

**Environment and Natural Resources Trust Fund
2020 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 123-C

Minnesota Freshwater Quest: Environmental Education on State Waterways

Category: C. Environmental Education

Sub-Category:

Total Project Budget: \$ 1,432,110

Proposed Project Time Period for the Funding Requested: June 30, 2023 (3 yrs)

Summary:

30,000 underserved Minnesota youth (6-12 grade) explore and improve their local waterways through the “MN Freshwater Quest”—using freshwater species as the hook for place-based, hands-on environmental education.

Name: Julie Edmiston

Sponsoring Organization: Wilderness Inquiry

Job Title: Associate Executive Director

Department: _____

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Location:

Region: Statewide

County Name: Statewide

City / Township:

Alternate Text for Visual:

Diverse students pictured with steps for the Freshwater Quest, sampling water with nets, canoeing, and learning about freshwater mussels. Map indicates program sites are statewide.

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity Readiness	_____ Leverage	_____ TOTAL	_____ %



Environment and Natural Resources Trust Fund (ENRTF) 2020 Main Proposal Template

PROJECT TITLE: Minnesota Freshwater Quest: Environmental Education on State Waterways

I. PROJECT STATEMENT

The Minnesota Freshwater Quest connects 30,000 diverse youth to Minnesota waterways across the state—using freshwater species as the hook for environmental education. More than the land of 10,000 lakes, Minnesota boasts 34,167 miles of rivers and streams and 28,176 different lakes, ponds, and wetlands. It is our collective responsibility to manage these waters. We need our next generation to protect our waters for generations to come—this begins with environmental and science education.

The Minnesota Freshwater Quest is a new project-based learning tool and framework connecting youth to information about threatened species and ecosystems throughout the state—guiding them on a “Quest” to discover and implement solutions to help in their local communities. The program is specifically tailored for Minnesota species and waterways. Through the Quest, students adopt a species, participate in hands-on environmental education on local waterways, collect and share water quality data through the worldwide database GLOBE (Global Learning and Observation to Benefit the Environment), and complete a student-led project to improve their ecosystem—enhancing the environment for their adopted species.

This project implements the MN Freshwater Quest for the first time in communities throughout the state to:

- Connect diverse and underserved students to outdoor experiences that increase environmental stewardship among the next generation.
- Improve water quality in lakes, rivers, and streams through education, data collection, and real-world projects implemented by youth.
- Integrate hands-on science and environmental education activities into classroom learning, with an opportunity to recover academic credits in select districts.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1 Title: 30,000 Minnesota Youth Experience and Improve their Watershed

Description:

A newly developed online platform, The Minnesota Freshwater Quest, delivers environmental education through classroom-based instruction and hands-on learning in the outdoors. The Quest is successful in engaging students in environmental education; however it has not yet been implemented throughout Minnesota. This project gives all districts the opportunity to participate in the Quest. Wilderness Inquiry will provide hands-on environmental education as part of the Quest to more than 30 school districts reaching all regions of the state—including Albert Lea, Brainerd, Fergus Falls, Grand Rapids, International Falls, Saint Cloud, Thief River Falls, and the Twin Cities.

As part of the Minnesota Freshwater Quest:

1. Teachers register their classroom at <https://herofortheplanet.org/mnwaterquest>.
2. Students enter their home zip code to learn about which species are imperiled in their local ecosystem, including amphibians, birds, dragonflies/damselflies, mussels, mammals, and reptiles.
3. Students “adopt” a species and learn about their watershed and what that species requires to thrive.
4. Students participate in an outdoor daylong environmental education experience to learn more about their species, collect water quality data, and analyze indicators of ecosystem health. *ENRTF funding allows 30,000 Minnesota youth to participate with Wilderness Inquiry.*



**Environment and Natural Resources Trust Fund (ENRTF)
2020 Main Proposal Template**

5. Students disseminate their water quality data through GLOBE—contributing to our understanding of the global environment.
6. Classrooms are encouraged to develop a project that improves the local watershed and positively impacts their chosen species. *A project partner, Captain Planet Foundation, provides mini-grants for these projects, with funding specifically for Minnesota schools.*

