

Environment and Natural Resources Trust Fund

M.L. 2025 Final Work Plan

General Information

ID Number: 2025-301

Staff Lead: Tom Dietrich

Date this document submitted to LCCMR: July 7, 2025

Project Title: Science Centers Supporting Northern Boys and Girls Clubs

Project Budget: \$1,091,000

Project Manager Information

Name: Lee Furuseth

Organization: Headwaters Science Center

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Project Reporting

Reporting Schedule: March 1 / September 1 of each year.

Project Completion: June 30, 2028

Final Report Due Date: August 14, 2028

Legal Information

Legal Citation: M.L. 2025, First Special Session, Chp. 1, Art. 2, Sec. 2, Subd. 05s

Appropriation Language: \$1,091,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Headwaters Science Center to expand access to environmental science education in northern Minnesota and leverage partnerships between rural and urban organizations to deliver culturally relevant, hands-on learning experiences to underserved students.

Appropriation End Date: June 30, 2028

Narrative

Project Summary: This proposal will expand access to environmental science education in Northern Minnesota by leveraging partnerships between rural and urban organizations to deliver culturally relevant, hands-on learning experiences to underserved students.

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

In Northern Minnesota, a region characterized by its high poverty/free and reduced lunch rates, and remote rural landscapes, there exists a profound inequity in access to informal environmental science education. The challenge is two-fold: 1) Geographical isolation of students from major urban educational centers and 2) The Headwaters Science Center (HSC) in Bemidji (pop. 15,300), though well located to serve this student population, is a very lean organization currently with limited capacity to provide staff training and deliver science education to students at scale.

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.

Under the leadership of the Headwaters Science Center, this initiative brings together the strengths of four Boys & Girls Club Systems In Northern Minnesota (BGCA), the Science Museum of Minnesota (SMM), and Freshwater (FW) to immerse students in place-based, culturally relevant, indoor/outdoor environmental science activities as part of their after-school and summer programs, many of which have high Native student populations and are far from the state's urban centers. The existing curricula will be chosen to reflect the unique ecological contexts and cultural heritage of each community including topics that illuminate the connections between geology, soils, watersheds, plants, animals, and people.

The partnership will leverage the strengths and resources of each organization, thereby extending the reach and impact of environmental education to regions where it is most needed. The active involvement of BGCA sites in choosing their curriculum guarantees that the educational content will resonate with the students' lived experiences and the environmental realities of their communities. The participation of the SMM and FW ensure high-quality, engaging hands-on experiments and training for the HSC and BGCA staff.

What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?

The central outcome of this project is to enhance the accessibility of environmental education for students in Minnesota's economically and geographically disadvantaged counties including the BGCA sites on the White Earth Nation (5), Detroit Lakes (2), the Red Lake Nation (2) and Bemidji (2) more than 20 times each year resulting in a greater appreciation of the protection, conservation, preservation, and enhancement of the state's natural resources. Additionally, this work will establish a cooperative model that provides a scalable and adaptable framework for expanding access to quality environmental informal science education across rural and economically challenged areas of Minnesota.

Project Location

What is the best scale for describing where your work will take place?

Region(s): NW

What is the best scale to describe the area impacted by your work?

Region(s): NW

When will the work impact occur?

During the Project and In the Future

Activities and Milestones

Activity 1: Establishing Capacity for BGCA Instructional Visits

Activity Budget: \$610,000

Activity Description:

HSC will hire an Outreach Director, 3x Education Specialists, and up to 3 Interns to conduct educational site visits to Boys and Girls Club sites. A Steering Committee will be formed consisting of representatives of each Club, along with project partners to discuss implementation of the STEM Kits, training on STEM kits, curriculum, logistics, and cultural considerations, anticipated to meet quarterly. SMM staff, with the expertise and input from FW, will develop STEM kits as the cornerstone for curriculum in site visits. Once a design has been developed, HWSC will review and approve, and then proceed with ordering kits from SMM for assembly. Each season will repeat this process, and Kit contents will be revisited, and possibly revised after steering committee meetings, outlined in Activity 3. Kit contents will be inventoried annually, and any necessary replacements will be included as part of this process. Anticipating 8-10 kits per season, with 4 seasons annually (total ~40 kits, to be reused each year). Lastly, a vehicle cost comparison will be conducted, which will be shared with LCCMR staff, prior to securing 2 vehicles and 4 cargo trailers for staff and curriculum transport to sites.

