

# Final Abstract

Final Report Approved on June 30, 2023

## M.L. 2020 Project Abstract

For the Period Ending June 30, 2023

**Project Title:** Minnesota Freshwater Quest: Environmental Education On State Waterways

**Project Manager:** Julie Edmiston

**Affiliation:** Wilderness Inquiry

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**Website:** <https://www.wildernessinquiry.org/>

**Funding Source:**

**Fiscal Year:**

**Legal Citation:** M.L. 2021, First Special Session, Chp. 6, Art. 5, Sec. 2, Subd. 05b

**Appropriation Amount:** \$500,000

**Amount Spent:** \$498,042

**Amount Remaining:** \$1,958

### Sound bite of Project Outcomes and Results

Wilderness Inquiry's Freshwater Quest engaged 8,833 youth across all regions of Minnesota. Using place-based outdoor environmental education, this project inspired the next generation of stewards of Minnesota's natural resources helping to preserve our state's outdoor economy and the vibrancy and health of our environment and residents.

### Overall Project Outcome and Results

Engaging with the natural world is a key aspect of stewardship and crucial to the health and wellbeing of communities and natural resources. Research shows that for children, direct experiences in nature are the primary determinant in developing a stewardship ethic as an adult (White, 2006). Many youths are prevented from accessing these experiences due to financial, geographic, and experience-based barriers. By combining opportunities for meaningful outdoor engagement with connection to a community of learners and explorers, Wilderness Inquiry's Freshwater Quest creates accessible, affordable, and engaging experiences with nature that increase stewardship in the outdoors and invest in the health and vibrancy of Minnesota's natural resources.

Wilderness Inquiry connected 8,833 diverse students to place-based, educational outdoor experiences across the state. The Freshwater Quest brought classroom learning to life with hands-on science and environmental education activities.

Students conducted experiments to learn about water quality and watersheds, endangered species, and the significance water has to all living creatures. View the Freshwater Quest [here](#).

This project also developed a network of partners including schools, educators, parents, state and local governments, indigenous-led organizations, and local outdoor clubs; all invested in the development of Minnesota's next generation of environmental stewards. Through these partnerships this project promoted equity and inclusion in the outdoors. For many participants, Canoemobile and the Freshwater Quest provided a foundation for environmental stewardship through their first immersive experience in the outdoors.

Programs were evaluated using the evaluation tool Hello Insight to measure program success in increasing social-emotional learning (SEL) capacities, which is foundational to youth experiencing positive wellbeing and academic outcomes. Overall, youth program participants reported that Wilderness Inquiry's staff excelled at providing a safe and supportive experience and pushed young people to try hard and do their best. A detailed report and evaluation results can be found on our website.

### **Project Results Use and Dissemination**

Project updates were shared about the Freshwater Quest to our wide network of diverse partners, stakeholders, and media outlets over the course of this project's timeline. Some examples of this includes: facilitating virtual professional development opportunities for MN educators, participating in MN Teach Outdoors! with over 50 MN educators, direct marketing outreaches, and media releases. After a media release, The Timberjay wrote a story about students from Tower-Soudan and Northeast Range experiencing the Canoemobile. Wilderness Inquiry also shared about the Freshwater Quest in our 2022 Year on Review on our website. The Freshwater Quest is also accessible to all Minnesotans.



## Environment and Natural Resources Trust Fund

M.L. 2020 Approved Final Report

### General Information

**Date:** August 28, 2024

**ID Number:** 2020-041

**Staff Lead:** Noah Fribley

**Project Title:** Minnesota Freshwater Quest: Environmental Education On State Waterways

**Project Budget:** \$500,000

### Project Manager Information

**Name:** Julie Edmiston

**Organization:** Wilderness Inquiry

**Office Telephone:** (612) 676-9424

**Email:** julie@wildernessinquiry.org

**Web Address:** <https://www.wildernessinquiry.org/>

### Project Reporting

**Final Report Approved:** June 30, 2023

**Reporting Status:** Project Completed

**Date of Last Action:** June 30, 2023

**Project Completion:** February 28, 2023

### Legal Information

**Legal Citation:** M.L. 2021, First Special Session, Chp. 6, Art. 5, Sec. 2, Subd. 05b

**Appropriation Language:** \$500,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Wilderness Inquiry for approximately 10,000 underserved Minnesota youth to explore and improve local waterways using the place-based and hands-on Minnesota Freshwater Quest environmental education program.

