Clean Water Council Meeting Agenda
Monday, May 20, 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

- Expand Weather Station Network (MDA)

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)

10:45 BREAK

11:00 Agency Presentations Continued: POINT SOURCE IMPLEMENTATION

- Chloride Reduction Efforts (MPCA)
- Wastewater/Stormwater TMDL Implementation (MPCA)
- Point Source Implementation Grant (PSIG) Program (PFA)
- Small Community Wastewater Treatment Program (PFA)

12:00 Lunch

12:30 Agency Presentations Continued: MONITORING, CHARACTERIZATION, AND ASSESSMENT

- Aquifer Monitoring for Water Supply Planning (DNR)
- Fish Contamination Assessment (DNR)
- Lake IBI Assessment (DNR)
- Buffer Map Maintenance (DNR)
- Stream Flow Monitoring (DNR)
- Monitoring for Pesticides in Surface Water and Groundwater (MDA)
- Pesticide Testing of Private Wells (MDA)
- Drinking Water Contaminants of Emerging Concern (MDH)
- Private Well Initiative (MDH)
- River and Lake Monitoring and Assessment (MPCA)
- Groundwater Assessment (MPCA)

1:45 Public Comments

2:00 Adjourn

Immediately after: Steering Committee

Clean Water Council
March 18, 2024, Meeting Summary

Members present: John Barten (Chair), Steve Besser, Rich Biske (Vice Chair), Dick Brainerd, Gail Cederberg, Steve Christenson, Tannie Eshenaur, Warren Formo, Brad Gausman, Kelly Gribauval-Hite, Justin Hanson, Holly Hatlewick, Rep. Josh Heintzeman, Peter Kjeseth, Annie Knight, Jason Moeckel, Ole Olmanson, Jeff Peterson, Victoria Reinhardt, Peter Schwagerl, Glenn Skuta, Marcie Weinandt, and Jessica Wilson.
Members absent: Gary Burdorf, Sen. Nicole Mitchell, Rep. Kristi Pursell, Dan Sparks, and Sen. Nathan Wesenberg.
Others present: Frieda VanQualen (MDH), Judy Sventek (Met Council), Jim Stark (LCC), Margaret Wagner (MDA), John Bilotta (UMN), Amy Zipko (House GOP Research), Molly Jansen (Red River Watershed Management Board), Trevor Russell (Friends of the Mississippi River), Jen Kader (Met Council), Ryan Merz (MMB), Carly Griffith (MCEA), Jeff Hrubes (BWSR), Udai Singh (BWSR), Cheryl Appledorn (Conservation Minnesota), Stephanie Pinkalla (Nature Conservancy), Barb Weisman (DNR), Brad Jordahl Redlin (MDA), Tom Gile (BWSR), Jeff Broberg (MN Well Owners Association), Sharon Doucette (BWSR), Mike Nelson (BWSR), LeAnn Buck (MASWCD), Chris O'Brien (Freshwater), Jan Voit (MN Watersheds), Marcey Westrick (BWSR), Rob Sip (Red River Watershed Management Board), Annie Felix-Gerth (BWSR), Danielle Isaacson (MDA)

To watch the Webex video recording of this meeting, please go to https://www.pca.state.mn.us/clean-water-council/meetings, or contact Brianna Frisch.

Regular Clean Water Council Business

- Introductions
- Approval of the March 18th meeting agenda and February 26th meeting summary by Dick Brainerd, seconded by Steve Christenson. Motion carries.
- Chair and Council Staff Update
  - Policy & Budget and Outcomes Committee Updates
  - Staff Update
    - We want to acknowledge all the wonderful work Victoria Reinhardt has done on the Council! She is stepping down from the Council. We appreciate all your time and energy on these water resources. We want to thank you for all your work. You have been a part of the Council for a long time; present since the start.

Supplemental FY24-25 Clean Water Fund Recommendations Update, by Council staff *(Webex 00:18:00)*

- Motion by Steve Christenson to adopt the recommendations for the $25,246,000 in the proposed supplemental funding in the meeting packet. Seconded by Marcie Weinandt.
  - Over the past few months, we have focused on the Strategic Plan and its larger strategic objectives. I see preventive measures in line with the Strategic Plan. I also like that there is a focus on the Upper Mississippi River. We are setting aside funds here to address the larger strategic goals. Additionally, the Impaired Waters List and Clean Water Fund Performance Report held larger themes (i.e., chloride and nitrates). Although we are seeing clearer outcomes in phosphorous and algae, we are seeing more impairments in nitrates and chloride. It is not a surprise that we are trying to get ahead of these items. It is perfectly appropriate that we are proposing these funds.

  Discussion:
  - Glenn Skuta, MPCA: The Nitrate Sensor Network request was only put forward currently as a bonding, which was not talked about here with the Council. As described, there is a bill that has been introduced to shift the funding to the Clean Water Funds (CWFs), which is why it is here. It is not something we have solicited, and we would have brought it to the Council.
  - Victoria Reinhardt: I am supportive of the recommendations. If there is some interaction that is inappropriate between Legislators and the Council, we should know about it. I think Paul is doing a great job and knows where these lines are drawn. It does not seem like it has happened here.
  - Dick Brainerd: I agree with the proposal that Steve Christenson put forward.

- Rep. Josh Heintzeman: I don't have any personal issue with the recommendations being made, because Legislators are on the Council to weigh in on discussions and proposals. It is important to recognize that there have been letters written to the Council to leave money left on the bottom line. Legislators could then decide where the funding would go. There needs to be transparency, so that would need to be included with what the Council decides. It is best to have these nitrate sensors paid out of bonding than CWFs. Again, talking about it here for transparency. There appears to be more legislative direction than years past.
- Motion approved unanimously.

Agency Presentations for FY26-27 Clean Water Fund Requests (first of four meetings) *(Webex 00:52:00)*

- Watershed Based Implementation Funding (BWSR) *(Webex 00:52:00)*
  - This is a non-competitive, performance-based grants program for local government units to implement projects on a watershed scale that protect, enhance, and restore surface water quality in lakes, rivers, and streams, protect groundwater from degradation, and protect drinking water sources. Projects must be identified in a water or comprehensive watershed plan developed by local governments and approved by the Board of Water and Soil Resources (BWSR). This may include those under the One Watershed, One Plan (1W1P) or under Metropolitan Surface Water Management frameworks and county groundwater plans.

    Questions/Comments:
  - Holly Hatlewick: I want to reiterate the comment on changing the landscape. We have a conversion of 15,084 acres to complete no-till cover crops because of 1W1P. They could not have made that change on their farm or lifestyle without this pot of funding. Nearby neighbors are seeing these changes as well, and they are talking to one another to support making the change.
  - Tannie Eshenaur, Minnesota Department of Health (MDH): Looking at slide 9, looking at the where the bar is for different activities, groundwater is small. I know you've worked with BWSR on the projects and practices grants to have up to twenty percent (I don't think we've ever made it) for drinking water. So, with the transition from projects and practices to WBIF, what can we do to increase that groundwater slice? *Answer:* I think we can do a lot. We can work with our partners to highlight the importance for it. It may also be the way items are categorized. I am confident that number represents well sealing (decided by the local implementors). It may be how it is being reported. Many surface water activities are benefiting groundwater impacts.
  - Rich Biske: With the increase in state and federal funds, do you see it continuing to soil health and cover crops, or will it shift to other sources? *Answer:* That is a great question. I do not know how the local implementors are going to think about all the funding available to them, or how many are pursuing these additional soil health grants, or perhaps deciding that they can only handle so much funding. Some of the planning partnerships may shift to other prioritized projects and activities in their plans. It may be plan by plan.
- Surface and Drinking Water Protection/Restoration Grants (BWSR) *(Webex 01:53:45)*
  - This is a competitive grant program and incentive funding to protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater and drinking water by implementing priority actions in local water management plans. Up to twenty percent of funds are dedicated to drinking water protection activities.

    Questions/Comments:
  - Tannie Eshenaur, MDH: On slide 38, we don't typically think of total suspended solids (TSS) and phosphorus (P) as being issues with drinking water supply management areas. Nitrate (N) clearly is included. Why are those two included? *Answer:* This is meant to be an overview slide and is considering both surface water and groundwater concerns. That is why all three are depicted.
  - Annie Knight: As the WBIF starts to ramp up, do you see a decrease in people applying for the competitive grants? *Answer:* It is hard to call. Each partnership thinks about the funding opportunities available differently. Some have learned how to write the applications well and know what ranks higher. It is hard to tell what type of projects will be pursued each year. They are diverse, and you don't know who they are competing against, or what other funding opportunities are open to them. It is still a very popular program. Some watersheds do not have access to WBIF, so this would be helpful for those folks.

- Accelerated Implementation (BWSR) *(Webex 02:12:13)*
  - This program is to enhance the capacity of local governments to accelerate implementation of projects and activities that supplement or exceed current state standards for protection, enhancement, and restoration of water quality in lakes, rivers, streams, and groundwater. It is designed to increase technical assistance through regional technical service areas (TSAs), provides technical training and certification to local conservation partners, develop inventories of potential restoration or protection sites, and developing and using analytical targeting tools like PTMApp that fill an identified gap.
    Questions/Comments:
  - Tannie Eshenaur, MDH: At the last budget cycle two years ago, we talked about adding groundwater in the PTMApp, has there been any progress in adding that? *Answer:* That is something still being considered.
  - Holly Hatlewick: I wanted to comment on slide 51, talking about training. This is unique to Minnesota. This is instrumental in the implementation of 1W1P, so we have skilled, trained, staff. I wish there was not so much turnover. However, it is not happening anywhere else nationally. It is getting people up to speed within one to two years versus three or five. It is an important piece.
- Conservation Drainage Management and Assistance (BWSR) *(Webex 02:30:30)*
  - The purpose of this program is to facilitate multipurpose drainage management practices to reduce erosion and sedimentation, reduce peak flows and flooding, and improve water quality, while protecting drainage system efficiency and reducing drainage system maintenance for priority Chapter 103E drainage systems. These grants can be used as an "external source of funding" for water quality improvements in accordance with: Section 103E.011, Subd. 5. Use of external sources of funding. The multipurpose water management provisions in MN Statute Section 103E.015 considerations before drainage work is done, and/or other applicable provisions of Chapter 103E (see BWSR Multipurpose Drainage Management Fact Sheet).
    Questions/Comments:
  - Steve Besser: I'd like to learn more about the current craze for pattern tiling, the benefits, and contra-indications of it. *Response:* One of the challenges with that, talking with this programing, is on the peripheral of it. That sort of work is done on lands that eventually ties into a public drainage system but is not necessarily part of the 103E drainage system. We have been exploring conversations with outside groups to deliver sort of subsurface drainage water management. There may need to be more work on saturated buffers and bioreactors in that arena. They are eligible, but not very popular.
  - Rich Biske: The Policy Committee has been talking about acknowledging the inconsistency about awareness about multipurpose drainage management, or training for drainage authorities or consultants. Could this training be included? *Answer:* It could be, but right now this program is not focused on it, because the limited resources for the number of practices. The Minnesota Watersheds does an annual workshop for their members, which is open to counties. The Association of Minnesota Counties does a conference each year as well on the topic. There are several consultants in drainage that do outreach, training, and tours. There could be more opportunities to increase that work or help that work. It may not be the most helpful to come from an agency, because of the structure of it. It is worth exploring.
- Enhancing Landowner Adoption of Soil Health Practices for Drinking Water and Groundwater Protection (BWSR) *(Webex 02:52:15)*
  - The program provides both applied research by the Minnesota Office for Soil Health (MOSH) and implementation of conservation cover practices and reduced tillage to reduce nutrient loss. The CWF dollars are being bundled with a General Fund appropriation to kick start a comprehensive package of soil health programing in Minnesota which has also successfully leveraged an additional $25 million in Federal dollars. While near-channel erosion is the largest source of sediment to the Minnesota and Mississippi Rivers, upland erosion on tilled fields is the second largest source of sediment and is a source which has increased substantially since major changes to vegetation and land cover were made many decades ago. The Minnesota Nutrient Reduction Strategy, Sediment Reduction Strategy, and Climate Action Framework identify a suite of soil health related activities that need to see significantly increased adoption rates to make tangible progress towards our water quality and climate goals. This proposal integrates sediment retention and climate related objectives with a goal of restoring and maintaining soil health.
    Questions/Comments:

- Steve Christenson: This seems like a surface water thing, but it really reflects a people thing. People value water in Minnesota, and you are really helping to build habits and practices.
- John Barten: When you are talking with the landowners, do you sense a willingness and interest from them to maintain these adoptions beyond their contract period? *Answer:* Yes and no. It is a unique question. It is hard to know where any given producer is at. It is about how you help them understand the benefit to their business model, meeting them where they are, and getting them to take that extra step. There are some who do not want a contract. There are a lot of people in different places. We need to be able to help people at all levels.

- Watershed Legacy Partners Grants (BWSR) *(Webex 03:17:15)*
  - This program is to increase implementation of voluntary conservation across Minnesota through new partners. This is based on CWC interest. This program is intended to expand partnerships to protect and restore Minnesota's water resources. The Legislature appropriated $400,000 in FY22 and $600,000 in FY23 from the Clean Water Fund "for developing and implementing a water legacy grant program to expand partnerships for clean water."
    Questions/Comments:
  - Brad Gausman: Where did $1 million come from? *Answer:* It was a good number to start with.
  - Brad Gausman: Do those applications stay internal to BWSR or do they come forward to this Council? *Answer:* That was discussed. There is something valuable to have BWSR review it versus the Council. The members on the Council are appointed from different constituencies so BWSR avoids any bias. (CWC staff was originally suggested for the technical review panel, but Paul says that many applicants call him and that could influence the outcome. That is sound judgment. The Council did assist with the criteria used. Other folks are called in to review these programs as well, and it is tricky. It is a goal to have the reviewers who are appropriate, but also understand the work involved.
  - Brad Gausman: For those who applied and did not receive funding, where those plans well defined proposals? Or was there a reason they did not meet the criteria? *Answer:* There is minimum requirement to meet criteria, and all BWSR programs have this requirement. We encouraged folks to reapply. It is very competitive as well. The drinking water criteria helped drive where points were awarded as well.
- Measures, Results, and Accountability (BWSR) *(Webex 03:30:00)*
  - Provide state oversight and accountability for grants to local government, support program and outcomes reporting, evaluate results and measure the value of conservation program and project implementation by local governments. On average, BWSR processes approximately 245 Clean Water Fund grants annually across the state. As part of this grant oversight, BWSR must report all proposed and final outcomes along with other reporting requirements to the Legacy Website (https://www.legacy.mn.gov/clean-water-fund). Grant reporting is conducted through BWSR's grant management system, eLINK https://bwsr.state.mn.us/elink.
  - No questions/comments for this program currently.
- Water Demand Reduction Grant Program (Metropolitan Council) *(Webex 03:34:30)*
  - Grants assist metro municipalities to implement water demand reduction and water efficiency measures to ensure the reliability and protection of drinking water supplies and support resiliency of water suppliers. State regulators require water suppliers to reduce water use and increase water conservation and efficiency. This requirement preserves limited groundwater, allows adjacent users to better share aquifer resources, and maximizes the value of existing infrastructure investments. Funding for this requirement has not been provided through other means. By providing financial assistance to incentivize communities to implement water demand reduction measures in municipalities, the program reduces reliance on groundwater which will help in preventing groundwater degradation in locations around the region, will ensure the reliability and protection of drinking water supplies, and will support resiliency of water suppliers.
    Questions/Comments:
  - Dick Brainerd: As a city that participated, this is a good program. How does this get expanded? *Answer:* We have done a survey and are looking into it. We are trying to expand the type of replacements as well. We are working this summer to see if we can connect to other communities that have not submitted it in the past.

- Jessica Wilson: Looking at the items included, the cost of items is a barrier for some folks. However, the smart irrigation controllers, although wise to include, I have an issue with funding it. If you can afford to irrigate your lawn, is it a barrier to buy a $200 controller? Perhaps it can be done a different way. Perhaps charging the users who irrigate more, to take that funding as an irrigation controller program. I have a problem with my sales tax funding an irrigation controller when I don't irrigate my lawn. *Answer:* We have had that conversation in the past. Over the years we have been out to replace irrigators. It does assist with water demand reduction.

- Minnesota Agricultural Water Quality Certification Program (MAWQCP)(MDA) *(Webex 03:47:00)*
  - The MAWQCP is a first of its kind partnership between federal and state government and private industry. This innovative and nationally recognized voluntary program targets water quality protection on a field by field, whole farm basis. The MAWQCP gives farmers and agricultural landowners the opportunity to take the lead in implementing conservation practices that protect our water. Those who implement and maintain approved farm management practices will be certified and in turn obtain regulatory certainty for a period of ten years.
    Questions/Comments:
  - John Barten: There has been talk about adding a groundwater or drinking water component to the certification, what is the status of that conversation? *Answer:* Like an endorsement, yes. We have items we would like to see done as part of an endorsement. There are many items that folks already need to do to get certified! It does become a challenge to get items endorsed that are not already on the list. There can be more conversations on this topic moving forward.
- Culvert Replacement Incentive Program (DNR) *(Webex 04:07:00)*
  - The Minnesota Department of Natural Resources (DNR) is proposing to continue using CWFs to accelerate the adoption of improved culvert designs by local governments. This cost-share grant program provides up to 25 percent cost share and technical assistance on projects that apply natural channel and floodplain design principles, which improve biological connectivity, channel stability, reduce flooding and lower long-term maintenance costs. Replacing culverts that are not functioning properly with the preferred geomorphic design will restore biological communities by allowing greater fish and wildlife passage, improve water quality by stabilizing streambanks, and by allowing water to access the floodplain, which facilitates nutrient removal.
    Questions/Comments:
  - Brad Gausman: Do the new culvert designs allow for fish passage? *Answer:* Yes, specifically eliminating barriers to make sure they can pass. We get more turtles as well. Probably more wildlife as well.
  - Rich Biske: Has there been any increase in federal funding for these kinds of passageways? *Answer:* Yes, there was federal funding, but a lot is going through Minnesota Department of Transportation (MNDOT) specific to fish passage. These are not the only funding sources. There were also ten million in state funds directed into stream restoration and infrastructure.

EASEMENTS (combined presentation)

- Wetland Restoration Easements (BWSR), Critical Shoreland Protection - Permanent Conservation Easements (BWSR), Working Land and Floodplain Easements (BWSR), and Targeted Wellhead/Drinking Water Protection (BWSR) will be moved to a future meeting.

Adjournment *(Webex 04:19:32)*

Clean Water Council
April 15, 2024, Meeting Summary

Members present: John Barten (Chair), Steve Besser, Rich Biske (Vice Chair), Dick Brainerd, Gail Cederberg, Steve Christenson, Tannie Eshenaur, Warren Formo, Brad Gausman, Kelly Gribauval-Hite, Justin Hanson, Holly Hatlewick, Peter Kjeseth, Annie Knight, Jason Moeckel, Ole Olmanson, Jeff Peterson, Victoria Reinhardt, Peter Schwagerl, Glenn Skuta, Marcie Weinandt, Jessica Wilson, and Sen. Nathan Wesenberg.
Members absent: Gary Burdorf, Rep. Josh Heintzeman, Sen. Nicole Mitchell, Rep. Kristi Pursell, and Dan Sparks.
Others present: Jen Kader (Met Council), Jim Stark (LCC), Jen Kostrzewski (Met Council), Judy Sventek (Met Council), Sharon Doucette (BWSR), Chris O'Brien (Freshwater), Annie Felix-Gerth (BWSR), Amy Adrihan (MPCA), Jan Voit (Minnesota Watersheds), Julie Westerlund (BWSR), Jamie Beyer (Bois de Sioux Watershed District), Margaret Wagner (MDA), Trevor Russell (Friends of the Mississippi River), Richard Gruenes (MDA), Sam Hirschhorn, Barb Weisman (DNR), Zoe Schroeder, Tara Solem (Lake County SWCD), Nicole Blasing (MPCA), R.C. Boheim (South St. Louis County SWCD), Anita Provinzino (North St. Louis County SWCD), Kate Holcomb (DNR), Brad Matlack (Carlton County SWCD), Sam Paske (Met Council), LeAnn Buck (MASWCD), Brad Jordahl Redlin (MDA), Danielle Isaacson (MDA), Myra Kunas (MDH), Frieda VanQualen (MDH)

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Regular Clean Water Council Business
- Introductions
- Motion to approve the April 15th meeting agenda by Steve Christenson and seconded by Brad Gausman. Motion Carries. No meeting summary available to approve.
- Chair and Council Staff update
  - Policy & Budget and Outcomes Committee Updates
  - Staff update: Six Council members who applied for reappointment and were reappointed by the Governor's Office: Steve Besser, Rich Biske, Dick Brainerd, Kelly Gribauval-Hite, Peter Schwagerl, and Marcie Weinandt. The final appointee will replace Victoria Reinhardt, who did not reapply. We are waiting on that final member appointment. Paul Gardner, Clean Water Council Administrator, will be watching the Legislature on the Clean Water Funds (CWFs) this week.

Agency Presentations for FY26-27 Clean Water Fund Recommendations

EASEMENTS *(Webex 00:36:00)*
- Critical Shoreland Protection - Permanent Conservation Easements (Board of Water and Soil Resources (BWSR)) *(Webex 01:13:00)*
  - BWSR purchases 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, and to provide source water protection for the Twin Cities and other communities along the Mississippi River. These are Reinvest in Minnesota (RIM) easements. 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 One Watershed One Plan (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).

- Wetland Restoration Easements (BWSR) *(Webex 00:48:00)*
  - The purpose of the Reinvest in Minnesota (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. 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 percent 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.
- Working Land and Floodplain Easements (BWSR) *(Webex 01:00:00)*
  - Easements to restore sensitive land in riparian corridors and floodplains to address water quality issues. Landowners may 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.
- Targeted Wellhead/Drinking Water Protection (BWSR) *(Webex 01:04:30)*
  - 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.
- *Questions/Comments on these four programs (Webex 01:16:00):*
  - Steve Christenson: Statewide, across these programs, total is about $23 million dollars (half for wetlands and the other half for the other three programs). Do we have the right balance? *Answer:* I think it is because of the nuances of the location and full cost of wetland restorations. The water quality benefits are significant. It may look like a small dollar amount spending on the critical shoreland restoration easements, but there is a significantly lower cost of acres. The dollars go further for the RIM program.
  - Steve Christenson: Regarding the Upper Mississippi plan, how can we measure our progress? How are we on this journey? What is the definition of the Upper Mississippi River Basin, and where do we draw the line? Those 100,000 acres, looking at the protection, what is the definition of "protection" and is RIM the only program? *Answer:* Looking into our database, I would have to think about it more, and the investments that would be needed to get the rest of the way.
  - Rich Biske: There is a lot of attention in Southeast Minnesota, so how does CREP score out within that region? *Answer:* Some of the criteria makes it hard for a plan to be eligible. That is why we did our

floodplain and riparian restoration program. There was a lot of feedback received from the southeast on this topic. We tried to create a program to target those areas, with flexibility.
  - John Barten: Of all the easements purchased with CWFs, how many are permanent? *Answer:* All of them are permanent. Until we created the flexibility, there was not an option for terms.
  - Margaret Wagner, Minnesota Department of Agriculture (MDA): There is either a permanent easement or thirty years term? *Answer*: Yes.
  - Brad Gausman: Are these connected to the license plates critical habitat? *Answer:* The DNR has the same name, but they are completely different programs.

TECHNICAL ASSISTANCE

- Buffer Law Implementation (BWSR) *(Webex 01:37:15)*
  - This provides program oversight and grants to support local governments in their implementation of the statewide buffer law. Funds are made available on a non-competitive, formula-based basis to SWCDs to support 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 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.
    Questions/Comments:
  - Rich Biske: What about the soil erosion part? What is happening on that side? Is it complaint driven? *Answer:* For counties electing to take jurisdiction, there is support. It is a local ordinance piece. That is not a statewide approach. It does seem to be complain driven, but not into the courts yet.
- Nonpoint Source Restoration and Protection Activities (DNR) (Webex 01:48:30)
  - 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.
    Questions/Comments:
  - John Barten: When you do the forest stewardship planning, how frequently does that resolve the costs of landowner to implement those plans, and where does that money typically come from? *Answer:* The $200,000 to date in cost share with 70 landowners with plans has come partly from past funding. I am not sure of the other sources of other, but there is a lot of leveraging in this program. We can follow up.
- Technical Assistance (MDA) *(Webex 02:04:00)*
  - 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 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 and scaling up of best management practices (BMPs).
    Questions/Comments:
  - John Barten: On nitrate concentration of surface water runoff, did you do a mass balance to see what percent of the applied urea was lost to the producer with those high concentrations? *Answer:* I don't remember that info, but I will look at it and follow up.
  - Rich Biske: You mention partners behind the Discovery Farms. In addition to supporting the data collection, are those members actively promoting and advocating for the practices that show reductions in nutrient outcomes? *Answer:* Yes. We do partner meetings to share data and increase participation.

FINANCIAL ASSISTANCE

- Conservation Equipment Assistance (MDA) *(Webex 02:35:00)*
  - Funding assists 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. 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.
    Questions/Comments:
  - Brad Gausman: Did you say the SWCDs can purchase the equipment and it can get loaned out like a library system? *Answer:* Yes.
  - Brad Gausman: With the highly competitive nature of the program, do you think that would be a good way to drive those efforts to get the most folks using the best equipment? *Answer:* Yes. We are excited about these opportunities.
- Agricultural Best Management Practices (AgBMP) Loan Program (MDA) *(Webex 02:52:00)*
  - 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.
    Questions/Comments:
  - Paul Gardner: The letters of support really reveal the details of this program.

STATE CAPACITY

- Mussel Restoration Pilot Program (DNR) *(Webex 03:43:00)*
  - 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.
    Questions/Comments:
  - Brad Gausman: You mentioned this is important to fish, and I would assume it is native rough fish. Taking those fish into affect, is there potential to take better stock of those necessary fish? Is there opportunity there to continue that native fish work. *Answer:* That is a great question. The fishery survey work is done by out DNR section of fisheries. I don't know what their plan is for that work. However, as our knowledge grows, it helps assist the interactions of species and ecosystems to support them.
- Water Storage (DNR) *(Webex 03:57:00)*
  - This proposal for $1 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.
  - *Questions/Comments:*
  - Comment: There is not a lot of times when clean water and flooding interact. Often, you are choosing one or the other, or a tiny benefit of one over the other. There is a lot of value there.
  - Rich Biske: Does the partner work with the fish and wildlife surface on any project design? It may be an opportunity. *Answer:* We seem to have the internal expertise that we need. Always open though. Leveraging outside expertise happens for us all the time.
- Great Lakes Restoration Projects (Minnesota Pollution Control Agency (MPCA)/BWSR)) *(Webex 04:06:00)*
  - 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, including the

Great Lakes Restoration Initiative (GLRI) fund, to implement Minnesota's clean water strategy. 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, which will allow Soil and Water Conservation Districts (SWCDs) to obtain federal funding (some of which is one time funding) to continue and enhance water quality protection and restoration work.

- *No questions or comments on this program currently.*

GROUNDWATER/DRINKING WATER IMPLEMENTATION

- Enhanced County Inspections/SSTS Corrective Actions (MPCA) *(Webex 03:29:30)*
  - State and county Subsurface Sewage Treatment Systems (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 (Minn. Stat. 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). It will also be used in support of Minnesota Rural Waters as a facilitator, working with areas and communities of SSTS concern (ACC).
    Questions/Comments:
  - John Barten: Is the failure rate for the newer systems lower than it was for the older ground systems? Are most of the systems being replaced being older? Or similar rate? *Answer:* It is all over the place. It depends on the work done when it was placed. Most of the failures that we see are not backing up or spitting up in the ground but do not have the appropriate separation to groundwater. That can happen with both a mound and in-ground system. It is more likely with in-ground system. Generally, older systems were installed deeper. They might have been sited incorrectly, but are at end of their life.
- National Park Water Quality Protection Program (St. Louis County Commissioner Paul McDonald and Jason Chopp) *(Webex 03:06:00)*
  - 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. Since 2009, nearly $35 million has been spent improving sanitary sewer systems adjacent to the National Park. In 2022 they updated their comprehensive sewage plan. They are looking for $4 million ($2 million for FY26 and $2 million for FY27) to continue with this critical work.
    Questions/Comments:
  - Is there anything across the border in Canada that could be impacting? *Answer:* There have been conversation that have happened at the board level. We've been focused on our tasks at hand.
  - Brad Gausman: It seems like a high nonconformance rate. What is that due to? *Answer:* The breakdown of the system over time, as well as the new standards of what a conforming septic system is at.

Presentations pushed to next meeting: Expand Weather Station Network (MDA), Irrigation Water Quality Protection (MDA), Nitrate in Groundwater (MDA), Future of Drinking Water (MDH), and Metropolitan Area Water Sustainability Support (Met Council). In addition, Council member can email presenters with further questions on programs or projects that were not asked during the meeting.

Adjournment *(Webex 04:23:23)*

Legacy Finance Committee:
HF4124 Conference Committee Comparison

						FY 2024	FY 2025	FY 24-25		FY 2024	FY 2025	FY 24-25	
124	**Article 2: Clean Water Fund**												
125						House				Senate/CC Agreement			
126						FY 2024	FY 2025	FY 24-25		FY 2024	FY 2025	FY 24-25	
127	**Sect. 3**	**Department of Agriculture**											
128		Nitrate in Groundwater	MDA			-	1,000	1,000		-	1,000	1,000	-
129		AgBMP Loan Program	MDA			-	3,402	3,402		-	3,402	3,402	-
130		AgBMP Loan Program SE Minnesota Focus	MDA			-	[3,000]	[3,000]		-	[3,000]	[3,000]	
131		**Subtotal**				**-**	**4,402**	**4,402**		**-**	**4,402**	**4,402**	-
132	**Sect. 4**	**Pollution Control Agency**											
133		River and Lake Monitoring and Assessment				-	326	326		-	326	326	-
134		Enhanced County Inspections/SSTS Corrective Actions	MPCA			-	2,000	2,000		-	1,950	1,950	*(50)*
135		Chloride Reduction Program	MPCA			-	1,000	1,000		-	1,000	1,000	-
136		Continous Nitrate Sensor Network	MPCA			-	2,000	2,000		-	2,000	2,000	-
138		Friends of the Minnesota Valley River Watch	MPCA								50	50	*50*
139		**Subtotal**				**-**	**5,326**	**5,326**		**-**	**5,326**	**5,326**	-
140	**Sect. 5**	**Department of Natural Resources**											
141		Fish Contamination Assessment	DNR			-	90	90		-	90	90	-
142		**Subtotal**				**-**	**90**	**90**		**-**	**90**	**90**	-
143	**Sect. 6**	**Board of Water and Soil Resources**											
144		Working Lands Floodplain Easements	BWSR			-	3,434	3,434		-	3,434	3,434	-
145		Critical Shore land Protection-Permanent Conservation Easements	BWSR			-	4,000	4,000		-	4,000	4,000	-
146		Watershed Partners Legacy Grants Program	BWSR			-	2,000	2,000		-	2,000	2,000	-
147		-Targeted Rain Garden Grant Program				-	[500]	[500]		-	[500]	[500]	
148		Great Lakes Restoration Initiative LAMP Match	BWSR			-	1,000	1,000		-	1,000	1,000	-
149		RIM Conservation Easements	BWSR			-	1,000	1,000		-	1,000	1,000	-
150		**Subtotal**				**-**	**11,434**	**11,434**		**-**	**11,434**	**11,434**	-
151	**Sect. 7**	**Minnesota Department of Health**											
152		Drinking Water Contaminants of Emerging Concern Program	MDH			-	384	384		-	384	384	-
153		Southeast Minnesota Nitrate Response	MDH			-	2,790	2,790		-	2,790	2,790	-
156		**Subtotal**				**-**	**3,174**	**3,174**		**-**	**3,174**	**3,174**	-
157	**Sect. 9**	**University of Minnesota**											
158		Storm water BMP Performance Evaluation and Technology Transfer	UMN			-	1,000	1,000		-	1,000	1,000	-
160		**Subtotal**				**-**	**1,000**	**1,000**		**-**	**1,000**	**1,000**	-
161		**TOTAL**				**-**	**25,426**	**25,426**		**-**	**25,426**	**25,426**	-
162													-
163		**Amount Available to Appropriate with 5% Reserve (February 2024 Forecast)**				-	25,426	25,426		-	25,426	25,426	-
164		**Difference**				-	-	-		-	-	-	-
165													
166	**Article 3: Parks and Trails Fund**												
167						House				Senate/CC Agreement			

Clean Water Council
Policy Committee Meeting
May 15, 2024

Legislative Highlights

All relevant finance bills have been passed off the floor. Some have finished conference committee and others are still there.

Omnibus Legacy Finance Bill (HF4124)

The Clean Water Council's recommendations are 99.8 percent intact for a supplemental appropriation of $25 million. (See attached spreadsheet.) The line item amounts are the same but there is some additional appropriation rider language for the Water Partners Legacy grant program. The conference committee took $50,000 out of the SSTS program for the Minnesota Valley River Watch program. The House re-passed the bill as amended by conference on Friday and the Senate did the same on Monday. Once the bill is "enrolled" by the House and Senate it is presented to the Governor, who has three days (except Sunday) to sign the bill. If the bill is enrolled Tuesday or Wednesday, the Governor could sign it by the end of session. Otherwise, he has more time to sign all the bills after session.

Omnibus Environment and Natural Resources Finance Bill (HF3911)

House provisions of interest include:

- Rulemaking for EIS for Large Animal Projects Required (HF4698 Pursell)
- Report on State Agency Salt Purchases (HF4624 Hansen)
- Report on State Agency Nitrogen Fertilizer Purchases (HF4625 Hansen)
- PFAS in Biosolid Agricultural Fertilizer Report (HF4135 Hansen)
- Water Quality Monitoring in State Fish Hatcheries (HF4214 Hansen)
- Planting Corn on State lands Prohibited (HF3624 Hansen)
- Subsurface Drain Tile Disclosure and Additional Drainage Work (HF 3389 Pursell)

Senate provisions of interest include:

- SF 3527 Manure Management Grants (Gustafson) for $2 million in FY25
- SF 3957 Keep It Clean Grants (Putnam) at $1.418 million in FY25.
- SF 4850 Report on State Agency Salt Purchases (Morrison)
- $300,000 for Red River Phosphorus Management
- $12 million additional to soil and water conservation districts

Omnibus Agriculture Finance Bill (SF4942)

The bill has only just gone to conference committee and agreed on some policy items on May 15th.

House provisions of interest include:

- Adds to existing soil health financial assistance grants ($300,000 from the General Fund to MN Department of Agriculture) and requires that any recipient of these funds should get certified by the Minnesota Agricultural Water Quality Certification Program (MAWQCP) within two years.
- Funds home water treatment for nitrate ($3,072,000 from the General Fund to the MN Department of Agriculture)
- Creates a Private Well Drinking Water Assistance Program and funds it at $223,000 to the MN Department of Health in FY25
- Moves the $0.40 per ton fee on fertilizer that supports the agricultural fertilizer research and education account to the Private Well Drinking Water Assistance Program starting July 1, 2025.

Senate provisions of interest include:

- Extends the expiration of the Minnesota Agricultural Fertilizer Research and Education Council until June 30, 2035.
- Supports Nitrate Treatment - Reverse Osmosis Systems in SE MN counties for $750,000.
- Supports $2 million to address nitrate contamination in private wells in SE MN counties through the Minnesota Department of Health.
- Adds $500,000 for soil health financial assistance grants.

Omnibus Tax Bill

- The Senate version includes an additional $2 million in support for soil and water conservation districts.

Capital Investment Bills

There are two bills in each house, neither of which has come up for a floor vote. One is a bill that uses general obligation (GO) bonds and requires a supermajority and therefore bipartisan support. The other uses general fund money and only requires a majority vote. A bonding bill (which includes plenty of water infrastructure funding) is generally the last piece of the puzzle to fall in place by the end of session, since it requires a bipartisan vote. The House bills have reached the floor but is not scheduled for a vote yet. The Senate bills have not yet been finalized in committee.

House provisions of interest include:

- (MPCA) $8 million for statewide drinking water contamination mitigation (for private wells around a few contaminated sites with 1,4-dioxane and PFAS)
- (BWSR) $4 million for permanent easements through the Conservation Reserve Enhancement Program (CREP)
- (Met Council) $10 million for inflow and infiltration grants
- (MDH) $6 million for Secondary Sources of Drinking Water Grant Program, plus $100,000 from the General Fund (cash, not bonding)

    - This is a new program (not in the Governor's request) designed to provide backup drinking water wells for small communities under 3,300 people that only have one well and meet environmental justice criteria.
- (PFA) $39 million for state match for federal grants to state revolving loan programs
- (PFA) $17.742 million in drinking water grants through the Water Infrastructure Funding Program and $17,742 for wastewater projects
- (PFA) $18,527,000 for Point Source Implementation Grant (PSIG) program
- (PFA) $7 million for Emerging Contaminants Grant Program

Senate provisions of interest include:

The Senate has not put its final bill forward in committee.

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

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)
- **The Future of Minnesota Drinking Water: A Framework for Managing Risk (PDF)** (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)
- Clean River Partners: **State Drinking Water Action 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 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. For FY 26-27, we intend to expand the scope and impact of this program to support and implement integrated water planning projects that address water sustainability across the entire water cycle with a focus on preventing degradation of both surface and groundwater resources while supporting sustainable water resources for the region.

Webpage

Water Supply Sustainability Program - Metropolitan Council (metrocouncil.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 protect and enhance surface water quality; to ensure uninterrupted economic growth and prosperity; to avoid conflict over water sustainability; and to foster collaboration to address regional water 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, GWMAs, and highly vulnerable DWSMAs.
- 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.)

The success indicators are increased number of communities that have received technical support from the Council; that projects are implemented based on the subregional input; achievement of intended long-term outcomes to sustainably use groundwater in a reliable approach with other available resources and reduction of groundwater use and impacts to surface waters 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 (a total of 23 engagements), 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 plan to continue to fund water supply sustainability work but also expand the program to cover water sustainability work which may include additional types of sustainability support. We will be using input from the issues, solutions and needed projects identified by the work groups for the 7 subregions in addition to input from MAWSAC, MAWSAC TAC, and our Water Policy Plan Advisory Committee as we make decisions about projects to fund. Expanding the program to a water sustainability program will allow us to fund a wider array of projects and solutions that are tied to overall water sustainability. An example of new work that could be funded with this minor change could be a program to fund projects aimed at helping to implement water reuse.

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 and partners through input from our subregional planning process as well as for projects scoped by MAWSAC, MAWSAC TAC, and our Water Policy Plan Advisory Group. 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

Chloride Reduction Efforts

MPCA	Program Number: 38
Program Contact Name: **Dave Benke**	Phone: **651-757-2221**
Contact E-mail Address: **david.j.benke@state.mn.us**	
Person filling out form: **Brooke Asleson**	Phone: **651-757-2205**
Person filling out form e-mail address **brooke.asleson@state.mn.us**	

Purpose

Technical assistance and grants to public entities to help meet chloride TMDL requirements.

Webpage

Chloride | Minnesota Pollution Control Agency (state.mn.us)

Smart Salting training | 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.

This program offers assistance, grants, training, and education and outreach to communities, permittees, and other organizations to reduce chloride at the source and protect water quality. Chloride is a permanent pollutant that does not breakdown over time, therefore source reduction is the best and most cost effective option for protecting surface waters and groundwater from chloride pollution.

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	
FY16-17	
FY18-19	
FY20-21	$500,000
FY22-23	$520,000
FY24-25	$1,300,000
TOTAL APPROPRIATED TO DATE	**$2,320,000**

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.)

Reductions in chloride will be gained through administering the Smart Salting Training & Certification program in both the public and private sector. We are able to certify roughly 1,200 individuals each year and provide additional annual training and education to many more through our refresher trainings, workshops and educational materials.

These funds will also reduce chloride entering our waters from all sources of chloride through technical and financial assistance to communities to work with residents, businesses, industrial and commercial facilities for implementing chloride reduction activities. Technical assistance is targeted to permit holders but open to any who request it. The chloride reduction grant program aims to offer grants to 4-5 communities each biennium but is dependent on the available funds and amount requested by each community.

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.

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.

Smart Salting Training program	2021 (CWF)	2022 (CWF & ENRTF)	2023 (CWF & ENRTF)	Cumulative
# certification trainings	40	48	43	131
total individuals certified	1267	1410	1246	**3923**
# trainings/workshops/refreshers	40	57	56	**153**

In FY20-21 the first Chloride Reduction grant in the amount of $200,000 was awarded to Fortin Consulting (acquired by Bolton & Menck during grant) who partnered with the cities of Altura, Avon, and Medina to develop and manage a water softening rebate program for their communities.

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	1.0
FY20-21	1.0
FY22-23	1.0
FY24-25	
FY26-27	

FY26-27 CLEAN WATER FUND PROPOSAL

National Pollutant Discharge Elimination Wastewater/Stormwater TMDL Implementation	
MPCA	Program Number: 39
Program Contact Name: **Ryan Anderson** **Suzanne Baumann**	Phone: **651-757-2222** **651-757-2798**
Contact E-mail Address: **ryan.anderson@state.mn.us**, **suzanne.baumann@state.mn.us**	
Person filling out form: **Ryan Anderson** **Suzanne Baumann**	Phone: **651-757-2222** **651-757-2798**
Person filling out form e-mail address: **ryan.anderson@state.mn.us**, **suzanne.baumann@state.mn.us**	

Purpose

Funding for these program areas supports point source implementation work, notably: integration of the watershed approach into NPDES wastewater permitting; incorporation of both stormwater and wastewater wasteload allocations into TMDLs where applicable; incorporation of stormwater and wastewater considerations into WRAPS; and creating opportunities for pollutant trading. Funding also supports technical assistance for permittees in both wastewater and stormwater permitting programs, particularly municipalities experiencing difficulties understanding and implementing the requirements of the municipal stormwater and wastewater programs.

Webpage

Municipal stormwater (MS4) | Minnesota Pollution Control Agency (state.mn.us)

Water quality trading | Minnesota Pollution Control Agency (state.mn.us)

Minnesota Stormwater Manual (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.

Stormwater and wastewater are significant contributors of pollutants to impaired waters. The MPCA oversees approximately 1,400 NPDES wastewater and 3,810 NPDES stormwater permits under the NPDES program, as enabled by the federal Clean Water Act. The Stormwater Program is implemented primarily through general permits, including the Municipal Separate Storm Sewer System (MS4) General Permit. Wastewater and stormwater NPDES permits must be written to include requirements consistent with applicable waste load allocations (WLA) included in Total Maximum Daily Loads (TMDLs).

The accelerated completion of TMDLs and Watershed Restoration and Protection Strategies (WRAPS) has dramatically increased the available information that must be considered during issuance of wastewater and stormwater permits. Proper permitting and management of

stormwater and wastewater is crucial to the successful implementation of TMDL requirements. A proactive and coordinated approach by the MPCA's wastewater and watershed programs ensures consistency among wastewater permits and TMDLs to achieve timely implementation of pollutant reductions by point sources. Significant staffing resources are needed to ensure that stormwater and wastewater are properly represented and addressed during the development and implementation of TMDLs and WRAPS.

Also, the MPCA has received comments from wastewater and MS4 permittees, industry groups, local partners, and environmental advocates stating that there is a significant need for assistance in implementing permit requirements and supporting pollutant trading. Requests include creation of form templates, checklists, guidance documents, support in identifying and developing water quality trading proposals, and assistance visits. These activities ensure technical scientific information is more easily and efficiently implemented by our permittees. After multiple permit cycles and traditional inspection and assistance activities, MPCA staff experience and program data demonstrate that many MS4s permittees are not meeting some of the permit requirements, which reinforces the need for continued, targeted assistance. In addition, implementation of permit requirements to meet TMDL wasteload allocations can be costly to communities. Local partners (wastewater and stormwater permittees and local implementation organizations like Soil and Water Conservation Districts) have voiced the need for support in identifying and developing water quality trading projects that achieve the point and nonpoint source pollutant reduction needs in a watershed. These water quality trading projects can be more cost-effective for permittees and local partners, and provide substantial water quality benefits within the watershed.

