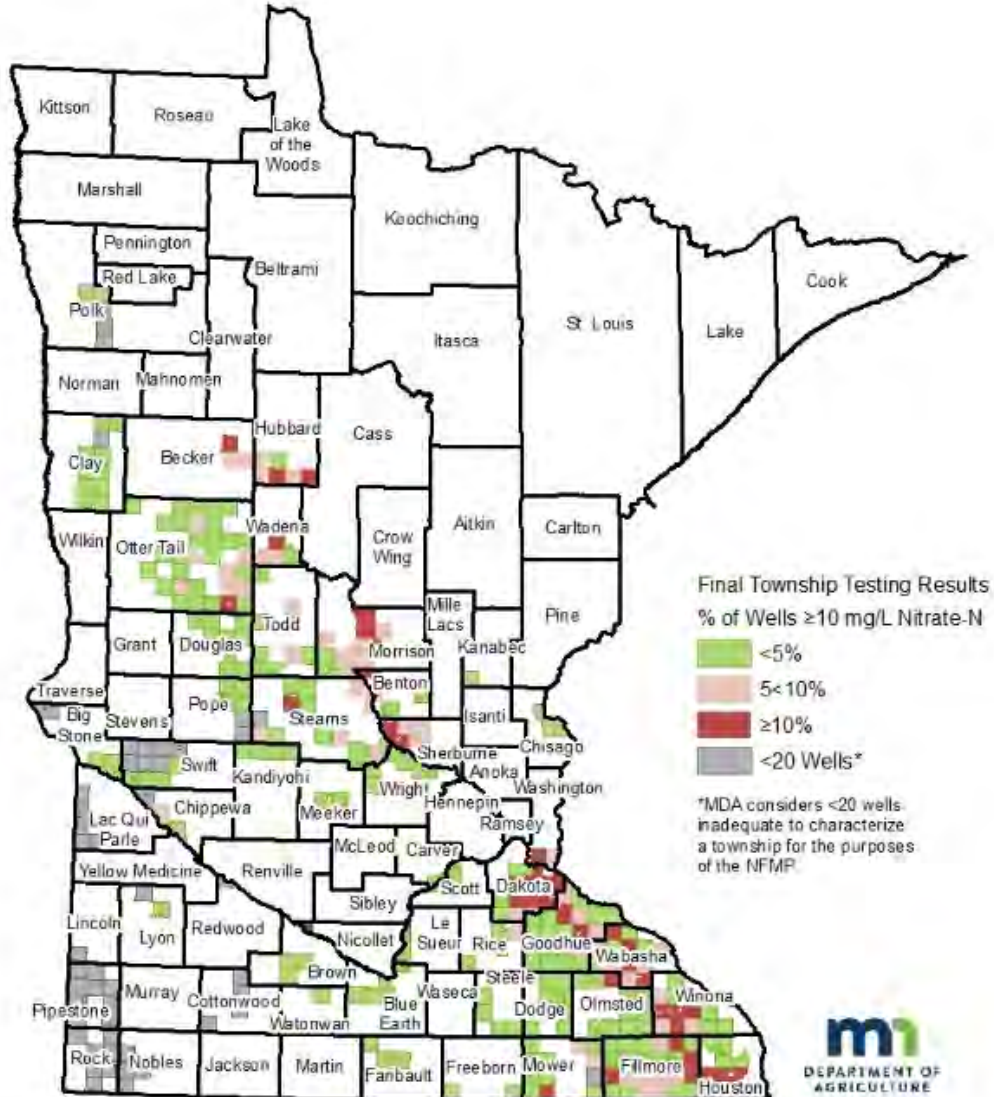


Part Two applies to DWSMAs where community wells have high nitrate

Drinking Water Supply Management Area Mitigation Levels
January 11, 2024



Township Testing of Private Wells Under Nitrogen Fertilizer Management Plan



Percent of Wells in a township ≥ 10 mg/L	Number of Townships (2013-2019)
<5%	189
5%-9.9%	60
$\geq 10\%$	44
Less than 20 wells	51
Total	344

- Map shows final Township Testing results from 2013-2019
- MDA will use Township Testing results to prioritize townships for additional work

Groundwater Monitoring

Regional and local groundwater monitoring is conducted to determine nitrate trends in vulnerable areas

- Ambient groundwater monitoring
- Monitoring network in DWSMAs
 - Hastings, St Peter, and Rock County
- Central Sands and Southeast Volunteer Networks
- USGS age-dating wells in Southeast



Developing and Promoting Nitrogen Fertilizer Best Management Practices (BMPs)



- **SE MN BMP Demonstration** - Since 2015, 275 farmers and crop advisers have participated in on-farm nitrogen trials
- Supporting **12 applied research** and **13 on-farm projects** evaluating BMPs, including work at **Rosholt Farm**
- **Updates** to Statewide Nitrogen Fertilizer and Irrigation BMPs
- **13 USDA NASS surveys** of agricultural BMP use in Minnesota (2010-2014)



Developing and Promoting Nitrogen Fertilizer Best Management Practices (BMPs)



Nitrogen Grand Challenges & Compelling Opportunities

- 9 statewide conferences reaching over 1,900 attendees
 - Continuing education credits offered to Certified Crop Advisors

Minnesota Irrigator's Program

- 3 workshops for irrigators and SWCD technical staff
- Attendees eligible for the irrigation endorsement under the MAWQCP

Nitrogen Rate and Timing Research Trials in Southeast



To measure the effects of N rate and application timing on corn production, nitrogen use efficiency, net return to fertilizer N, and residual soil nitrate.

Calculate the economic optimum N rate (EONR) for Preplant and Split Applications

**Add data to the MRTN database
(N Rate Calculator)**

Alternative Management Tools (AMTs)

A major goal for protecting groundwater is to promote BMPs and practices that go beyond the fertilizer BMPs. These are called AMTs.