**Appropriation End Date:** June 30, 2024

## Narrative

**Project Summary:** 10,000 diverse and underserved Minnesota youth (grades 6-12) participate in place-based, STEM environmental education to explore and preserve local ecosystems and waterways through the Minnesota Freshwater Quest online program.

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

Research shows that direct experiences in nature as a child are the primary determinant in developing a stewardship ethic as an adult (White, 2006). Unfortunately many youth of color, youth with disabilities, and youth living in urban and rural areas are prevented from accessing these experiences due to financial, geographic, and experience-based barriers. As a result, there is an opportunity gap for youth to experience the outdoors and develop an ethic to protect, preserve, and enhance Minnesota's natural resources.

Wilderness Inquiry seeks to address this challenge through the Minnesota Freshwater Quest, a project linking hands-on field experiences to classroom learning to provide environmental education and stewardship opportunities. This project increases the ability of 10,000 Minnesota students to access and participate in engaged learning in and outside the classroom.

The ENRTF was created to invest in programs that maintain and enhance Minnesota's natural resources by promoting and protecting water resources, exploring and limiting the impact of invasive species, preserving our public lands and natural habitats, and more.

Investing in the future champions of our state's wild spaces bridges the opportunity gap and connects youth to the actions and practices that promote the values of the ENRTF.

**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.**

Minnesota Freshwater Quest is a project-based learning tool that connects youth to information about threatened species and ecosystems that impact their local community. Whole classrooms explore diverse habitats close to home, experience place-based environmental education while paddling in 24' Voyageur canoes, collect water quality data, and complete youth-led projects to improve their local ecosystem. This project is well suited for distanced learning during COVID-19 as students can participate remotely while still benefiting from outdoor engagement tied to in-school learning.

This proposal is for a project in the 2020 funding cycle and will connect 10,000 Minnesota youth to environmental education using the Freshwater Quest. Support from the ENRTF will engage youth from diverse backgrounds statewide in outdoor experiences that build a conservation ethic.

Through place-based environmental education and hands-on learning in the outdoors, this project will serve communities in every region of Minnesota, develop a statewide network of broad-based partnerships, and implement the Freshwater Quest for 10,000 youth to develop as future stewards of Minnesota's natural resources. Investing in the next generation of nature lovers is key to preserving our state's outdoor economy and the vibrancy and health of our environment and residents.

**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 project will:

\* Connect 10,000 diverse and underserved students to educational outdoor experiences, investing in youth to cultivate a sustainable lifestyle and maintain a healthy natural environment.

- \* Improve water quality in local waterways through education, data collection, and real-world projects implemented by youth.
- \* Integrate hands-on science and environmental education activities into classroom learning. The Freshwater Quest is an existing framework that aligns with school science curriculum.
- \* Develop a network of partners including schools, educators, parents, state and local governments, environmental learning programs, and local outdoor clubs, all invested in the development of Minnesota's next generation of environmental stewards.

## 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

## Activities and Milestones

### Activity 1: 10,000 Minnesota Youth Experience Place-based Environmental Education on Minnesota Waterways

**Activity Budget:** \$500,000

**Activity Description:**

The Minnesota Freshwater Quest delivers environmental education through classroom-based instruction and hands-on learning in the outdoors. The Freshwater Quest enhances the learning experience, supporting teachers and students through guided exploration of local ecosystems while pairing environmental education with in-school learning. The proposed project will deliver the Freshwater Quest to educators and learners across the state. Classroom learning and use of the tool is enhanced by Wilderness Inquiry’s place-based environmental education programs, engaging youth in activities that include paddling in 24’ Voyageur canoes on local waterways, water quality testing, macroinvertebrate collection, and more. Wilderness Inquiry provides environmental education in the outdoors as part of the Freshwater Quest, reaching schools in all regions of the state, including Alexandria, Brainerd, Grand Lake, Grand Rapids, Mankato, Saint Cloud, Thief River Falls, and the Twin Cities region.

Through the Minnesota Freshwater Quest:

- \* Teachers register their classroom at <https://herofortheplanet.org/mnquest/>.
- \* Students learn about species that are endangered in their local ecosystem and “adopt” a species.
- \* Students participate in an outdoor, day-long environmental education experience on a local waterway, learning about their watershed and the health of the ecosystem.
- \* Classrooms develop a project that improves the local watershed and positively impacts their chosen species.

