Clean Water Council Meeting Agenda
Monday, May 18, 2026
9:00 a.m. to 3:00 p.m.

IN PERSON at MPCA offices in St. Paul with Webex Available (Hybrid Meeting)

9:00 Regular Clean Water Council Business

- **(INFORMATION ITEM)** Introductions—please declare any perceived or actual conflict of interest
- **(ACTION ITEM)** Agenda - comments/additions and approve agenda
- **(ACTION ITEM)** Meeting Minutes - comments/additions and approve April minutes
- **(INFORMATION ITEM**) Council updates
    - Chair update
    - Staff update
    - Policy Committee update

9:25 (DISCUSSION ITEM) Budget and Outcomes Committee Update

The Budget and Outcomes Committee has revised their 2026 goals document, developed definitions to help inform the priority and funding directions conversations, and prepared initial considerations regarding priority and funding direction for the proposals presented at the April Clean Water Council meeting. Feedback from Council members is requested.

9:35 (INFORMATION ITEM) Public Input

Any member of the public wishing to address the Council regarding something not on the agenda is invited to do so as a part of this agenda item.

9:45 (INFORMATION ITEM) Proposal presentations

- Point Source Implementation Grant (PSIG) Program (MPFA)
- Small Community Wastewater Treatment Program (MPFA)
- Wastewater/Stormwater TMDL Implementation (MPCA)

10:35 BREAK

10:45 (DISCUSSION ITEMS) Proposal presentations

- Forestry BMP Evaluation and Lidar Hydrography Tools (DNR)
- Lake Biological Monitoring and Assessment (formerly Lake IBI) (DNR)
- Stream Flow Monitoring (DNR)
- Fish Contamination Assessment (DNR)

12:00 LUNCH

12:30 (DISCUSSION ITEMS) Proposals Continued

- Pesticide Testing of Private Wells (MDA)
- Monitoring for Pesticides in Surface Water and Groundwater (MDA)
- Drinking Water Contaminants of Emerging Concern (MDH)
- Aquifer Monitoring for Water Supply Planning (DNR)
- Groundwater Assessment (MPCA)

(Agenda continues on next page)

1:45 BREAK

(DISCUSSION ITEMS) Proposals Continued

- River and Lake Monitoring and Assessment (MPCA)
- River Watch and River of Dreams (Red River Watershed Management Board)
- River Watch in the Minnesota Valley (Friends of the Minnesota Valley)
- Natural Shorelines (DNR)

2:45 (DISCUSSION ITEM) Taking Stock: Feedback for the process to date

3:00 Adjourn *(Steering Committee meets directly after adjournment)*

Clean Water Council
April 20, 2026, Meeting Summary

Members present: John Barten (Chair), Steve Besser, Eunie Biel, Rich Biske (Vice Chair), Dick Brainerd, Gail Cederberg, Steve Christenson, Tannie Eshenaur, Warren Formo, Brad Gausman, Justin Hanson, Holly Hatlewick, Bonnie Keeler, Peter Kjeseth (Margaret Wagner), Annie Knight, Chris Meyer, Fran Miron, Jason Moeckel, Ole Olmanson, Peter Schwagerl, Glenn Skuta, April Swenby, and Jessica Wilson.
Members absent: Kelly Gribauval-Hite, Rep. Steve Jacob, Sen. John Hoffman, Rep. Kristi Pursell, and Sen. Nathan Wesenberg.

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
  - Peter Schwagerl: A potential conflict of interest is that they have a farm and participate in raising some Forever Green crops.
- Motion to approve the April 20th meeting agenda by Dick Brainerd, seconded by Annie Knight. Motion carries unanimously.
- Motion to approve the March 23rd meeting summary by Dick Brainerd, seconded by Annie Knight. Motion carries unanimously.
- Council Updates
  - Chair Update
    - John Barten attended the Minnesota Stormwater Pond Research and Practice Symposium at the University of Minnesota. Jessica Wilson was also in attendance. This was by the Minnesota Stormwater Research Council (MSRC). Bonnie Keeler was one of the main organizers. It highlighted a lot of work happening in the metro area.
    - Saint Anthony Falls Lab with UMN, is moving through a grant process. It is the second phase. There are high hopes they will receive their grant. This is related to the wake boat research we heard about recently.
  - Staff Update
    - The Council provided a letter to the Legislature regarding the supplemental budget. Confirming that the Council would like to see it held for the FY28-29 cycle.
      - *Question:* Any feedback from the Legislative letter? *Answer:* We received a few thank you emails from the Legislators. *Rich Biske:* I think it is an important gesture to have a position on record from the Council. It is good practice, and something to keep in mind for the future.
    - Jen Kader provided a presentation on March 25th at the House Legacy Finance Committee. It was an opportunity to share what the Council is up to, the water management framework, and outcomes. There were also twenty-five minutes of questions.
    - Jen Kader met with the Board of Water and Soil Resources (BWSR) staff on April 15th at Camp Ripley.
    - Later in April Fran Miron and Jen Kader will be in Rogers presenting to Area IV SWCD staff and supervisors, presenting on how the CWF has been invested and what it has produced.

Public Comment *(Webex 00:15:00)*
No public comments provided at this meeting.

Policy Committee Update & Large Volume Water Users Policy Statement *(Webex 00:15:30)*
The Policy Committee has revised and finalized its Large Volume Water Users policy statement draft and is presenting it for adoption by the Clean Water Council at this meeting.

- Rich Biske: Under the recommendations 2.c. it says, "*The legislature should require proposers of a new large-volume water use to publicly disclose anticipated water use as a part of environmental review."* It is government units that require environmental review. There would be a need to change it from the legislature

to be government units conducting environmental review to require proposers to do so. This item was brought forward by Catherine Neuschler (MPCA), Director for the Environmental Quality Board (EQB).
Discussion:
  - Bonnie Keeler, UMN: Under the 2.a-2.d bullets, we do a good job of articulating who is doing the action. Under 2.e. there is no one identified. Could we add it in? *Answer:* At the meeting, as we started listing, there was a lot of responsible groups, so it was left broad.
- Steve Christenson makes the motion with the amendment that 2.c. should say "…responsible government units conducting environmental review". Seconded by Dick Brainerd. No further discussions. Motion carries.
- The policy statement will be placed on the webpage and sent out in the Council's newsletter.

Budget and Outcomes Committee (BOC) Update *(Webex 00:27:00)*
- The BOC has draft BOC goals for 2026 (see meeting packet).
Questions/Comments:
  - Jessica Wilson: I think we can take this and marry it with the Council's Public Participation Plan, thinking about how those can be carried forward. Is there a way to capture the feedback extended back further in time? It would be good to include it, to inform the current one.
  - Jen Kader: I think we can be more intentional here. I am also thinking we can look at my workplan, to pull these ideas consistently across areas. It is valuable as a strategy year, to look these over as well. Both for visibility and accountability, to write items down and follow through.
- The meeting packet also includes the flow charts. Currently, the Council is reviewing the proposals, the BOC is providing some initial feedback to the full Council and proposers.
- The BOC has prepared initial considerations regarding priority and funding direction for proposals presented at the March Council meeting. The workbook is included in the meeting packet. It includes the BOC members' initial overall priority level (low, medium, high), and initial directional funding (decrease, increase, or remain steady), along with any relevant notes. The Council is currently making directional decisions and not budget numbers. Those conversations will happen later in the year. Note, September is not the end, there will continue to be ongoing conversations, after the preliminary budget is created.
- Feedback from Council members is requested. This time is to flag items for future conversation.

Questions/Comments:
- April Swenby: Regarding the Voyageurs National Park program, is there local cost share or other sources of funding?
  - *Answer from Steve Christenson:* They are looking for local cost share and other sources of funding. The Clean Water Funds (CWFs) are a part of the funds they are seeking.
  - *Jen Kader:* They have eight other applications out right now and do have a commitment of funding from St. Louis County.
  - *John Barten:* The maintenance costs would be paid for by those folks hooked up to the infrastructure. Not knowing future costs, it is hard to know how impacting it will be, but there is confidence that they intend to pay for those future costs. Also, the legislators in that area provide vocal support for this program.
- Brad Gausman: Has this Voyageurs project been identified as a goal in the 1W1P for that area of the state? Would they be receiving WBIF funding? *Justin Hanson, BWSR:* I need to follow up on the plan. It is likely the work has been identified, but I am unsure right now.
- Note, the Minnesota Department of Agriculture (MDA) did not bring forward two programs for this cycle that were included in the previous cycle.
- No programs to flag for future discussion. There will be time in the future for these discussions as well.

Process Overview and Reminders *(Webex 00:49:45)*
- For scoring members, you should have a copy of your rubric of the programs for this meeting. So, you can see your scores and update them as we move through the meeting. Please ask any follow up questions. You can request additional questions in the next few days as well. These will have a written answer. Any final questions can be answered at the next BOC meeting as well. The updated scores, and additional questions will be sent to the proposers on Thursday. Priorities of non-voting members were shared to the BOC as well, so they had additional feedback for their meeting.

Proposal Presentations *(Webex 00:53:00)*

- Watershed Restoration and Protection Strategies (MPCA) *(Webex 00:53:00)*
  - High-level purpose/program goal: The Watershed Program provides watershed science to support our local and state watershed partners.
  - Program output or outcome highlights: Watershed Restoration and Protection Strategies (WRAPS), WRAPS Update, and Total Daily Maximum Load (TMDL) progress, publishing the Nutrient Reduction Strategy (NRS), delistings from Impaired Waters List (IWL).
  - This program has been funded since FY10-11, with total funding of $150.5 million.

  Questions/Comments:
  - John Barten: Nice graph in the presentation (4a). How many stream reaches or discharge points would you have similar data for?
    - *Answer:* Across the state, I will have to follow up on it to give you an accurate number. We are looking at trying to find ways to merge our data sets so we can do more work in this area. It is powerful. The more water quality data we can use is beneficial because it is going to reflect what is happening and changing on the landscape.
    - *John Barten:* This shows the impact. When Jen is asked to present to external groups, it would be good to have graphs like this, to reveal that impact.
    - *Glenn Skuta, MPCA:* When Kim Laing presents on the monitoring network next month, she will talk about the work they are doing. The amount of data collected now is crossing that threshold, and we are able to see more trends (positive or negative). It helps to show change over time, and we are doing this where we can, to provide that change analysis to be done. It is more intense work to pull together, but it is a big part of doing that work, to show the impact of the CWFs over time.
  - Rich Biske: It is great to see these different tools. I appreciate MPCA making them accessible online. At some point it would be good to see how the implementation and monitoring (at different scales) could be integrated too. We can see how the monitoring is informing the implementation. They all work together, and every presentation shows how they work together. It would be good to see the results between the programs. It is something for the Council to think about in the future.
  - Margaret Wagner (MDA): The MAWQCP uses this BEET Tool. It really helps to speak the same language for the programs.
- Watershed Restoration and Protection Strategies (DNR) *(Webex 01:14:30)*
  - High-level purpose/program goal: To enhance WRAPS with geomorphology, hydrology, and other watershed health data, analyses, and tools that help inform strategies and actions.
  - Program output or outcome highlights: Watershed Health Assessment Framework (WHAF) Explorer map. WHAF Lakes app. Paper on streambank contributions to nutrient loading. Forthcoming stream geomorphology survey database.
  - This has been funded since FY10-11, with a total fund of $33,692,000.

  Questions/Comments:
  - John Barten: We've looked at stream stabilization on our field tours. Is most of your stream stabilization in those areas, or across the state? *Answer:* Across the state. Stream stabilization may look different in different parts of the state, for what is done.
  - Rich Biske: What is the lifespan of these projects? *Answer:* It requires little to no maintenance long-term.
  - Rich Biske: Why hold steady for funding if there is a large backlog of these projects? *Answer:* This is not specifically going toward implementation work; it uses assessment and design. We are utilizing other funds as well. The staff help others implement the work. All parts of the system need capacity to accelerate, so if we increase the work of our staff, it does not mean it will increase the work of others in their capacity.
- Groundwater Restoration and Protection Strategies (MDH) *(Webex 01:37:30)*
  - High-level purpose/program goal: Complete plans and fund activities for protection and restoration of groundwater statewide.
  - Program output or outcome highlights: Developed 32 GRAPS Reports. They have 16 groundwater data sets on WHAF (statewide). AIG has been awarded $1.65 million in 36 contracts since 2021.
  - They have been funded since 2014, with a total fund of $8,279,000.

  Questions/Comments:

- John Barten: Are you integrating the WRAPs updates, so you are work on the same areas at the same time, or are those on different schedules? *Answer:* Currently, they are not timed in that way. We follow the 1W1P implementation schedule. When we could not keep pace with it, we focused on the highest groundwater risk. Now, we are filling in the gaps based on data with BWSR's midpoint evaluations. We are focused on getting information to local governments.
- John Barten: How active have you been in Southeast Minnesota? *Answer:* The Water Policy Center is engaged in the first step of the EPA petition. Our work has been more on investment, as well as understanding the local models and answering questions. For the Southeast we already have a large representation, and we work to support them. We take the information they have developed, especially as it relates to private wells, and assist with building it across the state. We also help support the "Find My Aquifer" tool app with the MDA. This work will be used with many different groups. It creates a foundation others can build from too.

- Source Water Protection (MDH) *(Webex 01:54:30)*
  - High-level purpose/program goal: Protection of drinking water sources is achieved via long term planning and associated implementation.
  - Program output or outcome highlights: Develop plans to delineate and protect areas that supply drinking water. First generation plans are in place for over 800 systems. Implementation was supported through technical and financial assistance. Monitoring to identify new threats.
  - Funded since 2009, receiving a total of $46,148,000 CWFs.

  Questions/Comments:
  - Dick Brainerd: Regarding unregulated contaminants, how far along in the monitoring program are you? I see PFAS is included. Aren't these contaminants regulated? *Answer*: For PFAS, in 2019 to 2021 that was a contaminant of emerging concern. It is now transitioning from unregulated to regulated, with the EPA creating standards for it. They will be regulated for that EPA guidance. In general, the work is expensive to do (analysis work), so we are unable to do it on an annual basis, instead we are working on a five-year event to measure the distributions across the state. If there is going to be a contaminant that we are concerned about, we can develop a basis for public health. Down the road, we are working to operationalize these findings in our program, to better address areas that we are observing these contaminants. We are working on that now for PFAS, so we can work to protect people. The Future of Drinking Water will also help address these contaminants.
  - John Barten: I recall there may be some fallback on the source water protection systems, those that use surface water instead of groundwater for developing plans. Where do we sit on those plans? *Answer:* There are about 23 systems statewide that use surface water, as opposed to 920 that use groundwater. The groundwater systems are regulated through the wellhead protection rule. There has been CWFs used to assist in this area (different program), and not all are done. The two to note are the Minneapolis and St. Paul systems. They will be publishing a paper soon on the topic as well, about the source water protection plan for each of those cities.
- Chloride Reduction (MPCA) *(Webex 02:16:00)*
  - High-level purpose/program goal: Technical assistance, grants, Smart Salting training, and education to help reduce chloride at its source and protect water quality.
  - Program output or outcome highlights: The Clean Water Fund grants total $2,904,733. This has allowed $0.2 million completed grants, about $1.75 million for projects underway, and there will be $0.95 million for upcoming 2026 RFP. It has been funded since FY20-21.

  Questions/Comments:
  - Steve Besser: Why are we not investing in salt substitutes for road salt, like the liquid beet waste from sugar plants? *Answer:* The training does reduce salt use. Education is part of many tools that need to be used to address the issue. Our training program covers the equipment available. We discuss alternatives, but they all have an environmental impact as well. There is not a perfect solution or alternative, so we need to do our best with the products being used right now.
  - *Comments from Jessica Wilson:* We have our draft chloride policy update, which helps address some of those common questions. There is not a good cost-effective product without an environment trade-off, so the focus is on reducing the introduction into the environment as much as possible. Chloride is one of my top issues. When we see who is going to the training, it is about ninety percent are public road

authorities, so it means that other ten percent are required to go or have other incentives to go. There are very few private sector folks going to this training. There is a lot of work to do in this space.
    - *Comment from Jen Kader:* Jessica Wilson referenced the Council's chloride policy. There are two comment letters encouraging increasing funding for this program. There were nine different organizations that attended the subcommittee meeting chiming in. They are paying attention to this issue. They want to see the Council act on this issue.
    - John Barten: Do you know what percentage of road salt being applied is by public road authorities versus private individuals on parking lots? *Answer*: We don't have that statistic. *Jessica Wilson:* I think Nine Mile Creek Watershed District had done an analysis a while back. However, data would be variable by watershed or area. I have seen public road authorities that have demonstrated progress over the last ten years. There have been a lot of case studies and analysis, revealing the training is important, followed by equipment modernization. You can see how much salt is purchased at the beginning of the season, and then how much is applied over the season in the public sector. In the private sector, there is no stick or carrot to make people change. Where I see the most salt is where folks are not trained or investing in that equipment modernization. There is no requirement to be judicious in the use of salt.
    - Dick Brainerd: Do you have a plan to help assist with the private sector? *Answer*: We do what we can, but we don't have a plan to get more private sector. We get the information out as much as we can. Unless we have a permit or something they need, a certain certification for an applicator, that shows they have done some training, that might be something that could be required. That would be something a local government unit would need to be required.
    - Steve Christenson: Over the course of the next two years, I encourage you to think more in this area. To work to get the private sector folks to sign up for the smart salting training, to help change the trajectory of this area.
    - Rich Biske: Regarding the policy statements, the audience is the Council, the state agencies, and legislators. I imagine the recommendations include this body, the MPCA.
- Stormwater Research (UMN) *(Webex 02:35:40)*
    - High-level purpose/program goal: Develop new and revised urban stormwater practices and management approaches using direct Minnesota-based applied research and equip public and private professionals with the discoveries and information so they can innovate implementation.
    - Program output or outcome highlights: There have been 46 research investments, 33 completed projects, and 13 ongoing projects, since 2017. There have been $9,650,000 in funding since 2016. Note, the first biennium were allocated to the MPCA and pass through to the UMN.
    - There were no questions or comments for this program during the meeting.
- County Geologic Atlas Part A (UMN) *(Webex 02:51:00)*
    - High-level purpose/program goal: Information infrastructure that is essential to sustainable management of groundwater and other natural resources.
    - Program output or outcome highlights: One atlas with two parts and works with the DNR on the second part. Part A includes geologic maps and databases showing properties and distribution of sediments and rocks. There are seven counties left to start.
    - This has been funded since 2010, with a total funding amount of $5,113,500.
    - There were no questions or comments for this program during the meeting.
- County Geologic Atlas Part B (DNR) *(Webex 02:59:00)*
    - High-level purpose/program goal: Develop County Groundwater Atlases that provide information about location and depth of aquifers, direction of water flow, pollution sensitivity, connections to surface waters, and other characteristics like natural quality and age of groundwater.
    - Program output or outcome highlights: In the last two years, five atlases were published, and work began in multiple new counties.
    - This program has been funded since FY10-11, with a total funding amount of $3,680,000.

  Questions/Comments
    - Brad Gausman: Are there older outdated groundwater atlases? Is this using new technology to make these maps? Is this all new? *Answer:* The northwest will be all new. Prior to this program, we did some regional hydrologic assessments, and there are four of them. Those were done without some of the tools and really great technology we have now. It is not a comparison.

- April Swenby: Are these available digitally? *Answer:* There are paper maps you could purchase through the map sales department, but they are also available as PDF online. Chemistry data is available online as well. The online items are all free, only the printed maps cost money.

- Minnesota Water Research Library (MnWRL) (MDA) *(Webex 03:14:30)*
  - High-level purpose/program goal: User-friendly, searchable inventory of water research relevant to Minnesota. It provides access to peer-reviewed articles, technical reports, and Clean Water Fund-supported documents.
  - Program output or outcome highlights: MnWRL currently hosts more than 3,900 publications, including WRAPS, 1W1Ps, and applied research studies. In 2025, more than 13,000 visitors with nearly 20,000 unique page views demonstrate continued demand for centralized access to water research. MnWRL serves the central repository for Clean Water Fund-supported reports, improving transparency and reducing duplication.
  - Total funding amount is $1.16 million.

  Questions/Comments:
  - Steve Christenson: Is MDA the best home for this library? *Answer:* The short answer is it works the way it does. We had staff that initiated it years ago. There was staff capacity and real interest in doing it. Now, it is good to rely on other agencies' partners to make sure publications are here and current. We are talking about moving some of the organization through the interagency WRAPS team. So, they will include it in their annual workplan and will be working on the coordination of it. It relies on an interagency approach.
- Forever Green Initiative (MDA) *(Webex 03:22:00)*
  - High-level purpose/program goal: Develop and deploy marketable crops that provide continuous living cover. Integrate research and implementation to drive adoption on the landscape. Support "ongoing implementation" step of the Watershed Management Framework. Advance Clean Water Council Strategic Plan goal of five million acres of continuous living cover.
  - Program output or outcome highlights: There are 15+ crop development teams and 8 crop varieties released. They have supported over 12,000 acres of on-farm production (technical and financial assistance). They have helped launch farmer-owned cooperative for Kernza growers. They have a strong partnership with Cargill to advance winter oilseeds.
  - They have been funded since 2016, with a total funding amount of $21,800,000.

  Questions/Comments:
  - Dick Brainerd: Regarding the non-CWFs funding, what happens if that funding is not available? *Answer:* In general, we are adaptive. We continue to plug along with the resources we have. We would scale back and it slows down our progress.
- Beach Portal (MDH) *(Webex 03:44:30)*
  - High-level purpose/program goal: Create a statewide beach portal, provide access to beach monitoring results and alerts in one online location; evaluation of monitoring data to assess past interventions and prioritize future restoration plans or protection strategies.
  - Program output or outcome highlights: Portal launching summer 2026.

  Questions/Comments:
  - Dick Brainerd: In your write-up you mentioned ninety percent will report. Is there a requirement? *Answer:* That is our goal. They do not have to report. We will get the reporting from them. They do not have to do anything. For this portal, if there is a sewage spill or other event that may close the beach, there will be an alert as well. This will allow us to get alerts in place in real time.
  - Dick Brainerd: Is your goal to have all beaches included? *Answer:* Yes.
  - John Barten: Do you require a particular monitoring protocol to verify before it is added to the website? *Answer:* Monitoring programs have a protocol. Part of the program is also the evaluation of the program, so we can work to find the better protocols and apply them.
- Tillage and Erosion Transects (BWSR) *(Webex 03:52:30)*
  - High-level purpose/program goal: This is a long-term program that collects and analyzes data on tillage practices, cover crop adoption, and soil erosion that can be used to support better decision-making by identifying priority areas and guiding conservation efforts to reduce erosion and improve water quality.
  - Program output or outcome highlights: Collect annual data on high residue tillage management systems and cover crops in 67 countries in Minnesota and deliver the information to Minnesota stakeholders

through the Daily Erosion Project, Single-event Wind Erosion Evaluation Program (SWEEP), and Minnesota Geospatial Common.
    - This program has been funded since FY 2016, with a total funding amount of $5.1 million.

  Questions/Comments:
    - John Barten: When in the spring do you take your satellite photos? *Answer:* That is the big challenge. There is a caveat in our data. Also, it changes fast in the fall too. The new goal is to use machine learning, to compare, the week before and after. There are students working on it.
    - Rich Biske: One of the ways Optis is used is to look across states to see adoptions, and to see what might be happening in these areas. How is this program being analyzed, influencing programs, being used to understand the effectiveness of these different programs? *Answer:* I will follow up with you on it. The way I have looked at it, WBIF grants going for crop cover adoption, and looking areas to see if it is reflecting it.
- Future of Drinking Water (MDH) *(Webex 04:06:45)*
    - High-level purpose/program goal: Develop public health policies and an action plan to address threats to safe drinking water.
    - Program output or outcome highlights: Assessment of Eliminating Lead in Drinking Water as well as the Minnesota Drinking Water Action Plan.
    - This program has been funded since 2018, with a total funding of $2,500,000.

  Questions/Comments:
    - John Barten: How do you navigate between protection of source water and protection of tap water? It seems that the inherent difficulty between those two have to be substantial. *Answer:* That is a great question. It is tricky because with water, everything is connected. When we think about how the Drinking Water Action Plan is laid out, regarding protection it is highlighting things already happening across agencies and programs, and how they are working together to protect those sources of drinking water. It does shift a little when we get to the tap, you need to understand people more. There are a lot of players in this area.
- Manure Land Application and Water Quality Specialist (MDA) *(Webex 04:21:30)*
    - High-level purpose/program goal: This is a new program. It would support a manure and water quality specialist who develops and promotes manure best management practices (BMPs) and supports a revision of manure crediting guidance with an emphasis on regions with high environmental risk, including southeast and central Minnesota.
    - Program output or outcome highlights: Co-development of manure and water quality BMPs. Development of an advanced manure-management training program for livestock producers. Submitting one or more proposals each year for non-CWF funding to support manure BMP promotions and manure storage/management. Co-lead manure management training workshops for SWCD technical staff.
    - There is no funding yet, as it is a new program.

  Questions/Comments:
    - John Barten: Do you see this position focusing primarily on feedlots? *Answer:* My initial thought is the larger facilities have an agronomist and other staff in house. There would likely be a greater impact on the smaller facilities.
    - Holly Hatlewick: Training-wise, this is a need. There is a gap in this area. Would the training be statewide, or is it focused in the southeast? *Answer:* When we met with the university, the training would be statewide, to serve everyone. It is good to look at options to do the training across the state, so folks can attend them without having to travel too far.
- Clean Water Council Administration (MPCA) *(Webex 04:34:00)*
    - High-level purpose/program goal: To fund the operation of the Clean Water Council and related expenses and ensure that Council activities fulfill statutory requirements for the Council and Clean Water Fund.
    - Program output or outcome highlights: New in the last year is the Participation Plan, Rubric and revised proposal approach, Upper Mississippi Basin Field Tour, and survey.
    - This has been funded since FY14-15, with a total amount funded at $2,692,000.

  Questions/Comments:
    - John Barten: Since we are coming to the end of the Legacy Amendment, we need to have the ability to promote what is being funded through the CWFs. We want to let people know about it. We need to have adequate funding moving forward. What do you think we should have? *Answer:* We are already seeing

consistent interest from others with invitations for presentations, and already we are starting to note some constraints on capacity. For instance, the newsletters are already reduced in frequency. With the anniversary, and increased discussion about what comes next, constraints will continue to increase.
    - April Swenby: Regarding communications, have you thought about an intern? *Answer:* Yes, with an intern who could focus on something like our newsletters, and we could have them do the research and tracking of the Council's policies. It is with these discreet projects that their work would be most helpful.
    - Dick Brainerd: I think this is important. We need to look at what we need to add to make it better. Jen has put forward these ideas, and I hope the Council will lean into it. What Jen does is incredible. As we look forward, I am not sure if it is enough. We are lucky to have the folks we have. We need to provide them with resources so they can do the work.
    - Tannie Eshenaur: I thought with Paul, there was support from MPCA Communications? *Answer:* We have 1.85 dedicated staff, and that .15 is for general communications work. Part of that is for the website, and there are smaller discreet things. Larger campaigns would need to have additional funding to support the work.
    - Rich Biske: There is the 20th anniversary coming up, and in terms of the stakeholder engagement, I think there will be a lot of demands looking at the effectiveness of the CWFs. The structure of the funds and showcasing of the work will be needed. Being responsive to those questions is important for the Council. I would not underestimate that demand from 2027 to 2034. We need to start planning for it.
- Legislative Coordinating Commission website (LCC) *(Webex 04:50:00)*
    - High-level purpose/program goal: The LCC has been tasked with developing and maintaining a website that shows how revenues generated by the Legacy Amendment and the Environment and Natural Resources Trust Fund are utilized.
    - This is required by law. It has been funded since FY10-11, with a total amount of funding at $113,000.
    - No questions or comments.

Adjournment *(Webex 04:52:32)*
Motion by Steve Besser, seconded by Holly Hatlewick. Motion carries.

DRAFT CWC BOC Goals - 2026

Theme	Goal	Actions (calendar year quarters)
Budget	Deliver budget recommendation for FY28-29 to Clean Water Council by legislative deadlines	• Utilize new program scoring rubric & process to inform budget recommendations favoring clean water outcomes (1Q-2Q) • Engage interested parties in development of recommendations (continuous) • Review accumulated proposal scores and input, and develop initial recommendation (2Q-3Q) • Capture lessons learned from initial season of using scoring rubric for future improvements (2Q-4Q) • Develop final recommendation to CWC in line with MMB forecasts by December (4Q)
Outcomes	Monitor overarching outcomes to track water quality improvements and ensure CWF dollars are being spent effectively and efficiently	• Support the biennial Performance Report measurement of outcomes (2Q) • Review Outcome updates embedded in proposal form for program-based outcome tracking (2Q-3Q) • Finalize KPI dashboard to review outcome updates (3Q)
Communication	Enhance communications about CWC budget processes & CWF outcomes to inform, consult, and involve the public and intersted parties per Minn. Stat. 114D.35	• Communicate BOC goals for 2026 (2Q) • Leverage communications capabilities of CWC fund recipients for external stakeholder audiences (continuous-4Q) • Increase transparency of BOC discussions and decisions for both CWC and public audiences in line with CWC Public Participation Plan (continuous) • Highlight how public input was used to inform decisions to close the loop with interested parties (2Q-4Q) • Provide input into the biennial recommendations report (3Q-4Q)

BOC Directional Scoring - DRAFT

Funding Direction	Meaning
Increase	Recommend additional investment (program scope expansion, scaling up, or other major change)
Hold Steady	Maintain current funding level (may include increases for inflation)
Reduce	Could be a potential program for reduced funding in FY28-29.

Priority & Strategic Alignment	Meaning
High	Strong alignment with CWC goals; critical for achieving or understanding water quality outcomes; if feasible, CWC would support expansion of program
Medium	Moderate alignment; contributes meaningfully but not central
Low	Limited alignment or lower impact relative to other programs

Overview of CWF Budget Item Changes

FY26-27 vs FY28-29

	Program Changes	Budget Implication
FY26-27 Appropriation Baseline		$303M
Completed programs	-MDA Ag Weather Station Network	-$2.3M
New Proposed programs	+Olmsted County proposal (merged with BWSR proposal) +MDA Manure Land Application and Water Quality Specialist +River Watch and River of Dreams	+$xM-TBD +$0.2-$0.3M +$0.xM
Inflation of ~5%-10% to hold steady existing programs	Hold steady	+ ~$15M-$30M range
MMB Forecast Increase for FY28-29		+ ~$30M range

ID	Program	Proposer	Brief Description	26-27 Amount	Proposed Change	Range (Mean)	BOC priority	BOC direction	Notes
32	Chloride Reduction Program	MPCA	The MPCA Chloride Reduction program provides assistance, grants, training, and education & outreach to communities, permittees, and partner organizations to help reduce chloride at its source and protect water quality. Chloride is a permanent pollutant—it does not break down over time—so preventing it from entering the environment is the most effective and cost-efficient strategy for protecting both surface water and groundwater from chloride contamination.	$ 1,300,000	Increase	37-49 (42.1)	High	Increase	2 members as hold steady (with one as potential increase), 1 medium. Connection to policy needs/ legislative action. Scale of challenge noted. Other state funding sources?
33	WRAPS	MPCA	WRAPS Updates provide the scientific basis to LGUs for prioritizing and targeting watershed planning and implementation via 1W1P. WRAPS Updates can include, but are not limited to, stressor identification reports, TMDL reports, in-depth water body characterization, modeling, and enhanced studies, like lake protection reports. WRAPS Updates contain pollutant reduction and waterbody protection goals to guide the creation of a comprehensive watershed management plan and resulting protection and restoration implementation activities. WRAPS scientifically inform water quality permit programs to assist with appropriate level of regulation. Beyond the work the program does, MPCA's Watershed Program carries We Are Water for the CWC/CWF.	$ 14,500,000	Hold Steady	35-49 (43.1)	High	Hold Steady	
34	WRAPS	DNR	This program adds geomorphology, hydrology, and connectivity data to the WRAPS process and suppoers the Watershed Health Assessment Framework (WHAF), supplementing MPCA's biomonitoring and water chemistry data to promote robust watershed health assessments and bridge gaps in watershed science. MPCA and local water managers use DNR data to help identify root causes of water quality problems, compare restoration and protection strategies, and implement resilient, multiple-benefit solutions. The WHAF encourages resource managers, scientists, landowners, and others to explore extensive spatial data at nested watershed scales, without using desktop GIS. Users can save and share custom views, ecological health scores, and more.	$ 4,750,000	Hold Steady	33-50 (42.7)	High	Hold Steady	
35	GRAPS	MDH	GRAPS serve an important purpose in the Water Management Framework aggregating existing state information and data to characterize groundwater and drinkng water at a watershed scale. The information sharing begins with the generation of a GRAPS report providng the foundation of what is known regarding potential risks, monitoring data, along with the the identification of strategies for LGUs to adopt to protext and restore groundwater and drinking water resources. Prior to the GRAPS initiative it was difficult for LGUs to obtain state agency data resulting in limited protection across the state.	$ 3,500,000	Hold Steady	36-48 (42.1)	High	Hold Steady	Explore additional funding sources. One Increase.
36	Source Water Protection	MDH	Source water protection planning and implementation supports the efforts of local public water systems to identify issues that threaten their source of drinking water as well as opportunities and activities that help to protect it. Implementation of priority activities are supported with financial and technical assistance. Emerging water quality threats are identified through ambient monitoring of drinking water sources and finished water.	$ 7,540,000	Increase	35-50 (43.1)	High	Increase	

37	County Geologic Atlas Part A	UMN	The distribution of geologic materials defines the location natural resources including aquifer boundaries and the connection of aquifers to the land surface and to surface water. Geologic atlases provide maps and databases that are essential for improved ground and surface water management. This foundational data supports drinking water management, domestic and industrial supply, irrigation, and aquatic habitats. Atlases enhance education, provide technical assistance for management and regulation, and facilitate wise use of natural resources. They support permitting, land-use planning, wellhead protection, remediation, nutrient management, monitoring, modeling, and well construction. Atlas information is used by citizens and government agencies.	$ 800,000	Increase	25-50 (40.3)	High	Increase	1 med, 1 Hold Steady
38	County Geologic Atlas Part B	DNR	County Geologic Atlases provide information about the region's geology and groundwater: location and depth of aquifers, direction of water flow, pollution sensitivity, connections to surface waters, and other characteristics like natural quality and age of groundwater. This information is essential for local planning and environmental protection efforts. Water supply planning, source water protection, and well sealing programs are examples of local programs that need geologic and groundwater information. Other typical uses include providing information for permit applications, resource management, monitoring needs, and emergency response to contaminant releases.	$ 200,000	Hold Steady	26-50 (41.5)	High	Hold Steady	1 med priority. DNR supports consistent funding with current capacity.
39	MnWRL	MDA	The Minnesota Water Research Digital Library (MnWRL) is a user-friendly, searchable inventory of water research relevant to Minnesota. It provides access to peer-reviewed articles, technical reports, and CWF-supported documents, including MPCA WRAPS, and BWSR 1W1P reports. MnWRL enables water managers, researchers, and residents to easily find and share research information that informs science-based decisions to protect, conserve, and restore Minnesota's water resources. By centralizing thousands of publications, MnWRL improves transparency, reduces duplication, and accelerates adoption of BMPs statewide.	$ 100,000	Decrease	26-45 (34.9)	High	Decrease	(Update to application: MDA supports decrease for this program).
40	Forever Green Initiative	MDA	The Forever Green Initiative (FGI) develops Minnesota-specific winter annual and perennial crops that provide continuous living cover to protect and restore surface and groundwater quality. Through integrated research, farmer adoption support, and market-building efforts, the program accelerates adoption of cropping systems that reduce nutrient loss, enhance soil health, and support farm profitability. Clean Water Fund support advances research, implementation, and partnerships that expand these crops across Minnesota's agricultural landscape. The program serves farmers, rural communities, and the public by promoting agricultural systems that deliver durable environmental and economic benefits.	$ 5,000,000	Increase	33-50 (43.3)	High	Increase	Appreciation for leverage, split of interest in moderate or full increase. NRS connection.
41	Beach Portal	MDH	Beach monitoring determines if beach water is safe for recreational activities and minimizes the risk of waterborne illnesses. Funding from the 2024-2025 CWFs established Minnesota Beach Portal (launching summer 2026), the first centralized source for statewide beach monitoring results an dtrends. This proposal will optimize the portal through evaluating and expanding its functionality, ensuring Minnesotans can access beach alerts for anywhere in the state. This proposal aligns with the vision of the Clean Water Council that Minnesota will have fishable and swimmable waters throughout the state. Furthermore, it makes Minnesota aware of crucial issues impacting water quality.	$ 600,000	Hold Steady	15-46 (35.7)	Medium	Hold Steady	1 low, 1 high
42	Stormwater Research Program	UMN	The program will lead to the development of new and revised stormwater practices and management techniques that are used on both public and private properties to prevent, minimize and mitigate the impacts of runoff to Minnesota's water resources. The program accomplishes this by investing the majority of the funds (~70%) into research through competitive or direct pass-through processes. Research is and will be conducted by a variety of Minnesota's academic institutions, public agencies, and private industry and by collaborations of all three. The program also provides technology transfer; training, outreach, and Extension education to Minnesota professionals, practitioners, and policy leaders.	$ 1,600,000	Increase	34-50 (42.3)	High	Increase	1 hold steady. Interest in at least restoring to previous levels

43	Tillage and Erosion Transects	BWSR	The Tillage and Erosion Transects survey is a comprehensive, long-term program to systematically collect data on high residue cropping systems and cover crop adoption to produce county, watershed, and statewide estimates of soil erosion caused by water and wind. This valuable information can then be used by local and Tribal government staff to help them reach their water quality goals by using the information to both identify critical areas, and to select and prioritize potential projects based on a more accurate estimate of projected impacts.	$ 850,000	Hold Steady	12-45 (35.8)	High	Hold Steady	
44	Future of Drinking Water	MDH	This initiative arose from a 2016 Clean Water Council 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 engaged local and national experts to develop an action plan that goes beyond current regulatory requirements to address emerging threats and ensure long-term safe public and private drinking water in Minnesota. With the release for the *Minnesota Drinking Water Action Plan* in 2025, the initiative now focuses on implementing the Plan and providing regular updates on progress and where there are key risks to address.	$ 500,000	Hold Steady	33-49 (41.3)	High	Hold Steady	
45	Manure and Water Quality Specialist	MDA	Funding will support a manure land application and water quality specialist to develop and promote BMPs and update guidance, with a focus on regions at elevated environmental rish, including SE and Central Minnesota. Data from the USDA and MDA indicate that nutrients from manure are frequently under credited when farmers calculate the total amount of nitrogen applied to the crop, resulting in overapplication of commercial fertilizer. Improving manure crediting accuracy--and ensuring manure is applied at the right time, in the right place, in the right amount, and from the right source--will reduce nitrate leaching from manured fields to groundwater and decrease manure related runoff to surface water. The UMN's current manure program would benefit from additional staff capacity dedicated to land application technologies, producer support, and technical assistance. The position will strengthen statewide efforts to improve nutrient management, protect vulnerable water resources, and support farmers in implementing practical, science-based BMPs.	$ -	NEW	16-46 (37.7)	High	Fund	Likely starting around the same as the Irrigation Water Quality Specialist position.
46	CWC Administration	MPCA	This program funds the operation of the Clean Water Council and related expenses, including reimbursements, per diem, communications and engagement expenses, overhead, and staff.	$ 922,000	Increase	37-50 (43.8)	High	Increase	Explore: what could be contracted vs. FTE? Support for FTE also.
47	LCC Website	LCC	The LCC has been tasked with developing and maintaining a website that shows how revenues generated by the Legacy Amendment and the Environment and Natural Resources Trust Fund are utilized. It is required by law.	7000	Hold Steady	15-50 (36.2)	High	Hold Steady	Required by law.

