Environment and Natural Resources Trust Fund 2018 Request for Proposals (RFP)

Project Title:	ENRTF ID: 216-G
East Fork Des Moines River Wetland Restoration	
Category: G. Land Acquisition, Habitat and Recreation	
Total Project Budget: \$ 1,716,192	
Proposed Project Time Period for the Funding Requested: <u>5 years, July</u>	2018 to June 2023
Summary:	
The project includes the restoration and permanent protection of a 160-acre we pollinator habitat along Martin County JD 50 within the East Fork Des Moines R	
Name: Michael Forstner	
Sponsoring Organization: Martin County Drainage Authority	
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Fairmont MN 56031	
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Email michael.forstner@co.martin.mn.us	
Web Address www.co.martin.mn.us	
Location	
Region: Southwest	
County Name: Martin	

City / Township: Manyaska Township

Alternate Text for Visual:

East Fork Des Moines River Watershed Wetland Restoration along Martin County CD 11 and JD 50

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



PROJECT TITLE: East Fork Des Moines River Wetland Restoration

I. PROJECT STATEMENT

The goals for the proposed project include the design, implementation, and permanent protection of a 160-acre wetland, native buffer, and pollinator habitat along Martin County Judicial Ditch 50 (JD 50) within the East Fork Des Moines River (EFDMR) watershed, a priority outlined in the Martin County Water Plan (MCWP). This project will also include long-term water quality monitoring and targeted community outreach, complementing existing outreach, also a component of the MCWP. Specific activities associated with this deliverable will be organizing a landowner meeting, creating an informational handout, and signage at the project site. We will also be conducting water quality monitoring for one year following completion of the project to build support for these practices among key constituencies.

In addition to flooding, a growing number of the watershed's lakes and streams are impaired for turbidity, dissolved oxygen (DO), and nutrient/eutrophication biological indicators. According to data from the Minnesota Pollution Control Agency, DO in JD 50 and CD 11 has been trending down, posing a threat to fish populations in Lake Okamanpeedan. It is critical to take advantage of the opportunity to begin reversing this trend, as landowners are currently motivated to find solutions to flooding and water quality issues.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1: Purchase Land to be Held in Conservation Easement Beginning in 2010, landowner meeting were initiated to discuss options for mitigating flood damages and addressing downstream water quality concerns. Through these meetings, it became evident there was interest in protecting and restoring the site to native prairie wetlands. This phase of the project includes working with landowners to permanently protect the 160-acre site through an easement, to be held and monitored by the Martin County Drainage Authority (MCDA).

Outcome	Completion Date
1. Acquire land through a purchased conservation easement; parcels to be included:	5-1-2019
Parcel ID: 120190200, Parcel ID: 120190400, Parcel ID: 120190700, Parcel ID: 120200500,	
Parcel ID: 120200300, Parcel ID: 120170500, Parcel ID: 120190100	

Activity 2: Design of 160-acre Wetland and Native Prairie Habitat

This phase includes the creation and completion of the technical materials and plans necessary to ensure the long-term success of the project.

Outcome	Completion Date
1. Complete survey of project area	11-30-2018
2. Finalize design and engineering report, prepare construction plan and specifications, and hold a public hearing to approve wetland construction and habitat improvements	1-31-2019
3. Publicly bid construction of the project	3-31-2019

Activity 3: Completion of Wetland and Native Prairie Restoration

Currently, the proposed project area is used for planting row crops and water is pumped from the site to an open ditch. However, this area has repeatedly flooded, most recently in 2016. MCDA is seeking funding to help landowners address this challenge in a way that achieves multiple benefits that are not currently supported through traditional agriculture funding programs' cost/benefit analysis. To accomplish the goal of enhanced habitat, improved water quality, and flood storage, we will level the bank along the current ditch so that water will flow into the newly restored wetland, remove existing water pumps that will no longer be needed, adjust