**Activity Milestones:**

| Description   | Approximate Completion Date |
|---|-----------------------------|
| Minnesota Freshwater Quest disseminated as an environmental learning tool to 40 Minnesota school districts. | September 30, 2022          |
| 25 educators participate in a training workshop on the Freshwater Quest and STEM curriculum integration.    | October 31, 2022            |
| 25 classrooms/educators register for the Freshwater Quest.  | October 31, 2022            |
| 10,000 diverse youth participate in environmental education programming on a local waterway.                | December 31, 2022           |
| Water quality data is entered through the Freshwater Quest and disseminated through GLOBE.                  | December 31, 2022           |

## Project Partners and Collaborators

| Name                               | Organization                                    | Role   | Receiving Funds |
|------------------------------------|---|--|-----------------|
| John Anfinson                      | 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.  | No              |
| Erika Rivers                       | Minnesota Department of Natural Resources (DNR) | The Minnesota DNR is a key partner in program implementation as Wilderness Inquiry programs utilize public lands such as state parks, waterways, and trails.   | No              |
| Educators, teachers and principals | Minnesota School Districts                      | In addition to sharing the online Minnesota Freshwater Quest with all school districts throughout the state, this project directly engages schools and districts in hands-on outdoor learning.   | No              |
| Leesa Carter-Jones                 | Captain Planet Foundation                       | With Wilderness Inquiry, Captain Planet Foundation tailored the Freshwater 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 Freshwater Quest. | No              |

## Dissemination

**Describe your plans for dissemination, presentation, documentation, or sharing of data, results, samples, physical collections, and other products and how they will follow ENRTF Acknowledgement Requirements and Guidelines.**

Project updates will be shared with diverse stakeholders through print and web based updates such as annual reports, Wilderness Inquiry blogs, Freshwater Quest website highlights, and more. In addition, Wilderness Inquiry will work with partners such as the Minnesota Department of Education and present at various conferences to disseminate resources and opportunities for engagement and training.

The Minnesota Environment and Natural Resources Trust Fund (ENRTF) will be acknowledged through use of the trust fund logo or attribution language on project print and electronic media, publications, signage, and other communications per the ENRTF Acknowledgement Guidelines.

## 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 Minnesota Freshwater Quest is implemented in partnership with educators and parents as a place-based environmental education platform. ENRTF funds will provide for implementation to launch the Freshwater Quest statewide. With support from ENRTF, this project builds the network of partnerships for the Freshwater Quest to reach every Minnesota school district and provides environmental education and hands-on learning experiences for 10,000 Minnesota youth. Wilderness Inquiry is committed to enhancing and expanding the Freshwater 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.

## Other ENRTF Appropriations Awarded in the Last Six Years

| Name   | Appropriation                          | Amount Awarded |
|--|--|----------------|
| Urban Environmental Education Engaging Students in Local Resources | M.L. 2014, Chp. 226, Sec. 2, Subd. 09c | \$1,093,000    |

|  |                                       |             |
|--|---------------------------------------|-------------|
| Connecting Youth to Minnesota Waterways through Outdoor Classrooms | M.L. 2017, Chp. 96, Sec. 2, Subd. 05a | \$1,200,000 |
|--|---------------------------------------|-------------|



## Budget Summary

| Category / Name                                | Subcategory or Type                        | Description  | Purpose | Gen. Ineligible | % Benefits | # FTE | Classified Staff? | \$ Amount        | \$ Amount Spent  | \$ Amount Remaining |
|--|--|--|---------|-----------------|------------|-------|-------------------|------------------|------------------|---------------------|
| <b>Personnel</b>                               |  |  |         |                 |            |       |                   |                  |                  |                     |
| Operations Director                            |  | Oversees operational elements of the project, including logistics, gear, equipment, staffing, etc.   |         |                 | 0%         | 0.98  |                   | \$78,000         | -                | -                   |
| Program Coordinator                            |  | Oversees teacher training, curriculum support and program coordination.  |         |                 | 0%         | 1.13  |                   | \$45,000         | -                | -                   |
| Marketing Manager                              |  | Leads outreach to schools/districts for student recruitment; communicates program impact to partners/funders.  |         |                 | 0%         | 1.13  |                   | \$45,000         | -                | -                   |
| Part-time warehouse staff (multiple personnel) |  | Warehouse and logistical support, canoe and inventory maintenance and repairs.   |         |                 | 0%         | 1.8   |                   | \$62,100         | -                | -                   |
| Finance and Administration Coordinator         |  | Coordinates project administration including payroll, finances and staff reimbursements.   |         |                 | 0%         | 0.75  |                   | \$26,250         | -                | -                   |
| Outdoor Leaders (multiple personnel)           |  | Trail Staff and leaders of on-the-ground programming and work with youth.  |         |                 | 0%         | 9     |                   | \$126,550        | -                | -                   |
| Program Manager                                |  | Manages implementation of the Freshwater Quest, program development and design, and outreach to educators.   |         |                 | 0%         | 1.13  |                   | \$56,250         | -                | -                   |
|  |  |  |         |                 |            |       | <b>Sub Total</b>  | <b>\$439,150</b> | <b>\$439,150</b> | <b>-</b>            |
| <b>Contracts and Services</b>                  |  |  |         |                 |            |       |                   |                  |                  |                     |
| Teachers (multiple)                            | Sub award                                  | Sub-award stipends to teachers to support training, supplies, and materials for youth-led environmental education projects. 25 teacher grants x \$200/grant = \$5,000. |         |                 |            | 0     |                   | -                | -                | -                   |
| Hello Insight - Baltimore, MD                  | Professional or Technical Service Contract | Adopted a research-based evaluation tool (Hello Insight) to measure youth development outcomes and evaluate our programs in comparison to other                        |         |                 |            | 0.15  |                   | \$5,000          | \$5,000          | -                   |

