

2017 Project Abstract

For the Period Ending June 30, 2021

PROJECT TITLE: Floating Classroom: Connecting 20,000 Youth to Minnesota Waterways

PROJECT MANAGER: Nell Holden

AFFILIATION: Wilderness Inquiry

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FUNDING SOURCE: Environment and Natural Resources Trust Fund

LEGAL CITATION: M.L. 2017, Chp. 96, Sec. 02, Subd. 05a as extended by M.L. 2020, First Special Session, Chp. 4, Sec. 2

APPROPRIATION AMOUNT: \$1,200,000

AMOUNT SPENT: \$1,189,384

AMOUNT REMAINING: \$10,616

Sound bite of Project Outcomes and Results

The Floating Classroom served more than 25,000 Minnesota youth by creating opportunities to engage in environmental science through accessing Minnesota waterways and public lands. Youth assessed natural resources, collected scientific data, developed a stewardship ethic, and learned about outdoor employment opportunities, becoming Minnesota's next generation of natural resource protectors.

Overall Project Outcome and Results

All told since the beginning of the project in June 2017, Wilderness Inquiry's Floating Classroom connected more than 25,714 Minnesota youth to environmental science and Minnesota's abundant waterways and public lands.

On live outdoor events, Wilderness Inquiry's Floating Classroom served 24,421 diverse Minnesota youth through place-based, educational experiences, creating opportunities to engage in environmental science through accessing Minnesota waterways and public lands. Of these youth, 23,600 youth engaged in hands-on exploration, recreation and assessment of said waterways and public lands and 821 youth participated in a multi-day expedition, learning to restore and maintain public lands and discover pathways into outdoor-related employment.

When COVID-19 forced Minnesota schools into distanced learning and limited the gathering of groups, the Floating Classroom quickly pivoted to meet the needs of educators and families educating and learning from home. Wilderness Inquiry's Online Learning Resources were created and this website has been visited by 1,254 unique visitors. Some highlights include pages dedicated to Environmental Science and Natural Resources (visited by 353 visitors) and Jobs in the Outdoors (visited by 126 visitors). The full scope of these resources goes much further with downloadable activities and additional pages being shared among virtual classrooms.

As COVID-19 continued to impact the Floating Classroom's ability for in person programming through summer 2020, Wilderness Inquiry and the National Park Service partnered together to create a free virtual summer camp to connect youth to the mysteries of the Mississippi River. 39 Minnesota Youth took part in this camp focused on the ecology of the Mississippi River.

Project Results Use and Dissemination

While participating in Floating Classroom activities, students collected water quality data and this data was reported back and disseminated through a citizen science online portal Canoe Quest via GLOBE, a national database for citizen science.

Wilderness Inquiry worked with the University of Minnesota's Center for Applied Research and Educational Improvement (CAREI) to evaluate the project. CAREI produced two reports over the course of the

three years which were shared directly with partners and stakeholders, presented at conferences, and can be found on the [Wilderness Inquiry website](#).

Lastly, many local media outlets covered the Floating Classroom's arrival throughout the state. Many of these are included in the Wilderness Inquiry blog, including this story from MPR:

<https://www.wildernessinquiry.org/current-news/news-notes/summer-school-program-uses-nature-as-a-classroom/>



Environment and Natural Resources Trust Fund (ENRTF) M.L. 2017 LCCMR Work Plan Final Report

Date of Report: September 15, 2020

Final Report

Date of Work Plan Approval: May 30, 2017

Project Completion Date: August 31, 2020

PROJECT TITLE: Floating Classroom: Connecting 20,000 Youth to Minnesota Waterways

Project Manager: Nell Holden

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Location: Statewide

Total ENRTF Project Budget:	ENRTF Appropriation:	\$1,200,000
	Amount Spent:	\$1,189,384
	Balance:	\$10,616

Legal Citation: M.L. 2017, Chp. 96, Sec. 02, Subd. 05a as extended by M.L. 2020, First Special Session, Chp. 4, Sec. 2

Appropriation Language:

\$1,200,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Wilderness Inquiry to provide place-based environmental education science water experiences to approximately 20,000 middle-and high-school students. This appropriation is available until June 30, 2020, by which time the project must be completed and final products delivered.

M.L. 2020 - Sec. 2. ENVIRONMENT AND NATURAL RESOURCES TRUST FUND; EXTENSIONS. [to June 30, 2021]

I. PROJECT TITLE: Floating Classroom: Connecting 20,000 Youth to Minnesota Waterways

II. PROJECT STATEMENT:

Floating Classroom: Connecting 20,000 Youth to Minnesota Waterways (“Floating Classroom”) will serve 20,000 diverse Minnesota youth (grades 4-12) over three years, creating opportunities to engage in environmental science through accessing Minnesota waterways and public lands. Youth will assess natural resources, collect scientific data, engage in outdoor recreation, develop a stewardship ethic, and be exposed to outdoor-related employment opportunities.

Through collaboration with agencies such as the National Park Service, Minnesota DNR, Conservation Corps of Minnesota and others, Wilderness Inquiry will provide opportunities for youth to participate in hands-on exploration of State Water Trails. The Floating Classroom offers students the chance to collect data on Minnesota waterways and contribute to statewide databases tracking watershed health and quality. This exposure to scientific method connects youth to their local waterways and offers a platform for cultivating a conservation ethic. Students will also have the opportunity to care for public lands through restoration projects in Minnesota State Parks and other public lands.

To ensure the health of Minnesota ecosystems, our natural resources must be cared for and protected by the next generation. Through exposure to outdoor spaces and hands-on experiences in the outdoors, Minnesota’s youth develop a stewardship ethic and learn to care for their natural resources as active, engaged citizens.

Floating Classroom activity outcomes include:

- 19,400 youth engage in hands-on exploration, recreation, and assessment of Minnesota waterways.
- 600 youth participate in a multi-day expedition along Minnesota waterways. Youth restore and maintain public lands, discover pathways into outdoor-related employment, and learn about outdoor recreation opportunities in their area.
- Youth compile scientific data and contribute to statewide online databases, tracking the health of waterways and ecosystems in Minnesota.
- Youth receive documentation of program completion, recognizing their achievements and outlining their skills for future employment opportunities.

Minnesota benefits from its youth cultivating a stewardship ethic and learning to access outdoor spaces for recreation and environmental education. The deep connections Minnesota youth develop with their environment and public lands leads to sustained care and awareness of Minnesota’s natural resources. This pro-social engagement encourages positive citizenship and active community building. The Floating Classroom fosters an ethic of conservation as well as an appreciation of natural outdoor spaces in Minnesota’s young people, ensuring healthy waterways and ecosystems for the future.

III. OVERALL PROJECT STATUS UPDATES:

Project Status as of December 15, 2017:

Between July 1 and November 30, 2017, Wilderness Inquiry connected 6,800 Minnesota youth to their local waterways and public green spaces. During these interactions, students performed hands-on chemical and physical tests to monitor water quality and assessed the indications of a healthy watershed. In addition, students inventoried aquatic and terrestrial native and non-native species, drawing conclusions about the interconnectedness of an ecosystem. Wilderness Inquiry retains these data for future dissemination and is in the process of selecting a vendor to create an online water quality portal/platform.

The groups of students who have participated in the project range from 4th-12th grade. Wilderness Inquiry has engaged new partners across the state to provide older students with local connections to employment

pathways and potential fields of study. These ongoing opportunities are a critical component for youth to develop a deep connection to public lands and waters. Wilderness Inquiry continues to collaborate with school districts and other partners statewide to initiate learning experiences for youth.