Activity Milestones:

Description	Approximate Completion Date
Complete Vehicle Cost Analysis	August 31, 2025
Hire HSC Staff (Outreach Director, Education Specialist x3, up to 3 Interns)	September 30, 2025
Formation of the Steering Committee	September 30, 2025
Secure Vehicles and Cargo Trailers	October 31, 2025
Development of Seasonal STEM Kits and Check-In w LCCMR Staff	May 31, 2026
SMM / FW Train HSC Staff in STEM Kit Use	June 30, 2026
Order STEM Kits and Related Supplies (Conducted Annually in June)	June 30, 2028

Activity 2: Boys and Girls Clubs - Instructional Visits and Teaching

Activity Budget: \$351,000

Activity Description:

HSC staff (Outreach Director, Education Specialists x3, Interns) will endeavor to visit each of the 11 sites within the 4 Boys and Girls Clubs locations approximately 4 times per year (seasonally), with 5 instructional days per visit for a total of 220-240 instructional days annually. Site visits will vary in structure, but will generally consist of 5-day units, where seasonal material will be taught, featuring the STEM kits, delivered to an audience of approximately 20-25 attendees (varies by site). Curricula will include wildlife, plant biology, and water quality. Units are designed to educate and empower students, fostering a deeper understanding and stewardship of the natural world.

Activity Milestones:

Description	Approximate Completion Date
Year 1 - Visit 11 Sites - 4x per year - 5 instructional days / site	June 30, 2026
Year 2 - Visit 11 Sites - 4x per year - 5 instructional days / site	June 30, 2027
Year 3 - Visit 11 Sites - 4x per year - 5 instructional days / site	June 30, 2028

Activity 3: Evaluation and Reporting

Activity Budget: \$130,000

Activity Description:

Feedback / evaluations will be collected from each site that will be compiled into an annual report for the Steering Committee. Evaluations may include site visits from SMM and FW staff to determine STEM kit effectiveness. The steering committee, aside from meeting quarterly, will hold annual meetings to review the previous year's site visits. HWSC will supply an annual report, outlining metrics (inc. site attendance, participant feedback, partner feedback, etc.), conclusions, and suggested improvements, to be discussed by the committee. The committee will determine any modifications to the curriculum, which will then be approved by HSC staff, before being sent to the SMM for revision and assembly. A final report at the end of the project will be compiled, summarizing the impacts of the project and feedback from participants.

Activity Milestones:

Description	Approximate Completion Date
Annual Partner Meetings & Reports (June 30 each year)	June 30, 2028
Curriculum Modifications, Updates, or Revisions (Annually, post partner meetings)	June 30, 2028
Final Project Report	June 30, 2028

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Andrea Kent	Boys & Girls Club of the Bemidji Area	Coordination between this project and local BGCA site	Yes
Carol Thompson	Boys & Girls Clubs of White Earth	Coordination between this project and local BGCA site	Yes
Thomas Barrett Jr.	Boys & Girls Clubs of Red Lake and Ponemah	Coordination between this project and local BGCA site	Yes
Patrick Petermann	Boys & Girls Clubs of Detroit Lakes and Perham	Coordination between this project and local BGCA site	Yes
Farzad Sadjadi	Science Museum of Minnesota	Training, provider of curriculum and classroom materials	Yes
Carrie Jennings	Freshwater	Training, provider of curriculum and classroom materials	Yes

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. Our commitment to broad dissemination and impact is reflected in a multifaceted approach:

Stakeholder Engagement: This project will be guided by a steering committee representing the four Boys and Girls Clubs and eleven sites. The steering committee will meet quarterly and as needed. Official minutes will be kept as a reporting mechanism. Environment and Natural Resources Trust Fund (ENRTF) approved logos and letterhead will be used with reporting tools.

