



Environment and Natural Resources Trust Fund

2027 Request for Proposal

General Information

Proposal ID: 2027-068

Proposal Title: Developing a Lake Macroinvertebrate Index - Phase 1

Project Manager Information

Name: Kaira Kamke

Organization: The Research Foundation for The State University of New York

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Project Basic Information

Project Summary: Develop a macroinvertebrate index of biological integrity specific to Minnesota lakes for impairment assessment, trend monitoring, and evaluation of restoration impacts across diverse ecological provinces

ENRTF Funds Requested: \$2,624,000

Proposed Project Completion: June 30, 2031

LCCMR Funding Category: Water (B)

Project Location

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

Statewide

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

Statewide

When will the work impact occur?

In the Future

Narrative

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

Minnesota's lakes are essential for recreation, biodiversity, and local economies, yet current monitoring tools lack precision for local conditions. Traditional chemical analyses, while useful, often miss biological signals of emerging stressors such as climate change, invasive species, and contaminants like PFAS and microplastics. The EPA's continental-scale Macroinvertebrate Multimetric Index (MMI) offers an advantage because macroinvertebrates respond to multiple stressors over time, revealing ecological impairment that single-point chemical sampling may overlook. However, the current MMI is designed for broad regional comparisons and does not capture the diversity of Minnesota's lake types or unique ecological province variability. This limitation reduces our ability to detect early impairment, measure restoration success, and understand ecosystem responses to emerging stressors. A majority of Minnesotan lakes are located within three ecological provinces, each with unique physical and biological characteristics. Without a locally calibrated index, management decisions risk being based on incomplete data. Developing a robust, region-specific monitoring tool is critical for protecting water quality and ecological integrity. This project addresses an urgent need for a scientifically sound, practical method to track long-term trends and respond to extreme events, ensuring Minnesota's lakes remain resilient through emerging changes and challenges.

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.

Our proposed solution is a multi-phase project to develop a Minnesota-specific macroinvertebrate-based lake monitoring index calibrated to local lake types and conditions. This proposal consists of Phase 1: creating a scientifically robust index tailored to the diversity of Minnesotan lakes. Future phases will include developing an interactive website where communities, schools, and associations can view lake data and utilize a simplified index to assess lake health. Our approach for Phase 1 consists of sampling 150 lakes located across Minnesota, representing the three largest ecological provinces and a spectrum of lake characteristics. Each lake will be sampled for macroinvertebrates using standardized quantitative methods and paired with water quality measurements such as dissolved oxygen, temperature profiles, phosphorus, chlorophyll-a, and Secchi transparency. Macroinvertebrate samples will be processed to the lowest feasible taxonomic level for detailed ecological analysis. Statistical modeling will integrate biological and chemical data to create a multimetric index sensitive to local stressors and restoration outcomes. This tool will support long-term monitoring, climate assessments, disaster preparedness, and evaluation of invasive species and contaminants. The resulting index will provide resource managers with actionable insights to protect and enhance Minnesota's lakes.

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?

Phase 1 of this project will deliver a locally calibrated macroinvertebrate-based lake index of biological integrity. The index and the data from Minnesotan lakes will be publicly accessible for use in developing baseline datasets and contributing to informed management decisions. Community groups, lake associations, and state agencies will be able to incorporate the sampling methods and index to monitor lakes during changing conditions. Current chemical-based monitoring can miss biological stress signals, leaving managers unaware of early impairment. This project fills this critical detection gap and contributes to more informed decisions that protect Minnesota's lakes for recreation, wildlife, and future generations.

Activities and Milestones

Activity 1: Project Planning, Development, and Reporting

Activity Budget: \$543,711

Activity Description:

The project team will develop the project specifications, including field sampling and laboratory protocols, and select the lakes that will be sampled to develop the lake macroinvertebrate index. After the laboratory processing for each field season is concluded, a summary report will be generated and distributed to project partners. A meeting with a board of advisors will occur annually or twice-annually to maintain collaborations and share project updates. The final report will include the developed lake macroinvertebrate index calculation, and all data from the project will be publicly available online.

