## Environment and Natural Resources Trust Fund 2020 Request for Proposals (RFP)

Project Title: ENRTF ID: 146-CH
Creating Awareness About Runoff to Protect Water Quality
Category: H. Proposals seeking \$200,000 or less in funding
Sub-Category: C. Environmental Education
Total Project Budget: \$ 200.000
Proposed Project Time Period for the Funding Requested: June 30, 2024 (4 yrs)
Summary:
We will create demonstration sites in Itasca County to study how phosphorous and chloride enters lakes. Outreach will educate the public about runoff impacts and strategies to reduce them.
Name: Matt Wegwerth
Sponsoring Organization: <u>City of Grand Rapids</u>
Job Title: City Engineer
Department:
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Grand Rapids MN 55744
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Web Address: https://www.citvofgrandrapidsmn.com/engineering-public-works/engineering-and-public-work
Location:
Region: Northeast
County Name: Itasca
City / Township: Grand Rapids, Cohasset
Alternate Text for Visual:
The attached map shows the three proposed demonstration sites in the vicinity of Grand Rapids.

Funding Priorities Multiple Benefits	Outcomes Knowledge Base
Extent of Impact Innovation	Scientific/Tech Basis Urgency
Capacity ReadinessLeverage	TOTAL%



#### **PROJECT TITLE:**

Creating Awareness About Runoff to Protect Water Quality I. PROJECT STATEMENT

The city of Grand Rapids proposes to create three high-visibility demonstration sites in Itasca County that will build awareness about the direct link between water quality and runoff of phosphorous and chloride. All three sites will demonstrate best practices in regard to shoreline management. In addition, one site will include a system to monitor runoff of phosphorous. A second site will include a system to monitor runoff of chloride. All three sites will be used for public outreach and education.

The project partners will develop the three sites in the vicinity of Grand Rapids, which is a regional business and retail center as well as a tourism destination. The sites have been identified and were chosen for their proximity to local traffic, their overall visibility, their location on popular and much-enjoyed bodies of water, and the availability of workable shoreline.

Under the LCCMR project, each site will be fully evaluated by the project manager, water quality lab, excavator, and a sub-contractor with expertise in shoreland remediation and best practices. Probable site-specific activities will include the curbing of erosion, planting a rain garden, and/or preserving or restoring natural shoreline vegetation. The water quality lab will install monitoring systems at two of the sites and collect data. Signage will be designed and installed to communicate the purpose and scientific concepts behind the demonstration sites. In addition, a local water quality advocacy group will coordinate and conduct outreach activities to maximize the potential of the sites to build public awareness and understanding.

The overall goal of the project is to show how phosphorous and chloride enter water resources and demonstrate ways to reduce such runoff. The proposed project is critical because high-quality water lies at the core of Grand Rapids' and Itasca County's culture and heritage. With more than 1,000 lakes and hundreds of miles of streams and rivers, the county's water high-quality water resources are not only a touchpoint for local residents, they're also an economic engine that drives an annual \$70 million tourism economy.

#### **II. PROJECT ACTIVITIES AND OUTCOMES**

Activity 1 Title: Develop three runoff demonstration sites and collect data.

**Description:** The objective of this activity is to develop sites that will be used to monitor runoff of phosphorous and chloride and demonstrate ways to reduce the harmful effects of runoff in local water resources. The work will be overseen by the city of Grand Rapids and completed by contracted vendors. **ENRTF BUDGET: \$190,000** 

Outcome	<b>Completion Date</b>	
1. Finalize partner agreements and complete design for three demonstration sites.	September 2020	
2. Complete excavation, site prep, and planting at all three sites.	July 2021	
3. Install systems to monitor phosphorous runoff at one demonstration site and chloride	July 2021	
runoff at a second site.		
4. Collect data regarding the runoff of phosphorous and chloride.	Ongoing	
5. Analyze data, complete reports, and disseminate findings. Make any necessary	Ongoing	
adjustments in monitoring systems or data collection protocols.		

Activity 2 Title: Conduct Community Outreach at Demonstration Sites

**Description:** The objective of this activity is to use the demonstration sites as tools to engage members of the public in conversations and learning about how runoff affects water quality and



steps that can be taken to reduce it. ENRTF BUDGET: \$10,000

Outcome	<b>Completion Date</b>
1. Develop and install signage that simply and clearly communicates the basic concepts and principles of the demonstration sites. Produce an educational pamphlet about the demonstration sites.	August 2021
2. Work with community partners to coordinate, host, and lead tours/events at the demonstration sites.	Ongoing after September 2021

### III. PROJECT PARTNERS AND COLLABORATORS

#### No ENRTF Funding

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Name	Title	Affiliation	Role
Andy Ahrens	District	Itasca County	Advisor
	Manager	Soil and Water	
		Conservation	
		District	
Max Peters	City	City of Cohasset	Location for Demonstration Site
	Administrator		
Chris Walker	Manager	Zorbaz	Location for Demonstration Site
	_	Restaurant	

#### **ENRTF Funded Partners**

Name	Title	Affiliation	Role
Matt Wegwerth	City Engineer	City of Grand Rapids	Project Director
TBD	Engineering Tech	City of Grand Rapids	Coordination and Ongoing Management
Position currently vacant, to be filled by May 1	Coordinator	Itasca Waters	Manager of Outreach
TBD		Excavator	Excavation
TBD		Shoreland Expert	Site prep and planting
Robert Borash	Owner	RMB Labs	Installation and monitoring of sampling stations

#### IV. LONG-TERM IMPLEMENTATION AND FUNDING:

We expect this to be a long-term project. Once the monitoring and demonstration sites are fully developed, the subsequent costs will be minimal. Under the LCCMR grant project, the city of Grand Rapids will complete any site maintenance in Years 2, 3, and 4. After project completion, Grand Rapids will maintain sites in Grand Rapids, and the project partners will maintain the sites at their locations. Monitoring of runoff beyond the project dates will be conducted by water quality advocates and volunteers through the partnership with Itasca Waters. Furthermore, Itasca Waters will be responsible to work with community partners including Grand Rapids Community Education, Independent School District 318 Grand Rapids, the Itasca Soil and Water Conservation District, and others to continue using the demonstration sites in ways that increase understanding about runoff and ways to reduce it.