- Increased low nitrogen vegetative cover (perennial crops, forages, and cover crops)
- Voluntary taking targeted land out of production
- Methods to reduce or manage nitrogen precisely – precision Ag, new hybrids, management software, and inhibitors



Working with Local Advisory Teams

LATs have been formed in 18 Level 2 DWSMAs and 3 townships

Working together:

- Share information about the Rule
- Answer questions from team members
- Survey farmers and fertilizer dealerships about current practices
- Current BMP practices for computer modeling
 - Determine effectiveness of practices
 - Strategies that can protect groundwater
- **Develop BMP lists**
- Alternative Management Tool Discussion



Local Teams are key to positive outcomes in the process



Computer Simulation Modeling

- MDA staff have calibrated models (EPIC and SWAT) and are running scenarios to evaluate impacts on nitrate leaching losses after implementing BMPs and AMTs
- Models are a tool for local teams and MDA to evaluate and quantify the effects of different practices on groundwater quality
- Simple spreadsheet tools developed and available to local partners

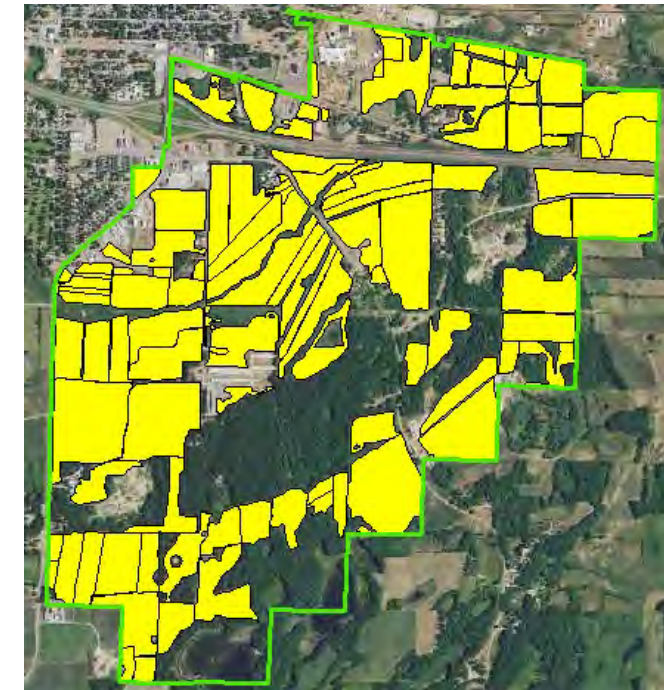


Transition from 'Tables' to Model Output...

University of Minnesota BMPs



Nitrogen loss estimated below cropland in the DWSMA



BMP lists for each DWSMA

BMP lists are developed in consultation with local advisory teams

Computer modeling is used to estimate the nitrate reduction of practices

Three BMP lists are published

- Hastings
- Adrian
- Verndale

BMP lists for 5 additional DWSMAs and 2 townships are in their final stages of review and will be published in 2024

Best Management Practices for the Adrian Drinking Water Supply Management Area (DWSMA)



Updated: 5-26-2023

This document is a list of the University of Minnesota nitrogen (N) fertilizer best management practices (BMPs) that apply within the Adrian Drinking Water Supply Management Area (DWSMA) and are based on the following University of Minnesota resources:

- Best Management Practices for Nitrogen Fertilizer
- Best Management Practices for Nitrogen Fertilizer
- Fertilizing Corn in Minnesota, and
- University of Minnesota Extension website: <https://extension.umn.edu/nutrient-management>

Considerations when reading the tables

- The BMPs listed below are applicable to both coarse and fine textured soils across the DWSMA.
- A map of the Adrian DWSMA identifies the DWSMA boundaries. <https://tinyurl.com/DWSMAAdrian>
- In situations where a field includes both coarse and fine textured soils, the BMPs on the final list must be implemented for the coarse textured soil.
- Nitrogen management records need to be maintained. If a responsible party does not provide or implement, it counts as non-implementation.
- Some BMPs may not apply to all crop systems. If a BMP is agronomically or topography, crop or management systems be selected in its place.
- See the companion document "Definitions of BMPs" for definitions of terms related to BMPs. www.mda.state.mn.us/adrian-dwsma

Best Management Practices (BMPs)

The BMPs numbered 1 – 3 apply to all soil types and are the most important BMPs to reduce nitrate losses.

BMP Number	Nitrogen Rate BMPs	Applies to
1	Nitrogen rates are based on nitrogen fertilizer application guidelines from the University of Minnesota. Rates were last updated July 2022 ¹ . Dryland corn following corn: up to the 0.075 MRTN (currently at 190 lbs N/ac) ^{1,2} Dryland corn following soybean: up to the high end of the 0.075 rate range (currently at 165 lbs N/ac) ^{1,2} For other crops grown in the DWSMA, nitrogen rates must follow the current University of Minnesota guidance applicable to that crop ³	All agronomic crops on all soils
2	Include N supplied in a starter, weed and feed program, and contributions from phosphorus fertilizers such as MAP and DAP when calculating total N rate	All agronomic crops on all soils
3	Take appropriate N credit for previous legume crops and manure used in the crop rotation	All agronomic crops on all soils

¹ Corn nitrogen rate guidelines from the University of Minnesota <https://extension.umn.edu/crop-specific-needs/fertilizing-corn-minnesota> or its successor.
² The implementation of approved alternative management tools may allow a higher nitrogen rate provided that the field specific data indicates this is appropriate.
³ All crops listed at the University of Minnesota Extension webpage Crop-Specific Nutrient Needs at <https://extension.umn.edu/nutrient-management/crop-specific-needs> or its successor.