Activity Milestones:

Description	Approximate Completion Date
Develop protocols for field sample collection and laboratory processing	September 30, 2027
Lake selection	October 31, 2027
First annual report and annual partner meeting	May 31, 2028
Second annual report and annual partner meeting	May 31, 2029
Third annual report and annual partner meeting	May 31, 2030
Final report and annual partner meeting	June 30, 2031

Activity 2: Sample Collection and Processing

Activity Budget: \$1,816,352

Activity Description:

The project includes three spring sampling seasons followed by lab processing of the samples. Two teams, each with a Cedar Corp field lead and an RF technician, will collect macroinvertebrate samples from approximately 50 lakes each year. Multiple samples will be collected from the littoral zone of each lake, using standardized quantitative methods, with six samples from lakes less than 200 acres and twelve samples from lakes greater than 200 acres. Additional data will be collected from each sample location, including but not limited to water temperature, conductivity, pH, chlorophyll, and dissolved oxygen, and a depth profile at the deepest point in the lake. Sample collection will occur within 10 weeks from spring ice-out on each lake. Laboratory processing will consist of subsampling macroinvertebrates from sample debris to a target specimen count, with identifications to the lowest feasible taxonomic level, genus or species where possible. All taxonomists assigned to this project will hold certifications through the Society for Freshwater Science Taxonomic Certification Program. Field and laboratory data will be entered into custom databases built for this project with the data accessible for analysis.

Activity Milestones:

Description	Approximate Completion Date
First field season	May 31, 2028
Laboratory processing of samples from first field season	March 31, 2029
Second field season	May 31, 2029
Laboratory processing of samples from second field season	March 31, 2030
Third field season	May 31, 2030
Laboratory processing of samples from third field season	March 31, 2031

Activity 3: Data Analysis and Index Development

Activity Budget: \$263,937

Activity Description:

Using chemical data, established ecological tolerance values, and comparable biological indices as a framework, the project team will conduct a comprehensive analysis of all data collected from the three field seasons. The macroinvertebrate community data will be synthesized with field data and typical biological metrics. Statistical analysis and modeling will be used to determine which metrics are most effective in indicating the ecological condition of the study lakes. Metrics found to be statistically significant, and ecologically meaningful, will be incorporated into a multimetric index of biological integrity. The final index and all supporting analyses will be included in the project's final report and shared with the scientific community through presentations at two Minnesota-based conferences and two international conferences. The results will also be submitted for publication in peer-reviewed journals, both to subject the metrics to broader scientific scrutiny and to provide researchers and practitioners with a locally grounded framework for index development.

Activity Milestones:

Description	Approximate Completion Date
Data entered into a database and checked for quality assurance	April 30, 2031
Statistical analysis and modeling	June 30, 2031
Build index and incorporate into final report	June 30, 2031

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Cienna Hanson	Cedar Corporation	Project Manager responsible for project partner coordination, field work, sample preparation, data validation, and reporting	Yes
Susan Daniel	Research Foundation for SUNY	Senior Taxonomist responsible for technician management and supervision, oligochaete specimen identification, database development, and reporting	Yes
Meaghan Stern	Research Foundation for SUNY	Sponsored Programs Coordinator assisting with grant preparation and logistics	No

Dissemination

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

This project includes annual reports and annual meetings with a board of advisors to disseminate progress and preliminary findings, as well as to maintain partnership relationships. Annual reports, presentation materials for the advisory meetings, the final report, and the finalized dataset compiled during this grant will be publicly available online at the conclusion of the project. We would also like to present the preliminary and final results at conferences in 2030 and 2031, within Minnesota and nationwide, if possible. At the end of the project, the developed index will be described in the final report so it can be used for ongoing lake monitoring, and we would like to publish the index in a peer-reviewed journal, as well as the process for developing the index.

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 macroinvertebrate index will be integrated into Minnesota's lake monitoring programs, complementing existing chemical and physical assessments. Results, protocols, and analytical tools will be published in accessible formats, including technical reports and peer-reviewed articles. Long-term implementation will rely on partnerships with state agencies and local organizations. Future monitoring can be funded through state programs, federal grants, and cost-sharing with lake associations. Additional work, such as expanding to new lake types or incorporating emerging contaminants, can be supported through targeted research grants and collaborations. Establishing a scientifically robust foundation and fostering stakeholder engagement ensures the continued protection of Minnesota's lakes.

