

Environment and Natural Resources Trust Fund

2026 Request for Proposal

General Information

Proposal ID: 2026-146

Proposal Title: Watersheds, Careers, and Conservation: Students Doing Outdoor Science

Project Manager Information

Name: Kristen Poppleton

Organization: Minnesota Trout Unlimited

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Project Basic Information

Project Summary: This program fosters a conservation ethic and interest in environmental and natural resource careers through a nationally recognized curriculum, outdoor learning and exposure to natural resource students and professionals.

ENRTF Funds Requested: \$582,000

Proposed Project Completion: June 30, 2029

LCCMR Funding Category: Education and Outdoor Recreation (C)

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.

The U.S. Bureau of Labor Statistics projects job growth in occupations related to conserving natural resources and an increasing need for professionals with specialized skills in areas of STEM and related to conservation and environmental science. There is gap, however, in the ability to address this need. Recently, Wilder Research identified a need to cultivate and promote STEM identity, interest, and achievement among students across Minnesota. To address this disparity, they recommend giving students opportunities to explore "real-world" situations and to build positive relationships with role models and mentors of diverse backgrounds.

Minnesota Trout Unlimited's Trout in the Classroom (TIC) program annually reaches 6,000 students in grades 4 to 12 around the state, teaching them about aquatic ecosystems through "real world" situations including macroinvertebrate investigations in the fall, raising and studying trout in their classroom during the winter, and releasing them in the spring. MNTU will inspire the next generation of conservation professionals and scientists, by expanding our established program to include opportunities for students to learn from professionals and practice scientific skills needed in conservation vocations. Leveraging partnerships developed at Universities, the MNDNR, and others, we will connect professionals and career models with classrooms across the state.

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.

Trout are an "indicator species" because they require cold, clean water to survive. Our program provides an excellent entry point for learning about water quality in "real world" situations and how people can conserve and protect our waterways. We will operate the program in 70 classrooms statewide, expanding it to include a focus on conservation professionals and research careers. Through partnerships with Trout Unlimited Chapters, universities, MN DNR, 1854 Treaty and others, we will connect each classroom with a conservation professional or college student, for impactful visits, presentations, and outdoor visits that highlight the paths and skills needed for a conservation career. TIC classrooms are extremely diverse, with over 80% in counties with a high child poverty rate and over 40% serving schools with more than 30% minority enrollment. We will match the diversity in our schools with mentors from similarly diverse backgrounds. To develop conservation research experience, high school students will create poster presentations answering a research question related to watershed conservation and will have an opportunity to present them at the annual Great Waters Fly-Fishing Expo. Teacher trainings will include speakers from natural resource fields to encourage teacher-lead field studies, introduce conservation careers, and suggest poster research ideas.

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?

This program fosters a lifelong conservation ethic and interest in environmental and natural resource careers through a nationally recognized curriculum, outdoor learning and exposure to college students and professionals, including communities underrepresented in natural resource fields. Providing students with local connections to aquatic resources is critical to making well-informed future decisions about the environment. High school students researching watershed conservation questions and developing a poster to communicate their findings will provide valuable experience and their posters will educate angling and outdoor enthusiasts from across Minnesota. This program will reach 6,000 students annually and 2,000 attendees at the Expo.

Activities and Milestones

Activity 1: Developing Student Environmental Ethic: Watershed Field Days, Trout in the Classroom and Conservation Careers

Activity Budget: \$411,224

Activity Description:

Fall and spring field days combined with classroom learning will connect students to waterways in their region, providing them with opportunities to develop outdoor skills and learn more about water resources careers. Students will raise trout in their classrooms from December to May and release them in local streams. Conservation and environmental college students and/or professionals from St. Mary's, the U of M, GLIFWC, the DNR, and more organizations will connect with 6,000 students, in 70 schools across the state, via presentations and field days. They will share how they entered their career, the training required, and one or two specific skills or tools that they utilize regularly in their job. In the winter MNTU staff and volunteers will offer lessons and outings featuring winter ecology, ice fishing, and learning about trout life cycles. During field days students will participate in macroinvertebrate studies. Some classes will be given age-appropriate habitat enhancement opportunities addressing erosion, climate resilience and invasive species. Spring field days will feature the release of trout raised in the classroom in addition to a variety of activities with support from volunteers recruited from MNTU.