Budget: \$1,044,192

Budget: \$422,000

Budget: \$140,000

1



Environment and Natural Resources Trust Fund (ENRTF) 2018 Main Proposal

Project Title: East Fork Des Moines River Wetland Restoration

the township road to allow for the installation of a flood culvert and outlet structure that will direct water to the wetland, and replant the project area with native grasses and forbs. In total, this effort will restore 160 acres of wetland prairie and pollinator habitat, totaling approximately 480 acre-feet of water storage, a 339 tons/year reduction in sediment, and a 709 pounds/year reduction in phosphorous, according to the Water Pollution Reduction Estimator by BWSR and Revised Universal Soil Loss Equation (RUSLE2) developed by NRCS.

Outcome	Completion Date
1. Remove 3 pumps and stabilize/level ditch banks	8-31-2019
2. Raise roadway approximately 3 feet, install floodplain culvert and outlet structure	11-30-2019
3. Planting of native grasses and forbs and final stabilization- a seed mix developed by	6-30-2020
Martin County SWCD through past ENTRF funds will be used and includes Small White	
Lady's Slipper, Tuberous Indian Plantain, Sullivant's Milkweed, Eared False Foxglove and	
several other at-risk and underutilized native plant species.	

Activity 4: Community Education, Water Quality Monitoring, and Maintenance Budget: \$ 110,000 In order to establish a constituency of support for these practices and build support for future efforts, we will provide educational outreach opportunities such as site visits, informational handouts, and signage as well as monitoring for water quality improvements upstream and downstream of the wetland and within the restoration site following completion of the project. A report quantifying those results will be completed and distributed to state agencies, landowners, and regional drainage authorities.

Outcome	Completion Date
1. Create outreach materials	3-31-2019
2. Present findings and hold a field day event at the site with a tour of the project	7-31-2023
3. Sample inlet and outlet flows once monthly for two years (May-October 2021 & 2022)	10-31-2022
4. Report developed	7-31-2023
5. MCDA will monitor the easement annually to ensure compliance and functionality of the improvements	ongoing

III. PROJECT STRATEGY

A. Project Team/Partners

Project Partners Receiving Funds:

- Project Sponsor: MCDA, Mike Forstner, Drainage Administrator and Shane Fett, Ditch Inspector (\$522,000)-serve as project manager, hold and monitor easement, act as fiduciary agent
- Landowners providing parcels for easement (\$1,044,192)-Sylvan Krumwiede Irrevocable Trust; Clarine Weiss; Wayne Christian; Patrick & Anne Bedford; Gary and Mary Jo Manzey

• Engineering Services, TBD (\$150,000)-Design, coordination of construction activities, and outreach Project Partners Not Receiving Funds:

• Minnesota Department of Natural Resources, Bryan Nyborg-provide technical review of project

B. Project Impact and Long-Term Strategy

The project will have a measurable impact on water quality and quantity leaving the project site, specifically a decrease in total suspended solids, which will increase DO and improve clarity. This project is part of larger restoration goals detailed in the MCWP, with additional restoration currently being considered through the USDA's CREP program, which would bring the total to 285-320 acres of contiguous lands protected.

C. Timeline Requirements

All phases of the project will be completed within the timeframe outlined in the above scope of work. The only activity continuing outside of that timeline is the long-term monitoring of the conservation easement by MCDA.

2018 Detailed Project Budget

Project Title: East Fork Des Moines River Wetland Restoration

IV. TOTAL ENRTF REQUEST BUDGET: 5 years

BUDGET ITEM		AMOUNT		
Personnel:				
All Martin County personnel time and travel is in-kind (see below)	N/A			
Professional/Technical/Service Contracts:				
Contract with Engineering Firm, TBD: Design and Survey (\$106,000), Construction	\$	150,000		
Staking/Administration (34,000), Outreach (\$10,000)				
Construction company, TBD: Cutting down built up channel banks, floodplain culvert, gravel	\$	422,000		
road rehabilitation, outlet structure, and seeding				
Monitoring company, TBD: Take 24 samples - once/month May-October in 2021 and 2022	\$	100,000		
Acquisition (Fee Title or Permanent Easements):				
7 parcels in conservation easement totaling ~160 acres to be held by Martin County JD 50	\$	1,044,192		
Travel:	+			
Martin County travel all in-kind (see below)		N/A		
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =	\$	1,716,192		