Project Manager and Organization Qualifications

Project Manager Name: Kaira Kamke

Job Title: Aquatic Ecologist

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

Kaira Kamke is a freshwater macroinvertebrate taxonomist with more than a decade of identification experience across Minnesota, Wisconsin, Missouri, and the Great Lakes. Her work spans a wide range of aquatic habitats, including streams, large rivers, wetlands, and lakes. She also brings five years of laboratory development and three years of project management experience. Kaira is a dedicated advocate for aquatic ecology. Throughout her academic and professional career, she proactively developed research initiatives to expand the understanding of macroinvertebrate communities in habitats that are often underrepresented in statewide monitoring programs. Her work emphasizes

applying macroinvertebrate community data to strengthen monitoring efforts and inform natural resource management strategies. In early 2025, Kaira completed dual Master's degrees in Environmental Management and Environmental Protection through programs at Kiel University in Germany and Adam Mickiewicz University in Poland. Her thesis examined the use of macroinvertebrates to assess the ecological condition of a lake and compared this index with other biological and chemical assessment methods. Upon returning to the Midwest, Kaira set out to continue advancing macroinvertebrate ecology, aiming to apply the methodologies gained from her international experience to develop new tools for monitoring freshwater ecosystems.

Organization: The Research Foundation for The State University of New York

Organization Description:

The SUNY Research Foundation (RF) is the largest comprehensive university-connected research foundation in the country. It provides essential administrative services that enable State University of New York (SUNY) faculty and staff to focus their efforts on educating students and performing life-changing research across a wide range of disciplines. The Great Lakes Center (GLC), located on the Buffalo State University campus, is a multidisciplinary research, education, and service institute with a primary focus on the Great Lakes. The mission of the GLC is to improve the quality of the environment by providing the best possible science to decision-makers concerned with the health and sustainability of resources, accomplished through high quality research and dissemination of information to the public through outreach. This mission is achieved by hosting full-time and joint-time RF employees who were awarded research grants by other institutions that specifically address Great Lakes concerns.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
Personnel								
Project Manager		Develop project plan and documentation, identify macroinvertebrate specimens, data analysis, and index development		X	38%	2.64		\$229,935
Senior Taxonomist		Identify macroinvertebrate specimens, assist with project development, reporting, and index development		X	38%	0.28		\$26,927
Scientist		Data analysis, modeling, and index development		X	38%	0.25		\$34,500
2 Field Technicians		Assist field crew leaders with site scouting and sample collection; sort macroinvertebrate samples in the laboratory		X	38%	3		\$519,155
Graduate Student		Graduate Student during Years 3 and 4		X	13.5%	1		\$34,050
							Sub Total	\$844,567
Contracts and Services								
Cedar Corporation	Service Contract	Project development, field work and sample collection, laboratory processing of macroinvertebrate samples		X		5.2		\$1,670,490
Buffalo State University Great Lakes Center	Subaward	The Great Lakes Center staff will be conducting oligochaete worm taxonomy for all samples in this project.		X		0.18		\$18,395
							Sub Total	\$1,688,885
Equipment, Tools, and Supplies								
	Tools and Supplies	Laboratory processing supplies	Supplies for sorting macroinvertebrate specimens from sample debris in a laboratory setting and identifying specimens. There is an additional equipment and supply expense of \$63,000 included in the budget breakdown for Cedar Corp.					\$5,838

							Sub Total	\$5,838
Capital Equipment								
		Field collection equipment: boats and YSI sondes	For accessing sampling sites on lakes and for collecting macroinvertebrate samples and other lake physical and chemical data. This will be a cost of \$30,000, and is included in the budget breakdown for Cedar Corp as it will be purchased by them.	X				-
							Sub Total	-
Acquisitions and Stewardship								
							Sub Total	-
Travel In Minnesota								
	Miles/ Meals/ Lodging	2 field teams of 2 people traveling to different lakes during weekly trips, for 12 weeks per sample season, for 3 years	To collect macroinvertebrate samples and lake physical and chemical data from approximately 150 lakes. There is an additional in-state travel expense of \$116,910 included in the budget breakdown for Cedar Corp.					\$64,710
	Conference Registration Miles/ Meals/ Lodging	Conference attendance within Minnesota for 2 people per year for 2 years	Conference presentations to share the findings of our project in the 2 terminal years of the grant, and offering opportunity for our technicians to attend and participate in the conference presentations. There is an additional in-state travel expense for conference attendance of \$6,000 included in the budget breakdown for Cedar Corp.					\$6,000
							Sub Total	\$70,710
Travel Outside Minnesota								