Wilderness Inquiry is contracting with the University of Minnesota's Center for Applied Research and Educational Improvement to evaluate success and measure impact of the Floating Classroom program.

Project Status as of June 15, 2018:

Since the start of the project in July 2017, Wilderness Inquiry has connected more than 10,000 young people to the waterways and green spaces in their community. The Floating Classroom serves as an entry point for students to learn about their ecosystem by collecting samples and measurements of water quality indicators including pH, temperature, phosphorus, nitrates, clarity and biologic data of the presence of plant and macro invertebrate species. Wilderness Inquiry selected Captain Planet Foundation to create the platform for these data to be collected and disseminated. The two organizations have been working closely to build the resources necessary for staff and teachers to educate students about their impact as citizen scientists in Minnesota.

Over the winter months, Wilderness Inquiry utilized its warehouse space for boat repairs for our fleet of Voyageur Canoes. This was essential to ensure our fleet would be ready to execute the Floating Classroom this season. Wilderness Inquiry does this internally due to a lack of external options and to minimize costs.

The University of Minnesota Center for Applied Research and Educational Improvement finalized the measurement tool and we have been collecting evaluations of the Floating Classroom program.

Current project manager, Meg Krueger, will be leaving Wilderness Inquiry in November 2018. Mary Mallinger was hired and will begin to take on responsibilities of the project in the fall, with the intention of succeeding Meg Krueger as project manager. An amendment request will be submitted once a timeline has been determined for this transition.

Amendment Request (08/21/2018):

Meg Krueger is leaving Wilderness Inquiry and will transition responsibilities to Nell Holden and Mary Mallinger. Nell Holden will act as Project Manager as of 9/1/2018. To account for this staff change as well as potential future staff changes, we request to remove employee names from the work plan budget, leaving only position titles.

From 9/1-11/1/2018, Meg Krueger and Mary Mallinger will split the 1.0 FTE Program Manager role to ease Mary's transition into the job. As of 11/1/2018, Mary will take on the full 1.0 FTE Program Manager role.

This project is moving as planned and we continue to engage students across the state in place-based education and citizen science. One recent development is the completion of our web-based learning platform and data collection portal: <https://herofortheplanet.org/mnwaterquest/> This tool is being tested by teachers as they prepare their ecosystem and science curricula for the school year.

Amendment Approved by LCCMR 9/5/2018

Project Status as of December 15, 2018:

Wilderness Inquiry has served over 16,000 youth since the project began in July 2017. Throughout summer and fall 2018, the Floating Classroom connected youth from the Twin Cities, Rochester, Cloquet, Silver Bay, Thief River Falls, and other communities across the state, to science and their local waterways through hands-on learning and engaging outdoor experiences. Students from 4th-12th grade participated in a variety of place-based educational activities focused on science. Activities include water-quality monitoring, where students measure chemical and biological indicators, such as pH, phosphate levels, and turbidity, as well as macroinvertebrate inventorying. Students record data in the field which is entered into an online data collection

platform, GLOBE (www.globe.gov). These data are compiled with citizen science data from around the world and are accessible to all. Researchers and the general public benefit from data collected by Minnesota youth as part of the Floating Classroom. In addition, students also enjoyed outdoor recreational activities close to home such as canoeing, hiking, and fire building.

Wilderness Inquiry worked with Captain Planet Foundation to build the Minnesota Freshwater Quest, an educational online platform for teachers. The Quest guides teachers and their students through interactive curriculum on threatened and endangered aquatic species in Minnesota. After learning about and “adopting” a species, classes participate in a Wilderness Inquiry trip connecting with their species’ aquatic environment and learn how to be stewards of Minnesota’s freshwater. The Quest also serves as the portal to GLOBE where classes enter and view their data as well as data collected by other groups statewide. Wilderness Inquiry is currently disseminating the Freshwater Quest to teachers across Minnesota for use in their classrooms. See more at: <https://herofortheplanet.org/mnwaterquest/>

The surveys developed with the University of Minnesota Center for Applied Research and Educational Improvement have been distributed to more than a thousand students across many day and extended trips. Survey administration was completed in September and the data are currently being analyzed by the University.

As of November 1, 2018, Mary Mallinger began as program manager full-time, as outlined in the previous amendment.

Project Status as of June 15, 2019:

Wilderness Inquiry has served more than 19,000 youth since the start of the project in July 2017. Throughout the winter and spring of 2019, time was spent preparing for summer by meeting with Minnesota teachers and school districts, planning for upcoming programming, and restoring the fleet of 24 foot cedar stripped Voyageur canoes. In May 2019, students partook in an adopt-a-campsite program, developing deeper environmental stewardship and personal connection to Minnesota’s public lands. A few key highlights of the Floating Classroom from the season to date include:

- Youth from Best Academy went to Maria State Park, for many of these youth it was the first time sleeping in a tent outside.
- Middle schoolers from Prairie View Middle school collected water quality data and learned about healthy waterways at Orono Lake, on the Elk River.
- More than 600 students in Austin, Minnesota connected to each other and their local waterway in 24 foot Voyageur canoes.

In addition, Wilderness Inquiry continues to improve an online platform for teachers and students to enter water quality data using the GLOBE database for dissemination.

The University of Minnesota Center for Applied Research and Educational Improvement delivered survey results from programming in 2018. Results show that Canoemobile develops persistence, environmental stewardship, and interest in future science careers. These results were shared with our Board of Directors in May and will be presented publically at the Minnesota Water Resources Conference in October. We continue to collect data throughout the program.

Amendment Request as of 11/11/2019:

As we approach the last 6 months of our project we’d like to make a few budgetary adjustments. A major component of the Floating Classroom is keeping our fleet of hand crafted wooden canoes in good repair. When we created our original work plan budget we had assumed the cost of these repairs would come out of our equipment budget. As the project continued we discovered that the real cost of repairs has been in part time labor through the winter. Due to this we would like to move \$15,000 from the equipment budget to wages. In addition, we have found we’ve been able to keep our travel costs to a minimum and we would like to move

\$10,000 from travel to wages. Lastly, our evaluation contract from the University of Minnesota Center for Applied Research and Educational Improvement has come under the original bid and we'd like to move \$3,000 from Professional Service Contracts to wages as well. With this additional \$28,000 in wages, Wilderness Inquiry will be able to provide direct programming through the Floating Classroom to 5,000 additional Minnesota students, increasing our total service number to 25,000 students. Of the 5,000, 4,750 will participate in day long activities through the floating classroom and 250 students will be on extended trips, experiencing a deeper engagement with their public lands.

Amendment Approved by LCCMR 11/12/2019

Project Status as of December 15, 2019:

Wilderness Inquiry has served more than 24,000 youth since the start of the project on July 1, 2017. Throughout the summer and fall the Floating Classroom connected youth to their local waterways including Lake Marion, Lake Phalen, Lake Nokomis, Lake Vermillion, Red Lake River, The Mississippi River and more. High school students from Minneapolis summer schools participated in place-based education, recovering academic credit through the Floating Classroom. Middle school students from Lakeville Area Public Schools learned about water safety, freshwater mussels, and collaborative team building by paddling in 10 person canoes. Elementary students from places including Crookston and St. Louis County experienced paddling a canoe for the very first time on waterways within 30 miles of their home.

