# Environment and Natural Resources Trust Fund

2026 Request for Proposal

## General Information

**Proposal ID:** 2026-126

**Proposal Title:** Nutrient Reduction Tracking in Minnesota

## Project Manager Information

**Name:** Matt Drewitz

**Organization:** Minnesota Pollution Control Agency

**Office Telephone:** (507) 810-9863

**Email:** matt.drewitz@state.mn.us

## Project Basic Information

**Project Summary:** The MPCA proposes to build an easy-to-use, interactive web-based dashboard to provide context for water quality data and show progress from nutrient-reducing work across the state.

**ENRTF Funds Requested:** $300,000

**Proposed Project Completion:** June 30, 2029

**LCCMR Funding Category:** Small Projects (G)
     **Secondary Category:** Water (B)

## Project Location

**What is the best scale for describing where your work will take place?**
     Statewide

**What is the best scale to describe the area impacted by your work?**
     Statewide

**When will the work impact occur?**
     During the Project and In the Future

## Narrative

**Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.**

Minnesota's large-scale environmental plans, like the Nutrient Reduction Strategy (NRS) and the Climate Action Framework, belong to all Minnesotans, but it is often difficult for those not working directly on these plans to see if progress is being made in meeting plan goals. Part of the challenge is wading through the sheer quantity of data, gathered through the work of state and federal agencies, soil and water conservation districts, local watershed groups, researchers from colleges and universities, and volunteer scientists. Another difficulty is being able to interpret the data in a meaningful context. Certain water quality parameters for one site might be excellent progress, while, in another location, would show an ecological disaster unfolding. Currently, there are many existing trackers and story maps showing much of the conservation and restoration work being done across the state. However there is no central dashboard where anyone can look up the cumulative impacts of this work on a watershed's nutrient concentrations, see the impact of conservation practices like cover crops, or discover how much phosphorus one particular watershed contributes to a major river.

**What is your proposed solution to the problem or opportunity discussed above? Introduce us to the work you are seeking funding to do. You will be asked to expand on this proposed solution in Activities & Milestones.**

We propose to build a user-friendly, web-based Minnesota Nutrient Reduction Strategy (NRS) Dashboard. We will use the best measures for evaluating nutrient reduction progress identified during the NRS revisions and incorporate existing progress-tracking displays that link the hard work of growers, local watershed groups, wastewater treatment facilities, and others to watershed-scale changes in water quality. We will host focus groups of key users, such as those experiencing high drinking water nitrate levels in Southeastern Minnesota or soil and water conservation district personnel, to ensure that the dashboard is usable and easily accessible to all audiences. Over the course of the public outreach for the revisions to the Minnesota NRS, multiple audience members have either asked for or recommended the development of such a tracking system. The development of this dashboard will provide a template for future progress tracking displays for other state agencies. We will document our process and create a "lessons learned" guide as a resource for the development of other integrated progress tracking efforts. We will also work with educators at the high school and college level to develop laboratory modules that could be conducted using the dashboard to ensure that the dashboard serves multiple purposes.

**What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?**

More effective and cost-efficient water quality protection measures through better community feedback and local collaboration will be made possible by data that is easier to understand. This dashboard will provide this accessible data through visualizations of the protection, conservation, preservation, and enhancement work being done at multiple levels across the state. It will further provide an opportunity to gather community feedback on the usefulness of the tools, and help aid in targeting specific protection and conservation work to provide the greatest benefit to water quality.

# Activities and Milestones

## Activity 1: Develop Nutrient Dashboard

**Activity Budget:** $180,000

**Activity Description:**

As part of the Minnesota NRS process (began in 2022 and completing at the end of 2025), a working group made up experts from MPCA, BWSR, MDA, University of Minnesota, and several federal agencies have been meeting regularly to identify the best metrics to track nutrient reduction progress across Minnesota. The findings from this group will be used to establish the design of the NRS Dashboard, and will be completed before this project would begin. While much of the data to be used for the dashboard already exists, determining how best to convey these data is a challenge. We will work with a (currently unselected) consultant to design a preliminary dashboard structure, including how to draw on existing databases and tracking tools to produce a statewide picture. A process to update and maintain the dashboard in-house will also be developed at this time. The NRS working group will continue to convene during the dashboard development to provide expert guidance and ensure their entities have input on the dashboard.

**Activity Milestones:**

| Description | Approximate Completion Date |
|---|---|
| Finalize tracking measures and metrics | December 31, 2026 |
| Working group develops dashboard concept | February 28, 2027 |
| Contractor builds out dashboard design | December 31, 2027 |
| Final DRAFT of dashboard delivered | February 28, 2028 |

## Activity 2: Gather User Input/Focus Groups

**Activity Budget:** $30,000

**Activity Description:**

The goal of the NRS Dashboard is to make large amounts of data quickly available and easy to understand. In order to determine if we are meeting that goal, we will need to gather both internal and external feedback. Internal feedback on the dashboard design will be collected via surveys to staff at MPCA and partner organizations. External input will be collected via targeted focus groups. The MPCA has conducted a number of outreach webinars about the NRS revisions and provided opportunities for event attendees to stay up-to-date on strategy progress via a listserv and social media campaign. These avenues will be used to invite participation in external focus groups to gather input, especially from those who do not work in water quality, on the understandability and accessibility of the NRS Dashboard design. Focus groups will be held both online and in-person and will be structured to gather feedback from all parts of the state. The MPCA Communications Department will provide advice and consultation for this process.