Notably, these funds have recently allowed us to hire a Water Quality Trading Program Coordinator to provide the support needed to utilize the science and priorities identified within Minnesota's Watershed Framework efforts to identify opportunities to work across sectors and achieve the water quality goals of a watershed faster and more economically. The position is working to connect point source with nonpoint source partners and supporting economic growth by allowing expansions while making net pollutant reductions. The project dollars will also ensure continued development of assistance, guidance and design materials, along with customized materials for stormwater permittees.

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	$1,800,000
FY16-17	$1,800,000
FY18-19	$1,800,000
FY20-21	$1,800,000
FY22-23	$1,800,000
FY24-25	$3,000,000
TOTAL APPROPRIATED TO DATE	**$12,000,000**

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.
    - Strategy: Enhance compliance for regulatory programs to accelerate progress

- 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.

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.)

NPDES wastewater/stormwater TMDL implementation funding supports several staff in the MPCA's wastewater and stormwater programs. These staff are responsible for providing input into the development of WRAPS and TMDLs, accounting for the inclusion of point source contributions, and ensuring that wasteload allocations are included in wastewater and stormwater permits. Staff also facilitate water pollutant trades in permits (point to point source and point to nonpoint source trades), the development of tools to better analyze the relationship between point sources and surface waters, and create connections with those in the market for a trade and those with the potential to make reductions. As an example of the work of this team, private sector watershed professionals make extensive use of the wastewater monitoring data the MPCA makes available in a Tableau data browser for development of TMDLs and WRAPS.

Funding also supports the continued development of the Stormwater Manual that is routinely used by both regulated and unregulated communities to properly manage stormwater. Each appropriation adds to the material in the Manual, and it is often referenced by stormwater professionals as a critical tool and source of information. Often the projects for a given FY seek to convert research into guidance for permittees or to develop credit programs to allow permittees to achieve compliance with permit conditions flexibly. The work chosen for a given year is guided by stakeholder input. Work selected for FY26-27 will likely be related to assisting MS4 permittees with requirements related to implementation of TMDLs in stormwater permits to ensure pollutant reductions from stormwater are achieved. In addition, work will also build

upon efforts by the Health Department related to the capture and reuse of stormwater, as well as proper management of wastes removed from stormwater BMPs. Past accomplishments include developing self-audit materials for permittees, a digital document library for easy online access to information, guidance on stormwater pond assessments, case studies for MS4 guidance, a concept for allowing credits for stormwater sweeping, guidance on green infrastructure, and updating both the MS4 and TMDL Toolkits.

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.

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.

State Employees

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

FY10-11	
FY12-13	5.2
FY14-15	6.5
FY16-17	8.0
FY18-19	6.0
FY20-21	6.0
FY22-23	7.0
FY24-25	7.75
FY26-27	

FY26-27 CLEAN WATER FUND PROPOSAL

Point Source Implementation Grant (PSIG) Program

Public Facilities Authority	Program Number: 7
Program Contact Name: **Jeff Freeman**	Phone: **651-259-7465**
Contact E-mail Address: **jeff.freeman@state.mn.us**	
Person filling out form: **Jeff Freeman**	Phone: **651-259-7465**
Person filling out form e-mail address **jeff.freeman@state.mn.us**	

Purpose

The PSIG program provides grants to help cities upgrade water treatment facilities to reduce discharge of nutrients and other pollutants to meet TMDL wasteload allocations and other regulatory requirements.

Webpage

Point Source Implementation Grant Program / Public Facilities Authority (mn.gov)

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.

Through the water management framework, impaired and threatened water bodies are identified and restoration and protection strategies are developed to guide point source and nonpoint source implementation activities. The PSIG program provides grants to help municipalities construct wastewater, stormwater, and drinking water treatment projects when the MPCA determines that higher levels of treatment are necessary to meet water quality goals. These include projects to meet Total Maximum Daily Load (TMDL) wasteload allocation requirements and water quality-based effluent limits for phosphorus, chlorides, and other pollutants. MPCA reviews projects for eligibility and ranks them on the annual Project Priority List.

PRIOR APPROPRIATIONS	
FY10-11	$30,200,000
FY12-13	$30,920,000
FY14-15	$18,000,000
FY16-17	$18,000,000
FY18-19	$15,750,000
FY20-21	$18,000,000
FY22-23	$15,936,000
FY24-25	$16,500,000
TOTAL APPROPRIATED TO DATE	**$163,306,0000**

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 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: Enhance compliance for regulatory programs to accelerate progress.
  - Action: Support wastewater treatment plants and stormwater projects seeking to meet tighter Total Maximum Daily Load requirements.
    - Measure: Adequate support of Point Source Implementation Grant (PSIG) program.

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.)

Projects are designed to achieve specific effluent limits and wasteload reductions, and discharges are monitored to verify compliance. Since 2010, Clean Water Fund dollars have helped 108 municipalities implement wastewater and stormwater projects, including 48 wastewater projects to reduce phosphorus discharges to 1 milligram per liter or less, resulting in a total phosphorus reduction of more than 139,000 pounds per year. Additional projects have reduced discharges of nitrogen, chlorides, and mercury.

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.

Since 2017, the PSIG program has also received funding from state general obligation bond appropriations. The Governor's bonding recommendations for 2020 include $75 million for the PSIG program.

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 funding is passed through to local units of government for construction projects. Projects must be ranked on the MPCA project priority list. The PFA accepts applications in July each year. Grants are not awarded until projects are approved and certified by the MPCA and ready to start construction.

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	
FY26-27	

FY26-27 CLEAN WATER FUND PROPOSAL

Small Community Wastewater Treatment Program

Public Facilities Authority	Program Number: 41
Program Contact Name: **Jeff Freeman**	Phone: **651-259-7465**
Contact E-mail Address: **jeff.freeman@state.mn.us**	
Person filling out form: **Jeff Freeman**	Phone: **651-259-7465**
Person filling out form e-mail address **jeff.freeman@state.mn.us**	

Purpose

The Small Community program provides technical assistance grants and construction loans and grants to help small unsewered communities replace failing septic systems with community subsurface treatment systems.

Webpage

Small Community Wastewater Treatment Program / Public Facilities Authority (mn.gov)

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.

Minnesota has many areas with significant numbers of noncomplying septic systems in close proximity that are polluting surface waters and groundwater. Local governments interested in community solutions submit projects to MPCA for ranking on the Project Priority List based on the density and condition of existing systems. The program provides technical assistance grants to help communities evaluate potential alternatives and prepare a community assessment report which is submitted for review to MPCA, and construction financing (loans and grants) for projects when they are ready to proceed.

PRIOR APPROPRIATIONS	
FY10-11	$2,500,000
FY12-13	$2,500,000
FY14-15	$4,000,000
FY16-17	$500,000
FY18-19	$250,000
FY20-21	$250,000
FY22-23	$200,000
FY24-25	$200,000
TOTAL APPROPRIATED TO DATE	**$10,400,000**

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 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. o Strategy: Enhance compliance for regulatory programs to accelerate progress.

o Action: Support small unsewered or under-sewered communities for long-term wastewater solutions.

- Measure: Small or no backlog for Small Community Wastewater Treatment.

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 2010, 34 unsewered communities have received technical assistance grants (max $60,000 each) to conduct site assessments and evaluate potential wastewater treatment alternatives. Six communities received construction funds to build publicly-owned soil-based systems. Many others used other funding sources for regionalization or private system fixes.

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.

No.

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 funding is passed through to local units of government. Projects must be ranked on the MPCA project priority list.

Could you include a list of communities that have received support from the program?

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	
FY26-27	

FY26-27 CLEAN WATER FUND PROPOSAL

Aquifer Monitoring for Water Supply Planning

DNR	Program Number: 18
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 is developing and maintaining a statewide network of groundwater level observation wells. Work includes data collection and management, analysis, modeling, and work with stakeholders to ensure groundwater is managed sustainably, including small communities to develop water supply plans and developing Groundwater Restoration and Protection Strategies (GRAPS).

Webpage

Cooperative Groundwater Monitoring Program | Minnesota DNR (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 DNR manages Minnesota's observation well network to collect critical aquifer level data and flow dynamics needed to protect drinking water, water supplies, and natural resources that depend on groundwater. Includes analysis, modeling, and work with stakeholders to address sustainability management and planning. In Minnesota, growth in demand for water resources is outpacing population growth. As water use increases, planning for adequate water supply is crucial to preventing water shortages and protecting lakes, streams, and wetlands - especially sensitive groundwater dependent trout streams and calcareous fens.

Because groundwater is below the ground surface, we need long-term data collection from groundwater observation wells to understand trends in groundwater levels. We then relate the trend data to precipitation, land use changes, groundwater use, to evaluate if that use is sustainable over time. Long-term data sets are essential to understanding and properly managing this valuable resource.

The DNR's network of 1,254~~125~~ groundwater level observation wells provides critical information on aquifer levels, flow, and surface water/groundwater interactions that is essential for protecting drinking water, water supplies and water resources that are fed by groundwater.

In addition to maintaining the observation well network, we work with state and local partners to cooperatively manage and share groundwater level data through a new cooperative groundwater monitoring website. We also do modeling, aquifer tests, and other technical analysis to better understand how aquifers are depleted and replenished in response to human use and climate. The DNR has recently been analyzing groundwater/surface water interactions and developing groundwater sustainability thresholds to ensure groundwater pumping does not negatively impact water resources that depend on groundwater.

PRIOR APPROPRIATIONS	
FY10-11	$1,100,000
FY12-13	$3,000,000
FY14-15	$2,750,000
FY16-17	$2,750,000
FY18-19	$2,750,000
FY20-21	$4,150,000
FY22-23	$3,700,000
FY24-25	$4,000,000
TOTAL APPROPRIATED TO DATE	**$24,200,000**

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.

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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.)

Outcome: Sustainable water supply that meets the needs of current and future generations.

Outputs: Installing about 50 new monitoring wells annually. Maintaining high quality water level data for the entire network available through the DNR website. Completion of GRAPS in support One Watershed One Plan. Completion of groundwater models.

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.

These efforts are also supported by state general fund and the water management account.

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	3.0
FY12-13	9.0
FY14-15	12.0
FY16-17	11.3
FY18-19	11.5
FY20-21	11.0
FY22-23	11.0
FY24-25	11.0
FY26-27	11.0

FY26-27 CLEAN WATER FUND PROPOSAL

Fish Contamination Assessment

DNR	Program Number: 6
Program Contact Name: **Isaiah Tolo**	Phone: **651-356-4236**
Contact E-mail Address: **isaiah.tolo@state.mn.us**	
Person filling out form: **Jason Moekel**	Phone:
Person filling out form e-mail address Jason.moeckel@state.mn.us	

Purpose

This program (Fish Contaminants Monitoring Program) analyzes fish tissue to detect mercury and other contaminants. The information is used to determine whether lakes are impaired for these contaminants (MPCA), and in establishing fish consumption advisories (MDH).

Webpage

Fish Contamination Assessment | Minnesota's Legacy (mn.gov)

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.

Clean water funding is used to significantly increase the number of lakes and rivers that are assessed for mercury contamination on an annual basis. From FY24, funding is used to conduct annual monitoring of PFAS in fish tissues. PFOS contamination appears to be pervasive across Minnesota. PFOS doesn't follow typical bioaccumulation patterns observed for mercury and PCBs. Fish are collected during DNR Fisheries' lake surveys, processed by the DNR Fish Health Laboratory (not paid for by this appropriation), and analyzed for contaminants. Funding is used to pay for laboratory analysis of fish tissue for contaminants (analysis is done by the Minnesota Department of Agriculture and Minnesota Department of Health analytical laboratories or by contracts with external laboratories). The data are shared with the Minnesota Pollution Control Agency and the Minnesota Department of Health. Long-term trends are summarized in the Clean Water Fund Performance Report.

While necessary, improvement of the current program with the addition of PFAS assessment has increased the complexity of the FCMP's process, particularly for the DNR's role of fish tissue processing, and project management.

PRIOR APPROPRIATIONS	
FY10-11	$270,000
FY12-13	$270,000
FY14-15	$270,000
FY16-17	$270,000

FY18-19	$270,000
FY20-21	$270,000
FY22-23	$350,000
FY24-25	*$910,000
TOTAL APPROPRIATED TO DATE	**$1,970,000**

*FY25 request includes an additional $90K for funding 1 FTE for the DNR's Fish Health Laboratory

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

[Don't fill out the FY26-27 until you receive agency approval. We will update the form at that time.]

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.

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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.)

Annually testing of ~120 waterbodies for mercury/PCB and ~25 waterbodies for PFAS levels in fish. Maintaining and revising fish consumption advice.

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.

These efforts are also supported by the Game and Fish Fund and state general 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	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	1.0 (requested for FY25)
FY26-27	

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FY26-27 CLEAN WATER FUND PROPOSAL

Lake Index of Biological Integrity

DNR	Program Number: 6
Program Contact Name: **Jacquelyn Bacigalupi**	Phone: **218-203-4315**
Contact E-mail Address: **Jacquelyn.bacigalupi@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

This program supports MPCA's water quality assessments in lakes with measurements of the biological integrity of fish populations. "Biological integrity" refers to the types and abundance of species that are found in a lake, and how the communities vary from what is expected in a high-quality lake for a given region of the state.

Webpage

Lake Index of Biological Integrity | Minnesota DNR (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 Index of Biological Integrity (IBI) is used to identify and help prioritize lakes for protection and restoration. It is an analytical tool that can identify water pollution, connectivity, or habitat problems based on the type and abundance of certain species in a biological community and how they vary from what is expected for a high-quality lake of that type. The IBI gives a holistic picture of lake condition, integrating numerous environmental stressors over time and complementing other traditional water quality measurements that represent a snapshot in time (phosphorus, water clarity, toxic contaminants). Developing an IBI involves sampling a wide range of lakes, from high-quality systems to those with significant water quality and habitat impacts, plus detailed statistical analyses. A key element of this effort is collecting information about the entire fish community, including rarely sampled non-game fish that are often more sensitive to watershed and shoreline disturbance.

Fishery managers traditionally have not sampled entire fish communities, but with the clean water funding, DNR added Fish IBI sampling. DNR Biologists complete about 135 Fish IBI surveys and 75 detailed habitat surveys on lakes annually, following the MPCA Intensive Watershed Monitoring schedule. Lakes are selected for surveys and assessment based on condition, size, local prioritization, and to be representative of watershed condition and of environmental justice areas. The DNR participates in the MPCA watershed assessment process, providing Fish IBI data and interpretation to identify impaired lakes, those meeting standards, and lakes of exceptional biological quality. In addition, the DNR is providing an analysis of the stressors

contributing to impairment on lakes listed as impaired or vulnerable to impairment based on the Fish IBI, using a rigorous stressor identification process. While lakes within forested watersheds that are surrounded predominantly by natural shorelines often support healthy fish communities, those within agricultural or developed watersheds with extensive shoreline development are more likely to contain fish communities that are impaired or vulnerable to impairment. Measures of these and other stressors such as altered interspecific competition, temperature regime changes, and decreased dissolved oxygen are evaluated and summarized in watershed-specific stressor identification reports. Information from those reports is integrated into watershed restoration and protection strategies and comprehensive watershed management plans, to guide future implementation efforts and ultimately improve fish community health.

The DNR Fish IBI Program also worked with MPCA scientists recently to expand the scope of biological assessments to include coldwater fishes and their habitats. Additional standards were developed for lakes that support coldwater fish species, and the agencies are progressing towards implementing the standards. Coldwater lakes are an important resource in Minnesota that provide a variety of beneficial uses. A major difference in the ecological requirements of coldwater species compared to cool and warm water species is the need for habitat with cooler temperatures and higher oxygen levels, therefore the standards are developed specifically for lakes with such species and habitat potential. These coldwater assessments will include additional monitoring, reporting, and stressor identification moving forward.

The DNR Fish IBI program is also expanding the geographical scope and developing tools to describe fish communities on lakes within the Canadian Shield part of the state, including lakes within the Lake Superior watersheds. Current FIBI tools were developed for lakes in the Mississippi, Red, St. Croix, Rainy, and Missouri river basins.

PRIOR APPROPRIATIONS	
FY10-11	$1,320,000
FY12-13	$2,300,000
FY14-15	$2,600,000
FY16-17	$2,600,000
FY18-19	$2,500,000
FY20-21	$2,500,000
FY22-23	$2,000,000
FY24-25	$2,900,000
TOTAL APPROPRIATED TO DATE	**$18,720,000**

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

[Don't fill out the FY26-27 until you receive agency approval. We will update the form at that time.]

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.

Primarily goals 1 and 2.

Goal 1: Monitor, assess, and characterize Minnesota's surface waters. Strategy: Maintain consistent funding for a statewide monitoring system.

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, and 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.)

Four different Fish IBIs were developed to represent a variety of Minnesota lakes. Nearly 800 lakes have been assessed for fish, with approximately 77% of lakes fully supporting aquatic life use based on the Fish IBI. Stressor investigations identified eutrophication and physical habitat alterations as the most common stressors to fish communities in impaired and vulnerable lakes. Approximately 17% of lakes contain exceptional fish communities that can be targeted for protection with more stringent water quality standards and voluntary protection efforts. Over 700 coldwater lakes have been identified, and rulemaking, monitoring, and several watershed assessments are in process to implement water quality standards to protect coldwater fishes and their habitats.

For more information about the percentages, and assessment information by watershed, see our website: https://www.dnr.state.mn.us/waters/surfacewater_section/lake_ibi/index.html

The Fish IBI program fits into the biennial Performance Report primarily under surface water health measures: 1) rate of impairment/unimpairment of surface water statewide and by watershed, and 2) changes over time in key water quality parameters for lakes and streams.

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.

These efforts are also partially supported by the Game and Fish Fund in that selective components collected as part of game fish management surveys are included in Fish IBI

calculations. However, the two additional survey components needed to target nongame fish, calculate a Fish IBI, and complete stressor identification are not eligible for game and fish funds. In addition, typically multiple surveys are considered when making a biological assessment of a lake, so data requirements are more rigorous than used in standard game fish management surveys. Biological community information collected and summarized by the DNR Fish IBI program have been incorporated into the MPCA watershed assessment process, which ultimately aims to guide clean water planning, restoration, and protection efforts for lakes in each watershed.

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.

The numbers provided are full time equivalent, as many of the employees are hired June – August only.

FY10-11	10
FY12-13	13
FY14-15	13
FY16-17	15.5
FY18-19	14
FY20-21	11
FY22-23	11
FY24-25	12.5
FY26-27	12.5

FY26-27 CLEAN WATER FUND PROPOSAL

Buffer Map Maintenance

DNR	Program Number: 76
Program Contact Name: **Jenifer Sorensen**	Phone: **651-259-5725**
Contact E-mail Address: **jenifer.sorensen@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

Develop, maintain and update a buffer protection map that identifies where 50 ft. (avg. width) buffers adjacent to public waters and 16.5 ft. buffers adjacent to public ditches as required in MS 103F.48.

Webpage

Buffer Mapping Project | Minnesota DNR (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 DNR's role in Minnesota's new buffer law is to produce maps of public waters and ditch systems that require permanent vegetation buffers. The DNR produced the initial buffer protection map in July 2016 and has produced 3 updates reflecting over 2,500 changes that resulted from over 4,000 comments from DNR staff, SWCDs and local governments.

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	
FY16-17	$650,000
FY18-19	$200,000
FY20-21	$200,000
FY22-23	$50,000
FY24-25	$50,000
TOTAL APPROPRIATED TO DATE	**$1,150,000**

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

[Don't fill out the FY26-27 until you receive agency approval. We will update the form at that time.]

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.

The buffer protection map is part of a statewide program to protect and restore surface waters and aligns with Goal 3 under the Surface Water Protection and Restoration Vision in the Clean Water Council's 2024 – 2028 Strategic Plan.

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.)

An updated buffer protection map identifying where buffers are required.

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.

General fund, Water Management Account and Water Recreation Account.

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	1.2
FY18-19	0.5
FY20-21	0.2
FY22-23	0.2
FY24-25	0.2
FY26-27	

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FY26-27 CLEAN WATER FUND PROPOSAL

Stream Flow Monitoring

DNR	Program Number: 76
Program Contact Name: **Joy Loughry**	Phone: **651-259-5686**
Contact E-mail Address: **joy.loughry@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

This program collects stream flow data, which is used to analyze total runoff, flood flows, calculate pollutant loads for MPCA's water quality assessments, and sample bedload at select stations to analyze sediment transport in streams.

Webpage

Cooperative Stream Gaging (CSG) | Minnesota DNR (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.

Clean water funds have allowed the DNR to expand a network of stream gages that are critical for MPCA's water quality assessments. Funds are used to install/upgrade and calibrate stream gages and to collect, compile, analyze and distribute data collected at gage stations. The Cooperative Stream Gaging Website provides a portal for agencies and the public to see stream flow data, site photos, water quality information and links to other information. In addition, a Monthly Hydrologic Conditions Report provides general trend information on water resources using climatic data, lake and river gages, and groundwater monitoring information.

The stream flow information collected from these gage stations is used by the Minnesota Pollution Control Agency to calculate pollution loads for Total Maximum Daily Loads. They are also used to evaluate trends in base flow conditions, determine the frequency and magnitude of floods and low flows, assist in assessing changes in land use and watershed conditions and the potential effects of climate change. This information is used to inform comprehensive watershed plans (1W1P) and helps set goals and objectives for implementation efforts.

PRIOR APPROPRIATIONS	
FY10-11	$1,500,000
FY12-13	$3,700,000
FY14-15	$4,000,000
FY16-17	$4,000,000
FY18-19	$3,900,000

FY20-21	$4,000,000
FY22-23	$4,000,000
FY24-25	$5,100,000
TOTAL APPROPRIATED TO DATE	**$30,200,000**

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.

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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.)

Continuously monitored flow at 147 sites. The program has achieved its goal for establishing long term monitoring sites. Current efforts are to maintain sites, service and replace equipment as needed, serve the data through a web application and support analysis of data for use by others.

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.

Other state funding sources are used to maintain previously established gage stations. CWF supplements that activity.

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	5.0
FY12-13	7.0
FY14-15	14.0
FY16-17	16.1
FY18-19	15.0
FY20-21	15.0
FY22-23	15.0
FY24-25	15.0
FY26-27	

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FY26-27 CLEAN WATER FUND PROPOSAL

Monitoring for Pesticides in Surface Water and Groundwater

MDA	Program Number: 4
Program Contact Name: **David Tollefson**	Phone: **507-206-2882**
Contact E-mail Address: **david.tollefson@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 ongoing monitoring using clean water funded laboratory instruments which provide increased capability and greater capacity for pesticide monitoring. Clean Water funding has allowed the MDA to increase the number of detectable pesticides, increase the sensitivity of detection of certain pesticides, and increase the overall number of samples that can be analyzed on an annual basis.

Webpage

Pesticide Monitoring: Increased Capacity and Capability | Minnesota Department of Agriculture

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.

Pesticide monitoring data is used to identify compounds and/or places where concentrations may exceed established water quality benchmarks, guidance values, and/or standards. This data is also used to identify trends regarding detection frequency and concentration of specific agricultural chemicals and to develop and evaluate the effectiveness of best management practices (BMPs) for specific compounds.

PRIOR APPROPRIATIONS	
FY10-11	$675,000
FY12-13	$700,000
FY14-15	$700,000
FY16-17	$700,000
FY18-19	$700,000
FY20-21	$700,000
FY22-23	$700,000
FY24-25	$700,000
TOTAL APPROPRIATED TO DATE	**$5,575,000**

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

[Don't fill out the FY26-27 until you receive agency approval. We will update the form at that time.]

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: Monitor ambient groundwater quality throughout the state
Action: Characterize nitrate and pesticide contamination in vulnerable aquifers.
Action: Reduce risk of pesticide contamination in groundwater

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

Goal 1: Monitor, assess, and characterize Minnesota's surface waters.

Action: Continue to monitor and assess on 10-year cycle and for emerging contaminants.

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.)

Clean Water funding has allowed the MDA to increase the number of detectable pesticides, increase the sensitivity of detection of certain pesticides and increase the overall number of samples that can be analyzed on an annual basis. Those samples include statewide pesticide assessments of municipal drinking water wells, lakes, rivers and streams, and wetlands. Data are used to identify and characterize pesticide related impairments and to identify pesticides of concern in Minnesota. Data are also used to evaluate surface and groundwater quality as compared to drinking water standards.

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, the MDA will use these funds to enhance the impacts of dedicated funds from the pesticide regulatory account generated from pesticide sales and has leveraged the CWF funds for supplemental EPA grant dollars to conduct monitoring on tribal lands. LCCMR requests and fee increases requiring legislative approval have been proposed but unsuccessful.

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.

FY10-11	0.0
FY12-13	2.25
FY14-15	2.25
FY16-17	2.25
FY18-19	2.54
FY20-21	2.29
FY22-23	1.9
FY24-25	2.11
FY26-27	

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FY26-27 CLEAN WATER FUND PROPOSAL

Pesticide Testing of Private Wells

MDA	Program Number: 307
Program Contact Name: **Kim Kaiser**	Phone: **651-201-6280**
Contact E-mail Address: **Kimberly.kaiser@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

Provides funding for free pesticide testing of private wells in areas where groundwater may be at risk for elevated pesticide concentrations. Testing currently focuses on the herbicide cyanazine which is no longer used in Minnesota but its degradates are being detected at concentrations above the drinking water standard in some areas. Future private well sampling could be offered for a larger suite of pesticides in vulnerable groundwater areas of the state at no cost to homeowners.

Webpage

Private Well Pesticide Sampling Project | 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 Private Well Pesticide Sampling (PWPS) Project is a follow-up program to the Township Testing Program. The primary goal of the PWPS Project is to provide information to homeowners and the general public about the presence of pesticides in private drinking water wells.

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	*
FY16-17	*
FY18-19	$2,000,000
FY20-21	$2,000,000
FY22-23	$870,000
FY24-25	$1,000,000
TOTAL APPROPRIATED TO DATE	**$5,870,000**

*In FY14-17, the MDA invested a total of $1.6M of funding from the "Nitrate in Groundwater" appropriation to support initial pesticide testing in private wells. A direct appropriation for this program began in FY18-19.

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

[Don't fill out the FY26-27 until you receive agency approval. We will update the form at that time.]

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

Action: Characterize nitrate and pesticide contamination in vulnerable aquifers

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.)

By the end of FY24 it is anticipated that approximately 8,000 vulnerable private drinking water wells will have been tested for pesticides. Approximately, 175 wells were identified with a pesticide concentration above a drinking water standards.

The MDA has not used the CWF for private drinking water well mitigation purposes. In light of the legal opinion from the Senate, that mitigation for private drinking water is not consistent with the purpose of the Clean Water Fund, the MDA will not use the CWF for this purpose in the future.

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, the CWF funds will leverage two EPA grants to broaden the project scope and the MDA uses dedicated funds from the pesticide regulatory account generated from pesticide sales to support an FTE for this project.

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 FY18-FY21, 76% of this funding was passed through to an analytical laboratory.

In FY22-23, approximately 50% of this funding was passed through to an analytical laboratory.

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	2.75
FY20-21	2.1
FY22-23	1.25
FY24-25	3
FY26-27	

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FY26-27 CLEAN WATER FUND PROPOSAL

Drinking Water Contaminants of Emerging Concern

MDH	Program Number: 23
Program Contact Name: **Kris Klos (HRA), Stefan Saravia (PHL),** and **Stephanie Drier (MNELAP)**	Phone: **651-201-5579**
Contact E-mail Address: **stefan.saravia@state.mn.us; kris.klos@state.mn.us; stephanie.drier@state.mn.us**	
Person filling out form: **Kris Klos (HRA), Stefan Saravia (PHL),** and **Stephanie Drier (MNELAP)**	Phone: **651-201-5579**
Person filling out form e-mail address **stefan.saravia@state.mn.us; Kris.klos@state.mn.us; stephanie.drier@state.mn.us**	

Purpose

The Minnesota Department of Health (MDH) develops innovative approaches to evaluate, analyze, and standardize methods for identifying and reporting emerging contaminants resulting in effective, science-based, public health responses. This proposal addresses three key areas of need for Contaminants of Emerging Concern (CEC): 1) increased capacity to define health-based levels for CEC; 2) increased capacity to analyze for CEC in the environment; and 3) increased capacity to ensure that analytical results are of high quality to inform public health decisions.

Firstly, MDH routinely develops human health-based drinking water guidance for emerging contaminants to aid in planning, monitoring, and mitigating impacts from CECs. The CEC initiative also actively engages agency and community stakeholders to ensure chemicals being examined are prioritized and provides funding for partners engaged in education, awareness, and analytical testing. In FY26-27, we will further the work of reviewing and evaluating chemicals, completing risk assessments for CECs, developing rapid assessments and new risk assessment methods, providing public information materials, giving technical support to our partners and stakeholders, collaborating with USEPA research staff, and representing Minnesota interests on state and national boards and committees.

Secondly, this proposal supports the MDH Public Health Laboratory (PHL) in expanding their PFAS testing capacity for the increased number of surface, ground, and drinking water samples that will need to be tested as a result of new standards and guidelines and growing public concern. Additionally, the PHL is developing new capabilities to look for currently unidentified PFAS chemicals through non-target analysis and total fluorine analysis. Finally, the PHL is lowering reporting levels to identify these compounds at lower concentrations in samples.

The PHL plays a critical role in the continued evolution of CEC monitoring throughout Minnesota. PHL provides the data that is essential for environmental assessments. PHL has continuing and additional needs for staff and equipment to support the CEC laboratory work. Those needs include more method development, identifying CEC compounds at lower concentrations, supporting programmatic testing and

operationalizing new instrumentation to meet these demands. Ensuring a strong PHL will ensure Minnesota is able to stay at the forefront of CEC.

Thirdly, this funding supports the Minnesota Environmental Laboratory Accreditation Program (MNELAP), which works to accredit the many public and private laboratories that will be bringing on PFAS testing methods in response to new EPA regulations that went into effect on April 10, 2024. The MNELAP ensures that public and private labs conducting testing on waters and other matrices of the state are providing reliable and reproduceable environmental data. These laboratories are accredited to national standards in staffing, data collection, analysis, management systems, and rigor so that laboratories generate reliable and accurate data for various federal and state environmental programs and clients. The accreditation and oversight of laboratories will be performed according to the environmental laboratory accreditation requirements under Minnesota Statutes, section 144.98.

The work of the CEC Initiative is prioritizing changes in order to meet the demands of stakeholders and continue to engage the public in understanding their CEC exposures from drinking water and other sources. Without Clean Water Funds, MDH would have significantly reduced capacity to review, analyze and accredit laboratories for CEC contaminants that pose a threat to ecological and human health in Minnesota. For example, most PFAS have little to no toxicological information available. To protect public health, MDH needs expertise to incorporate new toxicological methods and data streams into Minnesota's current risk assessment methods. The federal government recently published regulatory standards for PFAS in drinking water in April 2024.

Webpages

- Contaminants of Emerging Concern (CEC) Protecting Minnesota's Water Resources (www.health.state.mn.us/communities/environment/risk/guidance/dwec/index.html)
- MN Department of Health Environmental Laboratory (www.health.state.mn.us/communities/environment/envlab/index.html)
- Minnesota Department of Health Environmental Laboratory Accreditation Program (MNELAP) (https://www.health.state.mn.us/communities/environment/mnelap/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.

Since 2002, MDH and its partners have worked to characterize and evaluate the environmental and public health impacts of PFAS and other CECs in Minnesota.

When the CEC Initiative first started there was not much information on CECs in waters used for dinking in Minnesota, and very limited laboratory methods available. Since 2010, there have been multiple small- and large-scale sampling efforts by state agency staff to identify CECs in the environment. While these sampling efforts are illuminating the extent of CEC pollution in Minnesota's waters, often it is not clear if this pollution presents a human health risk. The CEC Initiative gives context to these environmental chemical detections through the development of water guidance values. These values are used by state agencies and other stakeholders. The CEC Initiative gives expert technical assistance

on the application of these values. The demand for these kinds of values has continued to grow as more sampling efforts have taken place.

The PHL maintains and develops new laboratory methods to meet and exceed the needs of state agencies doing this very important environmental sampling work. In addition, the PHL also develops and maintains new methods for analyzing for CECs (such as PFAS) in human samples. These analyses have been the cornerstone of biomonitoring projects that have given information about not only what Minnesotans are being exposed to, but also whether public health interventions are working to reduce their exposures.

In addition, the CEC Initiative passes through CWF monies in the form of small grants to local or small programs that focus on pollution prevention work for CEC chemicals such as pharmaceuticals and pesticides used in the home. As part of this small grant program, technical staff offer assistance to local programs. These small grants have generally been awarded to watershed districts, municipalities, and nonprofit agencies.

MNELAP uses CEC funds to enhance the accredited laboratory database and staff FTEs. These enhancements and staffing will implement and automate tools (e.g., database and the searchable laboratory list) to document ongoing laboratory quality, compliance reporting, enforcement, and PFAS data and records management. MNELAP publishes directly from our online database a list that is searchable to the public. This searchable laboratory list is a way private citizens, state agencies, and others find accredited laboratories for testing their water or other matrices of interest.

With the increasing demand for PFAS sampling and testing form the public, the PHL cannot meet all the required testing and take in samples from members of the public including well drillers, private well owners, daycare providers, real estate transactions, and others. Therefore, MNELAP accredits public and private labs to increase testing capacity and to provide backup testing to PHL due to any unforeseen situations.

PRIOR APPROPRIATIONS	
FY10-11	$1,300,000
FY12-13	$2,040,000
FY14-15	$2,300,000
FY16-17	$2,200,000
FY18-19	$2,200,000
FY20-21	$3,400,000
FY22-23	$2,400,000
FY24-25	$10,100,000
TOTAL APPROPRIATED TO DATE	**$25,940,000**

FY26 Request	FY27 Request	FY26-27 TOTAL REQUEST

[Don’t fill out the FY26-27 until you receive agency approval. We will update the form at that time.]

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 and management of newly identified contaminant risks.
    - Strategy: Identify policy options that will accelerate progress to achieving federal safe drinking water standards.
- **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.

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 the number of completed guidance values, rapid assessments, and screening values.
- Develop risk assessment tools that allow for guidance development of CECs with little to no toxicity data. This will be accomplished by our continued partnership with the EPA and our hiring of a computational toxicologist.
- Sustain outreach to community partners, that includes the annual CEC stakeholder meeting, the CEC Forum (which will explore equity issues in CEC exposure and in the development of CEC guidance), Town Halls when appropriate, responding to citizen issues, and assisting the University of Minnesota with toxicological and risk assessment requests.
- Support the CEC Outreach and Education Grant Program. The CEC initiative funded awards in 2017 and 2019 for community organizations to conduct outreach and education efforts related to contaminants of emerging concern. The purpose of these grants was to enhance Minnesotans' understanding and knowledge of contaminants of emerging concern in water that may be used for drinking. These grant-funded projects were paused at the start of the COVID pandemic and will restart later this year.
- Increase the number of PFAS samples the PHL can analyze in a year
- Increase the number of emerging contaminant compounds that can be tested for by the PHL
- Increase the number of MNELAP accredited PFAS laboratories
- Increase the number of PFAS and CEC Fields of Testing offered by MNELAP
- Continue to summarize and capture program activities and highlights on a quarterly, annual, and biennial schedule. These are often qualitative evaluations, but also include number of technical assists we've provided, conferences we've presented at, and other quantitative measures of our work and reach.

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. There are a number of factors contributing to the likely need for additional funding over the long-term:

- There are many, many compounds in the environment that remain unidentified, with more being added every year as new products are developed;
- As analytical methods improve, more compounds are identified in the environment, resulting in the need for additional toxicologic assessment;
- Research is regularly improving our understanding of human health and the implications of environmental contaminants, so standards need to be regularly updated; and
- As reporting limits get lower and analytical methods more complex, it will be critical to ensure that results accurately reflect conditions in the environment.

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.

MNELAP receives SGSR funds through the collection of fees based on MN Statutes 144.98.

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. The program areas described in this proposal all currently exist. However, as described in "Long-term funding vision" above there is a critical need to enhance current efforts and prepare for future demands for better understanding and responding to CECs.

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.

CEC Outreach and Education Grant Program

Year	Organization	Award
FY17	Coon Creek Watershed District	$41,637
	Clean Water Fund	$45,000
	University of Minnesota Water Resources Center, Onsite Sewage Treatment Program	$44,681
FY19	Central Minnesota Water Education Alliance	$10,000
	Health Advocates, Inc.	$9,800

	Minneapolis Health Department	$10,000
	University of Minnesota: InSciEd Out	$9,975
	University of Minnesota: Water Resources Center	$9,670

State Employees

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

FY10-11	3.0
FY12-13	7.0
FY14-15	10.0
FY16-17	11.0
FY18-19	9.0
FY20-21	7.0
FY22-23	6.9
FY24-25	**Total at end of FY25: 22.9** (3 MNELAP FTEs; 12 PHL FTEs by end of FY25; 7.9 HRA FTEs in FY24/10.5 HRA FTEs in FY25)
FY26-27	

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FY26-27 CLEAN WATER FUND PROPOSAL

Private Well Initiative

MDH	Program Number: 9
Program Contact Name: **Tannie Eshenaur and Frieda von Qualen**	Phone: **651.201.4074**
Contact E-mail Address: **frieda.vonqualen@state.mn.us**	
Person filling out form: **Frieda von Qualen**	Phone: **651-201-4547**
Person filling out form e-mail address **frieda.vonqualen@state.mn.us**	

Purpose

The Private Well Initiative works to ensure that the at least 20% of the people in Minnesota who rely on a private well as their source of drinking water (over 1.1 million people) are confident their drinking water is safe. This program does the following to supplement the work of the MDH Well Management Section (which ensures all wells are constructed and sealed properly) and local partners:

- **Better understand and explain the occurrence and distribution of contaminants in private wells** in Minnesota. This includes identifying if there are additional common contaminants in Minnesota private well water, understanding mitigation options, and making it easy for private well users to know what to test for and how to mitigate contaminant issues;
- **Education, outreach, and technical assistance** for private well users about testing private well water for common contaminants (coliform bacteria, nitrate, arsenic, lead, and manganese) and mitigation. A statewide assessment of private well users' knowledge, attitudes, and behaviors will inform and drive education and outreach approaches. Existing approaches include developing new materials and online trainings, translating materials, and sharing materials with partners.
- **Develop and strengthen partnerships** with local governments, professional organizations, and nonprofit organizations to support private well users. Activities include hosting the Private Well Forum, online training for real estate professionals, outreach to rental property owners and renters, and supporting the development of the peer-to-peer learning Minnesota Private Well Stewardship Program.
- **Make private well water quality data accessible** to the public and partners. This includes determining the platform for where data could be housed, the sources from which data will be pulled, and how the data will be displayed.
- **Develop model policies** that local partners could adopt to better protect private well users.
- **Establish a statewide well testing and inventory program.** This will build off lessons learned through previous and current pilot grants.
- **Support efforts to address nitrate in private wells in southeast Minnesota.**

Webpages

- Private Well Protection Clean Water Fund - MN Dept. of Health (state.mn.us) (www.health.state.mn.us/communities/environment/water/cwf/wells.html)
- Well Testing, Results, and Options (www.health.state.mn.us/communities/environment/water/wells/waterquality/tips.html)
- Well Partners (www.health.state.mn.us/communities/environment/water/wells/partners/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.

This program works directly with private well users and will establish and maintain a system to support private well users so they can protect their drinking water source and be confident their private well water is safe for everyone in their household.

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	$650,000
FY16-17	$650,000
FY18-19	$800,000
FY20-21	$1,500,000
FY22-23	$0
FY24-25	$3,000,000
TOTAL APPROPRIATED TO DATE	**$6,600,000**

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 is safe for everyone, everywhere in Minnesota.

Goal 1: Private water supply wells

- Strategy: Identify risks to and fund testing of private well water.
- Strategy: Support selected mitigation activities for private well users.
- Strategy: Identify policy options that will accelerate the reduction in the number of unsafe private wells.

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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.)

- **Percent of private well owners testing their well water at the frequency MDH recommends.**
  - In our 2016 survey, less than 20% or respondents test well water at the frequency MDH recommends.
- **Percent of private well owners with elevated arsenic who take action to reduce their exposure to arsenic in drinking water.**
  - In our 2016 survey, 66% of respondents took action to reduce their exposure to arsenic in drinking water.
- **Number of model policies that have been shared and adopted.**
  - MDH is drafting the policies.
- **Number of newly identified wells (pre-code and new construction) entered into Minnesota Well Index.**
  - In development.

Completed

- Studies of arsenic in private wells and radium in private wells.
- 2016 survey of private well households to better understand knowledge, attitudes, and behaviors of private well users with elevated arsenic.
- New *Well Water and Your Baby* brochure and translating top 8 brochures/info sheets into Spanish, Somali, and Hmong.
- Two pilot private well grants for well testing and mitigation to find ways to develop a statewide approach to well testing and mitigation.
- Hosted a Private Well Forum in 2023 to bring together partners working with private well users; 205 attendees.
- Online training for real estate professionals about private wells and property transfer. Over 100 completions since November 2023.

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.

Yes, we currently have a grant that will end in August 2025 from the U.S. Centers for Disease Control and Prevention. The grant provides some funding for outreach and education to real estate

professionals and rental property owners and to provide data visualizations related to existing private well water quality data and sociodemographic information.

We regularly search for grant opportunities.

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.

Previous entities:

- FY14-25: U.S. Geological Survey ($425K)
- FY18-19: Stearns County SWCD ($6,030), Becker County SWCD ($10,682)
- FY20-21 Appropriation: UMN Water Resources Center ($20,000), Horizon Public Health ($100,000), Olmsted County SWCD ($125,000), Healthy Kids Minnesota well testing ($20,000), Minnesota Management Analysis and Development ($31,000)
- FY24-25 (anticipated): Olmsted County SWCD ($100,000), Horizon Public Health ($100,000). Six phase I grants for well testing ($600,000), UMN Water Resources Center ($440,000), UMN Center for Changing Landscapes ($325,000)

State Employees

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

FY10-11	
FY12-13	
FY14-15	1.0
FY16-17	2.5
FY18-19	2.5
FY20-21	2.75
FY22-23	
FY24-25	2.3
FY26-27	

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FY26-27 CLEAN WATER FUND PROPOSAL

River and Lake Monitoring and Assessment

MPCA	Program Number: 10
Program Contact Name: **Kim Laing**	Phone: **651-757-2515**
Contact E-mail Address: **kim.laing@state.mn.us**	
Person filling out form: **Kim Laing**	Phone: **651-757-2515**
Person filling out form e-mail address **kim.laing@state.mn.us**	

Purpose

The Surface Water Monitoring program collects data on lakes, rivers, and streams to complete assessments and determine if waters are impaired or meeting standards, conducts trend analysis to determine water quality changes in our waters over time, and identifies areas for protection and restoration. Program includes 197 sites for annual pollutant load monitoring, and stream and lake monitoring at dozens of sites in up to 16 watersheds over the biennium. The program continues to conduct water quality monitoring at the basin, watershed, and subwatershed scales and deliver the high quality water quality data needed to run the other aspects of the Watershed Framework.

Webpage

Minnesota's Water Quality Monitoring Strategy 2021 to 2031 (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.

This program delivers the water quality data that are foundational to all other steps within the Watershed Framework. The monitoring activities allow us to determine ambient condition (are waters impaired or meeting standards), if waters have been protected or restored, and long-term trends in water quality. The data are also used to facilitate biological stressor identification and calibrate watershed models, which are critical to delivering TMDLs and WRAPS, and targeting local implementation efforts. Monitoring data from watersheds we are revisiting help us evaluate progress towards meeting clean water goals, including delisting waters from the Impaired Waters List once they have been restored.

PRIOR APPROPRIATIONS	
FY10-11	$15,000,000
FY12-13	$15,000,000
FY14-15	$15,200,000
FY16-17	$16,700,000

FY18-19		$16,550,000
FY20-21		$16,300,000
FY22-23		$14,832,000
FY24-25		$18,100,000
TOTAL APPROPRIATED TO DATE		**$127,682,000**
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.

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

Goal 1: Monitor, assess, and characterize Minnesota's surface waters.

o Strategy: Maintain consistent funding for a statewide monitoring system.

o Action: Continue to monitor and assess on 10-year cycle and for emerging contaminants.

▪ Measure: Completion of second monitoring and assessment cycle.

▪ Measure: Reports on contaminants of emerging concern as needed or requested.