Through these programs and additional teacher engagement, Wilderness Inquiry has continued to collect water quality data and improve upon the online platform to record and disseminate this data through the GLOBE database.

Surveys produced by the University of Minnesota Center for Applied Research and Educational Improvement (CAREI) continue to be administered to students and teachers through programs and will be analyzed again this winter. In October a representative from CAREI and Wilderness Inquiry presented data and findings that have been collected thus far to the Minnesota Water Resource Conference.

Amendment Request as of 4/21/2020:

Due to the impacts of COVID-19, Wilderness Inquiry has pivoted all outdoor programming to online resources, activities and curriculum. We are in direct communication with Minnesota educators and parents and are working together to support the distance learning efforts Minnesota students are completing. Rather than bringing students outside in large groups with our floating classroom, we are bringing the floating classroom to their homes. Through in-depth, extended lessons like the Freshwater Quest as well as shorter videos and activities that teach water quality testing and bird identification, students are able to keep learning environmental science and engage with Minnesota waterways.

To date, Wilderness Inquiry has served 24,377 youth across the state of Minnesota, leaving the need to serve an additional 623 youth to meet our goals. Through website traffic data tracking, as well as our direct communication with teachers and parents we will ensure we meet this goal.

To make this pivot effectively, Wilderness Inquiry's full-time Program and Outreach staff will focus their time and attention on the creation and dissemination of these resources. In addition we will not be able to hire many of the seasonal trail staff we had originally planned. We will need to add full time positions to our personnel budget in replacement of the majority of the remainder that was reserved for trail staff spring 2020.

The Program and Outreach staff will be creating videos and other online educational resources. In order to do this we will need to purchase audio/visual equipment. Wilderness Inquiry has never previously invested in any audio/visual equipment and will be unable to make videos at a usable quality without basic items like a go-pro camera and stand for outdoor, canoe based programming, tripod, small stand microphones and lights. This equipment will only be used to create videos/photographs/audio clips for online educational content. In

addition, some scientific instruments are needed for educational demonstrations. Because camping experiences are not currently safe, the remainder of the budget from camping and permits (approximately \$3,000) will be spent on this equipment.

Some of the website updates and transitions to remote work are beyond the skill set of our staff. We plan to use a technology contractor to assist with these tasks. We are budgeting approximately \$20,000 for their work as it pertains to this project.

Amendment Approved by LCCMR 5/14/2020

Project extended to June 30, 2021 by LCCMR 6/18/20 as a result of M.L. 2020, First Special Session, Chp. 4, Sec. 2, legislative extension criteria being met.

Project Status as of July 15, 2020:

As of March 1, 2020 Wilderness Inquiry served more than 24,000 students through the Floating Classroom on placed-based environmental and educational outdoor experiences. When schools turned to remote programming in May, many scheduled spring and early summer activities were also cancelled due to social distancing requirements. While schools around the state transitioned to distanced learning, the Floating Classroom pivoted to remote digital programming as well. Wilderness Inquiry program staff spoke with educators about the challenges of remote learning and determined how to be the most supportive. With teacher feedback, an Online Learning web page was developed and regularly updated with new activities and lessons focused on STEM education, outdoor stewardship, jobs in the outdoor industry, and more. These activities were shared with school teachers and administrators across the state, as well as parents and other adults supporting Minnesota youth during this turbulent time. See here for more information:

<https://www.wildernessinquiry.org/online-learning/>

Through google analytics, we know that more than 1,000 people from the state of Minnesota have explored this site as of July 15, 2020. This includes the educators who had to cancel in-person activities and instead shared these remote activities with their classrooms and youth groups.

In addition to Wilderness Inquiry's online learning activities, program staff also developed a free virtual camp experience in partnership with the National Park Service. The Mississippi River Explorers Virtual Summer Camp is best suited for youth in grades 5-8, facilitated via Zoom video meetings, and aligned with the middle school academic standard of investigation. Youth are tasked to uncover the mysteries of the Mighty Mississippi River through interactive activities, hands-on materials, and more. To encourage participation and ensure equal access throughout camp, each camper was provided with an Exploration Kit that included activity packets, art supplies, and other materials to be used during camp. Funding from LCCMR helped support lessons and activities focused on the ecology of the Mississippi River, including investigating "How are pollutants and other garbage getting into the river?" and "Why is prairie habitat beneficial for rivers?". For more information, see here: <https://www.wildernessinquiry.org/itinerary/mississippi-river-explorers-virtual-summer-camp/>

Overall Project Outcomes and Results:

All told since the beginning of the project in June 2017, Wilderness Inquiry's Floating Classroom connected more than 25,714 Minnesota youth to environmental science and Minnesota's abundant waterways and public lands.

On live outdoor events, Wilderness Inquiry's Floating Classroom served 24,421 diverse Minnesota youth through placed-based, educational experiences, creating opportunities to engage in environmental science through accessing Minnesota waterways and public lands. Of these youth, 23,600 youth engaged in hands-on exploration, recreation and assessment of said waterways and public lands and 821 youth participated in a multi-day expedition, learning to restore and maintain public lands and discover pathways into outdoor-related employment.

When COVID-19 forced Minnesota schools into distanced learning and limited the gathering of groups, the Floating Classroom quickly pivoted to meet the needs of educators and families educating and learning from home. Wilderness Inquiry's Online Learning Resources were created and this website has been visited by 1,254 unique visitors. Some highlights include pages dedicated to Environmental Science and Natural Resources (visited by 353 visitors) and Jobs in the Outdoors (visited by 126 visitors). The full scope of these resources goes much further with downloadable activities and additional pages being shared among virtual classrooms.

As COVID-19 continued to impact our ability for in person programming through summer 2020 Wilderness Inquiry and the National Park Service partnered together to create a free virtual summer camp to connect youth to the mysteries of the Mississippi River. 39 Minnesota Youth took part in this camp focused on the ecology of the Mississippi River.

IV. PROJECT ACTIVITIES AND OUTCOMES:

ACTIVITY 1: Engage 25,000 youth in environmental science and recreation opportunities along Minnesota's waterways

Description: 24,150 Minnesota youth, grades 4-12, practice scientific methods through hands-on environmental science education and recreation activities. Students engage in multiple water-focused science activities, paddle 24' Voyageur Canoes or 17' tandem canoes, and earn an environmental science certificate by completing these modules:

- Water quality testing and collection (pH, temperature, phosphorus, nitrates, clarity)
- Inventorying aquatic and terrestrial invasive and native species
- Assessing recreational opportunities such as fishing, canoeing, and hiking

For the final four months of the project, the remaining students will continue to complete the above modules through online resources like videos and at-home activities. The students will not be paddling in canoes.

As a result of exploring and assessing Minnesota waterways (including the Mississippi River, Minnesota River, Sauk River, Rum River, Crow River, Red River, St. Louis River, and other local lakes and public lands) 19,400 youth access recreational opportunities in their area, experience hands-on environmental science education, develop a stewardship ethic, and realize ongoing opportunities into career and academic pathways. Data and assessments will be collected in the field and compiled in an online waterway map that students can access from school. The online portal will also include information about ongoing outdoor activities and employment pathways to create more continuity and alignment between outdoor educational experiences, classroom learning, and lifelong care for the outdoors. The "Floating Classroom" leverages existing curriculum and assessment tools to highlight the health, accessibility, and recreation resources of local waterways.

The program can serve up to 200 youth each day, focusing on diverse students who wouldn't normally have access to similar opportunities, primarily from public schools and other youth programs. Each program day costs an average of \$46 per student.