BMP Number	Nitrogen Placement, Timing and Source BMPs	Applies to
4	Use split applications of nitrogen fertilizer	Corn on coarse textured soils

Additional Practices	Applies to
Keep records of nitrogen use, including rates, crediting of nitrogen sources, timing, placement, and source. The MDA will provide guidance on record keeping requirements.	All agronomic crops on all soils

Groundwater Protection Rule: Recent Activities

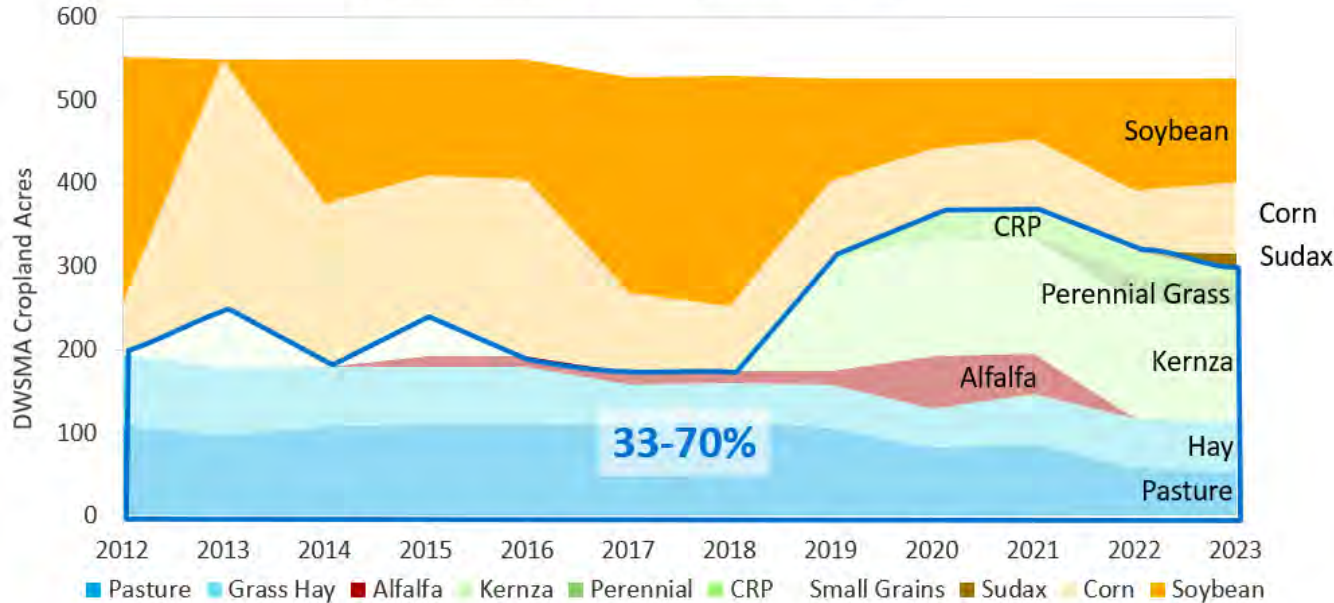
- Installed monitoring networks in 3 DWSMAs
- Estimated lag times for each Level 2 DWSMA
 - Initiated age dating study with USGS in southeast
- Surveyed farmers and crop advisers in DWSMAs
- Computer modeling completed in 5 DWSMAs
 - Spreadsheet developed to compare practices
- 18 Local Advisory Teams (LATs) are formed
- 3 DWSMA-specific BMP lists developed with LATs
- Demonstrating and promoting BMPs



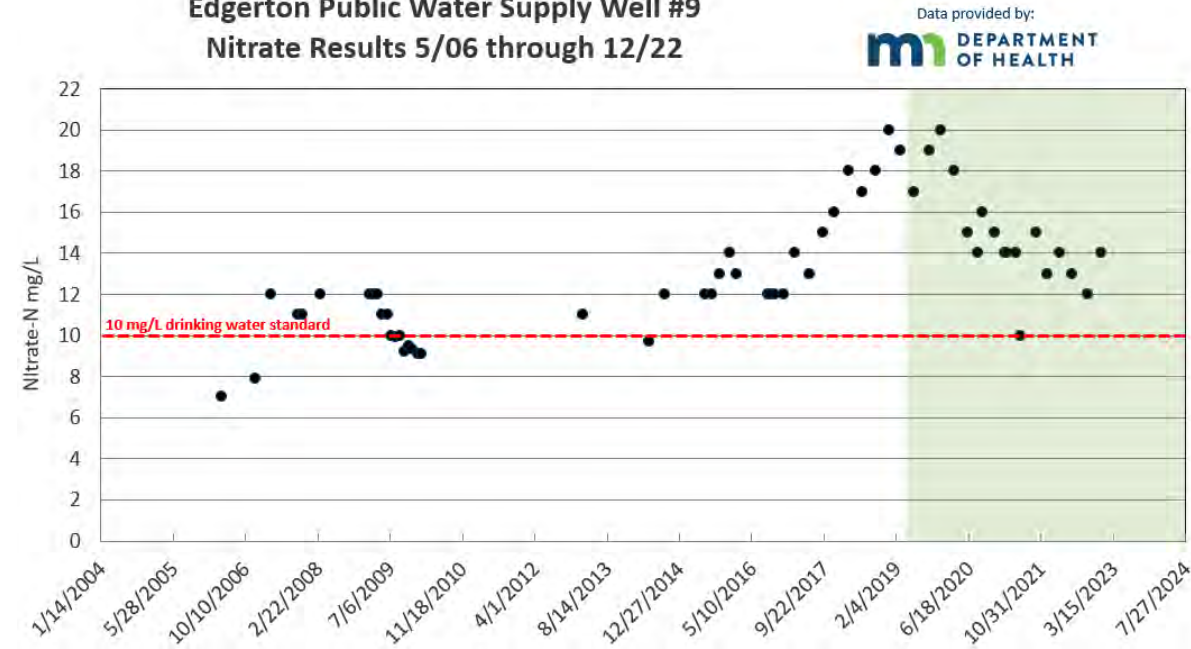
Edgerton DWSMA example

Establishment of perennial cover in Edgerton's public wellhead area is a great example of how state agencies, local partners, and landowners can work together for groundwater protection.