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Attachment A: Project Budget Spreadsheet Environment and Natural Resources Trust Fund
M.L. 2020 Budget Spreadsheet
Legal Citation:
Project Manager: Matt Wegwerth
Project Title: Creating Awareness About Runoff to Protect Water Quality
Organization: City of Grand Rapids
Project Budget: \$269,000
Project Length and Completion Date: Four years, June 30, 2024
Today's Date: April 12, 2019



ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET		Budget		Amount Spent	Balance	
BUDGET ITEM			Dudget	, anoune opene		
Personnel (Wages and Benefits)			-	\$-	\$	-
Matt Wegwerth, .05FTE Project Manager, \$50/hr x 100 hrs/year x 4 years = \$20,0	000; Fringe @ \$20,000	\$	70,000		\$	70,000
x .25 = \$5,000; \$20,000 + \$5,000 = \$25,000						
To be hired, .1FTE Engineering Tech, \$25/hr x 200 hrs/year x 4 years = \$20,000; Fringe @ \$20,000 x .25						
= \$5,000; \$20,000 + \$5,000 = \$25,000	-					
.1FTE Itasca Waters Coordinator, \$25/hr x 200 hours/year x 4 years = \$20,000						
Professional/Technical/Service Contracts						
Contract with excavator to prepare all three sites, \$3,500 x 3 = \$10,500		\$	191,500	\$-	\$	191,500
Contract with shoreland expert for site prep, planting, and maintenance, \$6,000 x 3 = \$18,000						
Contract with RMB Labs for Installation and Monitoring of Shoreland Runoff and	Chloride Runoff					
Sampling Stations. Installation: \$43,000, Monitoring: \$30,000/year x 4 years, \$120,000. \$43,000 +						
Equipment/Tools/Supplies						
Layout, creation, and installation of site signage, \$1,500 per site x 3 sites = \$4,500		\$	4,500	\$-	\$	4,500
Printing						
Design and printing of educational pamphlets, 1,500 x \$2 each = \$3,000			3,000	\$-	\$	3,000
COLUMN TOTAL		\$	269,000	\$-	\$	269,000
SOURCE AND USE OF OTHER FUNDS CONTRIBUTED TO THE PROJECT	Status (secured or pending)		Budget	Spent	В	alance
Non-State: Local grants	Pending	\$	20,000	\$-	\$	20,000
In kind: City of Grand Rapids	Secured	\$	39,000	\$-	\$	39,000
In kind: Itasca Waters	Secured	\$	10,000		\$	10,000
Other ENRTE APPROPRIATIONS AWARDED IN THE LAST SIX YEARS	Amount legally					
	obligated but not	Budget		Spent	Balance	
	yet spent					
N/A		\$	-	\$-	\$	-

# Site Location Map



City of Cohasset

Tioga

Forest Lake

LAN

City of Grand Rapids

**Tioga Mine Pit** 

Pokegama Lake

1

Site Location

n 0 0.5

12/05/2019

2 Miles

Zorbaz

#### **Project Manager Qualifications**

The proposed project will be managed and directed by Matthew Wegwerth. Wegwerth obtained a bachelor of science in civil engineering from North Dakota State University in 2002 and has 20 years of experience in municipal engineering. He's a registered professional engineer in the state of Minnesota (#45016) and has been the city engineer in Grand Rapids since 2014. In his role with Grand Rapids, Wegwerth performs complex technical and administrative work managing, organizing, directing, and coordinating the activities of the department and supervising the design, construction, and administration of capital improvement projects. He also provides engineering support for environmental, water, sewer, street, and other public works projects and programs, ensuring technical competence and compliance with all current codes and criteria. Wegwerth currently manages the MPCA MS4 Stormwater Permit for the city of Grand Rapids. In 2017, he managed the design and construction of a new stormwater treatment pond in Grand Rapids, which was funded by an MPCA Clean Water grant.

#### **Organization Description**

Grand Rapids is the county seat of Itasca County, which contains more than 1,000 lakes. The population of the city was 11,242 in 2017, according to the U.S. Census Bureau.

As a regional center, Grand Rapids is home to many national chains as well as locally owned businesses and manufacturing enterprises. The city is the largest community in Itasca County and for that reason is frequently visited by the majority of the county's 45,000 residents. Residents in other surrounding counties including Aitkin, Koochiching, St. Louis, and Cass also travel to Grand Rapids for shopping, healthcare, and business needs. Further adding to its role as a regional hub, Grand Rapids is a popular tourism destination as it is offers various attractions for visitors and is centrally located within the many surrounding lakes populated by resorts and vacation homes.

As a past recipient of grants from local, state, and federal sources, the city of Grand Rapids is experienced in managing the programmatic, financial, evaluative, and reporting components of complex grant projects. Furthermore, the city has implemented a number of unique and innovative public works projects to manage storm water, slow and control traffic, and beautify city streets and parks.

The Grand Rapids Engineering Department provides support services to guide the planning, design, management, maintenance, and construction of the city's infrastructure. The primary focus of infrastructure is related to those items located within the public right of ways and easements. Typical infrastructure items include, but are not limited to, streets, storm sewer, sanitary sewer collection, water distribution, street lighting, sidewalks and trails.