



# Environment and Natural Resources Trust Fund

2024 Request for Proposal

## General Information

**Proposal ID:** 2024-058

**Proposal Title:** Water Science and Policy Fellowships for Minnesota

## Project Manager Information

**Name:** Alexander Frie

**Organization:** U of MN - Duluth - Sea Grant

**Office Telephone:** (218) 726-8714

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## Project Basic Information

**Project Summary:** Minnesota Sea Grant seeks to create a science-policy fellowship program to train Minnesota's science-policy workforce and advance Minnesota's water resource policy, emulating Sea Grant's successful federal-level fellowship program.

**Funds Requested:** \$445,000

**Proposed Project Completion:** June 30, 2027

**LCCMR Funding Category:** Environmental Education (C)

## Project Location

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

Statewide

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

Statewide

**When will the work impact occur?**

During the Project and In the Future

## Narrative

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

Minnesota needs scientists skilled in navigating the interface of science and policy to address modern water resource challenges, including mitigating severe weather impacts, improving water quality, and managing invasive species. Sea Grant has a proven track record in placing scientists in federal agencies and Congress. To address this need at the state level, we propose a fellowship program that places highly qualified recent graduate students in host placements throughout Minnesota. This program will provide technical expertise to hosts and pathways to careers in science policy for Minnesotans. Hosts for science-policy fellows may include Minnesota's state agencies, legislative committees, tribal agencies, and nonprofit organizations.

Fellowship programs are a proven tool for policy and workforce development. For example, the Sea Grant John A. Knauss Marine and Great Lakes Policy Fellowship (Knauss model) has placed 1,557 fellows in federal agencies and legislative offices since 1979. Multiple state-level (WI, AK, WA) programs have recently followed the Knauss model with wide success.

These other programs have demonstrated that, after startup, fellowship hosts are willing to fund a significant portion of the program costs (50 - 100%). The host support allows the fellowship programs to expand with limited additional funding.

### **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.**

To train the next generation of Minnesota natural resource policy leaders, we propose a "Minnesota Sea Grant/LCCMR Science & Policy Fellowship Program" and request financial support from LCCMR for the first two fellowship classes of the program. This support will be leveraged by Minnesota Sea Grant to initiate the program, which we expect to continue beyond the requested grant period.

Hosts and fellows will be selected through a competitive process administered by Minnesota Sea Grant (MNSG). MNSG brings over 40 years of experience running fellowship competitions, recruiting fellows, and developing partnerships. MNSG will recruit prospective fellows from Minnesota-based graduate programs, identify prospective hosts, handle fellowship administration, and organize professional development opportunities.

In the program, partners will host fellows for one year and benefit from fellows' scientific expertise. During that year, fellows will support the host's efforts related to water resources policy. Hosts will benefit from the skills and insights of the fellows, and fellows will receive hands-on, real-life policy experiences that support their professional development. Letters of support from potential hosts suggest fellows could work on topics including co-management of aquatic-related resources (i.e., wild rice, lake sturgeon, or waterfowl) with tribes, agricultural water quality management, and environmental restoration policy.

### **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?**

Outcome 1: Expansion of the water resource science-policy workforce in Minnesota. We anticipate four LCCMR-supported fellows in class one, two LCCMR-supported fellows in class two, and at least two non-LCCMR fellows in class two.

Outcome 2: Technical support for hosts working on water resource policy issues in Minnesota. We anticipate at least four hosts will be supported during class one and four during class two.

Outcome 3: Establishment of an ongoing Minnesota Sea Grant Science & Policy Fellowship Program. We anticipate the

program continuing beyond the LCCMR funding period based on the success of similar fellowship programs in other states.

## Activities and Milestones

### Activity 1: Host Recruitment, Selection, and Matching

**Activity Budget:** \$10,000

**Activity Description:**

We will identify fellowship hosts that can provide meaningful experiences and professional development for fellows in water resource-science policy. We will competitively recruit hosts by releasing a “Call for Hosts” and will actively recruit hosts from Minnesota’s executive agencies, legislative offices, non-profits, and tribal agencies through webinars, informational meetings, and social media promotion.

Prospective hosts will apply to host fellows. In their application, hosts will describe how a fellow could support their work to protect, conserve, preserve, or enhance Minnesota’s water resources using science policy. Prospective hosts will also be asked to provide an overview of professional development resources and organizational Diversity, Equity, Inclusion, Justice, and Accessibility efforts. Lastly, hosts will be asked to describe their ability to partially or fully fund a fellowship.

Selected hosts will then be invited to a workshop used to match fellows and hosts. This workshop is described in additional detail in Activity 2.

