

Planning Grants for Stormwater, Wastewater, and Community Resilience

Application

FY 2026

Doc Type: Grant Application

Instructions: Read the complete *Request for Proposal (RFP)* and other associated documents before submitting this application.

Check the <u>SWIFT Supplier Portal</u> and the Minnesota Pollution Control Agency (MPCA) <u>Planning Grants for SWC Resilience</u> webpage for the most recent updates.

Applications are due no later than 4:00 p.m. Central Time (CT) on December 11, 2025.

Submit Application, Workplan, and Budget (as Microsoft Word and Excel documents) per the instructions listed in Section 7 and 8 of the RFP. **Projects submitted without all three documents will be deemed ineligible.**

1. Project information

Organization name:		The City of Northfield								
Organization address:		801 Washington Street								
City	:	Northfield		State:	MN	Zip code:	55057	County: R	Rice	
Contact name:		James McDermott		Title:		Water Quality Technician				
Phone:		507-645-3071		Email address: James.McDermott@northfi			northfieldr	nn.gov		
Organization type:		☐ Tribal government		 ☑ Local/Regional government (plus select one below ☑ City ☐ County ☐ Town/Township ☐ Soil and Water Conservation District ☐ Watershed Management Organization ☐ Watershed District ☐ Regional Development Commission ☐ Metropolitan Planning Organization ☐ Public School District 					ct cion	
Project focus area (check all that apply):		 ⊠ Stormwater Resilience Planning □ Wastewater Resilience Planning □ Community Resilience Planning 								
Pro	ject Title:	West Bank F	Floodwall Extension							
Grant requested:		\$ 90,0000	+ Matching funds:	\$ 10,0	00 =	Total projec	ct cost:	\$ 100,000		
									Yes	No
Is applicant the sole source of matching funds for this project?									\boxtimes	
1.	If no, is supporting documentation of commitment for cash or in-kind matching funds from outside organizations involved in the project attached?						n outside			

	If no, explain:		
2.	Is applicant in compliance with Minnesota's tax and environmental regulatory requirements?	\boxtimes	
	If no, explain:		

2. Project Details

- 1. **Project Summary:** Provide a brief narrative description of the project including the intent of the project and what deliverables will be completed (limit of 250 words): This planning project will complete the preliminary plan design for a project that will construct an approximately 415-foot long floodwall extension with drainage improvements along the west bank of the Cannon River in Northfield's downtown area. This will provide much needed flood relief for Northfield businesses located at 205, 207, and 301 Water Street S along the Cannon River. The anticipated deliverables for this project include 50% design plans, cost estimates, and creation of a standard specification document for the project.
 - a. **Co-benefits to stormwater and wastewater:** If the project is a stormwater project to address localized flooding that will meaningfully benefit the wastewater system, or a wastewater project that will meaningfully benefit the stormwater system, explain those co-benefits here: No co-benefits to the City wastewater systems.
- 2. **Project Need:** Describe the identified need for this project and severity of the problem. How does this project address a much-needed resiliency planning issue in the community? How have public safety and human health issues been considered? 7 of the 10 largest recorded flood events along the Cannon River in Northfield have occurred since 2010. In response to this repeated flooding, The City of Northfield commissioned a flood study of its downtown in 2022 to evaluate flood risk and options to reduce future flood damages for properties adjacent to the Cannon River. This flood study included an analysis of the current FEMA preliminary Flood Insurance Study (FIS) and an updated discharge frequency analysis using USGS stream gauge data for the Cannon River in Northfield. The study found there have been nine events with flows greater than the 10% Annual Exceedance Probability (AEP) FIS discharge (10-year flood) in the last 28 years, and three events greater than the 1% AEP FIS discharge (100-year flood) in the last 12 years.

The updated discharge frequency analysis indicates that the two largest flood events that took place during the study period (2010 and 2016) have a 1% AEP (100-year flood) instead of the 0.2% AEP (500-year flood) given by the FEMA FIS. After the completion of Phase II of this study, Northfield experienced another flood event in 2024 that would also have an AEP of 1% according to the updated discharge frequency analysis. All three of these flood events overtopped the existing floodwall along the west bank of the Cannon River.

