

**Environment and Natural Resources Trust Fund
2019 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 230-F

Water Quality Mitigation Project

Category: F. Methods to Protect, Restore, and Enhance Land, Water, and Habitat

Sub-Category:

Total Project Budget: \$ 7,104,000

Proposed Project Time Period for the Funding Requested: June 30, 2022 (3 yrs)

Summary:

Restoration of 90 acres of wetland and buffer with channel naturalization for stormwater storage, groundwater recharge, habitat and nutrient uptake reducing TP 18% and TSS 33%

Name: Michael McCarty

Sponsoring Organization: City of Mankato

Title: Assistant City Engineer

Department: _____

Address: 10 Civic Center Plaza

Mankato MN 56001

Telephone Number: (507) 387-8643

Email mmccarty@mankatomn.gov

Web Address mankatomn.gov

Location

Region: Southwest

County Name: Blue Earth

City / Township: Mankato

Alternate Text for Visual:

Proposed location and area of restoration of wetland and naturalization of channel with relationship to the Blue Earth and Minnesota Rivers

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity	_____ Readiness	_____ Leverage	_____ TOTAL _____%
_____ If under \$200,000, waive presentation?			



Environment and Natural Resources Trust Fund (ENRTF)
2019 Main Proposal Template

PROJECT TITLE: Water Quality Mitigation Project

I. PROJECT STATEMENT

The project will restore approximately 44 acres of drained wetland and 56 acres of upland buffer that will provide habitat and recreational opportunities including channel stabilization and naturalization. This project will reduce Total Phosphorus by 18% and Total Suspended Solids by 33% to the Minnesota River. Additionally excess stormwater will be stored and overall flows through natural channels will be reduced to pre-development conditions. These stormwater impact reductions will be achieved by connecting the existing storm drain, ponding system and agricultural drainage systems in the watershed to the restored wetland ensuring that optimal hydrology is maintained to maximize storage, groundwater recharge, habitat and nutrient uptake. This will require acquisition of the restorable wetland area and upland that is directly hydraulically active with this basin. Additional structural controls, storm drain modification and grading will be performed to urban and rural stormwater network to ensure adequate pre-treatment and flows to the restored basin. Native vegetation will be established to promote habitat diversity and improved nutrient removal.

The need for this project has been demonstrated by the failure of the system to adequately convey flows, specifically those outside of the urban stormwater pond network, increased erosion of the receiving channel and excessive sedimentation of stormwater ponds from non-urban runoff. The restoration of the drained wetland basin is a context sensitive solution to achieving nutrient and sediment removal from discharges to the Minnesota River while moving toward restoring the watershed's hydrology to pre-development conditions.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1: Land Acquisition, Preliminary Design.

ENRTF BUDGET: \$604,000 (total estimated cost \$1.28M)

Outcome	Completion Date
<i>1. Preliminary engineering to determine final project size</i>	<i>August 2019</i>
<i>2. Land Acquisition of approximately 100 acres</i>	<i>October 2019</i>

Activity 2: Final Design, regulatory submittals and construction of restoration of wetland basins

ENRTF BUDGET: \$6,500,000 (total estimated cost \$13,000,000)

Outcome	Completion Date
<i>1. Final design of project</i>	<i>October 2019</i>
<i>2. Submit modification to Flood Risk Reduction system to Corps of Engineers</i>	<i>February 2020</i>
<i>3. Construction/restoration of wetland in upper watershed</i>	<i>September 2020</i>
<i>4. Channel naturalization</i>	<i>November 2020</i>
<i>5. Construction/restoration of wetland in lower watershed</i>	<i>June 2021</i>
<i>6. Final vegetation establishment</i>	<i>September 2021</i>

III. PROJECT PARTNERS:



Environment and Natural Resources Trust Fund (ENRTF)
2019 Main Proposal Template

A. Partners receiving ENRTF funding

None

B. Partners NOT receiving ENRTF funding

Name	Title	Affiliation	Role
Mankato Townhsip	Township	Regional MS4 Partner	Permitting athourity for protions of the work
Blue Earth County	County	Regional MS4 Partner	Permitting athourity for protions of the work

IV. LONG-TERM- IMPLEMENTATION AND FUNDING: The long term results of this project will be monitored as a part of the City of Mankato's stormwater maintenance program. All of the features that are restored, naturalized or constructed as a part of this project will be added to the asset management system and have regular inspections performed. As maintenance needs arise, these activities will be programed into the annual stormwater maintenance budget to be performed. The funding for the inspection and maintenance of this project will come from the stormwater utility fund through the City of Mankato. This utility raises funds through a user fee to ensure that all stormwater facilities are inspected, maintained and improved.