Edgerton DWSMA Historical Cropland Data



Edgerton Public Water Supply Well #9
Nitrate Results 5/06 through 12/22



Increased perennial cover from 33% to 70% (2018-2021). Over the same time period, the nitrate levels in Edgerton's public well have dropped by 40% (20 mg/L in 2019 to 12 mg/L in 2022). Recent weather conditions (i.e. droughts) may also be contributing to nitrate reduction.

Lessons Learned

- Each DWSMA is unique (really)
- Ag community is coming to the table
- N rate is the most important practice to consider and most often the difficult to discuss
- Computer modeling is time intensive but invaluable to selection of practices.
- Manure management will need to be considered in certain DWSMAs
- Leveraging funding through partnerships and grants is key to implementation



Nitrate in Groundwater

	FY10-11	FY12-13	FY14-15	FY16-17	FY18-19	FY20-21	FY22-23
Clean Water Funds	\$1.125M	\$1.7M	\$5.0M	\$5.171M	\$4.171M	\$5.17M	\$5.17M
Pass through Funding			\$1.2M	\$3.6M	\$1.8M	\$1.2M	\$1.2M

On average 35% of these funds are passed through to local partners for nitrate monitoring and reduction activities
 FY14-24 pass through = \$9,104,824





Future of Drinking Water

Tannie Eshenaur | Manager, Water Policy Center

Minnesota Department of Health

CWC Strategic Plan

Drinking water is safe for everyone, everywhere in Minnesota.

1. Public water systems
2. Private water supply wells

Outputs and Outcomes: Future of Drinking Water

Outputs

- *Eliminating Lead in Drinking Water* report
- *Future of Drinking Water* report
- *COVID After Action* report
- *Organizational Assessment of Community Water System Unit*

Outcomes

- \$240M + 18M for lead service line replacement; MN Legislature ten-year goal
- Drinking Water Action Plan
- Recommendations on how to increase the efficiency and effectiveness for responding to new demands for protecting public drinking water
- 2023 Drinking Water Governance Assessment
- Community engagement process to discover Minnesotans' priorities for drinking water protection activities and actions

10-year action plan: Future of Drinking Water

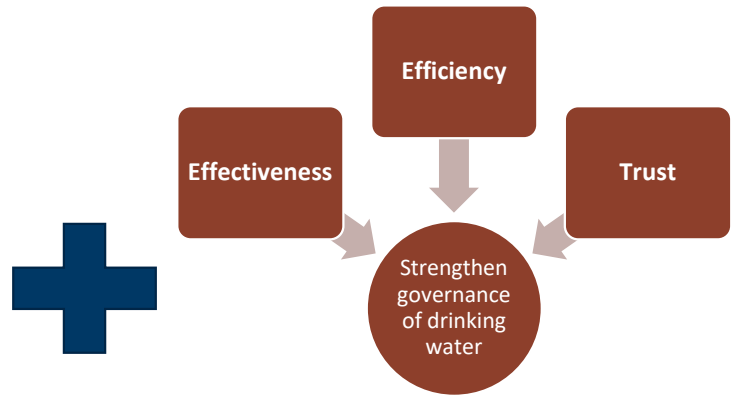
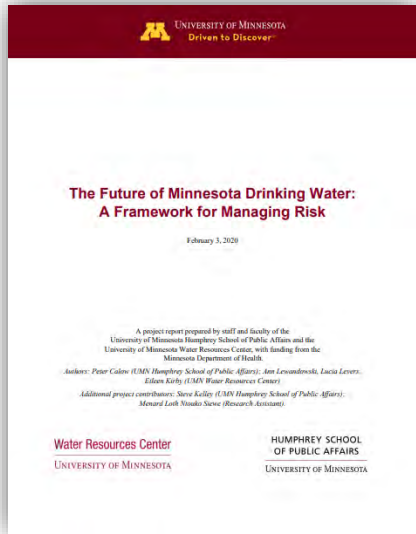
An actionable 10-year plan to ensure that everyone, everywhere in Minnesota has equitable access to safe and sufficient drinking water.

Serve every Minnesotan.

Be the State's commitment to protect against existing and emerging threats.

Incorporate expertise and robust feedback from diverse perspectives.

Ingredients : Future of Drinking Water



Independent Governance Assessment



Subject Matter Expertise



People who drink water

Feedback loops: Future of Drinking Water



7 Public meetings

- Fall/Winter 2024
- Learn about drinking water in Minnesota
- Provide feedback on version 1 of plan