(Estimated cost \$46 x 19,400 students = \$892,400)

An additional 850 students will participate in multi-day expeditions and learn to restore and maintain healthy and bio diverse natural environments on public lands. Groups of 6-30 youth paddle canoes and engage deeply in environmental science and stewardship in areas such as Fort Snelling State Park, Nerstrand State Park, William O'Brien State Park, Itasca State Park, as well as other municipal and regional parks, state and federal public lands and waterways. A subsection of these 850 students (10%) will pilot an "Adopt-a-Campsite" project in partnership with the Minnesota DNR.

“Adopt-a-Campsite” activities include facilities upkeep, fire pit maintenance, portage clearing, invasive species removal, trash clean up, general site improvements, and information-sharing for campsites. Youth will:

- Participate in hands-on environmental science education and recreation
- Improve and maintain waterways through service projects such as invasive species removal
- Earn an environmental-skills certification, highlighting resume-building skills learned in scientific data collection, resource management, leadership, Leave No Trace, and more

Multi-day expeditions prepare youth to improve their waterways, overcome challenges, learn about work opportunities in the outdoor industry, and adopt sustainable lifestyles. Multi-day expeditions cost an average of \$388 per student.

Similarly as stated above, for the final four months of the project, students will not be camping in groups, however many of the students participating in the online activities will do so through multiple weeks as new activities are released. In addition to the water quality and scientific modules listed above, there are modules with topics on environmental stewardship and employment opportunities in the outdoors.

(Estimated cost \$387.66 x 600 youth = \$232,600)

Summary Budget Information for Activity 1:

ENRTF Budget:\$ 1,128,000
Amount Spent:\$ 1,118,273
Balance:\$ 9,727

Outcome	Completion Date
1. 24,150 youth explore and assess Minnesota waterways	6/30/2020
2. 850 youth conduct intensive multi-day waterway assessments	6/30/2020

Activity 1 Status as of December 15, 2017:

- 6,629 students participated in Wilderness Inquiry science-based canoe day trips.
 - Program sites varied across the state and included waterways such as Sauk River, Mississippi River, Minnesota River, St. Croix River, Red River, Red Lake River, Crow River, Rice Lake in Brainerd, Lax Lake north of Duluth, Lake Marion, Lake Sagatagan, Bald Eagle Lake, Carver Lake, and the Minneapolis Chain of Lakes.
 - During canoe experiences, students tested water quality samples from the waterway for pH, turbidity, temperature, dissolved oxygen, and phosphates. They also used seine and hand nets to gather and identify macro-invertebrate species; through observation they were also able to identify animal life along the shoreline and in the water including turtles, fish, mussels, and birds. Wilderness Inquiry staff recorded and retained the data, although many of the groups also brought a copy of their data back to the classroom for further discussion.
 - Students identified recreational opportunities (hiking, fishing, water sports, etc) at multi-use program sites to gain a sense of the potential activities available near their homes.
- 218 youth participated in 3-day and 4-day expeditions focused on identifying career connections and cultivating a stewardship ethic; for many of these students it was their first time canoeing and camping.
 - Multi-day program locations included Voyageurs National Park, Superior National Forest, Chippewa National Forest, St. Croix Scenic River, Itasca State Park, and regional parks in the Twin Cities Metro Area.
- Conversations with the DNR are in progress to implement the Adopt-a-Campsite pilot program and identify sites and students.

- Spring and summer 2018 Floating Classroom tours are being planned to engage new communities in Minnesota from Austin to International Falls.

Activity 1 Status as of June 15, 2018:

- 3,232 students participated in Wilderness Inquiry science-based canoe day trips since our last work plan update in December 2017.
 - In partnership with Minnesota Department of Natural Resources, the Floating Classroom visited seven Northwest Minnesota State Parks in May 2018, reaching new waterways in Alexandria, Pelican Rapids, Roseau, Williams, Washkish, Bemidji, and Battle Lake. Students in grades 4-8 paddled on their state park waterway and collected water quality and species inventory data.
 - The Floating Classroom spent a day in McGregor, MN paddling and studying Big Sandy Lake with McGregor High School students. A group of these students will join Wilderness Inquiry on an extended 5-day Boundary Waters trip in July 2018 to compare their findings from Big Sandy Lake with those of the lakes in the BWCA.
 - Wilderness Inquiry spent a full week in Austin, MN in partnership with the Mower County Soil and Water District, paddling with students on the Cedar River. Over 600 students from Austin and surrounding communities learned about the health of the Cedar River watershed and their impact on it.
- Since January 2018, 140 youth participated in 3-day and 4-day expeditions focused on identifying career connections and cultivating a stewardship ethic; for many of these students it was their first time camping.
 - Multi-day program locations included Itasca State Park, the St. Croix National Scenic Riverway, and Wild River State Park.
- The Floating Classroom will engage more Twin Cities youth and Greater Minnesota communities throughout the summer and fall, including the Red River Basin area, North Shore of Lake Superior, and St. Cloud area.

Activity 1 Status as of December 15, 2018:

- 5,897 youth participated in science-based outdoor programming since the last work plan update. Since the beginning of the project, Wilderness Inquiry has served 16,538 of the planned 20,000 youth.
 - Wilderness Inquiry brought the Floating Classroom to many programming locations throughout the Twin Cities. At sites such as Fort Snelling State Park, Theodore Wirth Regional Park, and Hidden Falls Regional Park, students collected water quality data and sampled aquatic macroinvertebrates. In addition, youth connected to their local waterways and communities by working as a team and learning to paddle in 24-foot Voyageur canoes.
 - In partnership with Minneapolis Public Schools, summer school students experienced science curriculum in hands-on outdoor settings while participating in canoeing trips.
 - Canoemobile traveled across the state to engage with students in greater Minnesota. In Thief River Falls, Crookston, East Grand Forks, Fergus Falls, Cloquet, Silver Bay, Clinton, and Rochester, over 2,000 youth participated in place-based education through outdoor programming.
- Wilderness Inquiry partners with the National Park Service and Minnesota DNR to build a stewardship ethic, share employment opportunities, and connect youth to their public lands.
 - Between June and December of 2018, 169 youth participated in extended overnight adventures to places such as the St. Croix River, the Boundary Waters Canoe Area, Lake Elmo Park Reserve and Afton State Park.

- In partnership with Voyageurs National Park Association, youth in the National Park Teen Ambassador program participated in 5-day expeditions to Voyageurs National Park where they studied water quality and learned about land stewardship and the diverse career opportunities in the outdoor industry.
- Wilderness Inquiry employed 9 high school students who were participants in these programs.

Activity 1 Status as of June 15, 2019:

- Since the last work plan update, 2,856 youth participated in science-based outdoor programming. As a whole, Wilderness Inquiry has served 19,494 Minnesota youth of the planned 20,000.
 - Wilderness Inquiry brought the Floating Classrooms to many programming locations including Austin, Shakopee, Sauk River and Orono Lake. We partnered with the local public school districts. Students collected water quality data on their local lakes, rivers and streams, studied aquatic macroinvertebrates and practiced team work by paddling in Voyageur canoes.
- In May 2019, 66 youth from KIPP Academy and Best Academy participated in overnight camping experiences at Lake Maria State Park. While camping at Lake Maria State Park, these students showed deeper environmental stewardship through an Adopt-a-Campsite project. As part of the project, they took on “site beautification” by collecting trash and cleaning out fire pits.