Activity Milestones:

Description	Approximate Completion Date
Commence annual fall field studies along streams and lakess. Begin Fall 2026.	December 31, 2028
Begin classroom and field visits from MNTU staff and volunteers winter 2026-7	March 31, 2029
Annually set up and operation of 70+ classroom aquariums; distribute trout eggs; begin Fall 2026	June 30, 2029
Begin recruiting conservation professionals and volunteers to visit, present to, and attend events	June 30, 2029
Summer 2026	
Commence annual spring trout releases and aquatic field studies Spring 2027	June 30, 2029

Activity 2: Developing Teacher Skills and Knowledge: Instructional Support, Virtual and Regional Teacher Trainings

Activity Budget: \$105,233

Activity Description:

We will help 60 or more teachers throughout Minnesota set up and operate classroom aquariums where students in grades 4 to 12 raise trout from eggs to fingerlings. We will offer 7 monthly virtual trainings for new and returning teachers to use aquariums as the springboard for learning about watersheds, conservation, and locally relevant issues. Teachers will be introduced to watershed curricula endorsed by the National Science Teachers Association, such as Project WET and Project WILD Aquatic, as well as adaptations that address state grade level standards and locally relevant issues. Returning teachers will share experiences and a network listserv will be developed for teachers to connect with questions, experiences and best practices. We will hold 4 outdoor regional trainings for teachers in Bemidji, Duluth, the Twin Cities, and Winona to build confidence in leading outdoor learning on waterways and via trout release days. Macroinvertebrate studies, effective outdoor education techniques, and local threats to coldwater fisheries will be discussed. These trainings will include volunteers from MNTU's chapters and feature conservation professionals. High school educators will learn about developing professional poster presentations and prepare their students to share a research poster at the Great Waters Fly Fishing Expo.

Activity Milestones:

Description	Approximate
	Completion Date
Begin coordination with Chapters, recruiting of conservation students and professionals Summer 2026	November 30, 2028
Begin planning and implementation of 4 annual regional trainings Summer 2026	November 30, 2028
Begin 7 annual virtual trainings for teachers (NovMay) November 2026	May 31, 2029

Activity 3: Developing Community Conservation Ethic: Communicating Watershed Conservation

Activity Budget: \$65,543

Activity Description:

High school students will be challenged to develop a research question related to watershed conservation. They will work on them throughout the school year and develop poster presentations of their findings. MNTU staff will offer virtual coaching and open sessions October-February to students. Guest professionals will also provide guidance on question development and poster development. Classrooms and individual students will submit their posters through an online portal and all posters will be posted and shared on the MNTU website and on social media. All students will be eligible to have their poster displayed at the Great Waters Fly Fishing Expo, held annually and reaching thousands of angling and outdoor enthusiasts. A committee of MNTU volunteers and career professionals will judge posters submitted and select those to be displayed at the Expo.

Activity Milestones:

Description	Approximate Completion Date
Begin offering annual virtual sessions on developing and communicating about a research question Fall 2026	March 31, 2029
Create an online submission process Fall 2026 and post posters to website beginning Spring 2027	May 31, 2029
Identify a committee of poster judges Fall 2026 and replace judges annually as necessary	May 31, 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?

Our communication of the program's impact has increased, increasing our base of likely donors. Each of MNTU's 5 chapters across the state have pledged annual support of the program and we continue to actively seek additional funding to sustain and expand the program's impact. We have established strong relationships with the MNDNR fisheries, pathologists, and habitat restoration professionals to ensure continuation of the program. Finally, many teachers will also use their tanks, supplies, training and knowledge to continue the TIC curriculum and similar environmental education programs for years afterwards.

Other ENRTF Appropriations Awarded in the Last Six Years

Name	Appropriation	Amount
		Awarded
Teaching Students about Watersheds through	M.L. 2023, , Chp. 60, Art. 2, Sec. 2, Subd. 05g	\$290,000
Outdoor Science		

Project Manager and Organization Qualifications

Project Manager Name: Kristen Poppleton

Job Title: Assistant Director

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

Kristen Poppleton is a leader in environmental, outdoor, and science education and has written and managed three previous environmental education ENRTF projects. She holds a Masters of Education in Environmental Education and a MS in Conservation Biology, and served on the most recent Minnesota Science Standards Writing Committee. As the Assistant Director at Minnesota Trout Unlimited she is developing and implementing strategic communications and leading on engagement with staff, chapters and members in advocacy, habitat and education programs.

