



Environment and Natural Resources Trust Fund

2027 Request for Proposal

General Information

Proposal ID: 2027-090

Proposal Title: Minnesota FloodWise Communities Extension Program

Project Manager Information

Name: Heidi Roop

Organization: U of MN - Extension

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Project Basic Information

Project Summary: The FloodWise Minnesota Communities Extension Program will help communities plan and implement resiliency solutions to manage extreme rainfall impacts on stormwater systems, including the integration of nature-based solutions.

ENRTF Funds Requested: \$1,000,000

Proposed Project Completion: June 30, 2030

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?

During the Project and In the Future

Narrative

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

Water is a critical natural and cultural resource, vital to Minnesota's communities, recreation, industry, and agriculture. However, precipitation patterns across Minnesota are shifting. The largest single rain event has grown by 13% and the state now experiences more frequent and intense heavy rainfall events than ever recorded. These changes bring measurable and costly flooding and impacts to critical drinking and stormwater infrastructure that communities rely on from Chokio and Cokato to Thief River Falls and Lake Crystal.

In July 2025, eight inches of rain fell in a single storm in Chokio. The town, like many, has a combined storm sewer, where storm drains and sewage flow into the same pipes. That system was overwhelmed and human waste flooded residents' basements. Beyond costs to homeowners, expected infrastructure repair costs exceed the town's entire annual budget.

Technical assistance programs to help communities and municipalities assess stormwater vulnerabilities and implement solutions can help prevent damage from heavy rainfall and flooding. The need for such a program is growing, especially with the end of the State's stormwater resilience planning and implementation grants. The Minnesota FloodWise Communities Extension Program will help fill this gap by providing no-cost stormwater resiliency technical assistance to communities across Minnesota.

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.

The Minnesota FloodWise Communities Extension Program will provide no-cost technical assistance and resources for small- and medium-sized communities across Minnesota to understand, manage, and implement stormwater resiliency solutions. This will include tailored geospatial tools and a Minnesota-specific stormwater resiliency resource library to support the incorporation of nature-based solutions into stormwater management. Program participants will receive a community-specific stormwater vulnerability assessment, technical risk reports that provide insights into high-risk assets such as pipes, critical infrastructure and emergency services, and a road-map to implement and finance needed stormwater resiliency solutions.

To accelerate the timeline between completing the vulnerability assessment and implementing stormwater resiliency solutions, communities who complete the program will have the opportunity to request cost-free consultant time to develop cost estimates, initiate modeling studies, or receive grant writing support. This unique aspect of this technical assistance program aims to equip communities and municipalities with the critical "next step" support to put their vulnerability assessments and plans into action. This tailored support will better position participant communities to finance needed green and grey infrastructure investments through federal, state, or grant funds, during disaster recovery, or using other financing to ensure communities can invest in their critical and needed stormwater resiliency solutions.

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 Minnesota FloodWise Communities Extension Program is designed to reduce the resource burden on communities needing to plan and implement effective stormwater management and resiliency solutions. This will include dedicated Extension resources, videos, and technical assistance to expand the integration of nature-based solutions in stormwater management. When integrated alongside grey infrastructure, effective integration of nature-based solutions brings a multitude of ecosystem, water quality, and human well-being co-benefits, while also benefitting the enhancement of the state's natural resources. A future with reduced damage, costs, and stormwater system failures will not only mean healthier communities, but also a healthier environment for all.

Activities and Milestones

Activity 1: Develop and Deliver the Minnesota FloodWise Communities Extension Program Across Minnesota

Activity Budget: \$568,237

Activity Description:

The Minnesota FloodWise Communities Extension Program will help communities assess the vulnerability and adaptive capacity of their stormwater systems using nature-based and infrastructure resilience solutions. Participating communities will receive at no cost 1) a community profile with localized flood, climate, and socioeconomic information, 2) a completed stormwater vulnerability assessment, and 3) five early action steps to implement priority solutions. Research indicates vulnerability assessments are essential for local governments and stormwater managers to identify which systems and populations are at greatest risk and inform action and investment decisions.

This activity includes the design and development of the program curriculum, creation of a web-based tool for facilitating the program, and dedicated resource development on nature-based solutions for stormwater and flood resiliency. These resources will complement existing urban-focused stormwater programs while benefitting from a decade of program delivery of similar stormwater-focused technical assistance provided in other Great Lakes states.

