

Environment and Natural Resources Trust Fund

2026 Request for Proposal

General Information

Proposal ID: 2026-137

Proposal Title: Polar Lakes Park Water Reuse for Irrigation

Project Manager Information

Name: Dale Reed Organization: White Bear Township Office Telephone: (651) 747-2777 Email: dale.reed@whitebeartownship.org

Project Basic Information

Project Summary: Polar Lakes Park Water Reuse Project will offset groundwater use by using surface water to irrigate 18 acres of athletic fields at Polar Lakes Park in White Bear Township.

ENRTF Funds Requested: \$1,044,000

Proposed Project Completion: December 31, 2028

LCCMR Funding Category: Water (B)

Project Location

What is the best scale for describing where your work will take place? Region(s): Metro

What is the best scale to describe the area impacted by your work? Region(s): Metro

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.

Polar Lakes Park Water Reuse Project is located in White Bear Township and within the MnDNR North and East Metro Groundwater Management Area which is an area where groundwater resources are at risk of overuse and degraded quality. Because the park falls within a 5-mile radius of White Bear Lake and the athletic fields are currently irrigated by the township's potable water system (supplied by groundwater), it can be subject to use restrictions. Therefore, the township was looking for an alternative water supplies to help offset peak irrigation usage at this public park. This project will also serve as a highly visible, publicly owned groundwater conservation demonstration practice that will be leveraged as part of an outreach campaign to be led by Vadnais Lakes Area Watershed Management Organization (VLAWMO) to communities, businesses, and residents.

Additionally, flows through Polar Lakes Park ultimately drain to Wilkinson Lake, which is impaired for nutrients, and a TMDL was completed in August 2013. A significant watershed wasteload reduction is required to meet state water quality standards. The township and VLAWMO also see this project as an opportunity to intercept runoff for irrigation and reduce pollutant loads to downstream Wilkinson Lake.

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.

White Bear Township and VLAWMO completed a feasibility study in 2024 to evaluate use of surface water runoff from an existing basin in the park for irrigation. The study demonstrated surface water could be used for irrigation for all park athletic fields. The project will provide 78-93% of the average annual irrigation demand by using water from an existing basin, offsetting groundwater usage by 3.7 to 5.0 MGY. The potable water system would provide back-up supply if basin water levels went below the established use threshold. The project will reduce phosphorus loads to impaired Wilkinson Lake by 4-7 pounds per year. Additionally, the USACE and the MN Board of Water and Soils Resources were engaged during the study and initial conversation indicated water from the basin can be used for irrigation and permitting should not be a concern.

The project is located within a highly used park that receives thousands of visitors per year including regular athletic programming, numerous soccer and softball tournaments, and even hosting Hockey Day Minnesota in 2024. The township and VLAWMO plan to leverage this visibility to help "tell the story" of water conservation at the park through the signage, tours, and community communications.

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?

The Polar Lakes Park Water Reuse Project will reduce demand on the region's groundwater during the peak usage season, conserving critical groundwater resources in the NE metro near White Bear Lake. The township and VLAWMO view this as a demonstration project for both public and private entities showing how surface water can be leveraged for irrigation purposes to reduce groundwater demand. Finally, given the location within a highly used and programmed public park, the township and VLAWMO also see this as an opportunity to educate the general public about responsible usage of our surface and groundwater resources.

Activities and Milestones

Activity 1: Engineering and Design

Activity Budget: \$158,800

Activity Description:

This activity will include data collection, final design and engineering, and project permitting. Data collection will include project area topographic and utility survey, wetland delineation, geotechnical investigations, and consultation with SHPO. Final design and engineering will include development of a final project plan set, technical specifications, and cost estimates along with design review throughout the process, including the development of a final design package ready for bidding. This task will also include securing the necessary permitting for project construction from the various federal, state, and local agencies.

Activity Milestones:

Description	Approximate Completion Date
Consultation with SHPO	July 31, 2026
Data Collection	September 30, 2026
Final Design, Plans and Specs	April 30, 2027
Permitting	June 30, 2027

Activity 2: Bidding & Construction

Activity Budget: \$885,200

Activity Description:

Conducting the necessary pre-construction activities including facilitating the public bidding process to select a construction contractor, preconstruction meetings, project layout and staking, project management, construction administration/oversight efforts, project close out, and payment of the construction contractor for project implementation included the infrastructure construction and restoration of the site. The estimated construction cost from feasibility includes construction contingency.

Activity Milestones:

Description	Approximate Completion Date
Project Bidding	June 30, 2027
Construction Management, Administration, & Oversight	December 31, 2028
Construction (Contractor)	December 31, 2028

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Phil Belfiori	Vadnais Lakes Area Watershed Management Organization	Partner in feasibility/design/construction - Providing Local Match	No
Jennifer	Barr	Senior Water Resources Engineer; PM for Feasibility Study and assistance with	No
Koehler	Engineering	grant application	

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?