FY28-29 CLEAN WATER FUND PROPOSAL

Program Title:	Wastewater/Stormwater TMDL Implementation
Program Number (if applicable):	39
Agency/Organization Name:	Minnesota Pollution Control Agency
Program website:	MPCA municipal stormwater (MS4) MPCA stormwater manual MPCA water quality trading MPCA wastewater nitrogen reduction strategy Ag-Urban Partnership forum events

Program Contact	
Name	Ryan Anderson, Manager, Stormwater Section, Municipal Division Suzanne Baumann, Manager, Municipal Wastewater Section, Municipal Division
Email	ryan.anderson@state.mn.us suzanne.baumann@state.mn.us
Phone	651-757-2222 651-757-2798

Person Filling Out Form	
Name	Same as Program Contacts
Email	
Phone	

Eligibility Requirements

Proposers must confirm that their proposal meets basic statutory eligibility. Please check each box that applies to certify the following:

☒ **Eligible Use of Funds:** Requested funds will be used in accordance with Minnesota law and Clean Water Fund requirements, outlined in full in Minnesota Statutes 114D.50 Subd. 3. This includes confirmation that this funding request supplements rather than supplants previous non-legacy state funding.

☒ **Accounting and Reporting Capacity:** The proposing organization has experience with or ability to meet accounting and reporting requirements in order ensure appropriate use of funds, as stipulated in Minnesota Statutes 114.50 Subd. 4.

☒ **Mandate Alignment (if applicable):** This proposal supports or fulfills state or federal mandates (i.e. TMDL, Nonpoint Source Pollution, Nutrient Reduction Strategy, Wild Rice protection, etc.).

If yes, please cite applicable statute or rule: Federal delegation to implement the Clean Water Act, specifically by integrating total maximum daily load (TMDL) projects and National Pollutant Discharge Elimination Program (NPDES) point source discharge permits.

Abstract

Funding for these program areas advances point source water pollution reductions by supporting point source implementation work, notably 1) integrating the watershed approach and pollutant restrictions into point source stormwater and wastewater discharge permits; 2) incorporating stormwater and wastewater point source discharges into TMDL projects and watershed restoration and protection strategy (WRAPS) reports; 3) supporting technical assistance for wastewater and stormwater permittees in achieving pollutant reductions; and 4) creating more opportunity for water quality pollutant trades.

Water Quality Impact

This proposal fulfills the implementation step of the Water Management Framework. Achieving clean and sustainable water relies on collective and coordinated actions by point and nonpoint source programs. This proposal ensures that the essential connections between state point and nonpoint source programs are in place to advance and enhance point source implementation efforts, that wouldn't otherwise exist.

Pollutants in stormwater and wastewater point source discharges are significant contributions to impaired waters. The MPCA addresses water pollution from these sources through the NPDES permit program created by the Clean Water Act and delegated to the MPCA by the United States Environmental Protection Agency. Under the NPDES program, the MPCA administers 1,165 wastewater and 229 stormwater permits.

Proper permitting and management of stormwater and wastewater is crucial to successfully implement TMDLs. TMDLs and WRAPS have increased our understanding of water quality in the state, and as a result, there is a significant amount of data to consider and practices and policies that must be implemented to successfully integrate watershed work into these regulatory programs.

Additionally, NPDES permittees, industries, local partners, and environmental organizations advocate for additional assistance to achieve pollutant reductions necessary, such as tools that enable efficient implementation by translating research into actionable guidance, as well as increasing the number of water quality trading projects to achieve the point and nonpoint source pollutant reduction needs in a watershed. A crucial component of this work is the volume of water quality data points that are collected, stored, and utilized in the decision-making process, and distributed to the public in a user-friendly manner.

Maintaining existing staffing ensures a proactive, consistent approach across the programs, ensures that point source discharges are properly represented and addressed in TMDLs and WRAPS, and allows for timely implementation of point source pollutant reductions. Additionally, these funds allow direct assistance to regulated and non-regulated water managers across the State in making efficient and effective pollution reduction actions.

Measurable Outcomes and Progress

Expected outcomes for FY28–29 request

Measurable and outcome-based goals for the current funding request

- Long-term decreases in water quality pollutant contributions to waterbodies from point sources.
- Oversight of active water quality trades and enhanced capabilities for future water quality trades.

How outcomes will be tracked, evaluated, and reported

- Track point source pollutant discharges to ambient water quality.
- Track total number of trading projects and annual trading inspections conducted.
- Track number of wastewater permits with nitrogen requirements.
- Type and method of efforts to implement innovative and cost-effective solutions to achieve our water quality goals, including external communication, internal coordination, guidance, and strategies.

Planned changes to this program from previous funding cycles

- Beyond routine evaluations and adjustments, no major changes planned.

Outcomes from Prior Clean Water Fund Appropriations (if applicable):

Progress made to date

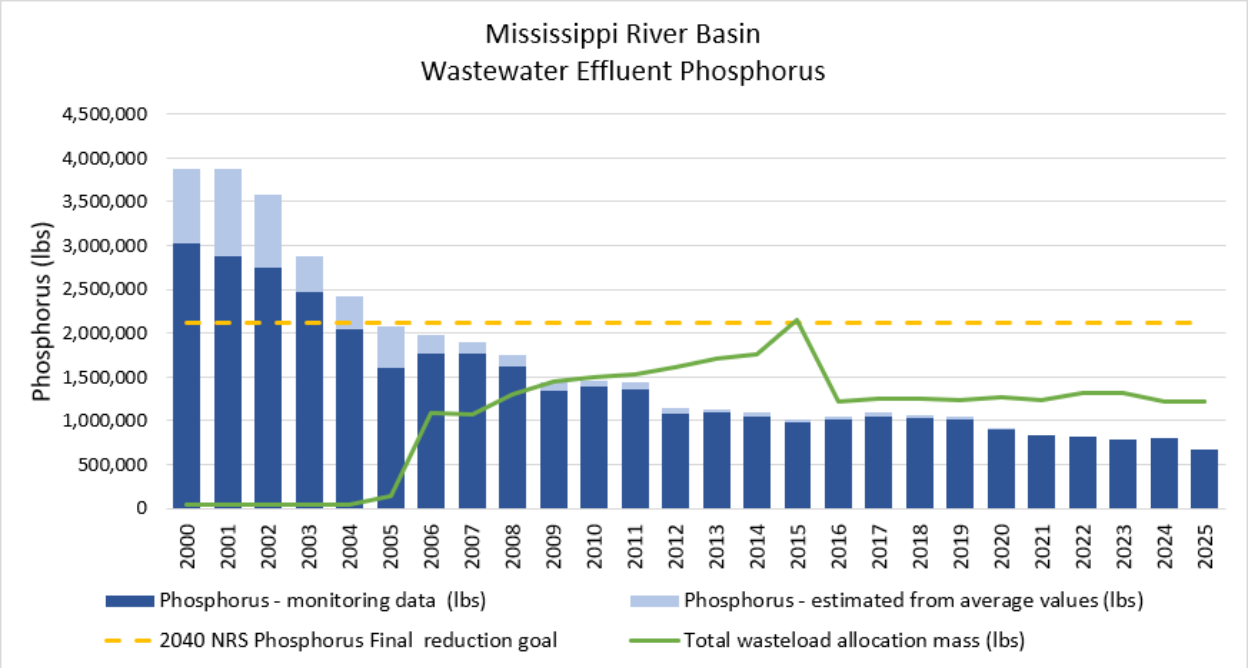
Collaboration between watershed and regulatory programs

- Continued incorporation of the WRAPS and TMDLs point source requirements into permits and factoring in wastewater point requirements into TMDLs and WRAPS.
- Execution and enhancement of pollutant trading activities, including 14 wastewater permits that authorize trading activities and the development of stormwater trading options. There are 6 active wastewater trades, and 8 are developing their trading activities.
- Updating and adapting TMDLs in response to changes in legislation, ensuring correct loads are assigned along with associated reduction requirements, and proper BMP crediting is taking place.

Wastewater

- Continued implementation of Phase 1 of the Wastewater Nitrogen Reduction Strategy
- Support of the development and finalization of the Nutrient Reduction Strategy, particularly the chapter and supporting materials on Urban Nutrient Reduction.

- A 79.6% reduction in phosphorus in the Mississippi River Basin from wastewater from 2000 to November 2025. Nitrogen loads to this basin have been increasing, reflecting work yet to be done.



Stormwater

- Moved the Minnesota Stormwater Manual to a more reliable website platform
  - Updated the Manual to a modern, secure system that meets state technology requirements.
  - Ensured this important resource will remain available for the public and professionals by moving more than 1,700 pages.
- Created a Green Stormwater Infrastructure booklet
  - Designed especially for those exploring green stormwater infrastructure for the first time.
  - Developed an easy-to-use booklet that explains green stormwater options that can be implemented at a local scale.
- Made enhancements to how stormwater progress is tracked and reported
  - Built the foundation and began testing for a new reporting system to organize years of backlogged data.
  - Will make it easier to see how stormwater efforts are improving water quality and to share that information publicly.
- Worked with researchers to get more value from existing data
  - Partnered with the Minnesota Stormwater Research Council to conduct additional analysis on already-collected sediment samples.
  - Gained new pollution information without the cost of collecting new samples.
- Partnered with other agencies to improve soil health guidance

    - Began developing guidance on emerging research – leveraging new information on how healthy soil helps reduce polluted runoff and allow water to soak into the ground more effectively.
    - Began working with MnDOT and the Minnesota Department of Agriculture on soil restoration guidance.
- Developed new guidance to help reduce winter salt use through better site planning
    - Created guidance that shows how smart site design can reduce the need for winter salt use.
    - Supported adding these ideas into existing Smart Salting training.
- Developed guidance that recognizes newer treatment devices and technologies.
    - Helps encourage stormwater treatment in areas that previously had little or none.

Water Quality Trading

- Intra-agency coordination on Water Quality Trading with the purpose to guide, advise and direct the development of water quality trading across various MPCA programs.
- Annually host the Ag-Urban Partnership Forum to promote water quality improvements by creating connections between farmers, producers, local community organizations, watershed staff and WWTFs. An annual gathering lead by the MPCA Water Quality Trading Coordinator, in collaboration the Minnesota Board of Water and Soil Resources, the Minnesota Department of Agriculture, the Minnesota Department of Health.
    - 2025 Ag Urban Partnership Forum: Theme was nitrogen in surface waters and private wells, including approaches and partnerships for nitrogen reduction; and funding opportunities for nitrogen reduction work.
        - April 15, 2025 event in Sauk Rapids
    - 2026 Ag Urban Partnership Forums: Theme is Advancing Nutrient Trading with Sustainable Farming and Conservation Practices.
        - January 7, 2026 virtual event
        - January 28, 2026 event in Moorhead
        - February 18, 2026 even in Mankato
- Increasing information and accessibility on water quality trading
    - Media coverage: https://www.tpomag.com/assets/issues/2025-10.pdf
    - Updated Water Quality Trading guidance: https://www.pca.state.mn.us/sites/default/files/wq-gen1-15.pdf
    - Presenting at conferences on BMP implementation and water quality trading
- Development of stormwater trading permit language, currently included in the draft MS4 General Permit. Once finalized this will expand water quality trading opportunities to stormwater, likely increasing the number of water quality trades and pollutant reduction potential and resulting water quality improvements throughout the state.

Reaching long-term goals

Because they are often expensive, difficult, or there are not yet technical feasible to reduce, reducing point source pollution for some pollutants will take decades of slow, but steady effort to achieve. These reductions are also impacted by many external factors outside of our direct control, such as rulemaking,

legislative, funding, etc. It will take a sustained, reliable effort and continued prioritization of water quality.

Alignment with Clean Water Council Strategic Plan

Surface Water Protection and Restoration Vision, Goal 3: Protect and restore surface waters… through statewide, regional, or issue-specific program…, Strategy: Enhance compliance for regulatory programs to accelerate progress

How this proposal fulfils this vision, goal, and strategy: NPDES wastewater/stormwater TMDL implementation funding supports several staff in the MPCA's wastewater and stormwater point source regulatory 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.

Numerous stormwater managers, including both regulated and non-regulated, utilize the guidance and materials developed for the Minnesota Stormwater Manual to help choose practices and management strategies, properly design and maintain those practices, evaluate their performance and accurately report resultant pollution reductions. Guidance is often developed in a format that is useful to both seasoned practitioners as well as those in the early phases of developing a stormwater pollution program. This work provides value by incorporating current research into actionable materials that improve the selection, operation and maintenance and reporting for both emerging practices along with historic long-tenured practices.

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.

How this proposal fulfils this vision, goal, and strategy: Many of the NPDES permittees impacted by this work are municipal-owned domestic wastewater treatment systems and municipal-owned stormwater systems; these are essential infrastructure to protect human health and the environment. This proposal also supports the continued development of the Stormwater Manual that is used by municipalities 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 communities or to develop credit programs to allow them to achieve compliance with permit conditions flexibly.

The work performed under this proposal directly supports these communities' efforts to reduce their impact beyond their municipal boundaries.

Interconnection

Connected CWF-supported programs:

- Water quality monitoring; this data is essential to quanitfy the quality of our waterbodies, to set appropriate wasteload allocations for point sources, etc. The work proposed in this request relies on this work to ensure the requirements embedded in NPDES permits will help achieve needed reductions.
- WRAPS and TMDL development; these plans are the blueprint for removing water body impairments, achieving point- and non-point reuctions, and identifying trading opportunties. The work proposed in this request ensures that these watershed plans are embedded in regulatory programs.
- Reducing use of road salt and water softener salt; there is no currently affordable chloride treatment for wastewater treatment plants, so reducing the amount of chloride in our waterbodies requires reducing the sources of chloride. The work proposed in this request relies on this work to further point-source efforts to reduce chloride in their discharges.

Connected non-CWF-supported programs:

- Wastewater Technical Assistance: Our Technical Assistance staff have been prioritizing outreach to WWTFs that have high concentrations of nitrogen in their discharge and those that discharges upstream of an IBI impairment with a nitrogen stressor.

- Wastewater and Stormwater Permitting: Embedding CWF-funded work into permits, when appropriate, including trading requirements and phosphorus, chloride, and nitrogen requirements, etc.

- Wastewater Engineering: Advising WWTFs considering a modification or expansion the nitrogen policy requirements

Non-CWF Funding

This proposal renews essential connections between state point and nonpoint source programs and improving pollutant reduction tools to advance point source implementation efforts, that wouldn't otherwise exist.

Long-term funding vision

- **If this proposal is funded, should the Clean Water Council expect future (beyond FY28-29) requests to increase, decrease, or stay about the same? (Do not factor inflation into your answer.)**
    - o _Increase
    - o _ Decrease
    - o X_ Stay the same
- **Do you have an anticipated end date for funding need? If so, when?** No

- **Do you intend to continue this program past 2034 in some capacity?** X Yes __ No __ Unsure

Funding Recipients

The MPCA is able to maximize its effectiveness by utilizing contractors for some of the tools and content developed for the Stormwater Manual. Historically, this has been approximately 12% of the total funding.

Engagement and Community Value

Water quality is important for children and families to have access to recreational uses and drinking water. Successful implementation of activities to maintain water quality are critical to ensuring water quality meets standards that allow children and families to enjoy these resources. Additionally, this proposal will benefit all Minnesota citizens, as regulated municipalities are distributed around the state. The Stormwater Manual projects chosen for a given year are guided by stakeholder input. We routinely engage with municipalities to understand what tools and support are needed for them to improve their operation.

The MPCA is committed to environmental justice, the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, concerning the development, implementation, and enforcement of environmental laws, regulations, and policies. We're committed to making decisions that do not place disproportionate pollution burdens on these communities. Environmental justice is part of our decision-making process when writing new or renewal permits for facilities. The current TMDL, WRAPS, and permitting implementation processes follow the procedures that have been developed under the Agency's Environmental Justice priorities. These principles are the foundation when developing new regulations and conducting enforcement actions. This proposal ensures that consistent implementation occurs statewide, resulting in improved water quality for all citizens.

Example of outreach, include: MPCA On Point Wastewater newsletter, Ag-Urban Partnership Forum events, webinars on wastewater topics including the Nitrogen Wastewater Reduction Strategy, wastewater and water quality trading pages on the MPCA website (links above), presentations, and more.

CWF Communication Plan

Minnesotans have made an incredible commitment to the environment via the Clean Water, Land and Legacy Amendment. To reaffirm the value of this commitment, it's essential to connect the work accomplished by this funding to the voter-approved Amendment.

The MPCA has information on its website about the work funded by the CWF. We routinely engage with members of the public and a wide range of water management professionals, and will communicate how resources from the Clean Water Fund make this work possible. More specifically, wherever feasible printed and other materials that support TMDL implementation will include the CWF logo.

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
FY26-27	$3,200,000
TOTAL APPROPRIATED TO DATE	**$15,200,000**

FY28 Request	FY29 Request	FY28-29 TOTAL REQUEST
Hold steady	Hold steady	Hold steady

[For agency applicants: don't fill out the FY28-29 until you receive agency approval. We will update the form at that time. Until then, please include "New", "Hold steady", "Increase", or "Decrease".]

State Employees

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	7.75

0_B__Wastewater Stormwater TMDL Implementation

Comments

Thanks for including a graph.

Questions:

1. Stormwater Manual
    a. Is it necessary to continue 12% of total funding for outside contractors to develop the Stormwater Manual?
    b. When will the Minnesota Stormwater Manual updates be complete?
    c. What is your plan for engaging with cities and other practitioners for stormwater reuse guidance development and inclusion in the stormwater manual? Would guidance development be supported by Clean Water Funds? Would the engagement plan be supported by Clean Water Funds?
2. Funding use
    a. Stated generally, where does the money go? More specifically, what are the categories of spending for the funds appropriated in the current biennium (e.g., staffing, consulting fees, grants, equipment, other?)
    b. The proposal covers wastewater and stormwater. What percentage of spending goes to wastewater versus stormwater?
    c. Can presenter share how much and what other funding is leveraged by the CW funds provided?
3. In reference to increasing Nitrogen levels the application mentions that there is "work left to be done". Further down the document work to reduce chloride is described as "reducing the amount of chloride in our waterbodies requires reducing the sources of chloride." Question: To achieve our Nitrogen goals will we need to deliberately reduce Nitrogen use as is described for Chloride?
4. Can presenter provide quantifiable information about water quality improvements or reductions in pollutants as a result of funding that has been granted?
5. Trading
    a. Could you describe a type of trading activity that has been authorized. How many do you anticipate starting/completing with the requested funding?
    b. Am I reading correctly that we're adding about one wastewater pollutant trading project per year (14 projects over 13 years)? Does this meet the demand?
    c. How long do trading projects take from intake to approval - I imagine a lot of project-by-project variability - provide an average or range.
    d. What does an annual trading inspection entail?
6. What is the status of the stormwater tracking progress project? When will it be ready to use?

FY28-29 CLEAN WATER FUND PROPOSAL

Program Title:	Small Community Wastewater Treatment Program
Program Number (if applicable):	41
Agency/Organization Name:	MN Public Facilities Authority
Program website:	Small Community Wastewater Treatment Program / Public Facilities Authority https://mn.gov/deed/pfa/funds-programs/smallcommunitywastewatertreatmentprogram.jsp

Program Contact	
Name	Chad Kolstad
Email	chad.kolstad@state.mn.us
Phone	651-201-3972

Person Filling Out Form	
Name	Chad Kolstad
Email	chad.kolstad@state.mn.us
Phone	651-201-3972

Eligibility Requirements

Proposers must confirm that their proposal meets basic statutory eligibility. Please check each box that applies to certify the following:

☒ **Eligible Use of Funds:** Requested funds will be used in accordance with Minnesota law and Clean Water Fund requirements, outlined in full in Minnesota Statutes 114D.50 Subd. 3. This includes confirmation that this funding request supplements rather than supplants previous non-legacy state funding.

☒ **Accounting and Reporting Capacity:** The proposing organization has experience with or ability to meet accounting and reporting requirements in order ensure appropriate use of funds, as stipulated in Minnesota Statutes 114.50 Subd. 4.

☒ **Mandate Alignment (if applicable):** This proposal supports or fulfills state or federal mandates (i.e. TMDL, Nonpoint Source Pollution, Nutrient Reduction Strategy, Wild Rice protection, etc.).

If yes, please cite applicable statute or rule: _____Minnesota Statute 446A.075_____

Abstract

Provide a summary (up to 100 words) that clearly states the purpose of the program, its intended water quality impact, and who it serves. The content here will largely be used as a brief summary when looking across programs, so some degree of redundancy is anticipated with other content in the form.

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.

Water Quality Impact

Which step of the Water Management Framework does this program most fit under: Ongoing Implementation

Overall, how will this program protect, enhance, and restore water quality in lakes, rivers, and streams, protect groundwater from degradation, or protect drinking water sources. Please limit your response to 200 words.

The Small Community Wastewater Treatment Program provides funding to help communities replace non-complying septic systems and straight pipe sewage discharges, which negatively impact waters of the state, with new individual or cluster subsurface sewage treatment systems (SSTS) that will be publicly owned, operated, and maintained.

Measurable Outcomes and Progress

Responses for each bullet (e.g. 1a, 1b, etc.) should be limited to 50-100 words.

1. Expected Outcomes for FY28–29 Request:
    a. Describe measurable and outcome-based goals for the current funding request.

        (1) Measure the number of site evaluations conducted and the number of reports prepared by a certified subsurface sewage treatment system designer indicating the feasibility of installing new subsurface sewage treatment systems meeting the requirements of MN Statue section 115.55;

        (2) Evaluate independent advice provided on the feasibility of subsurface sewage treatment system alternatives; and

        (3) Assess the governmental unit assistance provided to develop the technical, managerial, and financial capacity necessary to build, operate, and maintain subsurface sewage treatment systems.

    b. Describe how outcomes will be tracked, evaluated, and reported.

Projects must be listed on the Minnesota Pollution Control Agency's (MPCA's) Project Priority List (PPL), documenting the need, community characteristics, demographic data, and other pertinent project information. Construction applications must include a management plan providing for periodic inspection, maintenance, and repairs to ensure proper operation of the systems, and must be certified by the MPCA prior to grant award. Each project is tracked through our MPCA data management database and evaluated as it progresses through the evaluation, assessment and capacity analysis process as applicable in each situation. Reporting is performed as needed as determinations are made.

c. (If applicable) For past recipients, describe any planned changes to this program from previous funding cycles, if any.

No changes are planned from previous funding cycles.

2. Outcomes from Prior Clean Water Fund Appropriations (if applicable):
   a. How would you characterize progress made to date? As much as is possible, include outcomes achieved as they relate to the program purpose.

Significant progress has been made addressing the needs covered under the Small Community Program. 39 small community technical assistance projects to help small unsewered communities evaluate treatment alternatives to address serious water quality and public health problems from non-complying septic systems have been completed since 2010. The number of unsewered and undersewered communities and systems has decreased significantly over the years.

   b. How close is the program to reaching its long-term goals?

While significant progress has been made, challenges remain for the small communities that continue to face issues with noncomplying septic systems. These remaining issues tend to be more complex and require more innovative, flexible, or non-traditional solutions than past projects.

Alignment with Clean Water Council Strategic Plan

For each relevant goal or strategy in the Clean Water Council's Strategic Plan, list the applicable item and briefly explain (50-100 words) how this proposal helps fulfill that objective.

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.

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

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

Explanation – The Small Community Wastewater Treatment Program provides funding to help communities replace non-complying septic systems and straight pipe sewage discharges, which negatively impact waters of the state, with new individual or cluster subsurface sewage treatment systems (SSTS) that will be publicly owned, operated, and maintained.

Additionally, please list any other statewide or federal plan this effort supports.

N/A

Interconnection

Please list other Clean Water Fund-supported programs it informs and/or is informed by. Please briefly describe for each (up to 50 words) how Clean Water Funds add to existing efforts.

Connected CWF-supported programs: N/A

Connected non-CWF-supported programs: Clean Water Revolving Fund

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? N/A

If so, please describe what funds are being leveraged, the anticipated amount, and your degree of certainty that the funding is secure. Feel free to add rows if needed.

Funding Source	Anticipated Amount	Degree of Security (%)
Ex. Private landowner contributions	*$100,000*	*100%*

If additional description or elaboration is needed, please include here. (50 words max)

Long-term funding vision

- If this proposal is funded, should the Clean Water Council expect future (beyond FY28-29) requests to increase, decrease, or stay about the same? (Do not factor inflation into your answer.)
    - __ Increase

    - __ Decrease
    - _X_ Stay the same
- Do you have an anticipated end date for funding need? If so, when? ___No___
- Do you intend to continue this program past 2034 in some capacity? _X_ Yes __ No __ Unsure

Funding Recipients

Please state as a percentage the amount of funding from this request that is anticipated to be pass-through to a non-state agency entity.

_____100_____ %

Engagement and Community Value

- How have program beneficiaries been engaged in the development or evolution of this program? Who are the program partners, if any? (150 words)

  All Minnesota water infrastructure funding programs are marketed at various conferences, workshops, and training events by multiple state agencies. Feedback at those events is taken into consideration when evaluating the programs effectiveness and may lead to statutory changes as needed.

- Please describe how this program advances environmental justice and promotes equity. (150 words)

  The program generally assists communities that have lower incomes, are considered underserved (at least in terms of environmental concerns) and lack the resources needed to seek legislative funding on their own.

- If this has been funded through Clean Water Funds in the past, please share 1-3 recent examples of outreach conducted by this program. Links or attachments are allowable.

  Reading: Reading is a small, unincorporated community of just 93 residents (56 parcels) in Summit Lake Township, Nobles County. In 2012, the Minnesota Pollution Control Agency (MPCA) issued a Notice of Violation for Reading's untreated sewage discharge into public waters. Over the past 13 years the MPCA has worked with the project as they progressed through planning, permitting, and land acquisition; which was a slow process because as a low-income community, Reading lacked the resources to plan and construct a compliant wastewater system. Immediate action is required to prevent further enforcement actions in Reading, safeguard the environment, and eliminate the imminent threat to public health.
  The program has worked diligently alongside Nobles County, Rural Development (RD) and the Public Facilities Authority (PFA) to analyze the problem and develop a wastewater system project. All engineering reports and construction plans are complete, 10.26 acres have been acquired for stabilization ponds, and the necessary permits—including NPDES/SDS—have been

approved. Project Environmental Assessments are nearly complete, with final approval expected in March 2026. The project is truly "shovel-ready," and set to go out for bid in summer 2026 and only awaits final funding to begin construction.

Roscoe: The existing wastewater treatment facility (WWTF) is a large subsurface sewage treatment system (LSTS) serving 51 dwellings, six businesses, and one church.
The WWTF is designed to treat a wet weather design flow of 15,955 gpd and consists of 25 septic tanks, gravity collection system, dose tank, and a two-cell soil dispersal system with 3,640 lineal feet of chambered trenches. The City of Roscoe WWTF has been under review by the MPCA who has issued a Stipulation Agreement for failure to comply with their State Disposal System permit compliance Nitrogen Policy. Based on the MPCA Nitrogen Policy as it relates to LSTS, the discharge of WWTF effluent into the ground must result in a 10 mg/L or less nitrogen concentration in the groundwater. The existing WWTF does not treat wastewater to nitrogen levels that meet this SOS permit limit within three existing monitoring wells on the property. The program funds would pay for a feasibility study that would evaluate WWTF improvement alternatives for compliance with the Nitrogen Policy (as required by the amended Stipulation Agreement) including: 1) WWTF upgrade, or, 2) Regionalization

CWF Communication Plan

For both new and returning applicants, please describe (under 100 words) or attach the plan for communicating with the public and pass-through recipients about the Clean Water Fund.

All Minnesota water infrastructure funding programs are marketed at various conferences, workshops, and training events by multiple state agencies. MPCA also employs technical assistance staff that can help connect small systems with funding options.

Technical Assistance Grants						
Recipient	Date	Amount		Recipient	Date	Amount
Myrtle	7/28/2009	23,500		Red Rock Township - Nicolville	1/21/2014	6,885
French Township	8/4/2009	18,500		Oronoco Township - Cedar Beach	4/7/2014	37,798
Lake County	9/17/2009	6,500		Summit Lake Township - Reading	7/1/2014	38,523
Louisburg	12/7/2009	16,450		Steele County - Pratt	10/14/2014	24,283
Carlos Township	2/11/2010	28,000		Dresbach Township	8/4/2015	59,601
Lake View Township	3/8/2010	38,000		Saint Louis County - Sand Lake	7/11/2016	60,000
Leaf Valley Township	7/19/2010	20,269		Tintah	10/17/2016	54,000
Miltona Township	8/2/2010	2,447		Lansing Township	10/19/2016	35,485
Foxhome	9/27/2010	31,535		Fillmore County - Cherry Grove	11/1/2016	28,909

Biscay	11/1/2010	25,475		Oronoco Township - Sunset Bay	11/13/2017	31,001
York Township	11/7/2010	21,858		Zumbro Township - Ryan's Bay	11/13/2017	58,600
Trosky	12/7/2010	18,300		Randolph	11/28/2017	52,533
Amador Township	12/21/2010	25,500		Nobles County	1/2/2018	11,700
Grand Lake Township	3/10/2011	24,500		Rice County - Cedar Lake	4/9/2019	40,169
Northern Township - Birchmont Ct	3/28/2011	19,500		Crystal Bay Township	5/20/2019	43,900
Afton	6/6/2011	19,836		Florence Township - Frontenac	6/29/2020	60,000
Chisago County	10/19/2011	17,000		Kandiyohi County - Big Kandi Island & Point Areas	12/21/2020	36,985
Oronoco Township - King's Park	10/26/2011	24,000		Kandiyohi County - Big Kandi North/NE Area	2/8/2023	60,000
Oronoco	6/28/2012	39,937		Mower County - Dobbins Creek	2/8/2023	60,000
Austin Township - Turtle Creek 1	11/5/2012	7,000		Kandiyohi County – Big Kandi South/SW Area	2/24/2025	47,000
Austin Township - Turtle Creek 2	5/20/2013	10,250		Roscoe	4/4/2025	60,000
				42 Projects		**1,542,113**

Construction Grants/Loans

Recipient	Award Date	Amount		Recipient	Award Date	Amount
Red Rock Township - Nicolville	7/7/2010	294,637		Fillmore County	10/14/2014	678,970
Forest City Township	8/20/2010	86,536		Red Rock Township - Nicolville	7/13/2015	177,483
Doran	2/22/2011	70,000		Grand Lake Township	7/16/2015	1,916,142
Steele County - Bixby	8/26/2012	376,333		Amador Township - Almelund	10/22/2015	181,677
Oronoco Township - King's Park	11/4/2013	282,752		Kabetogama Township - Puck's Point	8/24/2016	1,998,000
Biscay	8/13/2014	1,311,547		Oronoco Township - Cedar Beach	9/19/2016	539,852
				12 Projects		**7,913,929**

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
FY24-26	$200,000
TOTAL APPROPRIATED TO DATE	**$10,400,000**

FY28 Request	FY29 Request	FY28-29 TOTAL REQUEST
		Hold Steady

[For agency applicants: don't fill out the FY28-29 until you receive agency approval. We will update the form at that time. Until then, please include "New", "Hold steady", "Increase", or "Decrease".]