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 primary output from the surface water monitoring activities are a large body of high-quality data, which is used in innumerable ways by other steps within the Watershed Framework. Monitoring data from approximately 16 watersheds will be assessed over the biennium, yielding a list of waters that are impaired or meeting standards. The data will also indicate whether we are meeting clean water goals and restoring impaired waters or not. The watershed pollutant load monitoring network will yield long-term trend data at the basin, watershed and subwatershed scales or help us both understand if pollutant levels from both point source and nonpoint sources combined are reducing, as well as feed watershed models used to target local implementation efforts. A primary feature of the surface water monitoring activities is partnership between MPCA and local SWCDs, WDs, educational institutions, and Tribal nations who work together to select monitoring sites. A large portion of the water chemistry sampling is conducted by local partners, which serves to involve them in this phase of the Watershed Framework and build their knowledge and capacity.

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.

MPCA historically (back to FY04) received an average of $1,250,000 per year for surface water monitoring and assessment activities from state and federal funds. MPCA has maintained this level of non-CWF funding for surface water monitoring and assessment activities following the advent of the CWLA and CWF. The specific breakdown of funding among the funding sources varies from one year to the next.

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.

On average 2.1 million has been passed through each biennium to LGUs, higher educational institutions, and non-profits.

State Employees

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

FY10-11	36.0
FY12-13	37.9
FY14-15	44.8
FY16-17	42.8
FY18-19	41.3
FY20-21	52.7
FY22-23	36.5
FY24-25	46.5
FY26-27	

FY26-27 CLEAN WATER FUND PROPOSAL

Groundwater Monitoring and Assessment

MPCA	Program Number: 11
Program Contact Name: **Paul Pestano**	Phone: **651-757-2090**
Contact E-mail Address: **paul.pestano@state.mn.us**	
Person filling out form: **Erik Smith**	Phone: **651-757-2719**
Person filling out form e-mail address **erik.smith@state.mn.us**	

Purpose

MPCA's Ambient Groundwater Monitoring and Assessment Program.

Webpage

Groundwater monitoring | 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.

Groundwater monitoring and assessment to continue to support the MPCA and local and state partners' ability to: track contaminant trends in an early warning well network; assess downward migration of key contaminants into drinking water aquifers; investigate potential new sources of contamination to the state's groundwater; and better understand the interaction between ground and surface waters in specific areas. Groundwater quality data, modeling, and information about surface water and groundwater interactions will inform: restoration and protection strategies developed by the MDH, MPCA and local and state partners; advancement of groundwater protection BMPs; and evaluation of their effectiveness in protecting groundwater for drinking, irrigation and healthy aquatic ecosystems.

PRIOR APPROPRIATIONS	
FY10-11	$2,250,000
FY12-13	$2,250,000
FY14-15	$2,250,000
FY16-17	$2,364,000
FY18-19	$2,363,000
FY20-21	$2,364,000
FY22-23	$1,900,000
FY24-25	$2,000,000
TOTAL APPROPRIATED TO DATE	**$17,741,000**

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.

This proposal aligns with a strategy from Goal 1- Develop baseline data on Minnesota's groundwater quality, including areas of high pollution sensitivity.

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.)

Maintaining ambient well network of 270 wells focusing on shallow aquifers in urban areas; conducting annual sampling and data analysis of multiple pollutants at most sites; contaminants of emerging concern (CECs) in 40 network wells; continuous data on level and conductivity at a few key sites; providing groundwater data and analysis for Watershed Monitoring and Assessment Reports, WRAPS, GRAPS, and 1W1P.

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.

MPCA historically (back to FY04) received an average of $225,000 per year for groundwater monitoring and assessment activities from state and federal funds. MPCA has maintained this level of non-CWF funding.

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

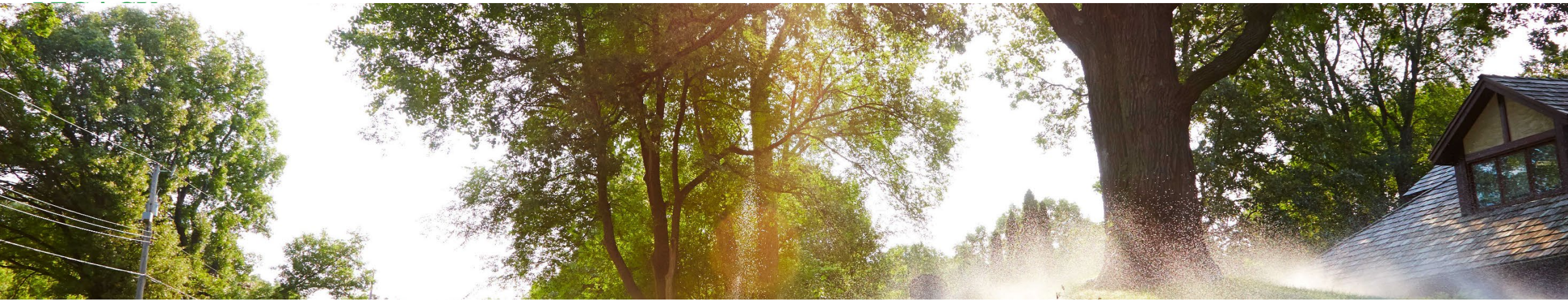
If this funding will be disbursed through competitive grants, loans, or contracts, or if recipients are not yet known, please list what entities have received this funding in previous fiscal years and how much.

Funds passed through by contract to analytical labs (private, MDH, USGS), well drilling and siting (private well drillers), and equipment providers (private). Number and value of contracts varies by year.

State Employees

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

FY10-11	3.0
FY12-13	2.6
FY14-15	2.9
FY16-17	3.6
FY18-19	3.9
FY20-21	6.5
FY22-23	3.9
FY24-25	4.45
FY26-27	



Metropolitan Area Water Sustainability Support

Judy Sventek | Water Resources Manager

Metropolitan Council

Water 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 Sustainability Support

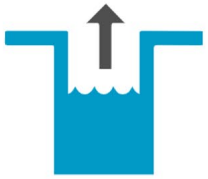
Maximize use of existing infrastructure

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

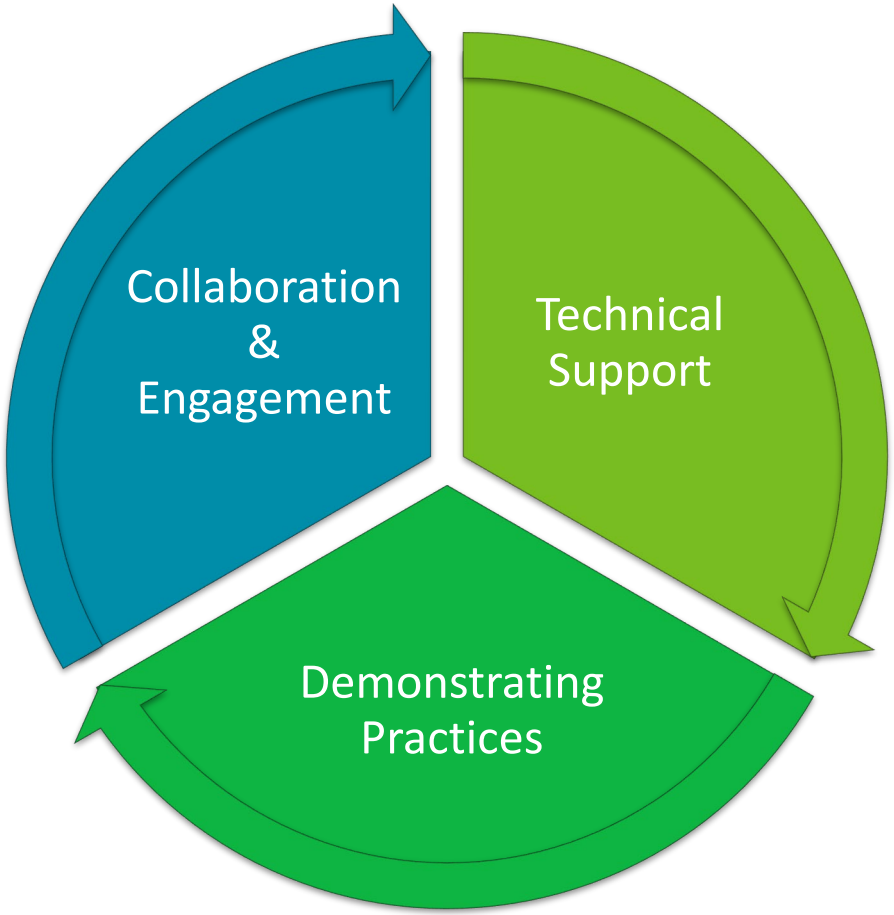
Protect surface water flows

Metropolitan Area Water 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 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

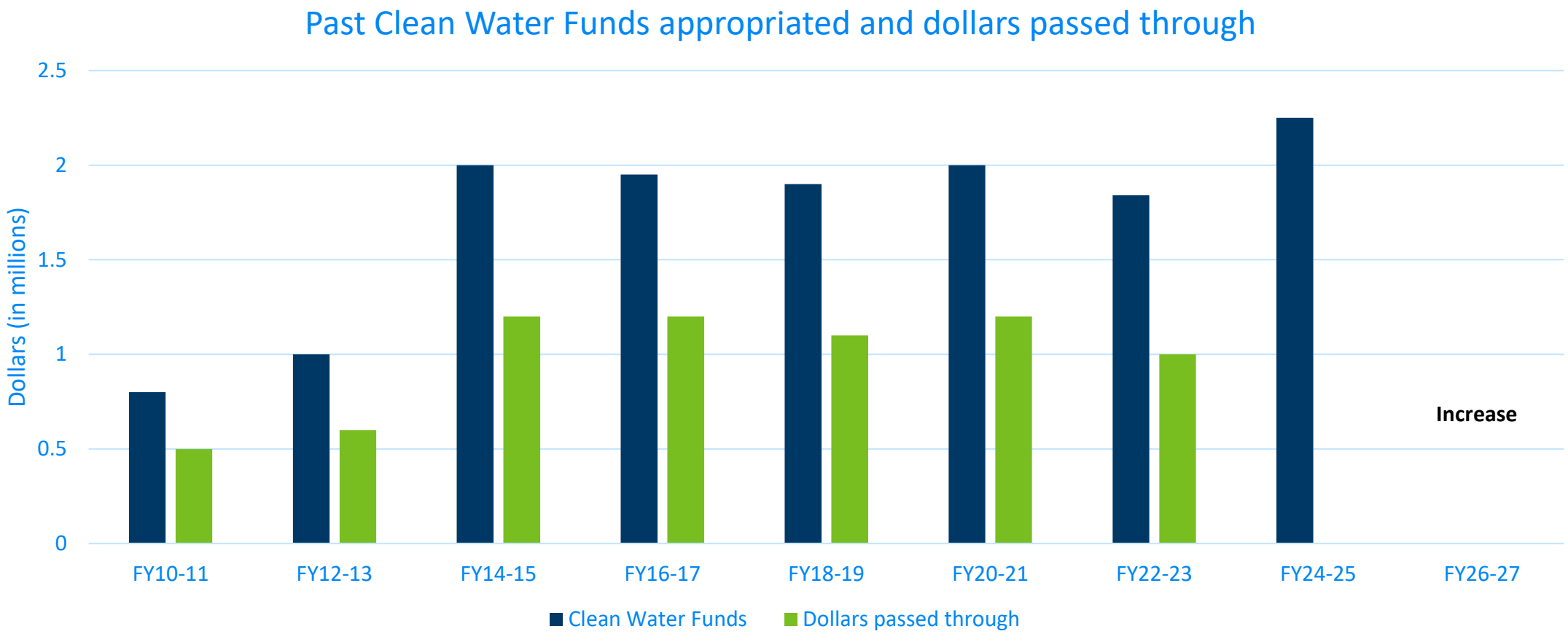
- Lawn irrigation efficiency (U of M)
- Industrial water efficiency (MnTAP)

Metropolitan Area Water Sustainability Support

Looking ahead…

- Climate change impacts on overall water sustainability
- Need to strengthen 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 Sustainability Support Initiative



Chloride Reduction Program

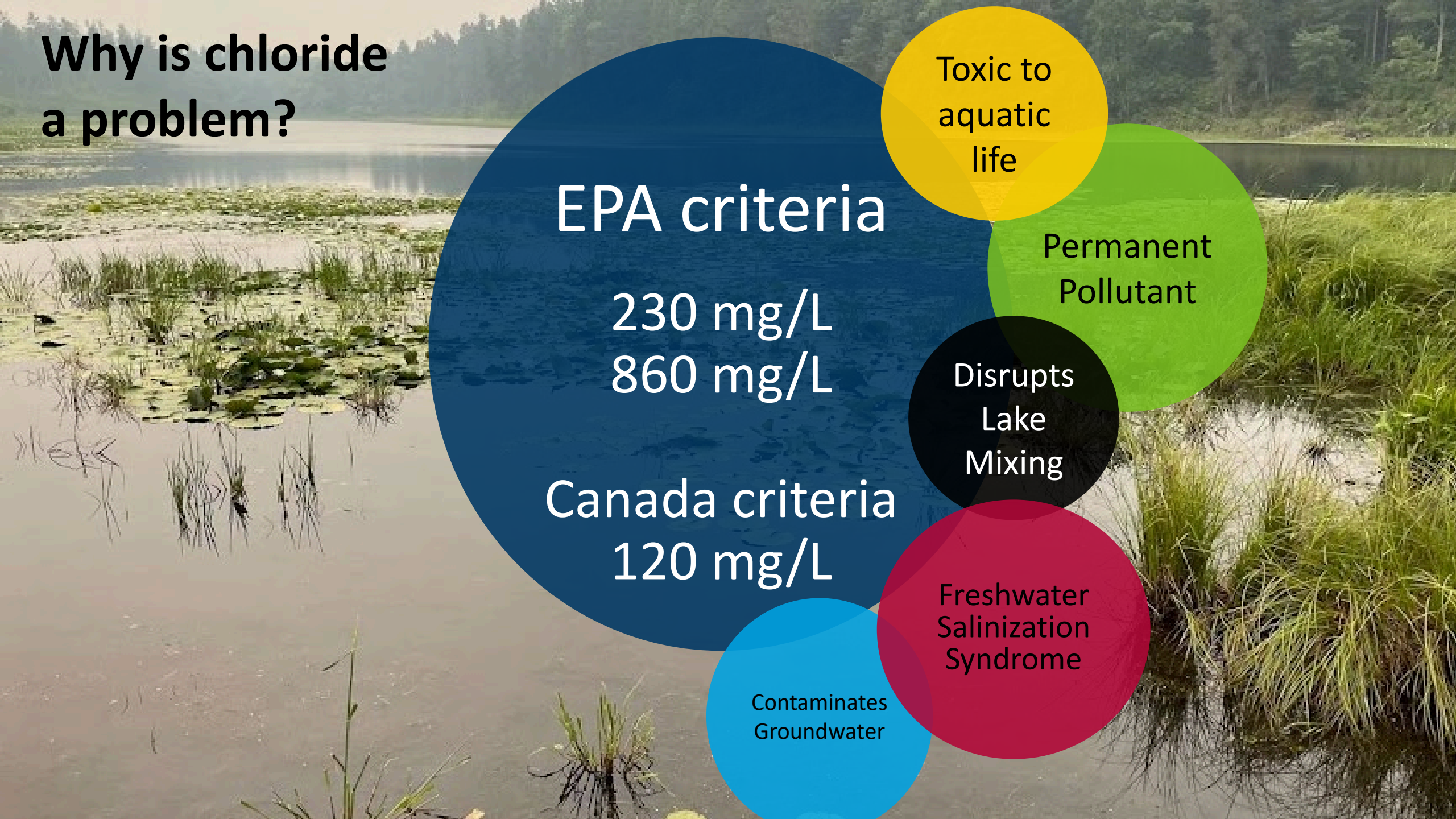
Brooke Asleson| Chloride Reduction Program Coordinator | Resource Management & Assistance Division

Minnesota Pollution Control Agency

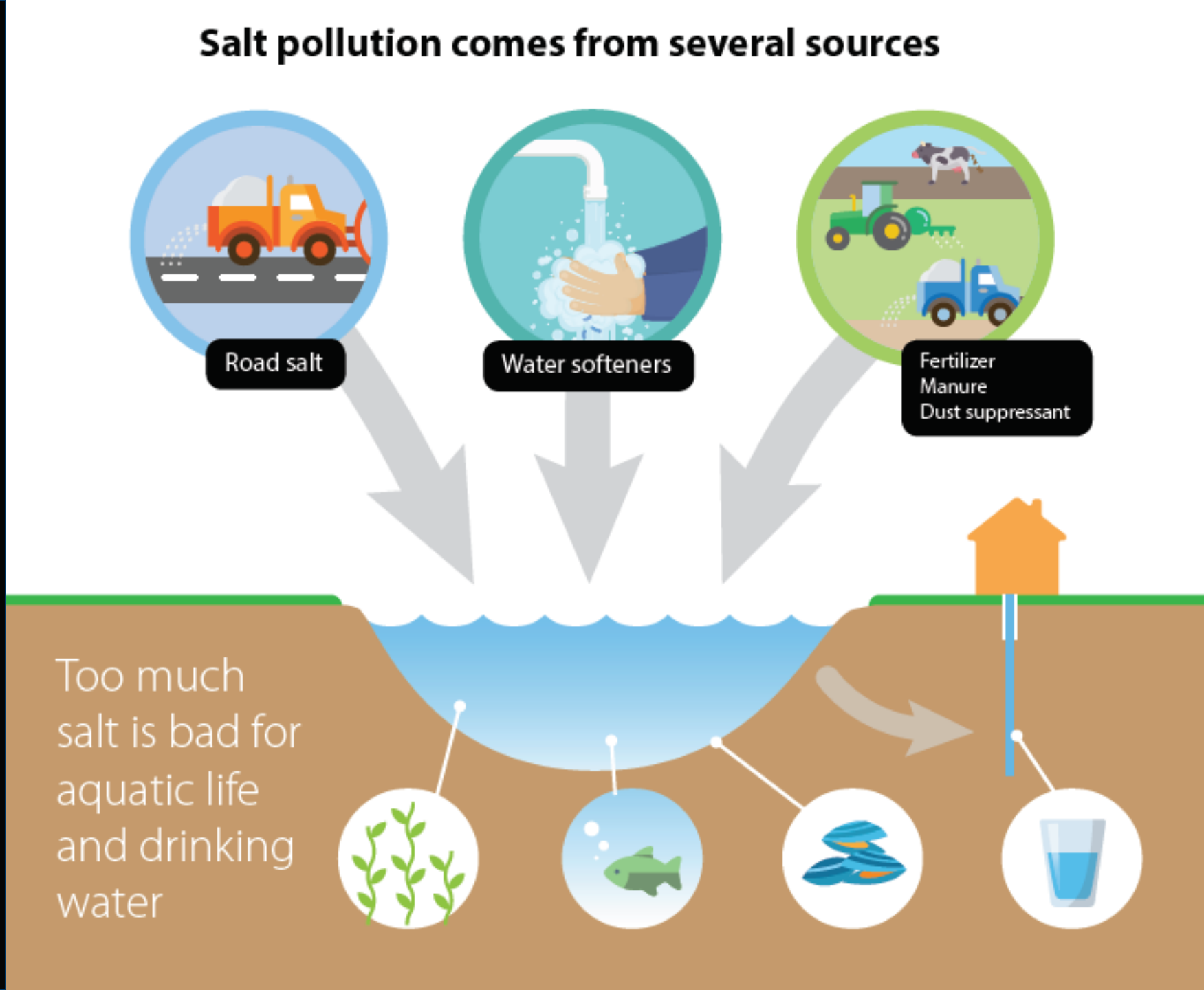
Chloride Reduction Program

Provide assistance to communities and organizations across Minnesota to identify and reduce chloride at the source and protect water quality.

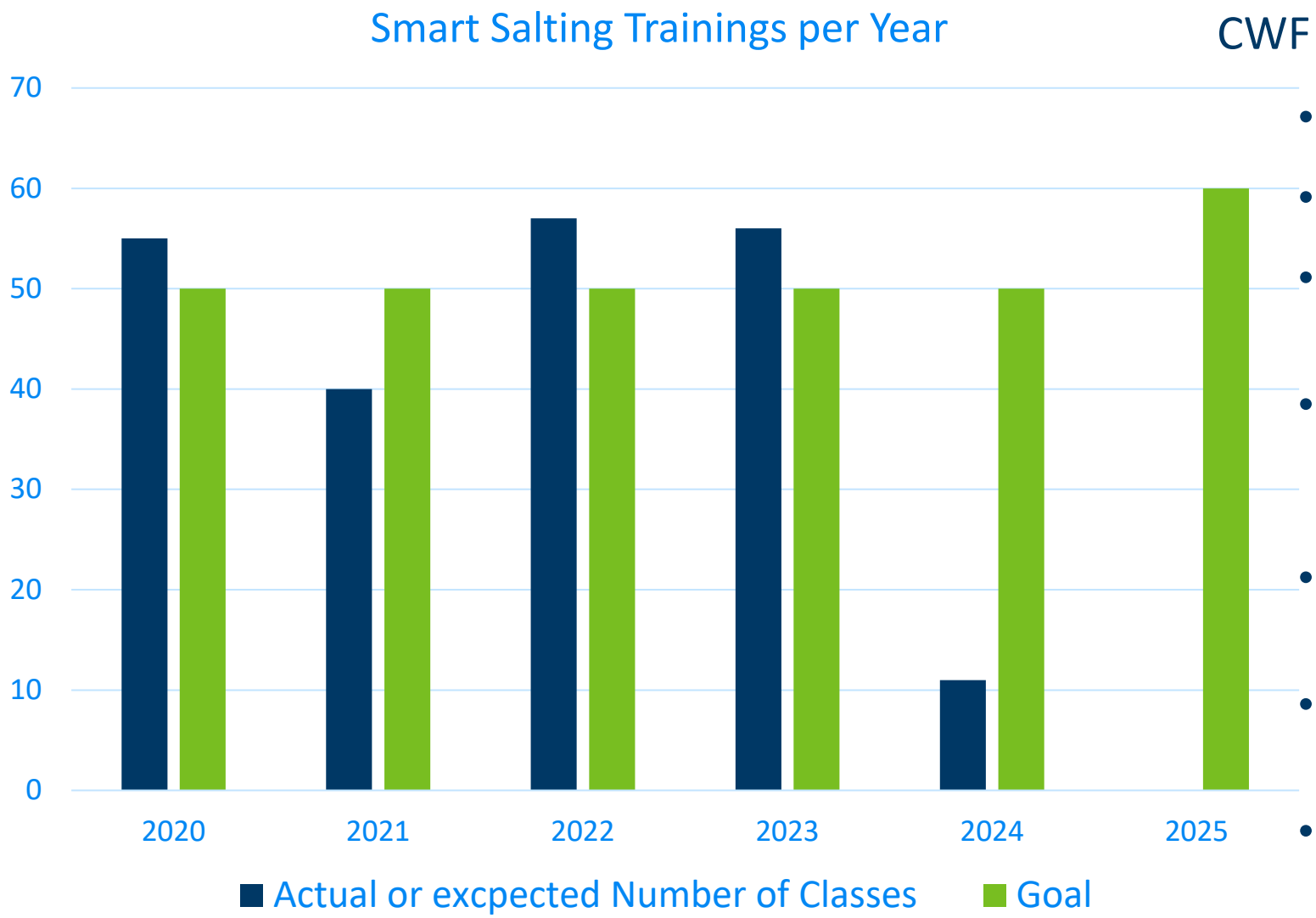
- Collaboration & Partnerships
- Training & Education
- Direct Assistance
- Resources & Support


Why is chloride a problem?
EPA criteria
230 mg/L
860 mg/L
Canada criteria
120 mg/L
Toxic to aquatic life
Permanent Pollutant
Disrupts Lake Mixing
Freshwater Salinization Syndrome
Contaminates Groundwater

Sources of chloride



Smart Salting Training program



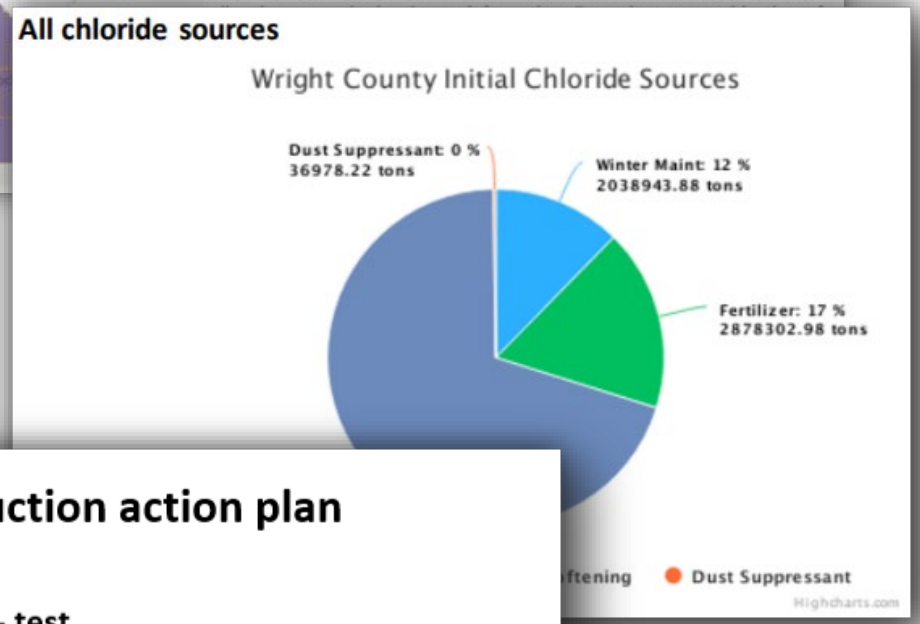
CWF dollars created & support:

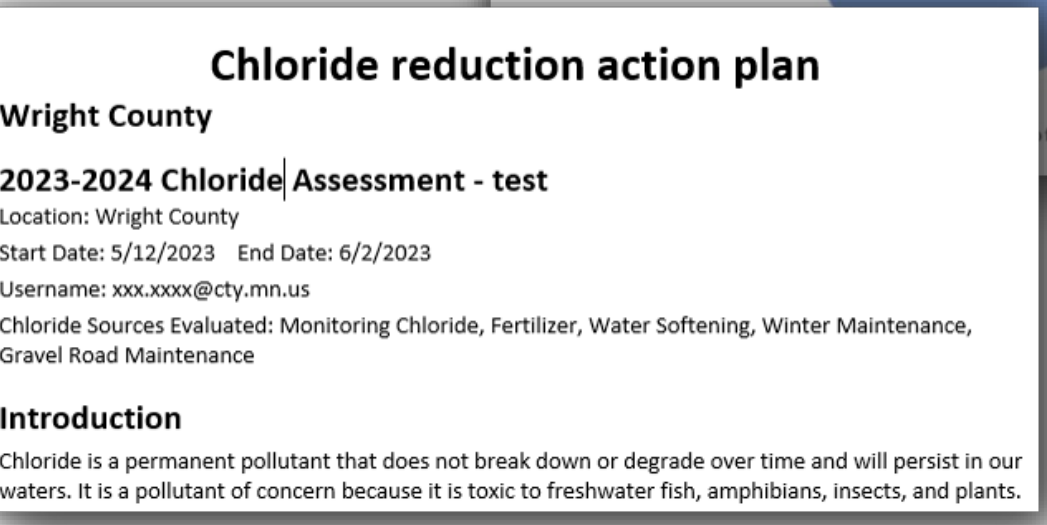
- MPCA FTE to administer training program
- Offer annual trainings statewide
- Certify roughly 1,100 winter maintenance professionals each year
- Created and offer 4 new refreshers to help continue education and meet MS4 permit requirements
- Reaching new audiences with new workshop for Community Leaders
- Creating a new certification training for water softening professionals and plumbers
- Updated training materials and content

Chloride Reduction Grant program

- Offered 200K as a single grant with FY20-21 CWF dollars that will assist 3 communities address water softening
- Offered 250K as single grant with FY21 ENRTF dollars assisting 2 communities address water softening
- In the process of offering up to 540K with FY22-23 CWF dollars to provide direct financial assistance to targeted communities to reduce chloride at the source
- Nearly 100 communities identified to have elevated chloride in their wastewater discharge
- Many communities have elevated chloride in surface waters from a variety of sources that are also eligible for the grant program

MCPA Smart Salting Tool





Chloride reduction action plan

Wright County

2023-2024 Chloride Assessment - test

Location: Wright County

Start Date: 5/12/2023 End Date: 6/2/2023

Username: xxx.xxxx@cty.mn.us

Chloride Sources Evaluated: Monitoring Chloride, Fertilizer, Water Softening, Winter Maintenance, Gravel Road Maintenance

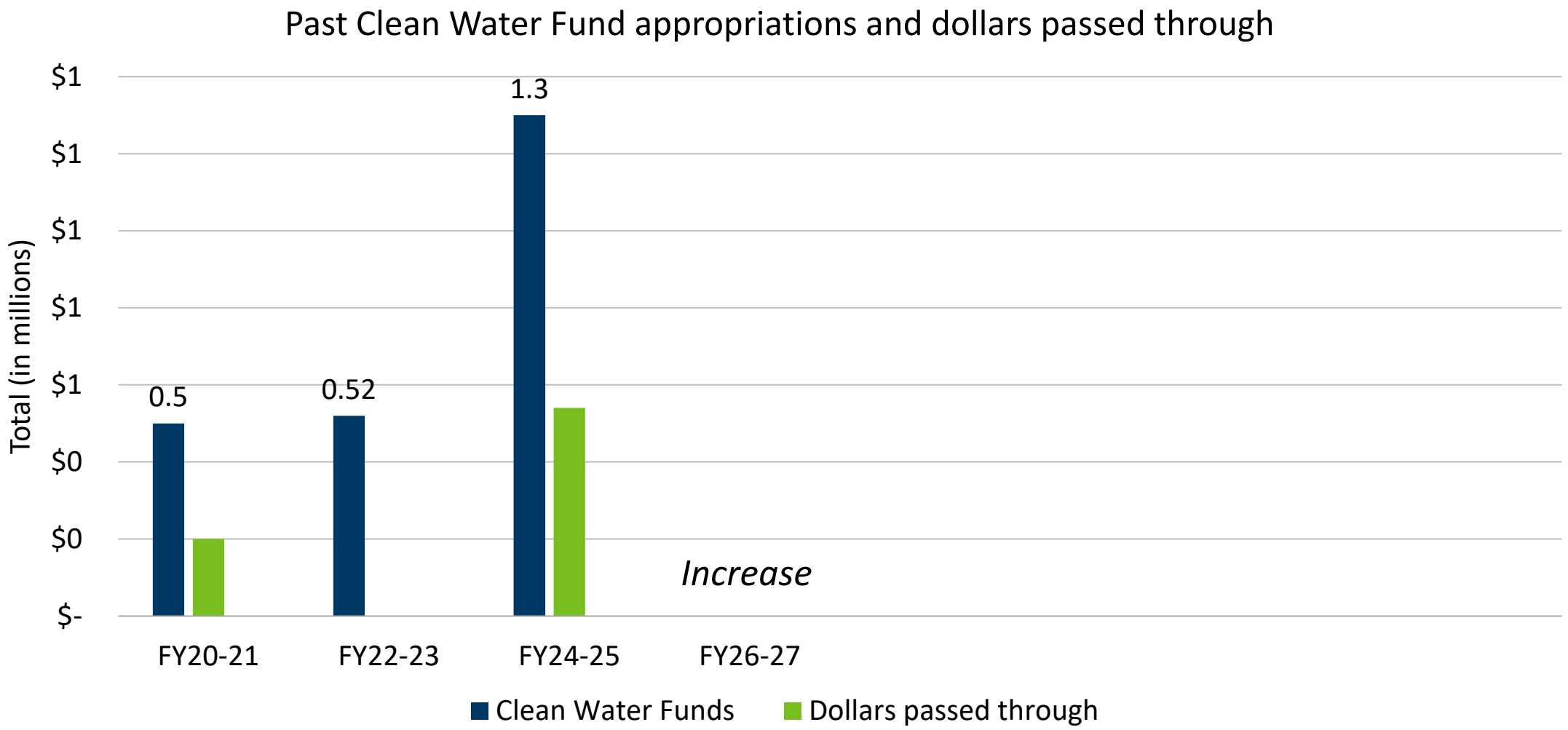
Introduction

Chloride is a permanent pollutant that does not break down or degrade over time and will persist in our waters. It is a pollutant of concern because it is toxic to freshwater fish, amphibians, insects, and plants.

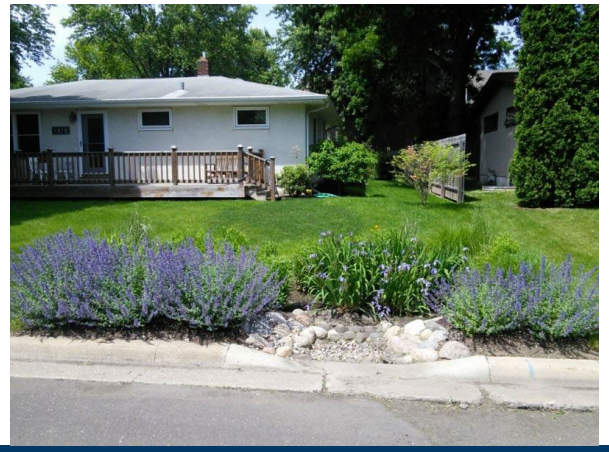
- Learn background information and environmental impacts of chloride sources
- Organizations can see and modify estimations of the amount of chloride from sources in their community:
  - winter maintenance
  - water softening
  - fertilizer
  - dust suppressants
- Survey templates
- Create a Chloride reduction action plan for each source

https://smartsaltingtool.com/

Clean Water Funds for Chloride Reduction program








NPDES Wastewater/Stormwater TMDL Implementation Program

Suzanne Baumann and Ryan Anderson

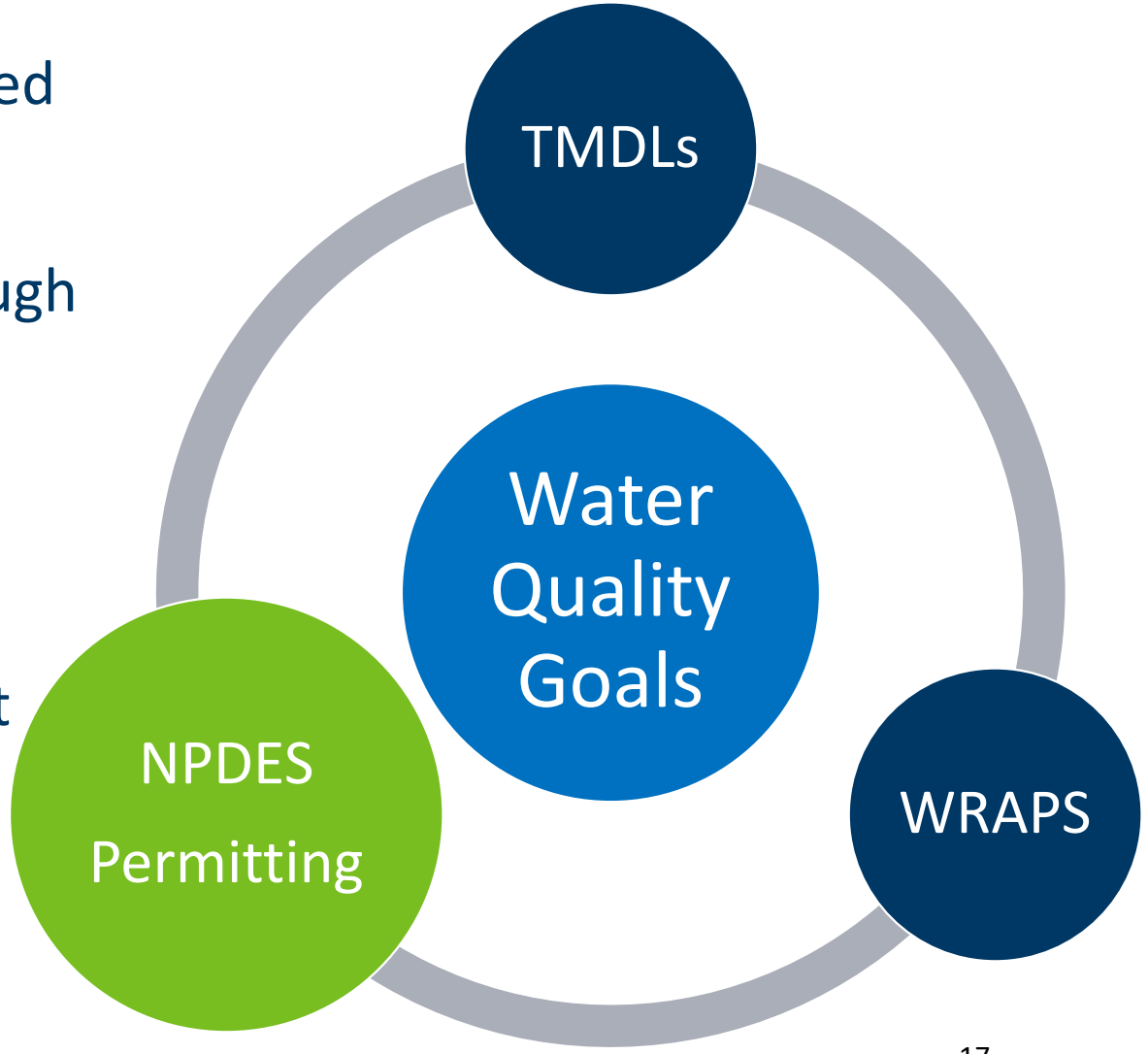
Municipal Wastewater and Stormwater Section Managers

Minnesota Pollution Control Agency

May 2024

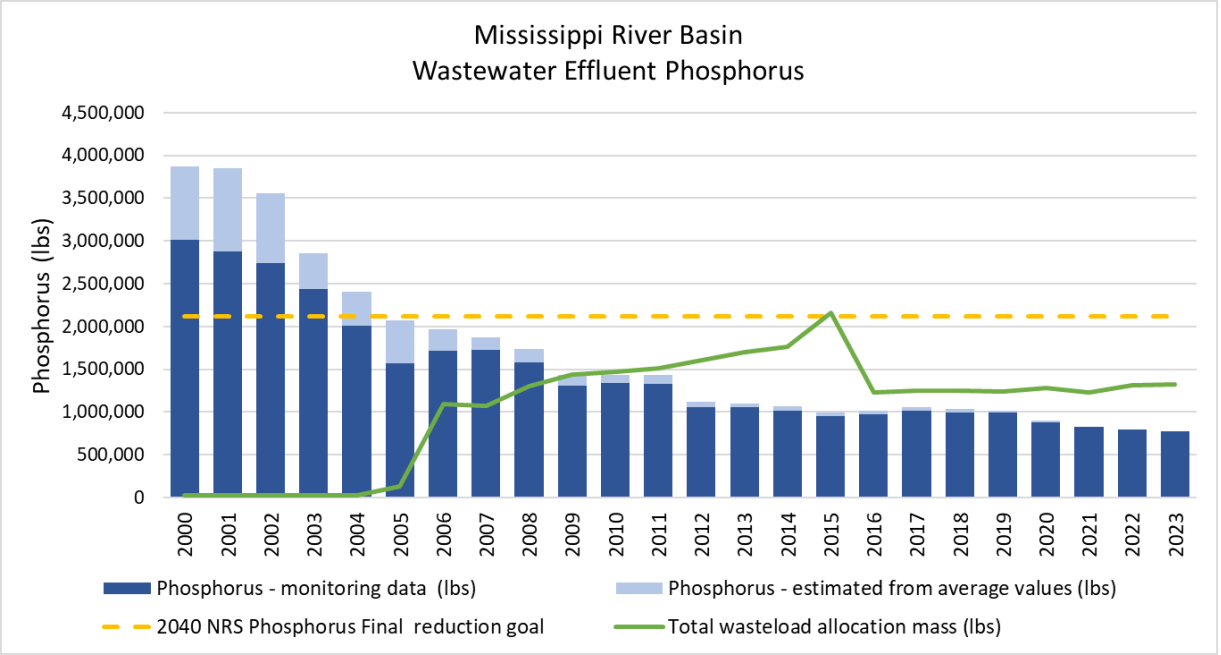
Point Source Implementation

- Ensure point source influences are represented in TMDLs and WRAPS
- Implement actions to reduce pollutants through permitting and working with local partners
- Establish limits and BMPs to prevent impairments
- Develop tools to analyze impacts and support water quality trading

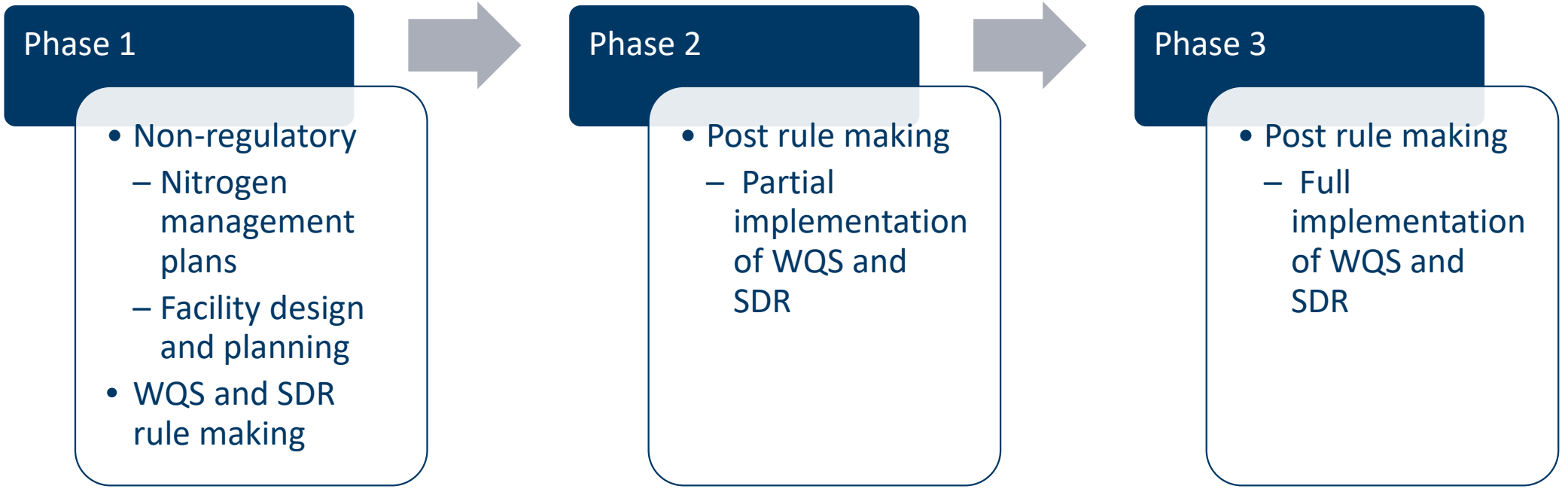


Wastewater Accomplishments

- Proactive coordination and implementation of effluent limits consistent with TMDL WLAs
  - Phosphorus below WLAs and nutrient reduction strategy goals
- Hired a Water Quality Trading Coordinator
- Wastewater Nitrate Reduction Strategy
- Continued to increase access to wastewater data and permits