Annual reports will be presented at meetings at of the all the partners. Meetings are scheduled to occur in August. All reports will be available for LCCMR. Included in the meetings will be project accomplishment, statistics, and curriculum development. ENRTF approved logos will be used on all published materials.

Digital Accessibility: All project data, results, reports, and curriculum materials will be housed on the Headwaters Science Center website. Acknowledgements of ENRTF funding support will accompany materials.

Reports (project accomplishment, statistics, and curriculum development.) will be provided for Boys and Girls Clubs, schools, and after-school programs. We will maintain ongoing communication regarding project activities and findings. Full use of ENRTF logos and letterhead.

Media Engagement: Press releases, media advisories, and targeted outreach will be utilized to amplify key project milestones and research outcomes, promoting public awareness and encouraging behavior changes that support environmental protection and conservation.

Additional Considerations: HSC will continue the work of serving Northern Minnesota Boys and Girls Clubs. As the project progresses, we will report our successes and share statistical data. We will use additional opportunities to share

findings through presentations at relevant conferences, workshops, and community events. Also, we will actively seek partnerships with organizations and agencies capable of leveraging project outcomes to enhance resource management practices statewide.

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 Headwaters Science Center maintains a diversified budget that includes funding from government, membership and admissions as well as donations from individuals, foundations and corporations. We will continue to develop these contributed and earned sources of revenue to sustain the impacts of this work beyond the life of this project. In addition, we are actively looking for future long-term funding from private sources and governmental agencies. We fully intend to continue this work after this funding ends.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineli gible	% Bene fits	# FTE	Class ified Staff?	\$ Amount
Personnel				gibic	1163		Stair:	
Education and Outreach Director		Management of Project and Teaching at BGCA Sites			15%	3		\$121,000
Education Specialists		Provide Instruction at the BGCA Sites			15%	4.5		\$176,000
Project Administrator		Scheduling, purchasing			15%	0.6		\$50,000
Three Student Interns From Bemidji State or Leech Lake Tribal College		Support Roles in Teaching and Preparation for working with BGCA Students			12%	1.8		\$58,000
							Sub Total	\$405,000
Contracts and Services								
Science Museum of Minnesota (SMM)	Subaward	SMM will develop and assemble STEM Kits (contents TBD, ~40 kits @ \$3,750/kit) for seasonal instruction at BGCA Sites (\$150,000). SMM will provide training on Kit use to HSC staff, assess kit implementation onsite, and participate in partner meetings (\$192,000). Travel expenses for meetings (\$6,000).		1.8		\$348,000		
Freshwater Society (FW)	Subaward	FW will provide high-level scope and sequence guidance on the development of STEM Kits, along with HWSC staff training, and instructional expertise. Additionally, FW will attend partner meetings to provide feedback on STEM Kit use and potential revisions. (\$10,000 / yr x 3yrs + \$4,000 travel expenses).				0.6		\$34,000
BGCA White Earth	Subaward	Coordination with project and attendance of meetings (personnel) \$15,000. \$3,000 travel and lodging. Sub-awards \$5,000 annually with BGClubs. Activities: on-site staff (2) time (3 hours) for each visit, prep time (1.5), club/HSC staff meetings, and				0.6		\$18,000