State Employees

If applicable, indicate the number the full-time state employees supported by the CWF for this program.

N/A

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

0_C__Small Community Wastewater Treatment

Questions:

1. Pace and overall need
    a. 39 small community projects since 2010. How many more are planned/scheduled?
    b. How many unsewered communities remain? How much do property owners and local communities contribute?
    c. How much progress has been made versus how much is left to do to sufficiently reduce the backlog and get to a maintenance phase?
2. Types of projects
    a. What pollutant or service is most commonly addressed with these projects?
    b. Please give examples of issues that tend to be more complex and require more innovative and non-traditional solutions. Can you tie this to $ needed for more grants?
3. Balance between technical assistance and construction projects
    a. The application mentions providing technical assistance but the spreadsheet of projects includes construction projects. Are construction projects currently being funded?
    b. Of the communities that received technical assistance grants which ones have moved forward with actual development of a solution?
    c. How many technical assistance projects do you anticipate funding in the next biennium?
4. Is there any match requirement for these grants?

FY28-29 CLEAN WATER FUND PROPOSAL

Program Title:	Point Source Implementation Grants
Program Number (if applicable):	7
Agency/Organization Name:	MN Public Facilities Authority
Program website:	https://mn.gov/deed/pfa/funds-programs/point-source-grants.jsp

Program Contact	
Name	Chad Kolstad
Email	chad.kolstad@state.mn.us
Phone	651-201-3972

Person Filling Out Form	
Name	Chad Kolstad
Email	chad.kolstad@state.mn.us
Phone	651-201-3972

Eligibility Requirements

Proposers must confirm that their proposal meets basic statutory eligibility. Please check each box that applies to certify the following:

☒ **Eligible Use of Funds:** Requested funds will be used in accordance with Minnesota law and Clean Water Fund requirements, outlined in full in Minnesota Statutes 114D.50 Subd. 3. This includes confirmation that this funding request supplements rather than supplants previous non-legacy state funding.

☒ **Accounting and Reporting Capacity:** The proposing organization has experience with or ability to meet accounting and reporting requirements in order ensure appropriate use of funds, as stipulated in Minnesota Statutes 114.50 Subd. 4.

☒ **Mandate Alignment (if applicable):** This proposal supports or fulfills state or federal mandates (i.e. TMDL, Nonpoint Source Pollution, Nutrient Reduction Strategy, Wild Rice protection, etc.).

If yes, please cite applicable statute or rule: TMDL - Minn. R. 7052.0200

Abstract

Provide a summary (up to 100 words) that clearly states the purpose of the program, its intended water quality impact, and who it serves. The content here will largely be used as a brief summary when looking across programs, so some degree of redundancy is anticipated with other content in the form.

Through the Clean Water Council and the Clean Water Fund Interagency Coordination Team (ICT) framework, specific impaired and threatened water bodies are identified where pollutant reductions are needed to meet water quality standards. Watershed restoration and protection strategies are developed to guide implementation activities. The PSIG program provides grants to help municipalities construct wastewater, stormwater, and drinking water treatment projects when the Pollution Control Agency (MPCA) determines that higher levels of treatment are necessary to meet water quality goals. These include projects to meet Total Maximum Daily Load (TMDL) requirements and water-quality-based effluent limits for phosphorus, chlorides, and other pollutants.

Water Quality Impact

Which step of the Water Management Framework does this program most fit under: Ongoing Implementation.

Overall, how will this program protect, enhance, and restore water quality in lakes, rivers, and streams, protect groundwater from degradation, or protect drinking water sources. Please limit your response to 200 words.

Through implementation of municipal treatment projects, water quality will be improved by reducing effluent levels for phosphorus, chlorides, and other pollutants.

Measurable Outcomes and Progress

Responses for each bullet (e.g. 1a, 1b, etc.) should be limited to 50-100 words.

1. Expected Outcomes for FY28–29 Request:
    a. Describe measurable and outcome-based goals for the current funding request.

        Fund high-ranked projects on MPCA's Project Priority List for municipal wastewater and stormwater projects that are certified by MPCA and ready to proceed to construction.

    b. Describe how outcomes will be tracked, evaluated, and reported.
        All awarded projects will be tracked and evaluated by MPCA for project performance certifications and will be reported on by MPFA regarding contracts awarded by funding source.

    c. (If applicable) For past recipients, describe any planned changes to this program from previous funding cycles, if any.

        No changes are planned from previous funding cycles.

2. Outcomes from Prior Clean Water Fund Appropriations (if applicable):
    a. How would you characterize progress made to date? As much as is possible, include outcomes achieved as they relate to the program purpose.

       MPFA has funded $651.0 million in PSIG projects through FY 2025. $156.5 million of this has come from Clean Water Legacy funding, $494.5 from other funds.

    b. How close is the program to reaching its long-term goals?

       PSIG project needs will continue for many years. Currently, there are approximately $198M in eligible projects that fall below the funding cutoff.

Alignment with Clean Water Council Strategic Plan

For each relevant goal or strategy in the Clean Water Council's Strategic Plan, list the applicable item and briefly explain (50-100 words) how this proposal helps fulfill that objective.

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.

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.

Explanation – The PSIG program provides funding assistance to communities needing to address more stringent wastewater effluent limits necessary to protect the waters of the state.

Additionally, please list any other statewide or federal plan this effort supports.

Interconnection

Please list other Clean Water Fund-supported programs it informs and/or is informed by. Please briefly describe for each (up to 50 words) how Clean Water Funds add to existing efforts.

Connected CWF-supported programs: N/A

Connected non-CWF-supported programs: Clean Water Revolving Fund

PSIG funding is often partnered with funding from the Clean Water Revolving Fund to fully fund the necessary upgrades.

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 what funds are being leveraged, the anticipated amount, and your degree of certainty that the funding is secure. Feel free to add rows if needed.

Funding Source	Anticipated Amount	Degree of Security (%)
Clean Water State Revolving Fund MS 446A.07	To be determined as projects are certified and have received construction bids	100%
Drinking Water State Revolving Fund MS 446A.081	To be determined as projects are certified and have received construction bids	100%
Water Infrastructure Funding Program MS 446A.072	To be determined as projects are certified and have received construction bids	70%

If additional description or elaboration is needed, please include here. (50 words max).

Some PSIG projects are “stand-alone”, many are leveraged with SRF and WIF funding. The amounts cannot be determined until project applications are completed and construction bids are accepted.

Long-term funding vision

- If this proposal is funded, should the Clean Water Council expect future (beyond FY28-29) requests to increase, decrease, or stay about the same? (Do not factor inflation into your answer.)
    - __ Increase
    - __ Decrease
    - _X Stay the same
- Do you have an anticipated end date for funding need? If so, when? __No____
- Do you intend to continue this program past 2034 in some capacity? _X_ Yes __ No __ Unsure

Note: successful PSIG program implementation will rely significantly on regular capital (bonding bill) appropriations.

Funding Recipients

Please state as a percentage the amount of funding from this request that is anticipated to be pass-through to a non-state agency entity.

100 %.

Engagement and Community Value

- How have program beneficiaries been engaged in the development or evolution of this program? Who are the program partners, if any? (150 words)

  All Minnesota water infrastructure funding programs are marketed at various conferences, workshops, and training events by multiple state agencies. Feedback at those events is taken into consideration when evaluating the programs effectiveness and may lead to statutory changes as needed.

  MPFA, MPCA, and MDH are the main program partners.

- Please describe how this program advances environmental justice and promotes equity. (150 words)

  This program helps systems construction needed wastewater infrastructure, which would not be affordable to fund on their own. PSIG funding can be partnered with other affordability grant funds at PFA for those system most in need.

- If this has been funded through Clean Water Funds in the past, please share 1-3 recent examples of outreach conducted by this program. Links or attachments are allowable.

  Information about this program is provided at varies conference and wastewater operator schools throughout the state including specific MRWA workshops dedicated to water infrastructure financing. MRWA training events can be found at: https://www.mrwa.com/training/

  MPCA also employs technical assistance providers that can education and connection systems with the various funding programs.

CWF Communication Plan

For both new and returning applicants, please describe (under 100 words) or attach the plan for communicating with the public and pass-through recipients about the Clean Water Fund.

All Minnesota water infrastructure funding programs are marketed at various conferences, workshops, and training events by multiple state agencies. MPCA also employs technical assistance providers that can education and connection systems with the various funding programs.

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
FY26-27	$16,440,000
TOTAL APPROPRIATED TO DATE	**$179,746,000**

FY28 Request	FY29 Request	FY28-29 TOTAL REQUEST
Hold steady	Hold steady	

[For agency applicants: don't fill out the FY28-29 until you receive agency approval. We will update the form at that time. Until then, please include "New", "Hold steady", "Increase", or "Decrease".]

State Employees

If applicable, indicate the number the full-time state employees supported by the CWF for this program.

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

0_D__Point Source Implementation Grants

Questions:

1. Water quality benefits
    a. Can presenter provide estimates of reductions in pollutants due to project support provided by this program?
    b. Can you talk specifically about the water quality benefits of this program - where we've been, where we're at, and anticipated outcomes of the PSIG program?
    c. How should we think about whether CWF would supplement or supplant funding already provided by the bonding bill or other funding sources? In other words, given that bonding and other funding sources are the primary funding sources for PSIG, what additional or supplemental benefits/outcomes would come from investing $16M from CWF in PSIG?
2. Backlog
    a. Is there a backlog of projects that are shovel-ready?
    b. Is there a backlog of projects/communities in need of support from this program? When will be at equilibrium? I.e., we've gotten through backlogs and can be responsive to communities as needs arise.

FY28-29 CLEAN WATER FUND PROPOSAL

Program Title:	Aquifer Monitoring for Water Supply Planning
Program Number (if applicable):	18
Agency/Organization Name:	Minnesota Department of Natural Resources (DNR)
Program website:	https://www.dnr.state.mn.us/waters/cgm/program.html; https://www.legacy.mn.gov/projects/aquifer-monitoring-water-supply-planning

Program Contact	
Name	Jamison Wendel
Email	jamison.wendel@state.mn.us
Phone	651-259-5661

Person Filling Out Form	
Name	Jamison Wendel
Email	Jamison.wendel@state.mn.us
Phone	651-259-5661

1. Eligibility Requirements

Proposers must confirm that their proposal meets basic statutory eligibility. Please check each box that applies to certify the following:

☒ **Eligible Use of Funds:** Requested funds will be used in accordance with Minnesota law and Clean Water Fund requirements, outlined in full in Minnesota Statutes 114D.50 Subd. 3. This includes confirmation that this funding request supplements rather than supplants previous non-legacy state funding.

☒ **Accounting and Reporting Capacity:** The proposing organization has experience with or ability to meet accounting and reporting requirements in order ensure appropriate use of funds, as stipulated in Minnesota Statutes 114.50 Subd. 4.

☐ **Mandate Alignment (if applicable):** This proposal supports or fulfills state or federal mandates (i.e. TMDL, Nonpoint Source Pollution, Nutrient Reduction Strategy, Wild Rice protection, etc.).

If yes, please cite applicable statute or rule: _____

2. Abstract

Provide a summary (up to 100 words) that clearly states the purpose of the program, its intended water quality impact, and who it serves. The content here will largely be used as a brief summary when looking across programs, so some degree of redundancy is anticipated with other content in the form.

The Minnesota DNR's groundwater monitoring program collects long-term aquifer level data through a statewide network of 1,257 observation wells. This program provides essential information on groundwater trends, sustainability, and groundwater–surface water interactions to protect drinking water, water supplies, and groundwater dependent ecosystems. By analyzing water level changes alongside climate, land use and water demand, the program supports planning that prevents water shortages and protects lakes, streams, wetlands, trout streams, and calcareous fens. The program serves state and local water managers, communities and resource professionals by supplying reliable data, modeling and shared tools for sustainable groundwater management.

3. Water Quality Impact

a. Which step of the *Minnesota Water Management Framework* does this program most fit under:

Monitoring, Assessment, and Characterization.

b. *Overall, how will this program protect, enhance, and restore water quality in lakes, rivers, and streams, protect groundwater from degradation, or protect drinking water sources. Please limit your response to 200 words.*

This program protects and enhances Minnesota's water resources by providing the long-term groundwater information needed to ensure sustainable use of aquifers that support drinking water, surface waters and groundwater dependent ecosystems. The DNR's statewide network of 1,257 observation wells supplies critical data on aquifer levels, flow dynamics and groundwater–surface water interactions. These data allow the state to detect trends, understand how groundwater responds to climate, land use and pumping, and identify when water use may risk degrading lakes, rivers, streams, wetlands, trout streams or calcareous fens.

By analyzing groundwater level changes, conducting aquifer tests and modeling, and developing groundwater sustainability thresholds, the program helps prevent overuse that could reduce streamflow, lower lake levels or impair sensitive habitats. This work is increasingly important as water demand grows faster than population, heightening the risk of shortages and ecological impacts.

The program also strengthens water resource protection by partnering with state and local agencies to share groundwater data through a cooperative monitoring website. This shared information supports informed permitting, planning, and management decisions that safeguard drinking water sources and prevent groundwater degradation. Overall, the program provides the scientific foundation needed to sustainably manage groundwater and protect Minnesota's interconnected water resources.

4. Measurable Outcomes and Progress

Limit responses to 50-100 words for each question below.

a. Expected Outcomes for FY28–29 Request

i. Describe measurable and outcome-based goals for the current funding request.

The program will advance a sustainable water supply for current and future generations by expanding and maintaining Minnesota's groundwater monitoring network. Key measurable goals include installing 30–40 new groundwater monitoring wells annually to replace failing wells and fill data gaps, completing comprehensive maintenance on approximately 120 existing wells each year, and ensuring continuous delivery of high-quality groundwater level data through the DNR website. Additional goals include completing Groundwater Restoration and Protection Strategies (GRAPS) to support One Watershed, One Plan, and completing groundwater models that inform sustainable water supply planning and resource protection.

ii. Describe how outcomes will be tracked, evaluated, and reported.

Progress will be tracked through annual counts of new wells installed, wells maintained and the operational status of the statewide observation well network. Data quality will be evaluated through routine verification, maintenance records and continuous review of groundwater level datasets published on the DNR website. Completion of GRAPS and groundwater models will be documented through formal reports and integration into watershed and regional planning efforts. Outcomes will be reported through annual program updates, publicly accessible data portals, and coordination with state and local partners who rely on these products for water resource decision making.

iii. (If applicable) For past recipients, describe any planned changes to this program from previous funding cycles, if any.

N/A

b. Outcomes from Prior Clean Water Fund Appropriations (if applicable):

i. How would you characterize progress made to date? As much as is possible, include outcomes achieved as they relate to the program purpose.

The program has added wells to the statewide groundwater monitoring network in areas of sustainability concerns such as places where there are strong connections between groundwater and surface water. The program has allowed DNR to proactively plan the network expansion across the state in areas of highest concern or in places where aquifers were not previously monitored.

ii. How close is the program to reaching its long-term goals?

While the program has established new wells in areas of concern, we still have additional counties to assess where we will add additional wells for long term monitoring. Successful groundwater monitoring requires years of water level data for understanding and assessment of the State's sustainability goals.

5. Alignment with Clean Water Council Strategic Plan

a. For each relevant goal or strategy in the Clean Water Council's Strategic Plan, list the applicable item and briefly explain (50-100 words) how this proposal helps fulfill that objective.

- Groundwater Vision, Goal 2: The proposal advances the goal of sustainable groundwater use by generating reliable, long-term data on aquifer conditions and groundwater-surface water interactions. By tracking water level trends across more than a thousand wells and integrating this information with climate, land use and water demand, the program enables early detection of stress on both groundwater and connected surface waters. This work supports informed planning and management decisions that prevent overuse, protect sensitive ecosystems, and maintain the health of lakes, streams, wetlands and other vulnerable surface water features.

b. Please list any other statewide or federal plan this effort supports.

- USGS National Water Monitoring Program

6. Interconnection

Please list other Clean Water Fund-supported programs it informs and/or is informed by. Please briefly describe for each (up to 50 words) how Clean Water Funds add to existing efforts.

a. Connected CWF-supported programs:

- MPCA Groundwater Monitoring:
    - Water quantity and quality are interconnected. This proposal strengthens MPCA groundwater monitoring by providing long-term, statewide data on aquifer levels and groundwater–surface water connections. The program's consistent measurements, trend analysis, and shared tools give MPCA better insight into changing conditions, helping identify risks early and support science-based decisions that protect Minnesota's groundwater resources.
- DNR Watershed Restoration and Protection Strategies:
    - Data from the aquifer monitoring program about DNR's observation well network and Groundwater Management Areas is included in DNR's Watershed Health Assessment Framework (WHAF) online tool.

b. Connected non-CWF-supported programs:

- The DNR's water appropriation management program is directly related to the supplemental efforts afforded by the Clean Water Fund. These efforts also relate to the County Geologic Atlas program.

7. Non-CWF Funding

a. Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources?

Yes

b. *If so, please describe what funds are being leveraged, the anticipated amount, and your degree of certainty that the funding is secure. Feel free to add rows if needed.*

Funding Source	Anticipated Amount	Degree of Security (%)
General Fund (Groundwater)	$600,000	75%

c. *If additional description or elaboration is needed, please include here. (50 words max)*

N/A

8. Long-term funding vision

a. *If this proposal is funded, should the Clean Water Council expect future (beyond FY28-29) requests to increase, decrease, or stay about the same? (Do not factor in inflation.)*

__ Increase
__ Decrease
_**X**_ Stay the same

b. *Do you have an anticipated end date for funding need? If so, when?* _____

No

c. *Do you intend to continue this program past 2034 in some capacity?* _**X**_ Yes __ No __ Unsure

9. Funding Recipients

Please state as a percentage the amount of funding from this request that is anticipated to be pass-through to a non-state agency entity. __0__ %

10. Engagement and Community Value

a. *How have program beneficiaries been engaged in the development or evolution of this program? Who are the program partners, if any? (150 words)*

DNR has collaborated extensively with MPCA, MDA, LGUs and the USGS to strengthen aquifer monitoring across the state. Together, these partners coordinate the placement of groundwater observation wells, share hydrogeologic data, and align monitoring protocols to ensure consistent, long-term tracking of aquifer levels and trends. This cooperative approach allows agencies to integrate groundwater level measurements with water-quality information, land-use data and regional modeling efforts, creating a more complete picture of aquifer conditions and supporting informed water management decisions.

b. *Please describe how this program advances environmental justice and promotes equity. (150 words)*

Clean water is essential to all Minnesotans. The DNR joins other agencies in striving to foster environmental justice, engage multiple ways of knowing, and striving to lead in diversity, equity, and inclusion, per the state's 2025 Nonpoint Priority Funding Plan. DEI is also a DNR strategic

plan priority via increasing staff's cultural competence, creating a workforce that reflects Minnesota, and continuing to strengthen tribal consultation and build partnerships with diverse communities. Groundwater protection is also a DEI commitment, recognizing that many disadvantaged, rural, and tribal communities rely on groundwater as their primary or sole source of drinking water.

c. *If this has been funded through Clean Water Funds in the past, please share 1-3 recent examples of outreach conducted by this program. Links or attachments are allowable.*

- Cooperative Groundwater Monitoring

11. CWF Communication Plan

For both new and returning applicants, please describe (under 100 words) or attach the plan for communicating with the public and pass-through recipients about the Clean Water Fund.

We recognize that continued CWF support will only be possible if the public sees the fund at work through stories, videos, field days, awards, and other means. We prominently display the Legacy Amendment logo on program materials and strive to ensure that beneficiaries understand that our staff are available thanks to the CWF. The Legacy Amendment logo is also prominently displayed on the Cooperative Groundwater Monitoring webpage.

12. Prior Appropriations

FY10-11	$1,125,000
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
FY26-27	$4,700,000
TOTAL APPROPRIATED TO DATE	**$28,925,000**

13. FY28-29 Funding Request

FY28 Request	FY29 Request	FY28-29 TOTAL REQUEST
Hold steady	Hold steady	Hold steady

14. State Employees

If applicable, 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	15.0

A__Aquifer Monitoring

Comments:

1. Appreciate the specific outcome goals shown in the proposal
2. Aquifers are unique and often ignored because they're not readily visible - unfortunately, they're also no longer immune to threats from the surface. This program is critical, especially for spring-fed surface water features, and all who depend on well water for drinking.

Questions:

3. How do you determine which counties are added and when and how many wells will be added?
4. What is the cost for the 15 FTEs?
5. Why is the monitoring program separate from DNR GRAPS development? Why not have monitoring captured within that program?
6. How does this program compare and contrast with the other groundwater monitoring programs (MPCA Groundwater Monitoring and DNR WRAPS)? What would be the potential efficiencies and potential tradeoffs of combining programs?

FY28-29 CLEAN WATER FUND PROPOSAL

Program Title:	Fish Contamination Assessment
Program Number (if applicable):	6
Agency/Organization Name:	Minnesota Department of Natural Resources (DNR)
Program website:	https://www.legacy.mn.gov/projects/fish-contamination-assessment-0

Program Contact	
Name	Jamison Wendel
Email	jamison.wendel@state.mn.us
Phone	651-259-5661

Person Filling Out Form	
Name	Isaiah Tolo
Email	Isaiah.tolo@state.mn.us
Phone	651-356-4236

1. Eligibility Requirements

Proposers must confirm that their proposal meets basic statutory eligibility. Please check each box that applies to certify the following:

☒ **Eligible Use of Funds:** Requested funds will be used in accordance with Minnesota law and Clean Water Fund requirements, outlined in full in Minnesota Statutes 114D.50 Subd. 3. This includes confirmation that this funding request supplements rather than supplants previous non-legacy state funding.

☒ **Accounting and Reporting Capacity:** The proposing organization has experience with or ability to meet accounting and reporting requirements in order ensure appropriate use of funds, as stipulated in Minnesota Statutes 114.50 Subd. 4.

☐ **Mandate Alignment (if applicable):** This proposal supports or fulfills state or federal mandates (i.e. TMDL, Nonpoint Source Pollution, Nutrient Reduction Strategy, Wild Rice protection, etc.).

If yes, please cite applicable statute or rule: _____

2. Abstract

Provide a summary (up to 100 words) that clearly states the purpose of the program, its intended water quality impact, and who it serves. The content here will largely be used as a brief summary when looking across programs, so some degree of redundancy is anticipated with other content in the form.

The Fish Contaminants Monitoring Program (FCMP) analyzes fish tissue to detect mercury and other contaminants. The information collected is then used by the Minnesota Pollution Control Agency (MPCA) to determine whether lakes are impaired for these contaminants, and by Minnesota Department of Health (MDH) in establishing fish consumption advisories. Fish consumption advisories are for the Minnesota public to determine how much wild caught fish can be safely eaten from Minnesota waters.

3. Water Quality Impact

a. Which step of the *Minnesota Water Management Framework* does this program most fit under:

Monitoring, Assessment, and Characterization.

b. *Overall, how will this program protect, enhance, and restore water quality in lakes, rivers, and streams, protect groundwater from degradation, or protect drinking water sources. Please limit your response to 200 words.*

Clean Water funding is used by FCMP to assess fish from Minnesota waters for contaminants including mercury (Hg), polychlorinated biphenyls (PCB), per and polyfluoroalkyl substances (PFAS/PFOS). Fish are collected by Minnesota Department of Natural Resources and MPCA during lake and stream surveys and processed by the DNR Fish Health Laboratory (FHL). Funding primarily supports laboratory analysis of fish tissue for contaminants, conducted by the Minnesota departments of Agriculture or Health's labs or contracted external labs. Funding will also support a full-time contaminants specialist at DNR-FHL starting in FY26 to help manage FCMP coordination, logistics and increasingly complex data workflows driven by the program's emerging focus on PFAS/PFOS. Resulting data help MPCA and MDH issue fish consumption advisories for Minnesotans through websites, brochures and signage aimed at diverse audiences. The FCMP also uses the data in continuous improvement projects to enhance consumption guidance and track spatiotemporal trends in fish tissue contaminants across the state.

This funding helps protect, restore, and enhance Minnesota's waters by identifying where harmful pollutants are building up in fish, which signals problems in lakes and rivers that need attention. By tracking contaminants over time, the program helps the state spot emerging issues, guide cleanup efforts, and make informed decisions that keep Minnesota's waters healthier.

4. Measurable Outcomes and Progress

Limit responses to 50-100 words for each question below.

a. *Expected Outcomes for FY28–29 Request*

i. *Describe measurable and outcome-based goals for the current funding request.*

Annual testing of approximately 90 waterbodies for mercury/PCB and approximately 50 waterbodies for PFAS levels in fish. Maintaining and revising fish consumption advice. The goal of this work is to generate clear, reliable data that helps Minnesota reduce contaminant levels in fish and improve the overall health of its lakes and rivers.

ii. *Describe how outcomes will be tracked, evaluated, and reported.*

Outcomes are tracked and reported on the Clean Water, Land and Legacy Amendment website. Evaluation of the program is done by the FCMP's work group which meets bi-annually and as needed on special projects.

iii. *(If applicable) For past recipients, describe any planned changes to this program from previous funding cycles, if any.*

In 2025, DNR led a FCMP publication on a model-based method for setting fish consumption advisories that is more statistically robust than the method that has been previously used (estimates based on sample statistics only). The adoption of this method can be used to decrease the total number of samples analyzed each year without sacrificing precision and consistency of fish consumption guidelines. Analytical service contracts will be reduced accordingly, and savings will be allocated to an FTE that will support the coordination, sample processing and data workflows bottleneck in the program without a change to the funding request.

b. *Outcomes from Prior Clean Water Fund Appropriations (if applicable):*

i. *How would you characterize progress made to date? As much as is possible, include outcomes achieved as they relate to the program purpose.*

The progress made has been substantial as CW funds have supported a broad interagency approach to fish contaminants monitoring that is unique to Minnesota. Fish contaminants status and trends have been consistently available to the public, allowing Minnesotans to safely consume locally caught fish by keeping contaminant exposure below levels associated with adverse health effects. The advisories are effectively communicated through various media, targeting a diverse audience. The program has also been able to incorporate a widespread and emerging contaminant of concern PFAS/PFOS using the existing sampling and processing program.

ii. *How close is the program to reaching its long-term goals?*

The program is needed on an annual basis and long-term objectives are to maintain the ability to communicate fish consumption advisories to the public.

5. Alignment with Clean Water Council Strategic Plan

a. For each relevant goal or strategy in the Clean Water Council's Strategic Plan, list the applicable item and briefly explain (50-100 words) how this proposal helps fulfill that objective.

- Surface Water Protection and Restoration Vision, Goal 1: Monitor, assess, and characterize Minnesota's surface waters. Strategy: Maintain consistent funding for statewide monitoring system.

  The FCMP is the only program in Minnesota that regularly screens Minnesota's fish populations for fish contaminants of emerging concern and that sets consumption advisories. a bullet for each relevant strategy or goal

b. Please list any other statewide or federal plan this effort supports.

- EPA Guidance for Developing, Implementing, and Improving Advisory Programs

6. Interconnection

Please list other Clean Water Fund-supported programs it informs and/or is informed by. Please briefly describe for each (up to 50 words) how Clean Water Funds add to existing efforts.

a. Connected CWF-supported programs:

- WRAPS (WHAF and Regional Clean Water Program): Supports efforts to identify fishable waters and determine sources of mercury, PFAS, and other contaminants that appear in fish tissue.
- Aquatic life and recreation beneficial uses: Biological monitoring of fish communities complements contaminant analysis.
- Lake Biological Monitoring and Assessment: Survey work provides tissue samples and analysis contributes to stressor ID.

b. Connected non-CWF-supported programs:

- MDH Fish Consumption Guidance is closely interlinked with these assessments.

7. Non-CWF Funding

a. Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources?

b. If so, please describe what funds are being leveraged, the anticipated amount, and your degree of certainty that the funding is secure. Feel free to add rows if needed.

Funding Source	Anticipated Amount	Degree of Security (%)

c. *If additional description or elaboration is needed, please include here. (50 words max)*

8. Long-term funding vision

a. *If this proposal is funded, should the Clean Water Council expect future (beyond FY28-29) requests to increase, decrease, or stay about the same? (Do not factor in inflation.)*

__ Increase
__ Decrease
_**X**_ Stay the same

b. *Do you have an anticipated end date for funding need? If so, when?* _____

No

c. *Do you intend to continue this program past 2034 in some capacity?* _**X**_ Yes __ No __ Unsure

9. Funding Recipients

Please state as a percentage the amount of funding from this request that is anticipated to be pass-through to a non-state agency entity. __0__ %

10. Engagement and Community Value

a. *How have program beneficiaries been engaged in the development or evolution of this program? Who are the program partners, if any? (150 words)*

The primary beneficiaries are Minnesotans and visiting out-of-state anglers who fish in or consume fish from the state's lakes and rivers. Anglers engage with the program through various media forms including websites, brochures, and signs posted at water access locations. Feedback is received through multiple mechanisms as each member agency of FCMP responds to media contacts, data requests and inquiries from the public.

b. *Please describe how this program advances environmental justice and promotes equity. (150 words)*

Clean water is essential to all Minnesotans. The DNR joins other agencies in striving to foster environmental justice, engage multiple ways of knowing, and striving to lead in diversity, equity, and inclusion, per the state's 2025 Nonpoint Priority Funding Plan. DEI is also a DNR strategic plan priority via increasing staff's cultural competence, creating a workforce that reflects Minnesota, and continuing to strengthen tribal consultation and build partnerships with diverse communities.

Fish consumption advisories intersect with environmental justice because communities relying on self-caught fish include low-income and minority groups and these populations may disproportionately suffer health impacts from contaminants. The FCMP's activities bring this issue to light by producing data on fish contaminant occurrence. The program seeks to protect the health of all communities that consume fish in Minnesota and provides advisories in

multiple languages and particularly directs consumption advisories toward sensitive populations like people who are or may become pregnant and children under the age of 15.

c. *If this has been funded through Clean Water Funds in the past, please share 1-3 recent examples of outreach conducted by this program. Links or attachments are allowable.*

- News Release from MDH on update of fish consumption guidance dur to PFAS. (Health officials update fish consumption guidance in some waterbodies due to PFAS - MDH)
- Fish Consumption guidance updates for waterbodies in 10 Minnesota Counties (Fish Consumption Guidance Updates - MDH)
- Fish Consumption Advisory Program Outreach: Fish Consumption Advisory Program Outreach - MDH

11. CWF Communication Plan

For both new and returning applicants, please describe (under 100 words) or attach the plan for communicating with the public and pass-through recipients about the Clean Water Fund.

We recognize that continued CWF support will only be possible if the public sees the fund at work through stories, videos, field days, awards, and other means. We prominently display the Legacy Amendment logo on program materials and strive to ensure that beneficiaries understand that our staff are available thanks to the CWF. Outreach materials include acknowledgement of Clean Water Land and Legacy Amendment and relevant links.

12. Prior Appropriations

FY10-11	$262,000
FY12-13	$260,000
FY14-15	$270,000
FY16-17	$270,000
FY18-19	$270,000
FY20-21	$270,000
FY22-23	$350,000
FY24-25	$1,000,000
FY26-27	$1,100,000
TOTAL APPROPRIATED TO DATE	$4,052,000

13. FY28-29 Funding Request

FY28 Request	FY29 Request	FY28-29 TOTAL REQUEST
Hold steady	Hold steady	Hold steady

14. State Employees

If applicable, indicate the number the full-time state employees supported by the CWF for this program.

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

B__Fish Contamination

Comments:

- Scoring is likely not reflective of the importance of this program. Public health and environmental justice/equity are definitely served by this program. Consumption of wild caught fish - especially subsistence use - by low income and and indigenous populations is substantial in many areas of our state.
- Appreciate the specific outcome goals shown in the proposal

Questions:

1. THINKING BIG: If funding were available, what could be done to reduce mercury contamination in fish (the largest single cause of impaired waters in MN)? What additional programs would be needed?
2. Communications:
    a. The application includes 3 links of outreach examples related to fish consumption advisories -- should the Legacy Amendment logo be visible at any of these links (not currently visible)?
    b. How do people know where to find the reports? Where are you advertising this info?
    c. The MDH is the agency that issues fish consumption guidelines but this proposal is within DNR. Why is this an DNR program and not and MDH program?
    d. Tested 90 waterbodies for mercury/PCB and 50 for PFAS --how was the data obtained used and communicated to the public?
3. Does this program fund 1 FTE or 0 FTE? (discrepancy between text and table in application)
4. Could the program be expanded to include other "consumed animals" that could become contaminated from polluted waters, such as waterfowl? Are there established guidelines for imposing a no consumption advisory on a waterbody?

FY28-29 CLEAN WATER FUND PROPOSAL

Program Title:	Lake Biological Monitoring and Assessment (formerly Lake IBI)
Program Number (if applicable):	6
Agency/Organization Name:	Minnesota Department of Natural Resources (DNR)
Program website:	https://www.dnr.state.mn.us/waters/surfacewater_section/lake_ibi/index.html; https://www.legacy.mn.gov/projects/lake-biological-monitoring-and-assessments

Program Contact	
Name	Jamison Wendel
Email	jamison.wendel@state.mn.us
Phone	651-259-5661

Person Filling Out Form	
Name	Jacquelyn Bacigalupi
Email	Jacquelyn.bacigalupi@state.mn.us
Phone	218-203-4315

1. Eligibility Requirements

Proposers must confirm that their proposal meets basic statutory eligibility. Please check each box that applies to certify the following:

☒ **Eligible Use of Funds:** Requested funds will be used in accordance with Minnesota law and Clean Water Fund requirements, outlined in full in Minnesota Statutes 114D.50 Subd. 3. This includes confirmation that this funding request supplements rather than supplants previous non-legacy state funding.

☒ **Accounting and Reporting Capacity:** The proposing organization has experience with or ability to meet accounting and reporting requirements in order ensure appropriate use of funds, as stipulated in Minnesota Statutes 114.50 Subd. 4.

☐ **Mandate Alignment (if applicable):** This proposal supports or fulfills state or federal mandates (i.e. TMDL, Nonpoint Source Pollution, Nutrient Reduction Strategy, Wild Rice protection, etc.).

If yes, please cite applicable statute or rule: _____

2. Abstract

Provide a summary (up to 100 words) that clearly states the purpose of the program, its intended water quality impact, and who it serves. The content here will largely be used as a brief summary when looking across programs, so some degree of redundancy is anticipated with other content in the form.

The Lake Biological Monitoring and Assessment (LBMA) Program supports MPCA and Federal Clean Water Act evaluations by conducting biological surveys and aquatic life use assessments for lakes. Fish-based Indices of Biological Integrity (FIBI) were developed and used to evaluate fish communities in 1,056 lakes within 47 watersheds to identify impairments, stressors and exceptionally healthy lakes. Monitoring has expanded to 13 northeastern watersheds. Standards to assess coldwater fish habitat in over 500 lakes have been developed, with assessments beginning once rules are promulgated. The program serves Minnesotans by informing watershed protection and restoration efforts, and by monitoring conditions and trends statewide.

