Lessard-Sams Outdoor Heritage Council Fiscal Year 2019 / ML 2018 Request for Funding

Date: May 31, 2017

Program or Project Title: East Fork Des Moines River Wetland and Prairie Restoration

Funds Requested: \$2,518,800

Manager's Name: Michael Forstner Title: Drainage System Manager

Organization: Martin County Drainage Authority

Address: 201 Lake Avenue Address 2: Suite 201 City: Fairmont, MN 56031 Office Number: 507-238-3130

Email: Michael.Forstner@co.martin.mn.us

Website: http://www.co.martin.mn.us/index.php/government/ditch-administration

County Locations: Martin

Regions in which work will take place:

Prairie

Activity types:

- Protect in Easement
- Restore
- Enhance

Priority resources addressed by activity:

- Wetlands
- Prairie
- Habitat

Abstract:

Martin County Drainage Authority, in collaboration with the Martin Soil and Water Conservation District and local landowners, are seeking funding to restore and permanently protect a 272-acre wetland, upland native prairie, and pollinator habitat along Martin County Judicial Ditch 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 two years of water quality monitoring and targeted community outreach, both components of the MCWP, in order to build support for these practices among key constituencies.

Design and scope of work:

Currently, the proposed project area is used for planting row crops and water is pumped from the project site to an open ditch, where the water quickly moves from the land downstream and into Lake Okamanpeedan and the larger EFDMR system. However, this area has repeatedly flooded, most recently in 2016, resulting in damages to agricultural lands and further stressing local waterbodies and the communities along them. 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.

Beginning in 2010, landowner meetings were initiated to discuss options for mitigating flood damages and addressing water quality concerns. Through these conversations, it became evident there was interest in not only increasing storage capacity but also protecting and restoring native prairie wetland habitat and improving water quality. 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. It is critical to take advantage of the opportunity to begin reversing the current water quality and quantity trend, as landowners are currently motivated to find solutions to flooding and water quality issues.



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 the township road to allow for the installation of a flood culvert and outlet structure that will direct water to the wetland, and re-plant the project area with native grasses and forbs. In total, this effort will protect in perpetuity and restore 272 acres through an easement to be held and managed through MCDA, with 160 acres of wetland, equating to approximately 480 acre-feet of water storage during high flow events, 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. The remaining 112 acres within the project area will be restored upland prairie and pollinator habitat, planted with a seed mix developed by Martin County SWCD using ENTRF funds, and includes Small White Lady's Slipper, Tuberous Indian Plantain, Sullivant's Milkweed, Eared False Foxglove, the federally endangered Prairie Bush Clover, and several other at-risk and underutilized native plant species.

To build support for future efforts, we will also conduct water quality and quantity monitoring pre-construction and for two years following completion of the project. In addition, we will work with local partners to coordinate a landowner workshop and develop informational signage and handouts.

Which sections of the Minnesota Statewide Conservation and Preservation Plan are applicable to this project:

- H5 Restore land, wetlands and wetland-associated watersheds
- H7 Keep water on the landscape

Which other plans are addressed in this proposal:

- Minnesota Prairie Conservation Plan
- U.S. Prairie Pothole Joint Venture Plan

Describe how your program will advance the indicators identified in the plans selected:

Key components of both the Minnesota Prairie Conservation Plan and the U.S Prairie Pothole Joint Venture Plan include the restoration of historically upland and wetland prairie habitat in southwestern Minnesota. As outlined in the Minnesota Prairie Plan, only about 3 percent of the state's prairies remain, with most of this area now planted in row-crop agriculture. Providing intermittent complexes of over 100 acres, in association with larger, core corridors of 4,500 to 300,000 acres, is critical to improving habitat for migratory waterfowl, pollinator species, and a variety of other birds and wildlife. Additionally, the Des Moines River basin in Jackson County is listed a priority core complex, with the proposed project area highlighted for restoration and conservation in collaboration with agricultural use.