This competitive process will be managed by Minnesota Sea Grant, and the request for financial support from hosts will expand the impact of the LCCMR’s investment.

**Activity Milestones:**

Description	Approximate Completion Date
Class 1 call for hosts released	August 31, 2024
Class 1 hosts selected	November 30, 2024
Class 1 matching workshop	March 31, 2025
Class 2 hosts selected	August 31, 2025
Class 2 matching workshop	March 31, 2026

### Activity 2: Fellow Recruitment, Matching, and Support

**Activity Budget:** \$435,000

**Activity Description:**

We will work to recruit recent graduate students who will bring solid science skills, innovative ideas, and a passion for using science to inform and shape policy. We will recruit prospective fellows from graduate programs throughout Minnesota by hosting webinars, informational meetings, and through media and social media promotion.

A selection panel will review all fellowship applications and select fellows based on their qualifications and alignment of their goals with those of the program. Specifically, selecting fellows interested in applying water resource policy to protect, conserve, preserve, or enhance Minnesota’s water resources.

Following the initial review, fellowship finalists and hosts will be invited to a matching workshop. Twice as many finalists will be invited than available hosts to ensure great matches between fellows and hosts. During the workshop, hosts will share additional information about their placements, and finalists will interview with hosts. Following the interviews, both hosts and finalists will rank their top choices. Placements will be made to maximize the fit between the host and

fellows and professional opportunities for fellows.

After placement, fellows will start their 1-year fellowship. During this fellowship, the fellows will receive a competitive stipend (\$60,000) and funds to support their professional development.

**Activity Milestones:**

Description	Approximate Completion Date
Fellowship Class 1 Applications Open	December 31, 2024
Fellowship Class 1 Begins	June 30, 2025
Fellowship Class 1 Ends	June 30, 2026
Fellowship Class 2 Begins	June 30, 2026
Fellowship Class 2 Ends	June 30, 2027

## 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?**

This project will demonstrate a water science policy fellowship program in Minnesota. After the conclusion of LCCMR funding, we anticipate that funds from hosts will allow for the continuation of the program. The self-sustaining nature of these fellowship programs has been demonstrated in other states. We also anticipate continued administrative support from the Minnesota Sea Grant.

We anticipate the results of this project, the trained fellows and the work they complete, will continue to positively impact Minnesota's natural resources far beyond the end date of the budget.

## Project Manager and Organization Qualifications

**Project Manager Name:** Alexander Frie

**Job Title:** Research and Fellowship Coordinator

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

Dr. Frie manages Minnesota Sea Grant's research and fellowship programs and has experience managing scientific teams, project budgets, and partnerships. Dr. Frie has effectively recruited applicants for other fellowship programs and research competitions and efficiently operated competitive selection processes.

Dr. Frie's educational background includes a Ph.D. in environmental science from the University of California Riverside and a B.A. in chemistry from Saint John's University.

**Organization:** U of MN - Duluth - Sea Grant

**Organization Description:**

Minnesota Sea Grant is a systemwide program of the University of Minnesota and one of 34 federal-university Sea Grant partnerships across the country that bring applied water science to communities. Minnesota Sea Grant is supported through a partnership with the National Oceanographic and Atmospheric Administration and the University of Minnesota. Minnesota Sea Grant's mission is to inform and facilitate interaction among the public and scientists to enhance the communities, the environment, and the economies along Lake Superior and across Minnesota's inland waters by identifying information needs, supporting scientific research to address those needs, translating the resulting science into actionable information, and communicating those results to the public.

## Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
<b>Personnel</b>								
Fellowship Coordinator: Alexander Frie		Coordinate fellowship recruitment and selection, coordinate host recruitment and selection, arrange fellowship placements, coordinate fellowship placement workshop, support fellows during the fellowship, plan fellowship professional development. Lead reporting of project and fellowship activities.			27%	0.36		\$42,003
Communication Manager: Marie Thoms		Manage fellowship promotion. Including creating and maintaining a fellowship program webpage, creating and distributing a social media promotion campaign for recruitment of fellows and host sites, and email promotion for recruitment of fellows and host sites.			24%	0.06		\$6,597
Extension Program Associate: To be named		Coordinate matching workshop logistics including lodging and travel for attendees, workshop program, and catering.			24%	0.08		\$5,279
							<b>Sub Total</b>	<b>\$53,879</b>
<b>Contracts and Services</b>								
							<b>Sub Total</b>	-
<b>Equipment, Tools, and Supplies</b>								
							<b>Sub Total</b>	-
<b>Capital Expenditures</b>								
							<b>Sub Total</b>	-
<b>Acquisitions and Stewardship</b>								