3. Water Quality Impact

a. Which step of the *Minnesota Water Management Framework* does this program most fit under:

Monitoring, Assessment, and Characterization; Problem Investigation and Applied Research; and Restoration and Protection Strategy Development.

b. Overall, how will this program protect, enhance, and restore water quality in lakes, rivers, and streams, protect groundwater from degradation, or protect drinking water sources. Please limit your response to 200 words.

The LBMA program operates within three steps of the framework (listed in order of relevance).

Monitoring, Assessment, and Characterization: The program uses FIBIs to monitor and assess the biological condition of over 1,000 lakes statewide within the 10-year watershed cycle. These assessments provide a holistic picture of lake condition, integrating cumulative stressors and complementing traditional water quality measurements that represent a snapshot in time (phosphorus, water clarity, toxics). Monitoring data are used to identify impaired, healthy, and exceptional lakes, contribute to the Impaired Waters List and watershed assessment and trends reports, and track changes at the lake and watershed scale.

Problem Investigation and Applied Research: The program conducts applied research to evaluate effects of stressors on fish communities and publishes lake-specific stressor identification and protection reports for each watershed. The program creates publicly available GIS layers that summarize stressors for assessed lakes and contributes data to other prioritization tools used by partners such as Lakes of Biological Significance and Watershed Health Assessment Framework.

Restoration and Protection Strategy Development: The program provides reports and information that is integrated into Watershed Restoration and Protection Strategies (WRAPS)

and Comprehensive Watershed Management Plans, to guide future implementation efforts and ultimately improve fish community health.

4. Measurable Outcomes and Progress

Limit responses to 50-100 words for each question below.

a. Expected Outcomes for FY28–29 Request

i. Describe measurable and outcome-based goals for the current funding request.

The LBMA program will complete at least 200 surveys annually (FIBI, shoreline habitat, and oxythermal habitat surveys). Models for expanding to northeastern (boreal shield) Minnesota will be implemented. Survey data will be used to determine whether lakes meet aquatic life standards, to identify and evaluate lakes vulnerable to future impairment, and to identify lakes of exceptional biological quality.

Survey data will be used to assess lakes per the 10-year watershed schedule in close collaboration with MPCA and other partners.

Publicly available reports will be completed for survey data, assessments, stressors, and protection priorities.

ii. Describe how outcomes will be tracked, evaluated, and reported.

Lake biological monitoring survey data and reports, assessment results, and stressor identification and protection reports will be updated annually on the DNR, MPCA and Minnesota Water Research Digital Library websites, as a criterion of lake health in the Watershed Health Assessment Framework online tool, and in GIS data layers. All data is publicly available. FIBI and habitat survey data will be used for prioritization in Watershed Restoration and Protection Strategies and Comprehensive Watershed Plans.

Annual Clean Water Fund reporting will be completed.

Percentages of impaired, healthy, and exceptional lakes within major watersheds will be tracked over time.

iii. (If applicable) For past recipients, describe any planned changes to this program from previous funding cycles, if any.

The LBMA program completed the first cycle of lake assessments and impairment listings using FIBI models. In the second cycle, the focus will be on lakes that are designated as "anchor" lakes for long-term trend analysis, high priorities for local communities, vulnerable to impairment, and located in environmental justice areas. Standards to assess coldwater fish habitat in over 500 lakes have been developed, with assessments beginning once rules are promulgated. The program is expanding monitoring in northeastern Minnesota by increasing fish community sampling and developing new models to assess 13 remaining watersheds, including some of the state's most pristine lakes.

b. Outcomes from Prior Clean Water Fund Appropriations (if applicable):

i. *How would you characterize progress made to date? As much as is possible, include outcomes achieved as they relate to the program purpose.*

Statistical relationships between fish communities and stressors were used to develop FIBIs for a wide range of lakes. Statewide 1,056 lakes in 47 watersheds were assessed using FIBIs. Of those, 77% fully support aquatic life use and 21% exhibit exceptional fish communities that can be targeted for protection with more stringent standards and protection efforts. For impaired and vulnerable lakes, stressor investigations reported on eutrophication and physical habitat alterations as the most common stressors. Over 500 coldwater lakes have been identified, and rulemaking, monitoring, and WRAPS are in process to protect coldwater fishes and their habitats.

For more, see:
https://www.dnr.state.mn.us/waters/surfacewater_section/lake_ibi/index.html

ii. *How close is the program to reaching its long-term goals?*

The LBMA program has consistently met CWF outcomes in terms of developing models and standards and completing surveys and assessments. The program meets the MPCA watershed schedule, and provides timely reports to MPCA, EPA, CWC, and other partners. An independent evaluation awarded the program a 91.3% score.

The program has developed a roadmap for long-term monitoring, assessment, and reporting. The focus is on monitoring and assessment of anchor lakes and other priority lakes (as listed above), trend analysis, connecting changes in condition to landscape stressors, and ensuring information is easily accessible to the public in a timely manner.

5. Alignment with Clean Water Council Strategic Plan

a. *For each relevant goal or strategy in the Clean Water Council's Strategic Plan, list the applicable item and briefly explain (50-100 words) how this proposal helps fulfill that objective.*

- *Surface Water Protection and Restoration Vision, Goal 1: Monitor, assess, and characterize Minnesota's surface waters.*
  Strategy: Maintain consistent funding for a statewide monitoring system.
    - The LBMA program is the only program monitoring and assessing the biological health of lakes in Minnesota. The program follows the 10-year watershed schedule and connects landscape stressors to the biological health for lakes. The program will monitor watershed trends as we move into the second cycle of sampling and assessment.
- *Surface Water Protection and Restoration Vision, 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.

- The LBMA program assesses fishable lakes and provides an annual update on the percent meeting standards. The program provides restoration recommendations for impaired lakes and protection recommendations for vulnerable, exceptional, and coldwater lakes and provides other data that is used for prioritization for watershed plans. Data gathered is used to understand and develop management approaches that can mitigate or minimize impacts caused by large-scale stressors such as land use, connectivity barriers, shoreline development, and invasive species.

b. Please list any other statewide or federal plan this effort supports.

- N/A

6. Interconnection

Please list other Clean Water Fund-supported programs it informs and/or is informed by. Please briefly describe for each (up to 50 words) how Clean Water Funds add to existing efforts.

a. Connected CWF-supported programs:

- MPCA Lake Monitoring and Assessment: The MPCA lake monitoring program uses physical measurements of water quality such as water clarity and amount of phosphorus to assess whether a lake fully supports aquatic recreation. The chemical measurements represent a snapshot in time of lake conditions whereas the biological community as measured by the LBMA program standards reflect cumulative changes to the lake over several years or longer.
- Fish Contamination Assessment: The LBMA program also complements and is complemented by fish consumption assessments (completed by DNR, MPCA, and MDH).
- MPCA River Monitoring and Assessment: In addition, as a water-rich state lakes are often connected to streams and wetlands. MPCA monitoring and assessments in streams and wetlands helps inform our understanding of biological health in lakes.

b. Connected non-CWF-supported programs:

- DNR Fisheries Lake Survey Program: The DNR's Fisheries Section completes traditional lake surveys to track gamefish population trends, evaluate the effectiveness of management actions such as stocking, and establish management goals for a given lake. FIBI surveys build on gamefish surveys by also targeting nongame indicator species that require clean water and healthy habitats.

7. Non-CWF Funding

a. *Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources?*

Yes.

b. *If so, please describe what funds are being leveraged, the anticipated amount, and your degree of certainty that the funding is secure. Feel free to add rows if needed.*

Funding Source	Anticipated Amount	Degree of Security (%)
Game and Fish Fund (GFF)	Varies Annually	100%
Federal funds	Varies (project specific)	0%

c. *If additional description or elaboration is needed, please include here. (50 words max)*

Select components collected in GFF surveys are included in FIBI scoring. CWFs are used for additional survey components and more rigorous surveys are used to target nongame fish, calculate FIBI scores, and complete stressor identification.

Several federal partners have provided survey data used for assessments (e.g. USFS, VNP, and EPA).

8. Long-term funding vision

a. *If this proposal is funded, should the Clean Water Council expect future (beyond FY28-29) requests to increase, decrease, or stay about the same? (Do not factor in inflation.)*

__ Increase
__ Decrease
_**X**_ Stay the same

b. *Do you have an anticipated end date for funding need? If so, when?* _____

No

c. *Do you intend to continue this program past 2034 in some capacity?* _**X**_ Yes __ No __ Unsure

9. Funding Recipients

Please state as a percentage the amount of funding from this request that is anticipated to be pass-through to a non-state agency entity. _0___ %

10. Engagement and Community Value

a. *How have program beneficiaries been engaged in the development or evolution of this program? Who are the program partners, if any? (150 words)*

Across Minnesota, residents place high value on healthy lakes for their contributions to community identity, economic vitality, and overall quality of life. Given this value, many partners and lake practitioners are interested in using the data collected by the LBMA program to inform lake management, watershed plans, and implementation projects to combat threats like shoreline degradation, landscape pollution, climate change, and invasive species.

Many have been engaged with LMBA in the selection process for lake monitoring, contributed to the evolution of our stressor identification and protection reporting, and assisted on local implementation projects. Some partners include other state agencies (primarily MPCA), tribal governments, watershed districts, SWCDs, federal partners (EPA, VNP, USFS), Universities (BSU, UMN), local governments, and lake associations. The program is regularly asked to present data and recommendations on lake health to audiences including lake practitioners, universities, and lake associations.

b. *Please describe how this program advances environmental justice and promotes equity. (150 words)*

Clean water is essential to all Minnesotans. The LBMA program ensures equal representation of sampling occurs on lakes within environmental justice areas. The DNR joins other agencies in striving to foster environmental justice, engage multiple ways of knowing, and striving to lead in diversity, equity, and inclusion, per the state's 2025 Nonpoint Priority Funding Plan. DEI is also a DNR strategic plan priority via increasing staff's cultural competence, creating a workforce that reflects Minnesota, and continuing to strengthen tribal consultation and build partnerships with diverse communities.

c. *If this has been funded through Clean Water Funds in the past, please share 1-3 recent examples of outreach conducted by this program. Links or attachments are allowable.*

- Public facing content:
    - Our website is frequently visited, and generates regular public interactions: https://www.dnr.state.mn.us/waters/surfacewater_section/lake_ibi/index.html
    - FIBI survey work and the LBMA Program was highlighted as premier story on the cover page for the 2026 Minnesota Native Fish Calendar. (see attachment)
    - Individual lake survey reports are located on DNR LakeFinder https://www.dnr.state.mn.us/lakefind/index.html
- Media:
    - A recent Star Tribune Article described FIBIs and highlighted a lake with a very high FIBI score due to excellent fish and habitat diversity: https://www.startribune.com/this-lake-can-lay-claim-to-the-title-of-fishiest-in-minnesota/601377914
    - A recent blog shared connections to FIBI monitoring and shoreline habitat: https://eastmetrowater.org/2025/07/25/one-fish-two-fish-plant-for-more-fish/

- Presentations:
    - LBMA Research Scientist Derek Bahr presented on the water quality standards we developed to support coldwater fish at Minnesota Outdoor Skills and Stewardship Series https://www.youtube.com/watch?v=_ZRweVBeI3E
    - LBMA Research Scientist Derek Bahr presented in the Midwest Glacial Lakes Lake Conservation Webinar Series https://www.youtube.com/watch?v=FHOlW1kw91M
    - Program staff were invited to speak at universities regarding LBMA Program and survey work. Recent presentations include at: University of Minnesota-Twin Cities, St. Cloud State University, St. John's University, Fond du lac Tribal and Community College, Central Lakes Community College.
    - Program staff routinely present to professional audiences (e.g. National Water Quality Monitoring Conference, American Fisheries Society, Midwest Fish and Wildlife Conference, Minnesota Lake Management Society).

11. CWF Communication Plan

For both new and returning applicants, please describe (under 100 words) or attach the plan for communicating with the public and pass-through recipients about the Clean Water Fund.

We recognize that continued CWF support will only be possible if the public sees the fund at work through stories, videos, field days, awards, and other means. We prominently display the Legacy Amendment logo on program materials and strive to ensure that beneficiaries understand that our staff are available thanks to the CWF. We update our FIBI website and GIS layers annually, regularly complete submissions to the DNR social media, and reach out to media sources to share the survey results and lake condition information.

12. Prior Appropriations

FY10-11	$1,378,000
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
FY26-27	$3,050,000
TOTAL APPROPRIATED TO DATE	**$21,828,000**

13. FY28-29 Funding Request

FY28 Request	FY29 Request	FY28-29 TOTAL REQUEST
Hold steady	Hold steady	Hold steady

14. State Employees

If applicable, indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	10
FY12-13	13
FY14-15	13
FY16-17	15.5
FY18-19	14
FY20-21	11
FY22-23	11
FY24-25	14.5
FY26-27	16

MINNESOTA NATIVE FISH

CALENDAR 2026

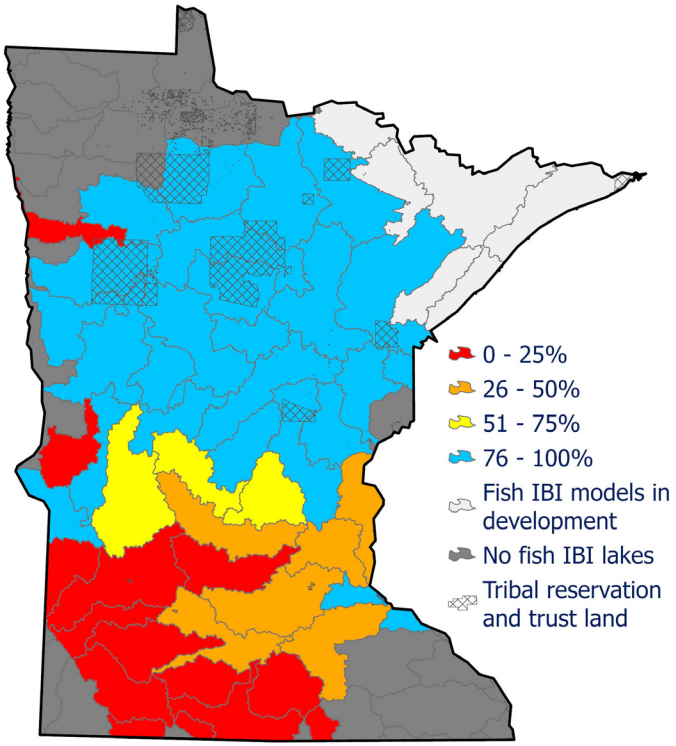
DEPARTMENT OF NATURAL RESOURCES

BIOLOGICAL INTEGRITY IN LAKES

Using fish community data to evaluate lake health

Some fish species need clean water and healthy habitats to survive, while others can live in polluted or degraded conditions. Because of this, certain species act as "indicators" of a lake's health. The number and types of fish species found in each lake are used to calculate a Fish Index of Biological Integrity (IBI) score. This score is then compared to a benchmark to determine the health of a lake's fish community.

Percentage of lakes in each watershed that are healthy as measured by fish IBI models



Fish IBI biologists use this information to identify lakes that are impaired and need restoration, as well as those with exceptional fish communities that should be protected.

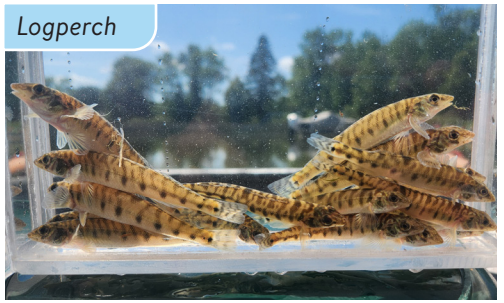
Through funding provided by the Clean Water, Land, and Legacy Amendment and the Sport Fish Restoration program, biologists have conducted fish IBI surveys in more than 1,000 Minnesota lakes since the program launched in 2011. Sampling methods used during these surveys included seining, backpack electrofishing, trap netting, and gill netting. Blackchin shiners, logperch, and northern sunfish are some of the more than 80 native fish species sampled during these efforts; some are designated as Species of Greatest Conservation Need (SGCN). Overall, about 77% of lakes are considered healthy based on their fish IBI scores, and those that are impaired are often most impacted by stressors such as excess nutrients and lakeshore habitat destruction.

Work is underway to develop specialized fish IBI models for lakes in northeastern Minnesota, which generally have fewer fish species, are relatively pristine, and are threatened by a different suite of stressors.

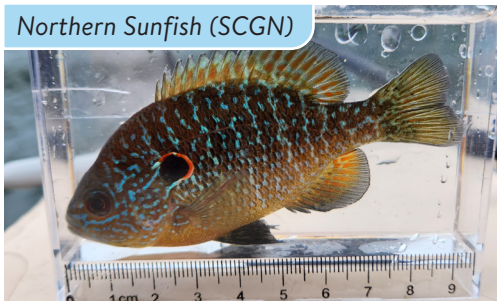
For more information
scan the QR code or visit
mndnr.gov/waters/surfacewater_section/lake_ibi/index.html

Sampling fish with a seine

Logperch



Northern Sunfish (SCGN)



Blackchin Shiners

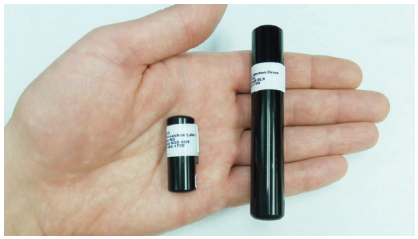
FISH TRACKING REVEALS KEY RIVER LINKS

Study shows vital role of connected waterways for fish.

Minnesota Department of Natural Resources fisheries biologists are tracking the movements of several species of fish throughout rivers in Minnesota. For more than a decade, they have been operating a network of underwater receivers that record the movements of individual fish that have a transmitter implanted in their bodies. This monitoring method yields crucial insights into native fish behavior and seasonal movements.

Right: a DNR biologist prepares to implant a transmitter in a paddlefish.

Below: two sizes of acoustic transmitters used to track fish movements.



Tracking seasonal movements of an individual paddlefish from 2015 to 2025.

In the Spring of 2015, a female paddlefish weighing nearly 60 lbs and measuring over 40 inches was implanted with a transmitter. For the past ten years, DNR biologists have tracked her movements throughout the St. Croix, Mississippi and Minnesota rivers covering a home range of over 230 miles of river!

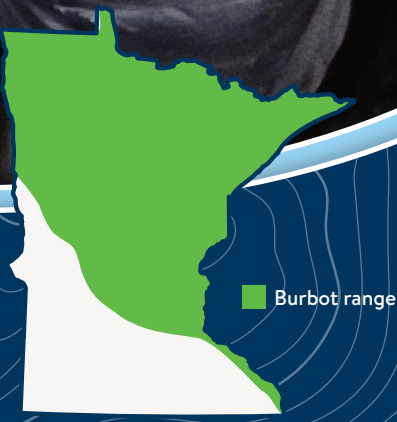
This female's primary residence is the St. Croix River between Stillwater and Afton. Roughly every other spring, she migrates into the Minnesota River, presumably to spawn. She begins her journey by moving down the St. Croix to the Mississippi, staging below Lock and Dam # 2 at Hastings. She then attempts to pass the dam, using either the lock chamber or dam gates if they are open. If successful, she then moves up the Mississippi and into the Minnesota for a period of 2-3 weeks before returning to the St. Croix. Each spring that she spends in the Minnesota, she moves further upstream. In 2021, she traveled over 195 miles after passing the dam, averaging over 30 miles of river per day. Perhaps due to low flow conditions, she remained in the Minnesota over that winter. In the spring of 2022, she moved even farther up the Minnesota before returning to her home waters of the St. Croix in June. In the spring of 2024, she traveled to the dam but did not pass it. She then returned the St. Croix where was most recently recorded near Stillwater in June of 2025.

Movements of an individual paddlefish in the St. Croix, Mississippi and Minnesota rivers from 2015 to 2025.

DNR Biologists have documented a great deal of variation in movement patterns among the more than 75 paddlefish implanted with transmitters. The information from monitoring the movements of paddlefish and other fish species allows DNR biologists to optimize their efforts to manage and conserve our native fish populations.

Burbot

Burbot are Minnesota's lone representative of the cod family. They inhabit cool waters of large and mid-sized rivers and occur throughout the lakes of central and northeast Minnesota. Burbot spawn early in the year, typically while surface waters are still frozen and are frequently captured by ice anglers.



JANUARY 2026

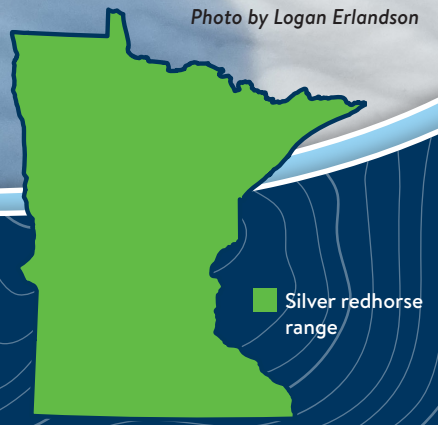
DEPARTMENT OF NATURAL RESOURCES

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	31	1 New Year's Day	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19 Martin Luther King Jr. Day	20	21	22	23	24
25	26	27	28	29	30	31

Photo by Logan Erlandson

Silver Redhorse

The silver redhorse is found throughout Minnesota's medium to large rivers over sand and gravel. Their large, fleshy lips are loaded with tasting structures that allow them to locate their prey, primarily aquatic insects, along the riverbed. The state record silver redhorse 26.75 inches in length.



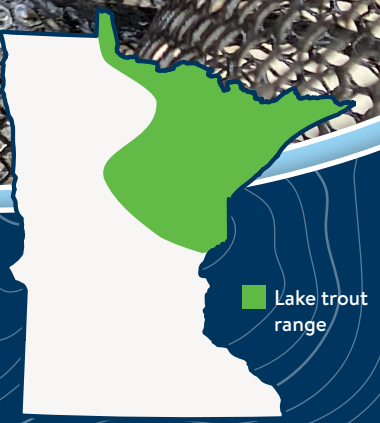
FEBRUARY 2026

DEPARTMENT OF NATURAL RESOURCES

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16 President's Day	17	18	19	20	21
22	23	24	25	26	27	28

Lake Trout

Lake trout are one of two trout species that are native to Minnesota, occurring in Lake Superior and deep inland lakes in the northeast portion of the state. Lake trout can attain very large sizes and are popular sport fish. The state catch-and-release record lake trout was caught in Lake Superior and measured 43.25 inches long.



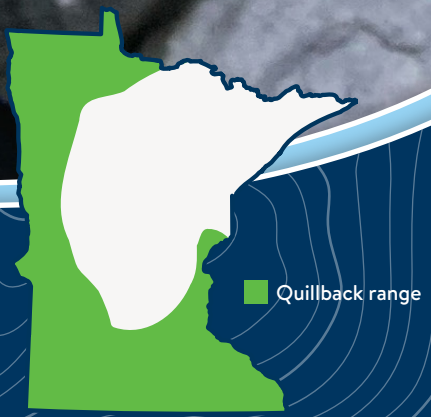
MARCH 2026

DEPARTMENT OF NATURAL RESOURCES

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

Quillback

Quillback may resemble the non-native common carp, but are in fact a native member of the sucker family. The species is found in higher quality habitats of Minnesota's large rivers. Quillback tend to form schools and feed on insects, snails, and other small animals on the riverbed. They are rarely caught by anglers.



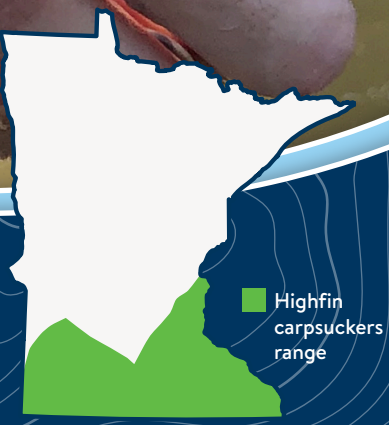
APRIL 2026

DEPARTMENT OF NATURAL RESOURCES

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2

Highfin Carpsucker

Highfin carpsuckers are members of the sucker family. They are found in medium to large rivers over sand and gravel where the current is swift to moderate. They are known to occasionally swim along the surface with their characteristically long and delicate dorsal fins exposed to the air.



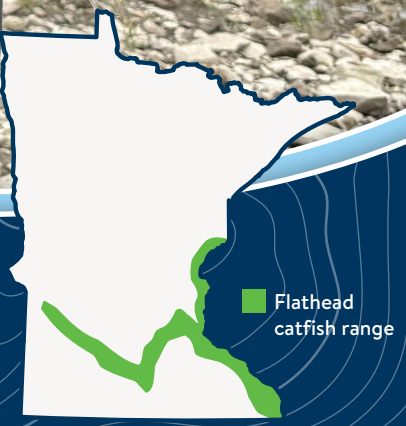
MAY 2026

DEPARTMENT OF NATURAL RESOURCES

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25 Memorial Day	26	27	28	29	30
31	1	2	3	4	5	6

Flathead Catfish

Flathead catfish inhabit the slow-moving waters of Minnesota's large rivers and are frequently found among submerged trees and woody debris. Flathead catfish are large predators that feed near the bottom and can attain very large size. The Minnesota state catch-and-release record flathead catfish was 52.5 inches long.



JUNE 2026

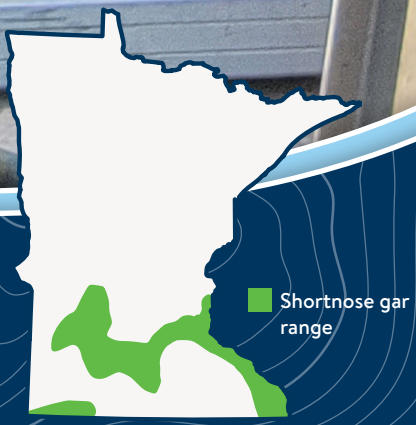
DEPARTMENT OF NATURAL RESOURCES

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19 Juneteenth	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4

Photo by Solomon David

Shortnose Gar

Shortnose gar belong to an ancient group of fishes that has been present in North America since the time of the dinosaurs. Gars use their long jaws with many sharp teeth to capture and eat other fish. They have thick, armor-like scales, a specialized swim bladder that allows them to breath air, and their eggs are toxic!



JULY 2026

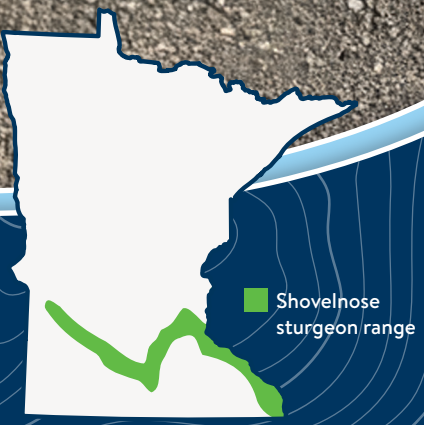
DEPARTMENT OF NATURAL RESOURCES

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	1	2	3	4 Independence Day
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1

Photo by Tony Sindt

Shovelnose Sturgeon

The shovelnose sturgeon lives in channels of large rivers and is generally found over gravel and sand where there is some amount of current. Shovelnose sturgeons feed close to the bottom and have four long barbels (whiskers) that allow them to detect food items in murky waters.



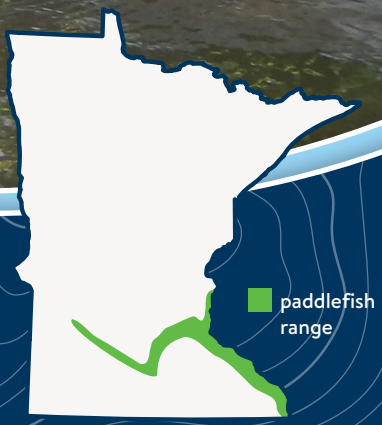
AUGUST 2026

DEPARTMENT OF NATURAL RESOURCES

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

Paddlefish

The earliest scientific descriptions of the paddlefish described it as an “entirely new shark.” In actuality, the paddlefish is a close relative of the sturgeons. Its long, spoon shaped snout is covered with thousands of sensing structures that allow them to locate and filter feed on swarms of plankton in the large rivers where they are found.



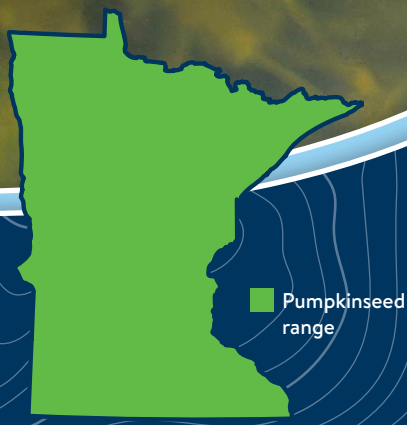
SEPTEMBER 2026

DEPARTMENT OF NATURAL RESOURCES

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	31	1	2	3	4	5
6	7 Labor Day	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3

Pumpkinseed

The pumpkinseed is a member of the sunfish family and is widespread throughout Minnesota. They prefer to live in ponds, lakes and slow-moving waters of rivers with plenty of aquatic plants. They are commonly caught by anglers. The Minnesota state record pumpkinseed was 10 inches long and weighed 1 lb 5 oz.



OCTOBER 2026

DEPARTMENT OF NATURAL RESOURCES

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27	28	29	30	1	2	3
4	5	6	7	8	9	10
11	12 Columbus Day/ Indigenous Peoples' Day	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

White Bass

White bass are commonly found in large streams and rivers but do occur in lakes throughout Minnesota. Though similar in appearance, they are more closely related to many marine fishes than they are to largemouth and smallmouth bass, which are actually members of the sunfish family. White bass are popular sport fish; the state record white bass was 20 inches long and weighed 4.5 pounds.

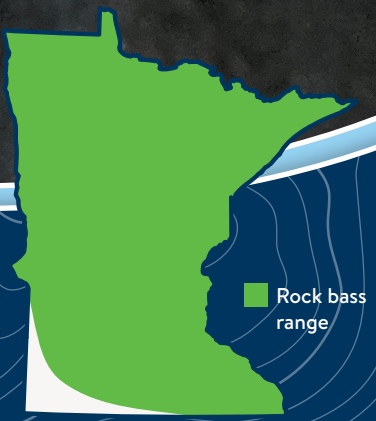
NOVEMBER 2026

DEPARTMENT OF NATURAL RESOURCES

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11 Veteran's Day	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26 Thanksgiving Day	27	28
29	30	1	2	3	4	5

Rock Bass

Rock bass are stout-bodied members of the sunfish family that commonly occur throughout medium to large streams and lakes in Minnesota. Though some anglers choose not to consume rock bass, the flesh of this fish is firm, white and makes excellent table fare, especially when harvested from cool, clear waters.



DECEMBER 2026

DEPARTMENT OF NATURAL RESOURCES

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25 Christmas	26
27	28	29	30	31	1	2

STATE RECORD FISH

Catching a big fish is always a thrill!

The Minnesota DNR keeps track of the largest fish caught through the record fish program. The list of fish species recognized by the catch-and-release category has been recently expanded.

The following native species are eligible for catch-and-release state records in Minnesota:

State record fish species	Size
Bigmouth buffalo	32.5"
Blue sucker	Open
Bowfin	Open
Brook trout	19"
Channel catfish	Open
Flathead catfish	52.5"
Freshwater drum	Open
Lake sturgeon	78"
Lake trout	43.25"
Largemouth bass	Open
Longnose gar	51"
Muskellunge	58.25"
Northern pike	46.25"
Sauger	Open
Shortnose gar	Open
Shovelnose sturgeon	35"
Smallmouth bass	22.75"
Smallmouth buffalo	32.5"
Walleye	Open

For more information about the state's record fish program, please visit dnr.state.mn.us/fishing/staterecords.html

Joe Dahl with a 32.5-inch bigmouth buffalo caught on the Cannon River near Northfield.

Isaiah Bartlett with a 43.25-inch lake trout caught on Lake Superior near Beaver Bay.

Andrew Nicholson with a 32.5-inch smallmouth buffalo caught on the St. Croix River near Stillwater.

DEPARTMENT OF NATURAL RESOURCES

500 Lafayette Road

St. Paul, MN 55155-4040

651-296-6157 or 888-MINNDNR (646-6367)

mndnr.gov

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C__Lake Biological Monitoring and Assessment

Comments:

- Appreciate the specific goals listed in the proposal
- Another program where scoring may not be reflective of importance. Biologic diversity and abundance is a direct indication of healthy water that is likely fishable, swimmable and drinkable.

Questions:

1. Surveys fish and aquatic plants in 495 lakes for stressors, do plans exist to expand the number of lakes to be surveyed and in what geographic sections of MN?

FY28-29 CLEAN WATER FUND PROPOSAL

Program Title:	Forestry BMP Evaluation and Lidar Hydrography Tools
Program Number (if applicable):	57
Agency/Organization Name:	Minnesota Department of Natural Resources (DNR)
Program website:	

Program Contact	
Name	Jamison Wendel
Email	jamison.wendel@state.mn.us
Phone	651-259-5661

Person Filling Out Form	
Name	Lila Westreich / Sean Vaughn
Email	Lila.westreich@state.mn.us / sean.vaughn@state.mn.us
Phone	Lila: 218-398-5955 / Sean: 763-284-7223

1. Eligibility Requirements

Proposers must confirm that their proposal meets basic statutory eligibility. Please check each box that applies to certify the following:

☒ **Eligible Use of Funds:** Requested funds will be used in accordance with Minnesota law and Clean Water Fund requirements, outlined in full in Minnesota Statutes 114D.50 Subd. 3. This includes confirmation that this funding request supplements rather than supplants previous non-legacy state funding.

☒ **Accounting and Reporting Capacity:** The proposing organization has experience with or ability to meet accounting and reporting requirements in order ensure appropriate use of funds, as stipulated in Minnesota Statutes 114.50 Subd. 4.

☐ **Mandate Alignment (if applicable):** This proposal supports or fulfills state or federal mandates (i.e. TMDL, Nonpoint Source Pollution, Nutrient Reduction Strategy, Wild Rice protection, etc.).

If yes, please cite applicable statute or rule: _____

2. Abstract

Provide a summary (up to 100 words) that clearly states the purpose of the program, its intended water quality impact, and who it serves. The content here will largely be used as a brief summary when looking across programs, so some degree of redundancy is anticipated with other content in the form.

The **Guideline Monitoring Program** monitors the implementation of forest management guidelines (FMGs) and BMPs at logging sites across Minnesota's forested watersheds. We analyze data on FMG/BMP implementation to identify risks to water quality and provide training and advising for forest managers and loggers to implement sustainable forestry practices. The **Lidar Hydrography Program** generates Minnesota's official statewide elevation data through lidar technology, enabling precise mapping of the state's landscape features that influence surface water movement and infiltration to groundwater. Specializing in 3D data collection and terrain analysis, the team develops authoritative digital contours, elevation models, hydrography, and watershed boundaries.

3. Water Quality Impact

a. Which step of the *Minnesota Water Management Framework* does this program most fit under:

The **Guideline Monitoring Program's** Forest Management Guideline monitoring fits under both the Monitoring, Assessment, and Characterization step and the Applied Research step.

Lidar Hydrography Program

- Monitoring, Assessment, and Characterization
    - Consistent long-term monitoring and evaluation under the Monitoring, Assessment, and Characterization phase necessitates the use of digital terrain and hydrography products provided by the Lidar Hydrography Program, including contours, DEMs, and watershed delineations, for ongoing planning and assessment.

b. Overall, how will this program protect, enhance, and restore water quality in lakes, rivers, and streams, protect groundwater from degradation, or protect drinking water sources. Please limit your response to 200 words.