|                                       |                    |  |  |  |  |  |                  |                 |                 |             |
|---------------------------------------|--------------------|--|--|--|--|--|------------------|-----------------|-----------------|-------------|
|                                       |                    | high quality programs. Tool is recognized nationally as a leader in evaluating social-emotional learning outcomes and promoting program continuous improvement. It is more cost-effective than local, individualized evaluation tools. |  |  |  |  |                  |                 |                 |             |
|                                       |                    |  |  |  |  |  | <b>Sub Total</b> | <b>\$5,000</b>  | <b>\$5,000</b>  | <b>-</b>    |
| <b>Equipment, Tools, and Supplies</b> |                    |  |  |  |  |  |                  |                 |                 |             |
|                                       | Tools and Supplies | EcoSTEM water quality testing kits and species identification materials (6 kits x \$700 = \$4,200).  | Environmental education supplies needed to conduct direct programming with youth.                                |  |  |  |                  | \$4,200         | \$4,200         | -           |
|                                       | Tools and Supplies | Teacher training materials   | Materials and supplies to conduct teacher training on project implementation and the Minnesota Freshwater Quest. |  |  |  |                  | \$1,150         | \$1,150         | -           |
|                                       | Equipment          | Environmental education program equipment for hands-on experiences (includes PFDs, paddles, first aid supplies, and other outdoor gear).   | Equipment needed for direct environmental education programming with youth.                                      |  |  |  |                  | \$13,000        | \$13,000        | -           |
|                                       | Equipment          | 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 (\$10,000).                 | Maintenance needed to keep equipment safe for direct environmental education programming with youth.             |  |  |  |                  | \$16,600        | \$16,552        | \$48        |
|                                       |                    |  |  |  |  |  | <b>Sub Total</b> | <b>\$34,950</b> | <b>\$34,902</b> | <b>\$48</b> |
| <b>Capital Expenditures</b>           |                    |  |  |  |  |  |                  |                 |                 |             |
|                                       |                    |  |  |  |  |  | <b>Sub Total</b> | <b>-</b>        | <b>-</b>        | <b>-</b>    |
| <b>Acquisitions and Stewardship</b>   |                    |  |  |  |  |  |                  |                 |                 |             |
|                                       |                    |  |  |  |  |  | <b>Sub Total</b> | <b>-</b>        | <b>-</b>        | <b>-</b>    |

|                                 |                             |  |  |  |  |  |                    |                  |                  |                |
|---------------------------------|-----------------------------|--|--|--|--|--|--------------------|------------------|------------------|----------------|
| <b>Travel In Minnesota</b>      |                             |  |  |  |  |  |                    |                  |                  |                |
|                                 | Other                       | Student transportation and busing  | When needed, and in order to make programming accessible to youth from low-income backgrounds, Wilderness Inquiry assists with student buses to program locations near the school. (\$300/day x 50 events = \$15,000). |  |  |  |                    | \$6,400          | \$4,490          | \$1,910        |
|                                 | Miles/<br>Meals/<br>Lodging | Transportation for Wilderness Inquiry staff to deliver environmental education events across the state via van with trailer and boats (125 events x avg. 200 miles round trip x .58 = \$14,500). | In order to deliver environmental education programming, Wilderness Inquiry staff must travel across the state (with boats and equipment) in order to reach students in the communities where they live.               |  |  |  |                    | \$14,500         | \$14,500         | -              |
|                                 |                             |  |  |  |  |  | <b>Sub Total</b>   | <b>\$20,900</b>  | <b>\$18,990</b>  | <b>\$1,910</b> |
| <b>Travel Outside Minnesota</b> |                             |  |  |  |  |  |                    |                  |                  |                |
|                                 |                             |  |  |  |  |  | <b>Sub Total</b>   | -                | -                | -              |
| <b>Printing and Publication</b> |                             |  |  |  |  |  |                    |                  |                  |                |
|                                 |                             |  |  |  |  |  | <b>Sub Total</b>   | -                | -                | -              |
| <b>Other Expenses</b>           |                             |  |  |  |  |  |                    |                  |                  |                |
|                                 |                             |  |  |  |  |  | <b>Sub Total</b>   | -                | -                | -              |
|                                 |                             |  |  |  |  |  | <b>Grand Total</b> | <b>\$500,000</b> | <b>\$498,042</b> | <b>\$1,958</b> |