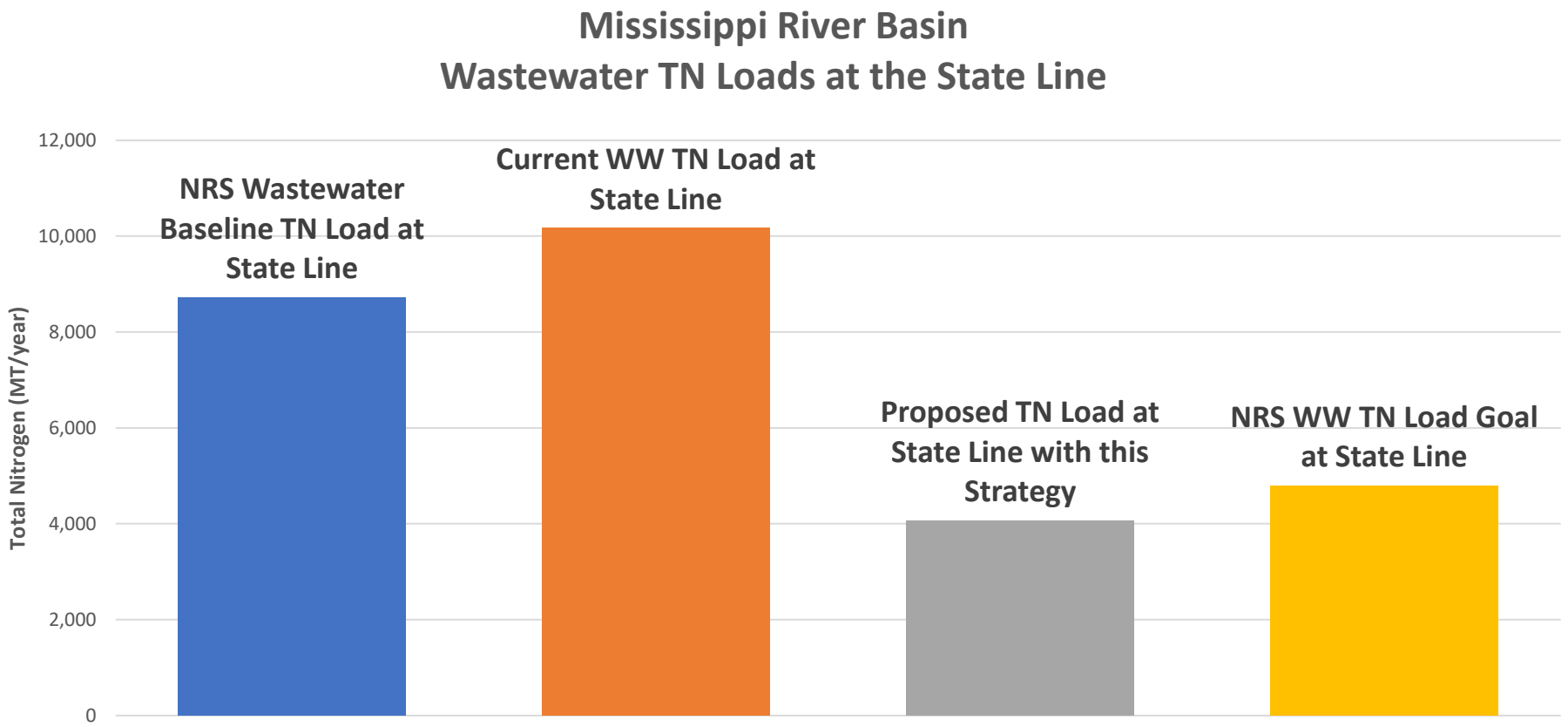


Wastewater Nitrogen Reduction Strategy



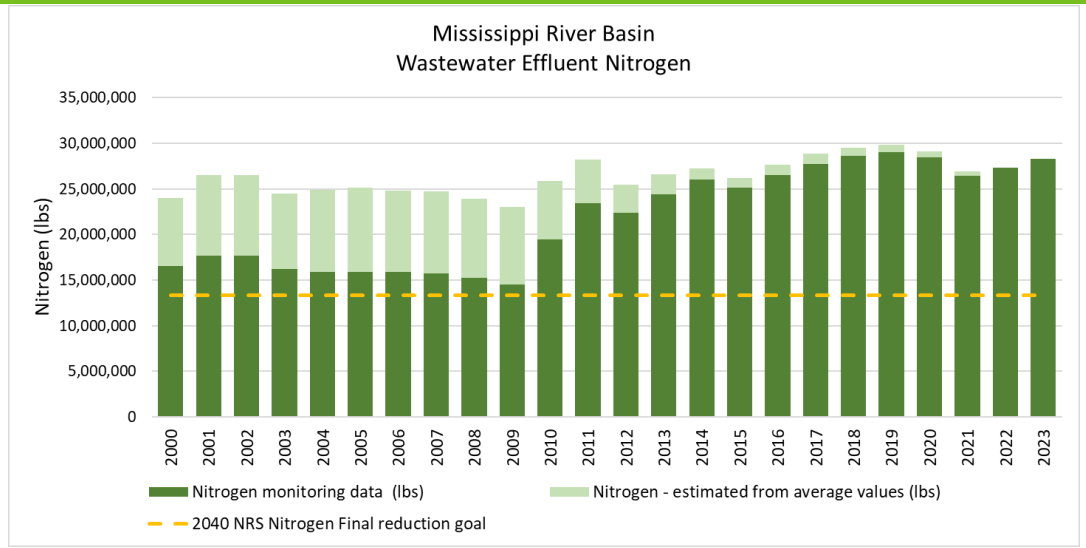
https://www.pca.state.mn.us/business-with-us/nitrogen-in-wastewater

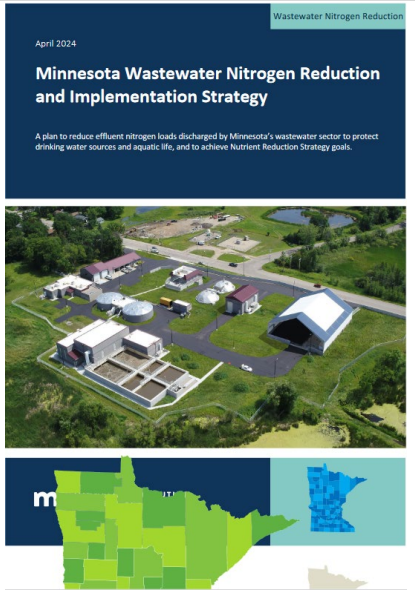
Wastewater strategy TN load reductions would meet NRS goals (only showing Mississippi R, but also Red R)

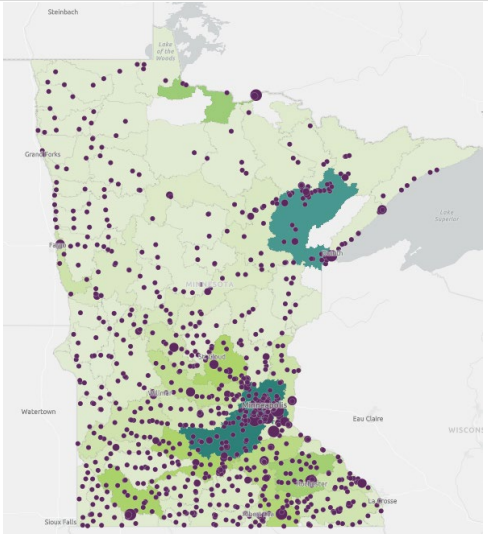


Supporting Future Wastewater Implementation

- Challenges include phosphorus, nitrate, chloride, sulfate, and PFAS
- Developing and implementing guidance and strategies to implement solutions
- Continued coordination - developing innovative and cost effective solutions is essential

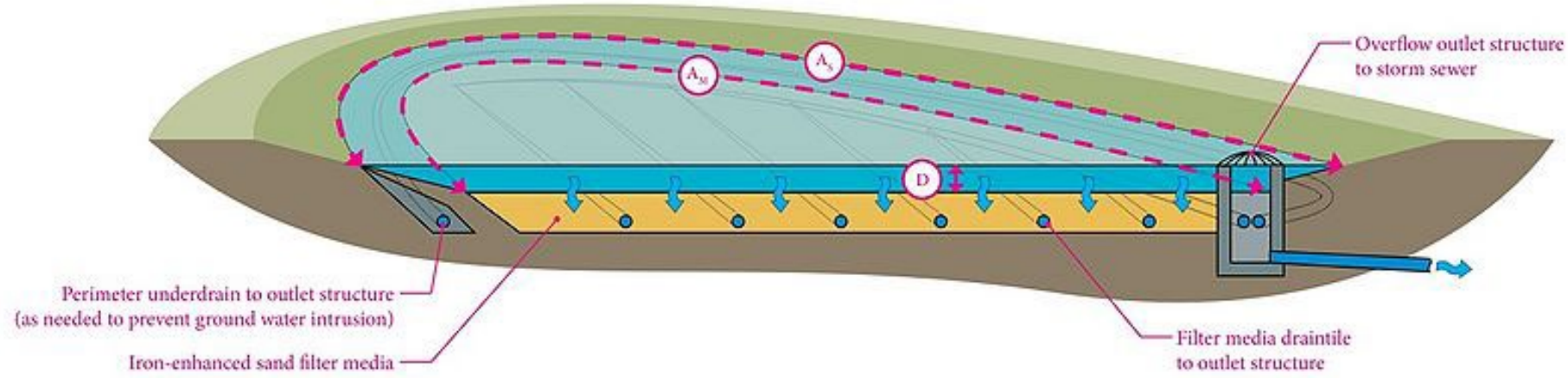






Stormwater TMDL Implementation and Stormwater Permitting Accelerated Implementation

- Accomplishments
  - Assist permittees by translating science into actionable guidance and credits
  - MS4 (Municipal Stormwater) Permit includes enhanced tracking of performance with TMDLs
  - Develop guidance for stormwater practitioners
  - Increasing access to tools and resources – Unique application materials, calculators
  - Supporting permits and permittees – Workshops/webinars



Iron Enhanced Sand Filter Basin

Supporting Future Stormwater Implementation

- Continued enhancement of design criteria and crediting for nutrient reduction BMPs including water quality trading
- Developing guidance based on MDH work on stormwater reuse
  - Inter-agency collaboration on CWF-funded projects
- Education and outreach efforts on new guidance related to advanced water quality improvement practices
  - Street sweeping and management of wastes, permit compliance, etc.

NPDES Wastewater/Stormwater TMDL Implementation

	FY12-13	FY14-15	FY16-17	FY18-19	FY20-21	FY22-23	FY24-25
Clean Water Funds		$1.8 M	$1.8 M	$1.8 M	$1.8 M	$1.8M	$3.0M
FTEs (state agency staff funded by CWF)		6.6/6.3	5.8/5.7	6.0/6.0	6.0/6.0	6.0	7.75
Clean Water Funds (MS4 Accelerated)			$550,000	$450,000	$400,000	$400,000	NA*
FTEs			1.0	1.0	1.0	1.0	NA*

* Combined former NPDES Wastewater/Stormwater TMDL and Accelerated Implementation into one request in FY 24

Point Source Implementation Grant and Small Community Wastewater Treatment Programs

Suzanne Baumann | Section Manager, Municipal Wastewater Division | Pollution Control Agency
Jeff Freeman | Executive Director | Public Facilities Authority

Clean Water Council Strategic Plan Vision

Minnesotans will have fishable and swimmable waters throughout the state.
All Minnesotans value water and take actions to sustain and protect it.

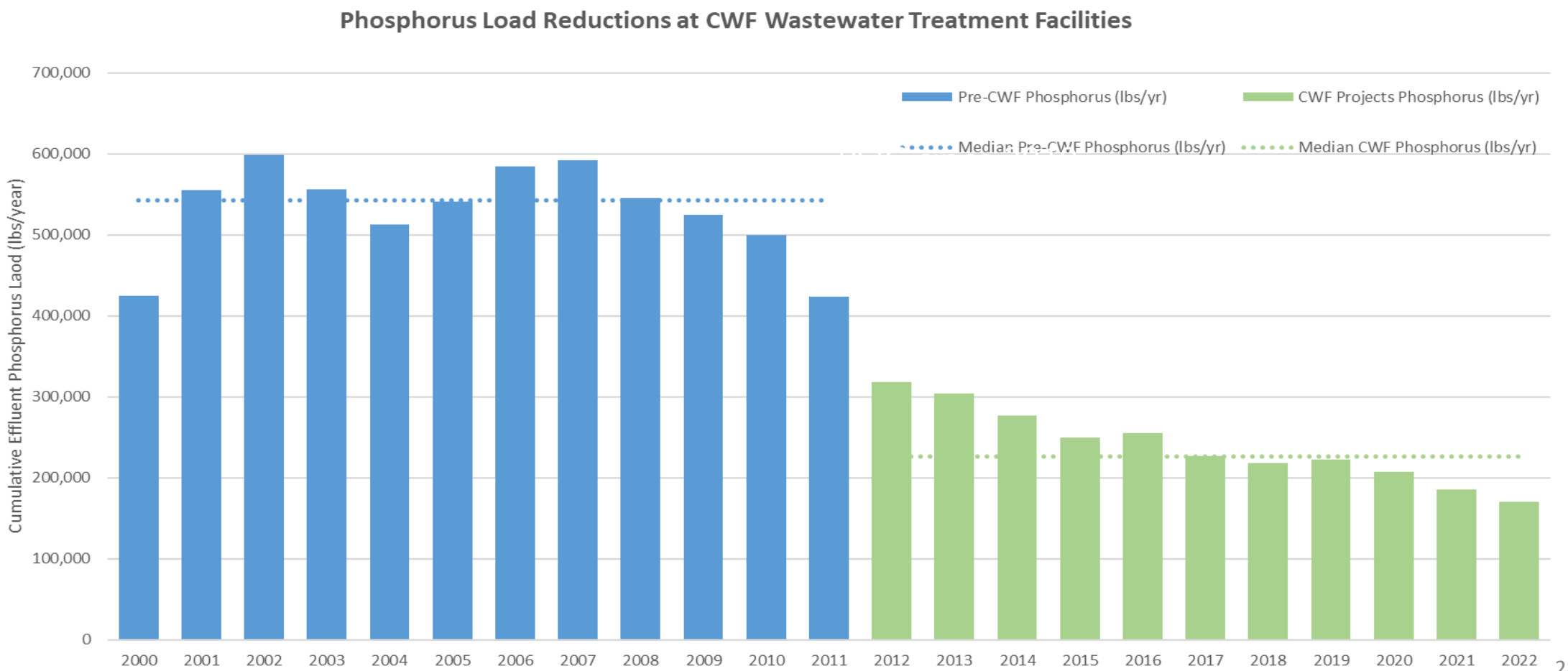
Goal 1: Build capacity of local communities to protect and sustain water resources.
Goal 3: Protect and restore surface waters.

PFA Program	Purpose
Point Source Implementation Grant (PSIG) Program	Help cities upgrade treatment facilities to reduce discharge of specific pollutants to address impaired waters and improve water quality (phosphorus, mercury, chlorides, others).
Small Community Wastewater Treatment (SCWW) Program	Help small under-sewered communities explore wastewater treatment alternatives and construct soil-based treatment systems.

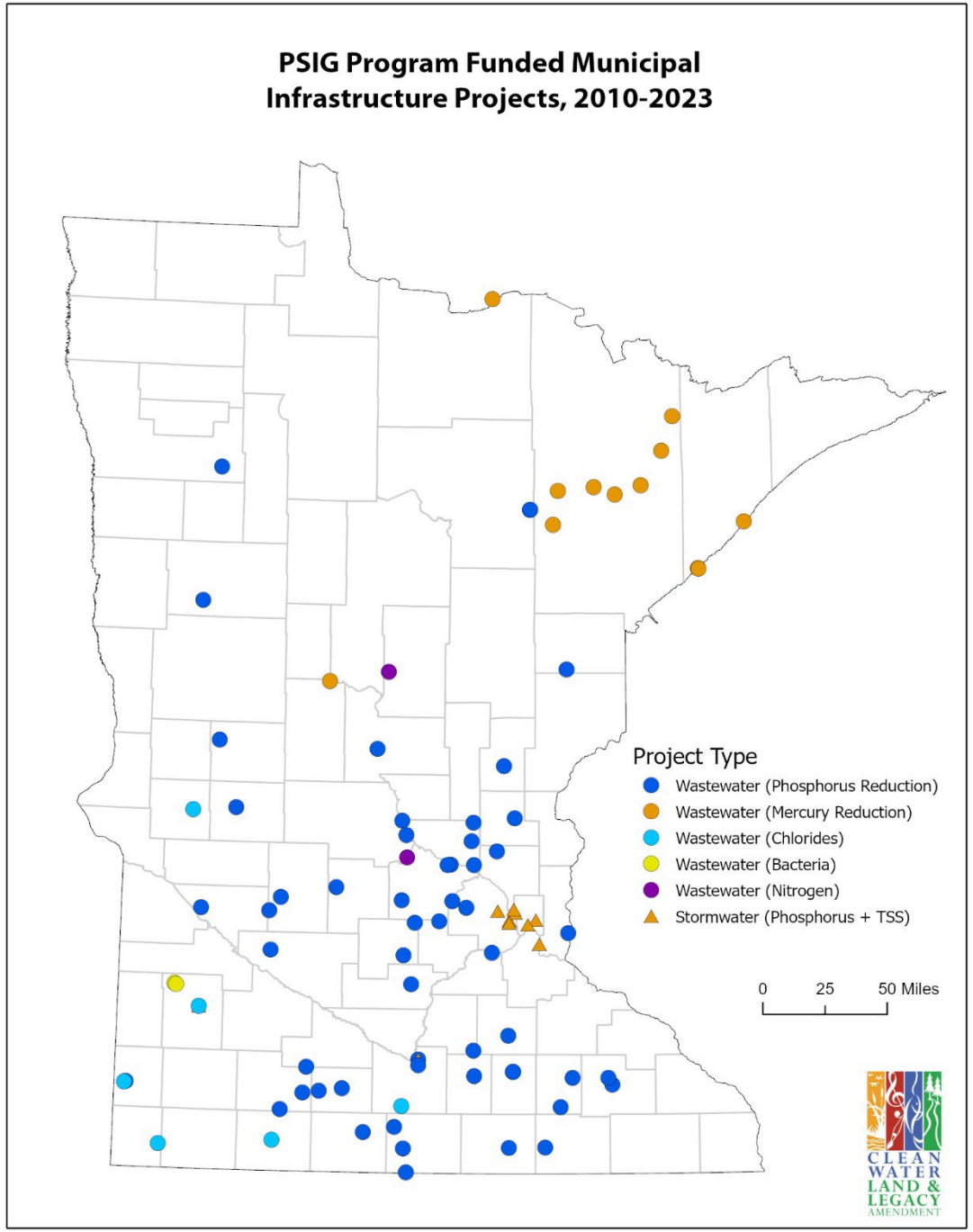
Point Source Implementation Grants (PSIG)

Statute	Section 446A.073
Project Eligibility	Projects to address TMDL wasteload reduction requirements, meet water quality-based effluent limits for phosphorus and other pollutants, reduce total nitrogen concentrations to ten milligrams per liter or less. Projects must be ranked on MPCA's Project Priority List.
PSIG Eligible Percentage	Only project costs related to meeting the specific pollutant reduction requirement are PSIG grant eligible
Project Funding	PSIG grants cover 80% of eligible project costs up to $7 million. Grant funds reserved for projects receiving MPCA approval and certification and awarded when projects are ready to start construction.

PSIG: Phosphorus reduction 48 projects



Clean Water Funds for PSIG



PSIG at work

PSIG is essential to making wastewater projects happen

City of Austin

- Major rehab and expansion of the WWTF.
- Upgrade treatment process to meet. phosphorus limit.
- Total project cost: $113 million.
- PSIG eligible: 22.4%.
- PSIG grant: $7 million.
- Outcome: 81% phosphorus reduction.

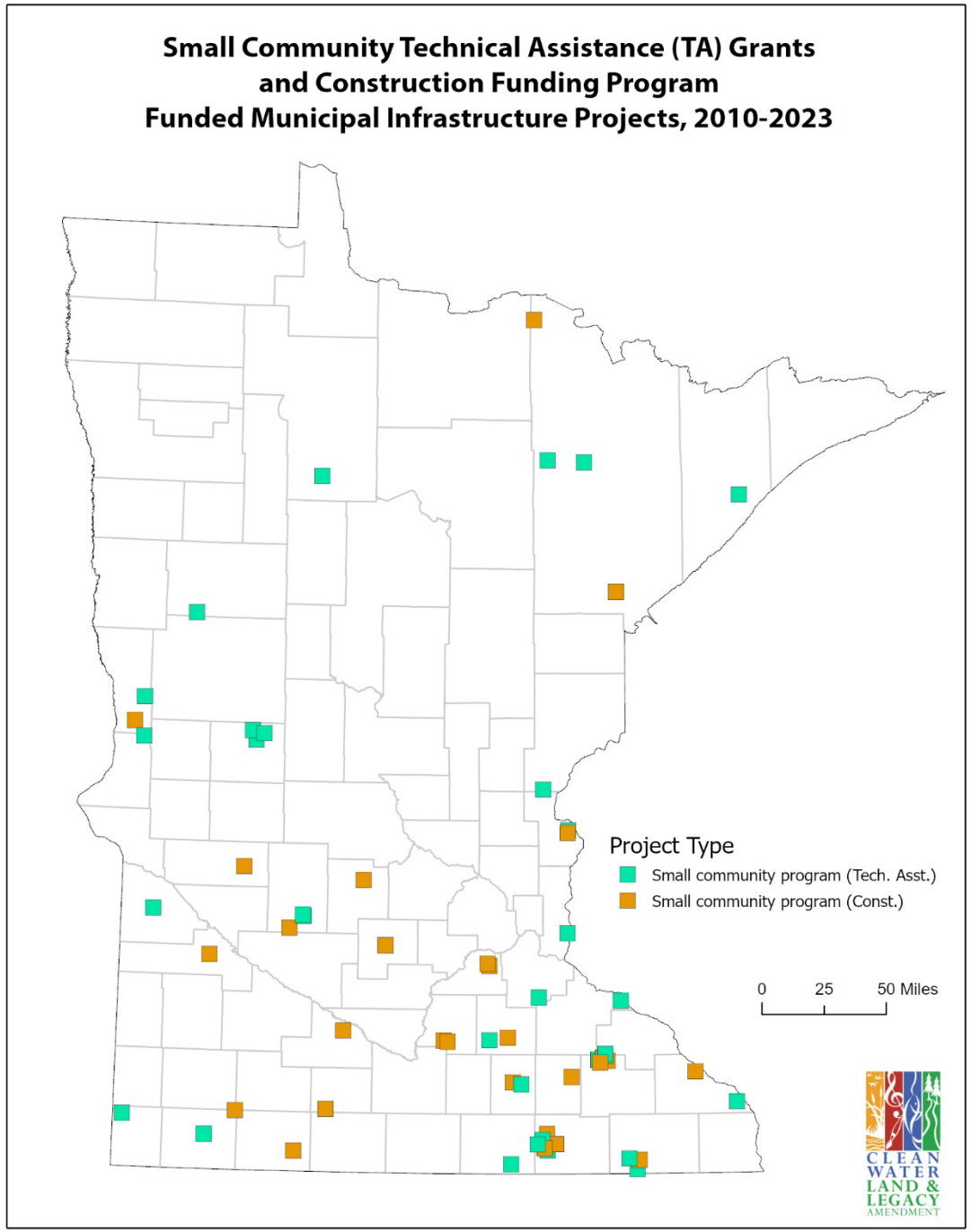
Point Source Implementation Grants (PSIG)

Statute	Section 446A.073
Funding Awards since 2010	120 projects, $435 million total project costs. CWF: $146 million. Leveraged funds: $291 million (including $126 million in state bond appropriations).
Funds Reserved	14 projects, $67.6M grant funds reserved.
Applications	Unfunded applicants: 24 projects, $92M grant need.
Requested Funding	2024 Governor's Bonding Recommendation: $18.527 million. FY2026-27 Clean Water Fund: Expect to request increase from FY24-25.

Small Community Wastewater Treatment (SCWW)

Statute	Minnesota Statutes 446A.075
Eligibility	Local governments (cities, townships, counties) seeking to address noncomplying subsurface sewage treatment systems. Projects must be ranked on MPCA's Project Priority List.
Project Funding	Technical Assistance: TA grants up to $60,000 to conduct site evaluations and evaluate feasibility of wastewater alternatives. Construction: Loans and grants up to $2 million for construction of publicly owned soil-based treatment systems.

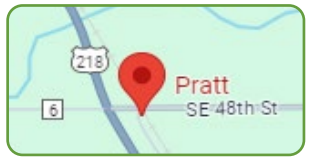
Clean Water Funds for SCWW



SCWW at work

Grant funding is essential for small communities:

- Improve wastewater systems.
- Protect residents from imminent threats to public health.
- Protect groundwater.



Pratt (Steele County)

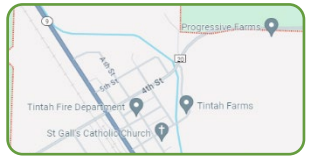
Upgraded Individual Systems

Hazel Run (Yellow Medicine County)

Upgraded individual and Cluster Systems

Zumbro Township (Wabasha County)

Upgraded to a community drain field



Tintah

Regionalizing to a neighboring WWTP

Big Kandi

Breaking community into 3 divisions, 3 separate CARS to determine best options for each area.

Small Community Wastewater Treatment (SCWW)

Statute	Minnesota Statutes 446A.075
Funding Awards since 2010	Technical Assistance: 39 TA grants, $1.4 million. Construction: 11 construction awards, $5.5 million.
Project Needs	Under-sewered communities identified by MPCA: 800.
Requested Funding	FY 2026-27 Clean Water Fund: Expect to request stable funding.
Potential Program Innovations	MPFA and MPCA continue to have discussions about ways to improve program effectiveness.

Thank you

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MN Pollution Control Agency
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651-757-2798

Jeff Freeman
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MN Public Facilities Authority
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Aquifer Monitoring for Water Supply Planning

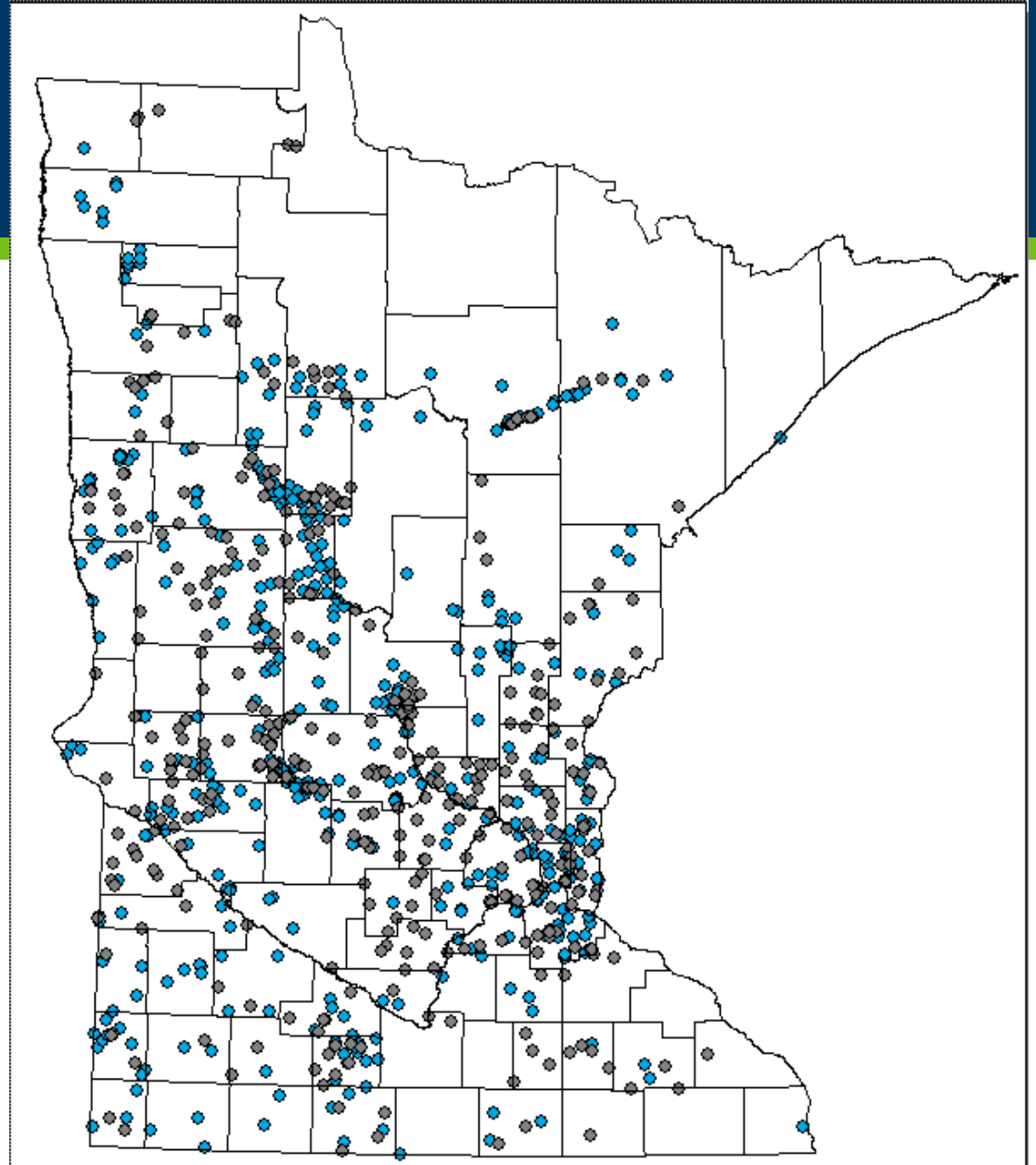
Jason Moeckel | Manager, Inventory, Monitoring and Analysis Section

Minnesota Department of Natural Resources

New Monitoring Well Install (Norwood Young America)

Aquitards vs Aquifers

Water Level Network



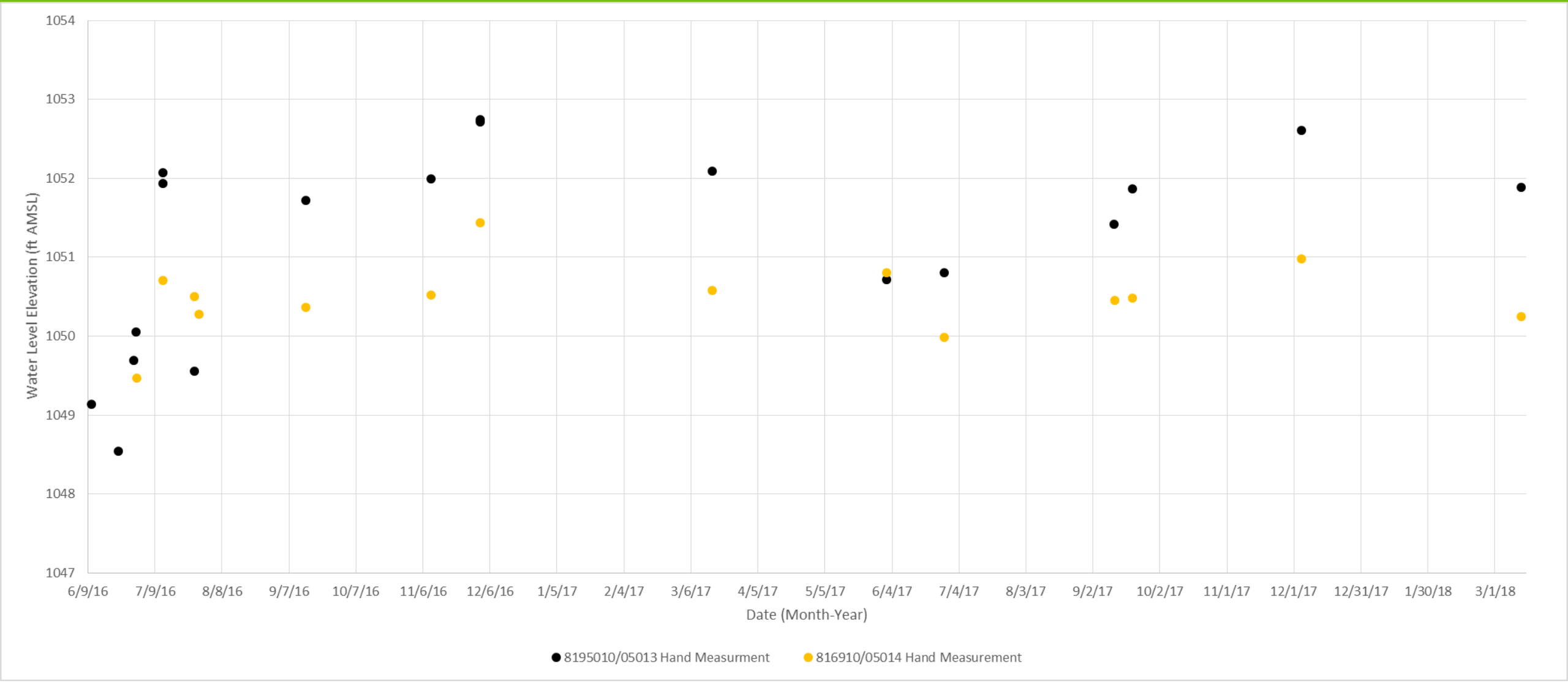
DNR Observation Wells

- Obwells Added Since CWF Began FY2010 (634)
- Actively Monitored Obwells (1254)

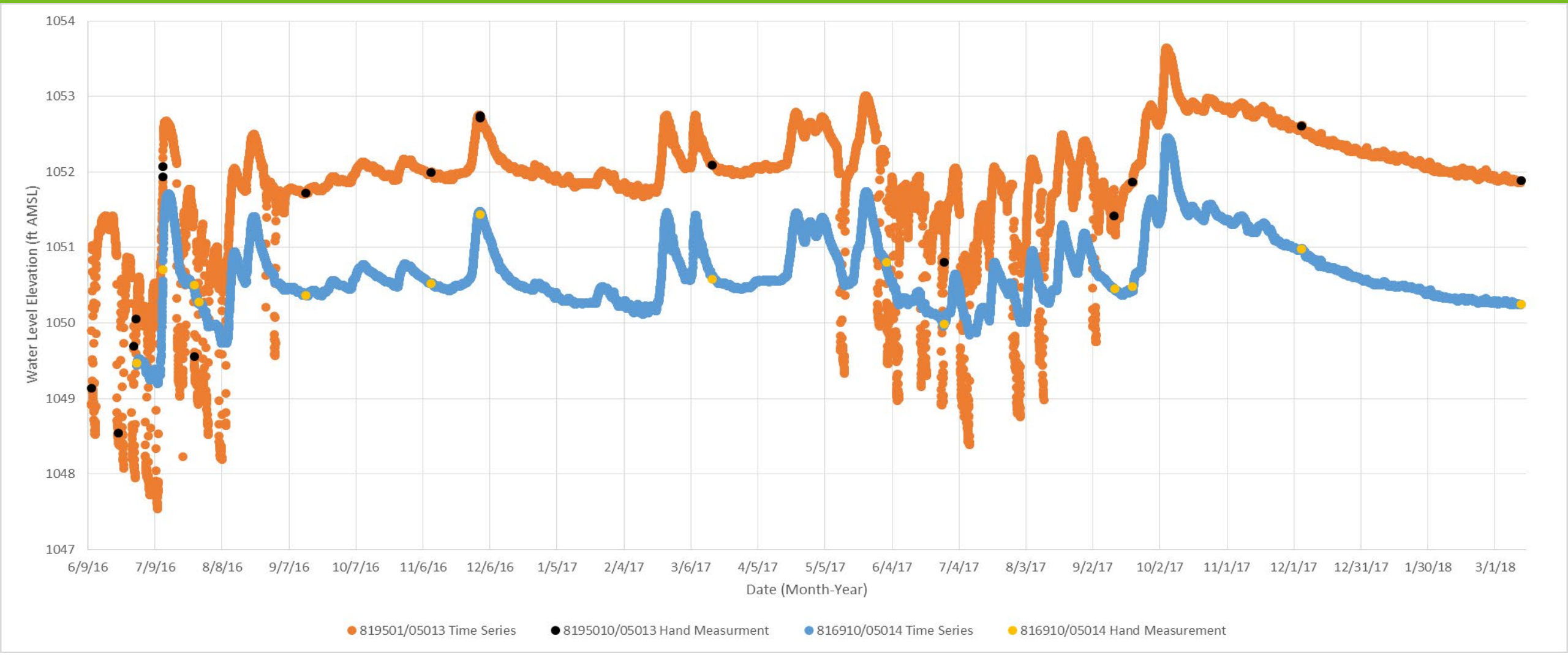
- Network with 1,254 wells
- 854 now have continuous monitoring

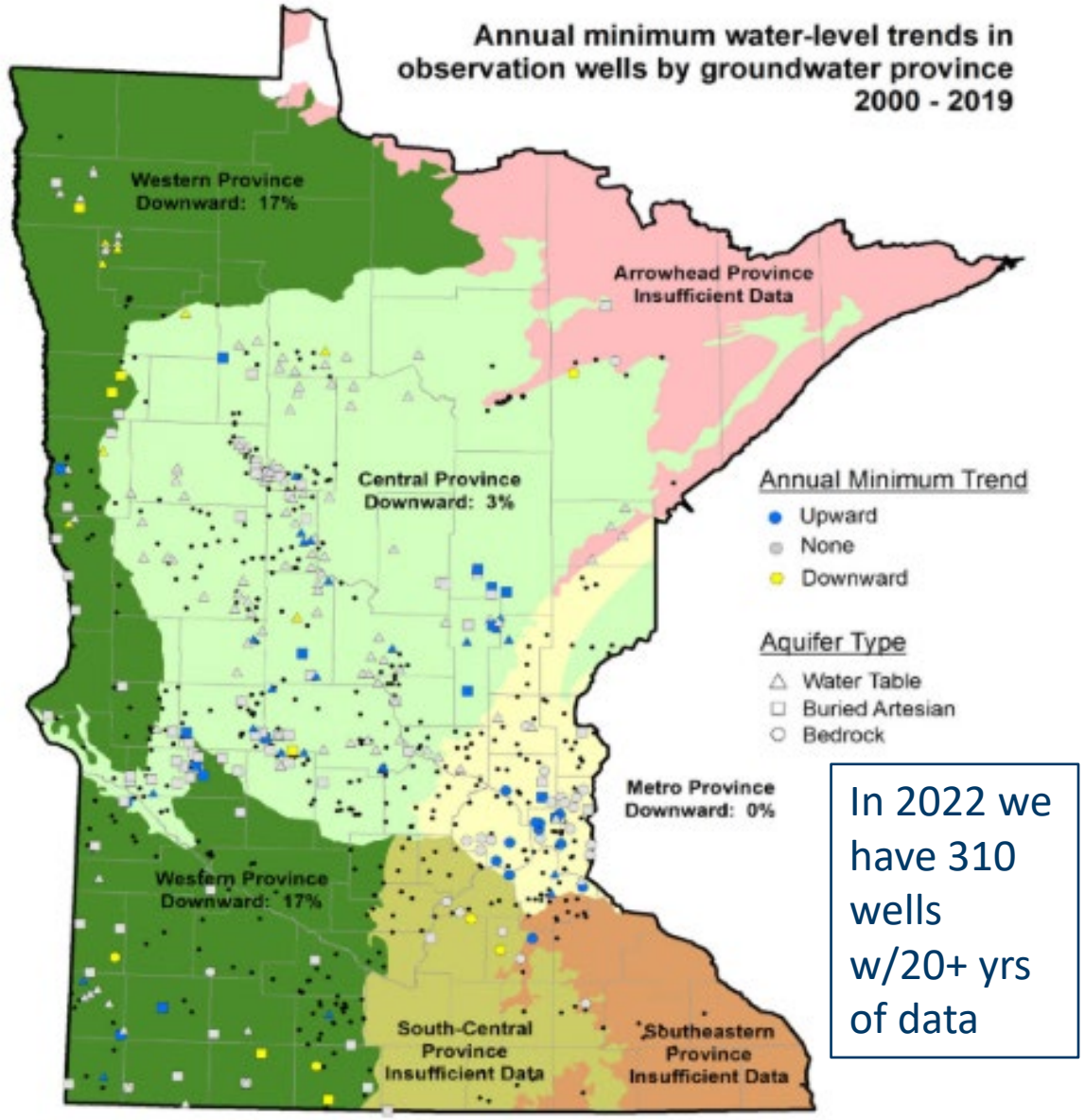
Aquifer Monitoring for Water Supply Planning

15th Ave Nest Near Rice
QBAA 5013 (133 ft) and QWTA 5014 (39ft)



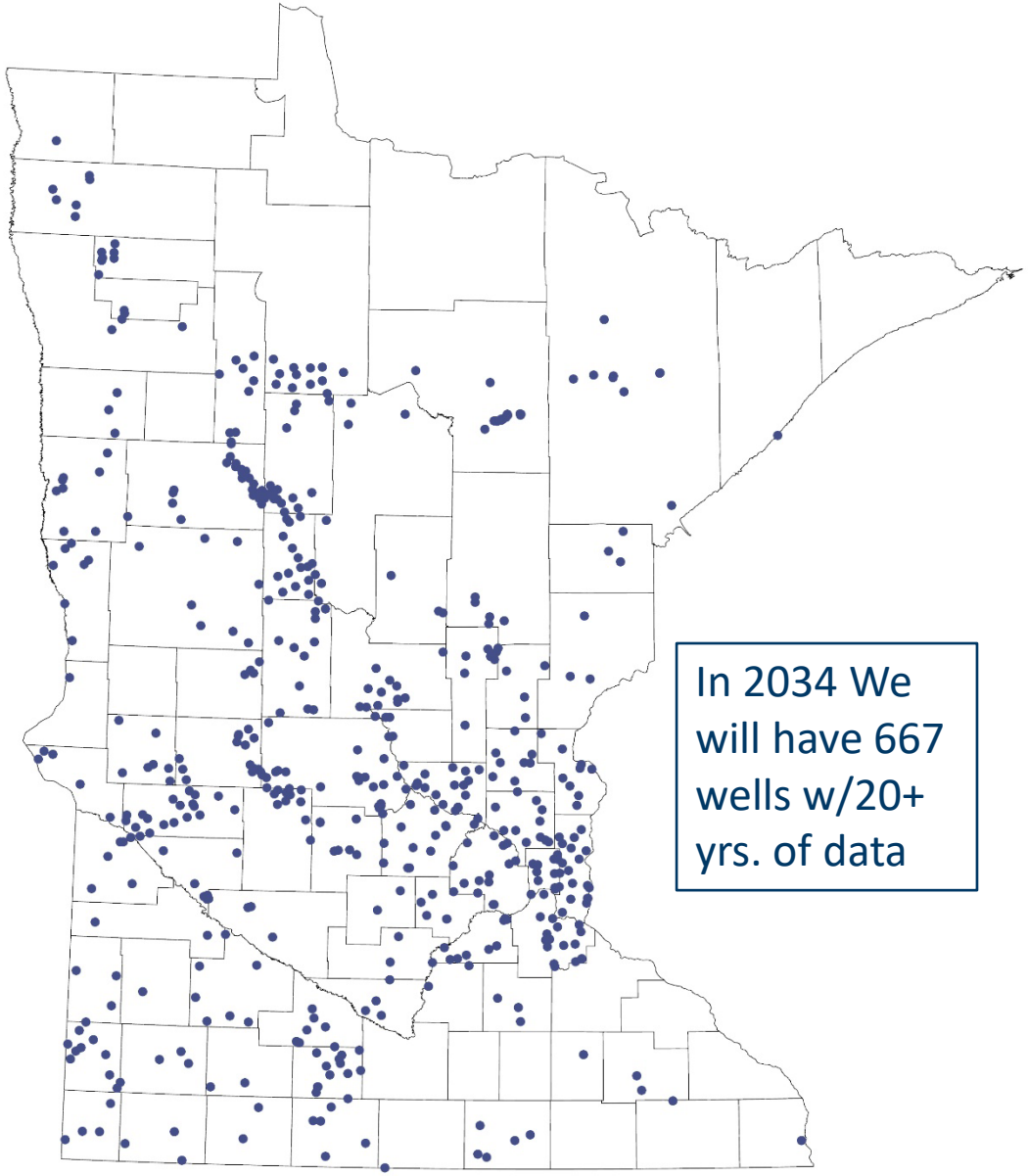
15th Ave Near Rice - 5013 (133 ft Buried Aquifer) and 5014 (39 ft Water Table)





In 2022 we have 310 wells w/20+ yrs of data

Figure 61. Water level trends in DNR observation wells for the period from 2000-2019



In 2034 We will have 667 wells w/20+ yrs. of data

DNR Observation Wells

- Obwells with 20+ years of data in 2034 (667)

Water Supply Planning Highlights in FY23

- Installed 56 (FY23/24) groundwater level monitoring wells in 23 counties
- City of Warren water supply delineated aquifer extent and thickness and evaluated groundwater levels compared to historic groundwater use
- Little Rock Creek Area
  - “Evaluation of Conceptual Groundwater-Use Management Actions, Little Rock Creek Area.”
  - Established sustainable diversion limits for Little Rock Creek
- Reviewed 16 groundwater-based community water supply plans
- Continued data compilation for Bonanza Valley Groundwater Modeling Analysis
- Completed three GRAPS reports

Aquifer Monitoring for Water Supply Planning

	FY10-21	FY22-23	FY24-25
Clean Water Funds	$16.5M	$3.7M	$4.0M
FTEs (state agency staff funded by CWF)	~11	12.5	12

Fish Contaminants Monitoring Program (FCMP)

Dr. Isaiah Tolo | Fish Health Supervisor

Minnesota Department of Natural Resources – Fish Health Laboratory

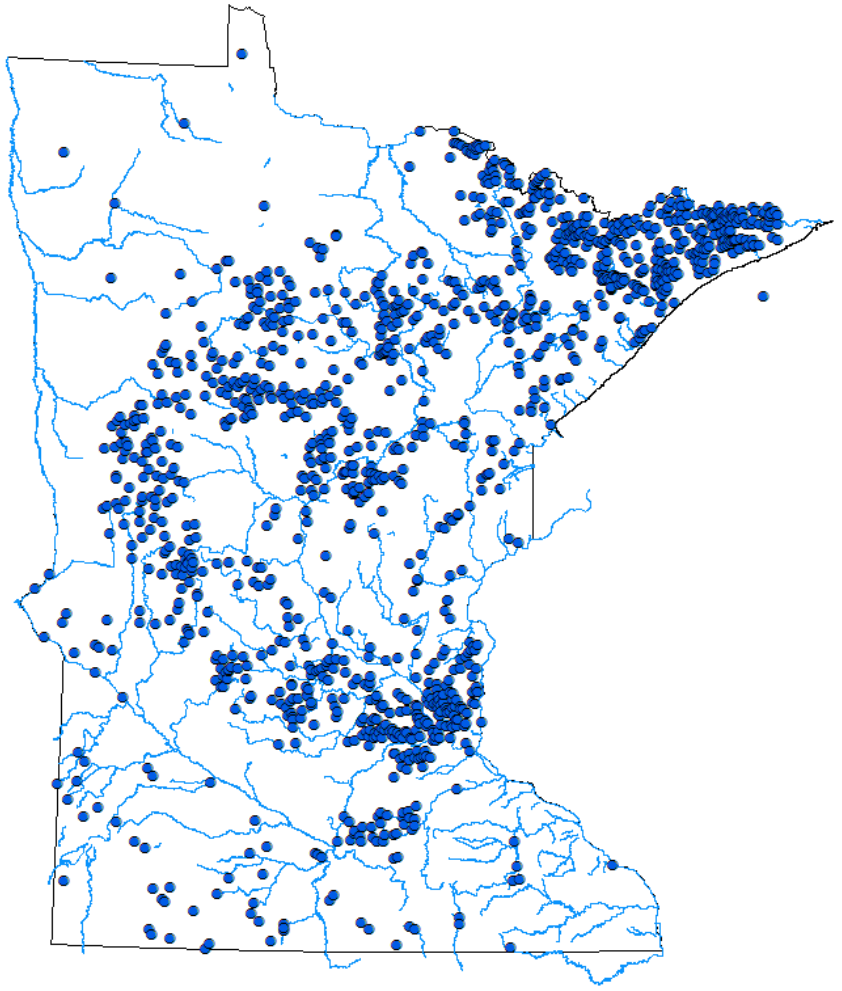
Using fish tissue contaminant surveillance to guide fish consumption advisories for the public

- Goal: to collaboratively support the state's needs for measuring and understanding contaminant levels present in Minnesota's fish, to protect human health (including that of subsistence anglers) and ensure thriving fish populations and fishable waters.
- Scope: Fish contaminants are those pollutants that persist and accumulate in fish tissues and may cause adverse impact to the health of people consuming fish or to those populations of aquatic communities.