Survey

- Winter 2024
- Provide feedback on version 1 of plan
- 55 responses



Online comment

- Spring
- Version 2 of plan



Final plan

Summer 2024

Future of Drinking Water

Cost-benefit
analysis of
private well
interventions

Implement
Drinking
Water
Action Plan

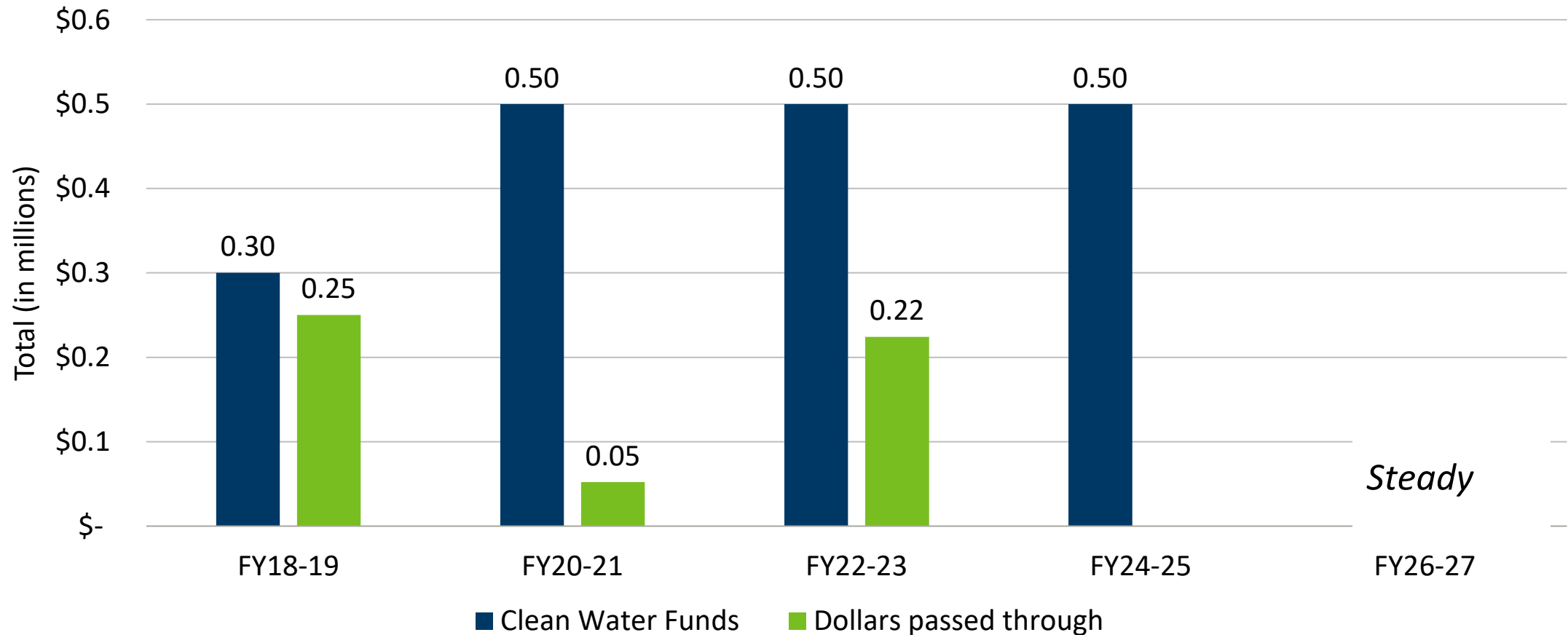
**Looking
Forward**

Comparative
risk
assessment

State
maximum
contaminant
levels

Clean Water Funds for the Future of Drinking Water

Past Clean Water Fund appropriations and dollars passed through





Metropolitan Area Water Supply Sustainability Support

Judy Sventek | Water Resources Manager

Metropolitan Council

Water Supply Sustainability Support Connection to Strategies in the CWC Strategic Plan

***Groundwater
Vision, Drinking
Water Source
Protection Vision,
Vision that all
Minnesotans
value water and
take action to
sustain and
protect it.***

Groundwater	Drinking Water	Surface Water	Value Water
2 goals, 5 strategies and 2 actions	2 goals, 4 strategies		1 goal, 1 strategy and 5 actions

Metropolitan Area Water Supply Sustainability Support



**Maximize use
of existing
infrastructure**



**Offset demand with
efficiency and
conservation**



**Balance multiple
water sources to
meet demand**



**Align agency
directions**



**Recognize
uncertainty and
minimize risk**



**Maintain
groundwater
levels**



**Prevent
groundwater
contamination
spread**



**Protect surface
water flows**

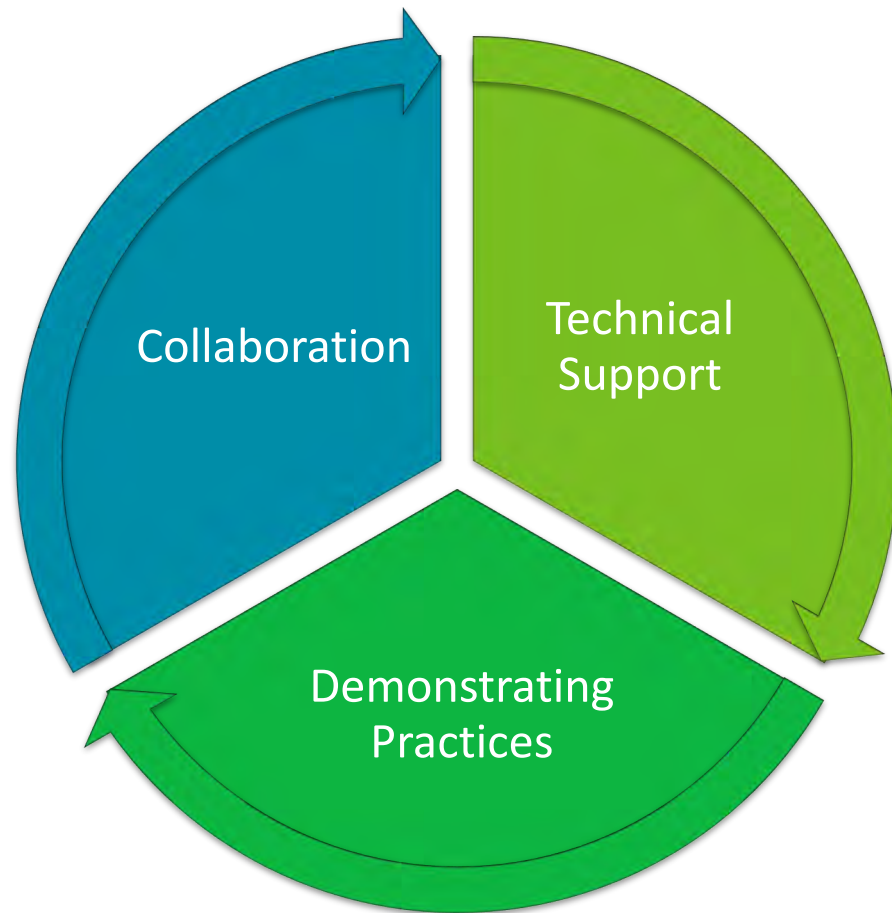
Metropolitan Area Water Supply Sustainability Support

Supports local decision making and project implementation to:

- Address emerging drinking water supply risks, threats and water supply reliability
- Provide cost-effective regional solutions
- Leverage inter-jurisdictional coordination
- Prevent degradation of groundwater resources