The **Guideline Monitoring Program's** assessments for water quality related to forestry related activities, sediment delivery to waterbodies, erosion and infrastructure placement and impacts, and protective measures such as leave trees and erosion control measures are integral to protecting waterbodies near and surrounding harvest areas in Minnesota, including wetlands, bogs, rivers, streams, and lakes. The Forest Management Guidelines protect these waterbodies from sediment delivery and potential degradation of water quality, and providing educational opportunities and encourage trainings, the Guideline Monitoring Program is able to prevent damage to water sources over the long term.

3D data provided by the **Lidar Hydrography Program** protects, enhances and restores water quality by providing high-resolution elevation data to clean water initiatives throughout

Minnesota. By using laser technology, lidar produces highly accurate representations of the state's landscape resulting in maps that save time in the decision-making process and facilitate the implementation of water-related projects. Digital Elevation Models generated from lidar data serve as foundational tools for watershed delineation and modeling. With these tools, resource managers can identify sources of pollution, track how contaminants travel, and determine their destinations, ultimately contributing to improved water quality in lakes, rivers, and streams.

4. Measurable Outcomes and Progress

Limit responses to 50-100 words for each question below.

a. Expected Outcomes for FY28–29 Request

i. Describe measurable and outcome-based goals for the current funding request.

The **Guideline Monitoring Program (GMP)** will survey 200 recently harvested forest sites and six watersheds over the two-year period and report biannually on results on a watershed basis, providing information to public and private landowners and forest managers to prevent erosion of sediment to waterbodies and preserve water quality statewide.

The **Lidar Hydrography Program** will advance lidar research and develop Minnesota's next-generation lidar data to support CWF projects for visualizing and modeling land features related to water flow. The team will also collaborate with the Minnesota Geospatial Information Office to provide access to digital terrain data by advising on its assembly, organization, and distribution.

ii. Describe how outcomes will be tracked, evaluated, and reported.

Guideline Monitoring sites will be visited annually, data analyzed by watershed and BMPs, and reported in 2029 summarizing results across all sites and watersheds. This work will support water quality efforts to control for sediment delivery and runoff to Minnesota's lakes, streams, and wetlands, closely tying in with Clean Water initiatives.

Lidar Hydrography Program outcomes are reported annually and tracked by availability and usage of 3D elevation resources—such as digital elevation models, contours, and watershed delineations on official dissemination portals. Effectiveness is measured by how easily the public and Clean Water initiatives can access and apply this data to improve Minnesota's water quality**.**

iii. (If applicable) For past recipients, describe any planned changes to this program from previous funding cycles, if any.

N/A

b. *Outcomes from Prior Clean Water Fund Appropriations (if applicable):*

i. *How would you characterize progress made to date? As much as is possible, include outcomes achieved as they relate to the program purpose.*

The **Guideline Monitoring Program** has surveyed the entire state of Minnesota for public and private forestry's adherence to the Forest Management Guidelines, covering over 1200 sites over 20+ years of annual monitoring. We have identified areas of improvement for forestry and used trainings to focus on preservation of water quality and reducing runoff.

The **LiDAR Hydrography Program** provides Minnesota's agencies and Clean Water partners with official statewide LiDAR-derived digital elevation and watershed data. Staff serve as stewards for 300TB of geospatial data and related tools worth $50 million, offer training and guidance on LiDAR technology, and lead technical teams to ensure consistent management of Minnesota's 3D data.

ii. *How close is the program to reaching its long-term goals?*

The **Guideline Monitoring Program** is successfully meeting yearly goals of surveying each part of the state for BMP implementation and continues to produce summary reports for public use in forestry trainings and conferences in Minnesota. Each year we meet our goal of data collection and publication and are on track to continue to do so.

The mission of the **Lidar Hydrography Program** is to continually serve Clean Water funded programs and projects with high-quality 3D elevation and watershed data from lidar. The team's ongoing work adapts to evolving LiDAR technologies to improve efficiencies and application of the data by technicians and Clean Water beneficiaries.

5. Alignment with Clean Water Council Strategic Plan

a. *For each relevant goal or strategy in the Clean Water Council's Strategic Plan, list the applicable item and briefly explain (50-100 words) how this proposal helps fulfill that objective.*

1. Add a bullet for each relevant strategy or goal
2. Groundwater Vision, Goal 1:
    - The **Guideline Monitoring Program** collects yearly data on a watershed basis to ensure that any degradation to groundwater is identified and added to trainings for the local loggers and forest managers to prevent further degradation or damage to groundwater (GMP).
    - The **Lidar Hydrography Program** provides official delineations for Minnesota's Major Watershed boundaries used in WRAPS, GRAPS, GWMA, 1W1P, TMDL modeling and reports, online dashboards, and other approved comprehensive management plans. Additionally, the program provides Lidar-derived digital landscape data to support watershed-based decision making for improved land-

use practices, landscape BMPs implementation, and targeted strategies and measured outcomes across the watershed.

3. Groundwater Vision, Goal 2:

    - The **Guideline Monitoring Program** promotes the establishment and use of practices that reduce erosion and sediment delivery from forestry activities through trainings, data collection, and reporting. This data is used to update MFRC Landscape Plans within the appropriate watersheds (GMP).

    - Groundwater is often degraded by infiltration of contaminated surface water. The **Lidar Hydrography Program** provides Lidar-derived digital landscape data to support mapping landscape features that convey and collect surface water associated with areas of infiltration. This 3D data also supports the building of strategies and effective measures to restore degraded ground water through improved watershed-based land use and decision-making.

4. Drinking Water Protection, Goal 1:

    - The **Guideline Monitoring Program** monitors any potential soil runoff into lakes, streams, and rivers across the state of Minnesota to identify sources of contamination from forestry activities and point trainings to diminish contamination and prevent future erosion of sediment into waterbodies (GMP).

    - The **Lidar Hydrography Program** generates 3D data that maps and models landscape features transporting and storing surface water --ultimately used for public water drinking-systems. Because the quality of untreated drinking water reflects the overall condition of the watershed, planners use this information to create Water Protection Plans and provide landowners with technical guidance on land use and BMPs.

Drinking Water Source Protection Vision, Goal 2:

    - The quality of drinking water obtained from private wells may be impacted by both local and regional landscape factors. The **Lidar Hydrography Program** provides high-resolution, 3D Lidar data and watershed delineations for water use planners to develop comprehensive Water Protection Plans, model the movement of potential contaminants, create educational and outreach materials, and offer technical assistance to landowners and homeowners on issues related to well water. By employing these advanced datasets, planners and technicians are able to more accurately identify areas at risk of contamination, forecast pollutant pathways in the landscape, and coordinate targeted BMPs for private well management.

5. Surface Waters Protection and Restoration, Goal 1:

- The **Guideline Monitoring Program** works to continuously monitor the state across HUC-8 watersheds to ensure Minnesota surface waters are assessed for their potential for sediment delivery from forestry related activities. All contaminants found are reported biennially (GMP).
- Digital elevation models generated and managed by the **Lidar Hydrography Program** are used by clean water specialists, planners, and landscape modelers to create *Total Maximum Daily Load (TMDL*) reports.

6. Surface Waters Protection, Goal 2:
    - The **Guideline Monitoring Program** works with local foresters, state lands timber foresters, private forest management foresters, and the Minnesota Logger Education Program and Sustainable Forests Education Cooperative to give trainings on Forest Management Guidelines and BMPs to ensure water quality standards are met (GMP).
    - The **Lidar Hydrography Program** creates and updates Minnesota's statewide HUC8/DNR Major Watershed boundaries, defining hydrological borders for Goal 2 of the Surface Waters Protection and Restoration Vision. It also provides lidar-derived DEMs for WRAPS, runoff modeling, hydrograph estimation, and identifying water storage sites. These data support prioritizing and targeting resources by DNR Major Watershed.
7. Surface Waters Protection, Goal 3:
    - The **Lidar Hydrography Program** develops and maintains Minnesota's official statewide watershed boundaries and digital elevation models (DEMs) from lidar data. The watershed delineations define borders used to create maps needed to support Goal 3 of the Surface Waters Protection and Restoration Vision. The program's DEMs are crucial for runoff modeling, hydrograph calculation, and BMP placement using tools like PTMApp and ACPF in watershed planning. Additionally, these 3D elevation models are essential for expanding such analyses—to pinpoint water storage possibilities that help meet acre-feet storage targets and to trace how contaminants move, aiding in efforts to lower nutrient loads.

b. Please list any other statewide or federal plan this effort supports.

Lidar Hydrography Program:

State Programs

- The **LiDAR Hydrography Program** provides Minnesota's official 3D topography data derived from LiDAR, supporting all statewide water resource planning and projects that require digital terrain analysis and watershed boundary mapping.

Federal Programs

- U.S. Geological Survey 3D Elevation Program (3DEP)
- U.S. Geological Survey 3D Hydrography Program (3DHP)

6. Interconnection

Please list other Clean Water Fund-supported programs it informs and/or is informed by. Please briefly describe for each (up to 50 words) how Clean Water Funds add to existing efforts.

a. Connected CWF-supported programs:

[Note (***Lidar Hydrography Program***)]

- The **Lidar Hydrography Program** provides essential data for all Clean Water Fund-supported programs that use watershed boundaries in maps and DEMs or contours in analysis and decision making. In short, any plan simply using watershed delineations in a map relies on this program's support.

b. Connected non-CWF-supported programs:

Guideline Monitoring Program

- The Department of Natural Resources Forestry Division utilizes Guideline Monitoring Program reporting and data to summarize areas of focus for logger and forester internal training (GMP).
- The Sustainable Forests Education Cooperative utilizes data collected by the Guideline Monitoring Program for focusing areas of trainings across the state for loggers and forest managers (GMP).
- The Minnesota Forest Resource Council uses results in biennial reports and 5-year summary reports to focus regional landscape committees and their landscape plans (GMP).
- The United States Forest Service utilizes results from monitoring data from the Guideline Monitoring Program to identify areas of improvement in following BMPs and FMGs on Forest Service lands in Minnesota, and in soil monitoring reports (GMP).

Lidar Hydrography Program

- Lidar Hydrography Program data is foundational to water resource management and non-CWF-supported programs. Listing all the non-CWF-supported programs would number in the hundreds or more, which likely exceeds the scope of this section.
- This description summarizes how the Lidar Hydrography Program provides foundational data to non-CWF programs, replacing a long list in this section:
    - The **Lidar Hydrography Program** underpins every non-CWF program, plan, and project that relies on Lidar point clouds or lidar-derived 3D elevation products—including digital elevation models, Hydrographic Position Index

data, contours, and watershed datasets. By acquiring, developing, and distributing authoritative 3D data, the program supplies essential information downloaded tens of thousands of times each year from Minnesota's official portals. These resources empower federal, state, and local agencies, private organizations, educators, nonprofits, stakeholders, and the public whose work and decisions depend on accurate data to protect and improve Minnesota's water quality and related natural resources.

7. Non-CWF Funding

a. *Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources?*

Answer simply Yes or No; save the details for 7b and if needed 7c below.

No. (No, for both programs part of this proposal)

b. *If so, please describe what funds are being leveraged, the anticipated mount, and your degree of certainty that the funding is secure. Feel free to add rows if needed.*

NA

c. *If additional description or elaboration is needed, please include here. (50 words max)*

NA

8. Long-term funding vision

a. *If this proposal is funded, should the Clean Water Council expect future (beyond FY28-29) requests to increase, decrease, or stay about the same? (Do not factor in inflation.)*

__ Increase
__ Decrease
_X_ Stay the same

b. *Do you have an anticipated end date for funding need? If so, when?* _____

No

c. *Do you intend to continue this program past 2034 in some capacity?* **_X_ Yes** __ No __ Unsure

9. Funding Recipients

Please state as a percentage the amount of funding from this request that is anticipated to be pass-through to a non-state agency entity. __0__ %

10. Engagement and Community Value

a. *How have program beneficiaries been engaged in the development or evolution of this program? Who are the program partners, if any? (150 words)*

The **Guideline Monitoring Program** has numerous partners in the development of the program, including the Minnesota Forest Resources Council (including staff on the MFRC Site-Level Committee and other committees and the council itself), the Forestry Division in the DNR, the University of Minnesota, MN Logger Education Program, Tand the Sustainable Forests Education Cooperative.

Lidar Hydrography Program staff chair the Minnesota Geospatial Advisory Council - 3D Geomatics Committee (3DGeo) and lead or participate in six additional 3DGeo Workgroups and various state agency teams. Through this expert collaboration, these groups contribute to the continued evolution of this program, ensuring that the lidar data and subject matter expertise provided aligns with the business needs and expectations of the geospatial community. This approach supports informed decision-making and fosters standardization and consistency in the development, storage, management, distribution, and education of official 3D geospatial data used tens of thousands of times per year across Minnesota.

b. *Please describe how this program advances environmental justice and promotes equity. (150 words)*

The Guideline Monitoring Program provides trainings multiple times per year, many of which are free or offered at very low cost to landowners, forest managers, state, private, and federal foresters to improve BMP implementation. This work provides direct training to on-the-ground loggers, aiming for a diverse participant group by traveling around the state to local communities. As clean water is essential to all Minnesotans, the Guideline Monitoring Program works to improve access and understanding of the Forest Management Guidelines/BMPs and provide training to rural communities.

c. *If this has been funded through Clean Water Funds in the past, please share 1-3 recent examples of outreach conducted by this program. Links or attachments are allowable.*

The **Guideline Monitoring Program** (GMP) has provided training and oversight on six trainings across the state of Minnesota over the past three years, teaching Forest Management Guidelines or BMPs to over 300 loggers across every area of the state where forestry is conducted regularly. The GMP also regularly visits private landowner groups, Minnesota Logger Education Program conferences with public loggers for private and state lands, and shares results from monitoring with high level admin groups such as the MFRC and with regional State DNR timber foresters and management. Personnel from the **Lidar Hydrography Program** routinely participate in professional outreach activities throughout Minnesota. These engagements serve as a primary channel of communication with Clean Water Fund beneficiaries, resource managers, and geospatial professionals. Staff disseminate information on recent lidar technology developments, as well as updates concerning their creation and management of Minnesota's official 3D digital elevation and hydrography

datasets. Furthermore, program staff design and conduct technical training sessions that emphasize the practical use of lidar data and its derivatives in addressing complex issues related to water resource management across the state.

Recent examples include:

1. Minnesota DNR Data Stewards Community of Practice
    - *Title: Lidar Origins and Preparing for the Future*
2. Minnesota 3D Geomatics Hydrogeomorphology Workgroup
    - *Title: Minnesota's Second Generation of Lidar and Lidar Derived Hydrography*
3. Minnesota GIS/LIS Consortium Annual Conference
    - Title: *Minnesota 3D Geomatics Lidar Technical Session I - Acquisition, Temporality & Accuracy of Minnesota's Second Generation of Lidar Data*
    - Title: *Minnesota 3D Geomatics Lidar Technical Session II - Lidar Data Download from Federal Apps and Application of ArcGIS Pro and QGIS*

11. CWF Communication Plan

For both new and returning applicants, please describe (under 100 words) or attach the plan for communicating with the public and pass-through recipients about the Clean Water Fund.

We recognize that continued CWF support will only be possible if the public sees the fund at work through stories, videos, field days, awards, and other means. We prominently display the Legacy Amendment logo on program materials and strive to ensure that beneficiaries understand that our staff are available thanks to the CWF.

The **Lidar Hydrography Program** actively engages communities and agencies through formal presentations and training sessions that prominently feature the Legacy Amendment logo. Staff consistently highlight that the program's work and data generated for tens of thousands of projects and Clean Water beneficiaries are made possible by the Clean Water Fund.

12. Prior Appropriations

FY10-11	$550,000
FY12-13	$790,000
FY14-15	$1,350,000
FY16-17	$ 1,350,000
FY18-19	$1,350,000
FY20-21	$1,400,000
FY22-23	$1,065,000
FY24-25	$1,300,000
FY26-27	$1,400,000
TOTAL APPROPRIATED TO DATE	$10,555,000

13. FY28-29 Funding Request

FY28 Request	FY29 Request	FY28-29 TOTAL REQUEST
Hold steady	Hold steady	Hold steady

14. State Employees

If applicable, indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	1.0 (Lidar)
FY12-13	1.0 (Lidar)
FY14-15	3.0 (Lidar and Forestry GMP)
FY16-17	3.0 (Lidar and Forestry GMP)
FY18-19	1.0 (Forestry GMP)
FY20-21	1.0 (Forestry GMP)
FY22-23	1.0 (Forestry GMP)
FY24-25	1.0 (Forestry GMP)
FY26-27	1.0 (Forestry GMP)

D__Forestry BMP Evaluation and Lidar Tools

Questions:

1. Why a single program?
    a. Why are these two programs connected? They both seem valuable but distinctly different.
    b. Why are these 2 programs together?
2. Guideline Monitoring Program
    a. The Guideline monitoring program is described as also promoting the use of practices. Is this monitoring program also an implementation program?
    b. Does this program inform on the ground logging and drainage activities by private landowners; and, can private land logging be legally compelled to follow Forest Management Guidelines? Are logging permits for public lands based upon this information and regulated by force of law? Finally, the MN logging industry is experiencing a declining workforce, aging equipment and financial difficulties resulting from decreased harvest - does this program also identify and provide guidance for advising logging to maintain forest health?
    c. Is the Guideline Monitoring Program required training for loggers/forest managers? Is there a penalty if the forest management guidelines are not upheld during a harvest? How do you identify harvest forest sites to evaluate?
3. Of the 200 sites monitored, how many are on public land?
4. Explain how LIDAR Hydrography Program will be accessed and used by the public and clean water initiatives?
5. Why doesn't Division of Forestry use timber sale revenue to pay for this program?
6. Can presenter share estimates of pollution reductions as a result of this program?
7. Does this program assess logging practices run by counties on county land? What percent of logging areas are assessed in a year?

FY28-29 CLEAN WATER FUND PROPOSAL

Program Title:	Stream Flow Monitoring
Program Number (if applicable):	5
Agency/Organization Name:	Minnesota Department of Natural Resources (DNR)
Program website:	https://www.dnr.state.mn.us/waters/csg/index.html; https://www.legacy.mn.gov/projects/stream-flow-monitoring

Program Contact	
Name	Jamison Wendel
Email	jamison.wendel@state.mn.us
Phone	651-259-5661

Person Filling Out Form	
Name	Joy Loughry
Email	Joy.loughry@state.mn.us
Phone	651-539-2109

1. Eligibility Requirements

Proposers must confirm that their proposal meets basic statutory eligibility. Please check each box that applies to certify the following:

☒ **Eligible Use of Funds:** Requested funds will be used in accordance with Minnesota law and Clean Water Fund requirements, outlined in full in Minnesota Statutes 114D.50 Subd. 3. This includes confirmation that this funding request supplements rather than supplants previous non-legacy state funding.

☒ **Accounting and Reporting Capacity:** The proposing organization has experience with or ability to meet accounting and reporting requirements in order ensure appropriate use of funds, as stipulated in Minnesota Statutes 114.50 Subd. 4.

☐ **Mandate Alignment (if applicable):** This proposal supports or fulfills state or federal mandates (i.e. TMDL, Nonpoint Source Pollution, Nutrient Reduction Strategy, Wild Rice protection, etc.).

If yes, please cite applicable statute or rule: _____

2. Abstract

Provide a summary (up to 100 words) that clearly states the purpose of the program, its intended water quality impact, and who it serves. The content here will largely be used as a brief summary when looking across programs, so some degree of redundancy is anticipated with other content in the form.

Stream flow information is essential for understanding the state of Minnesota's waters. Clean Water funding has allowed the DNR to expand the network of stream gages that support planning and implementation for clean water protection and restoration. Specifically, stream flow data are needed to calculate pollution loads for Total Maximum Daily Load studies and pollution reduction plans. Through the Legacy Amendment the DNR will continue to maintain at least one stream gage in each of the 81 major watersheds to provide water quantity information in support of the State's long term water quality trend monitoring efforts.

3. Water Quality Impact

a. Which step of the *Minnesota Water Management Framework* does this program most fit under:

Monitoring, Assessment, and Characterization

b. Overall, how will this program protect, enhance, and restore water quality in lakes, rivers, and streams, protect groundwater from degradation, or protect drinking water sources. Please limit your response to 200 words.

Clean Water funds have allowed the DNR to expand a network of stream gages that are critical for 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 MPCA, MDA, and LGU's 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.

4. Measurable Outcomes and Progress

Limit responses to 50-100 words for each question below.

a. Expected Outcomes for FY28–29 Request

i. Describe measurable and outcome-based goals for the current funding request.

Expected outcomes for FY28–FY29 include reliable streamflow information that directly supports water quality protection. Upgraded gages and improved data checks will give agencies more accurate flow records to calculate pollution levels and understand how water carries nutrients and sediment. Tracking changes in high and low flows will help identify where land use or climate shifts may be harming water quality. These improvements will give watershed partners the solid, science-based information they need to set goals, make decisions, and protect lakes, rivers, streams, and groundwater.

ii. *Describe how outcomes will be tracked, evaluated, and reported.*

Continuously monitor stream flow at 147 sites where partners collect water quality samples. 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.

Stream flow data collected by DNR using clean water funds are published on the Cooperative Stream Flow Monitoring website. Project accomplishments are reported though the Clean Water website.

iii. *(If applicable) For past recipients, describe any planned changes to this program from previous funding cycles, if any.*

N/A

b. *Outcomes from Prior Clean Water Fund Appropriations (if applicable):*

i. *How would you characterize progress made to date? As much as is possible, include outcomes achieved as they relate to the program purpose.*

The program has achieved the goal of establishing 147 long-term stream flow monitoring sites that are comanaged with other agencies who complete water quality assessments around the state.

ii. *How close is the program to reaching its long-term goals?*

While establishing 147 long-term monitoring sites is a major step toward the program's long-term goals, sustained success will depend on the ability to maintain these sites over time. Continued engagement with partner agencies and stakeholders, along with reliable support for ongoing operations, will be essential to ensure the network remains effective and continues to inform statewide water resource decisions.

5. Alignment with Clean Water Council Strategic Plan

a. *For each relevant goal or strategy in the Clean Water Council's Strategic Plan, list the applicable item and briefly explain (50-100 words) how this proposal helps fulfill that objective.*

- Surface Water Protection and Restoration Vision, Goal 1: The stream discharges calculated by DNR at CWF stream gages are used by MPCA, MDA, and LGUs to calculate total maximum daily loads for a variety of pollutant parameter.

- Surface Water Protection and Restoration Vision, Goal 2: Monitoring data contributes to second generation of WRAPS.

b. Please list any other statewide or federal plan this effort supports.

- USGS National Water Quality Program (NWQP) and National Streamflow Network
- EPA's National Water Quality Initiative (NWQI)
- EPA's Healthy Watersheds Program
- 1W1P
- Nutrient Reduction Strategy

6. Interconnection

Please list other Clean Water Fund-supported programs it informs and/or is informed by. Please briefly describe for each (up to 50 words) how Clean Water Funds add to existing efforts.

a. Connected CWF-supported programs:

- MPCA Watershed Pollutant load monitoring program: DNR collects stream flow data so that MPCA can use that data to calculate pollutant loads for a variety of parameters.
- MDA Ambient Water Quality program: DNR collects stream flow data so that MDA can use that data to calculate pollutant loads for fertilizers and pesticides.

b. Connected non-CWF-supported programs:

- N/A

7. Non-CWF Funding

a. Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources?

Yes.

b. If so, please describe what funds are being leveraged, the anticipated amount, and your degree of certainty that the funding is secure. Feel free to add rows if needed.

Funding Source	Anticipated Amount	Degree of Security (%)
General Fund	$60,000	75%
New General Fund	$160,000	75%

c. If additional description or elaboration is needed, please include here. (50 words max)

Other state funding sources are used to maintain stream gages that are used for flood warning and DNR water quantity regulatory needs. CWF supplements that activity for water quality parameters.

8. Long-term funding vision

a. If this proposal is funded, should the Clean Water Council expect future (beyond FY28-29) requests to increase, decrease, or stay about the same? (Do not factor in inflation.)

__ Increase
__ Decrease
_**X**_ Stay the same

b. Do you have an anticipated end date for funding need? If so, when? _____

No

c. Do you intend to continue this program past 2034 in some capacity? _**X**_ Yes __ No __ Unsure

9. Funding Recipients

Please state as a percentage the amount of funding from this request that is anticipated to be pass-through to a non-state agency entity. __0__ %

10. Engagement and Community Value

a. How have program beneficiaries been engaged in the development or evolution of this program? Who are the program partners, if any? (150 words)

DNR has worked closely with MPCA, MDA, LGUs, and the USGS to determine placement of stream gages where DNR collects flow data, and our partners collect water quality data that is combined with flow to determine stream load concentrations.

b. Please describe how this program advances environmental justice and promotes equity. (150 words)

Clean water is essential to all Minnesotans. The DNR joins other agencies in striving to foster environmental justice, engage multiple ways of knowing, and striving to lead in diversity, equity, and inclusion, per the state's 2025 Nonpoint Priority Funding Plan. DEI is also a DNR strategic plan priority via increasing staff's cultural competence, creating a workforce that reflects Minnesota, and continuing to strengthen tribal consultation and build partnerships with diverse communities.

c. If this has been funded through Clean Water Funds in the past, please share 1-3 recent examples of outreach conducted by this program. Links or attachments are allowable.

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

11. CWF Communication Plan

For both new and returning applicants, please describe (under 100 words) or attach the plan for communicating with the public and pass-through recipients about the Clean Water Fund.

We recognize that continued CWF support will only be possible if the public sees the fund at work through stories, videos, field days, awards, and other means. We prominently display the Legacy Amendment logo on program materials and strive to ensure that beneficiaries understand that our staff are available thanks to the CWF. We provide all our CWF supported data freely on our websites for our partners and the public to use.

12. Prior Appropriations

FY10-11	$1,510,000
FY12-13	$3,650,000
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
FY26-27	$5,650,000
TOTAL APPROPRIATED TO DATE	$35,810,000

13. FY28-29 Funding Request

FY28 Request	FY29 Request	FY28-29 TOTAL REQUEST
Hold steady	Hold steady	Hold steady

14. State Employees

If applicable, 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	15.0

E__Stream Flow Monitoring

Questions:

1. How much time/money is spent per year per gauge site?
2. Projected funding changes over time
    a. Currently 147 sites are monitored --- does the DNR need to continue funding the 15 FTEs on an ongoing basis?
    b. Since the stream flow gauges and website are already constructed and paid for, why don't the costs decline?
    c. With the 147 monitors installed will program costs drop over time?

FY28-29 CLEAN WATER FUND PROPOSAL

Program Title:	Monitoring for Pesticides in Surface Water and Groundwater
Program Number (if applicable):	4
Agency/Organization Name:	MN Department of Agriculture (MDA)
Program website:	Pesticide Monitoring: Increased Capacity and Capability | Minnesota Department of Agriculture and www.mda.state.mn.us/pesticide-fertilizer/agricultural-chemical-monitoring-assessment

Program Contact	
Name	Margaret Wagner
Email	Margaret.Wagner@state.mn.us
Phone	651-201-6488

Person Filling Out Form	
Name	David Tollefson
Email	David.tollefson@state.mn.us
Phone	507-718-0914

Eligibility Requirements

Proposers must confirm that their proposal meets basic statutory eligibility. Please check each box that applies to certify the following:

☒ **Eligible Use of Funds:** Requested funds will be used in accordance with Minnesota law and Clean Water Fund requirements, outlined in full in Minnesota Statutes 114D.50 Subd. 3. This includes confirmation that this funding request supplements rather than supplants previous non-legacy state funding.

☒ **Accounting and Reporting Capacity:** The proposing organization has experience with or ability to meet accounting and reporting requirements in order ensure appropriate use of funds, as stipulated in Minnesota Statutes 114.50 Subd. 4.

☒ **Mandate Alignment (if applicable):** This proposal supports or fulfills state or federal mandates (i.e. TMDL, Nonpoint Source Pollution, Nutrient Reduction Strategy, Wild Rice protection, etc.).

If yes, please cite applicable statute or rule: MS 18B.04, 103H.175- The Department of Agriculture is the lead state agency for the regulation of pesticides. The commissioner has the regulatory authority over

the application of pesticides and is responsible for developing and evaluating best management practices and other agricultural practices to protect water resources.

Abstract

Provide a summary (up to 100 words) that clearly states the purpose of the program, its intended water quality impact, and who it serves. The content here will largely be used as a brief summary when looking across programs, so some degree of redundancy is anticipated with other content in the form.

Funding supports the purchase and maintenance of laboratory instruments that provide greater capacity for pesticide monitoring throughout the state. Clean Water funding 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 analyzed on an annual basis. This expansion allowed the MDA to test additional public water supply wells, lakes, rivers, streams, and wetlands, including samples collected on Tribal lands. Data generated support pesticide management decisions to ensure groundwater, surface water, and drinking water resources are protected.

Water Quality Impact

Which step of the Water Management Framework **does this program most fit under:** Monitoring

Overall, how will this program protect, enhance, and restore water quality in lakes, rivers, and streams, protect groundwater from degradation, or protect drinking water sources. Please limit your response to 200 words.

MDA's monitoring activities determine the presence and concentration of pesticides in Minnesota's groundwater and surface water. Data are used to identify pesticides of concern and water quality trends and to evaluate the need for and effectiveness of protective actions.

Pesticide water quality monitoring data are used to identify compounds and/or places where concentrations may exceed established water quality benchmarks, guidance values, or other standards. Both groundwater and surface water samples are analyzed to ensure safe drinking water, and to assess the risk to aquatic life. This funding increased the capacity of the MDA lab, allowing the agency to increase the number of detectable pesticides in water from 44 in 2009 to 185 in 2024. Funding has allowed the MDA to analyze for neonicotinoid insecticides, 4-hydroxychlorothalinil, newly registered pesticide compounds, and to identify emerging issues to protect water resources.

Water monitoring data also are 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.

Measurable Outcomes and Progress

Responses for each bullet (e.g. 1a, 1b, etc.) should be limited to 50-100 words.

1. **Expected Outcomes for FY28–29 Request:**
    a. **Describe measurable and outcome-based goals for the current funding request.**

The MDA reports the number of pesticide analytes, samples analyzed, results reported, and the detections above a reference value. All surface-water detections above a reference value are assessed by the Minnesota Pollution Control Agency (MPCA) to determine if a water quality standard is violated, leading to a designated impairment. The MDA uses data collected from its ambient water quality monitoring network to support watershed and groundwater planning documents, including the MPCA Watershed Restoration and Protection Strategies (WRAPS) and Minnesota Department of Health (MDH) Groundwater Restoration and Protection Strategies (GRAPS). The MDA reports and discusses groundwater detections above reference values with the MDH.

b. Describe how outcomes will be tracked, evaluated, and reported.

The MDA completes extensive data analysis, summarizes findings in an annual report, engages with stakeholders, and uses the information to support Pesticide Management Plan activities.

Water monitoring reports and a pesticide water quality monitoring story map is located here: www.mda.state.mn.us/pesticide-monitoring-reports

c. (If applicable) For past recipients, describe any planned changes to this program from previous funding cycles, if any.

2. Outcomes from Prior Clean Water Fund Appropriations (if applicable):

a. How would you characterize progress made to date? As much as is possible, include outcomes achieved as they relate to the program purpose.

Clean Water Funds supported an increase in the number of detectable pesticides from 44 in 2009 to 185 in 2024. Approximately 1,600 pesticide samples were submitted for analysis during 2024, an increase of more than 600 samples compared to 2009 (before CWF). Total pesticide results reported from the laboratory, including both detections and non-detections, increased from approximately 19,700 in 2009 to approximately 124,500 in 2024. Each year, the MDA reviews analyzed pesticides to compare the method reporting limit (MRL) to reference values developed to protect human health and/or aquatic life. The MDA requests a lower MRL if the reference value is lowered, ensuring relevant information is used when making pesticide management decisions.

How close is the program to reaching its long-term goals?

Using the latest pesticide registration status and new toxicology information, the MDA conducts an annual assessment to determine what, if any, pesticides should be added to the lab method. This assessment process allows the MDA to verify that the correct pesticides are included in testing. Additionally, new active ingredients are registered each year, many of which require monitoring to protect water resources.

Alignment with Clean Water Council Strategic Plan

For each relevant goal or strategy in the Clean Water Council's Strategic Plan, list the applicable item and briefly explain (50-100 words) how this proposal helps fulfill that objective.

Additionally, please list any other statewide or federal plan this effort supports.

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.

- Funding allows the MDA to characterize pesticide contamination in vulnerable aquifers through the expansion of pesticide analytes and additional samples. The MDA further uses this information to implement the Pesticide Management Plan to reduce the risk of pesticide contamination in groundwater.

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

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

- The MDA laboratory supports the Private Well Pesticide Study by providing guidance on where to target sampling and what chemicals to test for, in addition to providing ongoing assistance to validate results from private laboratories.

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

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

The ability to test for additional pesticides and to collect greater numbers of samples allowed the MDA to develop one of the largest pesticide water quality datasets in the country. These dollars were responsible for the addition of many pesticides, including neonicotinoid insecticides, to bolster the scope of data collected through the MDA's ambient monitoring network.

Interconnection

Please list other Clean Water Fund-supported programs it informs and/or is informed by. Please briefly describe for each (up to 50 words) how Clean Water Funds add to existing efforts.

Connected CWF-supported programs:

Pesticide Well Pesticide Sampling (PWPS) Project: The expanded capability of the MDA laboratory supported the PWPS program through guidance on where to target sampling and what chemicals to test for, in addition to providing ongoing assistance to validate results from private laboratories.

WRAPS and GRAPS: The MDA uses pesticide data collected from its ambient water-quality monitoring network to support watershed and groundwater planning documents including the MPCA WRAPS and MDH GRAPS. Data are used to evaluate surface and groundwater quality against drinking water standards.

Connected non-CWF-supported programs:

This funding increased the capability and capacity of the MDA lab—allowing the MDA to increase the number of detectable pesticides in water from 44 in 2009 to 185 in 2024. The analytical advancements supported by the CWF enhanced the MDA's ambient pesticide monitoring network supported by the Pesticide Regulatory Account.

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 what funds are being leveraged, the anticipated amount, and your degree of certainty that the funding is secure. Feel free to add rows if needed.

Funding Source	Anticipated Amount	Degree of Security (%)
Pesticide Regulatory Account (PRA)	TBD	100%

If additional description or elaboration is needed, please include here. (50 words max)

Pesticide Regulatory Account is a fee-based account, funded by fees collected from registration and the sale of pesticides. Contributions from this account will vary depending on the available funds. These funds complement CWF investments by expanding capacity and increasing overall efficiency.

Long-term funding vision

- **If this proposal is funded, should the Clean Water Council expect future (beyond FY28-29) requests to increase, decrease, or stay about the same? (Do not factor inflation into your answer.)**
  - __ Increase
  - __ Decrease
  - x_ Stay the same
- **Do you have an anticipated end date for funding need? If so, when?** ___na____
- **Do you intend to continue this program past 2034 in some capacity?** _x_ Yes __ No __ Unsure

Funding Recipients

Please state as a percentage the amount of funding from this request that is anticipated to be pass-through to a non-state agency entity.