FCMP is focused on 2 groups of chemical contaminants (CWC funding only for Hg & PCB until 2023)

1. Mercury (Hg)
   - 1,385 lakes and 114 rivers tested
   - present at some level in every fish we test
   - follows a predictable pattern
     - higher in predator/game fish
     - lower in panfish (and smaller predator fish)
   - Pregnant women and children are more susceptible to adverse impacts.
2. Polychlorinated biphenyls (PCBs) are mainly an issue in the major rivers and Lake Superior and levels are declining (not in inland lakes).

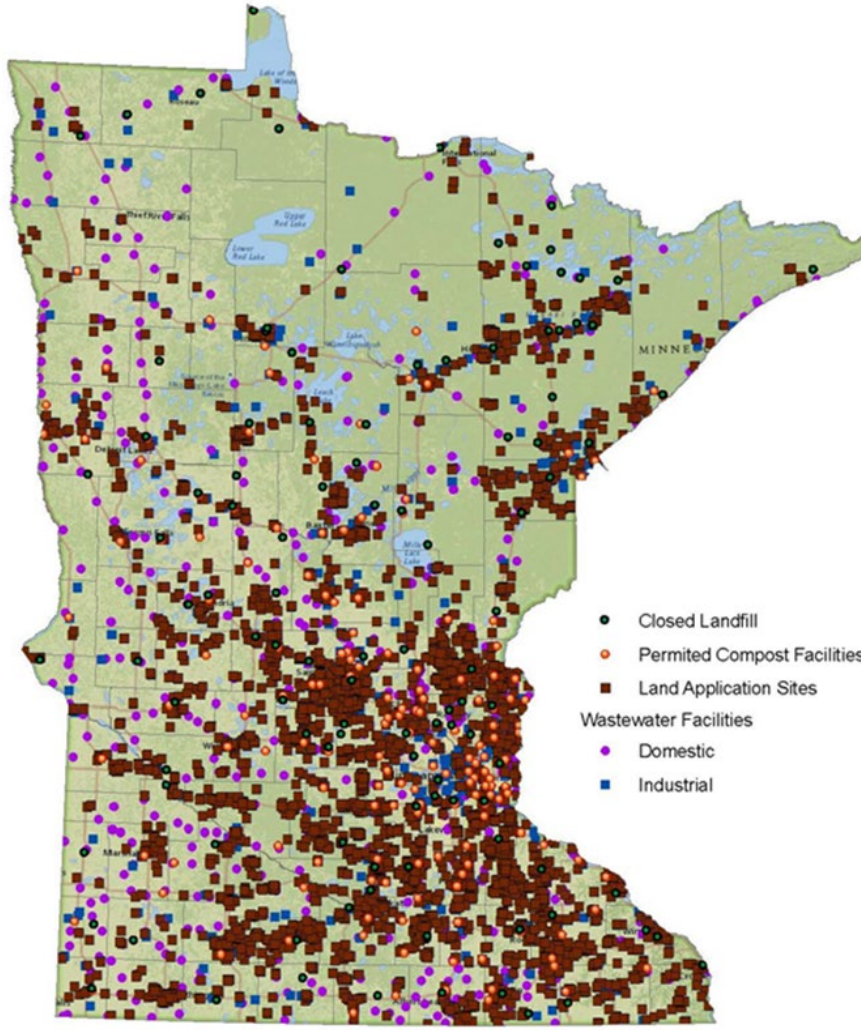
- MDH statewide fish consumption guidelines based on Hg and PCB levels



Waterbodies surveyed in 2019

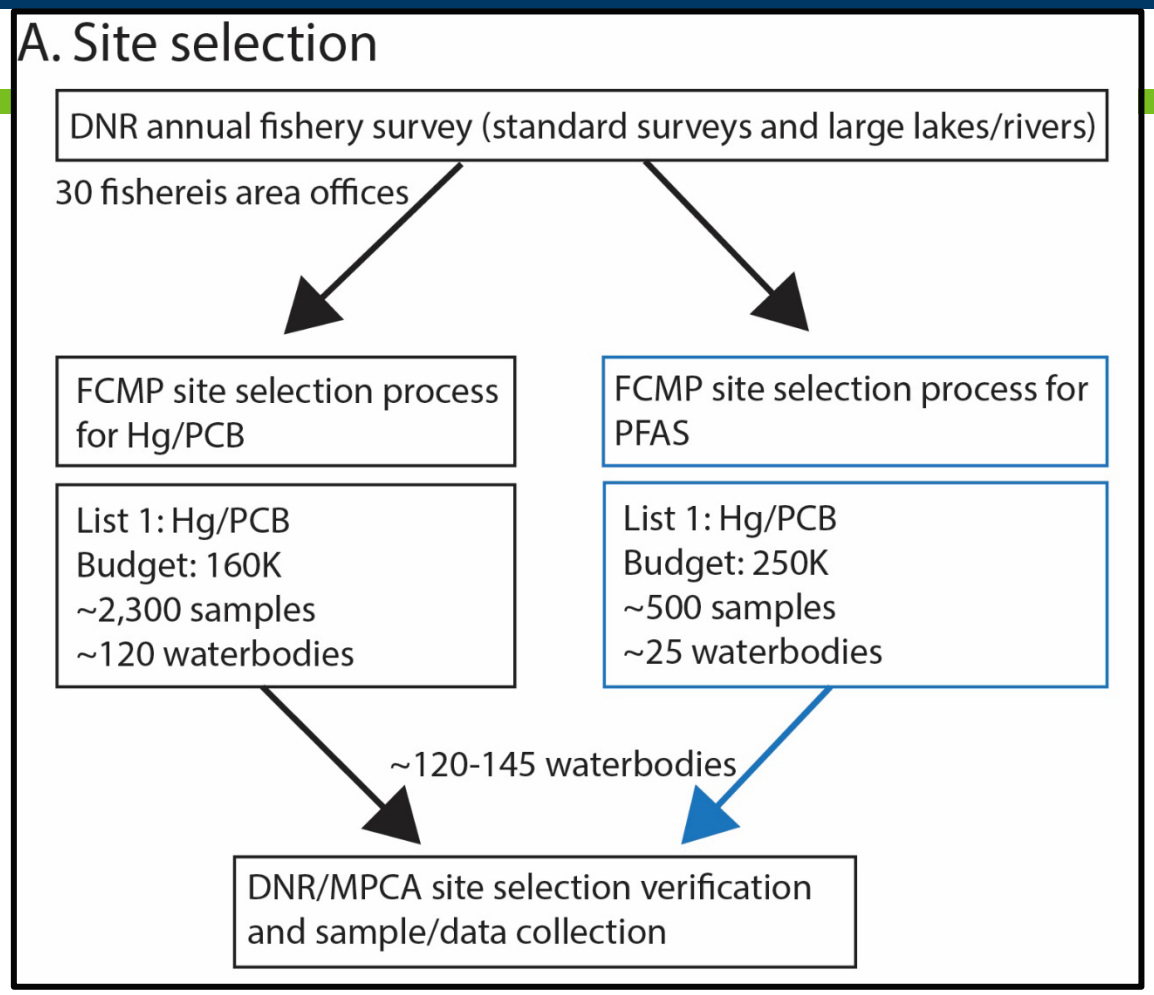
More recent shift to incorporating Per-and Polyflouroalkyl Substances (PFAS) monitoring

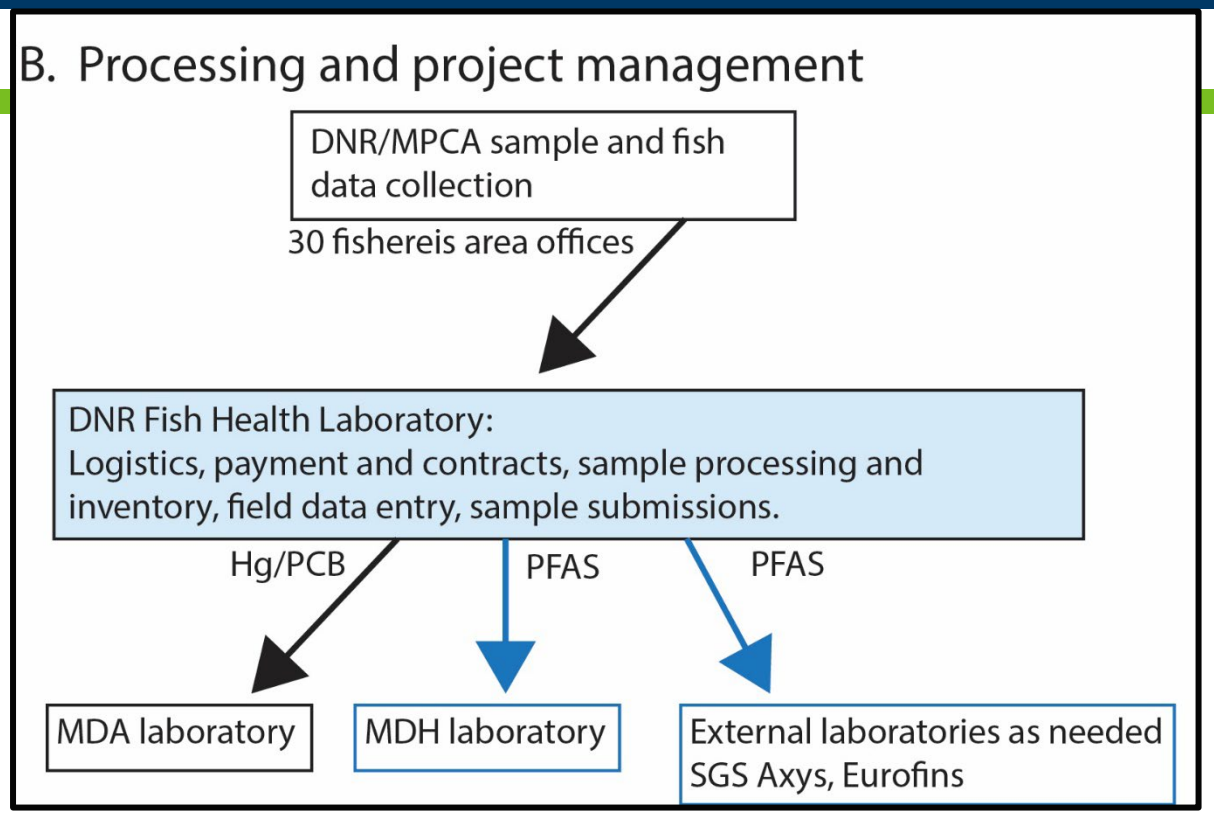
- PFAS is the first “new” contaminant that results in fish consumption advice more restrictive than Hg for some inland waters fish.
- PFOS contamination appears pervasive across Minnesota
  - PFOS in fish tissue; lakes: 84% in Metro, 22% in Non-Metro
  - 95% of waters tested in 2018 had at least one fish with PFOS
- Accumulation pattern in fish do not follow typical bioaccumulation
  - Similar levels in panfish and predator fish
  - Shorter half-life in fish than Hg or PCBs (monitoring data becomes out of date more quickly)
- Many waters may be impacted by PFAS
  - Landfills and wastewater implicated as potential sources of contamination.

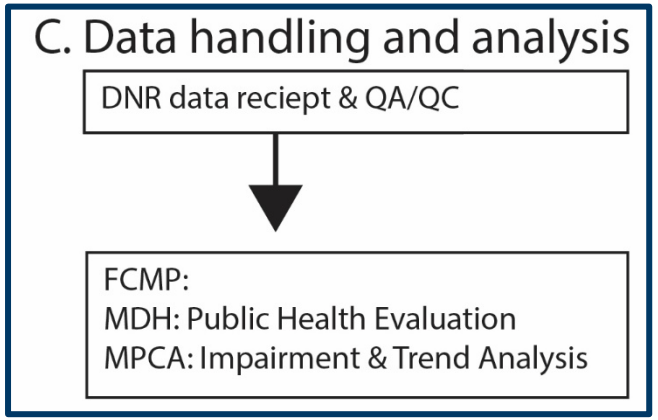


90 closed landfills have been tested – 97% had detectable PFAS

Fish contaminant monitoring program (FCMP) at a glance







New processes introduced by PFAS program

Fish Contaminants Monitoring Program

	FY12-13	FY14-15	FY16-17	FY18-19	FY20-21	**FY22-23**	**FY24-25**
Clean Water Funds	$270,000	$270,000	$270,000	$270,000	$270,000	$350,000	$910,000/ $1,000,000
FTEs (state agency staff funded by CWF)							Requesting $90K for 1FTE in 2025




Application of the Fish Based Index of Biological Integrity (IBI) Framework to Protect and Restore Minnesota Lakes

Derek Bahr, Jacquelyn Bacigalupi, and Jason Moeckel | Minnesota DNR

MINNESOTA

SPORT FISH & WILDLIFE RESTORATION

CLEAN WATER LAND & LEGACY AMENDMENT

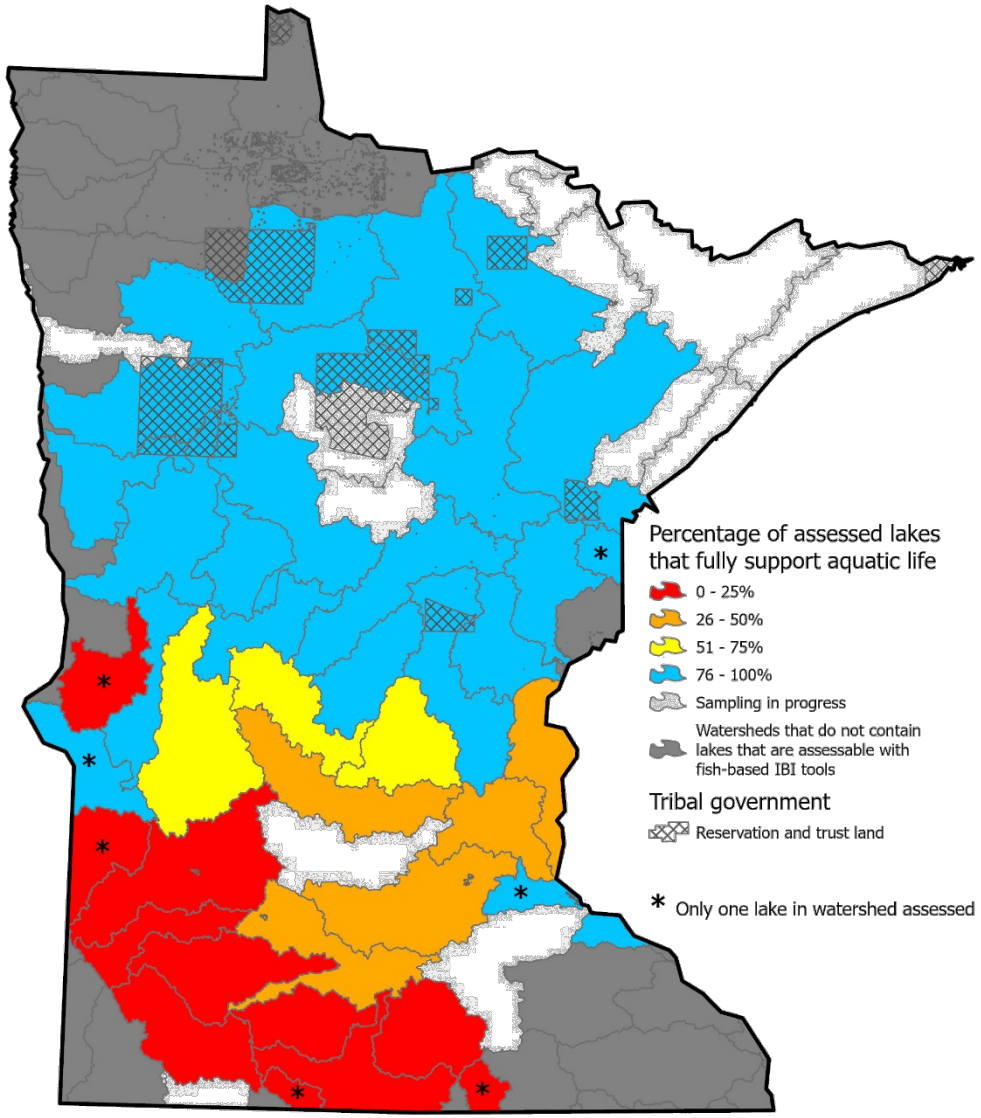
Use of Fish IBI in Monitoring and Assessment of Lakes

- Fish IBI results are used to assess the health of lakes and identify those negatively affected by watershed disturbance, shoreline degradation, or other environmental stressors

- Fish IBI results are used to prioritize watershed projects by identifying lakes with:
  - Exceptional fish communities, for protection
  - Vulnerability to impairment, for protection and restoration
  - Degraded fish communities, for restoration

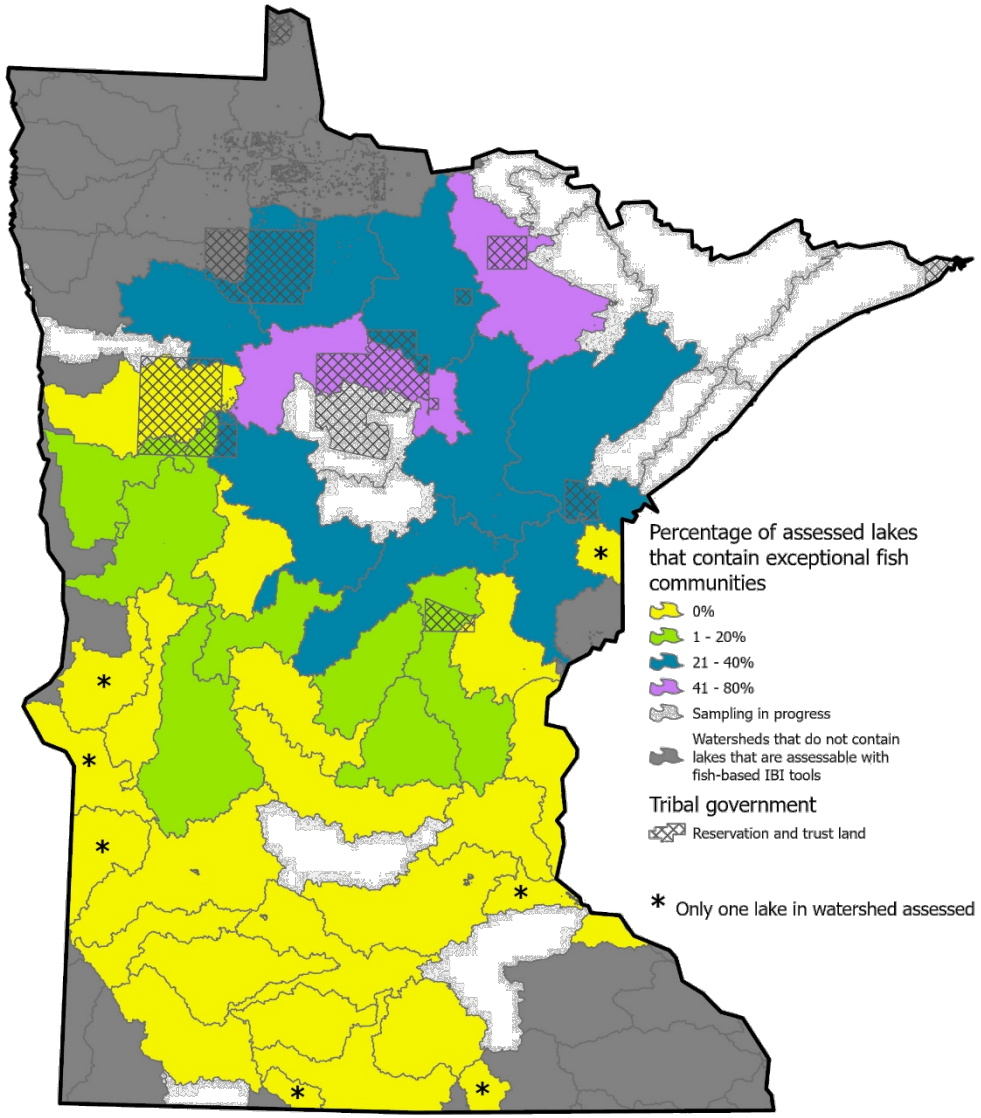
IBI webpage QR code:

Implementation of Fish IBI Monitoring and Assessment in Lakes



- 797 lakes assessed based on the Fish IBI
- 77% of lakes fully support aquatic life use based on the Fish IBI
- Stressor investigations identified eutrophication and physical habitat alterations as the most common stressors to fish communities in 159 impaired lakes & 71 lakes vulnerable to future impairment
- Research Scientist recently hired to expand program tools to far northeastern watersheds

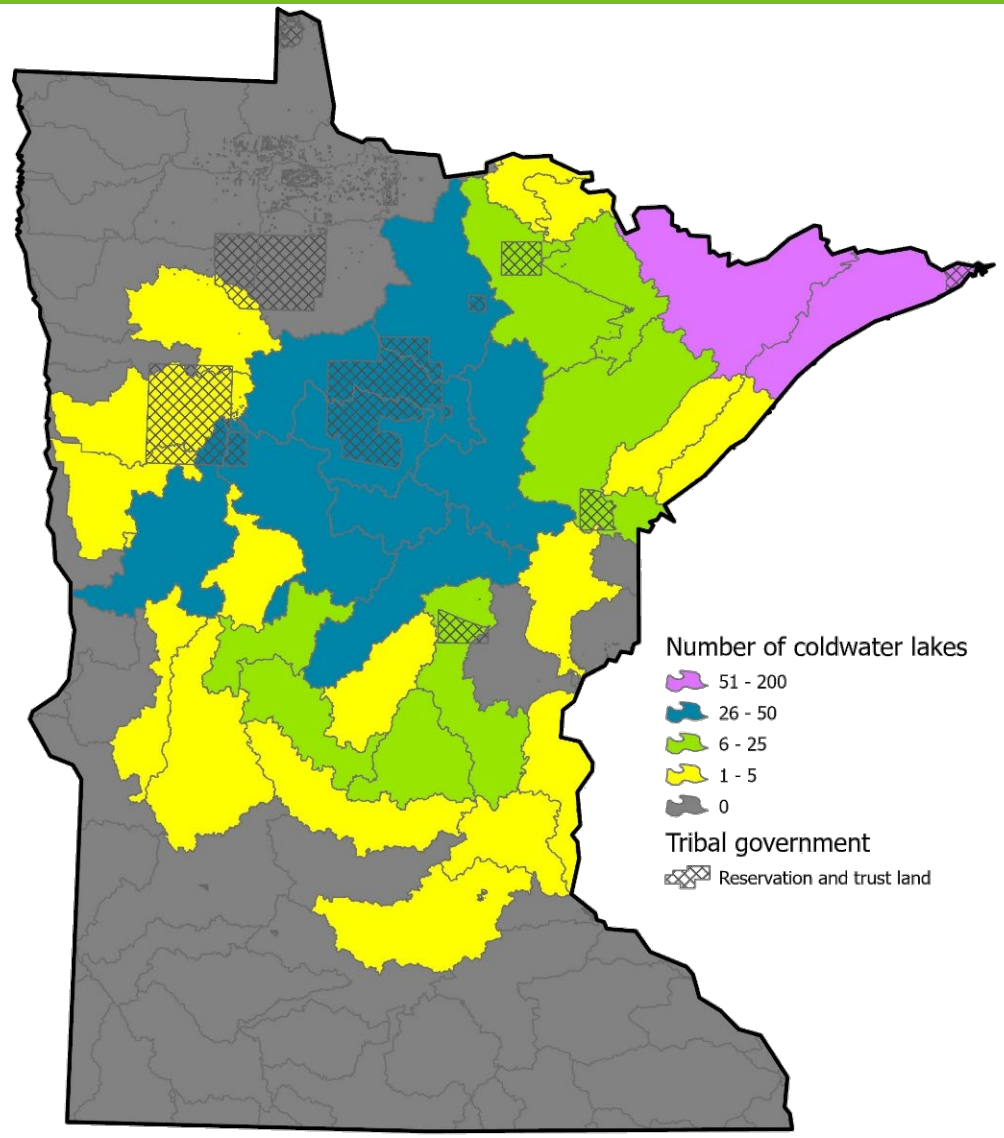
Protecting Exceptional Lakes Based on Fish IBI Data



- 17% of assessed lakes have exceptional fish communities
- Exceptional Fish IBI lakes are primarily in Northern MN and typically have high water clarity and high-quality shoreline habitat
- DNR and MPCA staff developed more protective standards for these lakes
- State and local units of government, and nonprofit land acquisition organizations are actively working on protection efforts for exceptional lakes
- https://www.pca.state.mn.us/get-engaged/lake-aquatic-life-and-recreation

Program Expansion: Protecting Coldwater Habitat in Lakes

- DNR IBI and MPCA scientists identified 740 lakes supporting coldwater fish (trout spp., lake whitefish, cisco)
- Scientists developed temperature/oxygen and water quality standards to protect coldwater fishes and their habitats
- Rulemaking, monitoring, and several watershed assessments are in process
- https://www.pca.state.mn.us/get-engaged/lake-aquatic-life-and-recreation



Application of the Fish Based IBI Framework to Protect and Restore Minnesota Lakes

	FY10-11	FY12-13	FY14-15	FY16-17	FY18-19	FY20-21	FY22-23	FY24-25
Clean Water Funds	$1.3M	$2.3M	$2.6M	$2.6M	$2.5M	$2.5M	$2.0M	$2.9M
FTEs (# state agency staff funded by CWF)	10	13	13	15.5	14	11	11	~12.5

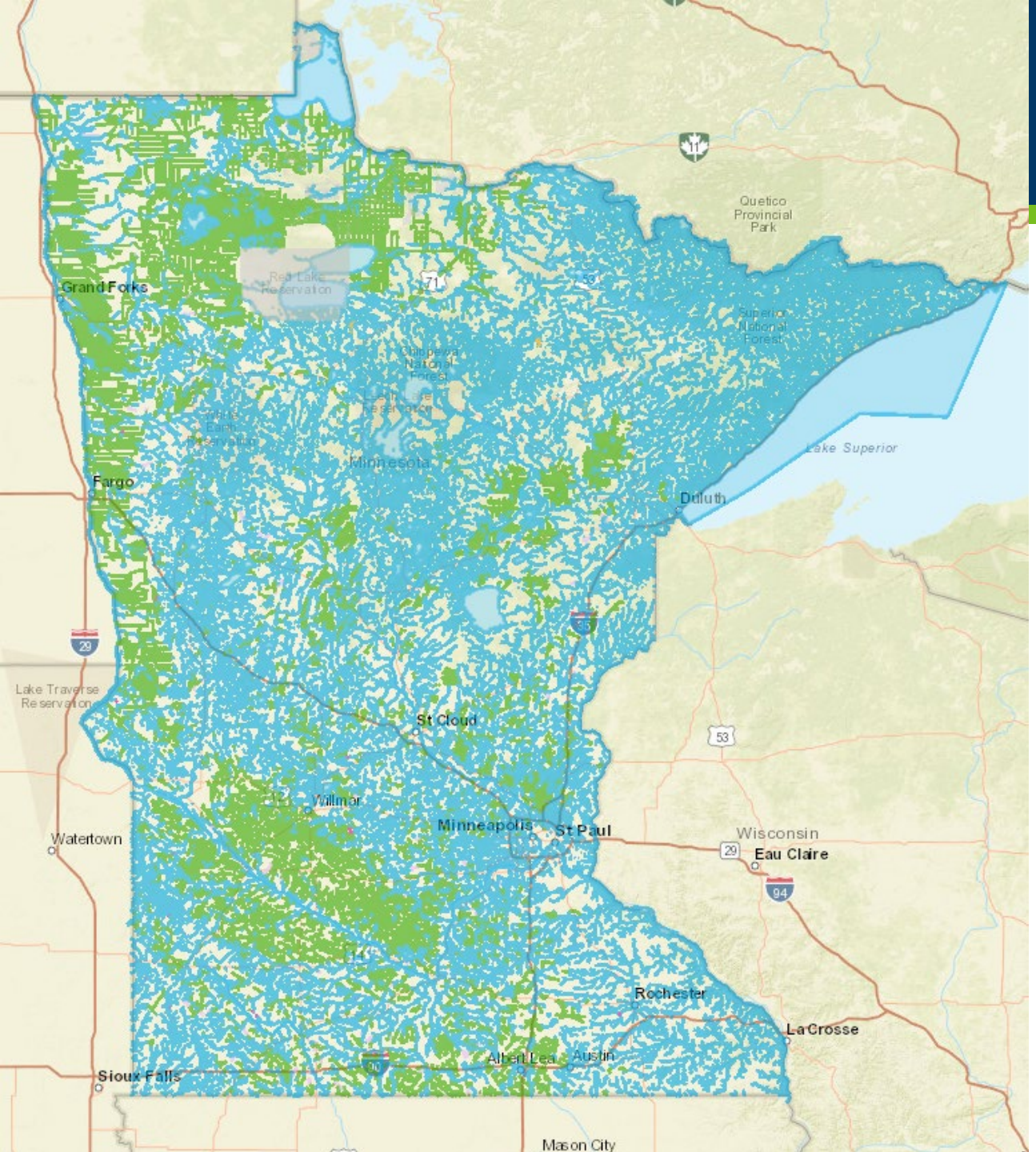
Fish IBI webpage QR code:

Buffer Map Maintenance

Jason Moeckel | Manager, Inventory, Monitoring and Analysis Section

Minnesota Department of Natural Resources

Buffer Map Maintenance



Buffer Map Legend

Lakes, Reservoirs, and Wetlands

- 50-ft Buffer
- Needs Field Review

Watercourses

- 50-ft Buffer
- 16.5-ft Buffer
- Needs Field Review
- Potential trout stream delisting and buffer map removal
- Public Water watercourse removal per Commissioner's Order

Tribal Lands

- Red Lake

Buffer Map Maintenance

	FY16-21	FY22-23	FY24-25	FY26-27
Clean Water Funds	$1.05M	$50K	$50K	TBD
FTEs (state agency staff funded by CWF)	1.2	0.5	0	TBD

Stream Flow Monitoring

Jason Moeckel | Manager, Inventory, Monitoring and Analysis Section

Minnesota Department of Natural Resources

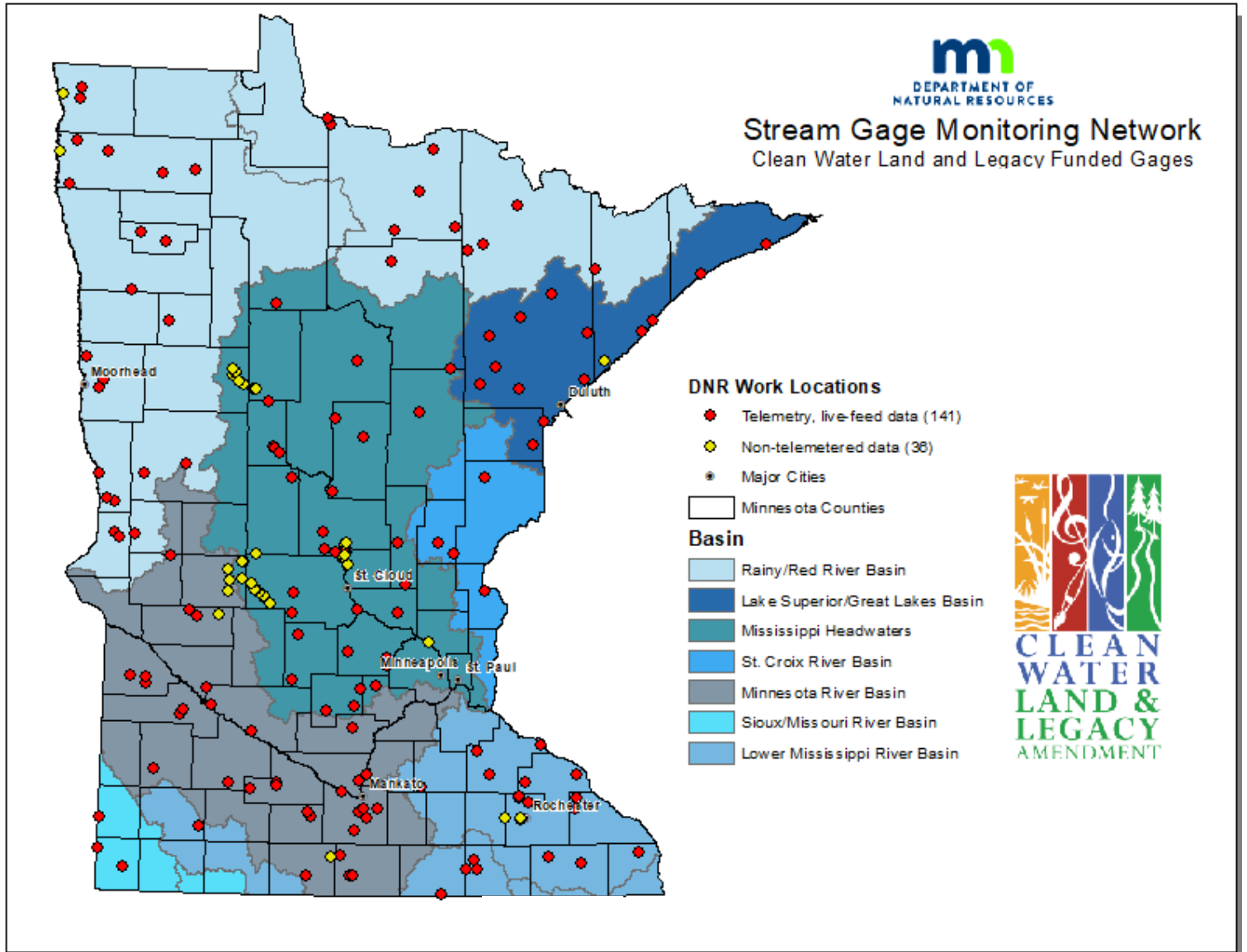
MINNESOTA

Statewide Streamflow and Sediment Monitoring

FY10-24

- 177 Continuous Sites (CWF) (271 total)
- 141 Real Time (satellite telemetry)
- 17,705 flow measurements
- 1,500 sediment samples

- https://www.dnr.state.mn.us/waters/csg/index.html



Flow Gaging Stations

Flood Flows

Winter Flows

Stream Flow Monitoring

	FY10-21	FY22-33	FY24-25
Clean Water Funds	$21.1M	$4.0M	$
FTEs (state agency staff funded by CWF)	~15	~15	~15
Dollars Passed Through*	$3,128K	~$300K	$0K

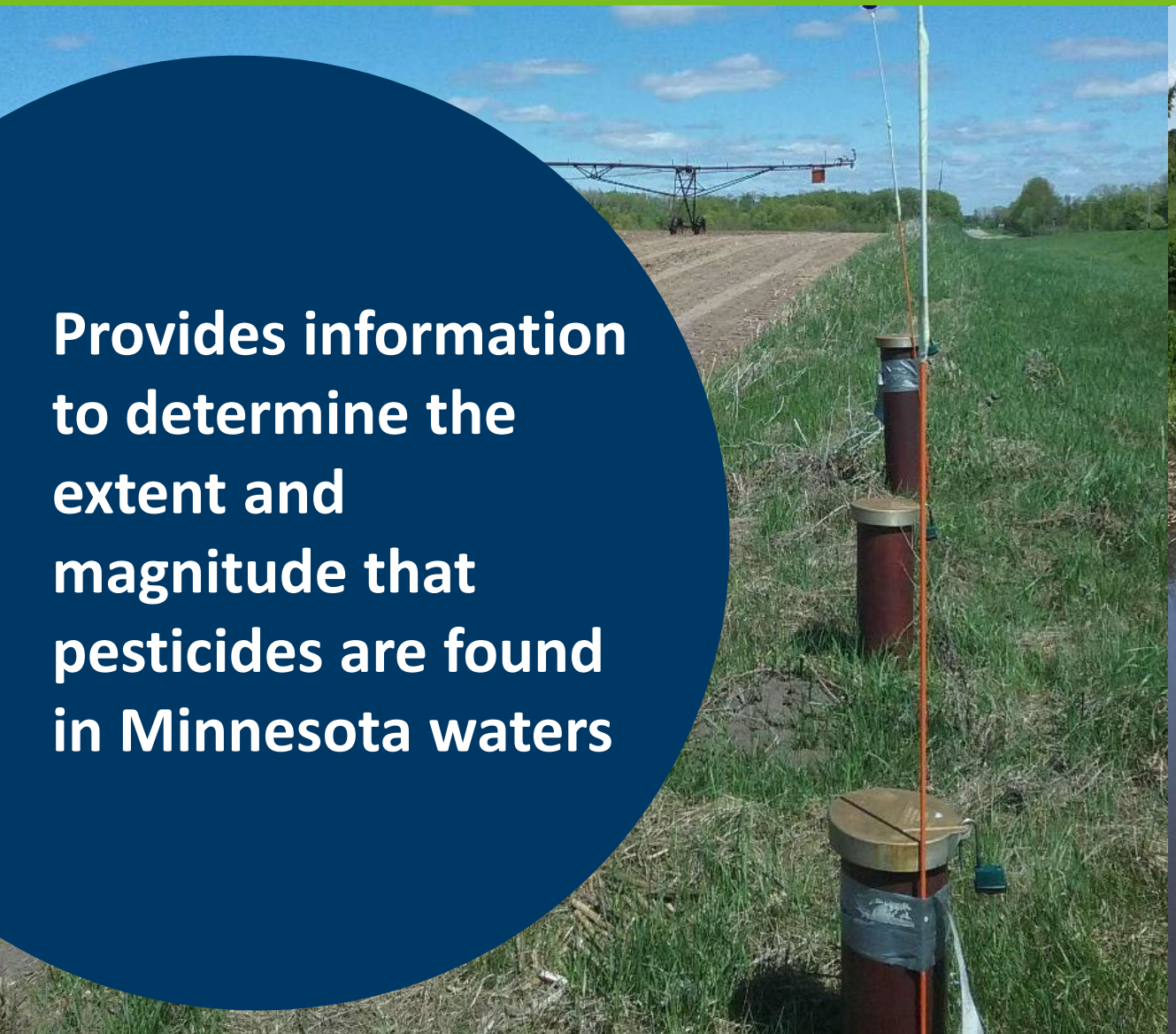
**Pass through $ for bedload and stream monitoring contract with the USGS.*