Which LSOHC section priorities are addressed in this proposal:

Prairie:

• Protect, enhance, or restore existing wetland/upland complexes, or convert agricultural lands to new wetland/upland habitat complexes

Describe how your program will produce and demonstrate a significant and permanent conservation legacy and/or outcomes for fish, game, and wildlife as indicated in the LSOHC priorities:

The proposed project will produce a lasting conservation legacy through permanent protection of 272 acres of restored prairie and wetland habitat, a key recommendation outlined in the LSOHC priorities. The project will not only improve habitat for key species of wildlife and birds, but will also improve water quality by restoring 160 acres of wetland that will filter and store precipitation before slowly releasing it into the larger East Fork Des Moines River system. The plan also identifies working in collaboration with agricultural landowners to prioritize restoration of lands that are frequently flooding and to achieve implementable water quality improvements. We see this project as a first step in partnering with Martin County landowners to implement these practices on a more comprehensive scale, highlighting the multiple benefits they provide, normalizing these types of practices, and alleviating concerns over their effectiveness to address water storage.

Describe how the proposal uses science-based targeting that leverages or expands corridors and complexes, reduces fragmentation or protects areas identified in the MN County Biological Survey:

The MN County Biological Survey identifies habitat loss and degradation as the greatest threat to native species of plants and animals in the Minnesota River prairie area. The survey identifies the Des Moines River prairie landscape in Jackson County, with smaller corridors in Martin County as remaining native prairie. This project will restore a wetland complex in Martin County and will promote connectivity with existing wetland and tallgrass prairie in the region, a key objective outlined in the survey needed to improve habitat for priority

species.

How does the proposal address habitats that have significant value for wildlife species of greatest conservation need, and/or threatened or endangered species, and list targeted species:

The proposed project will restore and protect in perpetuity through a conservation easement 272 acres of historically prairie and shallow wetland habitat within the prairie pothole region of southwestern Minnesota, an area that is currently being used for row-crop agriculture. Once restored, the site will provide habitat for migratory waterfowl, pheasants, pollinator species such as monarch butterflies as well as several small mammals, shorebirds, and fish species that would benefit from improved habitat and water quality. In addition, there are a number of threatened and endangered species that could benefit from the restoration efforts, including burrowing owls, an upland prairie bird which has been found in Martin County, according to Minnesota DNR surveys. Other threatened and endangered species that may benefit include the federally endangered prairie bush clover, a small flowering plant native to tallgrass prairies and the prairie vole, a species of special concern in Minnesota that has been in decline due to habitat destruction and over-grazing and which would benefit from comprehensive prairie restoration in southwestern Minnesota.

Identify indicator species and associated quantities this habitat will typically support:

The conversion of 272 acres of cropland to restored native prairie as outlined in this proposal will improve pollinator habitat for bees, monarchs, and other pollinator species, however quantities are dependent on exact planting mix. NRCS is currently developing a tool to quantify optimal pollinator habitats. Additionally, according to MN DNR increasing grassland help increase the number of ringnecked pheasants. Furthermore, utilizing USFWS's thunderstorm models

(https://www.fws.gov/midwest/hapet/thunderstormmaps.htm), through fee-title acquisition of 272 acres of priority mallard habitat, it will support an additional 4 nesting pair of mallards.

Outcomes:

Programs in prairie region:

• Agriculture lands are converted to grasslands to sustain functioning prairie systems This project will permanently protect and restore 272 acres that are currently in agricultural production to native prairie and wetland habitat.

How will you sustain and/or maintain this work after the Outdoor Heritage Funds are expended:

Martin County Drainage Authority, in collaboration with the Martin Soil and Water Conservation District, will manage and monitor the easement annually to ensure that the restoration is functioning as designed and that the terms outlined in the easement are being honored.

Explain the things you will do in the future to maintain project outcomes:

Year	Source of Funds	Step 1	Step 2	Step 3
2020	Martin County Drainage Authority	maintenance of project and	This will be done annually, and as needed.	

What is the degree of timing/opportunistic urgency and why it is necessary to spend public money for this work as soon as possible:

Timing is crucial for this project, as landowners are seeking solutions to address flooding and water storage issues. However, without funding through the Lessard-Sams Outdoor Heritage Council, the restoration efforts will not be included in the project scope due to funding restrictions through traditional agricultural programs cost/benefit analysis.