_____0%

Engagement and Community Value

- **How have program beneficiaries been engaged in the development or evolution of this program? Who are the program partners, if any? (150 words)**

The expansion of pesticide analytes and additional sample collection allowed the MDA to collect and share information about the presence and occurrence of pesticides across Minnesota. In addition to supporting the ambient MDA groundwater and surface water monitoring programs, this increased capacity allowed the MDA to expand statewide lake and river monitoring, and to test public water supply wells and resources on Tribal lands. The pesticide water quality data is a major focus of the Pesticide Management Plan; data are presented each year to the Pesticide Management Plan Committee and guides the activities of the Pesticide Education and Promotion Team each year. Water quality data are critical for engagement with stakeholders.

- **Please describe how this program advances environmental justice and promotes equity. (150 words)**
  Testing for pesticides is expensive and not accessible for many citizens. The MDA's statewide monitoring program collects information used to identify areas, and pesticides, that may impact groundwater and surface water resources. Identifying these pesticides and areas allows the MDA to partner with others to raise awareness and share the potential risks to state residents.

- **If this has been funded through Clean Water Funds in the past, please share 1-3 recent examples of outreach conducted by this program. Links or attachments are allowable.**

The MDA presents pesticide water quality data to the Pesticide Management Plan Committee, and results guide the work of the MDA Pesticide Education and Promotion Team. The MDA made several presentations related to the occurrence of neonicotinoids in surface water and worked to educate monitoring programs for pesticides in groundwater that are not widely included in other programs, such as cyanazine and 4-hydroxychlorothalinil.

The MDA recently developed Interactive Water Quality Story Maps (storymaps.arcgis.com/collections/a02130b7f8f24c64a433e60be2fe54f9) that allow users to easily access pesticide water quality data.

To reduce acetochlor concentrations in Southern Minnesota, the MDA referenced monitoring data when conducting targeted outreach to pesticide applicators. Examples include:

- www.mda.state.mn.us/sites/default/files/docs/2025-06/acetochlorsilvercreek.pdf
- www.carvercountymn.gov/Home/Components/News/News/3965/3956?backlist=%2Fdepartments%2Fpublic-services%2Fplanning-water-management%2Fwater-management

CWF Communication Plan

For both new and returning applicants, please describe (under 100 words) or attach the plan for communicating with the public and pass-through recipients about the Clean Water Fund.

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
FY26-27	$740,000
TOTAL APPROPRIATED TO DATE	**$6,315,000**

FY28 Request	FY29 Request	FY28-29 TOTAL REQUEST
Hold Steady	Hold Steady	Hold Steady

[For agency applicants: don't fill out the FY28-29 until you receive agency approval. We will update the form at that time. Until then, please include "New", "Hold steady", "Increase", or "Decrease".]

State Employees

If applicable, indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	2.3
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	2.92

F__Pesticide Monitoring in Surface Water and Groundwater

Comments

This program is long overdue, and I hope it actively engages lakeshore owners - people who generally view the lake as "their lake" and hold the inherent belief that because of higher seasonal property taxes, they "have paid for it."

Questions:

1. What integrated systems would be studied and at what cost to develop?
2. Connection to other easement programs
    a. Would it be more efficient to tie the easement portion of this proposal to one of the existing easement programs?
    b. How does the conservation easement element sync up with the multiple other existing conservation easement programs funded by CWF?
3. How many associations and volunteers are currently involved in the program?
4. Is there a non-agency partner here for the lake steward element? I wonder if a non-profit may be able to tap into a different audience.
5. Will the CWF Legacy logo be on the lake stewards dock sign?

FY28-29 CLEAN WATER FUND PROPOSAL

Program Title:	Pesticide Testing of Private Wells
Program Number (if applicable):	307
Agency/Organization Name:	Minnesota Department of Agriculture
Program website:	www.mda.state.mn.us/pesticide-fertilizer/private-well-pesticide-sampling-project

Program Contact	
Name	Margaret Wagner
Email	Margaret.wagner@state.mn.us
Phone	651-201-6488

Person Filling Out Form	
Name	Kimberly Kaiser
Email	Kimberly.kaiser@state.mn.us
Phone	651-201-6280

Eligibility Requirements

Proposers must confirm that their proposal meets basic statutory eligibility. Please check each box that applies to certify the following:

☒ **Eligible Use of Funds:** Requested funds will be used in accordance with Minnesota law and Clean Water Fund requirements, outlined in full in Minnesota Statutes 114D.50 Subd. 3. This includes confirmation that this funding request supplements rather than supplants previous non-legacy state funding.

☒ **Accounting and Reporting Capacity:** The proposing organization has experience with or ability to meet accounting and reporting requirements in order ensure appropriate use of funds, as stipulated in Minnesota Statutes 114.50 Subd. 4.

☒ **Mandate Alignment (if applicable):** This proposal supports or fulfills state or federal mandates (i.e. TMDL, Nonpoint Source Pollution, Nutrient Reduction Strategy, Wild Rice protection, etc.).

If yes, please cite applicable statute or rule: M.S 18B. The Department of Agriculture is the lead state agency for the regulation of pesticides. The commissioner has the regulatory authority over the application of pesticides and is responsible for developing and evaluating best management practices and other agricultural practices to protect water resources.

Abstract

Provide a summary (up to 100 words) that clearly states the purpose of the program, its intended water quality impact, and who it serves. The content here will largely be used as a brief summary when looking across programs, so some degree of redundancy is anticipated with other content in the form.

The Private Well Pesticide Sampling (PWPS) Project provides homeowners and the public with information about pesticide occurrence in private drinking water wells located in geologically vulnerable areas. Earlier phases of the project analyzed up to 133 pesticide compounds in private wells across agricultural areas with vulnerable groundwater. Those results identified the herbicides cyanazine and atrazine—and their degradates— represented the greatest pesticide-related risk to private well users. Building on these findings, upcoming sampling will prioritize these compounds, along with nitrate and select neonicotinoid insecticides and fungicides in vulnerable aquifers, to ensure continued monitoring of contaminants most likely to affect groundwater quality.

Water Quality Impact

Which step of the Water Management Framework does this program most fit under: Monitoring

Overall, how will this program protect, enhance, and restore water quality in lakes, rivers, and streams, protect groundwater from degradation, or protect drinking water sources. Please limit your response to 200 words.

The primary purpose of the PWPS Project is to provide homeowners with information about the presence of pesticides in their drinking water. Data collected also supports MDA's pesticide management decisions by identifying where and how pesticides are affecting private wells. In addition, the information is used to evaluate the relationship between pesticide and nitrate in areas vulnerable to groundwater contamination from agricultural activities.

From 2016 to 2024, the PWPS project collected more than 7,700 pesticide samples from private wells across 50 counties. Building on this extensive data, ongoing sampling will focus on the herbicides cyanazine and atrazine, the fungicide chlorothalonil, and their degradates, as well as nitrate in vulnerable aquifers. Previous monitoring indicates that nitrate and these agricultural chemicals pose the greatest risk to homeowners relying on private wells in vulnerable groundwater areas of the state. Evaluation of additional pesticides will continue through MDA's ambient groundwater monitoring program, and as new results emerge, the list of analytes included in the private well sampling program may expand. Information collected through this project will support the protection of Minnesotans by assessing private well water for pesticide concerns and offering mitigation options for safe drinking water for wells that are over the drinking water standards.

Measurable Outcomes and Progress

Responses for each bullet (e.g. 1a, 1b, etc.) should be limited to 50-100 words.

1. Expected Outcomes for FY28–29 Request:
    a. Describe measurable and outcome-based goals for the current funding request.

Results will be quantified based on the number of private wells sampled, number of pesticide detections, pesticide exceedances of standards, and the number of treatment systems installed and evaluated. Results are also summarized to support groundwater planning documents such and the Minnesota Department of Health (MDH) Groundwater Restoration and Protection Strategies (GRAPS).

b. Describe how outcomes will be tracked, evaluated, and reported.

Individual well owners are notified of their results directly and reports are produced summarizing the data, which are and posted on the MDA website. Information is also included in the Clean Water Performance Report.

c. (If applicable) For past recipients, describe any planned changes to this program from previous funding cycles, if any.

Hotspot Sampling – Building on previous sampling results, the MDA will conduct targeted hotspot sampling to better define the local extent and magnitude of contamination in areas where clusters of wells exceeded the total cyanazine health risk limit (HRL) of 1,000 ng/L. Sampling also will extend into adjacent areas with vulnerable geology and a history of agricultural land use. As part of this effort, the MDA will focus on untested private wells in Washington, Dakota, Goodhue, and Scott counties to more fully characterize pesticide levels in these high-priority regions.

2. Outcomes from Prior Clean Water Fund Appropriations (if applicable):
   a. How would you characterize progress made to date? As much as is possible, include outcomes achieved as they relate to the program purpose.

      Without investment from the Clean Water Fund, this monitoring would not occur and well owners would not have access to this information.

      From 2016 to the end of 2024, more than 7,700 private drinking water wells were tested for pesticides. Overall, 228 samples (3%) were identified with pesticide concentrations above drinking water standards. Individual well owners were informed about the results from their well, and summary reports are available at www.mda.state.mn.us/pesticide-monitoring-reports. Additionally, point-of-use water treatment systems continue to be evaluated to provide well owners information on effective mitigation strategies for removing pesticides from drinking water.

   b. How close is the program to reaching its long-term goals?

      The program continues to meet expectations to continue monitoring private wells and provide important health risk information to private well users in areas with vulnerable geology.

      - Long-Term Sampling - The MDA will target wells that previously indicated a total cyanazine concentration over 1,000 ng/L, on a three-year reoccurring basis, to assess how concentrations are changing over time. A similar approach may be pursued for other pesticides and pesticide degradates.

Alignment with Clean Water Council Strategic Plan

For each relevant goal or strategy in the Clean Water Council's Strategic Plan, list the applicable item and briefly explain (50-100 words) how this proposal helps fulfill that objective.

Additionally, please list any other statewide or federal plan this effort supports.

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.

o Action: Characterize nitrate and pesticide contamination in vulnerable aquifers

Shallow groundwater monitoring is accomplished through the MDA ambient pesticide monitoring program, while the PWPS program monitors conditions in deeper groundwater where private wells are typically installed. The information collected as part of this proposal aids in the protection of Minnesotans by assessing their drinking water quality for pesticide concerns and characterizes nitrate and pesticide contamination in vulnerable aquifers.

Interconnection

Please list other Clean Water Fund-supported programs it informs and/or is informed by. Please briefly describe for each (up to 50 words) how Clean Water Funds add to existing efforts.

Connected CWF-supported programs:

The pesticide testing of private wells was established as a companion program to the Township Testing Program, which tested more than 32,000 private wells for nitrate from 2013 to2020. PWPS results are summarized to support groundwater planning documents, such and the MDH Groundwater Restoration and Protection Strategies (GRAPS).

Connected non-CWF-supported programs:

The MDA ambient groundwater monitoring program helps to determine if the upper most aquifer water, which represents the most vulnerable groundwater, reflects the same pesticide concentrations as the deeper water that private wells typically draw on. Water quality monitoring results from MDA's ambient groundwater monitoring program are used to inform the PWPS project; additional pesticides may be added to private well sampling in the future. Without Clean Water funds, the MDA would not have the capacity to test for pesticides in private wells. When MDA identifies homeowners with high pesticide concentrations through the PWPS project, MDA uses Pesticide Regulatory Account funds to offer homeowners reverse osmosis treatment for their well water.

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 what funds are being leveraged, the anticipated mount, and your degree of certainty that the funding is secure. Feel free to add rows if needed.

Funding Source	Anticipated Amount	Degree of Security (%)
Pesticide Regulatory Account (PRA)	*TBD*	*100%*

If additional description or elaboration is needed, please include here. (50 words max)

The MDA will use Clean Water funds to enhance the impacts of dedicated funds from the pesticide regulatory account generated from pesticide sales. Contributions from this account will vary depending on the available funds.

Long-term funding vision

- If this proposal is funded, should the Clean Water Council expect future (beyond FY28-29) requests to increase, decrease, or stay about the same? (Do not factor inflation into your answer.)
    - __ Increase
    - __ Decrease
    - _X_ Stay the same
- Do you have an anticipated end date for funding need? If so, when? __No_____
- Do you intend to continue this program past 2034 in some capacity? __ Yes __ No __ Unsure

Funding Recipients

Please state as a percentage the amount of funding from this request that is anticipated to be pass-through to a non-state agency entity.

Approximately 50-60 %

Engagement and Community Value

- How have program beneficiaries been engaged in the development or evolution of this program? Who are the program partners, if any? (150 words

  Individual well owners are notified of their results and summary reports are available on the MDA website and the Minnesota Digital Water Research Library. Homeowners with results near a health risk limit are called directly to discuss the results and options. MDA coordinates with the MDH as a resource to homeowners to discuss the health risks of pesticides in drinking water.

- Please describe how this program advances environmental justice and promotes equity. (150 words)

This program will provide important information on drinking water quality in areas determined to be at risk for the presence of cyanazine and atrazine degradates, select neonicotinoid insecticides, and the fungicide chlorothalonil. Pesticide analysis is expensive ($200-$500) and is often confusing for well owners to understand how to collect samples, what to test for, and where to find appropriate laboratories. The cost alone often precludes many well owners from pesticide testing. Information collected as part of this request will aid in the protection of children and families by assessing their water quality for pesticide concerns and potentially offering mitigation options for safe drinking water for wells that are over the drinking water standard. This program benefits homeowners who are underserved or with limited incomes because they cannot afford water testing on their own.

- If this has been funded through Clean Water Funds in the past, please share 1-3 recent examples of outreach conducted by this program. Links or attachments are allowable.

  Individual well owners are notified of their results and summary reports are available on the MDA website and on the Minnesota Digital Water Research Library.
  - PWPS Project webpage: https://www.mda.state.mn.us/pesticide-fertilizer/private-well-pesticide-sampling-project
  - PWPS Projects Result and Workplans: https://www.mda.state.mn.us/private-well-pesticide-sampling-project-results-work-plans
  - Water Monitoring Reports and Resources as well as a Pesticide Water Quality Monitoring Story Maps: https://www.mda.state.mn.us/pesticide-monitoring-reports
  - Minnesota Digital Water Research Library: https://wrl.mnpals.net/, search “PWPS”

CWF Communication Plan

For both new and returning applicants, please describe (under 100 words) or attach the plan for communicating with the public and pass-through recipients about the Clean Water Fund.

MDA includes the CWF logo in all presentations and state-branded outreach materials. In instances where the logo cannot be displayed, the Clean Water Fund is acknowledged.

PRIOR APPROPRIATIONS	
FY10-11	
FY12-13	
FY14-15	$110,000*
FY16-17	$1,540,000*
FY18-19	$2,000,000
FY20-21	$2,000,000
FY22-23	$870,000
FY24-25	$1,000,000
FY26-27	$1,000,000
TOTAL APPROPRIATED TO DATE	**$8,520,000**

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

FY28 Request	FY29 Request	FY28-29 TOTAL REQUEST
Hold steady	Hold steady	

[For agency applicants: don't fill out the FY28-29 until you receive agency approval. We will update the form at that time. Until then, please include "New", "Hold steady", "Increase", or "Decrease".]

State Employees

If applicable, indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	NA
FY12-13	NA
FY14-15	NA
FY16-17	2.6
FY18-19	2.75
FY20-21	2.1
FY22-23	1.25
FY24-25	2.87
FY26-27	2.87

G__Pesticide Testing in Private Wells

Questions:

1. Please explain how this program relates to the Township Program?
2. In 8 years, it appears 7700 private wells were tested. Does a plan exist to test more wells and if so, how many and over what period of time?
3. While the primary parameters of concern appear to be nitrates, atrazine, & cyanazine, does the scope of testing continue to include acetochlor and chlorpyrifos? As context, these 2 pesticides (acetochlor and chlorpyrifos) have caused waterbodies to be listed on the Impaired Waters list.
4. Why is this an MDA program and not MDH?
5. MDA offers assistance to private well owners when pesticides are detected, why doesn't MDA prevent contamination of private wells? Private well owners receive information, how are the applicators informed of pesticide detection and what actions are taken?
6. Pesticide Regulatory Account
    a. Why isn't the program fully funded by the Pesticide Regulatory Account?
    b. What amount of funding (as a percentage) has been provided to this program through the Pesticide Regulatory Account?

FY28-29 CLEAN WATER FUND PROPOSAL

Program Title:	Contaminants of Emerging Concern
Program Number (if applicable):	XX
Agency/Organization Name:	Minnesota Department of Health
Program website:	**Health Risk Assessment:** www.health.state.mn.us/communities/environment/risk/guidance/dwec/index.html **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

Program Contact	
Name	Kris Klos (HRA)
Email	Kris.klos@state.mn.us
Phone	651-201-4901

Person Filling Out Form	
Name	Shane Olund
Email	Shane.Olund@state.mn.us
Phone	651-201-5357

Eligibility Requirements

Proposers must confirm that their proposal meets basic statutory eligibility. Please check each box that applies to certify the following:

☒ **Eligible Use of Funds:** Requested funds will be used in accordance with Minnesota law and Clean Water Fund requirements, outlined in full in Minnesota Statutes 114D.50 Subd. 3. This includes confirmation that this funding request supplements rather than supplants previous non-legacy state funding.

☒ **Accounting and Reporting Capacity:** The proposing organization has experience with or ability to meet accounting and reporting requirements in order ensure appropriate use of funds, as stipulated in Minnesota Statutes 114.50 Subd. 4.

☐ **Mandate Alignment (if applicable):** This proposal supports or fulfills state or federal mandates (i.e. TMDL, Nonpoint Source Pollution, Nutrient Reduction Strategy, Wild Rice protection, etc.).

If yes, please cite applicable statute or rule: _____

Abstract

Provide a summary (up to 100 words) that clearly states the purpose of the program, its intended water quality impact, and who it serves. The content here will largely be used as a brief summary when looking across programs, so some degree of redundancy is anticipated with other content in the form.

Minnesota Department of Health (MDH) advances science-based public health responses to contaminants of emerging concern (CEC) by strengthening health-based guidance development, water analysis, and laboratory quality assurance. Health Risk Assessment (HRA) develops drinking water guidance, conducts risk assessments, engages stakeholders, and collaborates with state and federal partners. The Public Health Laboratory (PHL) develops analytical methods and improves detection at lower concentrations. The Minnesota Environmental Laboratory Accreditation Program (MNELAP) ensures that accredited laboratories performing analytical water testing are accountable to standards that support defensible and accurate data. Clean Water Funds protect human and ecological health amid evolving contaminant risks.

Water Quality Impact

Which step of the Water Management Framework does this program most fit under:

HRA: Problem Investigation and Applied Research

PHL and MNELAP: Monitoring, Assessment, and Characterization

Overall, how will this program protect, enhance, and restore water quality in lakes, rivers, and streams, protect groundwater from degradation, or protect drinking water sources. Please limit your response to 200 words.

Since 2002, MDH and its partners have worked to assess environmental and public health impacts of PFAS and other CECs in Minnesota. Early in the CEC Initiative, limited data and laboratory methods existed to identify these contaminants in drinking water. Since 2010, expanded state-led sampling has revealed widespread CEC presence, increasing the need to determine whether detected levels pose health risks. The CEC Initiative provides this context by developing health-based water guidance values and offering technical assistance to agencies and stakeholders as demand grows.

This funding will allow the PHL to meet the needs of state agencies assessing CEC impacts through expanding PFAS testing capacities and developing new laboratory methods for measuring other CECs.

The CEC Initiative passes through CWF monies as 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.

MNELAP uses CWF funding to strengthen laboratory accreditation review of systems, staffing, and analysis using a new MN data system and the addition of a CEC technical expert. MNELAP accreditation expands CEC testing capacity statewide, providing essential support to protect water when public demand exceeds PHL capacity.

Measurable Outcomes and Progress

Responses for each bullet (e.g. 1a, 1b, etc.) should be limited to 50-100 words.

1. *Expected Outcomes for FY28–29 Request:*

a. *Describe measurable and outcome-based goals for the current funding request.*
HRA: Increase the development of health-based guidance, including: health-based guidance values, rapid assessments and other screening values, and fish consumption guidance
PHL: Expand non-targeted analyses capabilities of PFAS and pesticides to allow the identification of novel compounds and degradants and develop targeted trace level methods for the detection of 6PPDq and other tire treadwear compounds.
MNELAP: Increase programmatic support for enforcement and onsite assessment reviews; increase available Fields of Testing as methodology and standards evolve.

b. *Describe how outcomes will be tracked, evaluated, and reported.*
HRA: Completed guidance will be documented in the biannual CWF Performance Report, communicated to around 10,000 email subscribers and posted online, and presented at our annual meeting open to the public.
PHL: Outcomes will be tracked via method validations and data reported to partners.
MNELAP: Quantity of accredited laboratories within data system; quantity of onsite assessment reviews; quantity of additional Fields of Testing.

c. *(If applicable) For past recipients, describe any planned changes to this program from previous funding cycles, if any.*
HRA: no changes from previous funding cycles.
PHL: Initial targeted PFAS water testing methods have been developed. We will be continuing to expand capabilities by focusing on non-targeted analyses and additional emerging contaminants methods.
MNELAP: Data system development funds will shift to data system user training and standard operating procedures.

2. *Outcomes from Prior Clean Water Fund Appropriations (if applicable):*
   a. *How would you characterize progress made to date? As much as is possible, include outcomes achieved as they relate to the program purpose.*
   HRA: Since the program's inception, the CEC program has completed 165 screenings, 256 rapid assessments, and developed 53 health-based guidance values.
   PHL: PHL succeeded in increasing PFAS testing capabilities for water samples and method development for some CECs. PFAS sample throughput increased from 3,558 samples in 2023 to 4930 samples in 2024 to 8760 samples in 2025. Work continues for other CEC methods as well as non-targeted analysis.
   MNELAP: Significant progress has been made in a newly MNIT created secure data system; Program Systems and CEC Specialist onboarded.

   b. *How close is the program to reaching its long-term goals?*
   HRA: There are over 80,000 chemicals used in commerce. Most have not been tested for toxicity so there is little to no federal health-based guidance. These chemicals could be detected in Minnesota waters and end up on our CEC workplan.

PHL: The long-term goal of PHL is to maintain staff and equipment to develop methods for CECs and provide timely data to researchers. This group's work will be ongoing as researchers and the public identify new CECs.
MNELAP: The long-term goal for MNELAP is to enhance and maintain primary in-state assessments for accredited labs to strengthen partnerships with laboratories.

Alignment with Clean Water Council Strategic Plan

For each relevant goal or strategy in the Clean Water Council's Strategic Plan, list the applicable item and briefly explain (50-100 words) how this proposal helps fulfill that objective.

Additionally, please list any other statewide or federal plan this effort supports.

HRA develops health-based guidance values for CECs detected in Minnesota waters used for drinking. PHL develops methods and analyzes samples for CECs. MNELAP accredits public and private laboratories to ensure the reported data meets quality assurance standards and provides a public list of accredited labs. Collectively, these programs carry out all analyses for public system Safe Drinking Water Act monitoring and private well water testing—ensuring a defensible data baseline for these resources. This characterization of groundwater and surface water along with health-based guidance information helps prepare Minnesota for future CEC threats and supports the following goals and strategies:

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.

- Strategy: Develop baseline data on Minnesota's groundwater quality, including areas of high pollution sensitivity.

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.

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.

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.

Interconnection

Please list other Clean Water Fund-supported programs it informs and/or is informed by. Please briefly describe for each (up to 50 words) how Clean Water Funds add to existing efforts.

Connected CWF-supported programs:

This program is directly connected to other CWF Programs housed at MDH including the Beach Monitoring, Future of Drinking Water, Drinking Water Ambient Monitoring Program (DWAMP), and Private Well Initiative. In addition, PHL and MNELAP support the MPCA surface water monitoring within the Watershed Restoration and Protection Strategy (WRAPS) framework.

Connected non-CWF-supported programs:

MNELAP accredits laboratories utilized for Well Code testing requirements (which supports the MDH Well Management Section) and Resource Conservation and Recovery Act (RCRA) regulations.

HRA provides health-based guidance values to other programs across the state, including the Minnesota Pollution Control Agency, Minnesota Department of Agriculture, and tribal partners.

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources?

This program does not receive or have plans to receive any other funding from non-CWF sources.

If so, please describe what funds are being leveraged, the anticipated mount, and your degree of certainty that the funding is secure. Feel free to add rows if needed.

Funding Source	Anticipated Amount	Degree of Security (%)

If additional description or elaboration is needed, please include here. (50 words max)

Long-term funding vision

- *If this proposal is funded, should the Clean Water Council expect future (beyond FY28-29) requests to increase, decrease, or stay about the same? (Do not factor inflation into your answer.)*
    - __ Increase
    - __ Decrease
    - _X_ Stay the same
- *Do you have an anticipated end date for funding need? If so, when?* __No___
- *Do you intend to continue this program past 2034 in some capacity?* X Yes __ No __ Unsure

Funding Recipients

Please state as a percentage the amount of funding from this request that is anticipated to be pass-through to a non-state agency entity.

Roughly $50,000 (<1%) will be provided as grants to local communities.

Engagement and Community Value

- *How have program beneficiaries been engaged in the development or evolution of this program? Who are the program partners, if any? (150 words)*

PHL partners with MPCA, MDH DWAMP, and local universities to prioritize CECs for method development, with a long-term goal of creating a robust suite of CEC methods to support safe drinking and ground water sources. MNELAP has also incorporated this CEC initiative when advising and evaluating the operations, equipment, and procedures of laboratories as well as by increasing the available CEC Fields of Testing as methodology and standards evolve for newly discovered contaminants making testing available for the public.

The CEC Initiative has a virtual annual meeting that is open to the public. In addition to Minnesota partner agencies and MDH programs, the public may also request a toxicity and exposure screening for any CEC contaminant.

- *Please describe how this program advances environmental justice and promotes equity. (150 words)*

  Last year, the CEC initiative hosted a webinar series focused on equity issues related to Minnesota water. In addition, the CEC initiative has been working with tribal partners (Prairie Island) on understanding MDH's fish consumption guidance related to PFAS and is assisting Leech Lake tribal community in developing their own fish consumption guidance.

- *If this has been funded through Clean Water Funds in the past, please share 1-3 recent examples of outreach conducted by this program. Links or attachments are allowable.*

Toxicologists in the CEC Initiative attended several PFAS town hall meetings to discuss health effects of PFAS in water and answer questions from the public. These included the communities of Lake Elmo, South Saint Paul, Afton, Cottage Grove, and Hastings. In addition, CEC toxicologists responded to multiple interview requests from media including KSTP, Bloomberg, WCCO, and Consumer Reports (not a complete list) to discuss contaminants, such as PFAS, detected in Minnesota water. MNELAP has responded to public inquiry regarding the availability of testing for CECs including PFAS for private wells as new National Primary Drinking Water Regulations have been released. PHL has communicated PFAS and CEC capabilities to other agencies through recurring PFAS Lateral Team meetings, CEC Roundtable workshops, and Fish Consumption Monitoring Program meetings.

CWF Communication Plan

For both new and returning applicants, please describe (under 100 words) or attach the plan for communicating with the public and pass-through recipients about the Clean Water Fund.

HRA posts updated water guidance values for contaminants reviewed through its program on its website, over GovDelivery email to its subscribers, and hosts an annual meeting open to the public. In addition, the team presents work at public meetings, scientific publications, and conferences. The Clean Water Legacy Logo is acknowledged on all forms of communication. MNELAP will be incorporating the Clean Water Legacy Logo into the homepage of the newly created data system and future trainings to be used by accredited laboratories across the country, as well as third-party assessors and the general public utilizing the accredited laboratory search function.

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
FY26-27	$11,850,000
TOTAL APPROPRIATED TO DATE	**$37,790,000**

FY28 Request	FY29 Request	FY28-29 TOTAL REQUEST
Hold Steady	Hold Steady	Hold Steady

[For agency applicants: don't fill out the FY28-29 until you receive agency approval. We will update the form at that time. Until then, please include "New", "Hold steady", "Increase", or "Decrease".]

State Employees

If applicable, 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	22.9
FY26-27	24

H__Contaminants of Emerging Concern

Comments

Unfortunately a necessary cost that must be fully funded.

Questions:

1. Please give some examples of small grants to local and small programs and any results achieved.
2. Do local water providers cover any of the costs?
3. How has the CEC program prevented CEC contamination?
4. What are possible sources of supplemental funding? Can the Minnesota PFAS Blueprint appropriations from the Environmental Fund be used to cover some costs?
5. Use of funds
    a. How many screenings, rapid assessments and health-based guidance values do you anticipate completing with these funds?
    b. Please provide the total cost for the 24 FTEs.

FY28-29 CLEAN WATER FUND PROPOSAL

Program Title:	River and Lake Monitoring and Assessment
Program Number (if applicable):	
Agency/Organization Name:	Minnesota Pollution Control Agency
Program website:	Water quality | Minnesota Pollution Control Agency

Program Contact	
Name	Kimberly Laing
Email	kimberly.laing@state.mn.us
Phone	651-757-2515

Person Filling Out Form	
Name	Kimberly Laing
Email	kimberly.laing@state.mn.us
Phone	651-757-2515

Eligibility Requirements

Proposers must confirm that their proposal meets basic statutory eligibility. Please check each box that applies to certify the following:

☒ **Eligible Use of Funds:** Requested funds will be used in accordance with Minnesota law and Clean Water Fund requirements, outlined in full in Minnesota Statutes 114D.50 Subd. 3. This includes confirmation that this funding request supplements rather than supplants previous non-legacy state funding.

☒ **Accounting and Reporting Capacity:** The proposing organization has experience with or ability to meet accounting and reporting requirements in order ensure appropriate use of funds, as stipulated in Minnesota Statutes 114.50 Subd. 4.

☒ **Mandate Alignment (if applicable):** This proposal supports or fulfills state or federal mandates (i.e. TMDL, Nonpoint Source Pollution, Nutrient Reduction Strategy, Wild Rice protection, etc.).

If yes, please cite applicable statute or rule:

Chapter 36 - MN Laws, "completing needed statewide assessments of surface water quality and trends according to Minnesota Statutes, chapter 114D."

Sec. 114D.25 MN Statutes, "identify impaired waters and propose a list of the waters for review and approval by the United States Environmental Protection Agency;" and "3) propose to delist waters from the Environmental Protection Agency impaired waters list."

Section 305(b) of the Clean Water Act (CWA), states, territories, and tribes must assess waters every two years to determine whether they are meeting water quality standards (WQS). States issue a biennial 305(b) report that includes results from these assessments and explanation of assessment methodologies and data collection processes. 40 CFR 130.4 and 40 CFR 130.8 -- Water quality report.

Abstract

Provide a summary (up to 100 words) that clearly states the purpose of the program, its intended water quality impact, and who it serves. The content here will largely be used as a brief summary when looking across programs, so some degree of redundancy is anticipated with other content in the form.

Minnesota monitors and assesses surface waters to meet Clean Water Act requirements and support water protection and restoration. The state evaluates water quality every two years, identifies impaired waters, and reports results to the U.S. EPA. Monitoring includes intensive watershed studies, trend and pollutant monitoring, and 10-year lake and stream assessments using physical, chemical, and biological data. The program coordinates partners, supports volunteer monitoring, manages and shares data, tracks long-term and climate trends, and produces reports and analyses to inform water quality management and policy.

Water Quality Impact

Which step of the Water Management Framework does this program most fit under: Monitoring, Assessment and Characterization

Overall, how will this program protect, enhance, and restore water quality in lakes, rivers, and streams, protect groundwater from degradation, or protect drinking water sources. Please limit your response to 200 words.

Minnesota monitors, assesses, and characterizes its surface waters to meet Clean Water Act requirements and support water protection, restoration, and management. Under Section 305(b) of the CWA and Minnesota Statutes chapter 114D, the state evaluates water quality every two years, reports results and methods, identifies impaired waters, and submits findings to the U.S. EPA. The state conducts intensive watershed monitoring in six to eight watersheds annually. Watersheds are assessed on a 10-year cycle using monitoring data. Data on water chemistry, habitat, fish, vegetation, and macroinvertebrates are used to assess standards compliance, estimate pollutant loads, and track progress toward water quality goals.

Additionally, MPCA and partners monitor for trends and pollutant monitoring at 197 fixed sites. For additional trend information, MPCA maintains a continuous nitrate sensor, long-term biological monitoring and sentinel lakes monitoring networks. MPCA tracks Contaminants of Emerging Concern (CEC). The MPCA also supports a robust volunteer water monitoring program that supports both assessment and trend calculation. The results of this work are foundational to the remaining steps within the Watershed Framework. The program coordinates about 1,500 volunteers statewide, communicates results to the public, and produces reports, maps, visualizations, and analyses to inform policy and environmental response efforts.

Measurable Outcomes and Progress

Responses for each bullet (e.g. 1a, 1b, etc.) should be limited to 50-100 words.

- Expected Outcomes for FY28–29 Request:
    a. Describe measurable and outcome-based goals for the current funding request.
        - Completes intensive monitoring an average of 8 watersheds each year (IWM). This includes biological, physical and chemical monitoring of streams and lakes; and supporting citizen and local monitoring. Leading to assessment of Minnesota's waters every two years to determine whether they are meeting water quality standards.
        - Analyzing surface water pollutant change over time and trends by utilizing data collected at 197 Watershed Pollutant Load Monitoring Network stations spread throughout the 80 watersheds on a yearly basis.
        - Supporting Contaminants of Emerging Concern by supporting source investigation and monitoring of random 50 sites in lakes and streams on a 5-year rotation to get a sample of CECs in Minnesota's waters.
        - Maintain continuous nitrate sensor, long-term biological monitoring and sentinel lakes monitoring networks.
        - Maintain robust volunteer water monitoring program.
    b. Describe how outcomes will be tracked, evaluated, and reported.
        - Outcomes are shared in the Clean Water Fund Performance report.
        - Waterbodies are assessed and reported on via the Integrated report to EPA (303(d) and 305(b) lists).
        - Watershed reports through cycle 2 are available on the Watershed information pages.
        - Data are available through many reports, maps, visualizations, and analyses available on Minnesota Pollution Control Agency's website.
        - Data and assessment decisions are made available to other state water programs and to local units of governments.

    c. (If applicable) For past recipients, describe any planned changes to this program from previous funding cycles, if any.

        The MPCA previously received one-time funding to establish a continuous nitrate sensor network. That funding is spent and MPCA anticipates needing to incorporate ongoing support for this new network into its routine monitoring program budget request. Potential reduction of other work depending on funding limitations.

- Outcomes from Prior Clean Water Fund Appropriations (if applicable):
    a. How would you characterize progress made to date? As much as is possible, include outcomes achieved as they relate to the program purpose.

    The Minnesota Pollution Control Agency's watershed monitoring cycles (covering all 80 major watersheds on a 10-year rotation) provide consistent data that partners use to identify problems, track progress, and prioritize actions — a foundation for successful watershed planning. Multiple lakes and streams in Minnesota have been removed from the state's impaired waters list thanks to coordinated watershed actions and conservation practices, reflecting improvements in water chemistry and aquatic life conditions.

Monitoring turns the watershed approach from guesswork into a data-driven system that improves water quality efficiently, fairly, and measurably.

The progress to date has included Watershed Monitoring and Assessment – completed monitoring and assessment throughout entire state (2008-2018), and in process of completing the second rotation of monitoring (2018-2028). Implementing assessment of standards when added such as the recent additions of PFAS and sulfate monitoring and assessment.