Metropolitan Area Water Supply Sustainability Support



Collaborative & cost-effective solutions

- Feasibility analyses of alternatives
- Water supply system resiliency
- Subregional input on issues to address in Metro Area Water Supply Plan Update
- Water Values Survey

Technical support

- Groundwater modeling
- Pilot 3 Community Wellhead Protection Plan
- Water Atlas

Best management practices

- Lawn irrigation efficiency (U of M)
- Industrial water efficiency (MnTAP)

Metropolitan Area Water Sustainability Support

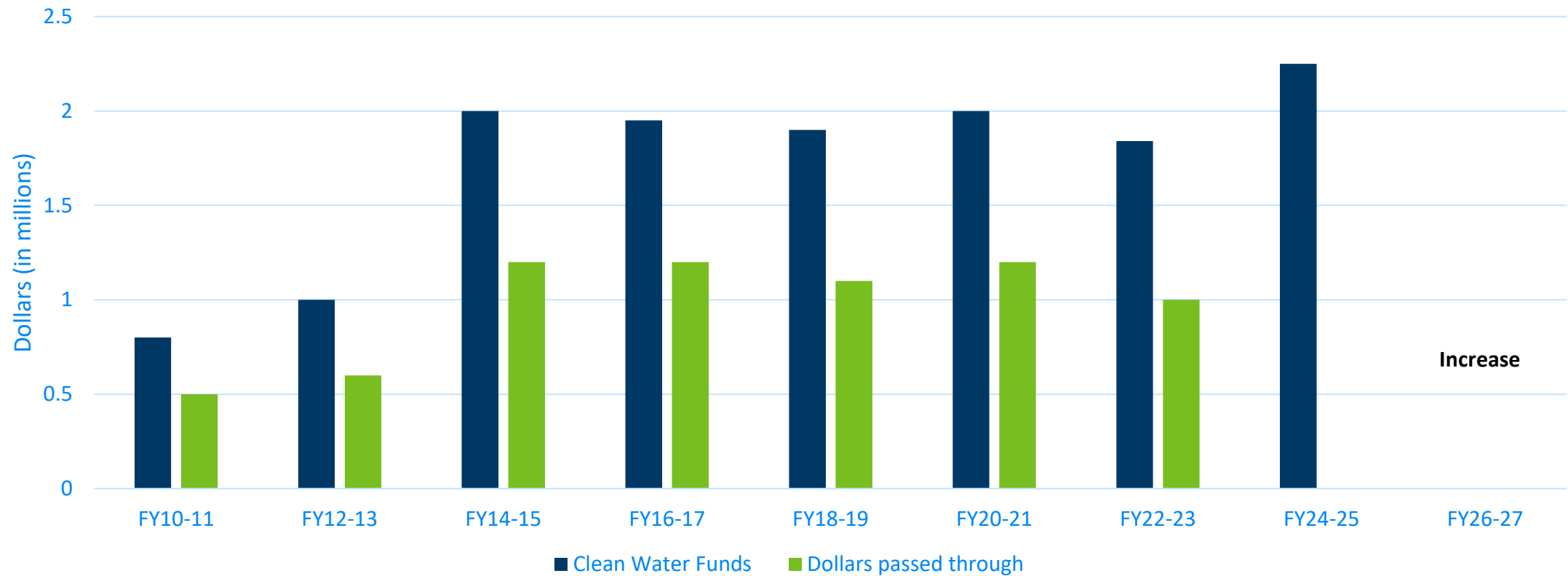


Looking ahead...

- Climate change impacts on overall water sustainability
- Need to strength water source reliability and systems' resiliency
- Land use impacts on water supply
- Infrastructure challenges
- Emergency preparedness
- Reduction of water use through reuse grants
- Continued reduction of water use through water efficiency grants

Clean Water Fund Metro Area Water Supply Sustainability Support Initiative

Past Clean Water Funds appropriated and dollars passed through





Enhanced County Inspections/ SSTS Corrective Actions

Brandon Montgomery | SSTS Program Coordinator

Minnesota Pollution Control Agency

Page 1

SSTS Overview

- In 2023 33% of Minnesotans depend on SSTS to treat their wastewater (44.4 billion gallons)
 - 649,000 SSTS in the state
 - 14,100 existing systems compliance inspections
 - LGUs issued ≈10,500 construction permits
 - SSTS in MN up 6.7% since 2019 (608,000 → 649,000)
- CWF Authorizing language
 - “Enhancing the county-level delivery systems for subsurface sewage treatment system (SSTS) activities necessary to implement Minnesota Statutes, sections 115.55 and 115.56, for protecting groundwater.”
 - “This appropriation includes base grants for all counties with SSTS programs.”
 - “available to counties for grants to low-income landowners to address systems that pose an imminent threat to public health or safety or fail to protect groundwater.”



SSTS CWF Grants & Base Grants

- MPCA has been distributing CWF money for SSTS purposes for 12 years (FY13)
 - Base Grants and Low-Income Grants
 - Total of \$32,018,489 (FY13-FY24)
 - FY25 - \$3.35
- SSTS Base Grants
 - \$21,200*
 - \$17,130 CWF
 - \$4,070 Env. Fund
 - $\$17,130 \times 86 = \$1,473,180$ Annually
 - Available for 11 years (FY14) (\$16,179,180)