		Steering Committee annual/seasonal meetings and presentations.					
BGCA Bemidji	Subaward	Coordination with project and attendance of meetings (personnel) \$15,000. \$3,000 travel and lodging. Sub-awards \$5,000 annually with BGClubs. Activities: on-site staff (2) time (3 hours) for each visit, prep time (1.5), club/HSC staff meetings, and Steering Committee annual/seasonal meetings and presentations.			0.	6	\$18,000
BGCA Detroit Lakes	Subaward	Coordination with project and attendance of meetings (personnel) \$15,000. \$3,000 travel and lodging. Sub-awards \$5,000 annually with BGClubs. Activities: on-site staff (2) time (3 hours) for each visit, prep time (1.5), club/HSC staff meetings, and Steering Committee annual/seasonal meetings and presentations.			0.	6	\$18,000
BGCA Red Lake	Subaward	Coordination with project and attendance of meetings (personnel) \$15,000. \$3,000 travel and lodging. Sub-awards \$5,000 annually with BGClubs. Activities: on-site staff (2) time (3 hours) for each visit, prep time (1.5), club/HSC staff meetings, and Steering Committee annual/seasonal meetings and presentations.			0.	6	\$18,000
		p. sandana a				Sub	\$454,000
Equipment, Tools, and Supplies						Total	
						Sub Total	-
Capital Expenditures						Total	
		Vehicle(s). Extended cab. Seat 4. Towing capacity (trailer) 2,500lbs. Additional hauling capacity. Lift system for loading/tailgate	Two vehicles to transport materials and personnel to BGCA sites. Additional storage capacity. 25,000/year/vehicle plus 1,000/year travel to and from SMM.	Х			\$120,000
		Cargo trailers (4). Estimated number of miles. Going to Red Lake BGC, White Earth Nation, Detroit Lake/Perham, and Bemidji/Blackduck. 50,000 miles/year. 12,000 per trailer. Plus SMM 1,000/year. Up to 12,000/trailer/year. Note: vehicle-	To transport educational materials and experiments to BGCA Sites. They also provide storage of materials on-site.	х			\$55,000

		20,000/vehicle per year plus 1,000 to and from SMM.			
				Sub Total	\$175,000
Acquisitions and Stewardship					
				Sub Total	-
Travel In Minnesota					
				Sub Total	-
Travel Outside Minnesota					
				Sub Total	-
Printing and Publication					
	Printing	Printing of Environmental STEM Materials for BGCA sites. Quantity TBD	Curricula for students and staff		\$15,000
				Sub Total	\$15,000
Other Expenses					
		Gas for BGCA Visits	Fuel for vehicles		\$42,000
				Sub Total	\$42,000
				Grand Total	\$1,091,000

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
Capital Expenditures	Турс	Vehicle(s). Extended cab. Seat 4. Towing capacity (trailer) 2,500lbs. Additional hauling capacity. Lift system for loading/tailgate	This project is about bringing environmental education to students and would not be possible without these vehicles. Additional Explanation: The purchase of these two vehicles is essential for transporting project personnel and equipment to our partner sites. Our project plan requires no less than twenty site visits per site. The number of sites stands at 20 different Boys and Girls Club locations, necessitating approximately 200-400 site visits per year. Sites and miles are as listed: Red Lake and Ponemah round trip 70 to 100 miles round trip, and 120 miles as a combined trip, Blackduck and Bemidji round trip 60 miles round trip, Detroit Lakes and Perham 180 miles round trip, and 220 miles as a combined trip, and White Earth Nation with six sites with a round trip over 200 miles. Based on individual site trips or combining sites, estimates vary greatly. Miles for each vehicle is expected to exceed twenty thousand miles/year and may reach thirty thousand miles each year for each vehicle. We are planning for the vehicles to accommodate a team of up to four passengers, including project staff and youth participants. Furthermore, a key component of our outreach involves bringing specialized equipment and materials to each site. Therefore, the vehicles must have the capacity to securely transport these items. The vehicle must have a towing capacity of 3,000 pounds, allowing us to safely haul our educational materials and research equipment. Most often small trailer a small trailer (single axle) will be used to haul equipment. The vehicles will need additional storage space allowing travel to multiple sites on the same trip. The Headwaters Science Center will continue providing the same or similar programs extending beyond June 30, 2028.
Capital Expenditures		Cargo trailers (4). Estimated number of miles. Going to Red Lake BGC, White Earth Nation, Detroit Lake/Perham, and Bemidji/Blackduck. 50,000 miles/year. 12,000 per trailer. Plus SMM 1,000/year. Up to 12,000/trailer/year. Note: vehicle-20,000/vehicle per year plus 1,000 to and from SMM.	Trailers and vehicles Additional Explanation: HSC will continue to use the trailers with continued service to Boys and Girls Clubs of Minnesota after the completion of the project. Two other clubs have been identified and conversations on-going.