MPCA develops partner monitoring through intensive watershed monitoring and watershed pollutant load monitoring opportunities. The River and Lake Monitoring and Assessment Program also supports Large River Monitoring and Assessment.

This program also supports two long-term climate change monitoring networks for lakes, Sentinel lakes, and streams, Long-term biological monitoring of rivers and streams, and the associated data analysis and reporting in conjunction with partners. Additionally, all Minnesotan's can be a part of the Volunteer water monitoring, who currently monitor at over 1500 sites statewide.

In 2025, 21 continuous nitrate sensors at monitoring stations were installed for the Continuous Nitrate Sensor Network. When complete, the network is expected to operate and maintain 35 sensors. The sensors are placed in rivers and streams during ice-free months providing publicly available water quality data on nitrate levels in our surface water 24 hours a day from February to November.

For more information, please see Flowing Forward: Trends in Minnesota's lakes and rivers.

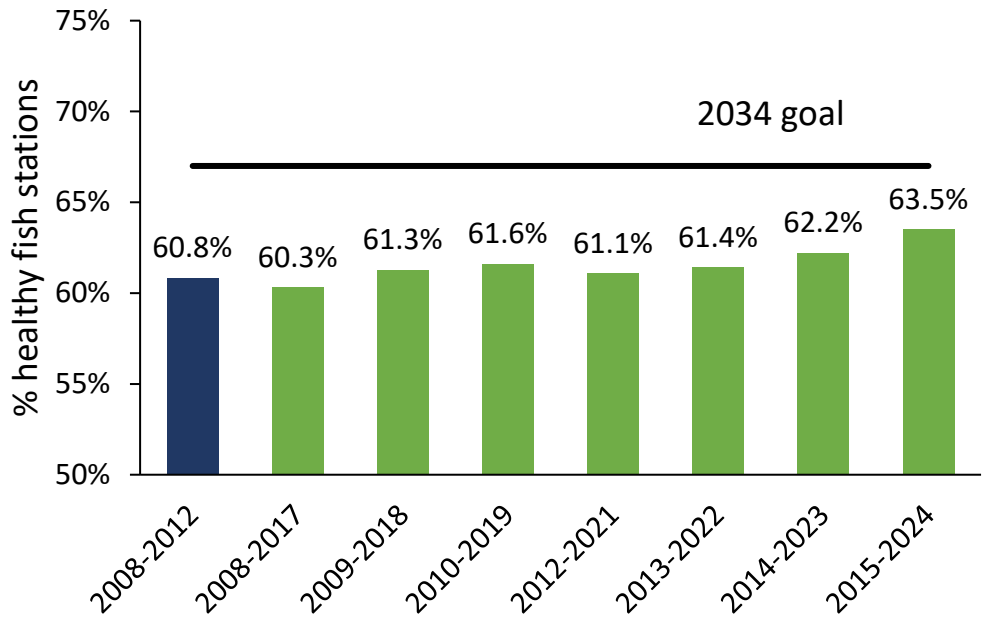
b. How close is the program to reaching its long-term goals?

River and lake monitoring is expected to be an ongoing program into the future. This work is critical to gaging effectiveness of implementation protection and restoration work and change over time. Results in water quality change are slow and steady. In a review of delistings in lakes, there were no "quick fixes" or "silver bullets" to improving water quality. All of Minnesota's delistings took several years, and in most cases over a decade, to achieve the necessary nutrient reductions to meet water quality standards. For more information on this study please see Twenty years of lake nutrient impairment Delistings in Minnesota.

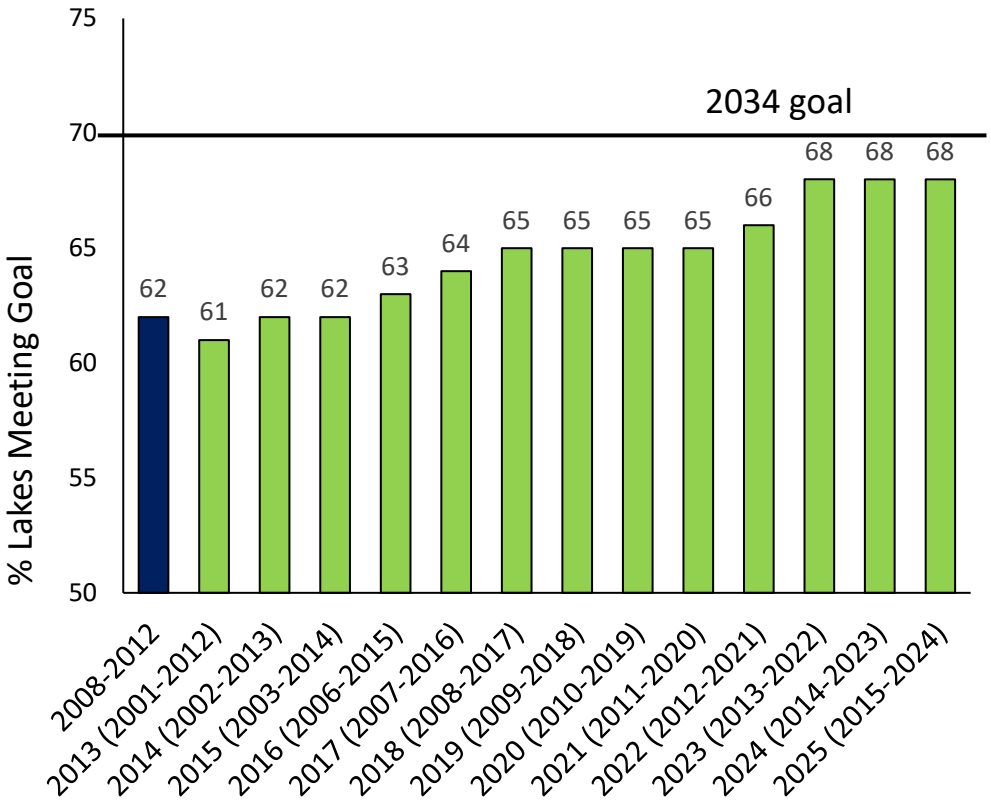
Monitoring is essential to the watershed approach because it provides the evidence needed to understand problems, choose the right solutions, and know whether those solutions are actually working. MPCA documented this in Flowing Forward: Trends in Minnesota's lakes and rivers.

The outputs are meeting goals to monitor and assess the state's waters. The outcome of the watershed approach is a long-term goal. Two long-term goals are from the CWF Roadmap document that identified measures to improve over the lifetime of the CWF.

The graph shows progress towards the goal of 67.8% of fish monitoring sites considered healthy as a goal at the end conclusion of the 25-year amendment. This is compared to the 2008-2012 baseline of which is 60.8%; We've seen a 2.7% improvement over time. There is a 7% increase expected over lifetime of CWF.



The next graph shows progress towards the goal of 70% of lakes meeting the lake eutrophication expectations as a goal at the end conclusion of the 25-year amendment. This is compared to the 2008-2012 baseline of which is 62%; We've seen a 6% improvement over time.



Alignment with Clean Water Council Strategic Plan

For each relevant goal or strategy in the Clean Water Council's Strategic Plan, list the applicable item and briefly explain (50-100 words) how this proposal helps fulfill that objective.

Additionally, please list any other statewide or federal plan this effort supports.

The River and Lake Monitoring and Assessment program supports many aspects of the CWC's Strategic Plan including 3 of the 4 pillars: Drinking water is safe for everyone, everywhere in Minnesota, Minnesotans will have fishable and swimmable waters throughout the state, and All Minnesotans value water and take actions to sustain and protect it.

Drinking water is safe for everyone, everywhere in Minnesota.

The River and Lake Monitoring and Assessment Program supports the Contaminants of Emerging Concern (CEC) through monitoring and assessment activities to examine emerging risks. The program has provided reports on contaminants of emerging concern as needed or requested (e.g. Pharmaceuticals and Chemicals of Concern in Minnesota Lakes).

Minnesotans will have fishable and swimmable waters throughout the state.

The River and Lake Monitoring and Assessment Program monitors and assess on 10-year cycle. The program is working on the completion of second monitoring and assessment cycle. Monitoring turns

the watershed approach from guesswork into a data-driven system that improves water quality efficiently, fairly, and measurably.

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

The program supports specifically the Volunteer Water Monitoring Program. Additionally, the program conducts outreach and works to have local partners engaged and funded in monitoring to support engaging Minnesotans in valuing the state's waters.

Interconnection

Please list other Clean Water Fund-supported programs it informs and/or is informed by. Please briefly describe for each (up to 50 words) how Clean Water Funds add to existing efforts.

Connected CWF-supported programs:

Informs: Monitoring is essential to the watershed approach and shows up as used in many other programs as it provides the evidence needed to understand problems or areas to protect, choose the right solutions, and know whether those solutions are working.

- Watershed Restoration and Protection Strategies–DNR Portion, DNR
- Source Water Protection, MDH (Including the Drinking Water Ambient Monitoring Program)
- Watershed Restoration & Protection Strategies (includes TMDL development), MPCA
- Watershed Management Transition (One Watershed, One Plan), BWSR
- Grants to Watersheds with Approved Comprehensive Watershed Plans (Watershed-based Implementation Funding), BWSR
- Surface and Drinking Water Protection/Restoration Grants: (Projects and Practices), BWSR
- Watershed Partners Legacy (WPL) Grants, BWSR
- Critical Shoreland Protection-Permanent Conservation Easements, BWSR
- Working Lands Floodplain Easements, BWSR
- Conservation Drainage Management and Assistance, BWSR
- Non-point Source Restoration and Implementation, DNR
- Culvert Replacement Cost Share, DNR
- MN Agricultural Water Quality Certification Program, MDA
- NPDES wastewater/stormwater point-source implementation, MPCA
- Chloride Reduction, MPCA
- Point Source Implementation Grant (5G) Program, PFA
- Small Community Wastewater Treatment Program, PFA

Informed by:

- Stream Flow Monitoring Program, DNR
- Lake Index of Biological Integrity, DNR
- Fish Contamination Assessment, DNR
- Monitoring for Pesticides in Surface Water and Groundwater, MDA

The following are documents that share how agencies work together for water quality monitoring.

- Cooperative Surface Water Quality Monitoring System for Minnesota

- Minnesota's Water Quality Monitoring Strategy 2021 to 2031

  Connected non-CWF-supported programs:

All implementation efforts for surface water and some research, evaluation and tools. Many federal programs.

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 what funds are being leveraged, the anticipated mount, and your degree of certainty that the funding is secure. Feel free to add rows if needed.

Funding Source	Anticipated Amount	Degree of Security (%)
Ex. Private landowner contributions	*$100,000*	*100%*
EPA Section 106 grants		
EPA Section 604b grant		
State Environmental Fund		

If additional description or elaboration is needed, please include here. (50 words max)

The MPCA uses federal EPA Section 106 and 604b grants and MPCA's appropriations from the Environmental Fund in conjunction with Clean Water Funds to leverage and support water monitoring across Minnesota. Amounts vary by grant periods and/or biennial appropriation.

Long-term funding vision

- If this proposal is funded, should the Clean Water Council expect future (beyond FY28-29) requests to increase, decrease, or stay about the same? (Do not factor inflation into your answer.)
  - __ Increase
  - __ Decrease
  - _X_ Stay the same
- Do you have an anticipated end date for funding need? If so, when? _____
- Do you intend to continue this program past 2034 in some capacity? _X_ Yes __ No __ Unsure

Funding Recipients

Please state as a percentage the amount of funding from this request that is anticipated to be pass-through to a non-state agency entity.

____13____ %

Historically, approximately 13-15% of the appropriation passed through for water chemistry sampling for local partners to participate in Watershed Pollutant Load Monitoring and monitoring for the Intensive Watershed Monitoring of eight watersheds per year. In the past this has ranged from $2.3M to $3.3M and at times included funds passed through to Red River Watershed Monitoring Board and Friends of MN Valley River Watch.

Engagement and Community Value

- How have program beneficiaries been engaged in the development or evolution of this program? Who are the program partners, if any? (150 words)

  The River and Lake Monitoring and Assessment relies heavily on the relationships with others to meet the program's work objectives. The section serves data to others engaged in water work. Informing others of findings is key to achieving the work.

  The following are documents that share how agencies work together for water quality monitoring.

  - Cooperative Surface Water Quality Monitoring System for Minnesota
  - Minnesota's Water Quality Monitoring Strategy 2021 to 2031

  This work of the surface water monitoring section is foundational to ensure many other programs are supported and ambient water conditions are tracked and communicated. This is done through extensive coordination with other MPCA sections, other state and local agencies, partners, Tribal Nations, EPA Region 5 states, and Upper Mississippi River Basin Association. We could not complete our work without reliable and collaborative partners.

- Please describe how this program advances environmental justice and promotes equity. (150 words)

  Surface Water Monitoring and Assessment has integrated EJ work into standard operating procedures for core monitoring site selection. Through collaboration and communication other monitoring projects that specifically help a community have been carried out when there is capacity to do so (e.g. Prairie Island Indian Community Fish tissue study).

  Surface Water Monitoring and Assessment is working to reduce disproportional impacts via monitoring data that leads to information, guidance, support for implementation to improve water quality. These are activities we can do to support those who can more directly impact Environmental Justice communities.

- If this has been funded through Clean Water Funds in the past, please share 1-3 recent examples of outreach conducted by this program. Links or attachments are allowable.
  - 24-Hour Nitrate Network | Minnesota Pollution Control Agency
  - Flowing Forward: Trends in Minnesota's lakes and rivers
  - Watershed Monitoring and Assessment update reports are available on the Watershed information pages.
  - Additional Outreach events - State Fair, school groups, Children's water festivals, county fairs. Sax-Zim Bog event, Webinars – e.g. Nitrate sensor network Data viewers, web maps, story maps, reports – interactions.

CWF Communication Plan

For both new and returning applicants, please describe (under 100 words) or attach the plan for communicating with the public and pass-through recipients about the Clean Water Fund.

The program uses a variety of approaches for its communications strategy, such as in-person meetings, reports, data dashboards, and media relations. Each communications tactic is tailored to a specific audience. The MPCA emphasizes that Minnesotans voted to approve the Clean Water Fund during the 2008 election, which states that three-eights of a cent sales tax will fund water conservation and restoration projects. An example of communication is the report Flowing Forward: Trends in Minnesota's lakes and rivers. Learn more here: Clean Water Fund | Minnesota Pollution Control Agency.

PRIOR APPROPRIATIONS	
FY10-11	$15M
FY12-13	$15M
FY14-15	$15.2M
FY16-17	$16.7M
FY18-19	$16.6M
FY20-21	$16.3M
FY22-23	$14.8M
FY24-25	$18.1M
FY26-27	$18.9M
TOTAL APPROPRIATED TO DATE	**$146.6M**

Additional CWFs, $2M, were obtained for the building of the continuous nitrate sensor network in FY25-26.

FY28 Request	FY29 Request	FY28-29 TOTAL REQUEST
Increase	Increase	Increase

[For agency applicants: don't fill out the FY28-29 until you receive agency approval. We will update the form at that time. Until then, please include "New", "Hold steady", "Increase", or "Decrease".]

State Employees

If applicable, indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	36
FY12-13	37.9
FY14-15	44.8
FY16-17	42.8
FY18-19	41.3
FY20-21	37.6
FY22-23	35.8
FY24-25	37.7
FY26-27	42.9

The FTE numbers include temporary seasonal staff (hired for April – October or summer months) that are necessary to complete the work and would not be possible without.

I__River and Lake Monitoring

Questions:

1. When will nitrate sensors -35 be completed?
2. When will monitoring of all 80 major watersheds be completed and move to a 10-year rotation?
3. Is the goal of 70% of lakes meeting the lake eutrophication expectations still in place? Give some reasons why the % improvement has remained around 60-63%?
4. How does this monitoring program align with the CWC's strategy to prioritize efforts at addressing "nearly/barely" impaired waters?
5. 42.9 FTEs cost?
6. This program has funded ~42 FTEs, which is a large number. How should we think about whether CWF is supplementing or supplanting MPCA's general funding for surface water assessment? As the larger CWF portfolio of programs matures, should we consider reducing investments in monitoring and redeploying resources toward implementation programs within the MN Water Management Framework?

FY28-29 CLEAN WATER FUND PROPOSAL

Program Title:	Groundwater Assessment
Program Number (if applicable):	
Agency/Organization Name:	Minnesota Pollution Control Agency
Program website:	https://www.pca.state.mn.us/air-water-land-climate/groundwater-monitoring

Program Contact	
Name	Paul Pestano
Email	Paul.pestano@state.mn.us
Phone	651-757-2090

Person Filling Out Form	
Name	Paul Pestano & Erik Smith
Email	Paul.pestano@state.mn.us; erik.smith@state.mn.us
Phone	651-757-2090; 651-757-2719

Eligibility Requirements

Proposers must confirm that their proposal meets basic statutory eligibility. Please check each box that applies to certify the following:

☒ **Eligible Use of Funds:** Requested funds will be used in accordance with Minnesota law and Clean Water Fund requirements, outlined in full in Minnesota Statutes 114D.50 Subd. 3. This includes confirmation that this funding request supplements rather than supplants previous non-legacy state funding.

☒ **Accounting and Reporting Capacity:** The proposing organization has experience with or ability to meet accounting and reporting requirements in order ensure appropriate use of funds, as stipulated in Minnesota Statutes 114.50 Subd. 4.

☒ **Mandate Alignment (if applicable):** This proposal supports or fulfills state or federal mandates (i.e. TMDL, Nonpoint Source Pollution, Nutrient Reduction Strategy, Wild Rice protection, etc.).

If yes, please cite applicable statute or rule: _Minnesota Groundwater Protection Act (Minn. Stat. Ch 103H)_

Abstract

Provide a summary (up to 100 words) that clearly states the purpose of the program, its intended water quality impact, and who it serves. The content here will largely be used as a brief summary when looking across programs, so some degree of redundancy is anticipated with other content in the form.

Most Minnesota residents receive drinking water from groundwater. Protecting and restoring groundwater quality requires reliable data on Minnesota's groundwater resources. Groundwater monitoring and assessment helps the MPCA, and its local and state partners, understand groundwater quality and investigate potential sources of contamination.

The groundwater assessment program is responsible for:

- Monitoring and evaluating the presence and concentrations of non-agricultural pollutants, including contaminants of emerging concern;
- Modeling the interaction between groundwater and surface water;
- Operating a nine well Sentinel Lakes groundwater monitoring network, focused on the four lakes enrolled in the Department of Natural Resources' Sustaining Lakes in a Changing Environment program.

Water Quality Impact

Which step of the Water Management Framework does this program most fit under:

Overall, how will this program protect, enhance, and restore water quality in lakes, rivers, and streams, protect groundwater from degradation, or protect drinking water sources. Please limit your response to 200 words.

The groundwater assessment program falls under the "Monitoring, Assessment, and Characterization" and "Problem Investigation and Applied Research" steps of the Water Management Framework. The groundwater data generated through this program provides essential information for decisions on other CWF-funded activities involving groundwater and drinking water protection.

The groundwater assessment program collects data and information to understand the quality of Minnesota's groundwater, including evaluating trends over time and serving as an early-warning system of contaminants reaching groundwater. The program also partners with other Minnesota groundwater programs in the Department of Natural Resources, Department of Health, and Department of Agriculture, and serves to monitor the progress that these other Clean Water Fund programs have made in protecting and restoring groundwater quality. Groundwater quality data, modeling, and information about surface water and groundwater interactions also inform restoration and protection strategies developed by the MPCA and its partners.

Measurable Outcomes and Progress

Responses for each bullet (e.g. 1a, 1b, etc.) should be limited to 50-100 words.

1. Expected Outcomes for FY28–29 Request:
    - Describe measurable and outcome-based goals for the current funding request.
        - Maintain the groundwater assessment monitoring program by sampling the entire well network.

    - Describe how outcomes will be tracked, evaluated, and reported.
        - Groundwater assessment is a monitoring program, so the goal is more output-based, i.e. monitoring the 270-well network. The program tracks the wells it monitors, sends samples to the MDH lab, and manages the data in MPCA's EQuIS database.
        - The program also partners with other programs to publish the following reports every five years:
            - The condition of Minnesota's groundwater quality (most recent report)
            - Best management practices and data needs for groundwater protection (most recent report)

    - (If applicable) For past recipients, describe any planned changes to this program from previous funding cycles, if any.
        - Inflation, primarily lab analysis costs, have outpaced the program's funding. Staff salaries have increased, but the program expects to keep the same number of FTEs. For FY28-29, the program needs to cut back on the suite of parameters it analyzes, including not analyzing contaminants of emerging concern, if funding cannot be secured to support the current program. Likewise, the program is considering sampling half the network each year.
        - The program is also seeking funds to maintain its analyses of PFAS pollutants, which are currently funded by non-CWF appropriations that may not be available in future biennia.

2. Outcomes from Prior Clean Water Fund Appropriations (if applicable):
    - How would you characterize progress made to date? As much as is possible, include outcomes achieved as they relate to the program purpose.
        - The monitoring network has been developed to its designed intent, which allows for monitoring shallow groundwater with statistical validity in specific land use settings, including rural/undeveloped, sewered residential, un-sewered residential, and commercial.
        - The network also tracks the downward migration of contaminants from the surficial aquifer to the commonly used deeper bedrock aquifers in the southeast portion of the state. This capability was enhanced with the recent addition of four new deep wells that were partially funded with a matching federal grant.

- Several network wells were utilized to fulfill a legislative charge to develop microplastics sampling methodologies and begin investigating their occurrence.

- How close is the program to reaching its long-term goals?
    - This program is ongoing for the future. The groundwater assessment program, through its monitoring of the ambient network, produces data to help support other water programs to protect and improve drinking water sources. The program evaluates long-term trends for pollutants, including chloride and nitrate, that are reported in the MPCA's long-term goals and other reporting mechanisms. The program continues to support the state's long-term groundwater goals but will need to increase its funding in order to maintain the data and information it provides that support groundwater protection.

Alignment with Clean Water Council Strategic Plan

For each relevant goal or strategy in the Clean Water Council's Strategic Plan, list the applicable item and briefly explain (50-100 words) how this proposal helps fulfill that objective.

Additionally, please list any other statewide or federal plan this effort supports.

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.

- Strategy: Develop baseline data on Minnesota's groundwater quality, including areas of high pollution sensitivity.
    - Action: Monitor ambient groundwater quality throughout the state.
    - Action: Characterize natural and synthetic contaminants in groundwater.

    The MPCA's groundwater assessment program is the primary CWF-program that characterizes ambient groundwater quality. The program oversees a network of 270 wells statewide and has sampled the network for non-agricultural pollutants, volatile organic compounds, and contaminants of emerging concern, including PFAS.

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

- Strategy: Support ongoing monitoring of groundwater quantity.
    - Action: Identify groundwater-dependent lakes; streams; calcareous fens, and wetland complexes.

The data from the ambient groundwater network supports the development of WRAPS, GRAPS, and comprehensive watershed management plans. Additionally, the groundwater assessment program uses its staff expertise to analyze groundwater-surface water interactions through statistical methods.

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.
    - Action: Fund adequate monitoring and assessment activities to examine emerging risks.

  The groundwater assessment program, especially in its role in monitoring the ambient groundwater statewide, serves as an early-warning system of contaminants reaching groundwater that may threaten drinking water sources.

The groundwater assessment program supports the MPCA's 2024-2028 Strategic Plan by monitoring ambient groundwater for PFAS. This PFAS work is currently funded by non-CWF appropriations. Additionally, the program reports long-term trends of specific pollutants in the MPCA's long-term goals.

Interconnection

Please list other Clean Water Fund-supported programs it informs and/or is informed by. Please briefly describe for each (up to 50 words) how Clean Water Funds add to existing efforts.

Connected CWF-supported programs:

- MDH Drinking Water Ambient Monitoring Program was set up in the past few years to provide permanent monitoring capacity for CECs and priority contaminants in drinking water sources. DWAMP uses MPCA ambient data to target and prioritize sampling, while also broadening the number and areal distribution of CEC sampling locations.
- The groundwater assessment program data informs BWSR's One Watershed One Plan, GRAPS, and WRAPS.
- A few of the groundwater assessment program's networks are sampled by MNDNR for the County Geologic Atlas Program.

Connected non-CWF-supported programs:

The MDA ambient groundwater pesticide monitoring program (funded by the Pesticide Regulatory Account) provides detailed information on the occurrence and concentrations of pesticides in Minnesota's groundwater resources. MPCA uses these data in The Condition of Minnesota's Groundwater Quality report, and the two programs coordinate sampling of each other's networks.

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 what funds are being leveraged, the anticipated mount, and your degree of certainty that the funding is secure. Feel free to add rows if needed.

Funding Source	Anticipated Amount	Degree of Security (%)
Ex. Private landowner contributions	*$100,000*	*100%*
Environmental Performance Partnership Grant (US EPA)		
State Environmental Fund		

If additional description or elaboration is needed, please include here. (50 words max)

- The MPCA uses other funding to supplement the program. The Environmental Performance Partnership Grant with EPA and MPCA's appropriations from the Environmental Fund cover portions of the staff. Starting in 2024, the MPCA began using the Minnesota PFAS Blueprint appropriations from the Environmental Fund to cover the cost of PFAS analysis. That funding has now been spent.

Long-term funding vision

- If this proposal is funded, should the Clean Water Council expect future (beyond FY28-29) requests to increase, decrease, or stay about the same? (Do not factor inflation into your answer.)
  - __ Increase
  - __ Decrease
  - _X_ Stay the same
- Do you have an anticipated end date for funding need? If so, when? _No end date_____
- Do you intend to continue this program past 2034 in some capacity? _X_ Yes __ No __ Unsure

Funding Recipients

Please state as a percentage the amount of funding from this request that is anticipated to be pass-through to a non-state agency entity.

_____0___ %

Engagement and Community Value

- How have program beneficiaries been engaged in the development or evolution of this program? Who are the program partners, if any? (150 words)

  Program beneficiaries include many other programs within the MPCA (e.g. RMAD-chloride group) as well as other state and federal agencies, tribal nations, universities, and the general public, given that the data are available through the PCA website. The current focus of the ambient monitoring program has been shaped by agency priorities over the years, including nitrate, chloride, PFAS, and CECs. Additional focus has been placed on collecting data on these parameters, as well as detailed interpretation of the results and reporting on trends and occurrences. Program staff work closely with their equivalent MDH and MDA colleagues, frequently sharing information, in addition to collecting samples for specific parameters across the other's networks.

- Please describe how this program advances environmental justice and promotes equity. (150 words)

  The groundwater assessment program collects and analyzes groundwater quality data statewide. These data can be used by Minnesotans to plan for their communities' future, particularly in terms of what is needed to ensure clean and safe drinking water for all. The program annually determines the difference in nitrate levels between areas of potential environmental justice concern and other areas. As lab analysis costs continue to increase and the program will have to be strategic in its sampling frequency or suite of parameters that it analyzes, the program will consider a well's location and prioritize areas of environmental justice concern.

- If this has been funded through Clean Water Funds in the past, please share 1-3 recent examples of outreach conducted by this program. Links or attachments are allowable.

  Outreach has occurred at many levels. As the program field staff travel to well locations across the state, they frequently have impromptu engagements with the public while sampling wells where they educate them on groundwater quality and the ambient program. Field staff also regularly conduct demonstrations on groundwater sampling for college classes (e.g. University of St. Thomas). Senior research staff give talks on program findings at venues ranging from adult learner classes to professional organizations (e.g. MGWA, UMN Water Resources Conference).

CWF Communication Plan

For both new and returning applicants, please describe (under 100 words) or attach the plan for communicating with the public and pass-through recipients about the Clean Water Fund.

The program uses a variety of approaches for its communications strategy, such as in-person/hybrid/virtual meetings, reports, and data dashboards. Each communications tactic is tailored to

a specific audience. The MPCA emphasizes that Minnesotans voted to approve the Clean Water Fund during the 2008 election, which states that three-eighths of a cent sales tax will fund water conservation and restoration projects. Learn more here: Clean Water Fund | Minnesota Pollution Control Agency.

PRIOR APPROPRIATIONS	
FY10-11	$2.25M
FY12-13	$2.25M
FY14-15	$2.25M
FY16-17	$2.36M
FY18-19	$2.36M
FY20-21	$2.36M
FY22-23	$1.9M
FY24-25	$2M
FY26-27	$2M
TOTAL APPROPRIATED TO DATE	**$19.73M**

FY28 Request	FY29 Request	FY28-29 TOTAL REQUEST
Increase	Increase	Increase

[For agency applicants: don't fill out the FY28-29 until you receive agency approval. We will update the form at that time. Until then, please include "New", "Hold steady", "Increase", or "Decrease".]

State Employees

If applicable, indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	3
FY12-13	3
FY14-15	2.9
FY16-17	3.5
FY18-19	4.8
FY20-21	4.8
FY22-23	4.2
FY24-25	4.2
FY26-27	4.2

J__Groundwater Assessment

Questions:

1. Please explain planned changes to program in FY28-29.
2. Will you change the PFAS testing and testing for contaminates of emerging concern? If so, please explain.
3. Relationship with other programs
    a. How does this program compare and contrast with the other groundwater monitoring programs (Aquifer monitoring for supply and DNR WRAPS)? What would be the potential efficiencies and potential tradeoffs of combining programs?
    b. Some of the objectives sound like other programs. Is this program duplicative?

FY28-29 CLEAN WATER FUND PROPOSAL

Program Title:	Red River Basin River Watch and River of Dreams
Program Number (if applicable):	
Agency/Organization Name:	Red River Watershed Management Board
Program website:	https://iwinst.org/front-page/watershed-education

Program Contact	
Name	Rob Sip
Email	rob.sip@rrwmb.us
Phone	218-784-9500

Person Filling Out Form	
Name	Danni Halvorson
Email	danni@iwinst.org
Phone	218-280-0515

Eligibility Requirements

Proposers must confirm that their proposal meets basic statutory eligibility. Please check each box that applies to certify the following:

☒ **Eligible Use of Funds:** Requested funds will be used in accordance with Minnesota law and Clean Water Fund requirements, outlined in full in Minnesota Statutes 114D.50 Subd. 3. This includes confirmation that this funding request supplements rather than supplants previous non-legacy state funding.

☒ **Accounting and Reporting Capacity:** The proposing organization has experience with or ability to meet accounting and reporting requirements in order ensure appropriate use of funds, as stipulated in Minnesota Statutes 114.50 Subd. 4.

☐ **Mandate Alignment (if applicable):** This proposal supports or fulfills state or federal mandates (i.e. TMDL, Nonpoint Source Pollution, Nutrient Reduction Strategy, Wild Rice protection, etc.).

If yes, please cite applicable statute or rule: _____

Abstract

The Red River Basin River Watch (RW) and River of Dreams (ROD) programs provide hands-on watershed education for K–12 students across the Red River of the North Basin. The programs connect youth to local rivers through field-based learning, water quality monitoring, and creative exploration. Their purpose is to build environmental literacy and stewardship by increasing understanding of non-point source pollution, its impacts, and key watershed health concepts. By engaging students, educators, and communities, the programs support improved water quality awareness, long-term protection of MN's waters, and development of the next generation of informed watershed stewards.

Water Quality Impact

These programs align most directly with the **Monitoring, Assessment, and Characterization** step of Minnesota's Water Management Framework, as defined in the 2023 framework document, while also supporting long-term implementation efforts.

The Red River Basin RW and ROD programs protect and enhance water quality by building understanding of watershed processes that affect conditions of rivers and streams through hands-on education and data collection. Student and teacher participants conduct surface water quality monitoring and biological assessments. These activities are designed to increase local and regional knowledge of rivers and streams to identify and understand impacts from point and non-point source pollution and invasive species. The programs are designed to align with the Framework's emphasis on assessing conditions to inform sound water management decisions.

By engaging K–12 students, educators, local resource managers, and communities, RW and ROD also build local capacity and stewardship that are essential for future protection and restoration actions. While these programs do not directly implement physical restoration or regulatory measures, they support the Framework's broader goals by preparing informed and engaged citizens who can participate in, and support, future implementation activities that protect and enhance MN's precious water resources.

Measurable Outcomes and Progress

Responses for each bullet (e.g. 1a, 1b, etc.) should be limited to 50-100 words.

1. Expected Outcomes for FY28–29 Request:
    a. Describe measurable, outcome-based goals, for the current funding request.

    The RW and ROD programs will engage at least 110 classrooms and ~2,400 K–12 students in hands-on watershed science. Program activities include 65 water quality and biological monitoring events across the Red River of the North basin, and a minimum of 16 paddling trips for youth and community members. Educators and students will receive training in field sampling, watershed curriculum, and interdisciplinary teaching. The program will host annual training and basin-wide RW Forums, maintain a centralized database of canoe tracking (ROD) and water quality data, and increase public awareness of watershed issues through student-led outreach and community events.

    b. Describe how outcomes will be tracked, evaluated, and reported.

Program outcomes will be tracked, evaluated and reported through student and educator submission of water quality and biological monitoring data that are recorded in a centralized database. Participation metrics—including classrooms, students, paddling trips, and events—are monitored annually. Surveys, reflections, and teacher evaluations assess learning, environmental literacy, and stewardship. Results are summarized in annual reports and shared with funders, educators, and the public via newsletters, forums, and digital media, ensuring transparency, program accountability, and continuous improvement.

c. (If applicable) For past recipients, describe any planned changes to this program from previous funding cycles, if any. No changes planned.

2. Outcomes from Prior Clean Water Fund Appropriations (if applicable):
   a. How would you characterize progress made to date? As much as is possible, include outcomes achieved as they relate to the program purpose.

The RW and ROD programs have consistently achieved their short- and long-term outcomes. For over 30 years, students and teacher participants have collected and analyzed water quality and biological data, shared findings through presentations and reports, and developed a strong understanding of watershed functions and hydrological processes. Participants apply knowledge in real-world settings, explore non-point source pollution and invasive species, build teamwork and collaboration skills, learn paddling and water safety, and begin exploring natural resource careers. Over three decades, 35 RW schools have participated, with more than 3,000 RW students, 7,000 ROD students, and 15,000 water quality samples collected.

b. How close is the program to reaching its long-term goals?

The programs have consistently demonstrated achievement of its long-term goals. Many past RW and ROD participants have translated their learning into local watershed stewardship projects, continued personal engagement with rivers and streams, and contributed to community water initiatives. Graduates who participate in RW and ROD often serve as ambassadors for clean water, sharing knowledge and raising awareness among their peers and in their communities. While ongoing participation and support are needed to sustain these impacts, the program is on track to cultivate a generation of informed and active watershed stewards.

Alignment with Clean Water Council Strategic Plan

The Red River Basin RW and ROD programs directly support multiple goals and strategies in the Clean Water Council Strategic Plan, particularly those focused on capacity building, education, and broad public engagement.

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

RW and ROD increase community capacity by educating students and educators about watershed systems, water quality challenges, and stewardship options. Each year, the programs engage more than 1,200 students across 38 communities in northwest Minnesota, including tribal nations within the Red River Basin. Through hands-on science, data collection, and student presentations, participants develop

a strong understanding of local water issues and share that knowledge with families and community members, strengthening awareness, stewardship, and local engagement in water protection.

2. Strategy: Maintain and increase capacity of Minnesotans to improve water quality
The RW and ROD programs build water quality literacy among young learners and future stakeholders through early engagement that fosters long-term understanding of nutrient and pollution impacts. Students gain practical skills relevant to local water planning and decision-making, supporting the Council's goal of expanding capacity across diverse audiences. The programs' impact is reflected in alumni career pathways spanning local, regional, and state levels, including positions such as Soil and Water Conservation District Technician, Project Engineer at a regional firm, County Environmental Services Compliance Officer, and Water Quality Planning Bureau Chief for the Montana Department of Environmental Quality.