Monitoring for Pesticides in Surface Water and Groundwater

Bill VanRyswyk, Monitoring and Assessment Section Manager

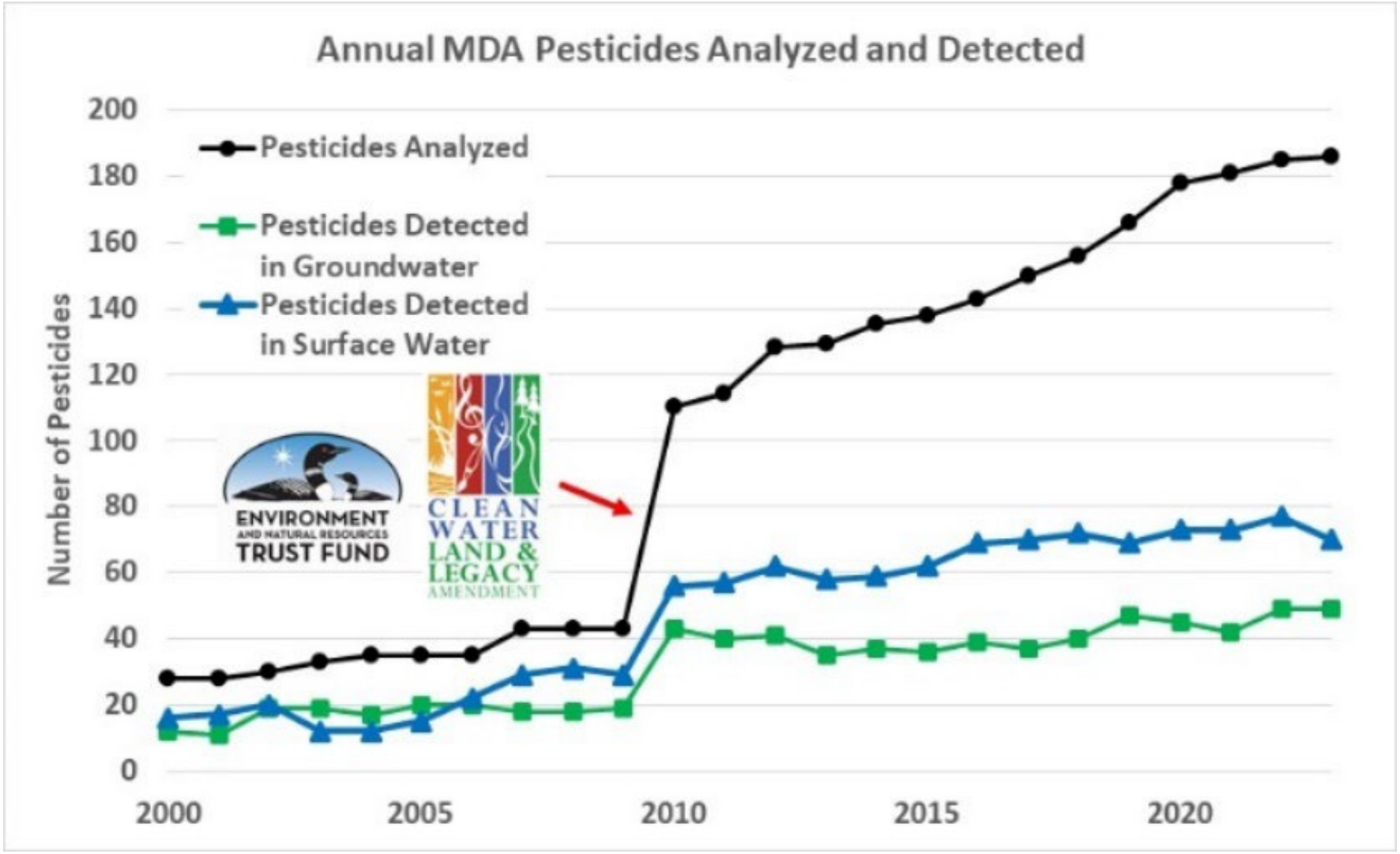
MN Department of Agriculture

Monitoring for Pesticides in Surface Water and Groundwater

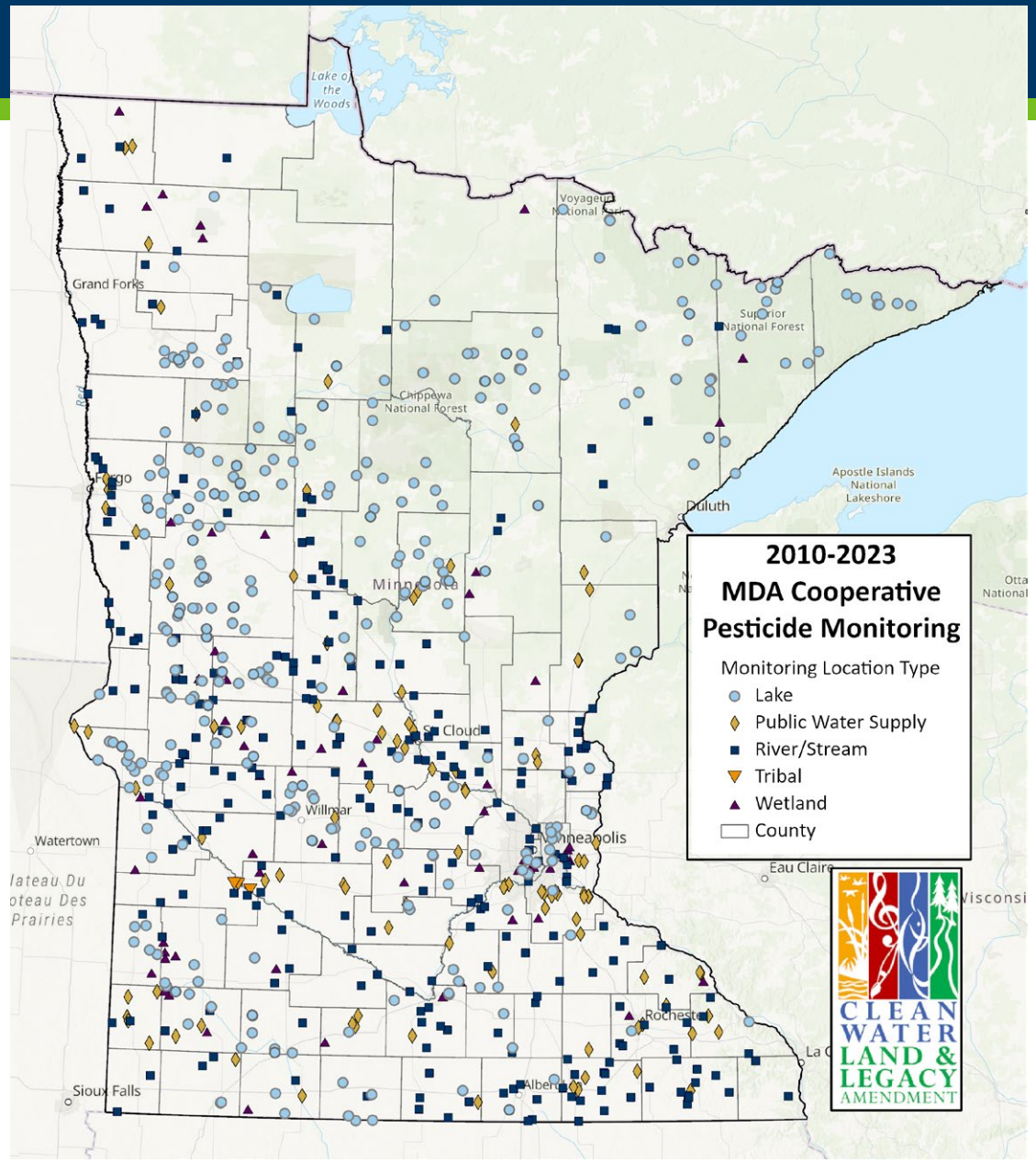


Provides information to determine the extent and magnitude that pesticides are found in Minnesota waters

Monitoring for Pesticides – MDA Laboratory Expanded Capability



Monitoring for Pesticides – MDA Laboratory Additional Capacity



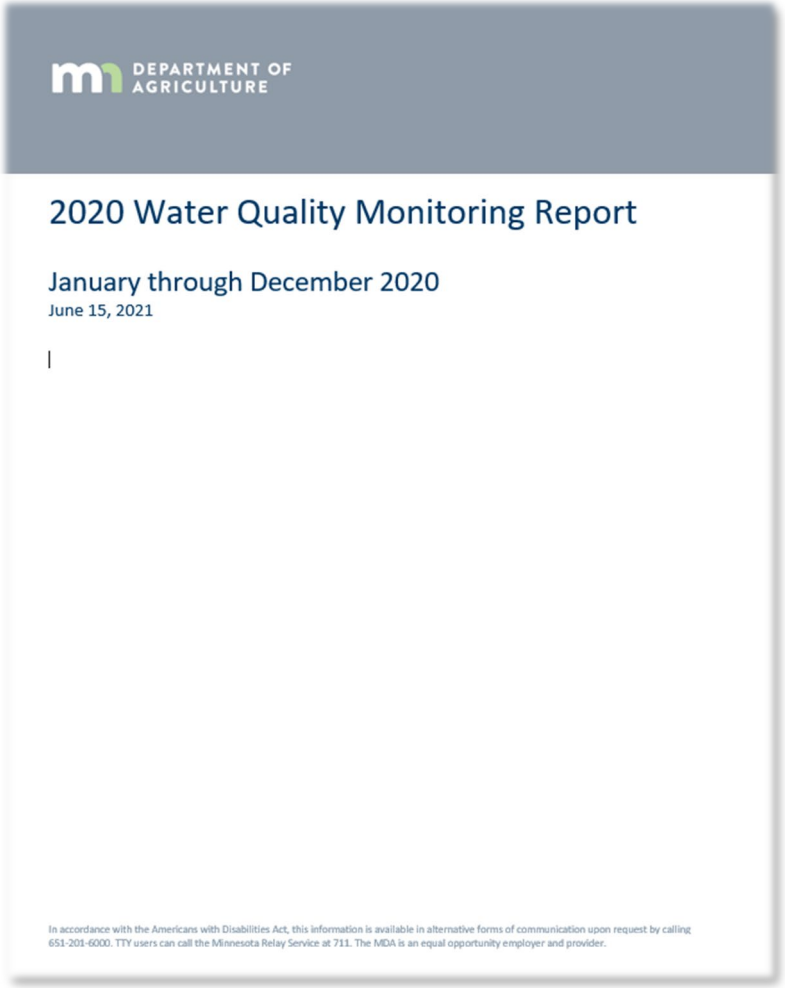
Funding has allowed for collaborations with MDH and MPCA across Minnesota:

- Public Water Supply
- Lake
- River/Stream
- Tribal
- Wetland

How is the Pesticide Data Used?

1. **Pesticide management and BMP development**
2. **Risk Assessment – MDH and MPCA review pesticide data**
   - **Drinking Water & Aquatic Life**
3. **Water Planning (WRAPS, GRAPS, 1W1P)**
4. **Other Uses**
   - EPA and other federal and state agencies
   - Research and Modeling
   - Public (homeowners, water suppliers, lake and watershed organizations, etc.)
5. **Pesticide data is published annually and is publicly available through statewide water quality database (EQuIS)**

www.mda.state.mn.us/monitoring


DEPARTMENT OF AGRICULTURE

2020 Water Quality Monitoring Report

January through December 2020

June 15, 2021

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.

Monitoring for Pesticides in Surface Water and Groundwater

	FY10-11	FY12-13	FY14-15	FY16-17	FY18-19	FY20-21	FY22-23	FY24-25	FY26-27	Total
Clean Water Funds (M)	$0.68	$0.7	$0.7	$0.7	$0.7	$0.7	$0.7	$0.7		**$5.58**
FTEs (state agency staff funded by CWF)	2.25	2.25	2.25	2.25	2.5	2.3	1.9	2.11		
$ Passed Through	0	0	0	0	0	0	0	0		

Private Well Pesticide Sampling Program

Provides information to determine the extent and magnitude that pesticides are found in private wells in Minnesota

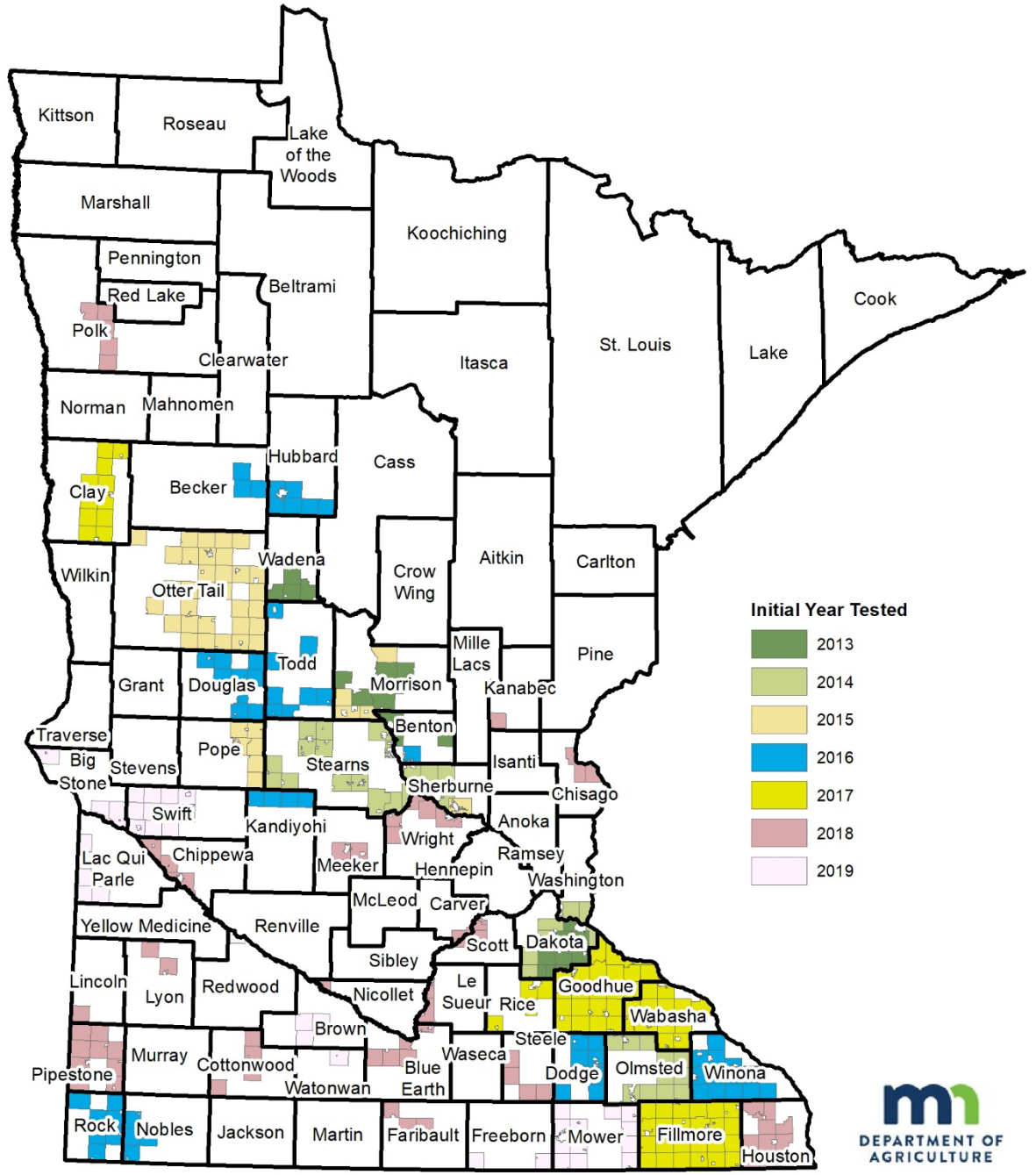
Private Well Pesticide Sampling Phase 1

Goal – Inform well owners about pesticide presence in drinking water.

- Homeowners with a nitrate detection during the initial Township Testing Program sampling were offered a follow up pesticide sample.

Phase 1: Approximately 5,700 wells were sampled in 50 counties between 2016 and 2020.

- Tested for ~130 pesticide chemicals.
- Pesticide detections in 76% of wells, most pesticides were present at very low levels.



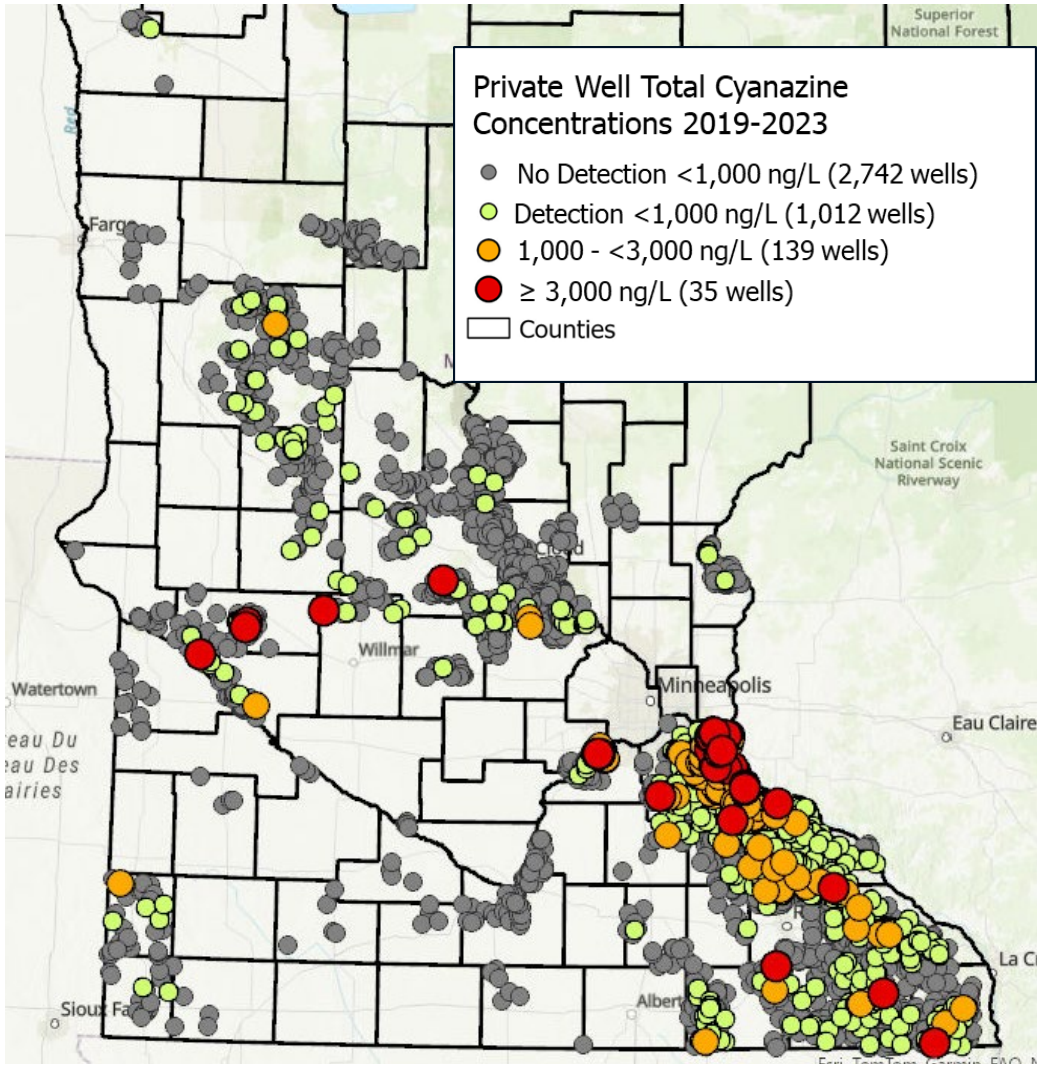
Private Well Pesticide Sampling –Phase 2

Phase 2: Starting in the summer of 2021, sampling focused on 11 pesticide chemicals (atrazine and cyanazine related).

Drinking water reference value exceedances:

- 2016-2018: 3 of the 3,858 (0.08%) wells tested.
- 2019-2021: 111 of the 2438 (4.6%) wells tested.
  - 110 were due to total cyanazine.
- 2022-2023: 64 of the 1490 (4%) wells tested
  - All 64 were due to total cyanazine

- We continue to go beyond Township Testing wells, focusing on areas where the risk is greatest.



Private Well Pesticide Sampling - Outcomes

- 7,786 private wells tested for pesticides
- Over 4,800 residents have been notified of a pesticide being present in their well water through 2023
- This project provided free samples for well owners regardless of financial status.
- Data used by MDA and local water planners.
- CWF leveraged an additional $60,000 in grants from EPA.

CLEAN WATER LAND & LEGACY AMENDMENT

Private Well Pesticide Sampling Program

Looking Forward

- Focusing on a pilot mitigation program
- Outreach and education efforts to areas of greatest risk
- Minnesota-focused identification of pesticides in groundwater

Pesticide Testing in Private Wells

	FY14-15	FY16-17	FY18-19	FY20-21	FY22-23	FY24-25	Total
Clean Water Funds	$0.11M*	$1.54M*	$2M	$2M	$0.87M	$1M	$5.87M
FTEs (state agency staff funded by CWF)		2.6	2.75	2.1	1.25	3	
Dollars Passed Through	$0.07M*	$1.13M*	1.62M	0.98M	$0.34M	$0.50M	$3.42M

- On average about 65-70% of the total funding has passed through to contract laboratories.

*FY14-FY17 funding was part of Nitrate in Groundwater appropriation.

Drinking Water Contaminants of Emerging Concern

Kristine Klos, PhD| Supervisor, Environmental Health Division

Stefan Saravia | Lab Manager, Public Health Laboratory Division

Stephanie Drier| Supervisor, Environmental Health Division

Contaminants of Emerging Concern

- Non-regulated contaminants in waterbodies that may cause human or ecological health impacts
- Many are lacking toxicity data
- New data indicate PFAS are thousands of times more toxic than we once thought
- The prevalence of these compounds in our environment is not fully understood

MDH Chemicals of Emerging Concern (CEC) Initiative

Develop innovative approaches to evaluate, analyze, and standardize methods for identifying and reporting emerging contaminants resulting in effective, science-based responses.

CWC Strategic Plan

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 and management of newly identified contaminant risks.
- Strategy: Identify policy options that will accelerate progress to achieving federal safe drinking water standards.

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.

MDH Contaminants of Emerging Concern (CEC) Approach

Health Risk Assessment CEC Unit	• Prioritize CECs and develop health-based guidance
Public Health Lab	• Detect and quantify CECs in water
MNELAP	• Accredit contract laboratories to ensure validity of CEC results

Drinking Water Contaminants of Emerging Concern

Kristine S Klos, PhD | Supervisor, Health Risk Assessment Unit

Minnesota Department of Health

Drinking Water Contaminants of Emerging Concern

What is Health-Based Guidance?

Health-based guidance

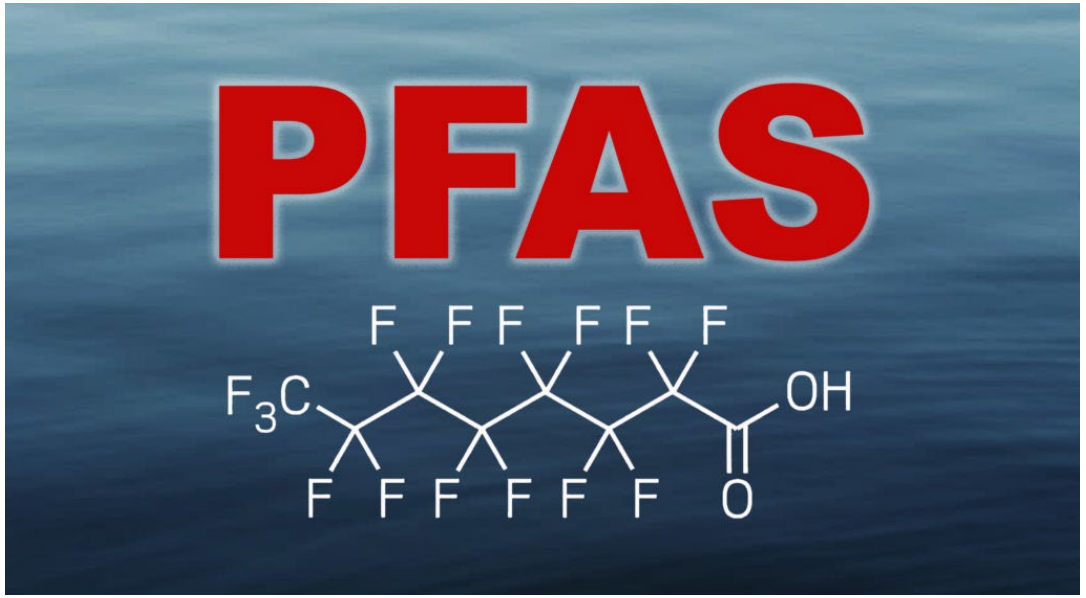
Concentration of a contaminant(s) in water that is likely to pose little or no health risk to people who drink the water, including sensitive and highly exposed populations.

Exposure and Toxicity Inform Health-Based Guidance

First Screen CECs, then select for review

- 165 CECs screened for toxicity and exposure
  - 38 FY22-23
- Full Chemical Reviews FY22-23
  - PFOS
  - PFOA
  - PFHxA
  - PFBS
  - Tributyl phosphate
  - Lithium
- 252 Rapid Assessments
  - 12 FY22-23

Health-based Guidance - PFAS



- Per- and Polyfluoroalkyl Substances (PFAS)
- Developed in the 1940's
- At least 4,000 chemicals
- Heat, grease, stain, oil, and water resistant
- Everywhere!
- PFOS, PFOA, PFBS, PFBA, PFHxS, PFHxA

PFOS and PFOA Through the Years

Year	PFOS Guidance (ppt)	PFOA Guidance (ppt)
2002	1,000	7,000
2006	600	1,000
2007	300	500
2009	70	300
2017	27	35
2024	2.3 7.6 cancer	0.24 0.0079 cancer

- 19 Minnesota Public Water Systems are over the federal guidance for PFOS and/or PFOA
- Minnesota has guidance for six of the thousands of PFAS
- CECs often do not have traditional animal toxicity information

Contaminants of Emerging Concern - Innovation

Most CECs have little to no toxicity data!

Hiring Computational Toxicologist

- New Approach Methodologies
- Large *in vitro* data sets
- Toxicokinetic Modeling
- Interactive water guidance table

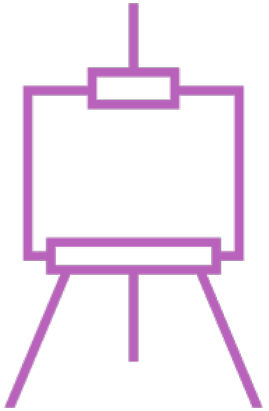
Partnership with EPA

- Efficient screening methods
- Rapid Tox

Elevate the CEC Team to the next level of human health risk assessment!

Outreach and Education

In the last 2 fiscal years...



>15 Presentations

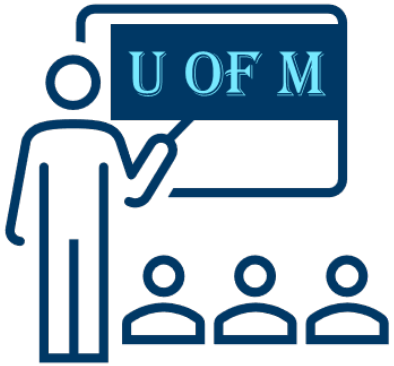
- Local Town Halls
- MN Agencies
- National Conferences

> 40 Technical Assists

- Citizen enquiries
- MN Agencies
- Other states

5 Publications

- PFAS in Infant Formula
- PFAS Toxicokinetic Model
- PFAS Exposure
- PFAS Serum Levels
- New Rapid Exposure Screening Tool



4 Guest-lectures at the U of M

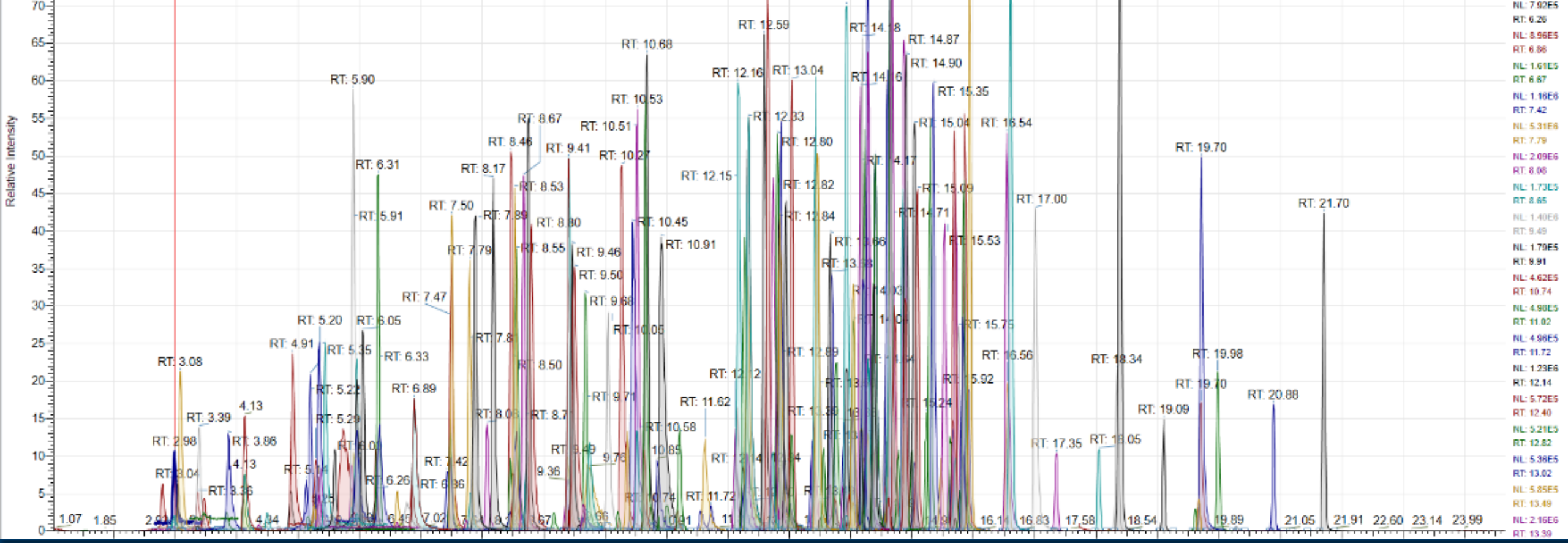
- Risk Assessment
- Glyphosate
- Exposure
- Policy

HRA CEC Initiative: Future Planning

Thank you!

Looking Forward

- Nurture relationships with partners
- Focus on new tools and skills
- Minnesota-focused identification of emerging issues
- Outreach and education efforts



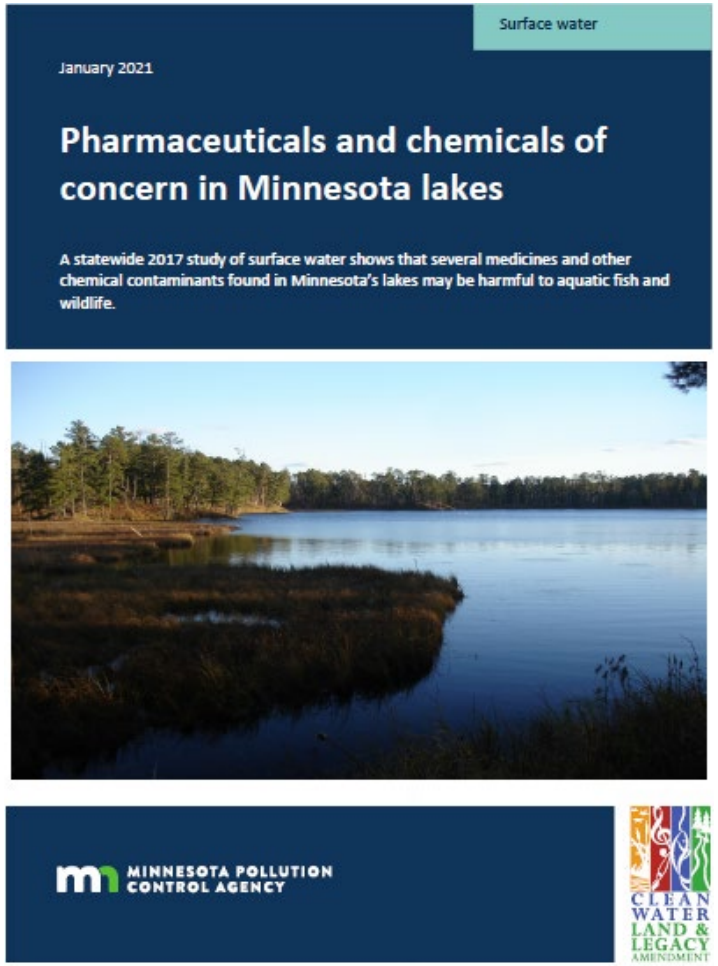
Expanding Public Health Laboratory Capacity and Capabilities for Emerging Contaminants

Stefan Saravia | Environmental Laboratory Manager, Public Health Laboratory Division

Minnesota Department of Health

History of CEC Work at PHL

- Analyzing PFAS in drinking water since 2003
- Began receiving CWFs in 2008
  - 1 FTE and testing supplies
- Collaborate with other state agencies and academic partners to study CECs on small projects
- In FY24 received substantial increase in CWF funding



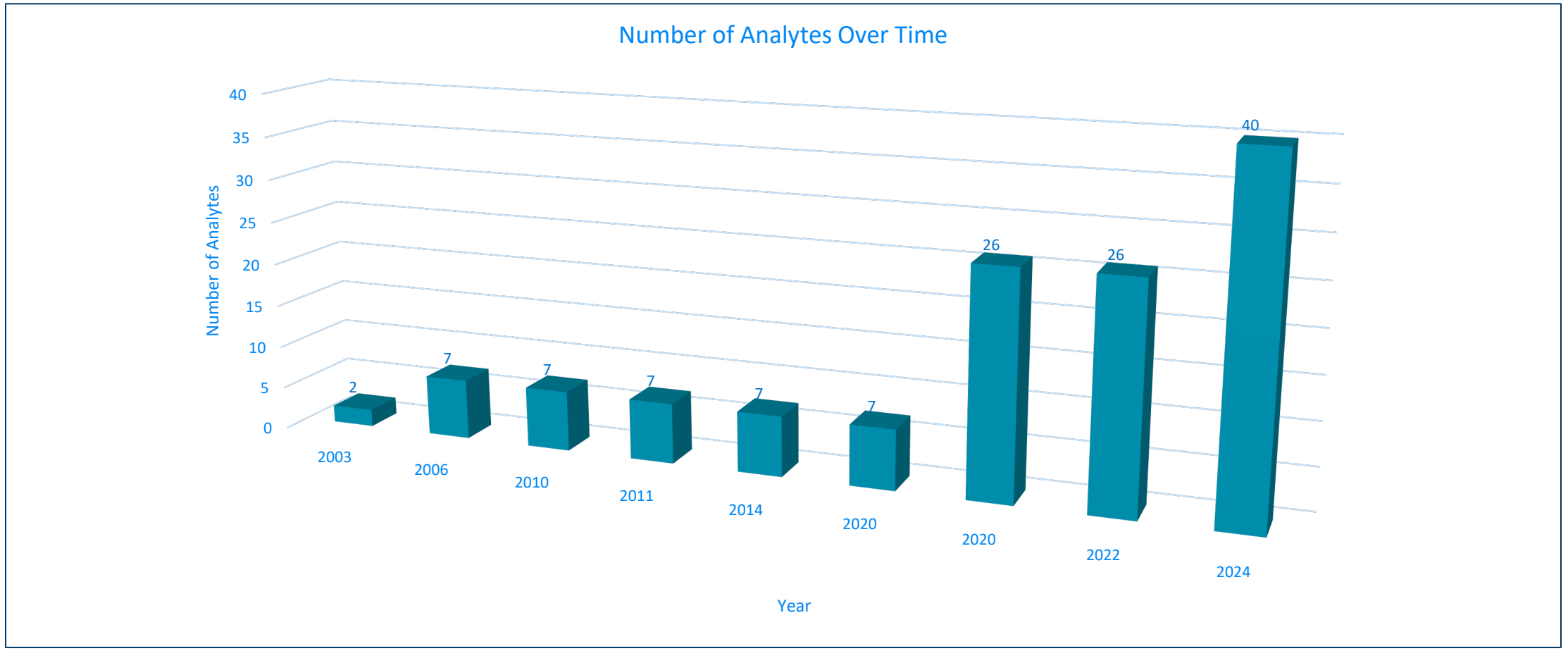
Current Leading Issue - PFAS

- Toxicity of specific PFAS compounds ~1,000x greater than originally thought
- EPA has released new regulations for some of these compounds
- We do not fully understand the extent of the contamination in MN
- Interagency planning has identified a need for ~14,000 samples/year, in the coming years; an 800% increase over current testing needs
- Concerns over national capacity for testing

Increasing Capacity to Identify More PFAS Compounds

- Through 2016 had one dedicated LC-MS/MS instrument
- 2024 we will have five dedicated instruments
- We have designated an Emerging Contaminants Unit and hired more staff
- Have increased capacity from ~1,500 samples year to > 8,000

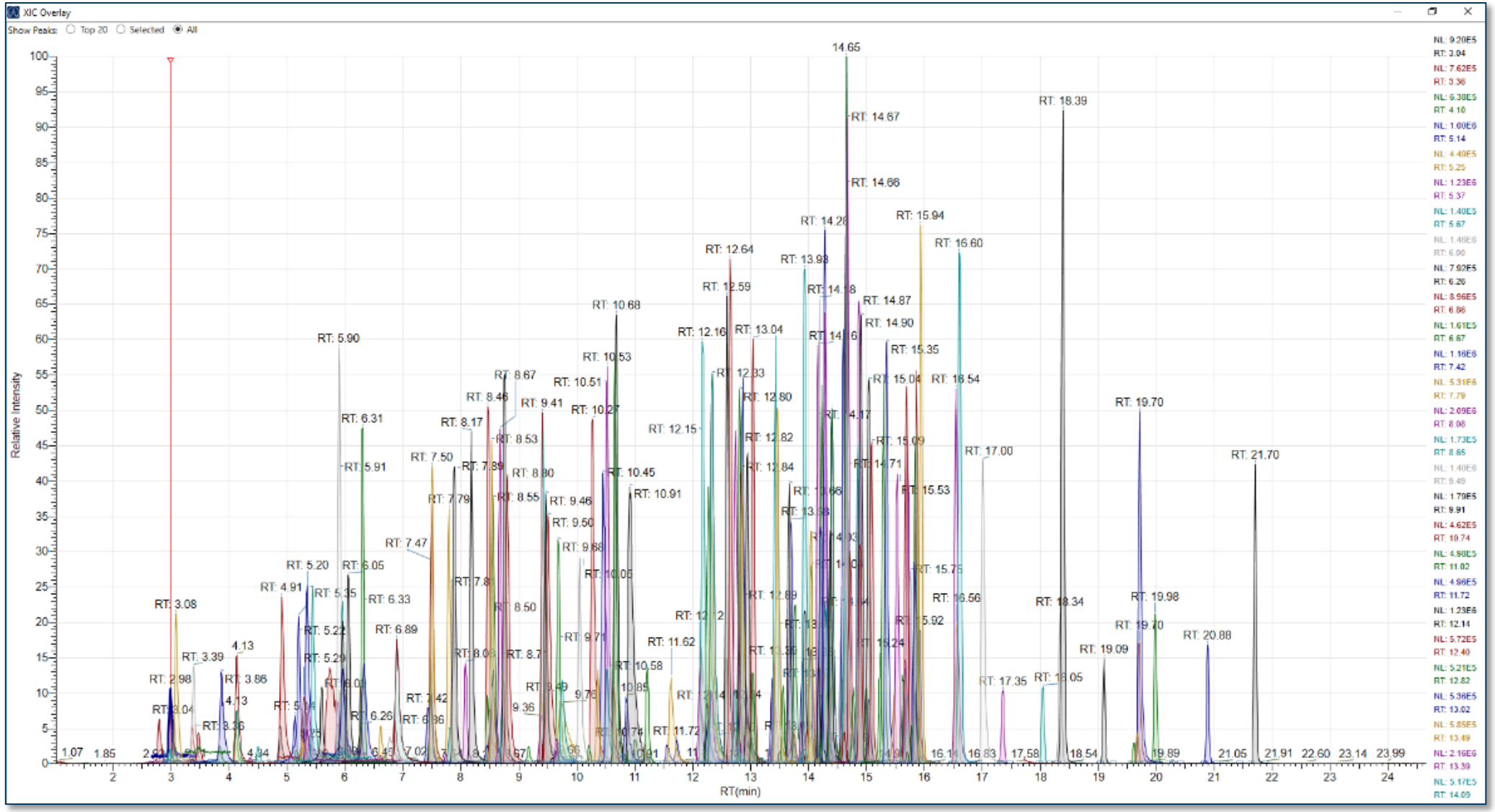
Increasing Capabilites



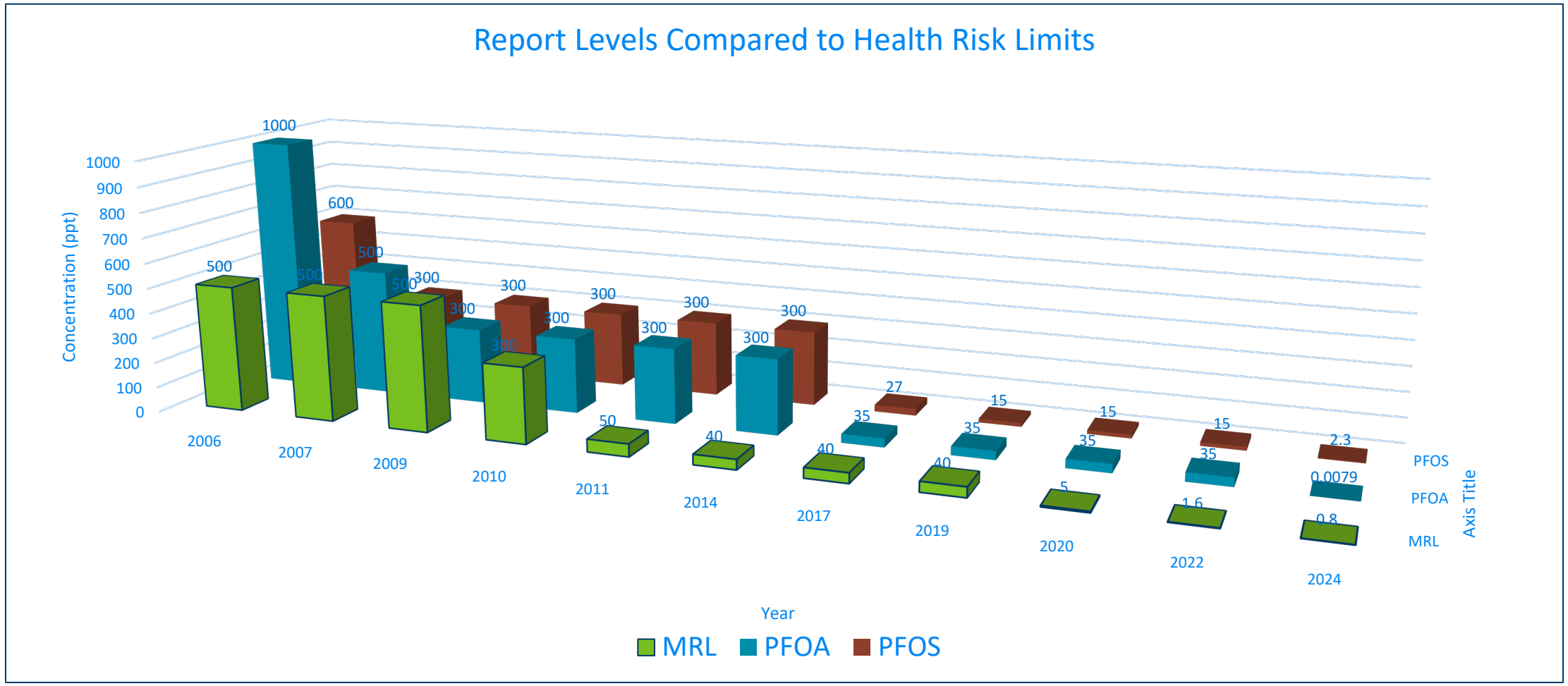
Increasing Capabilities for PFAS Testing

- 1,000s of PFAS compounds but only up to 40 are regularly measured
- Emerging methods
  - Total Organic Fluorine (TOF)
  - Total Oxidizable Precursors (TOP)
  - Non-target analysis are needed

Non-Target Testing



Lowering Report Limits in Response to HRLs



Future Plans

- Continue to increase capacity for PFAS in water testing
- Add additional PFAS methods that will help to understand the total PFAS load
- Continue to develop and streamline non-target analyses for CECs
- Work with state agency and academic partners to prioritize method development for new CECs

Minnesota Environmental Laboratory Accreditation Program (MNELAP)

Stephanie Drier| Supervisor, Minnesota Environmental Laboratory Accreditation Program

Minnesota Department of Health

MNELAP Purpose

- Accredit environmental laboratories to national and USEPA standards
- Build public and regulatory confidence in data
- Accredit private and public labs to increase analytical capacity
- Host a searchable environmental laboratory directory

Accreditation Steps

Application Review

- Standard Operating Procedures
- Quality Manual
- Proficiency Testing

Onsite Assessments

- Initially and every 2 years
- Instrumentation, documentation, staff training

Assessment Report

- Corrective Action Response (CAR)
- Review for acceptable corrective action(s)

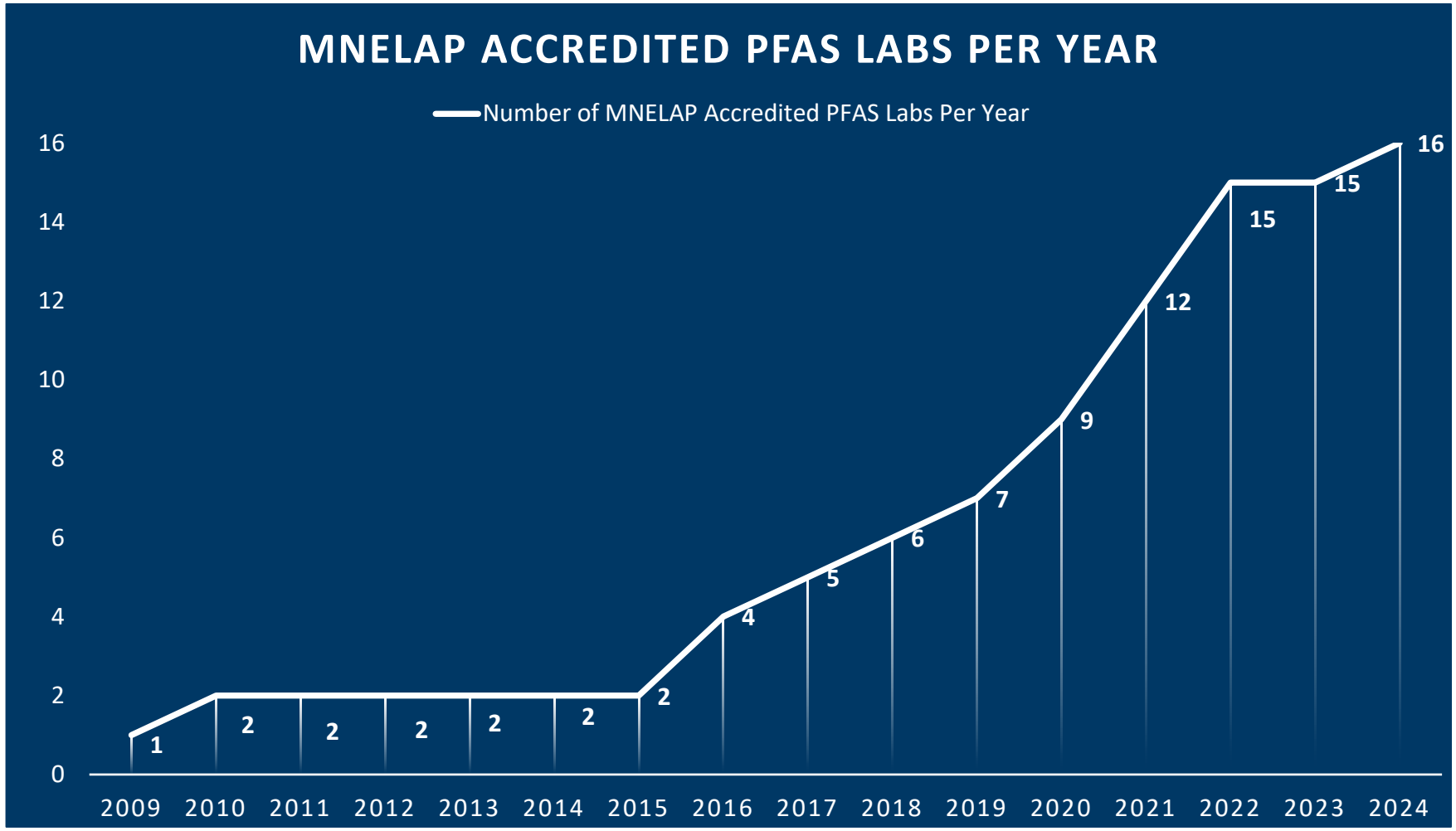
MNELAP CEC History

- 2008- Collaborated with the Public Health Laboratory and Minnesota Pollution Control Agency (MPCA) to create the PFAS Laboratory Guidance Document:
  - Outlined laboratory analytical acceptance criteria
  - Was the first “method” that MNELAP offered for accreditation
- 2018- Began offering PFAS methods validated by USEPA
- 2021- Responded to the method and analyte needs of the Minnesota’s PFAS Blueprint
- 2023- Retired MPCA Guidance as a method

What we offer?