Organization: Minnesota Trout Unlimited

Organization Description:

Minnesota Trout Unlimited is a nonprofit conservation organization working to protect, restore and sustain coldwater fisheries and watersheds throughout Minnesota. Our members volunteer on conservation projects improving in-stream habitat and riparian forests and grasslands and support students in the classroom and in the field learning about trout conservation. We also recognize that how people use the land within a watershed will determine its water quality and ability to support healthy fisheries and vibrant communities. Our holistic approach to public outreach and education focuses on this watershed health-water quality connection. Showing students first-hand the aquatic life in their local waters and teaching them how watersheds work to support clean water and aquatic life is part of our long-term strategy to increase public knowledge of how to improve water quality.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineli gible	% Bene fits	# FTE	Class ified Staff?	\$ Amount
Personnel								
Assistant Director		Reporting, program, supporting Chapters, and financial oversight1FTE +18% benefits=\$4700 x 3 years			18%	0.3		\$14,100
Education Program Manager		Lead on day-to-day implementation of the program, DNR logistics, teacher trainings, school coordination, scheduling teachers and volunteers, school/teacher support FTE+18% benefits= \$68,979 x 3 years			18%	3		\$206,950
Habitat Director		Identify habitat projects and attend field days .1FTE+18% benefits=\$4500 x 3 years			18%	0.3		\$13,500
Administrative Support		Budget reporting and reimbursement .05FTE+18% benefits=\$1500 x 3years			18%	0.15		\$4,500
							Sub Total	\$239,050
Contracts and Services								
Metro/South Environmental Education Specialist	Service Contract	Scheduling teachers and volunteers, activities onsite, teacher support in Metro/SE, field days; Average of 20 hrs/wk paid an hourly fee of \$28hr x3 yrs				1.5		\$67,200
North/North Central MN Environmental Educator	Service Contract	Field days, teacher support Central/NE MN Average of 15 hrs/wk paid an hourly fee of \$25hr x3 yrs				0.9		\$26,000
Environmental Educator	Service Contract	Outdoor Experience support Average of 38 wks 10 hrs/wk paid an hourly fee of \$25hr x3 yrs Support the field days in fall and spring, teacher trainings; location TBD				0.6		\$19,500
							Sub Total	\$112,700
Equipment, Tools, and Supplies								
	Equipment	Full set of aquarium equipment for new school set up \$1,500 x 20 schools	We will maintain a waitlist of interested teachers and when there is attrition provide the new teacher a full set of supplies to start TIC					\$30,000

	Tools and	\$150 per school: 3 years, 60 schools/year Recurring	Costs for supplies needed each year			\$27,000
	Supplies	set of supplies needed each year: water chem testing	for aquarium maintenance			<i>\$27,000</i>
		kit, filter pad replacements, water conditioner, etc.	·			
		(~\$120) Additional \$30 per school takes into account				
		costs for as needed replacements of low-cost				
		equipment such as aerators, tubing, bubblers,				
		breeder nets, tank tops, etc.				
	Tools and	Replacing chillers and filtersreplace 6 chillers/year	Chillers and filters occasionally fail and			\$32,400
	Supplies	including shipping: \$300 each Chillers and filters are	need to be replaced. Based on			
		the most expensive pieces of equipment. It is	experience we know that we need to			
		anticipated that ~10% of schools each year will need	replace on average 6 chillers/year			
		replacements. The cost to mail a chiller back to the	including shipping.			
		manufacturer in CA for refurbishing is ~\$100.				
		Tradewinds covers the cost of returning fixed chiller				
		back to MN if it is under the 3 year warranty. MNTU				
		covers the cost of return to MN if it not under				
		warranty. Replacing a chiller that can be fixed but				
		isn't under warranty is ~\$200.				
	Tools and	Items include d-nets and other materials for catching	Materials and supplies Used to			\$3,000
	Supplies	aquatic insects and stream studies; water quality	enhance and implement a variety of			
		testing equipment; field microscopes; 3D replicas of	educational lessons, activities,			
		MN fish; materials to build stream tables; bait,	programs, and trainings. Includes field			
		tackle, reels, line for fishing programs; gardening	days, winter lessons and activities,			
		gloves, safety glasses and other supplies for habitat	teacher and volunteer trainings			
		restoration projects; fly tying materials. =				
		\$1000/year				
					Sub	\$92,400
					Total	
Capital						
Expenditures						
					Sub	-
Acquicitions					Total	
Acquisitions and						
Stewardship					Cb	
					Sub	-
Travel In					Total	
Minnesota						
14IIIIIIESULA	Miles/ Meals/	Travel expenses Expenses for Education Program	Travel for Education Program			\$30,300
	Lodging	Supervisor, Environmental Education Specialist,	Supervisor, Environmental Education			730,300
	Louging	Environmental Educators, to travel w/in the Twin	Specialist, Environmental Education			
		Environmental Educators, to traver w/ in the TWIII	Specialist, Environmental Educators,	<u> </u>		