Non ENRTF Funds

Category	Specific Source	Use	Status	\$ Amount
State				
			State Sub Total	-
Non-State				
In-Kind	HSC Budget	HSC Director 0.2 FTE	Secured	\$33,000
In-Kind	HSC Budget	Accounting	Secured	\$15,000
In-Kind	HSC Budget	Programs and Exhibits, Maintenance	Secured	\$16,000
In-Kind	HSC Budget	Occupancy.	Secured	\$30,000
In-Kind	HSC Budget	Use of HSC Vehicle	Secured	\$6,000
In-Kind	Unclaimed Federal Indirects	SMM	Pending	\$77,000
In-Kind	Local donors	Electric Panel Van	Potential	\$70,000
In-Kind	Freshwater	Training 12 staff to become Minnesota Water Stewards	Secured	\$12,000
Cash	HSC Budget	Vehicle upgrades. License. Insurance. Registration. Parking and storage	Secured	\$19,000
			Non State	\$278,000
			Sub Total	
			Funds	\$278,000
			Total	

Total Project Cost: \$1,369,000

This amount accurately reflects total project cost?

Yes

Attachments

Required Attachments

Visual Component

File: <u>f3bd222b-129.pdf</u>

Alternate Text for Visual Component

Locations of the project partners....

Financial Capacity

Title	File
HSC Form 990	<u>5da92ba8-0a0.pdf</u>

Board Resolution or Letter

Title	File
HSC Board Resolution	<u>9614ed5e-046.pdf</u>

Supplemental Attachments

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

Title	File
Science Museum of Minnesota Support Letter	fce15c35-1d0.pdf
Freshwater Support Letter	4325f82f-4fb.pdf
White Earth BGCA Support Letter	a3c9bb74-ebf.pdf
Detroit Lakes BGCA Support Letter	<u>2519622d-ae0.pdf</u>
Bemidji BGCA Support Letter	<u>421adb03-5b7.pdf</u>
Red Lake BGCA Support Letter	e0d3c113-aeb.pdf
Rep. McCollum Support Letter	<u>32240713-313.pdf</u>
Vehicle Purchase Comparison Sheet	a13df6c9-c9a.docx
Statement: Transportation Options. Vehicles	<u>bc0a5041-18e.docx</u>
Vehicle Bid Sheet with details	41489a10-0fc.xlsx

Difference between Proposal and Work Plan

Describe changes from Proposal to Work Plan Stage

Hire HSC staff for the project. Equipment and supply management. Curriculum devel. in Activity 1. Under Budget, Travel: delete mileage. In Other, replaced with itemized costs related to site program visits.

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? Yes

Do you understand that travel expenses are only approved if they follow the "Commissioner's Plan" promulgated by the Commissioner of Management of Budget or, for University of Minnesota projects, the University of Minnesota plan?

N/A

Does your project have potential for royalties, copyrights, patents, sale of products and assets, or revenue generation?

No

Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?

N/A

Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?

N/A

Does your project include original, hypothesis-driven research?

No

Does the organization have a fiscal agent for this project?

No

Does your project include the pre-design, design, construction, or renovation of a building, trail, campground, or other fixed capital asset costing \$10,000 or more or large-scale stream or wetland restoration?

No

Do you propose using an appropriation from the Environment and Natural Resources Trust Fund to conduct a project that provides children's services (as defined in Minnesota Statutes section 299C.61 Subd.7 as "the provision of care, treatment, education, training, instruction, or recreation to children")?

Yes

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

Yes

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

Paul Morin, Headwaters Science Center

Do you understand that a named service contract does not constitute a funder-designated subrecipient or approval of a sole-source contract? In other words, a service contract entity is only approved if it has been selected according to the contracting rules identified in state law and policy for organizations that receive ENRTF funds through direct appropriations, or in the DNR's reimbursement manual for non-state organizations. These rules may include competitive bidding and prevailing wage requirements

N/A