	Conference Registration Miles/ Meals/ Lodging	Conference attendance outside of Minnesota for 2 people per year for 2 years	Presentations at national or international conferences to share the findings of our project in the 2 terminal years of the grant, and offering opportunity for our technicians to attend and participate in the conference presentations. There is an additional \$10,000 included in the subaward budget for Cedar Corp to cover their attendance as well.	X				\$10,000
							Sub Total	\$10,000
Printing and Publication								
	Publication	Publication expenses	Publication of the developed lake macroinvertebrate index in a peer-reviewed journal					\$1,000
	Publication	Publication expenses	Publication of the methods for developing the lake macroinvertebrate index in a peer-reviewed journal					\$1,000
	Publication	Publication expenses	Publications listing new species distributions within Minnesota					\$1,000
							Sub Total	\$3,000
Other Expenses								
		Sample shipping expenses	Specimens from each sample will be shipped to the Great Lakes Center at Buffalo State University					\$1,000
							Sub Total	\$1,000
							Grand Total	\$2,624,000

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
Personnel - Project Manager		Develop project plan and documentation, identify macroinvertebrate specimens, data analysis, and index development	The Great Lakes Center in Buffalo, New York, has a long history of conducting research across the Great Lakes region, notably the development of a Great Lakes-specific index, monitoring programs, and invasive species detection. Kaira Kamke is a freshwater macroinvertebrate taxonomist with more than a decade of identification experience across Minnesota, Wisconsin, Missouri, and the Great Lakes. Her work spans a wide range of aquatic habitats, including streams, large rivers, wetlands, and lakes. She also brings five years of laboratory development and three years of project management experience. Throughout her academic and professional career, she proactively developed research initiatives aimed at expanding understanding of macroinvertebrate communities in habitats that are often underrepresented in statewide monitoring programs. Her work emphasizes applying macroinvertebrate community data to strengthen monitoring efforts and inform natural resource management strategies. In early 2025, Kaira completed dual Master's degrees in Environmental Management and Environmental Protection through programs at Kiel University in Germany and Adam Mickiewicz University in Poland. Her thesis examined the use of macroinvertebrates to assess the ecological condition of a lake and compared this index with other biological and chemical assessment methods. For this grant proposal, Kaira was responsible for the conceptualization of this project and initiated collaboration with Cedar Corporation and the SUNY Research Foundation. She is the lead taxonomist for this project and will be in charge of protocol development, site selection, specimen identification, report and publication preparation, and index development.
Personnel - Senior Taxonomist		Identify macroinvertebrate specimens, assist with project development, reporting, and index development	The Great Lakes Center in Buffalo, New York, has a long history of conducting research across the Great Lakes region, notably the development of a Great Lakes-specific index, monitoring programs, and invasive species detection. Susan Daniel is the senior taxonomist and laboratory manager of the benthic portion of the EPA Great Lakes National Program Office (GLNPO) Biology Monitoring Program since 2013. Susan has 16 years of taxonomic experience in identifying benthic invertebrates from all the Great Lakes and received a B.S. from Heidelberg University in 2013 and graduated with M.S. in Buffalo State Great Lakes Ecosystem Science in 2017. She received extensive training in collecting and processing aquatic invertebrate samples at the National Center for Water Quality Research (NCWQR) at Heidelberg U. and completed additional training in taxonomy of freshwater Oligochaeta (NCWQR, 2013) and in taxonomy of benthic macroinvertebrates (2015). In addition to taxonomic expertise, Susan has been managing grant implementation, supervising personnel for 13 years, and collaborated with the vast network of Great Lakes professionals. For this project, she is primarily responsible for supervision of the technicians, preparing reports and publications, and oligochaete taxonomy.