With a focus on year-one program delivery, program pilots will reach communities who have expressed interest in participating (see Letters of Support). Concurrently, a community prioritization and recruitment process will be created to guide state-wide program participation.

Activity Milestones:

Description	Approximate Completion Date
Recruit minimum of three first pilot participant communities (ongoing recruitment will occur throughout project)	October 31, 2027
Develop community prioritization process to reach high-risk communities and those not receiving state resilience funding	November 30, 2027
Develop Minnesota-specific FloodWise Program design and facilitation workflow in collaboration with the GLISA team	November 30, 2027
Create menu of ~30 stormwater system components communities can select from for their vulnerability assessments	December 31, 2027
Develop program evaluation protocol to document learnings, capture testimonials, and enable knowledge exchange between communities	January 31, 2028
Develop "Nature-based Solutions in Action" technical assistance module showcasing nature-based flood and stormwater resilience solutions	March 31, 2028
Create communications resource toolkit for municipalities to share program outcomes with community leaders & others	June 30, 2028
Build Minnesota-specific interactive FloodWise web-tool including future projections, land-use, and socio-demographics	July 31, 2028
Deliver the Minnesota FloodWise Communities Extension Program to at least 30 communities across the state	June 30, 2030

Activity 2: Accelerate Implementation of Stormwater Resiliency Solutions Through Technical Design, Modeling, and Advanced Assistance

Activity Budget: \$274,487

Activity Description:

Completion of the FloodWise Program will help communities set a roadmap for implementing critical stormwater resiliency solutions (Activity 1). Similar assessments in Great Lakes communities have resulted in updated stormwater design and fee structures, improved hazard mitigation plans, streamlined capital improvement planning, and increased federal funding - all while saving communities tens of thousands of dollars.

Through Activity 2, participants will take the next critical step toward community-scale resiliency. Following program completion, we will pilot a program where communities can request no-cost services such as capital improvement/asset management evaluation, stormwater design standard review and updates, feasibility screening of nature-based solutions, cost estimates for system upgrades/modifications, and grant writing. These services, estimated at \$5,000-25,000 per community, will be provided by vetted consultant teams. This will enable communities to be well-staged to move the vulnerability assessment efficiently into implemented stormwater management solutions.

Our project team includes experts at Bolton & Menk, a well-regarded city engineer of record for several medium- and small-communities in Minnesota. Our budget is intentionally structured to allow us to develop contracts with Bolton & Menk, or other firms as preferred by communities, tailored to their needs without directly adding the burden of contract and finance management.

Activity Milestones:

Description	Approximate Completion Date
Develop community application and review protocol for receiving funded consultancy support	March 31, 2028
Develop services menu to help guide communities in selecting critical services offered by vetted consultants	March 31, 2028
Develop evaluation to document how consultant services support resiliency, conversation, financial, and other program benefits	April 30, 2028
Provide technical design and consultant services to at least 18 participant communities (estimated \$5-25k/community)	May 31, 2030

Activity 3: Develop the Minnesota Stormwater Resiliency and Nature-based Solutions Online Resource Library & Solutions Showcase

Activity Budget: \$157,276

Activity Description:

The Minnesota FloodWise Communities Extension Program fills a gap noted by many communities across the state, especially those not served by existing urban- and metro-focused flood and stormwater management programs. Participating communities will be able to not only plan but also identify critical pathways for implementing stormwater management solutions that will benefit their residents. However, capacity, time and other constraints require that we also build resources and tutorials for all communities regardless of their ability to commit to the full FloodWise Program model.

To reach beyond full program participants, we will also develop a Minnesota Stormwater Resiliency and Nature-based Solutions Online Resource Library and Solutions Showcase. These online resources will enable public access to the web-tool developed in Activity 1 and include a series of easy-to-use stormwater, water resource management and climate/flood risk management resources, checklists, and stories and videos highlighting the work and learning of FloodWise participant communities. Short videos created by our team will be shared widely to help create peer-to-peer learning opportunities between communities across the state. This resource library will draw directly on past LCCMR science and educational investments, including new flood and drought modeling and conservation and habitat management efforts.