How does this proposal include leverage in funds or other effort to supplement any OHF appropriation:

As stated above, Martin County Drainage Authority staff time and travel will be supported through existing funding. Project partners will continue to pursue funding to support restoration and protection throughout the county.

Relationship to other funds:

• Martin County Drainage Authority funds

Describe the relationship of the funds:

All of the staff time needed to complete this project will be done in-kind through existing allocation of local, state, and federal funds.

Describe the source and amount of non-OHF money spent for this work in the past:

Not Listed

Activity Details

Requirements:

If funded, this proposal will meet all applicable criteria set forth in MS 97A.056 - Yes

Is the land you plan to acquire free of any other permanent protection - Yes

Will restoration and enhancement work follow best management practices including MS 84.973 Pollinator Habitat Program - Yes

Is the activity on permanently protected land per 97A.056, subd 13(f), tribal lands, and/or public waters per MS 103G.005, Subd. 15 - Yes (Private Land)

Do you anticipate federal funds as a match for this program - No

Land Use:

Will there be planting of corn or any crop on OHF land purchased or restored in this program - No

Will the eased land be open for public use - No

Are there currently trails or roads on any of the acquisitions on the parcel list - No

Will new trails or roads be developed or improved as a result of the OHF acquisition - No

Accomplishment Timeline

Activity	Approximate Date Completed
Design of 272-acre Wetland and Upland Habitat	May 2019
Purchase Land to be Held in Easement	June 2019
Completion of Wetland and Upland Restoration	June 2020
Community Education and Water Quality Monitoring	June 2023

Budget Spreadsheet

Total Amount of Request: \$2,518,800

Budget and Cash Leverage

BudgetName	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$0	\$25,000	in-kind staff time	\$25,000
Contracts	\$746,500	\$0		\$746,500
Fee Acquisition w/ PILT	\$0	\$0		\$0
Fee Acquisition w/o PILT	\$0	\$0		\$0
Easement Acquisition	\$1,526,000	\$0		\$1,526,000
Easement Stewardship	\$0	\$0		\$0
Travel	\$0	\$500	In-Kind	\$500
Pro fessio nal Services	\$246,300	\$0		\$246,300
Direct Support Services	\$0	\$0		\$0
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$0	\$0		\$0
Supplies/Materials	\$0	\$0		\$0
DNR IDP	\$0	\$0		\$0
Total	\$2,518,800	\$25,500	-	\$2,544,300

Personnel

Position	FTE	Over#ofyears	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Drainage System Manager	1.00	5.00	\$0	\$25,000	in-kind staff time	\$25,000
Total	1.00	5.00	\$0	\$25,000	-	\$25,000

Amount of Request: \$2,518,800

Amount of Leverage: \$25,500

Leverage as a percent of the Request: 1.01%

DSS + Personnel: \$0

As a % of the total request: 0.00%

Easement Stewardship: \$0

As a % of the Easement Acquisition: -%

Does the amount in the contract line include R/E work?

A portion of the contract is for water quality monitoring and educational outreach, with \$40,000 included for monitoring and \$10,000 for targeted outreach activities.

Describe and explain leverage source and confirmation of funds:

The leveraged funds for this project include all Martin County Drainage Authority staff time and travel associated with planning, implementation, and long-term monitoring.

Does this proposal have the ability to be scalable? - Yes

Tell us how this project would be scaled and how administrative costs are affected, describe the "economy of scale" and how outputs would change with reduced funding, if applicable:

This project will serve as a model demonstration project for landowners in Martin County, with the goal to begin implementing these practices more comprehensively throughout the basin. If funding were reduced, it would eliminate the restoration component and would only include storage solutions through current agricultural funding cost/benefit structure.