Activity 1 Status as of December 15, 2019:

- Wilderness Inquiry has served 4,883 youth on science-based outdoor programming since June 15, 2019. Since the beginning of the project, 23,556 youth have participated in day programming and 594 youth have participated in multi-day programming for a total of 24,337 youth in the program. Highlights included:
 - In July, 19 immigrant girls from the Winona area went on an overnight camping trip to Carley State Park and participated in our Adopt-a-Campsite project.
 - Youth from Girls Inc participated in canoe trip on the Mississippi River and following the paddle, they engineered their own small boats and exemplified the scientific method of trial and error by floating these boats on the same water they had paddled.
 - More than 300 students from Crookston and Thief River Falls paddled on the Red Lake River and learned about water quality.

Activity 1 Status as of July 15, 2020:

- This spring, before social distancing measures were in place, Wilderness Inquiry served 40 youth and 4 chaperones from Sojourner Truth Academy on a science-based outdoor activities day at North Mississippi Regional Park, just a couple miles away from their school.
- Of the more than 1,000 people who used the Online Learning Resources, 345 specifically visited the Environmental Science and Natural Resources category.
 - This included activities like Twin Cities Plant ID and Revolutionary Recycling, where students learned about the natural world around them and were encouraged to reflect on how their daily lives impact plants, water, and animals in their community. In addition, through Wilderness Inquiry’s partnership with the Mississippi River National Recreation Area, students were exposed to a virtual Mississippi River Riverboat field trip and the living ecosystem of the Mississippi River.
 - Users came from Minneapolis, St. Paul, Richfield, Blaine, Golden Valley, Minnetonka, Two Harbors, Coon Rapids and more cities across Minnesota.
- 65 campers have signed up for the Mississippi River Explorers Virtual Summer Camp. This includes two youth with cognitive disabilities participating with a parent for additional support, as well as youth from across the state, including the Twin Cities Metro Area, Cloquet, Northfield, and Saint Cloud, MN.

Final Report Summary:

- More than 25,714 diverse Minnesota youth from around the state participated in environmental science and recreational opportunities along Minnesota's waterways.
 - 23,600 practiced scientific methods through hands-on education and recreation activities, frequently from the seat of a 24' voyageur canoe. These students tested water quality through measurements of pH, temperature, phosphorus, nitrates and clarity. They inventoried aquatic macroinvertebrates, and learned various recreational activities such as fishing, canoeing, and hiking.
 - 821 students experienced a multi-day expedition, learning to restore and maintain healthy and bio-diverse natural environments on public lands.
 - More than 1,254 explored Wilderness Inquiry's Online Learning Resources to assist with distance learning.
 - 39 Minnesota youth participated in a live virtual summer camp, learning about the Mississippi River from National Park Service Rangers and Wilderness Inquiry staff. One parent shared *"Thank you for the camp experience! My kids loved it and were inspired to check out some different areas of the river each week! It was great fun for the entire family. I really appreciate the effort you all put into making it a fun and educational experience from a distance... It inspired us all to leave the suburbs and to get out and explore the river!"*

ACTIVITY 2: Disseminate data and evaluation of project

Description:

Evaluation of project: Wilderness Inquiry partners with the University of Minnesota's Center for Applied Research and Educational Improvement (CAREI) to design, administer, and analyze the project evaluation. They will be contracted to do the following:

Year 1:

- Design an evaluation instrument, including survey and interview questions
- Administer evaluation tool to measure program effectiveness and the ability to develop environmental-based skills and socio-emotional growth in youth, including the development of:
 - A stewardship ethic
 - An increased awareness of sustainable lifestyle habits and active recreational opportunities on Minnesota's public lands and waterways
 - Scientific skills, such as water quality data collection and analysis

Year 2:

- Year 1 data analysis and program adjustment recommendations
- Continue to administer evaluation instrument, collecting both qualitative and quantitative data

Year 3:

- Develop final written report
- Share and disseminate through online portal and conferences

(Evaluation costs: \$20,000/year for first two years, \$5,000 for final year to provide a report and assist with dissemination)

Dissemination of data: Wilderness Inquiry will select a vendor through the competitive process to create an online portal to disseminate evaluations and statewide water quality data collected by students over three years. The online portal will act as an interactive map highlighting statewide program locations, student data collection, evaluation statistics, and ongoing opportunities for youth engagement in the outdoors. This webpage

provides a statewide model to highlight the educational and environmental impact of connecting youth with their local waterways. In addition to the program map, this site hosts evaluation information from partners about Floating Classroom activities to broaden dissemination. Visitors to this site will access:

- Aggregated, student-collected statewide water quality data
- Highlights from Floating Classroom, including the program impact based on evaluation data
- Overview of program locations and recreational opportunities statewide
- Opportunities for internships and jobs

To clarify the process of collecting, analyzing, and disseminating the water quality data, Wilderness Inquiry will follow these steps:

- Step 1: Youth in the field take samples of water quality data (turbidity readings, pH, dissolved oxygen, phosphorous, native/invasive species, etc)
- Step 2: Educators (WI trail staff) collect data using offline data collection tools
- Step 3: Wilderness Inquiry maintains data collected from the field in our existing database
- Step 4: Vendor develops online portal, takes data and transfers it to an interactive map of Minnesota waterways

(Costs: \$30,000 for online portal development project)

Summary Budget Information for Activity 2:

ENRTF Budget: \$ 72,000
Amount Spent: \$ 71,110
Balance: \$890

Outcome	Completion Date
1. CAREI Project evaluation: impact on development of a stewardship ethic, sustainable lifestyle habits, and recreational interests	6/30/2020
2. Water Quality Data Map through an online web-portal created for summary data collected and submitted by students tracking water quality, species inventory, and recreational opportunities in Activity 1. Evaluation summary and research dissemination as well as evaluation reports and summaries.	6/30/2020

Activity 2 Status as of December 15, 2017:

Wilderness Inquiry is working with the Center for Applied Research and Educational Improvement (CAREI) and developed a survey to measure participant outcomes. Among the myriad skills and attributes youth are expected to develop over the course of time, CAREI has helped identify three that the Floating Classroom program is uniquely designed to foster in youth: persistence, environmental stewardship, and academic/career interests (definitions provided by CAREI are listed below).

- **Persistence.** Persistence in this context means individuals’ willingness to try something new, which is related to the characteristic “openness to experience.” Research has demonstrated that individuals who are more open to experience enjoy positive life outcomes, including greater upward career mobility. Importantly, openness to experience does not remain static for individuals over time, meaning that youth programming has the potential to encourage development of this trait.
- **Environmental stewardship.** Environmental stewardship can be viewed as a component of the social-emotional learning competency *responsible decision-making*, defined as “the capacity to make choices based on realistic evaluations of consequences, well-being, ethics, safety, and social norms.” A higher capacity for responsible decision-making should contribute to more positive youth outcomes in terms of interpersonal skills and academic performance.
- **Academic/career interests.** For academic/career interests, Wilderness Inquiry is interested in developing students’ interests in science and the environment through the Floating Classroom project. Interest in pursuing a STEM-related career is typically developed during childhood and adolescence.

Expanded learning programs that incorporate science are an important complement to schooling for growing student interest in science, and may be especially important for increasing the representation of underserved groups in the STEM fields.

A first round of survey items was developed by CAREI (10 for persistence, 8 for environmental stewardship, 6 for science/career interests) and piloted with a group of middle school students in early September 2017. The items were refined and adapted before a large-scale administration of the survey was conducted in October 2017. The next steps in the survey development process are to perform an item analysis on these data and to finalize the completion of the Technical Manual that will accompany the final survey, which is expected in January 2018.