- Per-and Polyfluoroalkyl Substances (PFAS)
  - **1359 Fields of Testing** (analyte, method, matrix, test category) offered:
    - **Analytes**: 43
    - **Methods**: USEPA 1633; USEPA 533; EPA 537.1; USEPA 8327
    - **Matrices**: drinking water, non-potable water, solid and chemical material, biological tissue
    - **Category**: Emerging Contaminants

PFAS Labs Over Time



Outputs and Outcomes: MNELAP CEC

Outputs

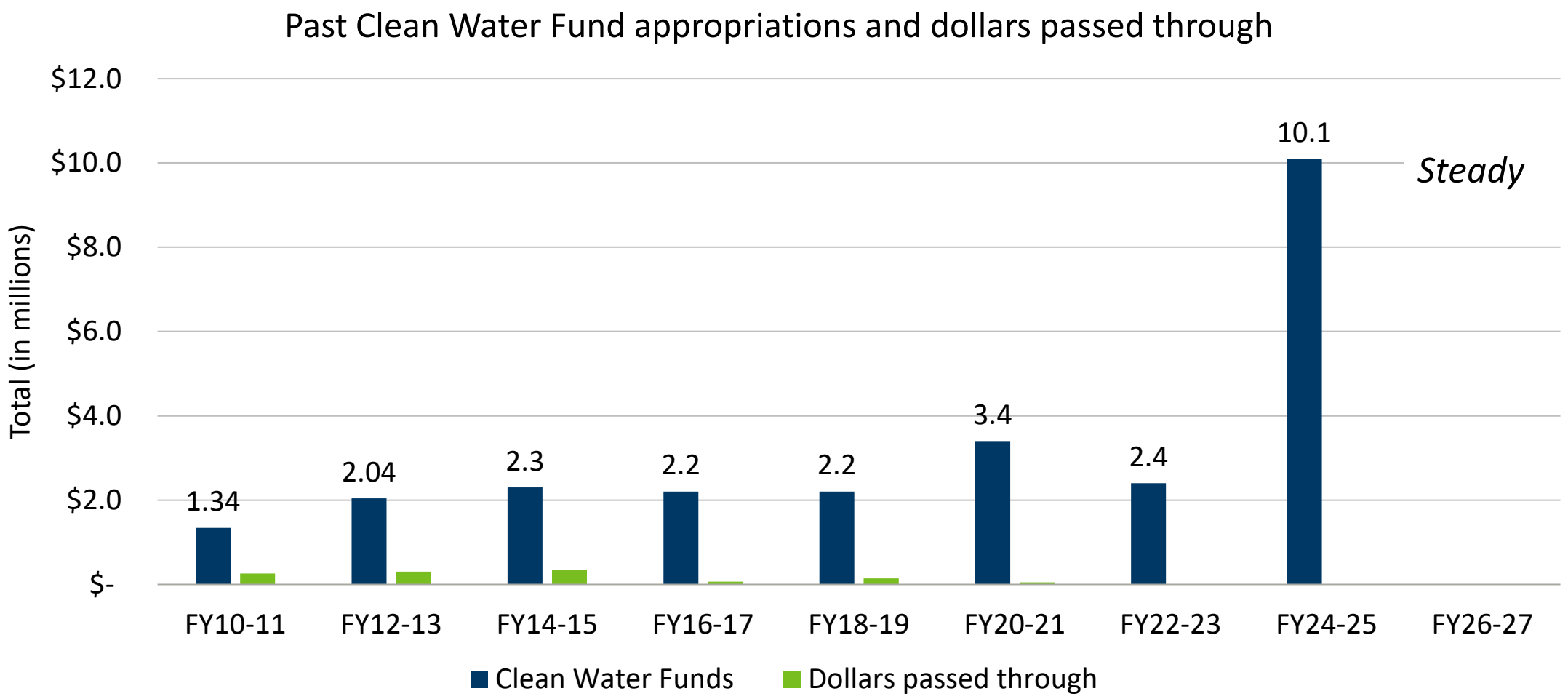
- Database assessment of the Environmental Laboratory Data Online system
- Hired an environmental laboratory accreditation management analyst

Outcomes

- Determined to enhance the Environmental Laboratory Data Online through maintenance and a MNIT Project
- Project analyst and management for Environmental Laboratory Data Online System enhancement project

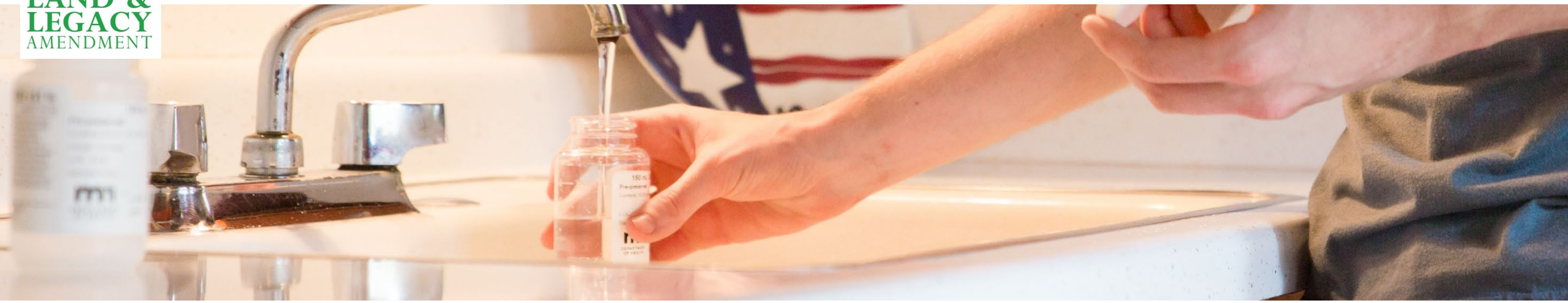
MNELAP CEC Initiative: Future Planning

Clean Water Funds for CEC



Drinking Water Contaminants of Emerging Concern

Thank You!
Questions?



Private Well Initiative

Tannie Eshenaur, Manager, Water Policy Center

Frieda von Qualen, Strategic Initiatives Coordinator, Water Policy Center

Minnesota Department of Health

Our vision

Minnesota private well users are confident their water is safe for everyone in their household.

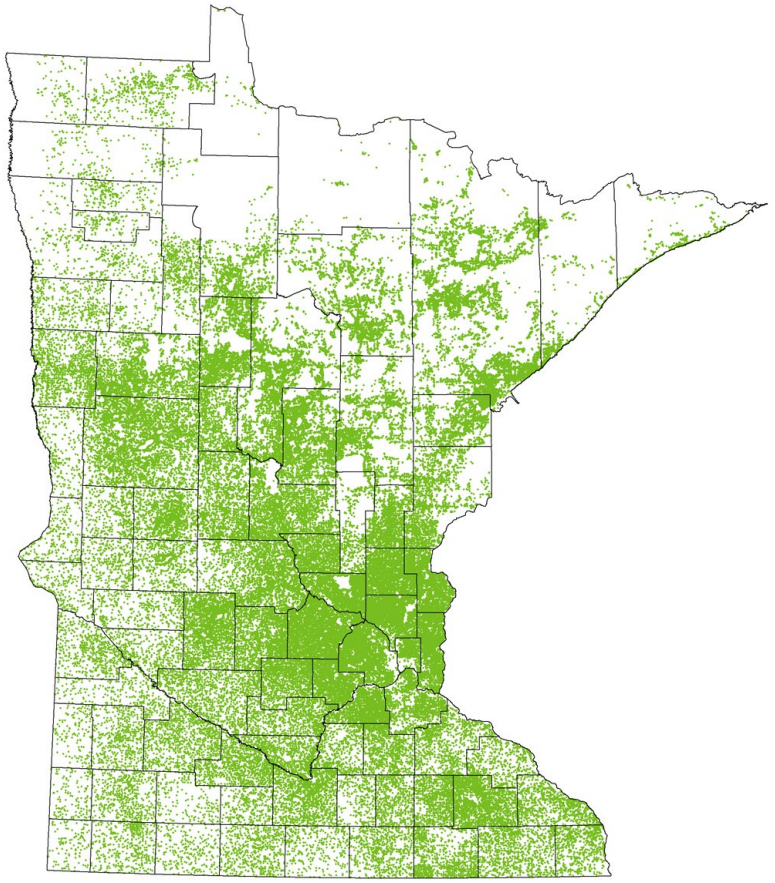
CWC Strategic Plan

Drinking water is safe for everyone, everywhere in Minnesota.

Goal 1: Private water supply wells

- Identify risks to and fund testing of private well water.
- Support selected mitigation activities for private well users.
- Identify policy options that will accelerate the reduction in the number of unsafe private wells.

At least 1.1 million private well users in Minnesota



Minnesota: 1 in 5 people depend on a private well

Disparities in safeguards over the lifespan of a well

Phase	Construction	Regular testing to ensure safe drinking water	Mitigation to address contaminants	Protecting source waters	Funding for construction, treatment, repair, sealing	Well Sealing
Public Water System						
Private Well		Initial test 			Disparate & limited funds 	

Well users don't choose their geology or how land is used around them

What are we concerned about in private wells?

Protect your health!

Test your well water for:

- **Coliform Bacteria** (Every year)
- **Nitrate** (Every year)
- **Arsenic** (At least once)
- **Lead** (At least once)
- **Manganese** (At least once)

Testing is even more important if young children drink the water.

Few private well users are testing and taking necessary action

2016 survey of 798 well owners who had arsenic above 10 µg/L in their new well sample

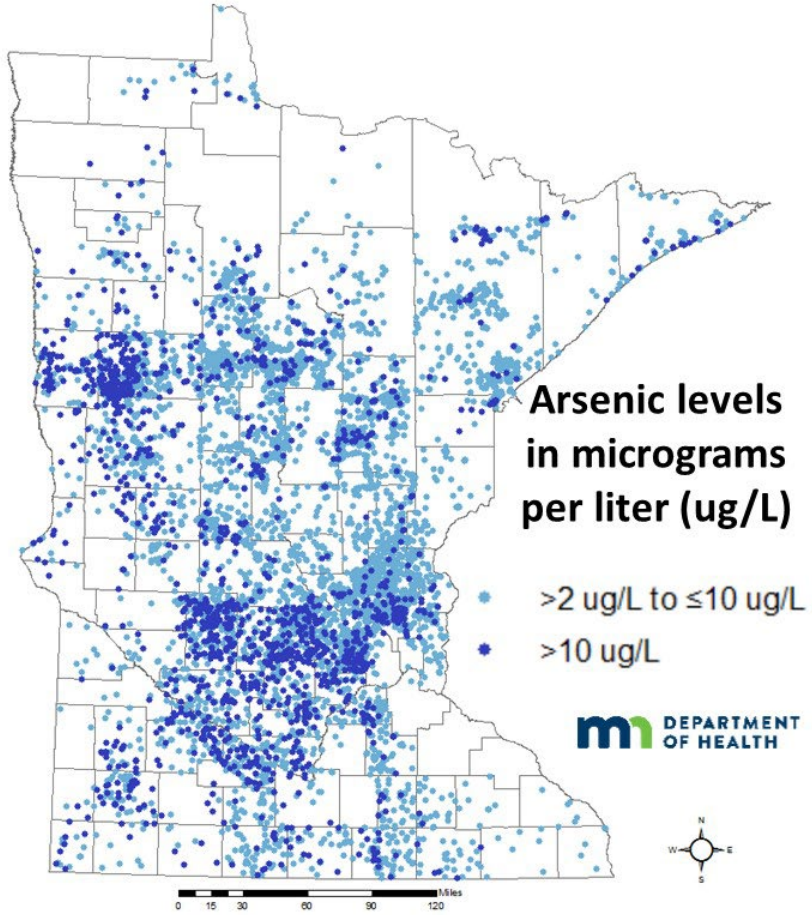
<20%

tested at recommended frequency

34%

did not take action to reduce exposure to arsenic above the level allowed in community water systems

Arsenic exposure reductions from MCL change



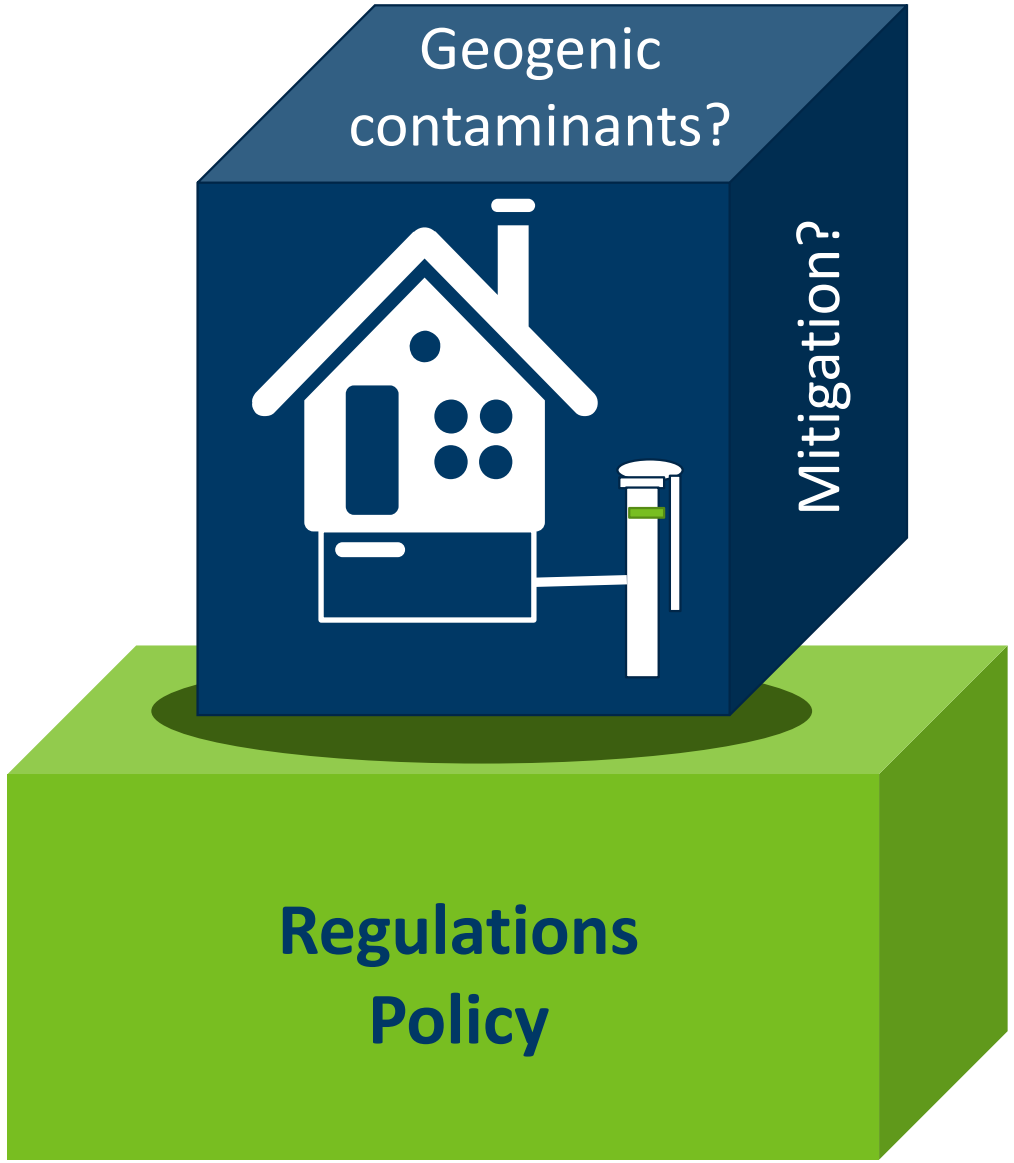
2001: MCL reduced from 50 µg/L to 10 µg/L		
	Nigra	**Welsh**
Community water system customers	17% decrease	10.6% decrease
Private well users	No change	No change

Nigra, et.al., 2017, Welch, et. al., 2018

How many preventable cancer cases?

Current tools leave gaps…

- Safe Drinking Water Act
- MN Well Code
- Clean Water Act
- Groundwater Protection Act
- Groundwater Protection Rule
- Nitrogen Fertilizer Management Plan
- One Watershed, One Plan



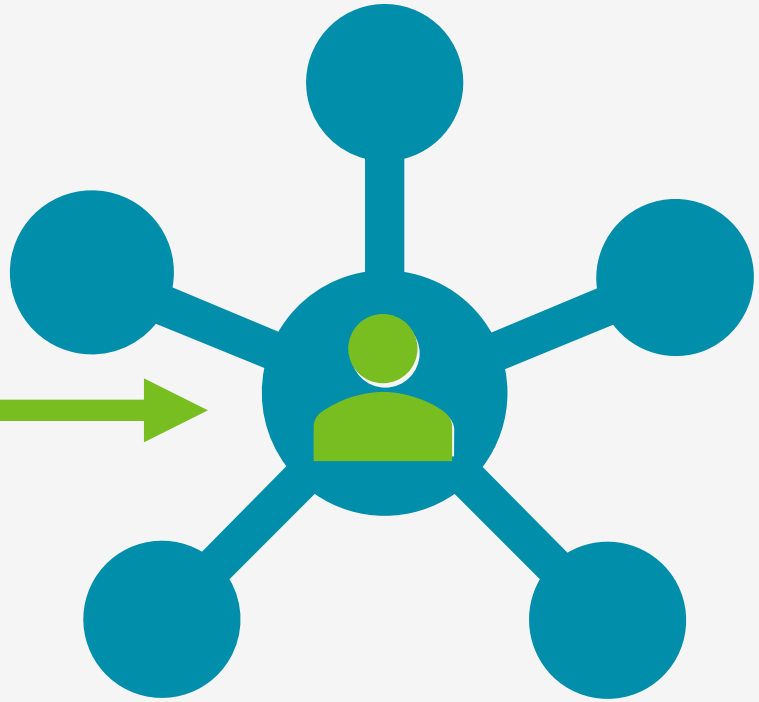
Lessons we are learning…

Private wells are "orphans" in our water resource management system

- **No/limited federal Safe Drinking Water Act protections**: EPA, CDC/NCEH, ATSDR
- **Patchwork of protections** at the state level (public health vs. environmental approach):
  - Differences in time scale; acute mitigation vs. long-term restoration
  - Human-caused (nitrate) vs. geogenic (arsenic)
  - Pollutants linked to responsible party, manure
  - Fertilizer/pesticides linked to ag practices
  - Well construction, sealing
  - Where do drinking water/private wells fit for local public health and legislature?
- **Funding options?** CWF with no mitigation, no "state revolving fund"

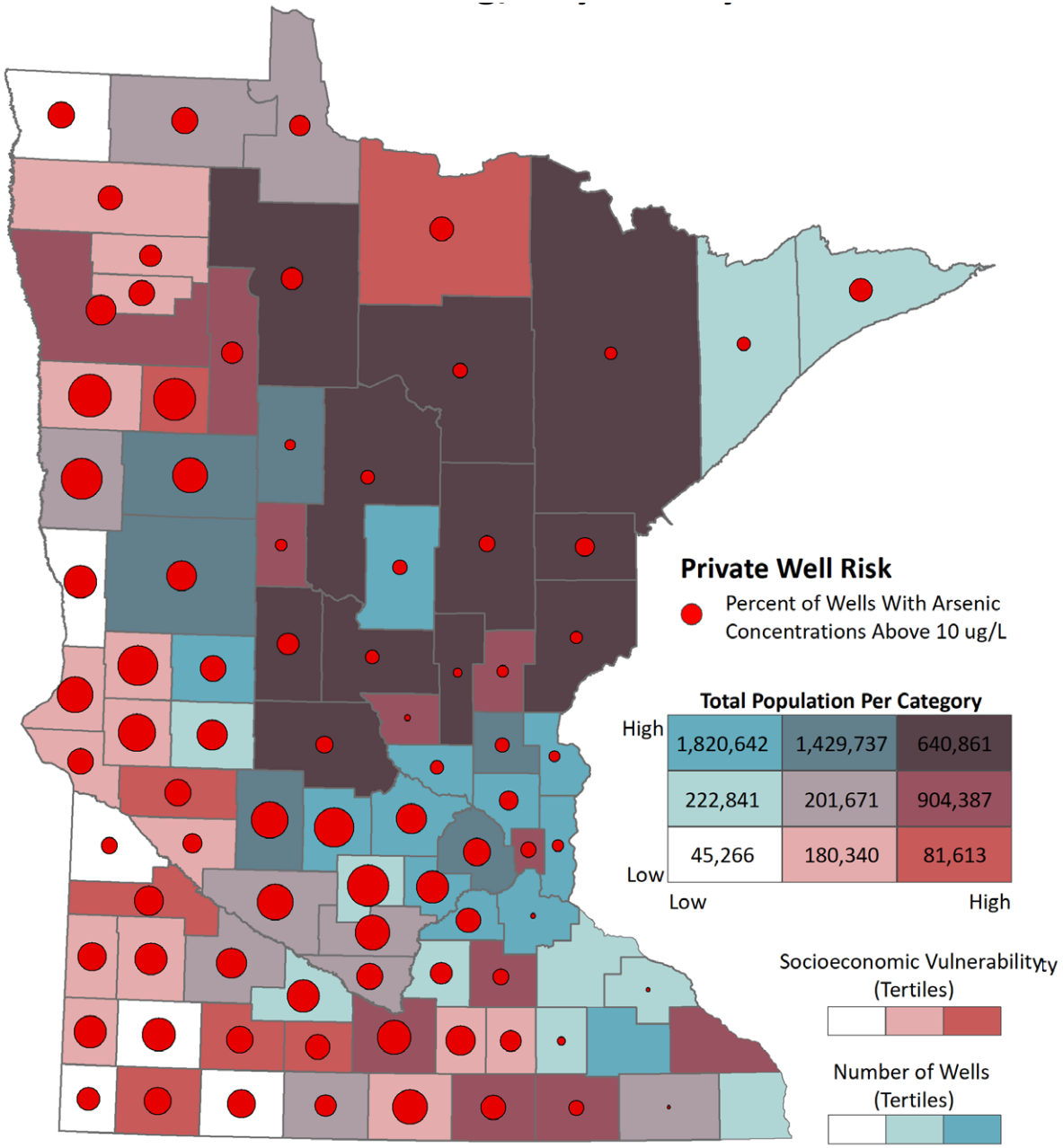
Our approach : Private Well Initiative

Support the individual



Build a supportive system

Private well user realities vary

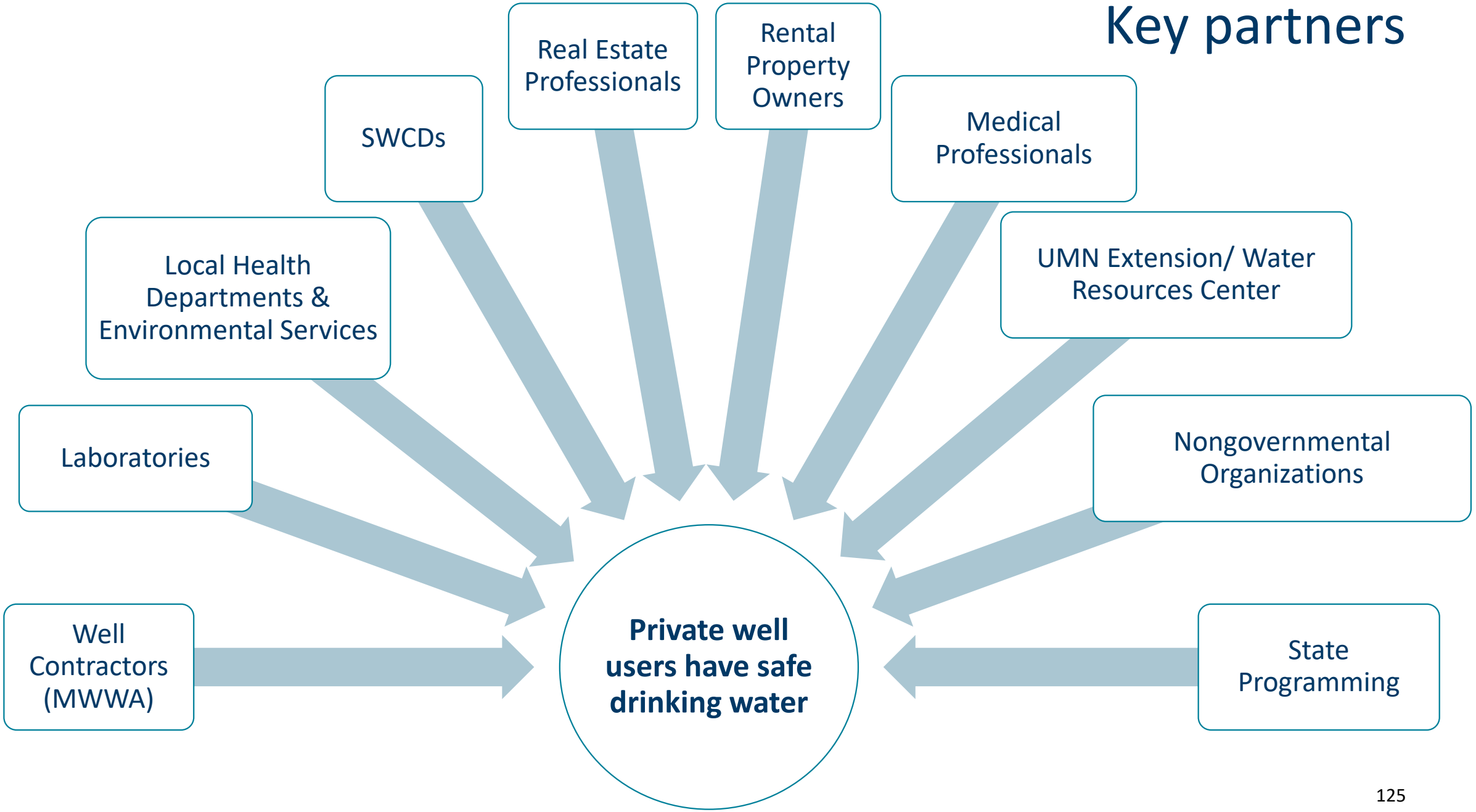


Number of Wells, Socioeconomic Vulnerability, and Arsenic Concentration

CDC Socioeconomic Vulnerability

- Below poverty
- Unemployed
- No high school diploma

Key partners



Outputs and outcomes: Private Well Initiative

Outputs

- Arsenic in Private Wells Study (2014)
- Private Well Household Survey (2016)
- New and translated brochures and videos
- Radium in Private Wells Study (2018)
- Well Testing and Mitigation Grants (2020)
- Private Well Forum (2023)
- Online CEUs for Realtors (2023)

Outcomes

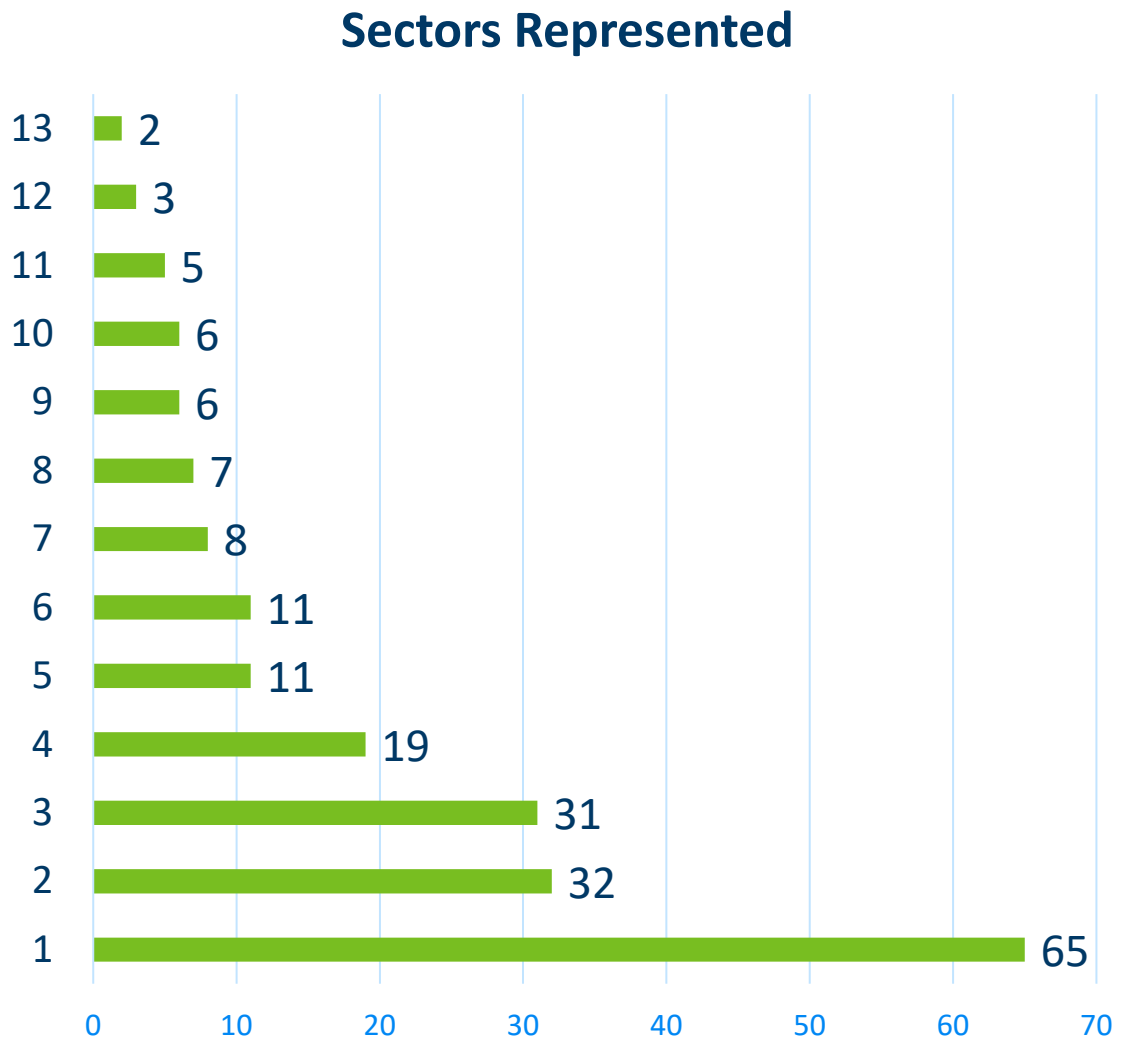
- Adjusted training for 325 well contractors
- Drives outreach and education approaches
- Over 43,000 brochures ordered; >65,000 views
- Radium is in private wells; working on guidance
- Model partnership; 391 private wells tested; 52 mitigated; 8 additional grants underway
- Identified need for Stewardship Network and KAB Assessment
- >100 completed CEU course

2023 Private Well Forum

205 participants

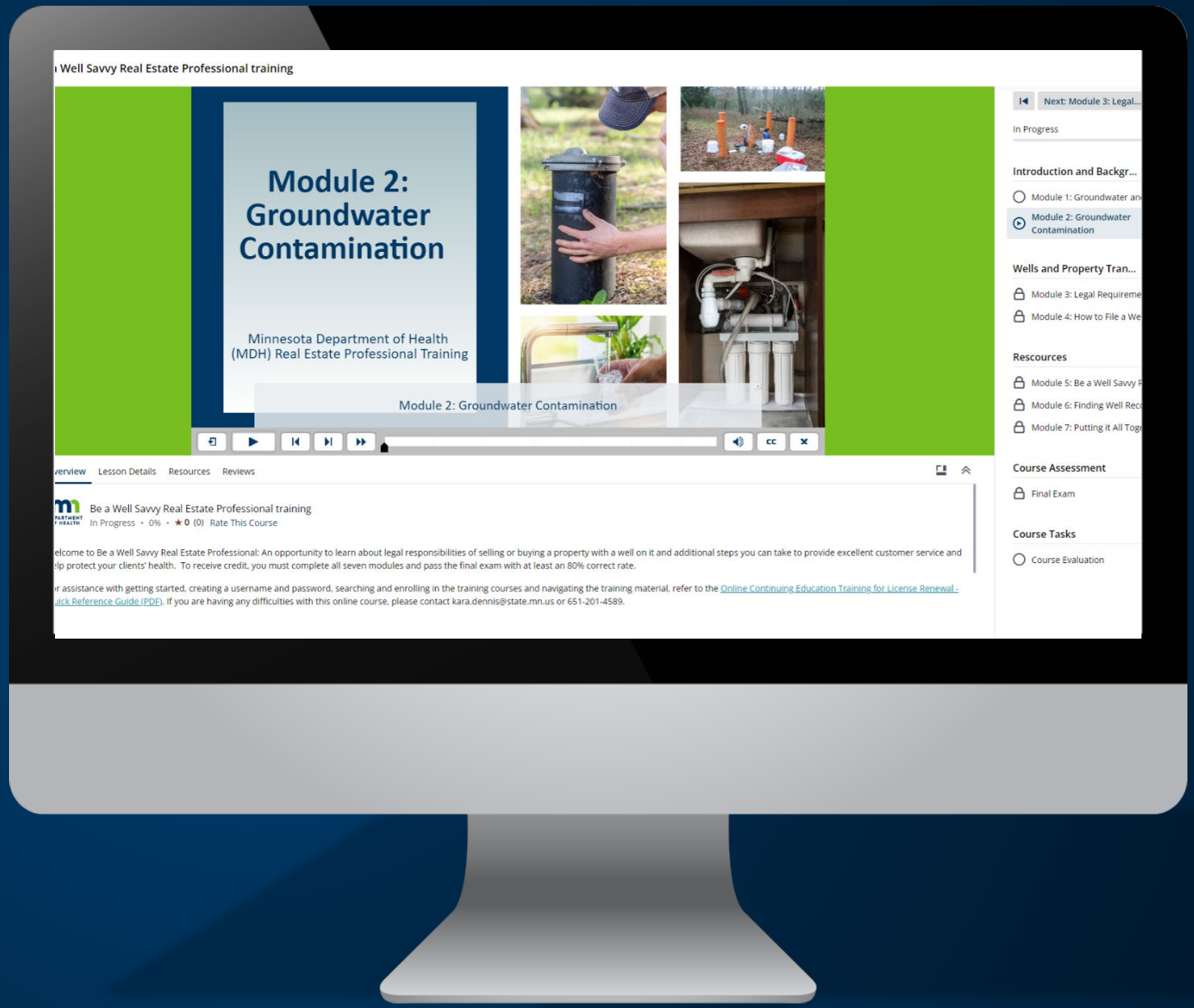
Takeaways

- Partners see the urgency and are interested in collaborating
- This work requires all hands-on deck
- Partners need educational, funding, and capacity resources for this work
- We should leverage social science



Be a Well Savvy Real Estate Professional

- Online training for real estate professionals about private wells and property transfer
- Over 100 completions since November 2023
- 2 free CEUs for real estate professionals



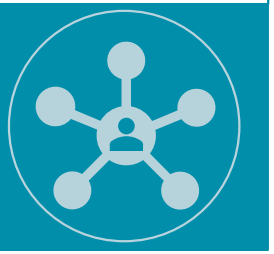
Private Well Initiative: Looking forward

- Expand **education and outreach**
- Provide **technical assistance**
- Offer **well testing**

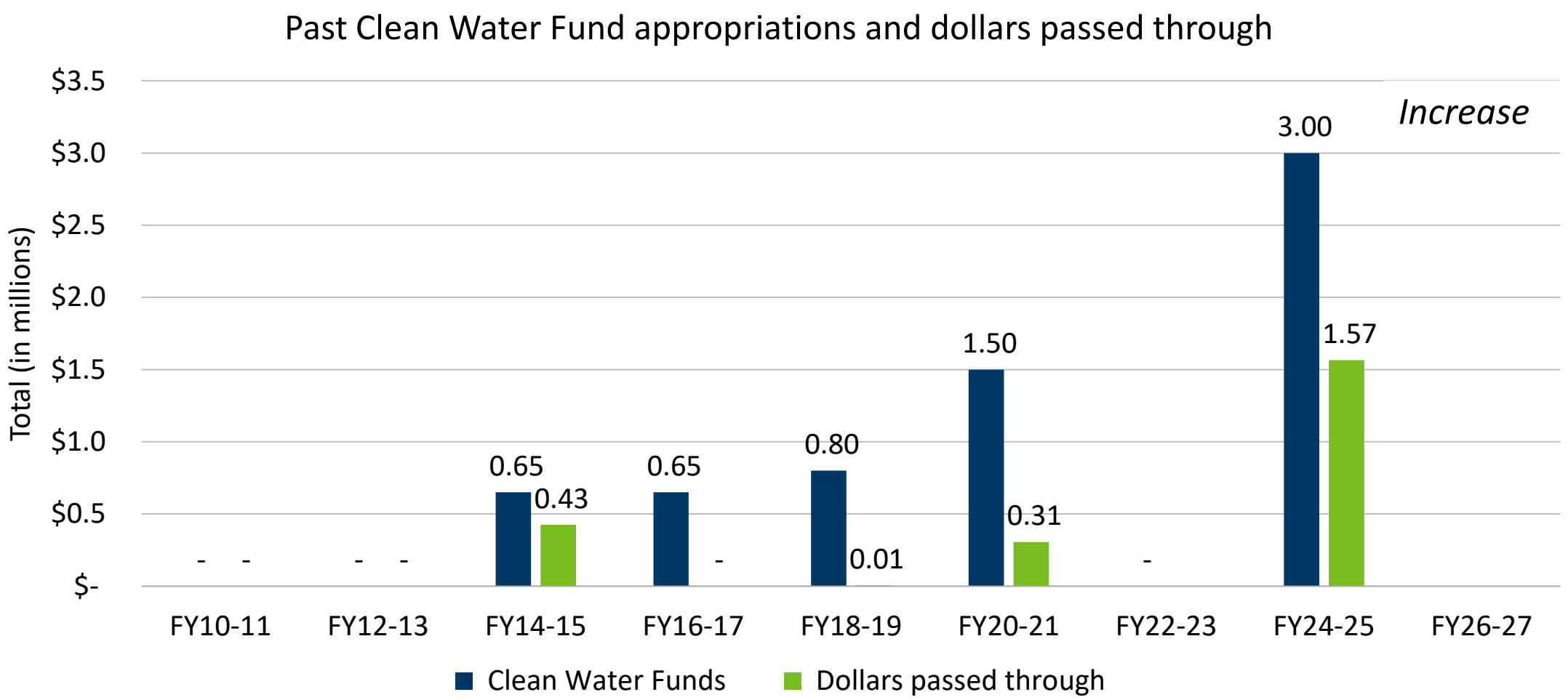
Work directly with **private well users**

- Better understand and explain the **occurrence and distribution of contaminants** in private wells
- Develop and strengthen **partnerships**
- Make private well **water quality data** publicly accessible
- Champion **policies** that benefit private well users
- Develop a statewide **well testing** and **inventory** program

Establish and maintain a **system to support private well users**



Clean Water Funds for the Private Well Initiative



River and Lake Monitoring and Assessment

Kimberly Laing| Manager, Surface Water Monitoring Program

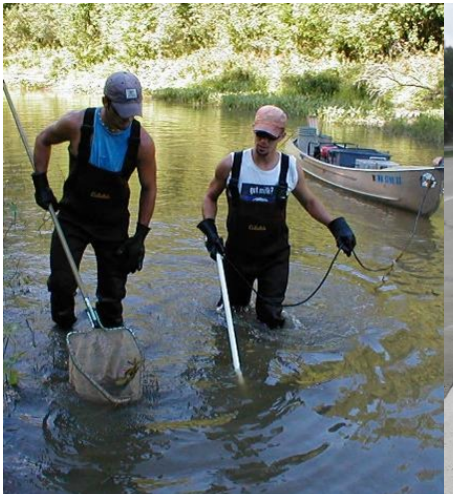
Minnesota Pollution Control Agency

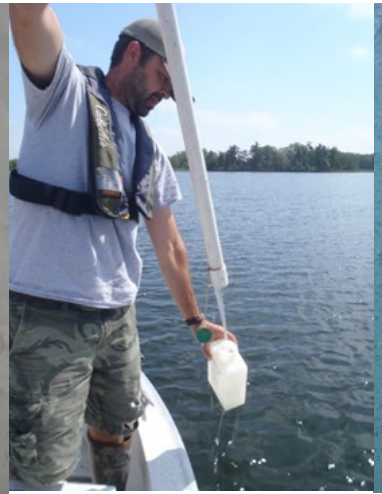
River and Lake Monitoring and Assessment