Output Tables

Table 1a. Acres by Resource Type

Туре	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	0	0
Pro tect in Fee with State PILT Liability	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0
Protect in Easement	272	0	0	0	272
Enhance	0	0	0	0	0
Total	272	0	0	0	272

Table 2. Total Requested Funding by Resource Type

Туре	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$0	\$0	\$0	\$0	\$0
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$2,518,800	\$0	\$0	\$0	\$2,518,800
Enhance	\$0	\$0	\$0	\$0	\$0
Total	\$2,518,800	\$0	\$0	\$0	\$2,518,800

Table 3. Acres within each Ecological Section

Туре	Metro/Urban	Forest/Prairie	SEForest	Prairie	Northern Forest	Total
Restore	0	0	0	0	0	0
Protect in Fee with State PILT Liability	0	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0	0
Protect in Easement	0	0	0	272	0	272
Enhance	0	0	0	0	0	0
Total	0	0	0	272	0	272

Table 4. Total Requested Funding within each Ecological Section

Туре	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$2,518,800	\$0	\$2,518,800
Enhance	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$2,518,800	\$0	\$2,518,800

Table 5. Average Cost per Acre by Resource Type

Туре	Wetlands	Prairies	Forest	Habitats
Restore	\$0	\$0	\$0	\$0
Pro tect in Fee with State PILT Liability	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0
Protect in Easement	\$9,260	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$0

Table 6. Average Cost per Acre by Ecological Section

Туре	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest
Restore	\$0	\$0	\$0	\$0	\$0
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$9,260	\$0
Enhance	\$0	\$0	\$0	\$0	\$0

Target Lake/Stream/River Feet or Miles

0

I have read and understand Section 15 of the Constitution of the State of Minnesota, Minnesota Statute 97A.056, and the Call for Funding Request. I certify I am authorized to submit this proposal and to the best of my knowledge the information provided is true and accurate.

Parcel List

Explain the process used to select, rank and prioritize the parcels:

Not Listed

Section 1 - Restore / Enhance Parcel List

No parcels with an activity type restore or enhance.

Section 2 - Protect Parcel List

Martin

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
BEDFORD, PATRICK & ANNE L - 120200300	10232220	31	\$176,900	No	No	No
BEDFORD, PATRICK & ANNE L - 120200500	10232220	34	\$191,400	No	No	No
CHRISTIAN, WAYNE - 120170500	10232219	60	\$335,400	No	No	No
CHRISTIAN, WAYNE - 120190700	10232219	11	\$62,300	No	No	No
KRUMWIEDE, SYLVAN K IRREV TST - 120190200	10232219	14	\$76,600	No	No	No
MANZEY, GARY & MARY JO P - 120190100	10232219	47	\$266,900	No	No	No
WEISS, CLARINE S - 120190400	10232219	74	\$416,500	No	No	No