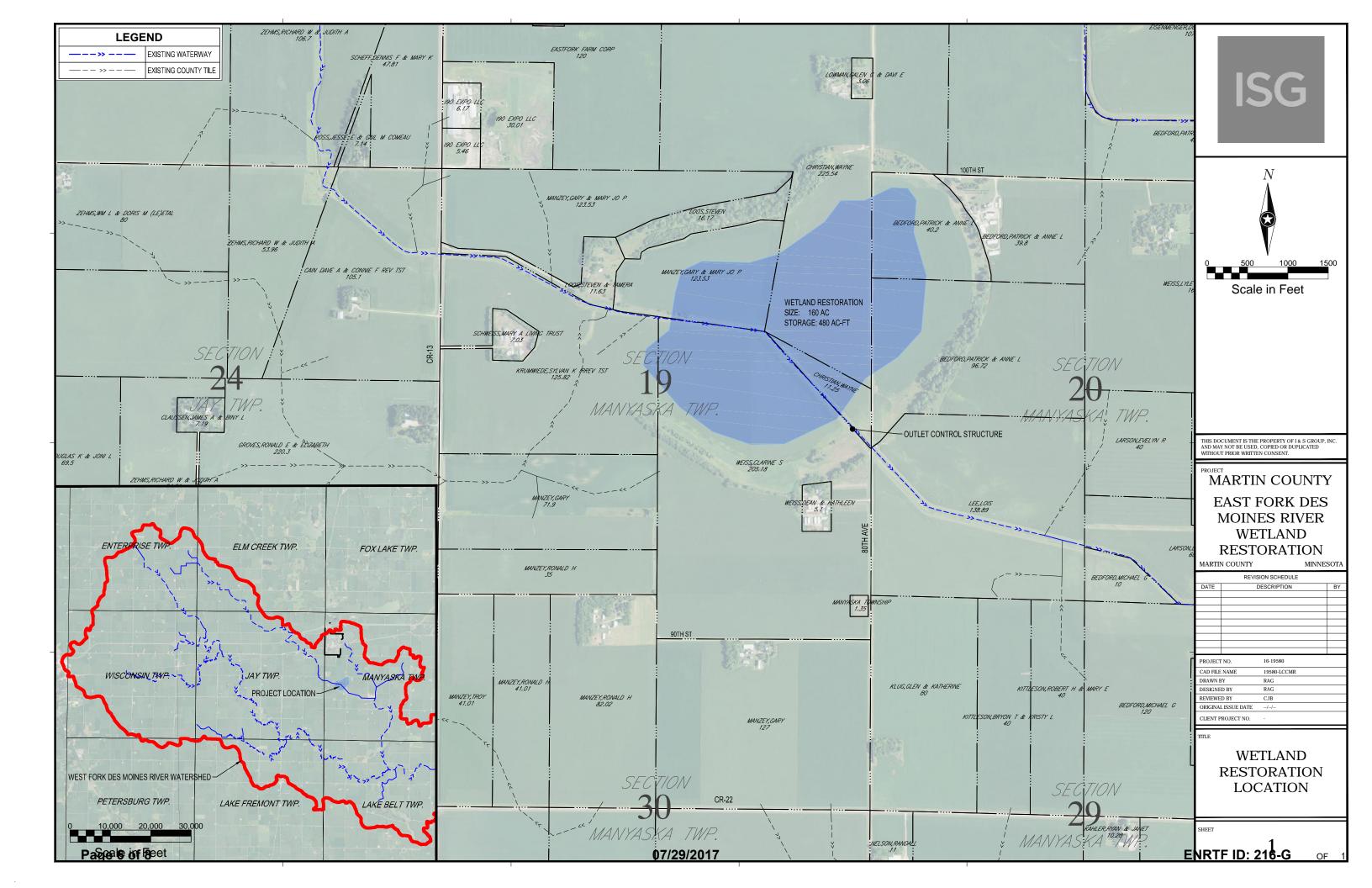
V. OTHER FUNDS

SOURCE OF FUNDS	AMOUNT	<u>Status</u>
Other Non-State \$ To Be Applied To Project During Project Period:	N/A	
Other State \$ To Be Applied To Project During Project Period:	N/A	
In-kind Services To Be Applied To Project During Project Period:	N/A	
Martin County Personnel	\$ 28,230	secured
Martin County Travel	\$ 5,000	secured
Past and Current ENRTF Appropriation:	N/A	
Other Funding History:	N/A	

Environment and Natural Resources Trust Fund 2018 Proposed Acquisition/Restoration List

Project Title: East Fork Des Moines River Wetland Restoration Project Manager Name: Michael Forstner Organization: Martin County Drainage Authority (MCDA) ENRTF \$ Request: \$1,044,192

	Acquisition or	Geographic Coordinates Format: [Deg.]° [Min.]'		U 1								# of		Proposed Fee Title or Easement
	Restoration	[Sec.]" [Hemis.]		on [Sec.]" [Hemis.]								Shoreline		Holder
#	Parcel Name	Latitude	Latitude Longitude		imated Cost	County	Ecological Significance	Activity Description	# of Acres	Miles	Type of Landowner	(if applicable)		
	KRUMWIEDE, SYLVAN													
	K IRREV TST -	43° 37'	94° 43'					Purchase conservation						
1	120190200	29.89" N	28.19" W	\$	9,261.14	Martin	Farmed, lowland, drained basin	easement	1.4182454	N/A	Private Individual/Trust	MCDA		
	WEISS, CLARINE S -	43° 37'	94° 43'					Purchase conservation						
2	120190400	28.48" N	13.80" W	\$	347,098.88	Martin	Farmed, lowland, drained basin	easement	53.1545	N/A	Private Individual	MCDA		
	CHRISTIAN, WAYNE -	43° 37'	94° 42'					Purchase conservation						