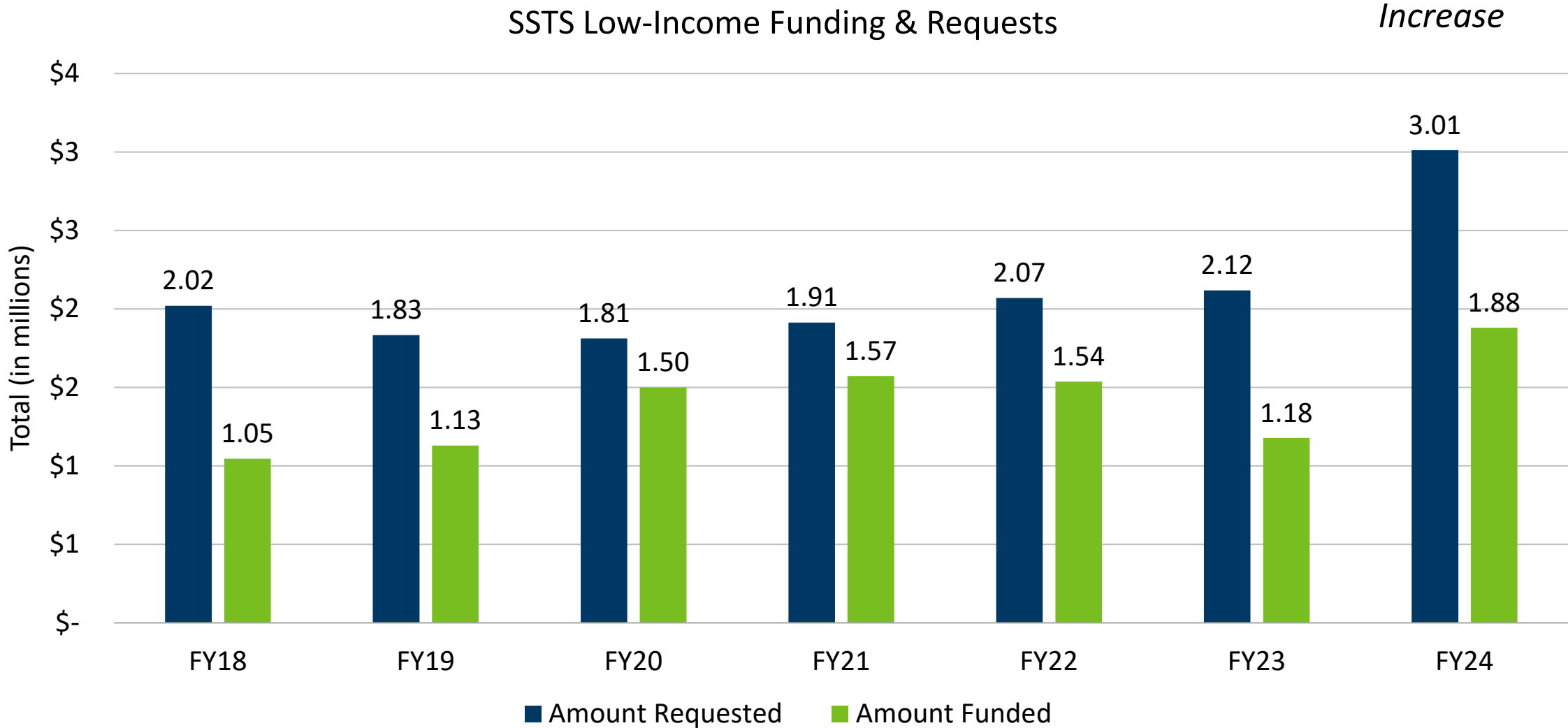


Low-Income Grants

- Competitive process that counties must apply for each fiscal year
 - Funding for low-income homeowners with failing SSTS for upgrades or replacements
- Available since FY13 (12 Years)
 - \$14,518,010 Total
 - \$1.2 million annual average
- High Demand
 - \$22,613,322 Requested
 - \$40,000 Cap*
 - “Deficit” averages - \$674,609