Classified Staff or Generally Ineligible Expenses

| Category/Name | Subcategory or Type | Description | Justification Ineligible Expense or Classified Staff Request |
|---------------|---------------------|-------------|--|
|---------------|---------------------|-------------|--|

## Non ENRTF Funds

| Category         | Specific Source                                 | Use  | Status                 | \$ Amount | \$ Amount Spent | \$ Amount Remaining |
|------------------|---|--|------------------------|-----------|-----------------|---------------------|
| <b>State</b>     |   |  |                        |           |                 |                     |
|                  |   |  | <b>State Sub Total</b> | -         | -               | -                   |
| <b>Non-State</b> |   |  |                        |           |                 |                     |
| Cash             | Minneapolis Foundation                          | Funds for curriculum/resource development that supports this project.  | Secured                | \$16,000  | \$16,000        | -                   |
| Cash             | REI Foundation                                  | Funds for curriculum/resource development that supports this project.  | Secured                | \$13,500  | \$13,500        | -                   |
| Cash             | Captain Planet Foundation                       | Mini-grants for Minnesota schools to participate - these funds go directly to teachers/students for use in implementing youth-led projects developed through the Freshwater Quest.   | Secured                | \$25,000  | -               | \$25,000            |
| Cash             | Minnesota Public School Districts               | When able, school districts and schools contribute a small amount of fee for service funding to support Canoemobile programs in their community.<br><br>Additionally, school districts and teachers contribute valuable time and resources to this project through staffing field trips/place-based programming, providing substitute teachers, recruiting and contacting students, guiding students through the Freshwater Quest, and planning and prep time. | Pending                | \$70,000  | \$70,000        | -                   |
| In-Kind          | National Park Service (NPS)                     | NPS provides program staff and Rangers in-kind to support programs, deliver educational materials, and guide students through place-based environmental education lessons.   | Secured                | \$40,000  | \$40,000        | -                   |
| In-Kind          | Minnesota Department of Natural Resources (DNR) | The Minnesota DNR provides program staff and in-kind to support programs, deliver educational materials, and guide students through place-based environmental education lessons.   | Secured                | \$16,000  | \$16,000        | -                   |
| In-Kind          | Wilderness Inquiry                              | Wilderness Inquiry will contribute the following in-kind support to this project: staff benefits; additional staff support including from the Executive Director and Program Director; equipment and facilities; staff food and lodging; insurance; additional teacher stipends.   | Secured                | \$93,000  | \$93,000        | -                   |

|  |  |  |  |                  |                  |                 |
|--|--|--|--|------------------|------------------|-----------------|
|  |  |  | <b>Non<br/>State<br/>Sub<br/>Total</b> | <b>\$273,500</b> | <b>\$248,500</b> | <b>\$25,000</b> |
|  |  |  | <b>Funds<br/>Total</b>                 | <b>\$273,500</b> | <b>\$248,500</b> | <b>\$25,000</b> |

## Attachments

### Required Attachments

#### *Visual Component*

File: [b302c1cc-ced.pdf](#)

#### *Alternate Text for Visual Component*

A visual representation of Canoemobile in action and a quick overview of the Minnesota Freshwater Quest...