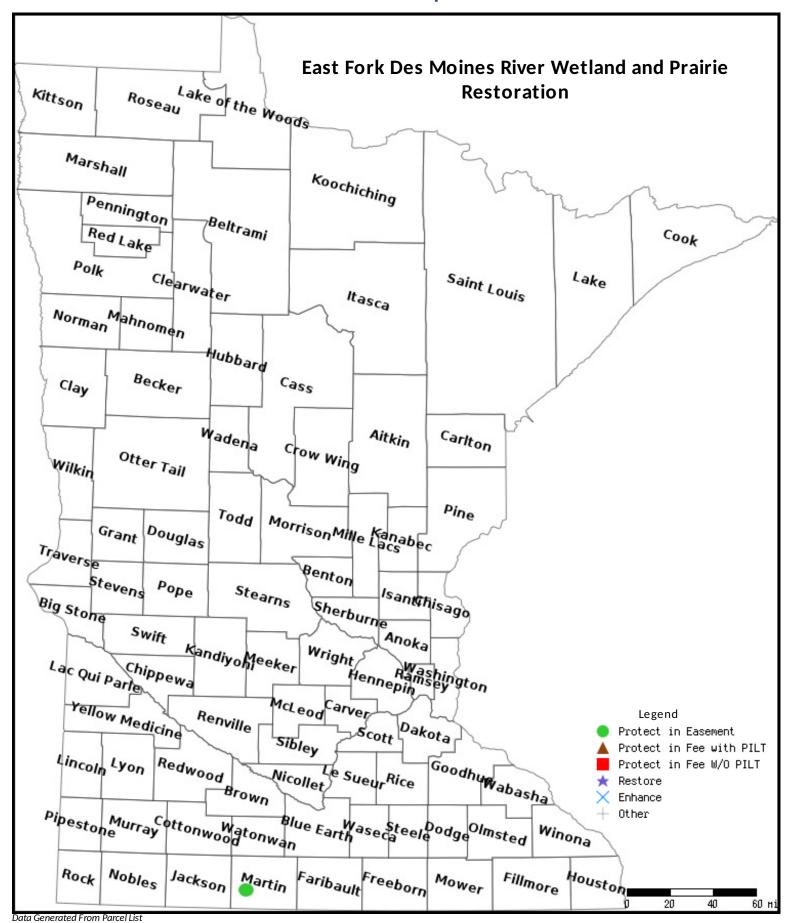
Section 2a - Protect Parcel with Bldgs

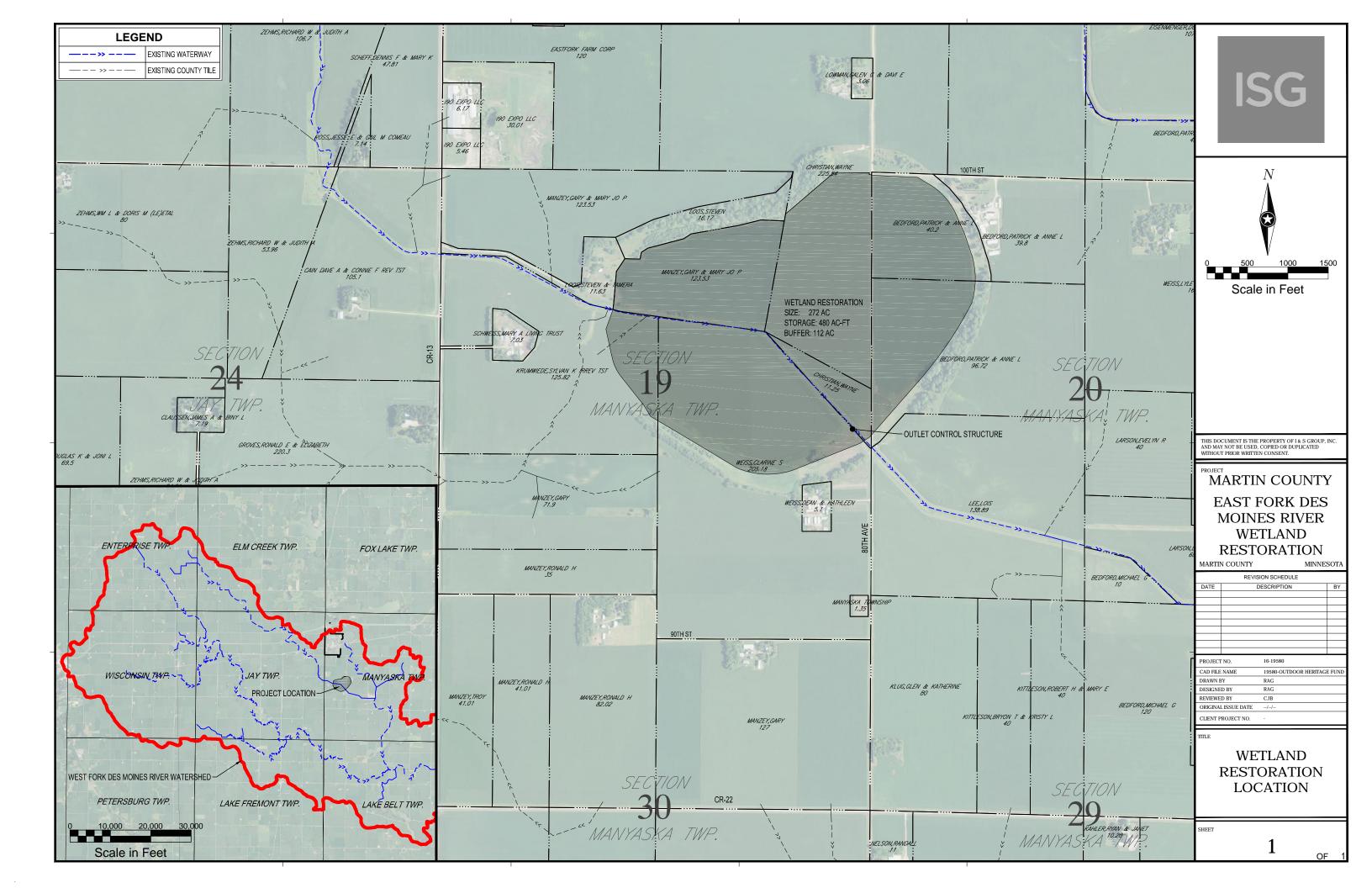
No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.