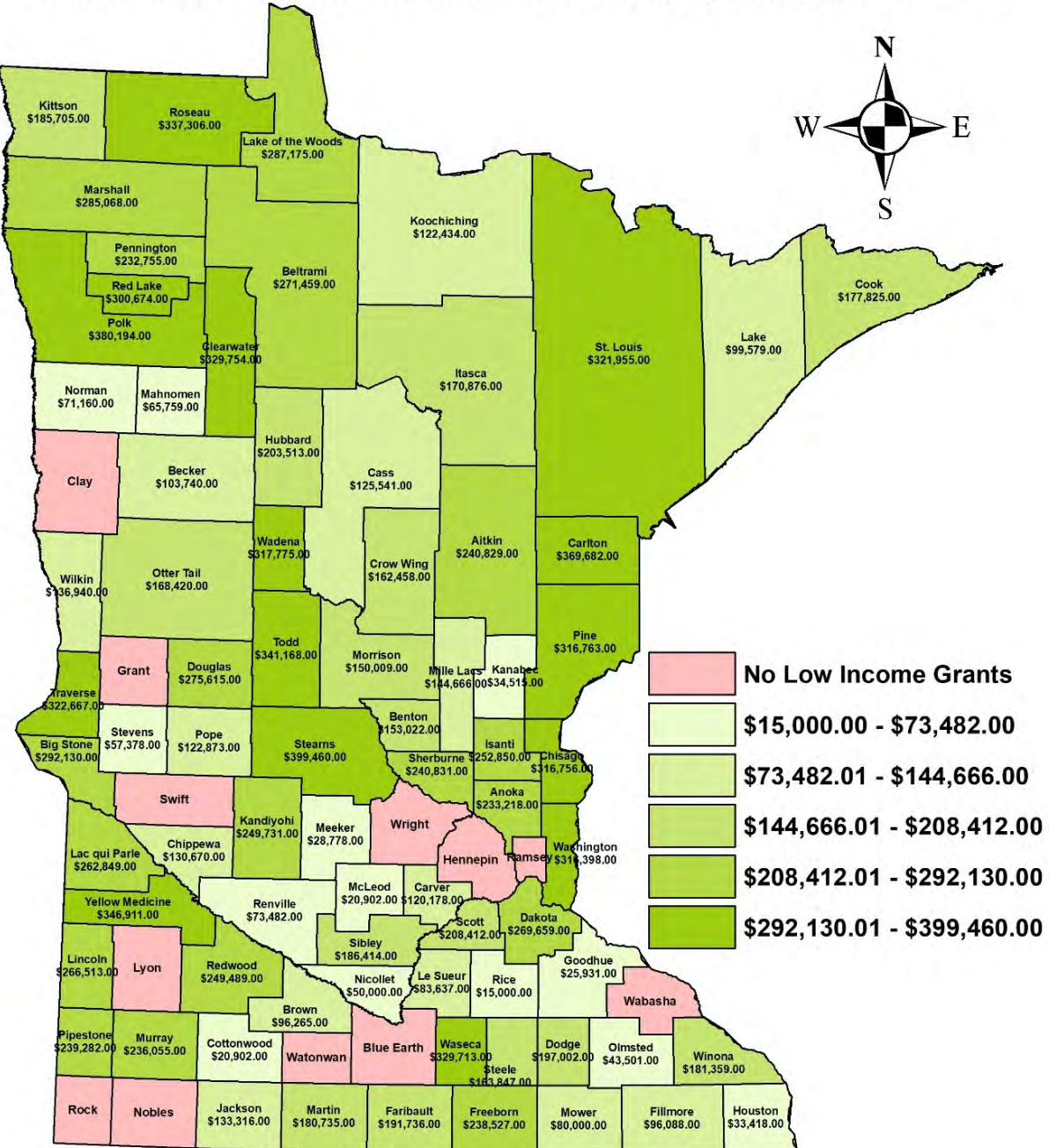


Low-Income Grants Funding & Requests



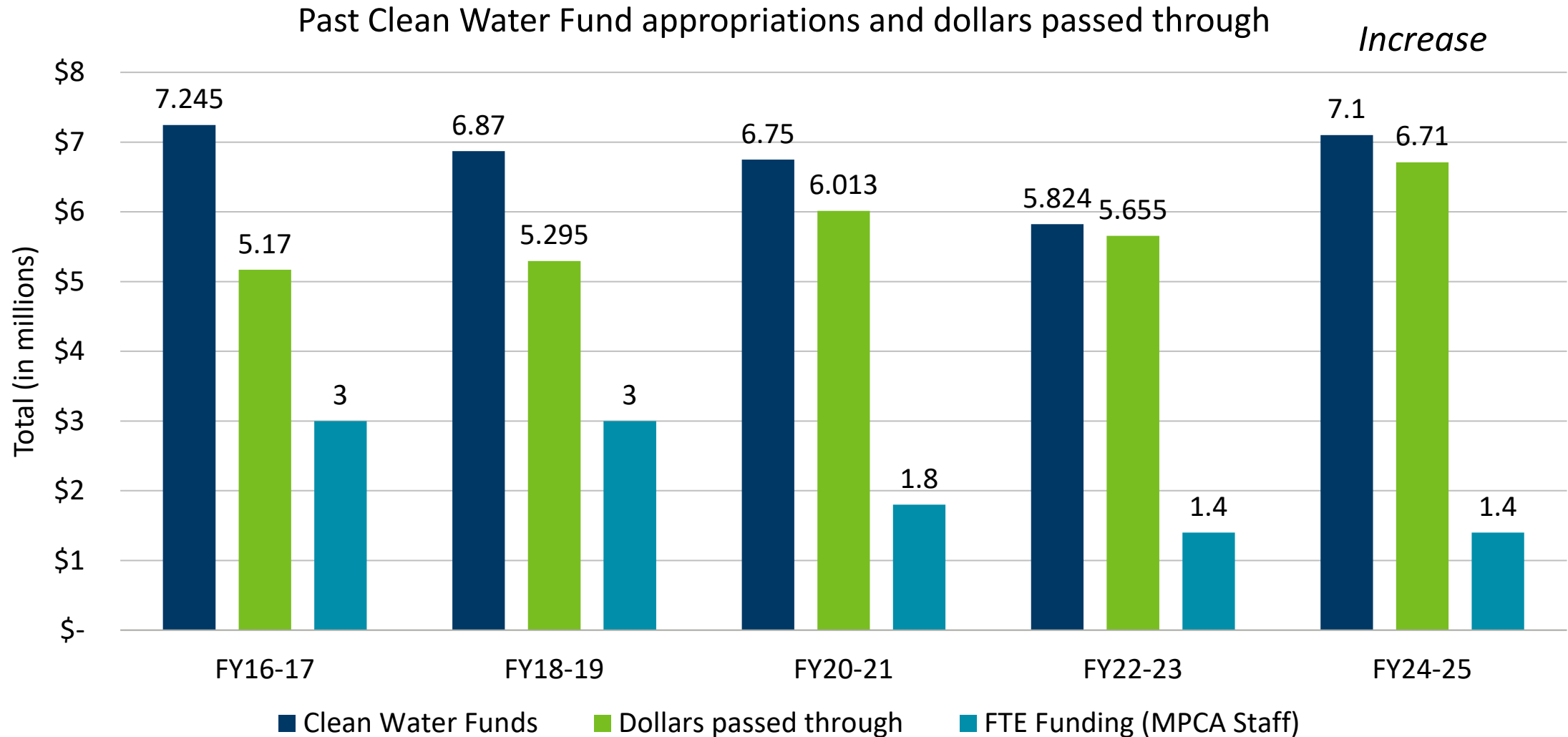
Clean Water Fund Low Income Grant Totals by County FY13 - FY24

Low-Income Grants Spending



- Average Grants
 - County - \$26,885.20
 - Homeowner - ≈\$7,500
 - AgBMP - \$17,444 and ↑
- 1,642 Systems Replaced FY13 – FY23 (\$12.5 million)
 - FY23 – \$310k unspent ≈ 41 Systems
 - FY24 Distribution - \$1.8 million ≈ 240 Systems

Clean Water Funds for SSTs



- FTE values represent number of staff (not millions)

Looking Forward

90% Overall
State SSTS
Compliance
Rate

Support more
low-income
household SSTS
replacements

Increases in
available
funding and
Other funding
sources





Questions?

Brandon Montgomery | SSTS Program Coordinator

Minnesota Pollution Control Agency