#### *Financial Capacity*

File: [8db19ab5-5a5.pdf](#)

#### *Board Resolution or Letter*

| Title                                | File                             |
|--------------------------------------|----------------------------------|
| WI Board Resolution for LCCMR - 2020 | <a href="#">7074936e-d56.pdf</a> |

### Supplemental Attachments

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

| Title  | File                              |
|--|-----------------------------------|
| WI LCCMR Letter of Support - National Park Service       | <a href="#">d0a0bf5b-5db.pdf</a>  |
| Background Check Certification Form - Wilderness Inquiry | <a href="#">d3dcfaf0-a93.pdf</a>  |
| Final Report Abstract                                    | <a href="#">92c56608-fb4.docx</a> |
| Final Report Visual Element                              | <a href="#">bc11dabe-05c.pdf</a>  |

#### *Media Links*

| Title                               | Link  |
|-------------------------------------|---|
| Minnesota Freshwater Quest homepage | <a href="https://herofortheplanet.org/quests/minnesota-freshwater-quest/">https://herofortheplanet.org/quests/minnesota-freshwater-quest/</a> |

## Difference between Proposal and Work Plan

### *Describe changes from Proposal to Work Plan Stage*

The original workplan was submitted for a 3-year project and a \$1.432 million budget. Updates to the budget are to match the appropriation amount of \$500,000 for this project. Updates to the workplan account for that reduced budget, as well as the timing/delay in beginning the project due to legislative delays. Specific changes include reducing the goal number of youth served from 30,000 to 10,000 (this change was made throughout the workplan and matches the budget reduction).

Under 'activities and milestones', we adjusted the youth served, as well as the number of educators trained and classrooms registered to 25 each. As we have implemented the Freshwater Quest as a distanced learning tool through COVID-19, we have already had a number of teachers/classrooms register that will subsequently participate in Quest programming through this project. Additionally, we have seen other positive avenues to implementation, including working directly with families and other groups to implement the Quest with students.

Under the budget, we changed one staff position from a Program Coordinator role to a Marketing Manager role. The Marketing Manager will assist in outreach to districts, educators, and families to recruit participants, as well as help share the impact of the program with partners, funders and the community.





## Additional Acknowledgements and Conditions:

The following are acknowledgements and conditions beyond those already included in the above workplan:

**Do you understand and acknowledge the ENRTF repayment requirements if the use of capital equipment changes?**

N/A

**Do you agree travel expenses must 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 agree to the Commissioner's Plan.

**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

## Work Plan Amendments

| Amendment ID | Request Type      | Changes made on the following pages  | Explanation & justification for Amendment Request (word limit 75)  | Date Submitted     | Approved | Date of LCCMR Action |
|--------------|-------------------|--|--|--------------------|----------|----------------------|
| 1            | Amendment Request | <ul style="list-style-type: none"> <li>• Budget</li> <li>• Budget - Personnel</li> <li>• Budget - Professional / Technical Contracts</li> <li>• Budget - Capital, Equipment, Tools, and Supplies</li> <li>• Budget - Travel and Conferences</li> <li>• Budget - Non-ENRTF Funds Contributed</li> </ul> | Requesting to move \$5,000 from Teacher Stipends to Outdoor Leader wages. Due to the virtual nature teacher trainings we did not need stipends, however our Outdoor Leader wages are higher than expected due to a tight labor market. Requesting to move \$8,600 from buses to equipment and repairs. Schools had surplus funds for busing due to covid funding. Our equipment and repairs are more expensive due to inflation and supply chain issues. | September 29, 2022 | Yes      | October 14, 2022     |
| 2            | Amendment Request | <ul style="list-style-type: none"> <li>• Project Collaborators - Project Manager Info</li> <li>• Budget - Professional / Technical Contracts</li> </ul>  | We are submitting this amendment to update the name of the contractor (Hello Insight) who was selected to complete our evaluation efforts after our original budget was initially approved. Thank you.   | April 21, 2023     | Yes      | April 27, 2023       |
| 3            | Project Manager   | Previous Manager: Julie Edmiston (julie@wildernessinquiry.org)<br>New Manager: Julie Edmiston (julie@wildernessinquiry.org)  | Reorganize WI staff accounts in system   | April 19, 2023     | Yes      | April 19, 2023       |
| 4            | Completion Date   | Previous Completion Date: 06/30/2024<br>New Completion Date: 02/28/2023  | LCCMR Completion Date change to get projects that finished prior to final reporting functionality being available in the online. See Activity Log for notes on final report approval.  | May 23, 2023       | Yes      | May 23, 2023         |

# Status Update Reporting

## Final Status Update July 7, 2023

**Date Submitted:** June 30, 2023

**Date Approved:** June 30, 2023

### Overall Update

1: The project served 8,833, not quite meeting the goal of 10,000 participants due to unforeseen circumstances such as impacts from COVID-19, bussing, and staffing shortages. Through virtual programming, and a focus towards smaller in-person group experiences, the project engaged learners on more personalized levels, creating more meaningful connections to nature. The Freshwater Quest continues to serve youth through additional ENRTF funding and we anticipate surpassing combined project service goals.