ENRTF BUDGET: \$1,432,110

Outcome	Completion Date
<i>1. Minnesota Freshwater Quest disseminated as an environmental learning tool to all 336 Minnesota school districts through directed outreaches. (Facilitated and Funded by Wilderness Inquiry In-Kind)</i>	<i>12/31/2020</i>
<i>2. 400 educators complete a Minnesota Freshwater Quest training to learn how to integrate the Quest into their existing school curriculum. (Facilitated by Wilderness Inquiry; Funded by ENRTF)</i>	<i>06/01/2022</i>
<i>3. 400 classrooms register for the Quest. (Facilitated by Wilderness Inquiry)</i>	<i>9/01/2022</i>
<i>4. 10 student-led watershed improvement projects completed based on discovery during the Quest. (Facilitated by Wilderness Inquiry; Funded by Captain Planet Foundation)</i>	<i>6/30/2023</i>
<i>5. 30,000 diverse youth experience environmental education along their local Minnesota waterways through activities such as collecting and disseminating water quality data, paddling in 24' Voyageur canoes, and learning about their ecosystem by "adopting a species." Water quality data is entered through the Freshwater Quest and disseminated through GLOBE. (Facilitated by Wilderness Inquiry; Funded by ENRTF) Approx. 375 events, average 80 youth each</i>	<i>6/30/2023</i>

III. PROJECT PARTNERS AND COLLABORATORS:

This project represents a large-scale collaboration with Wilderness Inquiry as the lead organization, coordinating with multi-sector partners. Key partners include:

- Minnesota School Districts: In addition to sharing the online Quest with all school districts throughout the state, this project directly engages more than 30 school districts in hands-on outdoor learning.
- Captain Planet Foundation: With Wilderness Inquiry, Captain Planet Foundation tailored the Quest to Minnesota waterways and is now committed to launching across the state. Captain Planet Foundation has pledged \$25,000 to fund watershed improvement projects in Minnesota through the Quest.
- Minnesota Department of Natural Resources (DNR): The MN DNR is a key partner in program implementation as Wilderness Inquiry programs utilize public lands such as state parks and water trails.
- National Park Service (NPS): NPS provides in-kind support of staff time and materials for program implementation along the Mississippi National River and Recreation Area.

IV. LONG-TERM IMPLEMENTATION AND FUNDING:

The Minnesota Freshwater Quest is a newly developed online platform that is specifically tailored to Minnesota waterways and species. ENRTF funds provide initial implementation funds to launch the Quest statewide, offering a platform for school districts to implement environmental education with hands-on learning experiences. Wilderness Inquiry is committed to enhancing and expanding the Quest over time with public and private long-term funding sources such as the Environmental Protection Agency, USDA Forest Service, Department of Education, foundations, corporations, and individuals.

Attachment A: Project Budget Spreadsheet
 Environment and Natural Resources Trust Fund
 M.L. 2020 Budget Spreadsheet



Legal Citation:
 Project Manager: Julie Edmiston
 Project Title: MN Freshwater Quest: Environmental Education on State Waterways
 Organization: Wilderness Inquiry
 Project Budget: \$1,432,110
 Project Length and Completion Date: 3 years; June 2023
 Today's Date: April 14, 2019

ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET		Budget	Amount Spent	Balance
BUDGET ITEM				
Personnel (Wages and Benefits)		\$ 968,810	\$ -	\$ 968,810
Operations Director (.65FTE)(\$80,000 x 3 years) = \$156,000				
Program Manager (.75 FTE)(\$50,000 x 3 years) = \$112,500				
Program Coordinator (.75 FTE)(\$40,000 x 3 years) = \$90,000				
Program Coordinator (.75 FTE)(\$40,000 x 3 years) = \$90,000				
Finance and Administration (.5 FTE)(\$35,000 x 3 years) = \$52,500				
Part-time staff for warehouse, canoe and inventory maintenance and repairs; (Multiple personnel at \$15/hour x 2,300 hours/year x 3 years) = \$103,500				
Outdoor Leaders (1 to 7 staff/student ratio)(4,286 staff trail days x \$85) = \$364,310				
Professional/Technical/Service Contracts				
Teacher professional development stipends to be paid upon completion of training and registration. Stipends off-set teacher time, travel, and materials to participate. (200 stipends x \$200 = \$40,000) Any additional stipends needed provided in-kind by Wilderness Inquiry.		\$ 40,000		\$ 40,000
Contract for project evaluation to demonstrate success of implementation of Quest throughout the state. Contracts selected through a competitive bidding process.		\$ 60,000	\$ -	\$ 60,000
Equipment/Tools/Supplies		\$ 123,000	\$ -	\$ 123,000
Environmental education program equipment for hands-on experiences including PFDs, paddles, first aid supplies, and other outdoor gear (\$20,000). Equipment maintenance and repair -- this program primarily utilizes existing equipment such as 24' foot Voyageur canoes; however these require annual maintenance and repair to use safely across the state (\$12,000 year x 3=\$36,000) EcoSTEM water quality testing kits, species identification materials (60 kits x \$700 = \$42,000 + \$10,000 supplemental = \$52,000) Training materials and webinar tool for teacher professional development and Quest training. To ensure access to trainings, webinars and online training materials will be available in addition to in-person trainings. (\$15,000)				
Capital Expenditures Over \$5,000				
Six Voyageur canoes (\$15,000 x 6). This project primarily leverages existing equipment and resources; however to scale appropriately additional boats are needed.		\$ 90,000	\$ -	\$ 90,000
Dual-axle Voyageur canoe trailer. Remackel Trailers based in Minnesota has created a specialized trailer to safely haul six of our Voyageur canoes.		\$ 16,800		\$ 16,800
Travel expenses in Minnesota				
Transportation for Wilderness Inquiry staff to deliver environmental education events across the state via van with trailer and boats (375 events x avg. 200 miles round trip x .58)		\$ 43,500	\$ -	\$ 43,500
Student transportation. When needed, Wilderness Inquiry assists with student buses to program locations near the school. (\$300 x 300 events)		\$ 90,000	\$ -	\$ 90,000
COLUMN TOTAL		\$ 1,432,110	\$ -	\$ 1,432,110
SOURCE AND USE OF OTHER FUNDS CONTRIBUTED TO THE PROJECT				
	Status (secured or pending)	Budget	Spent	Balance
Non-State:				
Minnesota Public School Districts	Pending	\$ 300,000	\$ -	\$ 300,000
Minneapolis Foundation (Curriculum development that supports project)	Pending	\$ 15,000	\$ -	\$ 15,000
Captain Planet Foundation (Mini-grants for Minnesota schools to participate)	Secured	\$ 25,000	\$ -	\$ 25,000
State:				
In kind:				
National Park Service: Program staff / Rangers in MNRRA in-kind	Secured	\$ 150,000	\$ -	\$ 150,000
Minnesota Department of Natural Resources: Program staff in-kind	Secured	\$ 50,500	\$ -	\$ 50,500
Wilderness Inquiry: Staff benefits; additional staff support incl. Exec. & Prog. Dir; equipment and facilities; staff food and lodging; insurance; teacher stipends	Secured	\$ 400,000	\$ -	\$ 400,000
Other ENRTF APPROPRIATIONS AWARDED IN THE LAST SIX YEARS		Budget	Spent	Balance
M.L. 2017, Chp. 96, Sec. 02, Subd. 05 Floating Classroom		\$ 1,200,000	\$ 705,049	\$ 494,951
M.L. 2014, Chp. 226, Sec. 02, Subd. 09c UEE		\$ 1,093,000	\$ 1,062,565	\$ 30,435



Minnesota Freshwater Quest



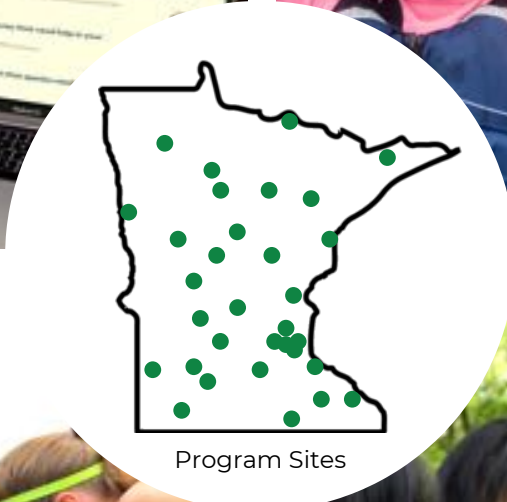
Connect 30,000 diverse MN students to outdoor experiences that increase environmental stewardship.



Improve water quality through education, data collection, and student-led projects.



Integrate hands-on science and environmental education into classroom learning.



Program Sites





Environment and Natural Resources Trust Fund (ENRTF)

PROJECT TITLE: Minnesota Freshwater Quest: Environmental Education on State Waterways

PROJECT MANAGER QUALIFICATIONS – Julie Edmiston

Julie Edmiston has been active in Wilderness Inquiry’s education programming and LCCMR projects through a variety of roles since 2008. Currently the Associate Executive Director, she has a background in education, business, nonprofit development, and program management.

As project manager, Julie will oversee the team that implements this project and ensure that Wilderness Inquiry delivers stated outcomes within the budget. Julie is familiar with the Freshwater Quest, avenues to connect with teachers and districts, and how to implement the program in a safe, effective, and cost-effective manner.

ORGANIZATION DESCRIPTION – Wilderness Inquiry (WI)

A non-profit organization based in the Twin Cities, WI has provided opportunities for outdoor recreation for our most underserved and at-risk populations since 1978. WI serves more than 40,000 people annually on canoe, kayak, horsepack, dogsled and hiking trips. The Canoemobile is WI’s youth program that connects thousands of Minnesota youth to their public lands and natural resources through hands-on outdoor learning experiences. The program works with federal, state, and local entities to engage youth – addressing the achievement gap and fostering the next generation of environmental stewards. WI has 18 full-time and 70 part-time staff.