Parcel Map







COUNTY OF MARTIN

COURTHOUSE • FAIRMONT, MINNESOTA 56031

Commissioners meet 1st & 3rd Tuesdays • Phone (507) 238-3277 • Fax (507) 238-3136

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May 31, 2017

Mark Johnson Executive Director, Lessard-Sams Outdoor Heritage Council State Office Building 100 Rev. Dr. Martin Luther King Jr. Boulevard, Room 95 St. Paul, MN 55155

Re: Lessard-Sams Outdoor Heritage Council 2019 grant proposal request for Martin County, Minnesota

Dear Mr. Johnson,

On behalf of the Martin County Board of Commissioners we are writing to express our overwhelming support for the Lessard-Sams Outdoor Heritage Council (LSOHC) 2019 grant proposal and efforts to improve water quality, protect downstream communities from flooding and enhance habitat within the East Fork of the Des Moines River watershed supported through this proposal.

The Martin County Board of Commissioners recognizes the unique challenges facing rural communities in Minnesota and is actively working with agricultural landowners and other local partners to address those challenges in a way that achieves multiple benefits, ensuring farmers are able to productively utilize their land to grow crops while also protecting and restoring Minnesota's important natural resources. Funding for the proposed project on Judicial Ditch 50 and County Ditch 11 would restore 160 acres of wetlands; improving flood storage, establishing critical pollinator habitat, and filtering and slowing the flow of water making its way to the East Fork Des Moines River and into Okamanpeedan Lake.

The Martin County Board of Commissioners supports the collaborative efforts of Martin County, local landowners as well as other private and public partners to improve local water quality, provide important habitat, and reduce the impacts of flooding along County Ditch 11 and the East Fork Des Moines River through the proposed LSOHC grant.

Sincerely,

Chairman

Martin County Board of Commissioners

Our Mission:

Martin County Government is to provide efficient and quality service to taxpayers and customers, utilizing partnerships, communication, and cooperation.



923 North State Street, Suite 110 Fairmont, Minnesota 56031 Telephone (507) 235-6680

MINNESOTA SOIL and WATER CONSERVATION DISTRICTS

May 31, 2017

Martin County Drainage Administration c/o Mike Forstner 201 Lake Avenue Fairmont MN 56031

Dear Mike,

Martin Soil and Water Conservation District (SWCD) would like to express its support for the Martin County Drainage Administration's Lessard-Sams Outdoor Heritage Council proposal, "East Fork Des Moines River Wetland Restoration." Martin SWCD will assist with this project as outlined and we hope to further our efforts in the East Fork Des Moines watershed under this proposal.

Sincerely,

Ashley Brenke
District Manager
Martin SWCD



MARTIN COUNTY CONSERVATION CLUB INC 1234 South State St Fairmont MN 56031

May 9, 2017

To: Mike Forstner

RE: Wetland habitat project

The Martin County Conservation Club is happy to support your project for the protection of additional wildlife habitat and the restoration of wetland habitat within the drainage system. We need more projects like this one that sets land aside to provide multiple benefits.

The work proposed on these parcels will add to the existing nesting habitat along the old Manyaska Lake banks along with the restoration of a significant amount of wetland and open water habitat. This land is important in the management of waterfowl, species of small game, and many non-game wildlife species, including pollinators. It will allow the addition of native food plants in a critical area for the deer, pheasants and the many other species that use the existing wildlife habitat.

The Martin County Conservation Club will assist with the Fox Lake Conservation League efforts and other partners to provide support as needed in restoration of these additional acres of the much needed wildlife habitat. This area will add to the quality of hunting and other recreational activities that it will support for the future.

We look forward to working with you on this important project to protect water quality and habitat while managing flows to reduce the impacts of flooding within the watershed.

Sincerely,

Bruce Moore, President

Martin County Conservation Club, Inc.

Bruce R. Moore