Activity 2 Status as of June 15, 2018:

The University of Minnesota Center for Applied Research and Educational Improvement (CAREI) finalized the survey items referenced above. CAREI randomly selected day and extended trips on which the surveys will be administered to youth participants. We are currently utilizing the survey during these trips and CAREI will do a preliminary analysis in Fall 2018 for initial outcomes. In addition, we developed an online survey for teachers involved with the program. This is distributed after the trip and results will be included in CAREI's analysis. A mid-project evaluation report is expected in early 2019.

Activity 2 Status as of December 15, 2018:

The surveys created in partnership with the University of Minnesota Center for Applied Research and Educational Improvement (CAREI) were distributed to youth across the state on both day and extended trips. Youth residing in urban, suburban, and rural areas were surveyed. A total of 1,315 surveys were administered, 241 on extended trips and 1,074 on day trips. The surveys are being analyzed by CAREI and an initial evaluation report is expected in early 2019.

Through the Minnesota Freshwater Quest, created with the Captain Planet Foundation, classes have the capability to upload and disseminate their water quality data collected on Wilderness Inquiry trips. The Quest guides teachers and students through the GLOBE Program, where their data is visually represented alongside water quality data collected across the world. Classes visit the site and compare the data collected and the health of their watersheds to others throughout the state.

Activity 2 Status as of June 15, 2019:

The surveys completed by teachers and students last summer and fall were analyzed by the University of Minnesota Center for Applied Research and Educational Improvement (CAREI) and results were reported in February, 2019. Highlights from the results include:

- Canoemobile's "Floating Classroom" was evaluated on its ability to develop persistence, environmental stewardship, and interest in future science careers. Results show that Canoemobile leads to a statistically significant increase in all three of these metrics. 100% of areas measured show a statistically significant improvement following a Canoemobile event.
- After their Canoemobile experience, 90% of students on extended trips reported being interested in helping the environment and 92% of participants reported that they felt it was partly their responsibility to care for their environment.
- Additionally, survey results showed that Canoemobile's impact is largest among middle school aged students and female students -- two populations with particular needs that are often not met by traditional classroom formats.

CAREI presented these results to the Wilderness Inquiry Board of Directors in May. Our full report is available on our website at <https://www.wildernessinquiry.org/current-news/research-results/uwca-evaluations/>. We continue to collect data as the program progresses.

Activity 2 Status as of December 15, 2019:

Additional surveys were administered through the summer and fall of 2019. These surveys included additional analysis on the outcomes derived based on school district locale (city, suburban, town and rural) as defined by the National Center for Education Statistics through the US Census Bureau. The University of Minnesota Center for Applied Research and Educational Improvement (CAREI) will be delivering a second report and analysis in early 2020.

The evaluator from CAREI, Jane Fields, and a representative from Wilderness Inquiry, Julie Edmiston, presented initial findings from this project at the Minnesota Water Resources Conference in October. Highlights from the presentation include results from teacher surveys, student surveys, and other observations and testimonials. Approximately 80 individuals attended this presentation and several expressed interest in becoming involved with the project moving forward. LCCMR was credited in the presentation for funding the project and evaluation.

Activity 2 Status as of July 15, 2020:

In March 2020, the University of Minnesota's Center for Applied Research and Educational Improvement (CAREI) delivered their second and final report and analysis on the Floating Classroom. Results show that participating in Wilderness Inquiry's Canoemobile program led to statistically significant increases in students' development of persistence, environmental stewardship, and an interest in future science careers. In addition, 94% of teachers believe that because of Canoemobile, students will be more open to new experiences even if those experiences are challenging for them, and 89% of students reported they believe it is partly their responsibility to care for the environment and that they know something they can do to make a difference. The full report is available on our website at: <https://www.wildernessinquiry.org/current-news/research-results/uwca-evaluations/>

Final Report Summary:

The University of Minnesota's Center for Applied Research and Educational Improvement (CAREI) designed, administered, and analyzed the project evaluation, overall coming in under budget from original projections. The final report produced in March 2020 showed significant increases in students' development of persistence, environmental stewardship, and an interest in future science careers. The full report is available on our website at: <https://www.wildernessinquiry.org/current-news/research-results/uwca-evaluations/>

V. DISSEMINATION:

Description: We will work with our partners at collaborating agencies to identify venues for disseminating information, statistical data, and summary findings about this project. Wilderness Inquiry's website will post updates on activities, partners, and resources at < <https://www.wildernessinquiry.org/current-news/>>. Once created, The Water Quality Data Map and online portal for evaluation and research dissemination will also be available to the public.

Status as of December 15, 2017:

Wilderness Inquiry has begun discussions with online platform providers to disseminate water quality data around the state. The collected water quality monitoring and species data is retained by Wilderness Inquiry and will continue to be collected throughout 2017 with the intent to disseminate reports in 2018.

Status as of June 15, 2018:

Wilderness Inquiry selected Captain Planet Foundation to create the online platform for dissemination of water quality and ecosystem data. The platform is in its final draft and our findings will be collected and shared in two ways:

- Canoe Quest is an online portal designed for collecting water quality data from Floating Classroom events across Minnesota. Field data are collected in the Canoe Quest via GLOBE, a national database for

citizen science. The Canoe Quest data is then shared with students, teachers, partner organizations, and available to the general public.

- Minnesota Freshwater Quest is an extensive online learning system that builds on the simpler Canoe Quest portal. Minnesota Freshwater Quest brings educational resources and the data from Canoe Quest on-water experiences into classrooms and curricula across the state. This ensures data are not just held online but are utilized in schools to impact change, promote stewardship ethics, and educate young people about Minnesota's waterways.

Status as of December 15, 2018:

Wilderness Inquiry began testing the Minnesota Freshwater Quest built by Captain Planet Foundation. The online platform is used for collection and dissemination of water quality data, and provides teachers with ecology-based curricula. In addition, an "Explore Opportunities" page was added to connect youth with organizations that provide internships and jobs in the outdoor industry. In November, the Quest was distributed to teachers for use in their classrooms to supplement their educational outdoor experiences with Wilderness Inquiry.

Status as of June 15, 2019:

Wilderness Inquiry held an introductory Educators Workshop for Minnesota teachers and community leaders highlighting the Minnesota Freshwater Quest developed in partnership with Captain Planet Foundation. This online platform provides teachers with ecology-based curricula as well as acts as a platform for collecting and disseminating the water quality data collected by youth during Wilderness Inquiry programming.

Status as of December 15, 2019:

Wilderness Inquiry and other media outlets have highlighted a few Floating Classroom Canoemobile events throughout the past summer. A couple include our partnership with Minneapolis Public Summer School for students to recover academic credit: <https://www.wildernessinquiry.org/current-news/news-notes/summer-school-program-uses-nature-as-a-classroom/> and a deeper partnership in Austin, Minnesota which was highlighted in many local news sources: <https://www.wildernessinquiry.org/current-news/news-notes/95159/> In addition, results from the 2018 evaluations from CAREI can be found here: <https://www.wildernessinquiry.org/current-news/research-results/uwca-evaluations/> Once we receive the next report in early 2020 it will be added to this same page.

Status as of July 15, 2020:

Wilderness Inquiry shared the new online resources through a variety of platforms, including Wilderness Inquiry and partner organization email campaigns, social media posts, and community websites.