Activity Milestones:

Description	Approximate Completion Date
Develop Minnesota FloodWise Communities website for program resource library and multimedia content (videos, interviews, how-tos)	September 30, 2027
Develop communications campaign to highlight program availability, outcomes, and learnings to reach Minnesota communities (ongoing)	November 30, 2027
Develop public-facing, online nature-based solutions resources and checklists for effective stormwater and habitat management	June 30, 2028
Share the program accomplishments, findings, and resources in workshop presentation at the Midwest Resilience Conference	October 31, 2029
Develop ten short videos of participant communities to create a stormwater resiliency “Solutions Showcase”	May 31, 2030

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Kristen Schmitt	University of Minnesota Extension - Climate Adaptation Partnership	Extension Educator for Natural Resources and Decision Support; assist in developing educational resources including nature-based solutions materials and training module, and delivering FloodWise workshop across Minnesota throughout the project.	No
Nathan Meyer	University of Minnesota Extension - Climate Adaptation Partnership	Co-Principal Investigator; assist with Extension program development and delivery and project oversight; lead program evaluation	No
FloodWise Communities Program Specialist (TBH)	University of Minnesota Extension - Climate Adaptation Partnership	FloodWise Communities Program Specialist; serve as the primary lead for FloodWise Minnesota Extension program development and delivery across Minnesota throughout the three-year project	Yes
Martin Froger Sliva	University of Minnesota Extension - Climate Adaptation Partnership	Digital Content Specialist; serve as communications lead for the project and assist with developing and disseminating program materials; lead development of web and multi-media content featuring community participants and flood management interviews	Yes
Dena Coffman	University of Minnesota Extension - Climate Adaptation Partnership	Geospatial Specialist; Support program delivery through developing maps, geospatial resources and developing web-based tool for use by FloodWise Minnesota communities participants and the public	Yes
Maria Tomczik	University of Minnesota Climate Adaptation Partnership	Senior Program Coordinator; oversee contracts, services and overall financial and project management tasks including community recruitment support to ensure timely delivery of project tasks and milestones	Yes
Tori Field	University of Michigan Great Lakes Regional Integrated Sciences and Assessments	Sustained Engagement Specialist; assist Minnesota Extension team and project partners in the development and delivery of the Minnesota-specific FloodWise Communities Program	Yes
Jenna Jorns	University of Michigan Great Lakes Regional Integrated Sciences and Assessments	Program Director; oversee program collaboration and delivery for GLISA and provide technical guidance on program tool development and nature-based resource creation	Yes
Leslie Brandt	Bolton & Menk, Inc	Resiliency & Sustainability Project Manager; provide technical guidance and consultations related to modeling, finance, grant writing and other consultant support services to participant communities through contracts for service.	Yes

Griffin Peck	West Central Initiative	Energy and Adaptation Planner; facilitate community recruitment and program delivery of the Minnesota FloodWise Communities program in the nine counties and White Earth Nation served by the West Central Initiative.	No
Samuel Sharp	Region Nine Development Commission	Energy and Sustainability Planner; facilitate community recruitment and program delivery of the Minnesota FloodWise Communities program in the nine counties served by the Region Nine Development Commission	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.

The Minnesota FloodWise Communities Program is focused entirely on engaging, training and sharing resources and services directly with Minnesota communities. A dedicated website and communications campaign, including outreach supported by at least four regional development organizations (covering a total of 39 counties), will help raise awareness about the Minnesota FloodWise program offering for small- and medium-sized communities. Dedicated factsheets about the program will be developed digitally and in print and distributed through Extension's numerous county offices and directly to cities, townships, and others with potential interest in participating in the Minnesota FloodWise Extension Program.

Ongoing communication and dissemination will occur throughout the project through dedicated website content built for the program as well as on social media. Testimonials of program participants, evaluation results, and videos from the proposed "Solutions Showcase" will also help highlight the program. This will include highlighting the benefits of program participation to interested communities as well as highlighting the value of the State's investment in the program for Minnesotans, and for enhancing Minnesota's environment and natural resources through the expanded integration of nature-based interventions as for critical stormwater management and resiliency.

Further, all resources and materials created for the program, including the online web-tool and the proposed Minnesota Stormwater Resiliency and Nature-based Solutions Online Resource Library, will be available to the public. These resources and tools will be made available through the University of Minnesota Extension's Climate Adaptation Partnership website (climate.umn.edu) and will feed into the existing national FloodWise Communities website (floodwisecommunities.org).