3. Action: Engage non-traditional audiences with water planning and implementation
By reaching K–12 students in NW Minnesota, an underserved audience in traditional water programs, RW and ROD broaden participation in watershed protection, helping to cultivate future participation in local watershed planning and restoration initiatives.

Other Plans Supported

- **Minnesota Watershed Approach / One Watershed One Plan** – by building watershed literacy and data experience that supports local watershed planning and implementation.
- **Minnesota Nutrient Reduction Strategy** – by equipping students to understand sources and effects of nutrient pollution and engage in prevention.
- **Clean Water Act (Federal)** – Water quality monitoring and community engagement form the foundation for compliance and adaptive management, consistent with federal water quality goals.

Interconnection

The Red River Basin RW and ROD programs both inform and are shaped by multiple Clean Water Fund–supported and complementary initiatives.

Connected CWF-supported programs

Minnesota Watershed Approach / One Watershed One Plan (1W1P)
Data collection and student learning reinforce watershed-scale thinking used in 1W1P. Clean Water Funds support coordinated planning and implementation that give context to monitoring activities and help translate education and data awareness into basin-wide protection and restoration strategies.

Surface Water Assessment Grants (SWAG)
Water quality and biological monitoring complement professional assessments funded through SWAG. Clean Water Funds expand the depth, consistency, and geographic reach of monitoring, while student-collected data build public understanding of assessment results and water quality conditions.

Clean Water Partnership / Watershed-Based Implementation Funding
RW and ROD prepare future participants to engage-in and support the planning and implementation of projects beneficial to MN's waters by building literacy around nonpoint source pollution and watershed health. Clean Water Funds enable on-the-ground practices that students learn about and help advocate for within their communities.

Connected non-CWF-supported programs

MPCA Citizen Stream Monitoring Program
RW aligns with citizen monitoring goals by training students in standardized data collection. While not CWF-funded directly, Clean Water Funds strengthen statewide monitoring frameworks that increase the value and relevance of student-generated data.

Minnesota Department of Education STEAM Initiatives
ROD and RW support statewide STEAM priorities by applying science and math to real water issues. ROD is specifically designed to incorporate the arts as a means of engaging participants in watershed education. Clean Water Funds enhance these efforts by providing authentic environmental contexts and field-based learning opportunities.

U.S. EPA Environmental Education Programs
RW and ROD fully complement USEPA's education goals including increasing awareness and understanding, building skills and competencies, fostering positive attitudes and motivation, promoting responsible actions, supporting educators and Institutions, and facilitating partnerships and community engagement.

Non-CWF Funding

Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources? Yes.

If so, please describe what funds are being leveraged, the anticipated mount, and your degree of certainty that the funding is secure. Feel free to add rows if needed.

Funding Source	Anticipated Amount	Degree of Security (%)
Red River Watershed Management Board	*$350,000*	*100%*

Long-term funding vision

- If this proposal is funded, should the Clean Water Council expect future (beyond FY28-29) requests to increase, decrease, or stay about the same? (Do not factor inflation into your answer.)
    - __ Increase
    - __ Decrease
    - _X_ Stay the same
- Do you have an anticipated end date for funding need? If so, when? __No___
- Do you intend to continue this program past 2034 in some capacity? _X_ Yes __ No __ Unsure

Funding Recipients

Please state as a percentage the amount of funding from this request that is anticipated to be pass-through to a non-state agency entity.

_____100_____ %

Engagement and Community Value

- How have program beneficiaries been engaged in the development or evolution of this program? Who are the program partners, if any?

  Program beneficiaries, local partners, students and educators, play an active role in shaping the RW and ROD programs. Teachers provide regular input through evaluations, surveys, and regional training events, helping refine curriculum, field activities, and alignment with state education standards. Students influence program evolution by reflecting on experiences, presenting findings at the RW Forum, and participating in service-learning and outreach which inform program improvements. Program partners include K–12 schools across the Red River of the North Basin, watershed districts, soil and water conservation districts, universities, and natural resource professionals who contribute technical expertise, data guidance, and field support. Additional partners include state and local agencies, community organizations, and paddling outfitters that assist with river access, safety, and public engagement. These collaborative relationships ensure the programs remain responsive to local watershed needs, educational priorities, and emerging water quality challenges while strengthening community ownership and long-term stewardship.

- Please describe how this program advances environmental justice and promotes equity.

  RW and ROD advance environmental justice and equity by providing accessible, hands-on watershed education to all K–12 students across the Red River of the North Basin, including tribal nations, rural areas, and under-resourced communities. By engaging students from diverse cultural and economic backgrounds in water quality monitoring, field experiences, and community outreach, the programs ensure youth can understand and influence the health of their local water systems. RW and ROD empower underserved students by amplifying their voices in decisions affecting waterways and fostering civic engagement. Teacher training, curriculum support, and partnerships with local agencies and organizations reduce barriers to participation and expand access to scientific tools, paddling programs, and watershed exploration. Together, these efforts create equitable opportunities for environmental literacy, leadership, and active participation in protecting and restoring water resources.

- If this has been funded through Clean Water Funds in the past, please share 1-3 recent examples of outreach conducted by this program. Links or attachments are allowable.

1**. Basin-wide "Canoemobile" kick-off events (Sept. 22–26, 2025):** More than 720 students and teachers from schools across the Red River Basin participated in paddling events on the Red River, Red Lake River, and other waterways as part of a fall watershed education launch, deepening direct connection to local water systems (Grand Forks Herald).
2**. River of Dreams canoe launches and tracking**: Elementary students decorated and launched miniature cedar canoes into rivers in 2025, learning about watershed connectivity and tracking their canoes' journeys downstream, reinforcing real-world understanding of hydrological connections (MPR News).
3. **Annual River Watch Forum**: High school teams from across the region brought water quality data analyses and watershed projects to a basin-wide event where students presented findings, engaged with water professionals, and celebrated watershed science (Bemidji Pioneer).

CWF Communication Plan

The RW and ROD programs will communicate Clean Water Fund (CWF) support through multiple channels including program websites, newsletters, and social media to acknowledge CWF funding and its role in watershed education and water quality monitoring. Public events will feature signage, materials, and verbal recognition. Educators and partners will receive guidance and templates to include CWF acknowledgment in classroom materials, local media, and community updates. All reports, student projects, and outreach products will reference CWF support, ensuring transparent, consistent recognition of the Fund's impact on basin-wide watershed stewardship.

PRIOR APPROPRIATIONS	
FY10-11	$346,000
FY12-13	$200,000
FY14-15	$200,000
FY16-17	$200,000
FY18-19	$250,000
FY20-21	$300,000
FY22-23	$300,000
FY24-25	$326,000
FY26-27	$0
TOTAL APPROPRIATED TO DATE	**$2,122,000**

FY28 Request	FY29 Request	FY28-29 TOTAL REQUEST
$175,000	$175,000	$350,000

[For agency applicants: don't fill out the FY28-29 until you receive agency approval. We will update the form at that time. Until then, please include "New", "Hold steady", "Increase", or "Decrease".]

State Employees

If applicable, indicate the number the full-time state employees supported by the CWF for this program.

FY10-11	
FY12-13	

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

K__River Watch and River of Dreams (Red River)

Comments

- This program was funded in FY24/25 and not funded in FY26/27. This program provides K-12 students an opportunity to be involved in water programming which is good.
- Nice program to support the Vision: All Minnesotans value water and take actions to sustain and protect it
- Does anyone else hear Billy Joel singing River of Dreams when reading this proposal? 😊
- Rather than a direct appropriation, this would better fit as a grant program within the MPCA Lake and River Monitoring program.

Questions:

1. Do the River Watch and River of Dreams programs serve different audiences?
2. Has the program applied for LCCMR funding? Has the program sought funding from the ENRTF Community Grants program? Has the program applied to the Clean Water Legacy Partners grant program?

FY28-29 CLEAN WATER FUND PROPOSAL

Program Title:	Natural Shorelines for Clean Water
Program Number (if applicable):	
Agency/Organization Name:	Minnesota Department of Natural Resources (DNR)
Program website:	https://www.dnr.state.mn.us/ewr/index.html

Program Contact	
Name	Jamison Wendel
Email	jamison.wendel@state.mn.us
Phone	651-259-5661

Person Filling Out Form	
Name	Paul Radomski
Email	paul.radomski@state.mn.us
Phone	218-203-4361

1. Eligibility Requirements

Proposers must confirm that their proposal meets basic statutory eligibility. Please check each box that applies to certify the following:

☒ **Eligible Use of Funds:** Requested funds will be used in accordance with Minnesota law and Clean Water Fund requirements, outlined in full in Minnesota Statutes 114D.50 Subd. 3. This includes confirmation that this funding request supplements rather than supplants previous non-legacy state funding.

☒ **Accounting and Reporting Capacity:** The proposing organization has experience with or ability to meet accounting and reporting requirements in order ensure appropriate use of funds, as stipulated in Minnesota Statutes 114.50 Subd. 4.

☐ **Mandate Alignment (if applicable):** This proposal supports or fulfills state or federal mandates (i.e. TMDL, Nonpoint Source Pollution, Nutrient Reduction Strategy, Wild Rice protection, etc.).

If yes, please cite applicable statute or rule: _____

2. Abstract

Provide a summary (up to 100 words) that clearly states the purpose of the program, its intended water quality impact, and who it serves. The content here will largely be used as a brief summary when looking across programs, so some degree of redundancy is anticipated with other content in the form.

We are proposing an integrated system to address the mounting challenges on Minnesota's most heavily used lakes. About half of Minnesota's natural shorelines have been altered or degraded, diminishing ecological function and lake water quality, as lawn-down-to-the-lake shorelines allow 7-9 times more pollutants to enter a lake than naturally vegetated shoreline. These pollutants accumulate in lakes, creating serious water quality problems. This proposal includes a Lake Steward program administered by Minnesota Lakes and Rivers and a lakeshore conservation easement program managed by Minnesota Land Trust for permanent protection of critical shoreland on popular lakes at risk for land use change. Another element of this overall effort will be submitted to the LCCMR to support a program to develop a certification and extension program for protection and restoration of natural shorelines.

3. Water Quality Impact

a. Which step of the *Minnesota Water Management Framework* does this program most fit under:

Implementation

b. Overall, how will this program protect, enhance, and restore water quality in lakes, rivers, and streams, protect groundwater from degradation, or protect drinking water sources. Please limit your response to 200 words.

These programs will protect and restore water quality in lakes in two ways. First, Minnesota Lakes and Rivers (MLR) will train lake association members to coach property owners on actions to improve their lake stewardship. Lakeshore property owners value healthy lakes and clean water, but the condition of Minnesota's shorelines suggests that many actions are inconsistent with this value. The connection between behavior (both individual and collective), knowledge and values is the issue. A bottom-up, community approach is necessary to provide a more comprehensive solution to this environmental problem. Over 60 lake associations and over 700 neighbor-to-neighbor shoreline reviews have been conducted, with results that guide lakeshore property owners to restore their shorelines and treat stormwater runoff. This project will expand the benefits of informed lake stewardship. Second, Minnesota Land Trust (MLT) will prioritize protecting parcels on headwater lakes in central and northern Minnesota at risk of land use conversion and associated lake water quality impacts. Specifically, lakes targeted will have low watershed to lake area ratios and low lakeshed water transport capacity. It is these kinds of lakes where shoreland protection from land use change will have the greatest lake water quality benefit, as the total pollution load attributable to the proximate shorelands is generally substantial for these lakes.

4. Measurable Outcomes and Progress

Limit responses to 50-100 words for each question below.

a. Expected Outcomes for FY28–29 Request

i. Describe measurable and outcome-based goals for the current funding request.

Lake Steward program – Expand the Lake Steward program to include 30 new lake associations, train over 75 new volunteers, and conduct over 200 shoreline evaluations and stewardship reviews. Lakeshore Conservation Easement program – Permanently protect about 300 shoreland acres and 6,000 feet of natural shoreline across several vulnerable lakes. Outcomes from this project include: 1) maintaining water quality of priority aquatic resources; 2) increased participation of private landowners in lake water quality protection projects; and 3) enhancement of prior state and local investments made in shoreland.

ii. Describe how outcomes will be tracked, evaluated, and reported.

Minnesota Lakes and Rivers' Lake Steward program will use a Survey123 app hosted on ArcGIS Online that tracks evaluations and generates individual and summary reports. Minnesota Land Trust will use the established tracking, evaluation, and reported processes for conservation easements. The land protected through conservation easements will be sustained through the best standards and practices for conservation easement stewardship. The Minnesota Land Trust is a nationally accredited and insured land trust with a very successful stewardship program that includes annual property monitoring, effective records management, addressing inquiries and interpretations, tracking changes in ownership, investigating potential violations and defending the easement in case of a true violation. Funding for these easement stewardship activities is included in the project budget. Given the typical complexity of easement processing, the grant completion for this program will require 3 to 4 years.

iii. (If applicable) For past recipients, describe any planned changes to this program from previous funding cycles, if any.

n/a

b. Outcomes from Prior Clean Water Fund Appropriations (if applicable):

i. How would you characterize progress made to date? As much as is possible, include outcomes achieved as they relate to the program purpose.

n/a

ii. How close is the program to reaching its long-term goals?

n/a

5. Alignment with Clean Water Council Strategic Plan

a. For each relevant goal or strategy in the Clean Water Council's Strategic Plan, list the applicable item and briefly explain (50-100 words) how this proposal helps fulfill that objective.

- Support local efforts to engage lakeshore property owners and private landowners – this action specifically mentions the Lake Steward program, and this proposal seeks to advance that program. The conservation easement program is consistent with the plan's desire to protect lands in the Upper Mississippi River headwaters and shorelands of groundwater-dependent lakes.

b. Please list any other statewide or federal plan this effort supports.

- Nutrient Reduction Strategy
- Nonpoint Source Management Plan

6. Interconnection

Please list other Clean Water Fund-supported programs it informs and/or is informed by. Please briefly describe for each (up to 50 words) how Clean Water Funds add to existing efforts.

a. Connected CWF-supported programs:

- Lake Steward property reviews can feed into shoreline restoration efforts identified in 1W1Ps. Lakeshore conservation easements would also use information in 1W1Ps to further prioritize parcels for permanent protection.

b. Connected non-CWF-supported programs:

- The Lakeshore conservation easements add to efforts from the Forest Legacy and Forest Stewardship programs, which also seek to protect water quality.

7. Non-CWF Funding

a. Will this program receive or request other funding from non-CWF sources, or eventually leverage non-CWF sources?

Yes

b. If so, please describe what funds are being leveraged, the anticipated amount, and your degree of certainty that the funding is secure. Feel free to add rows if needed.

Funding Source	Anticipated Amount	Degree of Security (%)
Landowner donated easement value	$110,000	30%
Lake steward new volunteer time	>1000 hours	90%
Lake association purchase of steward signs	$8,000	90%

c. *If additional description or elaboration is needed, please include here. (50 words max)*

The Natural Shoreline Partnership identified the need for training for technical staff, consultants and landscape contractors, so this proposal is part of system that includes UMN-Extension, who are advancing a LCCMR proposal for technical training on lakeshore restorations.

8. Long-term funding vision

a. *If this proposal is funded, should the Clean Water Council expect future (beyond FY28-29) requests to increase, decrease, or stay about the same? (Do not factor in inflation.)*

_**X** Increase
__ Decrease
__ Stay the same

b. *Do you have an anticipated end date for funding need? If so, when?* _____

No

c. *Do you intend to continue this program past 2034 in some capacity?* _**X** Yes __ No __ Unsure

9. Funding Recipients

Please state as a percentage the amount of funding from this request that is anticipated to be pass-through to a non-state agency entity. __100__ %

10. Engagement and Community Value

a. *How have program beneficiaries been engaged in the development or evolution of this program? Who are the program partners, if any? (150 words)*

The development of this program was accomplished by discussions with members of the Minnesota Natural Shoreline Partnership, which is an organization comprised of non-profit organizational leaders and government (local, state, tribal) natural resource professionals concerned about the continuing loss of shoreline vegetation, which helps protect clean water, habitat, lakeshore character, and recreation. The program partners will be lake associations, lakeshore property owners, and the public recreating on lakes.

b. *Please describe how this program advances environmental justice and promotes equity. (150 words)*

Add any noteworthy program-specific information, if applicable, in a new paragraph following the standardized DNR response below, and keep the entire response within the 150-word limit.

Clean water is essential to all Minnesotans. The DNR joins other agencies in striving to foster environmental justice, engage multiple ways of knowing, and striving to lead in diversity, equity, and inclusion, per the state's 2025 Nonpoint Priority Funding Plan. Expanding diversity, equity, and inclusion is also a DNR strategic plan priority via increasing staff's cultural competence, creating a workforce that reflects Minnesota, and continuing to strengthen tribal consultation

and build partnerships with diverse communities. MLR uses a civic organizing framework in all its work, and will do so with the Lake Steward program. The Lakeshore conservation easement program advances environmental justice and promotes equity by MLT actively working with local communities, county SWCD's, Tribal interests, and the DNR to identify protection priorities and opportunities. This effort will be formalized with a technical advisory committee of local resource management experts which reviews easement applications.

c. *If this has been funded through Clean Water Funds in the past, please share 1-3 recent examples of outreach conducted by this program. Links or attachments are allowable.*

- **n/a**

11. CWF Communication Plan

For both new and returning applicants, please describe (under 100 words) or attach the plan for communicating with the public and pass-through recipients about the Clean Water Fund.

Add (or attach) any noteworthy program-specific information, if applicable, following the standardized DNR response below, keeping the entire response within the 100-word limit.

We recognize that continued CWF support will only be possible if the public sees the fund at work through stories, videos, field days, awards, and other means. We prominently display the Legacy Amendment logo on program materials and strive to ensure that beneficiaries understand that our staff are available and understand the outcomes of the work are made possible through support from the CWF.

Lake Steward program – MLR will engage lake associations across the state and work with the Natural Shoreline Partnership to raise awareness on the importance of natural shorelines for water quality via digital ad videos, social media, and traditional media. The goal will be to improve public outreach with a sustained, consistent message from all partner organizations.

Lakeshore Conservation Easement program – MLT will leverage its existing outreach efforts through social and traditional media to raise awareness about funding availability for conservation easements with potential landowners in targeted areas. The goal will be to secure a pipeline of high-quality easement projects that meet the acreage and shoreline goals within the available budget constraints.

12. Prior Appropriations

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

FY24-25	$
FY26-27	$
TOTAL APPROPRIATED TO DATE	$

13. FY28-29 Funding Request

Agency applicants: Don't include FY28-29 dollars until you receive agency approval. We will update the form at that time. Until then, please include "New", "Hold steady", "Increase", or "Decrease".

DNR Note: total request is $1.8M; $1.7M cons. easement; $100K lake steward]

* - Conservation easement work will require 3 to 4 years for grant completion (LCCMR allows 3 years and LSOHC allows 4 years)

FY28 Request	FY29 Request	FY28-29 TOTAL REQUEST
New	New	New *

14. State Employees

If applicable, indicate the number the full-time state employees supported by the CWF for this program.

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

X__Natural Shorelines for Clean Water

Comments

This program is long overdue, and I hope it actively engages lakeshore owners - people who generally view the lake as "their lake" and hold the inherent belief that because of higher seasonal property taxes, they "have paid for it."

Questions:

1. What integrated systems would be studied and at what cost to develop?
2. Connection to other easement programs
    a. Would it be more efficient to tie the easement portion of this proposal to one of the existing easement programs?
    b. How does the conservation easement element sync up with the multiple other existing conservation easement programs funded by CWF?
3. How many associations and volunteers are currently involved in the program?
4. Is there a non-agency partner here for the lake steward element? I wonder if a non-profit may be able to tap into a different audience.
5. Will the CWF Legacy logo be on the lake stewards dock sign?

FY28-29 CLEAN WATER FUND PROPOSAL

Program Title:	River Watch in the Minnesota Valley
Program Number (if applicable):	
Agency/Organization Name:	Friends of the Minnesota Valley
Program website:	

Program Contact	
Name	Ted L. Suss
Email	tedLsuss@gmail.com
Phone	507 828 3377

Person Filling Out Form	
Name	Ted L. Suss
Email	tedLsuss@gmail.com
Phone	507 828-3377

Eligibility Requirements

Proposers must confirm that their proposal meets basic statutory eligibility. Please check each box that applies to certify the following:

x **Eligible Use of Funds:** Requested funds will be used in accordance with Minnesota law and Clean Water Fund requirements, outlined in full in Minnesota Statutes 114D.50 Subd. 3. This includes confirmation that this funding request supplements rather than supplants previous non-legacy state funding.

x **Accounting and Reporting Capacity:** The proposing organization has experience with or ability to meet accounting and reporting requirements in order ensure appropriate use of funds, as stipulated in Minnesota Statutes 114.50 Subd. 4.

☐ **Mandate Alignment (if applicable):** This proposal supports or fulfills state or federal mandates (i.e. TMDL, Nonpoint Source Pollution, Nutrient Reduction Strategy, Wild Rice protection, etc.).

If yes, please cite applicable statute or rule: _____

Abstract

Provide a summary (up to 100 words) that clearly states the purpose of the program, its intended water quality impact, and who it serves. The content here will largely be used as a brief summary when looking across programs, so some degree of redundancy is anticipated with other content in the form.

River Watch is a hands-on learning program operated by Friends of the Minnesota Valley for students in 28 high schools nd in some middle schools during the 2025-2026 school year. Beginning with an in-classroom lesson aligned with state Science standards, students make 2 trips per semester to a river or stream to conduct water quality monitoring using a multi-function electronic probe and other tools. Macroinvertebrate surveys are conducted during the stream visits. Data is reported through the MNPCA Citizen Science Portal.

Most work is in the Minnesota River Basin, two High Schools serving Latino and Indigenous students in Minneapolis participate.

Water Quality Impact

Which step of the Water Management Framework does this program most fit under: Monitoring Assessment and Characterization

Overall, how will this program protect, enhance, and restore water quality in lakes, rivers, and streams, protect groundwater from degradation, or protect drinking water sources. Please limit your response to 200 words.

By educating students and faculty from schools across the Minnesota River basin on surface water quality, the causes of water quality impairment and pollution, and educating them on actual actions individuals, property owners, businesses, and local units of government, these students and the others they influence know and in the future can, with a high degree of certainty, and will work to improve and protect water quality.

The curriculum we use for the in-classroom portion of the program was developed in a Science curriculum workshop presented by the MInnesota Department of Education to align with recently adopted Minnesota Science standards. We leave a copy of that curriculum with participating teacher for future use in other classrooms.

The Water Quality Data our River Watch program collects is entered into the citizen science MPCA portal. The longitudinal data can inform policymakers of the changing conditions of each river or stream sampled.

Measurable Outcomes and Progress

Responses for each bullet (e.g. 1a, 1b, etc.) should be limited to 50-100 words.

1. Expected Outcomes for FY28–29 Request:
    a. Describe measurable and outcome-based goals for the current funding request.
        i.Participation by 1000+ students through classroom and sampling field trips

ii.Increased student knowledge about water quality, specific water pollutants, sources and causes of pollution, steps that can be taken individually or by organizations and units of government to improve and protect water quality
iii.increased interest by students in pursuing scientific careers
iv.Participation by 30+ middle schools and high schools schools
v.increased faculty knowledge about water quality, water quality monitoring techniques monitoring techniques, and related subject matter for 30+ faculty.

b. Describe how outcomes will be tracked, evaluated, and reported.

i.Student and school participation numbers will be recorded
ii.Student satisfaction and water quality knowledge gained by students will be obtained thorough a student evaluation questionnaire
iii.Increased faulty knowledge and value of available curriculum will be obtained thorough a faculty evaluation questionnaire.

c. (If applicable) For past recipients, describe any planned changes to this program from previous funding cycles, if any.

Following each year, faculty feedback is sought and used to improve the program. This program improvement work has been done each year regardless of the source of program funding.

2. Outcomes from Prior Clean Water Fund Appropriations (if applicable):
   a. How would you characterize progress made to date? As much as is possible, include outcomes achieved as they relate to the program purpose.

Since beginning the program during the 2017-2018 school year with five “text “ school teams, the program has grown to include 28 teams during the 2025-2026 school year. One of our outcomes has always been to increase participation.

Among the additional school teams added to the program is a team from Minneapolis based Hiawatha Academy (95%+ Latino enrollment) and a team from All Nations Program at Mpls South High School which is exclusively indigenous student enrollment.

Since beginning the program, our classroom component has moved from explaining how to use the monitoring equipment and how to report the data, to including a formal water quality lesson aligned with state Science standards as described above.

Working with the MN Valley Izaak Walton League, we have been able to offer River Watch to elementary aged students participating in that partner organization’s Green Summer program reaching hundreds of students.

Working with the MSU Mankato Minnesota River Data Center, we have been able to offer river Watch at summer field days that serves hundreds of students

b. How close is the program to reaching its long-term goals?

On a project content basis, River watch has achieved its original goal of developing and offering a strong Science standards aligned program.

Our major unachieved goal is to have the resources to meet the demand from aloof the schools in the Minnesota river basin that wish to join and participate. As new students enter school each year, we will never reach a point in time when the program is unneeded and can be said to have accomplished aloof its goals.

Alignment with Clean Water Council Strategic Plan

For each relevant goal or strategy in the Clean Water Council's Strategic Plan, list the applicable item and briefly explain (50-100 words) how this proposal helps fulfill that objective.

Additionally, please list any other statewide or federal plan this effort supports.

Groundwater Goals and Drinking Water Protection Goals are not directly related to the River Watch program other than students gaining an enriched understanding of the relationship between surface water, ground water and drinking water source protection.

The core purpose of river Watch is summarized in the following from the Strategic Plan

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.

While data collected is of value, the primary purpose of River Watch is to educated students, future community leaders and professionals about Water Quality, threats to water quality, how landscape changes cause changes in hydrology and geomorphology, and build within those students a personal commitment to protecting water quality. This touches on every goal within this vision.

The more frequently we can bring young people to the water's edge to learn about and think about how human decisions and actions affect water quality, the greater the probability those young people will grow into responsible citizens and decisionmakers who will take positive action to protect our water resources.

Adding something such as a Water Quality component to a school district curriculum is time consuming, complex, and difficult. The River Watch program bypasses many of the barriers that prevent lessons about water quality from being added to the school curriculum. The river acth curriculum already exists, itis aligned with State Science standards, and it comes to the school district with trained staff at no cost to the school.

Many education studies have shown that hands on experiential learning is far superior to most other teaching methods. Especially when the subject matter is easily reduced to a theoretical

lecture. River Watch brings water quality science to life and lays the foundation for public decisions that will protect water quality far into the future and far after legacy funding ends.

Interconnection

Please list other Clean Water Fund-supported programs it informs and/or is informed by. Please briefly describe for each (up to 50 words) how Clean Water Funds add to existing efforts.

Connected CWF-supported programs:

Data is submitted through the MPCA Citizen Science Portal, it is unknown to Friends of the Minnesota Valley if that data is in anyway used by CWQF programs

Connected non-CWF-supported programs:

FMV River Watch adds to the Science Curriculum offerings of school districts. We also provide educational opportunity for Hiawatha Academy(95% plus Latino) and All Nations Program (indigenous) in Minneapolis.

River Watch is a component of summer youth programming of the Izaak Walton League and MSU-Mankato Minnesota River Data Center.

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 what funds are being leveraged, the anticipated mount, and your degree of certainty that the funding is secure. Feel free to add rows if needed.

Funding Source	Anticipated Amount	Degree of Security (%)
Friends of the Minnesota Fundraising	*$10,000*	*100%*
Watershed Board Contributions	$10,000	75%
Annual Recurring Foundation support	$5,000	75%
Support from partner organizations	$5,000	90%

If additional description or elaboration is needed, please include here. (50 words max)

Friends fundraising history exceeds $10,000 annually, Verbal commitments from staff of. foundations and watershed districts are secured but subject to annual budget allocation. One partner "purchases" the services of our River Watch team to provide summer programming for the partner organization. Future plans are for this to continue.

Long-term funding vision

- If this proposal is funded, should the Clean Water Council expect future (beyond FY28-29) requests to increase, decrease, or stay about the same? (Do not factor inflation into your answer.)
    - _X_ Increase To accommodate more school teams
    - __ Decrease
    - __ Stay the same
- Do you have an anticipated end date for funding need? If so, when? Need to continue the program as new students enter school _____
- Do you intend to continue this program past 2034 in some capacity? _X_ Yes __ No __ Unsure

Funding Recipients

Please state as a percentage the amount of funding from this request that is anticipated to be pass-through to a non-state agency entity.

____100_____ % Pass through to Friends of the Minnesota River

Engagement and Community Value

- How have program beneficiaries been engaged in the development or evolution of this program? Who are the program partners, if any? (150 words)
  Program partners are the school districts enrolled in the program. A list of 2025-2026 school partners is attached. When the program was conceived, based on the River Watch Program in the Red River in 2017-2018, five school district teams were invited to join on a design implementation basis. Intensive feed back was sought on a regular basis from those five teams. That feedback guided program changes, mostly in such areas as scheduling, classroom instruction, and addressing transportation.

  As the program has grown and matured, feedback was formally solicited on an annual basis and informal feedback on a continuous basis. The most important recommended change was to develop a formal water quality curriculum aligned with the Minnesota State Science standards. This was done by sending sampling staff through a MDE Science curriculum development seminar.

  As noted elsewhere, annual feedback is formally sought.

- Please describe how this program advances environmental justice and promotes equity. (150 words)

Outreach efforts have been made each year the program has been operated to discuss River Watch with the two indigenous communities based in the Minnesota Valley to begin community based River Watch teams. Those discussion have not yet led to formal participation. This outreach to the indigenous tribal communities continues.

A formal outreach was made to two BIPOC programs, Hiawatha Academy, a Latino Charter School in Minneapolis and the All Nations Program an indigenous magnet program at South High School in Minneapolis. Both of these schools have participated in River Watch.

Traditional Ecological Knowledge (TEK) is an indigenous worldview connecting humans to nature. Working with a TEK expert, the Friends River Watch staff are exploring the development of a second classroom lesson that would incorporate the learner outcomes of River Watch with the teachings of TEK. This integration will begin in 2026-2027 but would be fully complete by the end of the request funding period.

- If this has been funded through Clean Water Funds in the past, please share 1-3 recent examples of outreach conducted by this program. Links or attachments are allowable.

Because River Watch is a partner(school districts) participation program, Outreach to every participating school district is necessary every year as is outreach to schools not yet participating. Outreach to previous participants is in person with faculty. Outreach to new school partners occurs through emails to district administrators and selected staff as well telephone and in person visits. Our long term goal would be to engage every school in the River basin in the River Watch program.

CWF Communication Plan

For both new and returning applicants, please describe (under 100 words) or attach the plan for communicating with the public and pass-through recipients about the Clean Water Fund.

Numerous communications are made each year to retain schools and recruit new participating schools. This occurs through emails, phone calls and in person visits. At present, we have a waiting list of schools wanting to participate, Due to this circumstance outreach to new schools has not been a recent priority.

Every water quality sampling event is newsworthy in the local community. Local news media are informed of all sampling events. Every communication will include reference to the Clean Water Fund as the source of funding'.

Another communication tool is to inform local service organizations of the River Watch program in their community. High school River Watch participants have been invited as guest speakers by service organizations. Every presentation will include attribution to the Clean Water Fund as the source of funding.

All data collected will be reported through the MPCA Citizen Science Portal

PRIOR APPROPRIATIONS	
FY10-11	0
FY12-13	0
FY14-15	0
FY16-17	0
FY18-19	0
FY20-21	0
FY22-23	0
FY24-25	$100,000 direct legislative appropriation
FY26-27	0
TOTAL APPROPRIATED TO DATE	**$100,000**

FY28 Request	FY29 Request	FY28-29 TOTAL REQUEST
$75,000	$75,000	$150,000

[For agency applicants: don't fill out the FY28-29 until you receive agency approval. We will update the form at that time. Until then, please include "New", "Hold steady", "Increase", or "Decrease".]

State Employees

If applicable, indicate the number the full-time state employees supported by the CWF for this program.

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

Addendum to FY 28-29 River Watch CWF application

Subject: Expansion of River Watch into the Cannon/Strait River Watershed

Several persons connected with the Friends of the Minnesota Valley (FMV) or the FMV River Watch Program have professional, family, or residential connections to the Cannon River-Straight River Watershed. Through those connections, schools, teachers and even school board members in the Cannon/Straight River Watershed have become aware of the FMV River Watch Program. As a result of inquiries from schools in the Cannon/Straight River Watershed, FMV has begun to explore a full scale River Watch expansion into that watershed.

An FMV leader who lives in that watershed and is a former school administrator has contacted several school leaders and has received enthusiastic support for a River Watch program in which their schools could participate.

The leadership of FMV has met with and had numerous conversations with Clean River Partners, a successful NGO operating in the Cannon and Straight River watershed, about the possibility of Clean River Partners joining in a collaborative effort to offer River Watch in this watershed. Clean River Partners has expressed great interest in accomplishing this goal.

Some advantages:

- The FMV River Watch program already exists and expansion into nearby schools within the Minnesota River Basin has already successfully taken place.
- There is no need for the expense of new program design
- The two major watersheds, the Cannon River and the Minnesota River watersheds are geographically adjacent to each other.
- Clean River Partners, already operating in the Cannon River watershed, is supportive of this expansion.

The cost for full expansion of the FMV River Watch would be approximately the same as the request to which this note is an addendum; $75,000 per fiscal year.

Funds appropriated for FY 28-29 will not be available until the 27-28 school year. This provides a full year during which details of the River Watch relationship between FMV and Clean River Partners can be formulated and finalized.

During this coming year, additional schools can be contacted and firm school participation commitments can be obtained.

A positive response at this time from the Clean Water Council will further encourage these FMV efforts to expand River Watch into the Cannon and Straight River Watershed.

XX__River Watch (Minnesota River)

Comments

- This program was funded in FY24/25 and not funded in FY26/27. This program provides K-12 students an opportunity to be involved in water programming which is good.
- Nice program to support the Vision: All Minnesotans value water and take actions to sustain and protect it
- Rather than a direct appropriation, this would better fit as a grant program within the MPCA Lake and River Monitoring program.

Questions:

1. Has the program sought funding from the ENRTF Community Grants program? Has the program applied to the Clean Water Legacy Partners grant program?

Schools Participating in the FMV River Watch Program

- All Nations Program South HS(Mpls)
- Bloomington Jefferson
- Bloomington Kennedy
- Cedar Mountain
- Chaska
- Comfrey
- Eden Prairie
- Hiawatha HS (Mpls)
- Hopkins
- Madelia
- Mankato East
- Mankato Loyola
- Mankato West
- MN New Country School
- New Ulm Minnesota Valley Lutheran
- New Ulm Cathedral
- New Ulm Public
- Nicollet Middle School
- Norwood Young America
- Prior Lake
- School of Environmental Studies
- Shakopee
- Sibley East
- Sleepy Eye Public
- Sleepy Eye St. Mary's
- Springfield
- Waseca

Some schools participate for an entire school year and some schools only participate for one semester each year depending on school scheduling. Other schools participate through a school based Environment club.