2: Programs increased education of local watersheds, water-quality, endangered and invasive species, and human impact on the environment through experiential place-based education. Youth participated in water quality sampling and data collection, uploading results to the citizen scientist database GLOBE. Youth collected water quality samples from 31 different water bodies across Minnesota.

3: The Freshwater Quest is aligned to Next Generation Science Standards and is a versatile tool that easily incorporates into curriculum. Activities include: paddling on local waterways, water safety skills, biological and chemical water quality testing, building secchi disks, scientific method observations and hypothesizing, and native species exploration.

4: The Freshwater Quest project expanded a diverse partner network in Silver Bay, Crosby, Austin, St. Cloud, Albert Lea, Rochester, Tower, Roseville, the Twin Cities, and Lakeville.

### Activity 1

Milestone 1: This milestone is complete. The Freshwater Quest has been shared with over 40 school districts through targeted email communications, outreaches, and virtual planning meetings.

Milestone 2: This milestone is complete. 54 educators participated in Freshwater Quest professional development workshops covering STEM curriculum integration, how to use the Quest online platform with students, and opportunities to take learning outside with Wilderness Inquiry's Canoemobile.

Milestone 3: 18 educators participated with their classrooms in the Freshwater Quest between August 2021 - December 2022. In addition, the quest continues to be used as a teaching platform today and educators may also use the platform without formally registering.

Milestone 4: This project has engaged 8,833 youth. Through additional ENRTF funding, we expect more than 17,000 additional youth to participate in environmental education programming on local waterways through Canoemobile and The Freshwater Quest, meeting the combined goal by June 30, 2024.

Milestone 5: Water quality data continues to be collected by students on Wilderness Inquiry Freshwater Quest programs, it is then entered and shared through the GLOBE citizen science platform. Data will continue to be collected and entered through fall programming.

*(This activity marked as complete as of this status update)*

**Dissemination**

Wilderness Inquiry regularly shared project updates on Canoemobile and the Minnesota Freshwater Quest to diverse partners, stakeholders and media outlets. This happened through direct email campaigns, social media publications, and press releases regarding ongoing programming. Most recently, The Timberjay picked up a story about students from Tower-Soudan and Northeast Range participating in Canoemobile. Wilderness Inquiry also shared about the Freshwater Quest in our 2022 Year on Review on our website in December, 2022.

In addition, progress dissemination took place through engaging teacher professional development opportunities including Teach Outdoors! MN, an event where 39 teachers learned first hand how to use the Freshwater Quest in their classrooms.

# Status Update Reporting

## Status Update April 1, 2023

**Date Submitted:** April 21, 2023

**Date Approved:** April 27, 2023

### Overall Update

1: The project served 8,833, not quite meeting the goal of 10,000 participants due to unforeseen circumstances such as impacts from COVID-19, bussing, and staffing shortages. Through virtual programming, and a focus towards smaller in-person group experiences, the project engaged learners on more personalized levels, creating more meaningful connections to nature. The Freshwater Quest continues to serve youth through additional ENRTF funding and we anticipate surpassing combined project service goals.

2: Programs increased education of local watersheds, water-quality, endangered and invasive species, and human impact on the environment through experiential place-based education. Youth participated in water quality sampling and data collection, uploading results to the citizen scientist database GLOBE. Youth collected water quality samples from 31 different water bodies across Minnesota.

3: The Freshwater Quest is aligned to Next Generation Science Standards and is a versatile tool that easily incorporates into curriculum. Activities include: paddling on local waterways, water safety skills, biological and chemical water quality testing, building secchi disks, scientific method observations and hypothesizing, and native species exploration.

4: The Freshwater Quest project expanded a diverse partner network in Silver Bay, Crosby, Austin, St. Cloud, Albert Lea, Rochester, Tower, Roseville, the Twin Cities, and Lakeville.

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# Status Update Reporting

## Status Update October 1, 2022

**Date Submitted:** September 29, 2022

**Date Approved:** October 14, 2022

### Overall Update

Though data is still being calculated, more than 6,500 diverse Minnesota youth have connected with educational outdoor experiences through Wilderness Inquiry's Canoemobile and Freshwater Quest programming. These youth have learned first hand about water quality on their local waterways through science based curriculum and real-world projects implemented by youth and their classroom teachers. In addition to the schools and partners stated in the April update, some highlights include a week spent in Mower County with students from Austin, MN and the surrounding area, numerous activities with Minneapolis and Saint Paul Public summer schools, various Twin Cities based charter schools and time spent on Rainy Lake with students from International Falls, South Koochiching and Lake of the Woods School Districts.