The study also updated existing-conditions flood inundation maps for the 50-year, 100-year, and 500-year flood events based on the updated flood frequency analysis. Three downtown Northfield properties are identified along the west bank of the Cannon River that have low floor and low opening elevations below the updated 1% AEP flood elevation at their respective locations. The floodwall was provided as one of five flood risk reduction alternatives in the study.

The City and private property owners have taken some measures to reduce flood risk by constructing temporary and permanent barriers and elevating equipment along the Cannon River. While these measures have helped, responding to these flood events still requires timely deployment of sandbags and pumps in multiple areas. The goal of this project is to provide more reliable flood mitigation measures that are less labor-intensive and less dangerous for emergency response personnel and private property owners.

3. Lasting Impact: How are final deliverables from the proposed planning project expected to have a positive impact on the community's preparedness for Minnesota's changing climate? (limit of 500 words): The 50% plan design and standard specification document for an approximately 415-foot-long floodwall will give our community the ability to construct more reliable flood mitigation infrastructure that will safeguard Northfield businesses against more frequent flooding driven by Minnesota's changing climate. Northfield's downtown flood study used precipitation data and data from a USGS stream gauge, located near the Second Street bridge in Northfield, to define likely boundaries for the

Cannon River's peak flows in Northfield over the next century. This analysis determined there is a 90% chance that the 1% AEP peak discharge is between 13,000 cfs and 24,000 cfs, with a median value of 16,200 cfs. The conceptual design of the floodwall provided in the study is designed for the median discharge but was also checked for performance against the 24,000 cfs flood event. The proposed planning project would use this climate change data for the 50% plan design.

- 4. **Use of Climate Data:** (answer a, b, or c, as applicable, and the questions following)
 - a. For stormwater projects, what climate change data and design storms will be used to design future implementation projects? (limit of 250 words): Northfield's commissioned flood study reviewed data from regional climate change models and concluded that these models are not useful for accurately predicting extreme weather events like 1% AEP flood. However, when calibrated to historic data, these models can accurately predict annual average precipitation increases. These potential precipitation increases were used to determine the upper and lower bounds of the 90% confidence limit and median value for the 1% AEP peak discharge event over the next century. For projects in Northfield along the Cannon River, this updated median value for the 1% AEP will be used to design future implementation projects, while also considering the potential for the upper bound of the 90% confidence limit.
 - b. For wastewater projects, how will rainfall data or groundwater level data be used in the planning process, if applicable? (limit of 250 words):
 - c. For community resilience projects, how will climate data be used in the community planning process or to design future implementation projects? (limit of 250 words):

How will climate data be used to increase the community's climate resiliency? The MNDNR HEC-RAS hydraulic model for the Cannon River was updated as part of Northfield's downtown flood study to add missing bridges and calibrate the model to recent flood events. The calibrated model was used to simulate flood profiles for a range of annual exceedance probabilities, and to update the current 50, 100, and 500-year flood inundation maps along the Cannon River in Northfield. These maps and flood profiles can be used for future flood resiliency projects by both private property owners and the City of Northfield.

How will data about current Minnesota climate trends and projections of future climate conditions be used in the methodology of this planning project? The updated flood inundation maps and flood profiles from Northfield's downtown flood study will be used for the proposed planning project design. The identification of the at-risk properties along the Cannon River is based on these updated models, and the floodwall extension will be designed to mitigate flooding based on increased precipitation and Cannon River peak discharges over the next 100 years.

5.	EJ Areas of Concern: Using the MPCA's criteria and interactive mapping tool, will the geographic area in which the
	project is located and/or which is directly benefitted by the proposed planning project include one or more MPCA
	identified areas of concern for environmental justice (EJ areas of concern)? Yes No

Note: Exhibit B: Resources on climate equity and environmental justice contains resources to incorporate climate equity and environmental justice into a resilience planning project.