							<b>Sub Total</b>	-
<b>Travel In Minnesota</b>								
	Miles/ Meals/ Lodging	Estimated as \$125 a night x 8 finalists x 1 night x 2 workshops	Finalist lodging during matching workshops					\$2,000
	Miles/ Meals/ Lodging	Mileage or other Minnesota travel for finalists to travel to attend matching workshops. Estimated as \$62.50 a finalist x 8 finalists x 2 workshops.	Finalist travel to and from workshops					\$1,000
							<b>Sub Total</b>	<b>\$3,000</b>
<b>Travel Outside Minnesota</b>								
							<b>Sub Total</b>	-
<b>Printing and Publication</b>								
	Printing	Flyers for distribution to graduate programs throughout Minnesota. Estimated at a cost of \$0.50 a flyer for 500 flyers.	Print Media for Fellowship Promotion					\$250
							<b>Sub Total</b>	<b>\$250</b>
<b>Other Expenses</b>								
		Estimated as \$47.90 per hour for x for 8 hours x for 2 days and 2 workshops.	Space rental for fellowship matching workshops.					\$1,500
		Estimated as \$25 a meal x (4 hosts x 2 representatives per host + 8 fellows+ 4 staff) x 5 meals for 2 workshops.	Catering/Meals for matching workshop attendees					\$5,000
		Fellow financial support for 4 fellows to work with hosts to gain skills and advance projects in water resources policy. Estimated as \$60,000 per fellow for 4 fellows with 100% LCCMR support	Fellowship Year 1 Stipends					\$240,000
		Fellow professional development funds for 4 fellows to support professional development and presenting of results related to water resources policy within Minnesota. These funds would be dispersed to fellows after they complete the activity to ensure funds are dispersed following University of Minnesota's and LCCMR's guidelines and the activities are within the project scope. Estimated as	Fellowship Year 1 Professional Development Funds					\$14,000



		\$3,500 per fellow for 4 fellows 100% LCCMR Support						
		Fellow financial support for 4 fellows to placed with hosts to gain skills and advance projects in water resources policy. Estimated as \$60,000 per fellow for 4 fellows with 50% LCCMR Support	Fellowship Year 2 Stipends					\$120,000
		Fellow professional development funds for 4 fellows to support professional development and presenting of results related to water resources policy within Minnesota. These funds would be dispersed to fellows after they complete the activity to ensure funds are dispersed following University of Minnesota's and LCCMR's guidelines and the activities are within the project scope. Estimated as \$3,500 per fellow for 4 fellows at 50% LCCMR Support	Fellowship Year 2 Professional Development Funds					\$7,000
		Shipping costs for print media distribution. Estimated at \$4.95 per package for 75 packages	Shipping of Media					\$371
							<b>Sub Total</b>	<b>\$387,871</b>
							<b>Grand Total</b>	<b>\$445,000</b>

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
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## Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
<b>State</b>				
In-Kind	University of Minnesota	Facilities and Administrative Costs	Secured	\$21,875
Cash	Fellowship Host Organizations	50% host support of fellowship stipends during fellowship year 2 (year 3 of grant)	Potential	\$120,000
Cash	Fellowship Host Organizations	50% host support of fellow professional development funds during fellowship year 2 (year 3 of the grant)	Potential	\$7,000
			<b>State Sub Total</b>	<b>\$148,875</b>
<b>Non-State</b>				
			<b>Non State Sub Total</b>	-
			<b>Funds Total</b>	<b>\$148,875</b>

## Attachments

### Required Attachments

#### *Visual Component*

File: [5bac4f2c-d9b.pdf](#)

#### *Alternate Text for Visual Component*

Top: Scientists in lab and field situations followed by the text "Water Science." Center: The state of Minnesota with a cartoon microscope and a path to a cartoon government building. Bottom: the text "Water Policy" and images of Sea Grant Knauss fellows (federal science-policy fellows)....

### Optional Attachments

#### *Support Letter, Photos, Media, Other*

Title	File
Fond du Lac Band of Lake Superior Chippewa Resource Management Division: Letter of Support	<a href="#">f6360718-6f1.pdf</a>
Minnesota Agricultural Water Quality Certification Program hosted at the Minnesota Department of Agriculture: Letter of Support	<a href="#">134224a0-cec.pdf</a>
UMN Authorization Letter	<a href="#">046c2869-fb4.pdf</a>

## Administrative Use

**Does your project include restoration or acquisition of land rights?**

No

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

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 design, construction, or renovation of a building, trail, campground, or other capital asset costing \$10,000 or more?**

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?**

No