### Activity 1

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Milestone 2: This milestone is complete. 54 educators participated in Freshwater Quest professional development workshops covering STEM curriculum integration, how to use the Quest online platform with students, and opportunities to take learning outside with Wilderness Inquiry's Canoemobile.

Milestone 3:

\*\*\*More than 6,500 youth have participated in programming to date, coming from the Twin Cities Metro, Austin, Saint Cloud, International Falls, Silver Bay, and more.

--> 42% of these youth identify as Black, Indigenous, and/or as a person from various racial and ethnic backgrounds.

\*\*\*In March 2022, nearly 300 youth participated in the Freshwater Quest Virtual Youth Explorers experiences. Students participated in water quality testing and watershed activities. During a live recording of the Mississippi River with staff teaching and demonstrating experiments. Students brainstorm stewardship project ideas that will help freshwater ecosystems.

Milestone 4: Water quality data continues to be collected by students on Wilderness Inquiry Freshwater Quest programs, it is then entered and shared through the GLOBE citizen science platform. Data will continue to be collected and entered through fall programming.

### Dissemination

Wilderness Inquiry continues to share project updates on Canoemobile and the Minnesota Freshwater Quest to diverse partners, stakeholders and media outlets.

\*\*\*In September, we produced a media release regarding programming on Rainy Lake in Voyageurs National Park. The Minnesota Environment and Natural Resources Trust Fund was acknowledged in this media release as funding the programming.

\*\*\*39 K-12 teachers participated in a Teach Outdoors! MN virtual event to learn about this project and the MN Freshwater Quest tool and how to use it in their classroom.

\*\*\*Later in October, Wilderness Inquiry is planning a professional development educator paddle during the Minnesota

Education Association school break to share about the Freshwater Quest and encourage educators to sign their classrooms up for virtual and in-person field trips.



# Status Update Reporting

## Status Update April 1, 2022

**Date Submitted:** April 29, 2022

**Date Approved:** May 2, 2022

### Overall Update

With support from LCCMR, Wilderness Inquiry has connected 1,686 diverse and underserved students to in-person educational outdoor experiences from August 13th, 2021 to February 28th, 2022 through our 2022 Minnesota Freshwater Quest: Environmental Education On State Waterways project. Within these outdoor experiences, students learned about and contributed to real-world projects that benefit local ecosystems in their own communities and beyond. Using The Freshwater Quest online platform, students will engage in activities that align with educational content that meet state standards. So far, project partners including, Captain Planet Foundation, Mississippi Park Connection, National Park Service, YMCA, Minneapolis Public Schools, Lake Superior School District, Stewartville Public Schools, Saint Cloud Area School District, and more, have participated in helping develop Minnesota's next generation of environmental stewards.

### Activity 1

Milestone 1:

As of February 28, Wilderness Inquiry has shared opportunities to participate in the Freshwater Quest through a variety of channels including email communications, social media, word of mouth, and distributing through existing partners. Continued broad dissemination of this learning tool to districts across the state will happen in 2022.

Milestone 2:

15 educators have participated in a workshop style training for Freshwater Quest and STEM curriculum integration thus far.

Milestone 3:

1,686 diverse youth have participated in environmental education programming between August 13th, 2021 and February 28th, 2022. Participants joined from across the state -- from the Twin Cities metro to Lake Superior School District to Saint Cloud and more.

Preparations were made for the spring Freshwater Quest virtual series to connect classrooms to science and environmental content in addition to planning for in-person experiences later in the season.

Milestone 4:

Water quality data collected by students from August 13th, 2021 to February 28th, 2022 on Wilderness Inquiry Freshwater Quest programs has been tallied and will be shared through GLOBE at a later date in 2022.

### Dissemination

To date, Wilderness Inquiry's Freshwater Quest program has been featured on our website, blog posts, and through bulk communications to community members. At this time, we are currently reevaluating an adjusted approach to sharing the project with the broader audience across school districts throughout the state. A communication to Minnesota school superintendents and districts is planned for 2022. See links to some Freshwater Quest features online below:

Freshwater Quest Website: <https://herofortheplanet.org/quests/minnesota-freshwater-quest/>

Wilderness Inquiry Website: <https://www.wildernessinquiry.org/mnfreshwaterquest/>

Wilderness Inquiry March Blog Post: <https://www.wildernessinquiry.org/current-news/news-notes/90-days-at-the-helm-wilderness-inquiry/>

Freshwater Quest Teacher Training Webinar: <https://www.wildernessinquiry.org/mnfreshwaterquest-teachertraining/>