Monitor, assess, and characterize Minnesota's surface waters

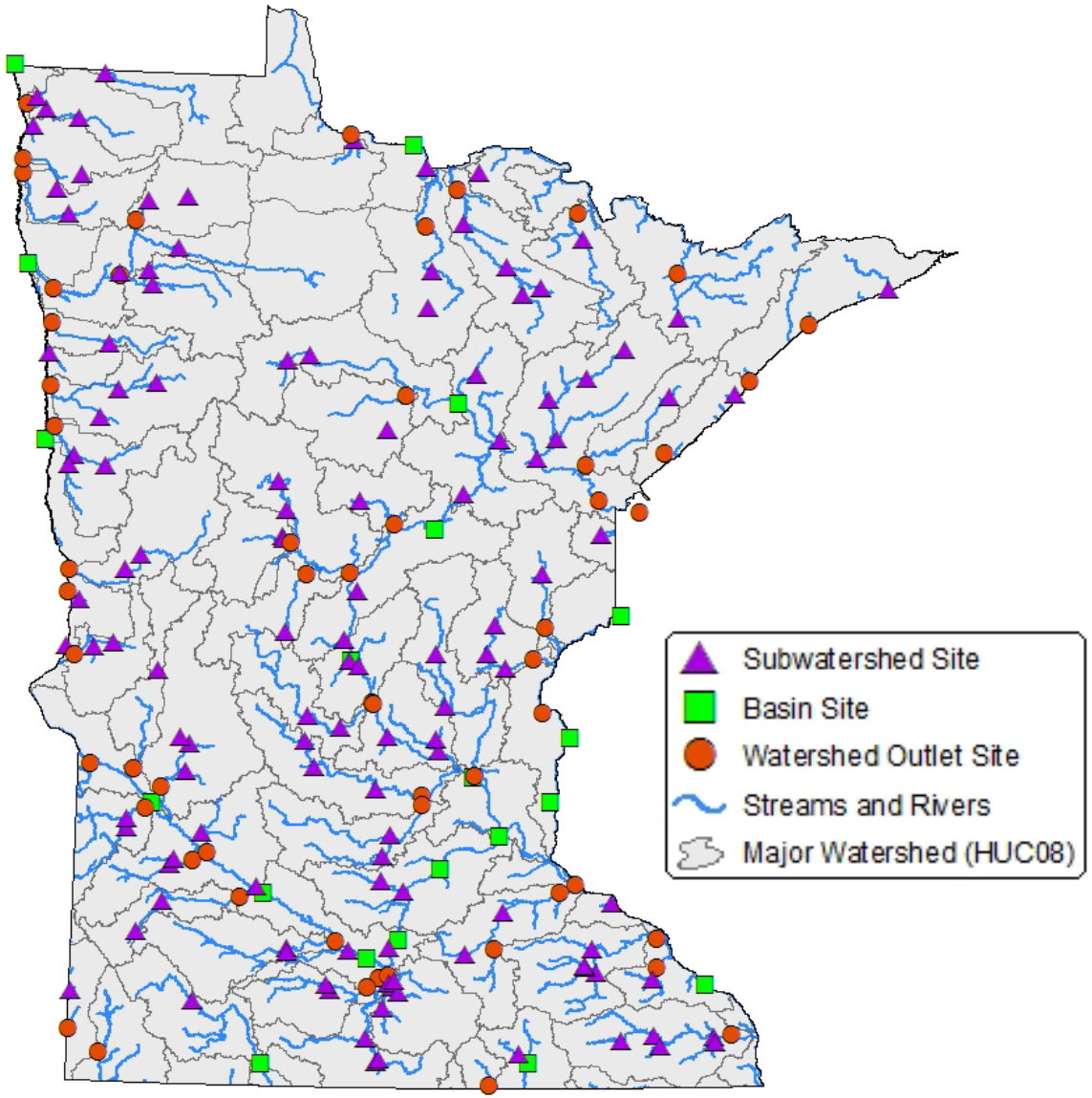
River and Lake Monitoring and Assessment

- Comprehensive stream and lake monitoring for recreation and aquatic communities to assess watershed condition
- Unbiased stream design to capture watershed health and identify areas for protection and restoration
- Targets lakes of greatest use; large, publicly accessible waters, highest local interest




Pollutant Load Monitoring in Rivers

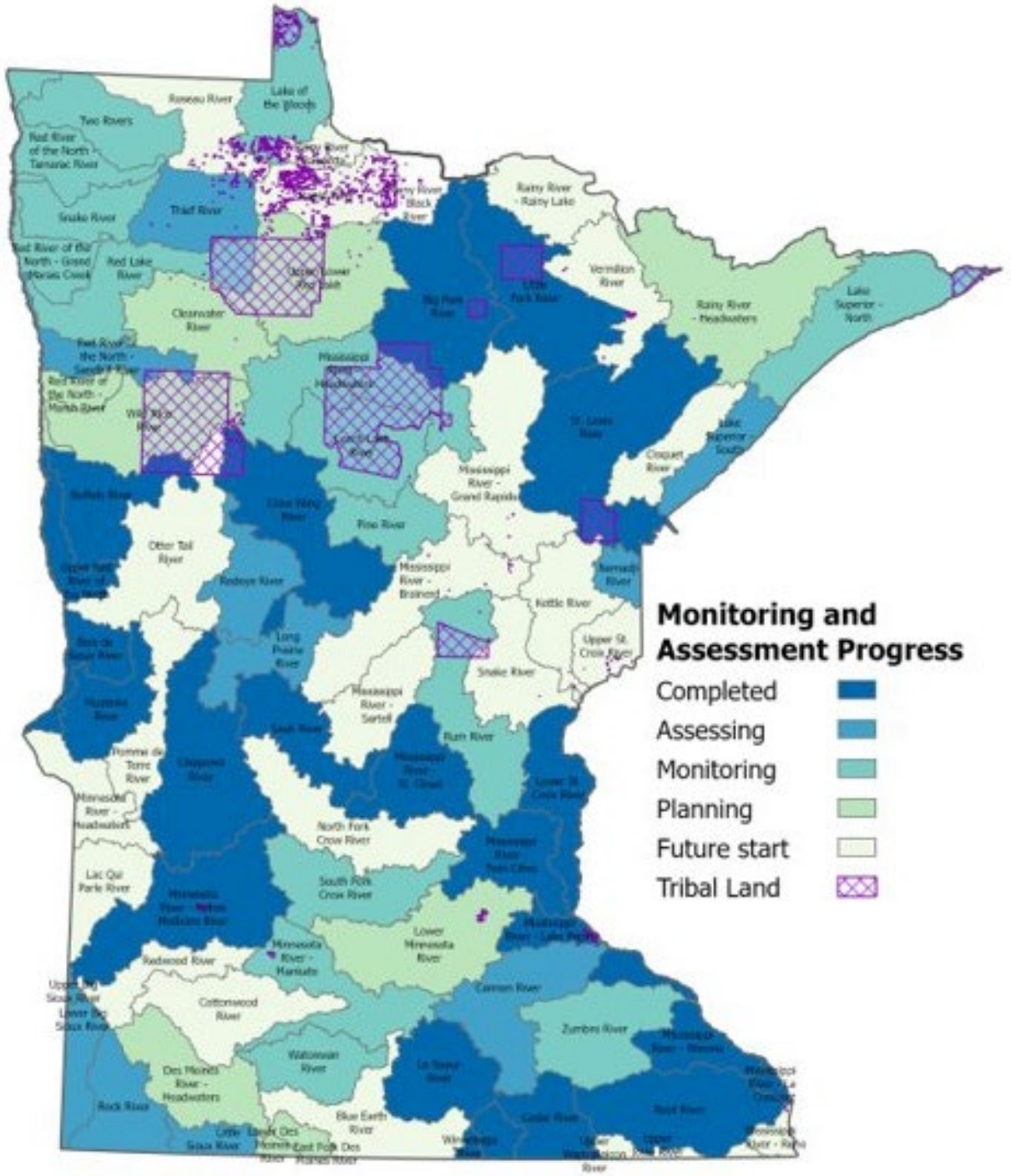


- Goal: ID reduction strategies, measure progress
  - TMDLs, watershed models
  - Track trends over time, progress toward goals
- Features:
  - Flow and water chemistry
  - ~70% of sites monitored by local partners

Contaminants of Emerging Concern

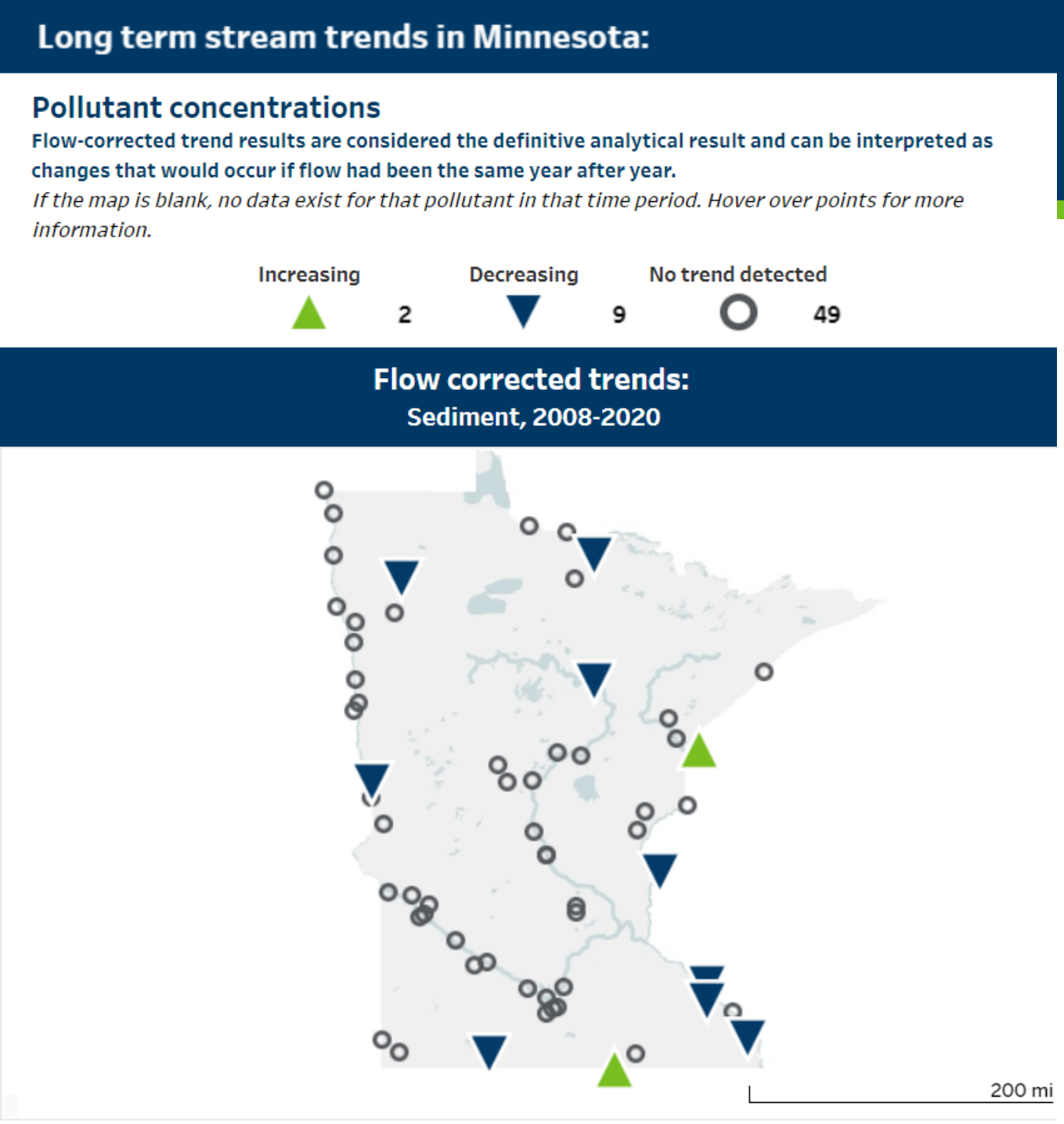
- Condition monitoring
  - Surface water – lakes and streams
- Source investigation
- Effects investigation

Outcomes



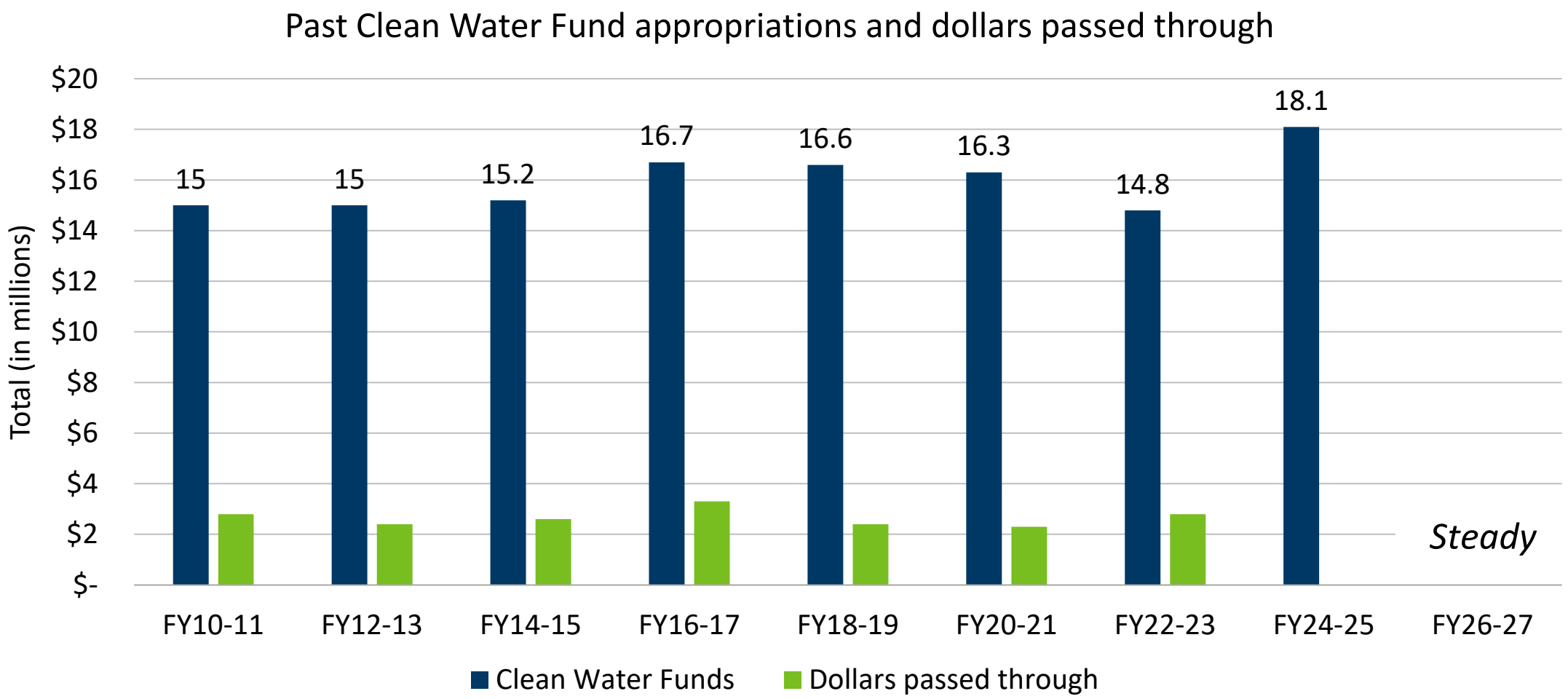
- Foundational and comprehensive statewide lake and stream chemistry and biology data
- Assessments in every watershed to inform local protection and restoration
- Sampling and evaluating watershed condition change over time
- Refined approach to collect data for locally identified needs

Outcomes



- Pollutant loading data for high quality watershed modeling
- Permanent river trend network gauging progress over time
- Sampling and evaluating watershed condition change over time
- Active engagement of monitoring partners statewide

Clean Water Funds for River and Lake Monitoring and Assessment



Groundwater Monitoring & Assessment

Paul Pestano |Manager, Water Assessment Section

Minnesota Pollution Control Agency

Groundwater Monitoring & Assessment

- **Focus**
  - Ambient (no known point sources of contamination)
  - Non-agricultural pollutants
- **Purpose**
  - Provide data and information to understand ambient groundwater quality
  - Analyze and understand trends in groundwater quality
  - Gauge effectiveness of land use practices and BMPs to reduce pollution

Alignment with the CWC Strategic Plan

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

Action: Monitor ambient groundwater quality throughout the state.

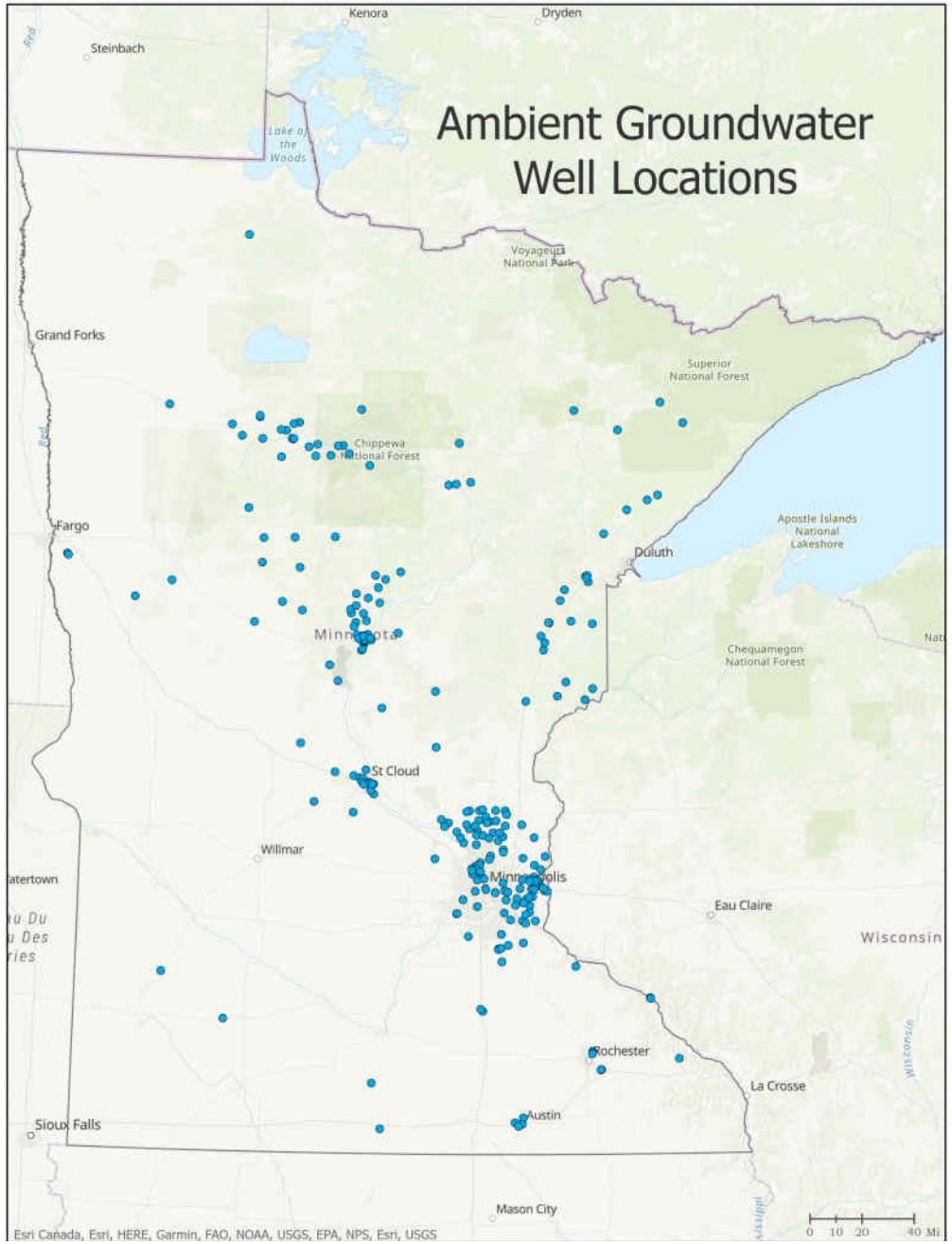
Measure: *Updates from MPCA Groundwater Monitoring Program.*

Action: Characterize natural and synthetic contaminants in groundwater.

Measure: *Locations with high concentrations of natural contaminants mapped.*

Measure: *Groundwater monitoring performed as appropriate for contaminants of emerging concern.*

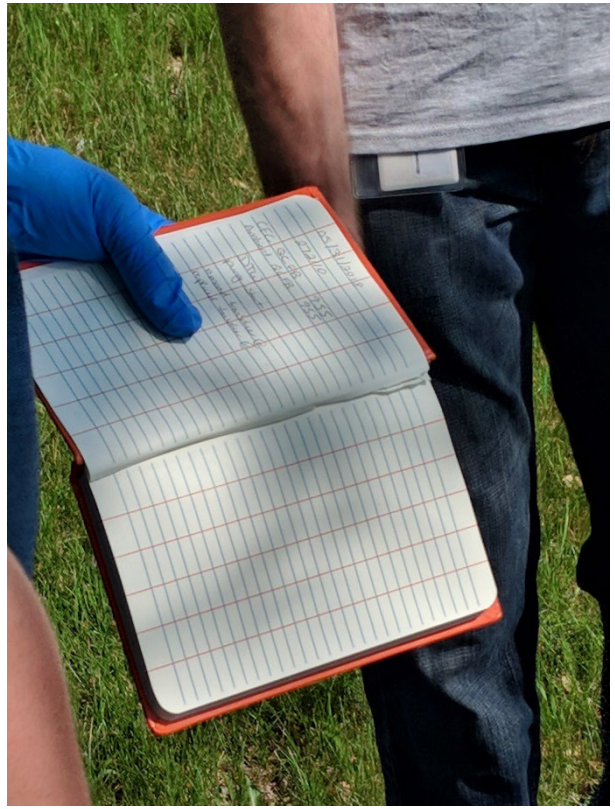
Program Design and Activities



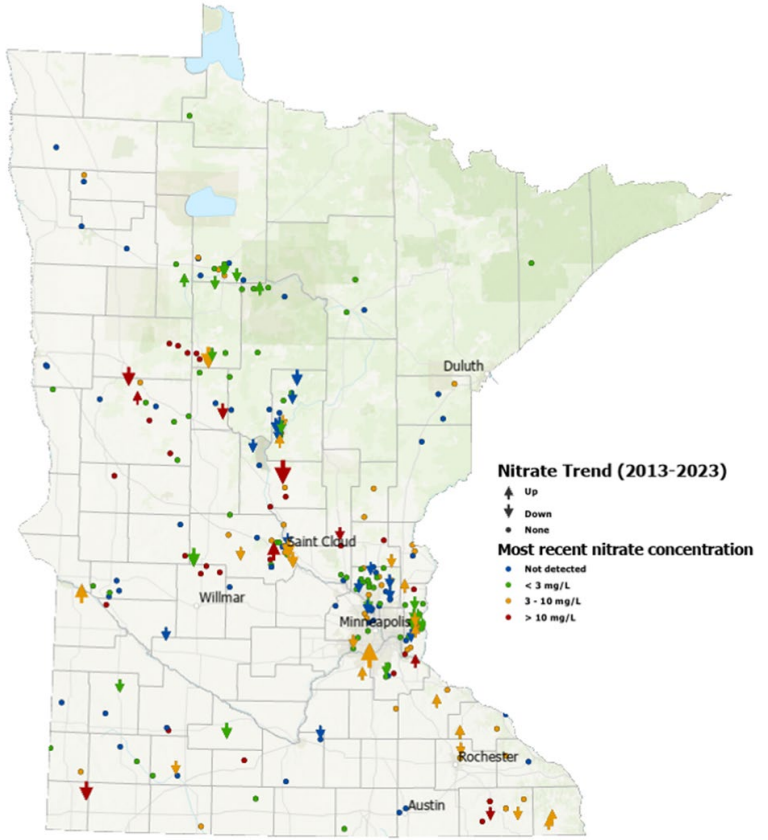
- **Groundwater monitoring network**
  - "Early warning"
    - Shallow aquifers, vulnerable to contamination, urban areas
  - ~270 wells
    - Visit each annually
    - 40 wells annually measured for CECs

Program Design and Activities

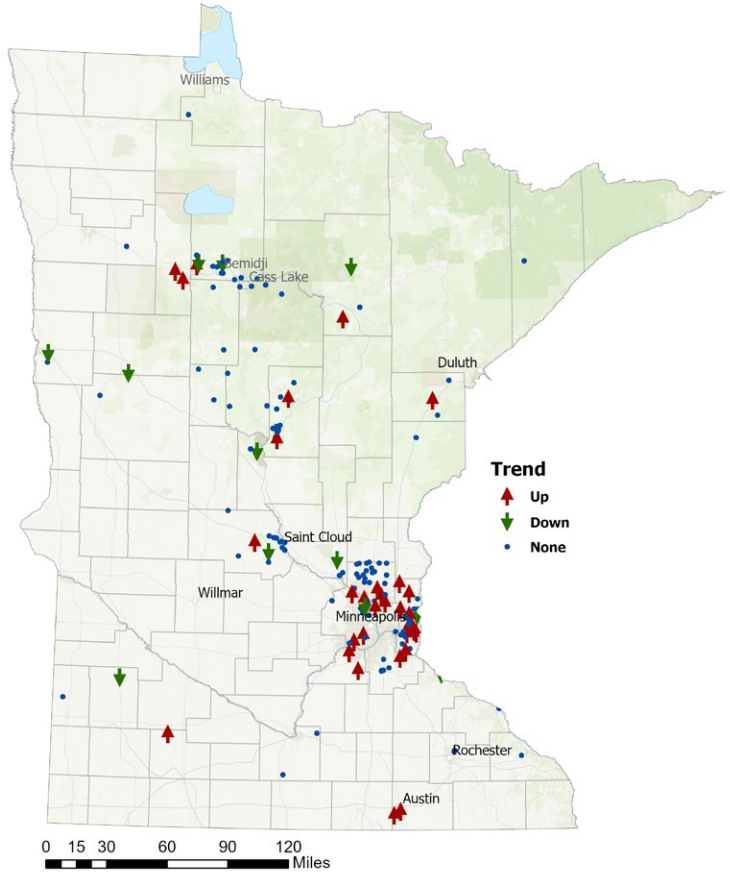
- Other groundwater work (supported by the monitoring) includes:
  - Data and information contributed to GRAPS
  - Development of predictive modeling tools for groundwater/ surface water interaction
  - Source investigation and BMP development



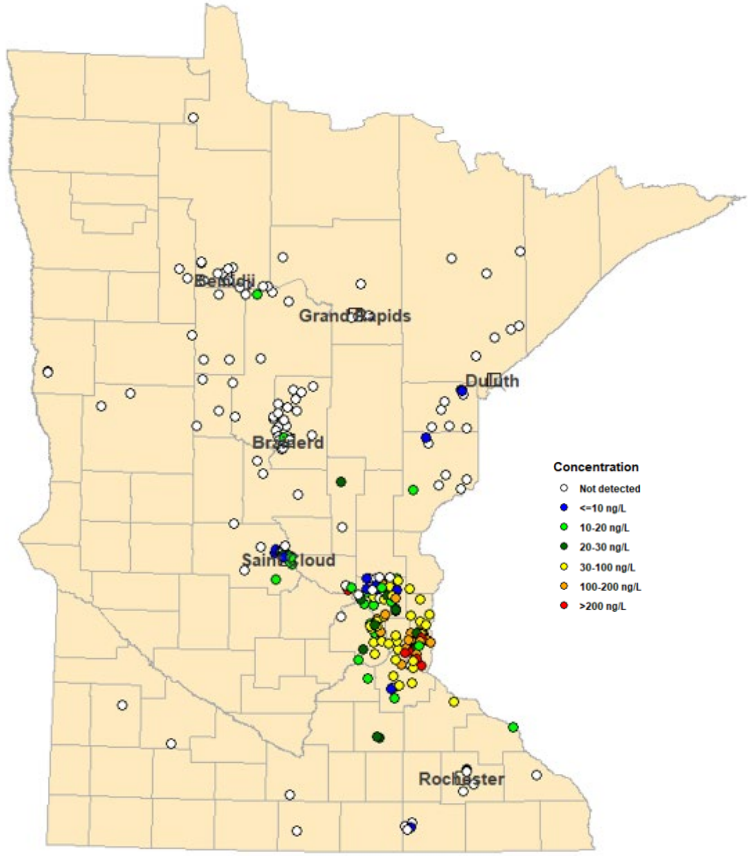
Example Maps/Analyses



Nitrate



Chloride



PFBA

New and Upcoming Program Work

- Regular evaluation of network and sampling needs
  - Use of data loggers and telemetry to increase understanding of pollutant dynamics and variability
- Understanding key pollutants and changes of concern (climate)
  - Chloride migration and seasonal variation; potential climate effects
  - Potential integration of key new pollutants, including PFAS and microplastics
- Responding to regulatory changes
  - Requirements to look at groundwater as a conduit to surface water under CWA
- Increase focus on data analysis and communication

Groundwater Monitoring & Assessment

	FY10-11	FY12-13	FY14-15	FY16-17	FY18-19	FY20-21	FY22-23	FY24-25
Clean Water Funds	$2.25M	$2.25M	$2.25M	$2.36M	$2.36M	$2.36M	$1.9M	$2.0M
FTEs (state agency staff and seasonals)	~3	~3	2.9	3.5	4.8	4.8	4.2	4.45

- Envision steady funding at pre-covid levels moving forward
- Savings due to fewer new well installations are being offset by increased laboratory costs (MDH +50% since 2021)

Point Source Implementation Grant and Small Community Wastewater Treatment Programs

Suzanne Baumann | Section Manager, Municipal Wastewater Division | Pollution Control Agency
Jeff Freeman | Executive Director | Public Facilities Authority

Clean Water Council Strategic Plan Vision

Minnesotans will have fishable and swimmable waters throughout the state.
All Minnesotans value water and take actions to sustain and protect it.

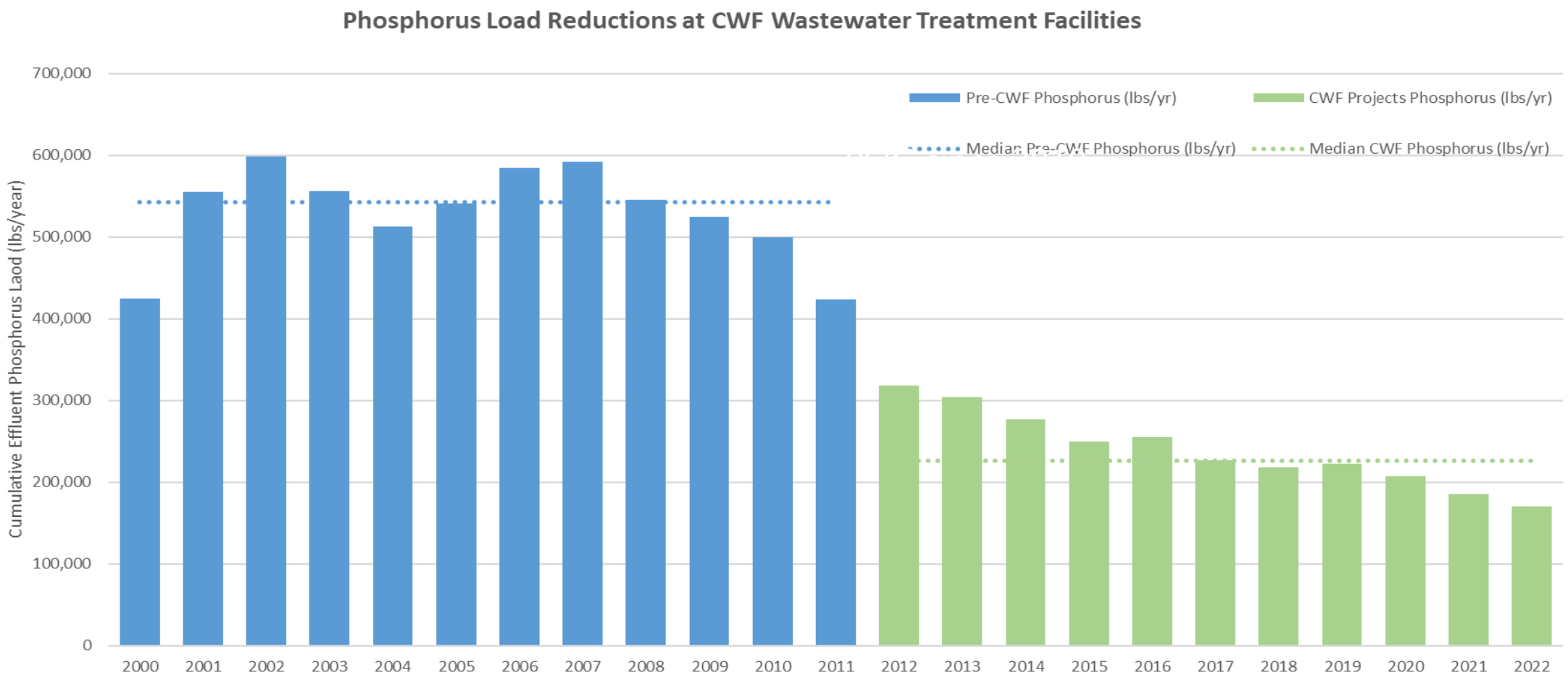
Goal 1: Build capacity of local communities to protect and sustain water resources.
Goal 3: Protect and restore surface waters.

PFA Program	Purpose
Point Source Implementation Grant (PSIG) Program	Help cities upgrade treatment facilities to reduce discharge of specific pollutants to address impaired waters and improve water quality (phosphorus, mercury, chlorides, others).
Small Community Wastewater Treatment (SCWW) Program	Help small under-sewered communities explore wastewater treatment alternatives and construct soil-based treatment systems.

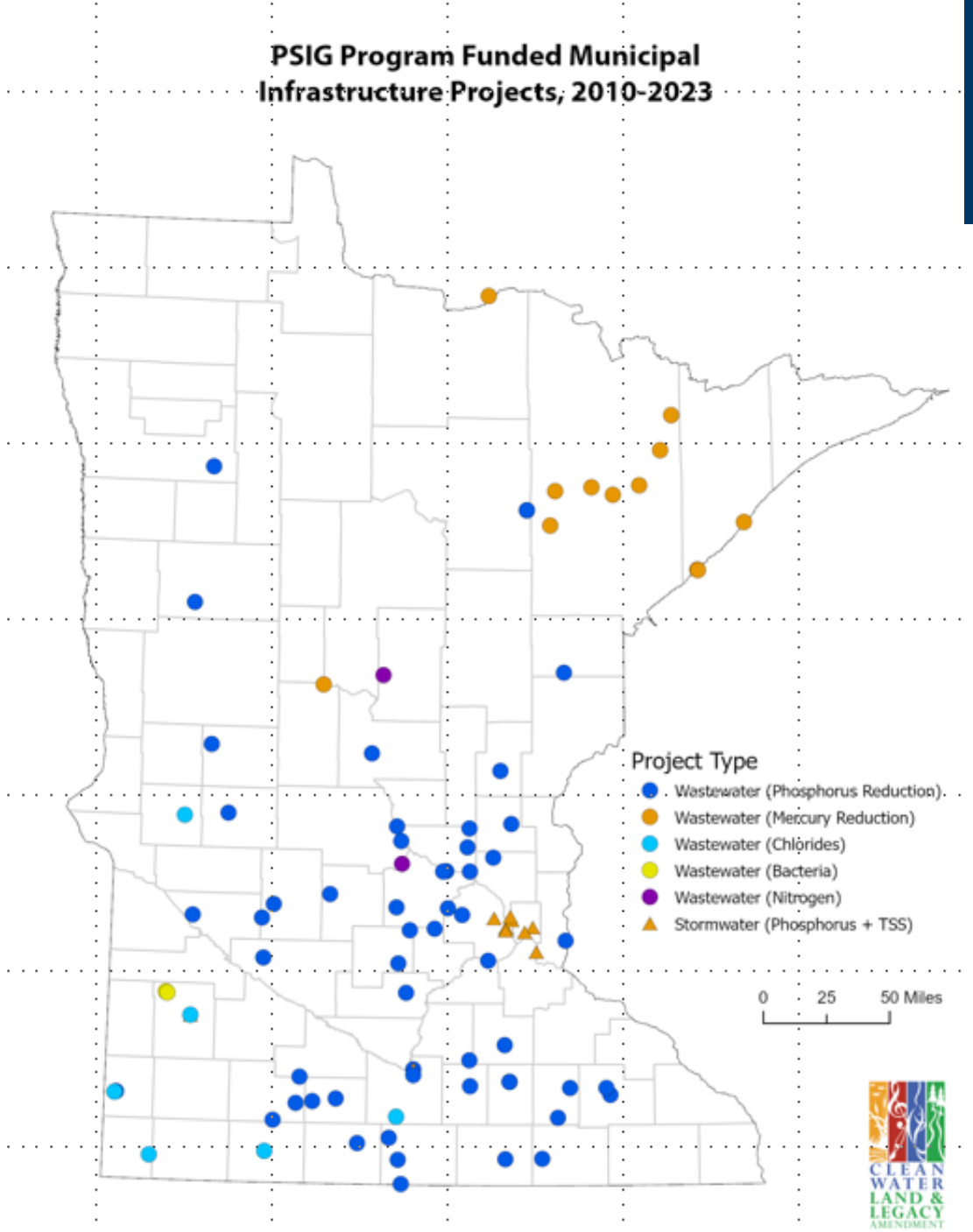
Point Source Implementation Grants (PSIG)

Statute	Section 446A.073
Project Eligibility	Projects to address TMDL wasteload reduction requirements, meet water quality-based effluent limits for phosphorus and other pollutants, reduce total nitrogen concentrations to ten milligrams per liter or less. Projects must be ranked on MPCA's Project Priority List.
PSIG Eligible Percentage	Only project costs related to meeting the specific pollutant reduction requirement are PSIG grant eligible
Project Funding	PSIG grants cover 80% of eligible project costs up to $7 million. Grant funds reserved for projects receiving MPCA approval and certification and awarded when projects are ready to start construction.

PSIG: Phosphorus reduction 48 projects



Clean Water Funds for PSIG



PSIG at work

PSIG is essential to making wastewater projects happen.

City of Austin

- Major rehab and expansion of the WWTF.
- Upgrade treatment process to meet phosphorus limit.
- Total project cost: $113 million.
- PSIG eligible: 22.4%.
- PSIG grant: $7 million.
- Outcome: 81% phosphorus reduction.

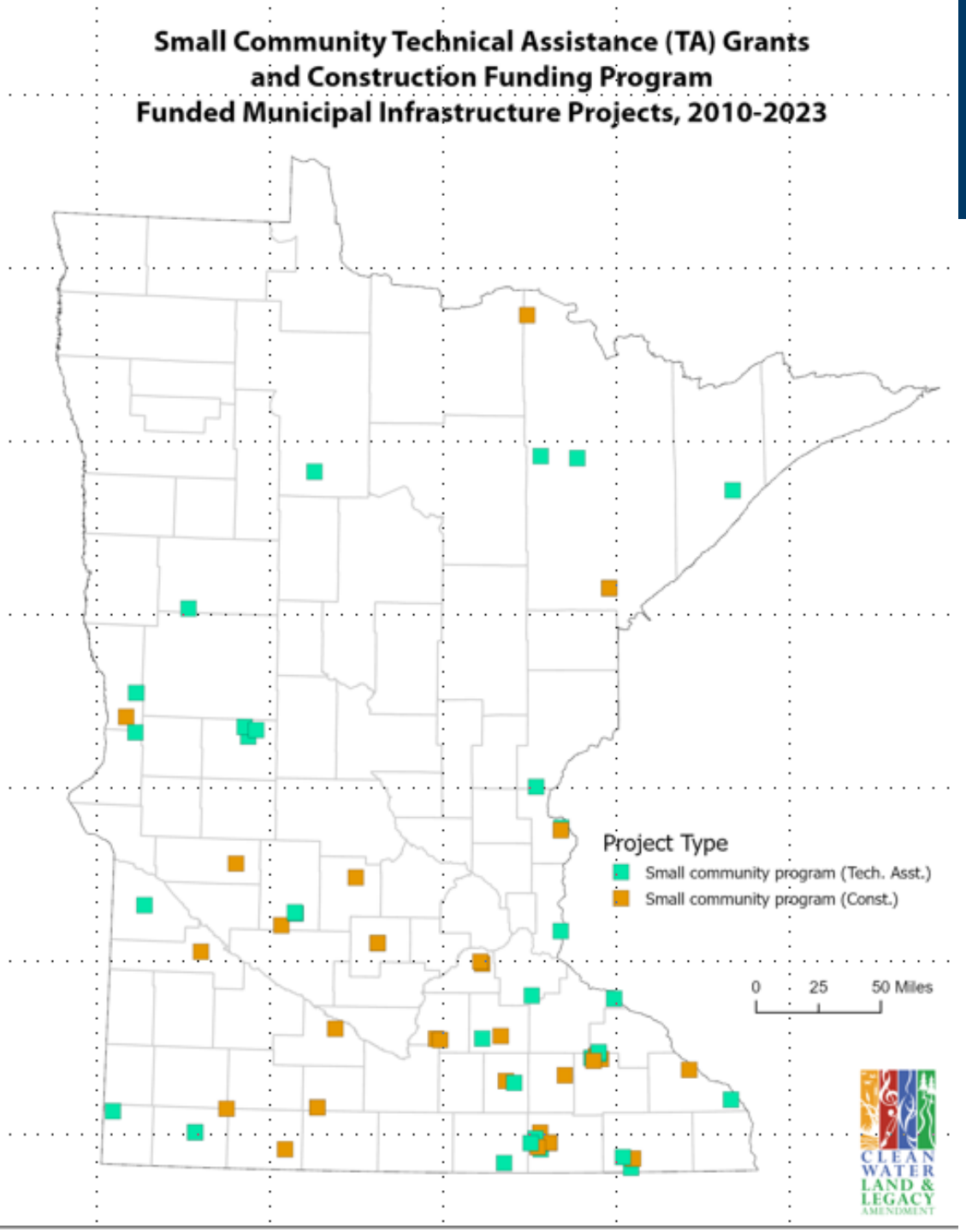
Point Source Implementation Grants (PSIG)

Statute	Section 446A.073
Funding Awards since 2010	120 projects, $435 million total project costs. CWF: $146 million. Leveraged funds: $291 million (including $126 million in state bond appropriations).
Funds Reserved	14 projects, $67.6M grant funds reserved.
Applications	Unfunded applicants: 24 projects, $92M grant need.
Requested Funding	2024 Governor's Bonding Recommendation: $18.527 million. FY2026-27 Clean Water Fund: Expect to request increase from FY24-25.

Small Community Wastewater Treatment (SCWW)

Statute	Minnesota Statutes 446A.075
Eligibility	Local governments (cities, townships, counties) seeking to address noncomplying subsurface sewage treatment systems. Projects must be ranked on MPCA's Project Priority List.
Project Funding	Technical Assistance: TA grants up to $60,000 to conduct site evaluations and evaluate feasibility of wastewater alternatives. Construction: Loans and grants up to $2 million for construction of publicly owned soil-based treatment systems.

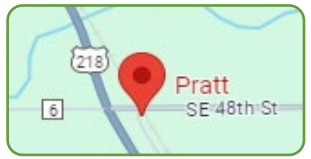
Clean Water Funds for SCWW



SCWW at work

Grant funding is essential for small communities:

- Improve wastewater systems.
- Protect residents from imminent threats to public health.
- Protect groundwater.

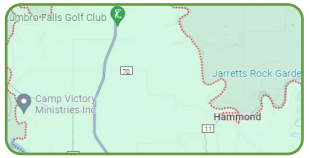


Pratt (Steele County)

Upgraded Individual Systems

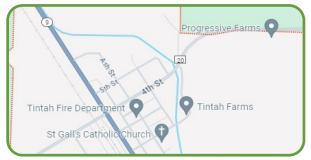
Hazel Run (Yellow Medicine County)

Upgraded individual and Cluster Systems



Zumbro Township (Wabasha County)

Upgraded to a community drain field



Tintah (Traverse County)

Regionalizing to a neighboring WWTP

Big Kandi (Kandiyohi County)

Breaking community into 3 divisions, 3 separate CARS to determine best options for each area.

Small Community Wastewater Treatment (SCWW)

Statute	Minnesota Statutes 446A.075
Funding Awards since 2010	Technical Assistance: 39 TA grants, $1.4 million. Construction: 11 construction awards, $5.5 million.
Project Needs	Under-sewered communities identified by MPCA: 800.
Requested Funding	FY 2026-27 Clean Water Fund: Expect to request stable funding.
Potential Program Innovations	MPFA and MPCA continue discussing ways to improve program effectiveness.

Thank you

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Comment Sheet

for Clean Water Fund Requests

May 20, 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 June 7th.

Expand Weather Station Network (MDA)

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Irrigation Water Quality Protection (MDA)

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Nitrate in Groundwater (MDA)

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Future of Drinking Water (MDH)

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Metropolitan Area Water Sustainability Support (Met Council)

Chloride Reduction Efforts (MPCA)

Wastewater/Stormwater TMDL Implementation (MPCA)

Point Source Implementation Grant (PSIG) Program (PFA)

Agricultural Best Management Practices Loan Program (MDA)

Small Community Wastewater Treatment Program (PFA)

Aquifer Monitoring for Water Supply Planning (DNR)

Fish Contamination Assessment (DNR)

Lake IBI Assessment (DNR)

Buffer Map Maintenance (DNR)

Stream Flow Monitoring (DNR)

Monitoring for Pesticides in Surface Water and Groundwater (MDA)

Pesticide Testing of Private Wells (MDA)

Drinking Water Contaminants of Emerging Concern (MDH)

Private Well Initiative (MDH)

River and Lake Monitoring and Assessment (MPCA)

Groundwater Assessment (MPCA)