Personnel - Scientist		Data analysis, modeling, and index development	The Great Lakes Center in Buffalo, New York, has a long history of conducting research across the Great Lakes region, notably the development of a Great Lakes-specific index, monitoring programs, and invasive species detection. The Scientist role will be a Research Foundation employee with experience in analysis and modeling of large ecological datasets. They will be essential for the final stages of the project, including the index development and publication of results.
Personnel - 2 Field Technicians		Assist field crew leaders with site scouting and sample collection; sort macroinvertebrate samples in the laboratory	The two technicians hired by the Research Foundation will fill the critical role of conducting field work and preliminary laboratory processing of the samples collected from Minnesota lakes. The ineligible aspect of this role is the location for the laboratory work, which will use space and equipment in a Cedar Corporation facility in Menomonie, Wisconsin. During the hiring process for these positions, early application opportunities will be offered to recent graduates from Minnesotan universities.
Personnel - Graduate Student		Graduate Student during Years 3 and 4	The Great Lakes Center in Buffalo, New York, has a long history of conducting research across the Great Lakes region, notably the development of a Great Lakes-specific index, monitoring programs, and invasive species detection. A graduate student will develop a thesis using the data compiled throughout this project. Their primary responsibility in the grant context will be to assist with data analysis and to conduct an in-depth exploration of a subset of the data.
Contracts and Services - Cedar Corporation	Service Contract	Project development, field work and sample collection, laboratory processing of macroinvertebrate samples	We request an exception for the Office and Lab Rental Fee because the space serves as a dedicated laboratory workspace essential to completing this project. Although categorized as 'office' space, it is used exclusively for specimen sorting, sample processing, temporary storage, and preparation of field and laboratory materials, all activities that require controlled indoor conditions to maintain QA/QC standards and ensure data integrity. The SUNY Research Foundation technicians hired for this project will conduct their laboratory work within Cedar's facility, using lab space and equipment under supervision by a Cedar staff member. The rental cost represents the project-specific use of these facilities and is necessary to perform work that cannot be carried out in the field or in general administrative areas. All costs will be documented, directly tied to the project's laboratory functions, and limited strictly to the space and resources required to complete the approved work plan, consistent with LCCMR criteria for exceptions. Please see attached cost table from Cedar Corporation for further cost breakdown. All capital equipment purchased through this appropriation, including boats and YSI sondes, will remain dedicated to the same program for their full useful lifespan. These items are essential for lake sampling, macroinvertebrate collection, water-quality monitoring, and data processing, all core components of the long-term lake monitoring program established under this project. Upon completion of this project phase, the equipment will be used in Phase II, which includes training and educating lake groups,

			volunteers, and the public in conducting their own lake monitoring. Additionally, macroinvertebrate-based lake assessments will continue as an ongoing service offered to lake groups, agencies, and the public. The same boats, sondes, and associated equipment will support future fieldwork, demonstrations, public education, and long-term monitoring activities. Because these items remain dedicated to lake assessment and outreach activities that directly extend the objectives of this project, they meet the requirement that capital equipment continue to be used for the same program throughout its useful life. Although Cedar's primary office is located in Menomonie, Wisconsin, all fieldwork, sampling, and project-related travel will occur within the State of Minnesota. The only out-of-state travel associated with this project consists of brief transit between our office and the Minnesota border when departing for and returning from field activities. All sampling sites, monitoring activities, and field-based data collection occur entirely within Minnesota. Because project work is conducted wholly within the state, and because travel outside Minnesota is incidental and limited exclusively to accessing Minnesota field locations, the project remains fully compliant with LCCMR's expectations for in-state work and in-state use of appropriated funds.
Contracts and Services - Buffalo State University Great Lakes Center	Subaward	The Great Lakes Center staff will be conducting oligochaete worm taxonomy for all samples in this project.	The Great Lakes Center in Buffalo, New York, has a long history of conducting research across the Great Lakes region, notably the development of a Great Lakes-specific index, monitoring programs, and invasive species detection. Kit Hastings is a research technician and taxonomist with 17 years of experience in identifying Great Lakes benthos, specializing in Oligochaeta. For a decade, they were responsible for planning and implementation of biweekly sampling for Buffalo State's participation in the multiagency Lake Erie Lower Trophic Level Assessment (2008-2018), including boat operation, sample collection, processing chlorophyll a and benthic macroinvertebrate samples, data delivery, and report preparation. Kit has also contributed to the GLNPO Biology Monitoring Program since 2013 through sample collection and sorting, slide mounting Oligochaeta and Chironomidae, oligochaete identification and species additions, QA/QC, and report editing. They created the Great Lakes Benthic Invertebrate Guide, which currently has 26 species of oligochaetes and 2 species of chironomids profiled on the GLC website, as well as a taxa list for over 150 species found in the GLNPO BMP samples. Other contributions include designing and producing the GLC Annual Reports and Newsletters and managing the GLC website. They specialize in accessible document design and PDF remediation to meet accessibility standards, a skill that has helped many colleagues with reports and papers. They received a B.S. in Environmental Science from SUNY Fredonia in 2007, with additional coursework in GIS and limnology at Buffalo State from 2010-2013. For this project, they will be responsible for oligochaete taxonomy.