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 create a new Minnesota FloodWise Communities Extension Program that can be continually offered through University of Minnesota Extension. To expedite program delivery, we propose leveraging a decade of investment from NOAA and others in the FloodWise program model used in other states. However, there is a critical and timely opportunity to develop a FloodWise program tailored to Minnesota's communities and stormwater challenges. We will also leverage past LCCMR investments in flood and stormwater science and ensure it reaches decision-makers. Once created, we are well-positioned to sustain the long-term delivery of this program through Extension.

Other ENRTF Appropriations Awarded in the Last Six Years

Name	Appropriation	Amount Awarded
Water and Climate Information to Enhance Community Resilience	M.L. 2022, , Chp. 94, Art. , Sec. 2, Subd. 04f	\$564,000

Managing Future Floods and Droughts in Minnesota	M.L. 2024, , Chp. 83, Art. , Sec. 2, Subd. 07e	\$460,000
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Project Manager and Organization Qualifications

Project Manager Name: Heidi Roop

Job Title: Extension Specialist

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

Roop serves as Minnesota’s Extension Specialist for weather and climate risk management, and brings over a decade of experience and expertise in providing decision-relevant technical assistance for water and natural resource management. She is recognized as a national leader in climate services program development and delivery and has advised two U.S. Presidents and 15 federal agencies – from the Department of the Interior to the Department of Defense – on how to effectively plan and adapt to extreme weather hazards, including flooding and stormwater.

In Minnesota, she is a trusted advisor to state agencies, commodity groups, businesses, local governments and others on weather and climate risk management. Through her leadership of the Climate Adaptation Partnership, she has nurtured the development of new, nation-leading weather and climate risk information to help reduce risks and damage to Minnesota’s communities, natural resources, and local economies. Since joining Extension in 2020, she has worked in dozens of counties across Minnesota and is well-regarded for the quality of her Extension program content and delivery.

She also brings past experience in helping to manage and support LCCMR-funded projects to ensure high-quality and timely delivery of project milestones and activities.

Organization: U of MN - Extension

Organization Description:

University of Minnesota Extension discovers science-based solutions, delivers practical education, and engages Minnesotans to build a better future.

Affiliated with both University of Minnesota Extension and the College of Food, Agricultural and Natural Resource Sciences, the Climate Adaptation Partnership performs applied research on extreme weather risks and flooding while also offering hands-on education, technical assistance, and support to individuals, businesses, and organizations across Minnesota. As a program recognized nationally for its innovative and high-quality approach, the Partnership’s statewide team serves as a trusted partner in helping to foster and sustain resilient communities, landscapes, and economies across the state.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
Personnel								
Principal Investigator/Extension Specialist		To provide supervision for project staff and provide overall program design, content expertise, direction, and oversight			36.6%	0.24		\$58,577
FloodWise Communities Program Specialist		Serve as the primary lead for the Minnesota FloodWise program development and delivery across Minnesota throughout the project			36.6%	2.25		\$363,198
Communications Lead & Digital Content Coordinator		Serve as communications lead for the project and assist with developing and disseminating program materials; lead development of web and multi-media content featuring community participants and flood management interviews			32.3%	0.24		\$24,128
Senior Program Coordinator		Oversee contracts, services, community recruitment support, and overall financial and project management tasks to ensure timely delivery of project tasks and milestones			32.3%	0.24		\$24,490
Geospatial Specialist		Support program delivery through developing maps, geospatial resources and developing web-based tool for use by FloodWise Minnesota communities participants and the public			32.3%	4.2		\$41,872
							Sub Total	\$512,265
Contracts and Services								
GLISA Program	Service Contract	GLISA will collaborate with the project team to provide services to support specific program module refinement informed by community needs, assist with program facilitation, assist with webtool creation, and other communication and delivery tasks as appropriate for the deployment of a Minnesota-specific FloodWise program.				1.74		\$225,000
Bolton & Menk	Service Contract	Bolton & Menk is a well-regarded city engineer for several communities in Minnesota. They will provide services associated with Activity 2 such as capital improvement/asset management evaluation, stormwater design standard review				0.36		\$150,000