3	120190700	28.85" N	59.98" W	\$	47,015.80	Martin	Farmed, lowland, drained basin	easement	7.1999695	N/A	Private Individual	MCDA		
4	BEDFORD, PATRICK & ANNE L - 120200500	43° 37' 36.64" N	94° 42' 48.32" W	\$	91,149.27	Martin	Farmed, lowland, drained basin	Purchase conservation easement	13.95854	N/A	Private Individual	MCDA		
5		44.09" N	94° 42' 48.24" W	\$	93,443.61	Martin	Farmed, lowland, drained basin	Purchase conservation easement	14.309894	N/A	Private Individual	MCDA		
	,	43° 37'	94° 42'					Purchase conservation						
6	120170500	38.11" N	59.38" W	Ş	317,774.15	Martin	Farmed, lowland, drained basin	easement	48.663728	N/A	Private Individual	MCDA		
		43° 37'	94° 43'					Purchase conservation						
7	120190100	38.11" N	14.70" W	\$	138,448.67	Martin	Farmed, lowland, drained basin	easement	21.20194	N/A	Private Individual	MCDA		
NOTES:														



Martin County Drainage Administration Staff

Michael Forstner - Drainage Systems Manager

Coordinates all operations relating to public drainage systems within the county. Serves as the principal spokesperson for drainage matters, as well as makes drainage related recommendations to the County Commissioners. Performs various GIS activities that relate to the public drainage systems. Handles all billing and special assessment matters that pertain to the various drainage projects that occur throughout the year.

Shane Fett - Drainage Inspector

Conducts yearly ditch inspections and enforces buffer compliance per drainage statute. Serves as the contact person for landowners/taxpayers for ditch related repairs. Supervises the work performed on drainage systems by various contractors and provides assistance to drainage systems manager.