If yes (proposed project includes EJ areas):

- a. Will the planning to be undertaken by this project yield direct benefits for communities within these EJ areas of concern? \square Yes \square No
 - i. If yes, describe these communities and how they will benefit:
 - ii. If yes, describe how the planning completed for this project will benefit EJ communities specifically compared to other communities in the area covered by the project:

	 b. Will these communities be provided the opportunity to have a voice in decision-making through meaningful engagement as part of the planning completed for this project? ☐ Yes ☐ No i. If yes, describe specifically how this will be done; if no, explain why not: 					
6.	 a. Potential funding to implement the resilience project (s) for which planning was completed? Describe: a. Potential funding sources and how planning will better position the project for that implementation funding: This planning project will position the City of Northfield to pursue federal funding through FEMA's Hazard Mitigation Grant and Flood Mitigation Assistance programs by showing that the city has designed the project and is prepared to move forward with the bidding and construction of the proposed floodwall if awarded implementation funding. b. How direct responsibility for implementation of planned actions will be assigned: Direct responsibility for the implementation of the proposed floodwall extension project will be assigned to the City of Northfield's engineering division. Completion of the proposed project design will be awarded to a qualified consultant. c. Anticipated timeline to begin implementing actions identified in the planning project: Proposals for the project design of the planning project are anticipated to be due in the Summer of 2026. d. How community feedback gained during planning project will guide future actions, and/or how there will be opportunity for meaningful community involvement before implementation of planned actions: The City of Northfield has held three open house public engagement events for this project to date. Most attendees of these events were property owners in the flood study area and were generally supportive of the recommendations from the study. 					
7.	rotential Barriers: Describe any potential barriers to successful completion of the planning project and the methods hat will be used to overcome them: The greatest potential barrier to successful completion of this project will be cos of construction. The City of Northfield will continue to pursue FEMA funding and other funding sources to implement his project.					
3.	Experience and qualifications					
1.	escribe applicant's experience and qualifications related to the applicant's role in the proposed planning project: mes McDermott, Water Quality Technician— City of Northfield, MN mes is the primary applicant for this grant and is responsible for coordinating the City of Northfield's MS4 program. e provides plan review for City projects regarding the City's Surface Water Management code and Surface Water anagement Plan. James is a member of the Technical Advisory Group for the Cannon River Watershed Management an and is a work group member for the University of Minnesota Southeast Extension Regional Sustainability evelopment Partnership.					
2.	Will anyone outside your organization be responsible for work performed? $oxtimes$ Yes \odots No					
	If yes, provide name of organization(s) and contact information, experience, and qualifications related to the proposed project, and describe the role of the outside organization(s) in the project: City Staff intend to hire a qualified consultant to complete the plan design for the proposed improvements. The consultants that are solicited for proposals will be required to submit resumes and provide examples of projects they have worked on in the past of similar nature.	l				

3. Provide detailed information about the qualifications and experience – including with similar projects – of the specific

people who will work on this project, both within the applicant organization and from outside organization(s):

Sean Simonson, Engineering Manager - City of Northfield, MN

- 25 years of Municipal Project Design/Management
- Successful completion of the following Grants Programs:
 - MnDOT Local Road Improvement Program (LRIP)
 - MnDOT Local Partnership Program (LPP)
 - o MnDOT Local Bridge Replacement Program
 - o MN DNR Parks and Trails Legacy Grant

Dave Bennett, Public Works Director/City Engineer – City of Northfield, MN

- 23 Years of Municipal Infrastructure Project Oversight and Design
- Storm water infrastructure projects including:
 - o Drainage systems improvement modifications
 - Outlet/Inlet modification
 - Expansion Storage Expansion
 - Storm water diversion
 - o BMP design

Consultant for Plan Design – Undetermined

The City has not selected a consultant to complete the plan design yet. The City plans to release a competitive Request for Proposals or direct select a qualified consulting firm. Whichever option the City decides to go with, the City will ensure the consultant has adequate experience and background information to ensure the project is completed effectively.