Capital Equipment		Field collection equipment: boats and YSI sondes	YSI sondes are essential tools for collecting and managing the water-quality and environmental data required for this project. The sondes provide chemical and physical measurements needed to interpret macroinvertebrate patterns and distinguish unique lake characteristics. These items directly support the project's data-collection activities and are required to carry out the scientific methods outlined in the work plan. Additional Explanation : All capital equipment purchased through this appropriation, including boats and YSI sondes, will continue to be used for the same program throughout their useful life. The equipment is essential for lake sampling, macroinvertebrate collection, water-quality monitoring, and data processing, all of which are core components of the long-term lake monitoring program initiated under this project. Following completion of the current project phase, this equipment will be used in Phase II, where we will train and educate the public, lake groups, and volunteers on conducting their own lake monitoring. In addition, macroinvertebrate-based lake assessments will become an ongoing service offered to lake groups, agencies, and the public. The same boats and sondes will be used to support future fieldwork, demonstrations, public education, and long-term monitoring activities. Because these items will remain dedicated to lake assessment and public-engagement activities that directly extend the objectives of this project, they will continue to be used for the same program throughout their full useful lifespan.
Travel Outside Minnesota	Conference Registration Miles/Meals/Lodging	Conference attendance outside of Minnesota for 2 people per year for 2 years	Sharing our data and findings at national or international organization conferences bolsters the audience for this Minnesota project and promotes further collaborations

Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
			State Sub Total	-
Non-State				
In-Kind	Campus	In-State Tuition for Graduate Student on the project, years 3 and 4	Pending	\$18,792
			Non State Sub Total	\$18,792
			Funds Total	\$18,792

Total Project Cost: \$2,642,792

This amount accurately reflects total project cost?

Yes

Attachments

Required Attachments

Visual Component

File: [2a06cfad-5df.pdf](#)

Alternate Text for Visual Component

This visual includes a map of Minnesota with each of the ecological provinces, bar charts showing the distinct differences in total phosphorus, chlorophyll, transparency, and floristic quality index for each of the three largest provinces, and text summarizing the background, need, and proposed solution of this project....

Financial Capacity

Title	File
Proof of Good Standing	44e6ff8a-3c8.pdf
24-25 Audited Financial Statements	f94e12d3-ae5.pdf
Form 990	ea8eb8d9-edf.pdf

Board Resolution or Letter

Title	File
Non-State Entity Authorization Letter to Submit	2b44764c-6b0.pdf

Supplemental Attachments

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

Title	File
Cedar Corporation Cost Table	0dee0db5-046.pdf
Leach Lake Band of Ojibwe Letter of Support	e7657819-578.pdf
Friends of the Boundary Waters Letter of Support	d838c125-59b.pdf
Friend of the Mississippi River Letter of Support	8e5148b3-d68.pdf
Minnesota Lakes and Rivers Letter of Support	fc05c8d8-ec4.docx

Administrative Use

Does your project include restoration or acquisition of land rights?

No

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

Yes, I understand the Commissioner's Plan applies.

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

No

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

N/A

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

N/A

Does your project include original, hypothesis-driven research?

No

Does the organization have a fiscal agent for this project?

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")?

No

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

Meaghan Stern, Research Foundation for SUNY; Cienna Hanson, Cedar Corporation

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

Yes, I understand