Long term maintenance of the area is anticipated to include vegetation establishment and management though appropriate activities such as mowing, spot spraying and prescribed burns. Additionally, the facilities will be monitored for performance. Accumulated sediment and excess aquatic vegetation will be removed at such time that it negatively impacts the hydraulic and water treatment performance of the facilities.

V. TIME LINE REQUIREMENTS:

The proposed project has a substantial land acquisition component, which will facilitate a longer time line to ensure that staff works closely with the landowners to ensure the final land acquisition is adequate for the overall performance of the proposed project and does not impact agricultural production of the adjacent properties. The project will require close coordination with the Army Corps of Engineers to ensure the modifications made to restore wetlands and create water quality treatment within the Corps easement areas meet the overall design goals of both the Flood Risk Reduction System and the Water Quality Project. Since this project does not have a similar peer within the St. Paul District, additional design and regulatory review may be required. Should funding be awarded to the City of Mankato for this project the following is a proposed schedule:

April 2018 – Begin land appraisal and planning design for property acquisition.

August 2018 – Begin discussion with land owners and enter in to purchase agreements for property

July 2019 – Being preliminary and final engineering design to finalize design and determine regulatory submittals for DNR and USACOE.

October 2019 – Finalize property acquisition after crops are harvested.

October 2019 – Submit necessary regulatory submittals for approval

February 2020 - Advertise for Bids.

April 2020 – Being construction.

December 2020 – Intermediate completion.

September 2021 – Final project close out.

2019 Proposal Budget Spreadsheet

Project Title:

IV. TOTAL ENRTF REQUEST BUDGET *[Insert # of years for project] years*

BUDGET ITEM (See "Guidance on Allowable Expenses")	AMOUNT
Personnel: City Engineering staff will perform public outreach, land acquisition negotiations, design, contract administration and construction inspection.	\$ 406,000
Professional/Technical/Service Contracts: Outside services will include consulting engineers to develop hydraulic model for wetland restoration and channel naturalization. Real estate agents and title agents will be required for land acquisition activities.	\$ 271,000
Equipment/Tools/Supplies: No direct cost for equipment tools or supplies are anticipated	\$ -
Acquisition (Fee Title or Permanent Easements): Land acquisition in fee title for wetland restoration.	\$ 567,000
Travel: No travel costs are anticipated	\$ -
Additional Budget Items: Construction related costs for wetland restoration and channel naturalization.	\$ 5,860,000
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =	\$ 7,104,000

V. OTHER FUNDS *(This entire section must be filled out. Do not delete rows. Indicate "N/A" if row is not applicable.)*

SOURCE OF FUNDS	AMOUNT	Status
Other Non-State \$ To Be Applied To Project During Project Period: Local Option Sales Tax funds	\$ 7,104,000	<i>Available</i>
Other State \$ To Be Applied To Project During Project Period: An application has been submitted to MPCA for PSIG funding. This funding would be capped at \$7M, and would need to be determined if it can be used on this project in conjunction with ENRTF funds. If PSIG eligible and the project is funded the requested amount for ENRTF would be reduced by 50%	\$ 7,000,000	<i>Under review with MPCA and PFA</i>
In-kind Services To Be Applied To Project During Project Period: None	\$ -	
Past and Current ENRTF Appropriation: None	\$ -	
Other Funding History: A study was performed to develop the concept of this project. This study was funded through stormwater utility funds.	\$ 245,000	<i>Paid</i>

Attachment C:
Environment and Natural Resources Trust Fund
M.L. 2019 Acquisition/Restoration Parcel List Spreadsheet
Project Title: Water Quality Mitigation Project
Legal Citation:
Project Manager: Michael McCarty
Organization: City of Mankato
College/Department/Division: Engineering
M.L. 2019 ENRTF Appropriation: \$7,104,000
Project Length and Completion Date: 1.5 years, September 30, 2021
Today's Date: March 29, 2018