- Wilderness Inquiry email campaigns were sent to past youth participants, educators, and families in our network. Partner organizations, like the Outdoors Alliance for Kids (OAK), also included a link to our online resources in their email newsletter.
- Social media posts on Facebook and Instagram -- weekly posts on Wilderness Inquiry's social media accounts highlighted new activities, like Backyard Bird ID and MN Native Plant ID, that were added to our online learning webpage.
- Saint Paul Connect email campaigns and website -- A recent website created by Saint Paul Public Schools and Sprockets was designed to be a resource hub for the 35,000 Saint Paul Public School students and families. Wilderness Inquiry's online activities and our Mississippi River Explorers Virtual Summer Camp opportunity were added to their website, as well as marketed in their email campaigns.

Final Report Summary:

Throughout the 3-year project, Wilderness Inquiry worked with various partners and collaborating agencies to identify venues and disseminate information, statistical data, and summary findings about the project. Both

formal reports produced by CAREI can be found at: <https://www.wildernessinquiry.org/current-news/research-results/uwca-evaluations/>

In addition, many local media outlets covered the Floating Classroom’s arrival throughout the state. Many of these are included in the Wilderness Inquiry blog including this one from MPR: <https://www.wildernessinquiry.org/current-news/news-notes/summer-school-program-uses-nature-as-a-classroom/>

Wilderness Inquiry also worked with CAREI and the Captain Planet Foundation to disseminate research through various presentations and webinars as well as student collected water quality data, including the 2019 Minnesota Water Resources Conference.

VI. PROJECT BUDGET SUMMARY:

A. Preliminary ENRTF Budget Overview:

***This section represents an overview of the preliminary budget at the start of the project. It will be reconciled with actual expenditures at the time of the final report.**

Budget Category	\$ Amount	Overview Explanation
Personnel:	\$837,400	1 Program Director at .5 FTE for 3 years; 1 Program Manager at 1.0 FTE for 3 years; 2 Program Coordinators at .75 FTE for 3 years; 1 Finance and Administration Assistant at .15 FTE for 3 years Trail Guide Wages at 1:7 staff/student ratio
Professional/Technical/Service Contracts:	\$72,000	Project evaluation by CAREI (\$20,000 x 2 years, 5,000 for 3 rd year); Web-based portal development for watershed data map and evaluations; dissemination (\$30,000)
Equipment/Tools/Supplies:	\$96,000	Equipment maintenance and repair (estimated \$9,000 x 3 years); PDFs, paddles, first aid supplies, and other outdoor gear (estimated \$18,000); Biffy rental for program sites (\$200 x 30 events); Water quality testing kits, invasive species interpretive materials, youth certification cards (\$3 x 20,000 youth)
Travel Expenses in MN:	\$56,000	Travel to planning meetings with MN School districts (estimated 4,500 miles x \$.54/mile); Gear and trail Staff transportation (estimated 300 events x 100 miles round trip x \$.54/mile); Youth transportation (\$250 x 150 events); Staff food and lodging for day programming away from Twin Cities (\$100 x 100 events)
Other: Food	\$36,700	Youth food for events (600 youth x 5 days x \$9/day per youth) + (19,400 youth x \$.50)
Other: Liability Insurance	\$90,000	Liability Insurance for staff and participants on programming events (\$30,000 x 3 years)
Other: Camping fees	\$11,900	Camping fees and entrance fees to state/regional/national parks and recreation areas around the state (estimated \$125 nightly group campsite fees x 75 events); permits and

Budget Category	\$ Amount	Overview Explanation
		licenses for participants (\$25 vehicle permits for 17 vans x 3 years); annual permits for river and recreational access (\$400 x 3 years)
TOTAL ENRTF BUDGET:		\$1,200,000

Summary of Personnel Costs:

- Program Director (.50 FTE) – Estimated wages \$35,000/year x 3 years = \$105,000
Responsible for directing all aspects of the Floating Classroom project to ensure timely and high quality delivery of service including oversight of hiring, training, scheduling, and supervising staff and volunteers, coordinating with schools, collecting and maintaining accurate demographic data, and executing all trip logistics.
- Program Manager (1.0 FTE) – Estimated wages \$60,000/year x 3 years = \$180,000
Responsible for managing logistic details for all events statewide. Supervises staff and ensures quality, safety, and cost effectiveness of all events. Oversees the delivery and implementation of educational curricula and timely communication with school and other partners
- Program Coordinator (.75 FTE) – Estimated wages \$30,000/year x 3 years = \$90,000
Coordinates the day-to-day details of the single and multi-day experiential programs, including hiring, training, scheduling, and supervising staff and volunteers conducting the events, coordinating with schools, collecting and maintaining accurate demographic tallies, coordinating all trip logistics including permits and reservations, transportation, gear, and food.
- Program Coordinator (.75 FTE) – Estimated wages \$30,000/year x 3 years = \$90,000
Coordinates the day-to-day details of the single and multi-day experiential programs, including hiring, training, scheduling, and supervising staff and volunteers conducting the events, coordinating with schools, collecting and maintaining accurate demographic tallies, coordinating all trip logistics including permits and reservations, transportation, gear, and food.
- Finance and Administration Assistant (.15 FTE) – Estimated wages \$6,000/year x 3 years = \$18,000
Responsible for entering participant registrations and demographic data and collecting, entering, and coding project receipts. Provides assistance with scheduling and communications correspondence for the project.
- Trail Guides – Estimated wages \$85/day x 3,840 days = \$326,400

Explanation of Use of Classified Staff: N/A

Explanation of Capital Expenditures Greater Than \$5,000: N/A

Total Number of Full-time Equivalent (FTE) Directly Funded with this ENRTF Appropriation: 9.45

Total Number of Full-time Equivalent (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation: N/A

B. Other Funds:

Source of Funds	\$ Amount Proposed	\$ Amount Spent	Use of Other Funds
Non-state			
Public Schools in Minnesota	\$300,000	\$	Teacher and staff time to coordinate and attend events with Wilderness Inquiry
Other			

Source of Funds	\$ Amount Proposed	\$ Amount Spent	Use of Other Funds
Wilderness Inquiry (in-kind support)	\$360,000	\$	All staff benefits, additional staff support including Executive Director, Outreach Director, Equipment and Facilities
National Park Service	\$150,000	\$	Program staff/Rangers, Environmental curricula and interpretation, estimates
TOTAL OTHER FUNDS:	\$510,000	\$	

VII. PROJECT STRATEGY:

A. Project Partners:

Partners receiving ENRTF funding

- University of Minnesota CAREI: \$45,000 for project data collection, evaluation, summary of findings, and dissemination.

Partners NOT receiving ENRTF funding

- Minnesota Department of Natural Resources: DNR will provide educational and interpretive curricula content on many day and multiday trips; assist in coordinating access to multiple programming sites throughout the state; work with Wilderness Inquiry to pilot the Adopt-a-Campsite program; and provide significant in-kind personnel and funding to the project.
- National Park Service: NPS will provide educational and interpretive curricula content on many day and multiday trips. NPS will broker use agreements to facilitate use of the Mississippi River with other land management agencies. NPS will provide significant in-kind personnel and funding to the project.
- Minnesota Public School Districts: School faculty contact and recruit youth, develop pre and post trip resources to align Wilderness Inquiry events with classroom learning, and provide chaperones and staff support to the project.