		and updates, feasibility screening of nature-based solutions, cost estimates for system upgrades/modifications, and grant writing.						
TBD	Service Contract	Communities will have the option to select consulting firms to support Activity 2 activities. Services provided by firms other than Bolton and Menk may include capital improvement/asset management evaluation, stormwater design standard review and updates, feasibility screening of nature-based solutions, cost estimates for system upgrades/modifications, and grant writing.				0.2		\$70,000
							Sub Total	\$445,000
Equipment, Tools, and Supplies								
	Tools and Supplies	Extension Program supplies including, but not limited to, flipcharts, markers, pens, and other related education and program delivery supplies.	Extension Program supplies are requested to support the delivery of the FloodWise program to participating communities and to share and recruit participant communities across the state.					\$3,716
							Sub Total	\$3,716
Capital Equipment								
							Sub Total	-
Acquisitions and Stewardship								
							Sub Total	-
Travel In Minnesota								
	Miles/ Meals/ Lodging	Travel is estimated based on a general round-trip distance between for one person between Saint Paul, Minnesota and Saint Louis County, Minnesota (375 miles per trip at \$0.725/mile), two nights of hotel (\$159/night) and per diem based on an estimated two-night stay per trip using standard per diem rates for Duluth/Saint Louis County (\$86.00 full per diem; \$64.50 for first and last day of travel). We are requesting	Minnesota travel is requested to support travel for project team members to recruit, deliver, and support communities through completion of the Minnesota FloodWise Communities Extension Program. Additional travel will be used to support development of the Solutions Showcase videos and other					\$28,977

		support for twelve trips in each year of the project for a total of \$9,659 per year.	project related materials, documentation, and educational resources.					
	Conference Registration Miles/ Meals/ Lodging	Trip expenses, per person, include two nights of hotel at \$148/night, per diem (\$92.00 full per diem and \$69.00 for first and last day of travel), registration (\$550), and estimated mileage of 375 miles (at \$0.725/mile), consistent with other travel.	In Year 3, three team members will present program results and host a workshop on the Minnesota FloodWise program at the Midwest Resilience Conference anticipated to be held in Saint Paul, MN.					\$4,042
							Sub Total	\$33,019
Travel Outside Minnesota								
							Sub Total	-
Printing and Publication								
	Printing	Large format maps (average cost of \$40/unit; estimated total of 25/year), program booklets and hand-outs (\$10/unit estimated as a total of 80/year) and program signage (~four per year at \$50 per unit).	Print charges are requested to develop Extension educational and program-specific print resources to support the delivery, recruitment and documentation of the FloodWise program.					\$6,000
							Sub Total	\$6,000
Other Expenses								
							Sub Total	-
							Grand Total	\$1,000,000

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
State				
			State Sub Total	-
Non-State				
			Non State Sub Total	-
			Funds Total	-

Total Project Cost: \$1,000,000

This amount accurately reflects total project cost?

Yes

Attachments

Required Attachments

Visual Component

File: [6ea05970-b1d.pdf](#)

Alternate Text for Visual Component

This visual outlines the need for the FloodWise Communities program and core deliverables including tailored stormwater resiliency resources, a stormwater vulnerability assessment, and no-cost consultant hours to support implementation. Drawings are used to depict a stormwater system, sandbags being installed by community members, a map, and a flooded home....

Supplemental Attachments

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

Title	File
UMN Authorization Letter	61b4b3a0-f93.pdf
West Central Initiative Support Letter	1284568f-458.pdf
City of Eden Valley Support Letter	611bc56c-7c2.pdf
Bolton and Menk Support Letter	c9cc85f4-542.pdf
City of Spring Valley Support Letter	c13dd8d3-465.pdf
City of Waseca Support Letter	80fb4ba2-b51.pdf
GLISA Support Letter	e0292079-e39.pdf
Minnesota Pollution Control Agency Support Letter	2a63053a-d8b.pdf
Initiative Foundation Support Letter	650756e0-17c.pdf
Region Nine Development Commission Support Letter	f4076790-132.pdf
City of Madelia Support Letter	ef1dfd03-baf.pdf
City of Long Beach Support Letter	122bdc45-d34.pdf
Brown County Planning and Zoning Support Letter	058c9f88-d76.pdf
Arrowhead Regional Development Commission Support Letter	1fac10d7-6e6.pdf
City of Chokio Support Letter	89c8ad2c-528.pdf

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 UMN Policy on travel 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:

Sarah Hulke, University of Minnesota Sponsored Projects Administration

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