#	Acquisition or Restoration Parcel Name	Geographic Coordinates (preferably from the center of the parcel) Format: [Deg.]° [Min.]' [Sec.]" [Hemis.]		Estimated Cost	Estimated Annual PILT Liabilities	County	Site Significance (please include what ecosystem (e.g., prairie, forest, wetland, savanna) is represented as well as the ecological significance, site importance, conservation value, and public benefits)	Activity Description (e.g. fee title acquisition, conservation easement acquisition, site preparation, restoration)	# of Acres	# of Shoreline Miles	Type of Landowner (private individual or trust, non-profit organization, for-profit entity)	Proposed Fee Title or Easement Holder (if applicable)	Status of work (e.g. engaged in landowner negotiations, no longer in consideration, restoration activities underway)
		Latitude	Longitude										
1	R43.09.29.300.003	44° 7' 40"	93° 59' 13"	\$ -	\$ -	Blue Earth	Wetland, upland buffer, public open space and restored basin and habitat connectivity	Fee Title acquisition, site preperation and restoration of wetland		0	Individual / Family	City of Mankato	Beginning Landowner Negotiation
2	R43.09.29.400.001	44° 7' 45"	93° 58' 38"	\$ -	\$ -	Blue Earth	Wetland, upland buffer, public open space and restored basin and habitat connectivity			0	Individual / Family	City of Mankato	Beginning Landowner Negotiation
3	R43.09.29.400.004	44° 7' 29"	93° 58' 38"	\$ -	\$ -	Blue Earth	Wetland, upland buffer, public open space and restored basin and habitat connectivity			0	For-profit	City of Mankato	Beginning Landowner Negotiation
4	R43.09.28.300.002	44° 7' 30"	93° 58' 3"	\$ -	\$ -	Blue Earth	Wetland, upland buffer, public open space and restored basin and habitat connectivity			0	Individual / Family	City of Mankato	Beginning Landowner Negotiation
5	R43.08.26.276.002	44° 8' 2"	94° 1' 53"	\$ -	\$ -	Blue Earth	Wetland, upland buffer, public open space and restored basin and habitat connectivity			0	For-profit	City of Mankato	Beginning Landowner Negotiation
6	R43.08.26.276.001	44° 8' 1"	94° 1' 57"	\$ -	\$ -	Blue Earth	Wetland, upland buffer, public open space and restored basin and habitat connectivity				For-profit	City of Mankato	Beginning Landowner Negotiation
7													
8													
9													
10													

NOTES:

Water Quality Mitigation Project Map



Project Manager Qualification and Organization Description

The project manager for this project will be Michael McCarty. He is a licensed professional Engineer in the state of Minnesota and has been with the City of Mankato for 10 years, and has been practicing for 16 years. Mr. McCarty leads the Engineering Division, consisting of 13 personnel, delivering over \$7.5 million in construction improvements on an annual basis. These projects include Federal and State funded transportation projects along with State funded environmental and economic development projects. Specific environmental projects include three that have been funded through the Point Source Implementation Grant program. These projects include the extension of municipal utility services to two rural subdivisions and one stormwater facility improvement. Each of these projects were valued in excess of \$2.5 million and encompassed approximately 60 property owners. Additionally, Mr. McCarty has been the lead staff member on the acquisition of right-of-way for the on-going Adams Street Extension Project, which required the acquisition of 11.5 acres of land with a market value of \$867,000. Mr. McCarty's background in hydraulics and stormwater management, as well as a Local Government Unit member of Mankato's Technical Evaluation Panel, provide the necessary technical skill to complete the proposed project successfully.

Mankato, Minnesota is a major regional center which has been designated as a Metropolitan Statistical Area, earning several livability awards. Recently, reports have shown Mankato's economic growth leads Minnesota and is among the top in the nation. The vision of the City of Mankato is to lead the way as a prosperous, diverse, regional community. The organization cares about making a positive difference in the lives of others by providing full municipal services including sewer and water to the residents and visitors of Mankato.