		Cities metro area and throughout the state (Winona, Bemidji, Duluth, TC Metro) for 12 total Teacher Trainings, average of 100 Field Days and classroom visits/year. Mileage expense estimated at current IRS rate of .70 cents/mile.	to travel w/in the Twin Cities metro area and throughout the state (Winona, Bemidji, Duluth, TC Metro) for Teacher Trainings, Field Days to and from schools for presentations, field day locations, various events throughout the year, meetings, MN-DNR facilities, delivering supplies and newsletters to school.		
				Sub Total	\$30,300
Travel Outside Minnesota					
				Sub Total	-
Printing and Publication					
	Printing	Printing/copying and laminating MNTIC teacher manuals, education program related handouts, training materials, activities/lessons, poster printing for EXPO 25 poster/year, 150 each etc. = \$4500/yr	For classroom use and for poster display at Great Waters EXPO		\$13,500
		, ,		Sub Total	\$13,500
Other Expenses					
		Trout Eggs and Supplies \$150/shipment of eggs from Trout Lodge; \$150 x 3 shipments/yr = \$450/yr; coolers for delivery to schools and for teachers to send fish to DNR headquarters for testing - \$30/cooler x 10 new schools/yr = \$300/yr	For classroom aquariums to raise for release		\$2,250
		Expenses for events Building, classroom, and park pavilion costs, in addition to port o potty rentals as needed for programming and events. This includes field days, teacher trainings. = \$1,000/yr	To ensure events are accessible for all learners and attendees.		\$3,000
		Busing Reimbursements for schools needing assistance with cost for one of the required program trips. Average cost/school = \$400; 35% of schools request reimbursement each year; 20 schools	To ensure all classrooms can attend field days		\$24,000
		Career Leader Stipends (100 interactions/year); Stipends for environmental and conservation focused college students and career professionals to	Career leaders will provide presentations and hands on learning		\$64,800

	join each educator workshop, visit classrooms and field days to share their path, role and important skills used in their profession. We budget for \$200 honoraria per person per visit to offset mileage and honor expertise and time spent preparing. We will work to encourage presenters of color and women.	opportunities to inform about and inspire conservation careers.			
				Sub Total	\$94,050
				Grand Total	\$582,000

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or	Description	Justification Ineligible Expense or Classified Staff Request
	Туре		

Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
			State Sub	-
			Total	
Non-State				
Cash	MNTU Chapter Contributions	Extra Staff Time	Pending	\$15,000
In-Kind	Volunteer Hours	Volunteers will contribute approximately 300 hours per year to help	Secured	\$15,000
		implement the program.		
In-Kind	Printing and wide distribution of periodic newspapers	Supporting information for teachers and students	Secured	\$5,000
	with significant space dedicated to ongoing lessons			
	targeting youth.			
			Non State	\$35,000
			Sub Total	
			Funds	\$35,000
			Total	

Total Project Cost: \$617,000

This amount accurately reflects total project cost?

Yes

Attachments

Required Attachments

Visual Component

File: e456386b-fdd.pdf

Alternate Text for Visual Component

Photos of students participating in Minnesota Trout Unlimited's education program and a map showing locations of schools statewide...

Financial Capacity

Title	File
MNTU FY24 Audit	<u>4e558f5a-34c.pdf</u>

Board Resolution or Letter

Title	File
MNTU Board Resolution	<u>0c80bc81-703.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?

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?

Nο

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")?

Yes

Do you certify that background checks are performed for background check crimes, as defined in Minnesota Statutes, section 299C.61, Subd. 2, on all employees, contractors, and volunteers who have or may have access to a child to whom children's services are provided by your organization?

Yes

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

John Lenczewski, Executive Director MNTU and Amber Taylor, Education Supervisor MNTU

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