**Activity Milestones:**

| Description | Approximate Completion Date |
|---|---|
| Gather internal feedback | December 31, 2026 |
| Conduct external focus groups | December 31, 2027 |

## Activity 3: Refine Dashboard

**Activity Budget:** $50,000

**Activity Description:**

We will use the feedback collected in Activity 2 to refine the dashboard design. We will also incorporate working group feedback on dashboard maintenance and updating plans to ensure the plan developed is workable. While most of the updating work will be done by the consulting firm, we will also coordinate with state accessibility experts to ensure that all Minnesotans can make use of the dashboard.

**Activity Milestones:**

| Description | Approximate Completion Date |
|---|---|
| Consult with MN Office of Accessibility and MNIT@MPCA | August 31, 2027 |
| Compile external feedback | February 28, 2028 |
| Compile internal feedback | February 28, 2028 |
| Contractor updates dashboard | April 30, 2028 |
| Working group provides final recommendations | July 31, 2028 |
| Final dashboard published and outreach campaign kicked off | September 30, 2028 |
| Maintenance and updates to dashboard | June 30, 2029 |

## Activity 4: Introduce Dashboard/Dashboard Training and Outreach

**Activity Budget:** $40,000

**Activity Description:**

Because the dashboard is a new concept tool from state agencies, we will develop a robust outreach and training effort for its rollout. We will hold several webinar sessions to reach a large general audience, and we will offer internal training to state agencies. We will also work with the MPCA Tribal Liaison to offer training sessions to Tribes and/or courses at Tribal Colleges as requested. Finally, the dashboard team will develop several sample lab modules that could be used in high school or college science laboratory classes and offer training sessions to interested teachers and professors. We will also collect feedback from these outreach and training events to continue to refine the dashboard design. As a final product, we will document the dashboard development experience, lessons learned, and create a template that other programs across state agencies can use to develop dashboards for other statewide plans and strategies.

**Activity Milestones:**

| Description | Approximate Completion Date |
|---|---|
| Write dashboard development guide | February 28, 2028 |
| Develop a dashboard training guide and develop all outreach content | April 30, 2028 |
| Develop and hold public training webinars | October 31, 2028 |
| Hold internal state training | December 31, 2028 |
| Tribal trainings offered | January 31, 2029 |
| Complete on-line training lab modules for the education community | April 30, 2029 |
| Update training materials based on feedback or new data or tools that have come on-line | June 30, 2029 |

## Long-Term Implementation and Funding

**Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this work be funded?**
The data and analysis on which the dashboard will be based are part of the regular responsibilities of MPCA staff. Maintaining the dashboard as annual datasets are updated will be incorporated into the nutrient reduction work already conducted by MPCA staff and funded by state general and Clean Water Fund dollars. The build out and testing of the dashboard are supplemental work to regular MPCA water quality monitoring and reporting.

## Project Manager and Organization Qualifications

**Project Manager Name:** Matt Drewitz

**Job Title:** Research Scientist 3

**Provide description of the project manager's qualifications to manage the proposed project.**
Matt has nearly 25 years of experience managing Minnesota state contracts and grants and has managed three (3) LCCMR projects in the past. He has helped provide feedback to LCCMR on the current on-line project management system and is very familiar with LCCMR reporting requirements. He also has a long history of working with private contractors on water quality and technology-based projects. As a Research Scientist, he has the technical expertise to oversee and assist in developing the deliverables for this project. He currently works on the development on tracking tools and interactive maps and has extensive experience working with watershed science, strategy development, and planning.

**Organization:** Minnesota Pollution Control Agency

**Organization Description:**
The MPCA monitors environmental quality, offers technical and financial assistance, and enforces environmental regulations in Minnesota. We strive to ensure that all Minnesotans have healthy air, sustainable lands, clean water, and a better climate, no matter where they choose to live and work.