White Bear Township and VLAWMO plan to work in partnership to support the implementation of this water reuse project, including providing the local match for project implementation. Long-term, the township will be the day-to-day owner and operator of this reuse system and track monthly/annual water use performance. Township staff were part of project feasibility, the town board supports project implementation, and staff will continue to be involved throughout the design process to inform design and operations/maintenance to ensure project long-term success. VLAWMO staff will assist with education and outreach efforts and may cost-share large capital expenditures for maintenance.

Project Manager and Organization Qualifications

Project Manager Name: Dale Reed

Job Title: Public Works Director

Provide description of the project manager's qualifications to manage the proposed project.

Dale Reed serves as the Public Works Director for White Bear Township. His background includes over 40+ of construction management and oversight in both the private and public sectors. His education includes a BA in Construction Management and a MA in Public Administration. His project management experience includes work in residential, commercial, road, and a variety of public construction projects. In his current public sector role, he proactively manages township owned infrastructure including park and athletic complexes (using smart irrigation systems), streets, and utilities including the township water supply which is reliant on groundwater. He is involved in all phases of project development including the public meetings, feasibility studies, design, construction, and post construction activities. Dale leverages a staff of 10 to successfully manage these township resources, and Dale and his staff were active participants in the Polar Lakes Park Water Reuse Feasibility study completed in partnership with the Vadnais Lakes Area Watershed Management Organization (VLAWMO).

Organization: White Bear Township

Organization Description:

White Bear Township was founded in 1858 and is located in Ramsey County. It is governed by a town board. The population as of 2020 was approximately 11,049. It is located within a 5 miles radius of White Bear Lake and is part of the Minnesota Department of Natural Resources (MnDNR) Northeast Metro Groundwater Management Area and the Township has been an active participant in the recent water supply and groundwater management planning effort coordinated by the Metropolitan Council. Groundwater supply and conservation is a driver for this funding request along with pollutant load reduction.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineli gible	% Bene fits	# FTE	Class ified Staff?	\$ Amount
Personnel								
							Sub Total	-
Contracts and Services								
TBD	Service Contract	Engineering Consultant to perform Engineering and Design, Data Collection, SHPO Consultation, Final Design, Permitting, Bidding, Project Management, Construction Administration/Oversight				0.9		\$209,000
TBD	Service Contract	Construction Contractor to be selected for project construction/implementation through the public bidding process and meeting prevailing wage requirements - Labor assumed to be 33% of estimated construction costs to estimate FTE.				1.8		\$835,000
							Sub Total	\$1,044,000
Equipment, Tools, and Supplies								
							Sub Total	-
Capital Expenditures								
							Sub Total	-
Acquisitions and Stewardship								
							Sub Total	-
Travel In Minnesota								
							Sub Total	-
Travel Outside Minnesota								

			Sub	-
			Total	
Printing and Publication				
Publication				
			Sub	-
			Total	
Other				
Expenses				
			Sub	-
			Total	
			Grand	\$1,044,000
			Total	

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
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Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
			State Sub Total	-
Non-State				
Cash	White Bear Township	Local match to support engineering, design, bidding and construction administration/oversight, and contractor/construction	Pending	\$174,100
Cash	Vadnais Lakes Area Watershed Management Organization	Local match to support engineering, design, bidding and construction administration/oversight, and contractor/construction	Pending	\$174,100
			Non State	\$348,200
			Sub Total	
			Funds	\$348,200
			Total	

Total Project Cost: \$1,392,200

This amount accurately reflects total project cost?

Yes

Attachments

Required Attachments

Visual Component

File: ae0dad73-bc6.pdf

Alternate Text for Visual Component

Figure of Polar Lakes Park Project Area...

Financial Capacity

Title	File
VLAWMO Most Recent Financial Summary/Audit	21a0fd18-30e.pdf
White Bear Township Most Recent Financial Summary/Audit	<u>19c99ac6-e08.pdf</u>

Board Resolution or Letter

Title	File
White Bear Township Resolution Support for LCCMR Grant	4d27475b-836.pdf
Application	

Supplemental Attachments

Capital Project Questionnaire, Budget Supplements, Support Letter, Photos, Media, Other

Title	File
Budget Addendum	<u>fd385a07-b8f.xlsx</u>
Capital Project Questionnaire	<u>3bc92ec5-176.pdf</u>
MetCouncil Letter of Support	<u>9775642b-c9b.pdf</u>
VLAWMO Letter of Support	<u>3b14dd71-1e6.pdf</u>
Wilkinson Lake TMDL Report (approved 2014)	f006743b-17a.pdf
Polar Lakes Park Water Reuse Feasibility Study	<u>344758ec-b40.pdf</u>

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?

N/A

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?

Yes, White Bear Township

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?

Yes

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:

Dale Reed - Public Works Director of White Bear Township; Phil Belfiori - District Administrator of VLAWMO; Jennifer Koehler - Barr Engineering & PM of Polar Lakes Park Feasibility Study

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