B. Project Impact and Long-term Strategy: Minnesota’s natural spaces provide opportunities for outdoor recreation, tranquility, and learning. Valuing these resources and cultivating enthusiasm and interest in Minnesota youth will help preserve and maintain public lands and waters for years to come. The Floating Classroom contributes to ongoing, statewide efforts to track and improve the quality and health of Minnesota waterways.

C. Funding History:

Funding Source and Use of Funds	Funding Timeframe	\$ Amount
M.L. 2014, Chp. 226, Sec. 2, Subd. 09c	FY 2014-2017	\$1,093,000
M.L. 2013, Chp. 52, Sec. 2, Subd. 07b	FY 2012-2013	\$450,000
		\$

VIII. REPORTING REQUIREMENTS:

- The project is for 4 years, will begin on 7/1/17, and end on 6/30/21.
- Periodic project status update reports will be submitted on June 15 and December 15 of each year.
- A final report and associated products will be submitted between June 30 and August 15, 2021.

IX. VISUAL COMPONENT or MAP(S):



Minneapolis Summer School students earn science credit and measure water quality at Fort Snelling State Park.



Youth from Shriner's Hospital inventory freshwater aquatic macroinvertebrates before paddling.



Students study the water quality of their local watershed through summer school programming in Lakeville, MN.

WATER QUALITY DATA SHEET

EVENT NAME: Fort Snelling - MU River Back Channel

DATE: 6-7-2018

GPS COORDINATES: 44.8874591, -93.1789142

LEADERS: Katie Johnson + Alyssa Brawitt + Ellen Groff

DIRECTIONS: Record data in respective boxes for each rotation and small group. Find the average for each rotation.

CHEMICAL																				
	NITRATE (ppm)					PHOSPHATE (ppm)					DISSOLVED O2 (ppm)					pH				
	1	2	3	4	AVG	1	2	3	4	AVG	1	2	3	4	AVG	1	2	3	4	AVG
ROTATION	1	5			2.5	4	4			4	4	3			3.5	8	7.5			7.75
2	5			5	4	4			4	4	4			4	4	7	7		7	
3	5	6		5.5	4	4			4	4	4			4	4	8	8		8	
4	5	5		5	2	4			3	4	4			4	4	7.5	7.5		7.5	

PHYSICAL										
	TEMPERATURE (°F)					TURBIDITY (cm)				
	1	2	3	4	AVG	1	2	3	4	AVG
ROTATION	1	74°F				10	5	10	8.5	8.375
2	75°F					6	7	8.5	7	7.125
3	78°F					8	4	6	7	6.25
4	78°F					5	8	8	7	

FIELD NOTES/OBSERVATIONS: Drue was mowing grass + just left clippings behind

HOW CAN WE USE THIS PARK?

- | | | | |
|---|--|---|---------------------------------|
| <input checked="" type="checkbox"/> CANOEING/KAYAKING | <input checked="" type="checkbox"/> HIKING | <input checked="" type="checkbox"/> WALKING/RUNNING | <input type="checkbox"/> OTHER: |
| <input checked="" type="checkbox"/> FISHING | <input checked="" type="checkbox"/> BIKING | <input checked="" type="checkbox"/> TEAM SPORTS | |

A sample data sheet where students record measured physical and chemical indicators of water quality, as well as take field observations.

Environment and Natural Resources Trust Fund

Final M.L. 2017 Project Budget

Project Title: Floating Classroom: Connecting 20,000 Youth to Minnesota Waterways

Legal Citation: M.L. 2017, Chapter 96, Sec. 2, Subd. 05a

Project Manager: Nell Holden

Organization: Wilderness Inquiry

M.L. 2017 ENRTF Appropriation: \$1,200,000

Project Length and Completion Date: 4 years, June 30, 2021

Date of Report: September 15, 2020



ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET	Amended Budget (5/14/2020)	Amount Spent	Activity 1 Balance	Amended Budget (11/11/2019)	Amount Spent	Activity 2 Balance	TOTAL BUDGET	TOTAL BALANCE
BUDGET ITEM								
Personnel (Wages and Benefits)	\$837,400	\$837,400	\$0				\$837,400	\$0
Program Director \$70,000; 50% FTE for 3 years -- 100% salary= \$105,000 total								
Program Manager \$60,000; 75% FTE for 3 years -- 100% salary= \$180,000 total								
Program Coordinator \$40,000; 75% FTE for 3 years -- 100% salary= \$90,000 total								
Program Coordinator \$40,000; 75% FTE for 3 years -- 100% salary= \$90,000 total								
Finance and Administration Assistant \$30,000; 15% FTE for 3 years -- 100% salary= \$18,000 total								
Outreach Director \$80,000; 75% FTE for 4 months -- 100% salary = \$27,000 total								
Outreach Coordinator \$40,000; 75% FTE for 4 months -- 100% salary = \$14,000 total								
Program Coordinator \$40,000; 75% FTE for 4 months -- 100% salary = \$14,000 total								
Operations Coordinator \$40,000; 75% FTE for 4 months -- 100% salary = \$14,000 total								
Program Coordinator \$40,000; 75% FTE for 4 months -- 100% salary = \$14,000 total								
Operations Manager \$60,000; 75% FTE for 4 months -- 100% salary = \$15,000 total								
Trail Guides \$85/day x 3,840 days = \$326,400 total								
Professional/Technical/Service Contracts							\$92,289	\$8,741
Online resource website development & remote server transition costs contracted with LuminFire Brilliant Solutions	\$20,289	\$12,438	\$7,851					
University of Minnesota Center for Applied Research and Educational Improvement				\$42,000	\$41,110	\$890		
Web-based portal development vendor				\$30,000	\$30,000	\$0		
Equipment/Tools/Supplies								
Examples of program supplies and equipment for participants and program volunteers are listed below. Please note that the items below are estimates of program supplies and equipment needed. We will bill for actual costs. Equipment maintenance and repair (\$9,000 x 3 years); PFDs, paddles, first aid supplies, and other outdoor gear (\$18,000); Biffy rental for program sites (\$200 x 30 events); Water quality testing kits, invasive species interpretive materials, youth certification cards (\$3 x 20,000 youth) A/V needs: small stand microphones (\$200), studio lights (\$100), Go-pro camera (\$350), tri pod and clamps (\$150)	\$98,930	\$97,055	\$1,875				\$98,930	\$1,875
Travel expenses in Minnesota								
Travel to planning meetings with MN School districts (estimated 4,500 miles x \$.54/mile); Gear and trail Staff transportation (300 events x 100 miles round trip x \$.54/mile); Youth transportation (\$250 x 150 events); Staff food and lodging for day programming away from Twin Cities (\$100 x 100 events)	\$35,711	\$35,711	\$0				\$35,711	\$0
Other								
Liability Insurance for staff and participants on programming events (\$30,000 x 3 years)	\$90,000	\$90,000	\$0				\$90,000	\$0
Food for youth events (600 youth x 5 days x \$9/day per youth) + (19,400 youth x \$.50)	\$36,700	\$36,700	\$0				\$36,700	\$0
Camping fees and entrance fees to state/regional/national parks and recreation areas around the state (estimated \$125 nightly group campsite fees x 75 events); permits and licenses for participants (\$25 vehicle permits for 17 vans x 3 years); annual permits for river and recreational access (\$400 x 3 years)	\$8,971	\$8,971	\$0				\$8,971	\$0
COLUMN TOTAL	\$1,128,000	\$1,118,274	\$9,726	\$72,000	\$71,110	\$890	\$1,200,000	\$10,616