## Budget Summary

| Category / Name | Subcategory or Type | Description | Purpose | Gen. Ineligible | % Benefits | # FTE | Classified Staff? | $ Amount |
|---|---|---|---|---|---|---|---|---|
| **Personnel** | | | | | | | | |
| Research scientist | | Technical lead--this position will provide project leadership and manage the design, development, and operation of the NRS Dashboard. They will identify data sets, visualization tools, and models needed to maintain the NRS Dashboard, interface with the contractor, manage focus group feedback, give trainings, and maintain the project. | | | 34% | 0.6 | X | $92,000 |
| | | | | | | | **Sub Total** | **$92,000** |
| **Contracts and Services** | | | | | | | | |
| TBD | Service Contract | Contractor will build framework for dashboard, test the platform, and incorporate user feedback into design and function. They will work with state agencies to establish a maintenance plan. | | | | 0 | | $203,400 |
| | | | | | | | **Sub Total** | **$203,400** |
| **Equipment, Tools, and Supplies** | | | | | | | | |
| | | | | | | | **Sub Total** | - |
| **Capital Expenditures** | | | | | | | | |
| | | | | | | | **Sub Total** | - |
| **Acquisitions and Stewardship** | | | | | | | | |
| | | | | | | | **Sub Total** | - |
| **Travel In Minnesota** | | | | | | | | |
| | Miles/ Meals/ Lodging | 3-6 day or overnight trips | To facilitate focus groups for participants who do not wish to meet | | | | | $3,000 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | virtually or provide training for the dashboard | | | | | |
| | | | | | | | **Sub Total** | **$3,000** |
| **Travel Outside Minnesota** | | | | | | | | |
| - | | | | | | | **Sub Total** | - |
| **Printing and Publication** | | | | | | | | |
| - | | | | | | | **Sub Total** | - |
| **Other Expenses** | | | | | | | | |
| | | Honoraria | To thank focus group members for their time a small gift card, less than $25, may be provided | | | | | $1,600 |
| | | | | | | | **Sub Total** | **$1,600** |
| | | | | | | | **Grand Total** | **$300,000** |

## Classified Staff or Generally Ineligible Expenses

| Category/Name | Subcategory or Type | Description | Justification Ineligible Expense or Classified Staff Request |
|---|---|---|---|
| **Personnel** - Research scientist | | Technical lead--this position will provide project leadership and manage the design, development, and operation of the NRS Dashboard. They will identify data sets, visualization tools, and models needed to maintain the NRS Dashboard, interface with the contractor, manage focus group feedback, give trainings, and maintain the project. | **Classified :** Classified positions paid for with LCCMR funds will either be 1) back filled with a new or modified position or 2) the work previously done by this position will be delayed, eliminated, or completed by the start of the project. |

## Non ENRTF Funds

| Category | Specific Source | Use | Status | Amount |
|---|---|---|---|---|
| **State** | | | | |
| In-Kind | Communications | Communications support will be provided to help with focus groups | Secured | $20,000 |
| In-Kind | Working group members | Staff time | Secured | $100,000 |
| | | | **State Sub Total** | **$120,000** |
| **Non-State** | | | | |
| Cash | Federal--Gulf Hypoxia Program funds | Manage LCCMR grant, external contracts, working groups, project calendar | Pending | $50,000 |
| Cash | Federal--Gulf Hypoxia Program funds | NRS Tool Development | Pending | $250,000 |
| | | | **Non State Sub Total** | **$300,000** |
| | | | **Funds Total** | **$420,000** |

**Total Project Cost: $720,000**

**This amount accurately reflects total project cost?**

    Yes

## Attachments

### Required Attachments

*Visual Component*

File: c005ae3a-f2a.pdf

*Alternate Text for Visual Component*

The visual component includes a caption "this project will develop a user-friendly, one-stop-shop dashboard to display progress made toward reducing nutrient impacts to water quality at multiple scales" and shows three screen shots from existing data trackers in Minnesota: Wastewater, long term stream trends, and acres of ag BMPs adopted...

## Administrative Use

**Does your project include restoration or acquisition of land rights?**

No

**Do you understand that travel expenses are only approved if they follow the "Commissioner's Plan" promulgated by the Commissioner of Management of Budget or, for University of Minnesota projects, the University of Minnesota plan?**

Yes, I understand the Commissioner's Plan applies.

**Does your project have potential for royalties, copyrights, patents, sale of products and assets, or revenue generation?**

No

**Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?**

N/A

**Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?**

N/A

**Does your project include original, hypothesis-driven research?**

No

**Does the organization have a fiscal agent for this project?**

No

**Does your project include the pre-design, design, construction, or renovation of a building, trail, campground, or other fixed capital asset costing $10,000 or more or large-scale stream or wetland restoration?**

No

**Do you propose using an appropriation from the Environment and Natural Resources Trust Fund to conduct a project that provides children's services (as defined in Minnesota Statutes section 299C.61 Subd.7 as "the provision of care, treatment, education, training, instruction, or recreation to children")?**

No

**Provide the name(s) and organization(s) of additional individuals assisting in the completion of this proposal:**

Heather Johnson (MPCA), Justin Watkins (MPCA), Adam Olson (MPCA)

**Do you understand that a named service contract does not constitute a funder-designated subrecipient or approval of a sole-source contract? In other words, a service contract entity is only approved if it has been selected according to the contracting rules identified in state law and policy for organizations that receive ENRTF funds through direct appropriations, or in the DNR's reimbursement manual for non-state organizations. These rules may include competitive bidding and prevailing wage requirements**

Yes, I understand