

Lessard-Sams Outdoor Heritage Council

Laws of Minnesota 2014 Accomplishment Plan



Date: July 24, 2018

Program or Project Title: Mustinka River Fish and Wildlife Habitat Corridor Rehabilitation

Funds Recommended: \$ 2,440,000

Manager's Name: Jamie Beyer

Organization: Bois de Sioux Watershed District

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Legislative Citation: ML 2014, Ch. 256, Art. 1, Sec. 2, Subd. 5(e)

Appropriation Language: \$2,440,000 in the second year is to the commissioner of natural resources for an agreement with the Bois de Sioux Watershed District to acquire land in fee and to restore natural systems associated with the Mustinka River located within the Bois de Sioux Watershed. Lands acquired with this appropriation may not be used for emergency haying and grazing in response to federal or state disaster declarations. Conservation grazing under a management plan that is already being implemented may continue. A list of proposed land acquisitions must be provided as part of the required accomplishment plan. ML 2018, Ch. X, Art. 1, Sec. 2, Subd 10 Carryforwards: (a) The availability of the appropriation in Laws 2014, chapter 256, article 1, section 2, subdivision 5, paragraph (e), for Mustinka River Fish and Wildlife Habitat Corridor Rehabilitation is extended to June 30, 2022.

County Locations: Grant, and Traverse.

Regions in which work will take place:

- Prairie

Activity types:

- Protect in Fee
- Restore

Priority resources addressed by activity:

- Habitat

Abstract:

This habitat project presents a unique opportunity within the prairie region to convert 5.5 miles of ditched river to 8+ mile long stream channel within a 359 acre fish and wildlife habitat corridor composed of riparian wetlands and grassland.

Design and scope of work:

In the past 100 years, thousands of miles of rivers and streams in Minnesota were straightened and thousands of acres of riparian wetland and grassland habitat has been lost in the interest of improving drainage. The Mustinka River was first channelized as a state ditch in 1896 and again as an Army Corps of Engineers project in the early 1950's. This channelization resulted in a direct conversion of about 43 miles of natural sinuous channel and floodplain corridor to about 25 miles of straightened channel without a functional riparian corridor. The Mustinka River (Judicial Ditch 14) currently provides little functional aquatic or riparian corridor habitat. This stream corridor project will rehabilitate a 5.5 mile portion and directly provide both fish and wildlife habitat benefits in the prairie region.

This stream corridor rehabilitation project will convert 5.5 miles of the upper reaches of the Mustinka River to a more functional 8 to 9

mile long meandering channel within a 300 foot wide, 442 acre floodplain corridor. The stream rehabilitation will be based on the principles of natural channel design with an understanding of the hydrology and fluvial geomorphology at the site. The enhanced stream and associated riparian wetland habitats will provide seasonal spawning and nursery habitat to a variety of fish species including northern pike and walleye and some of the other 30+ fish species that are found in the Lake Traverse watershed.

In addition to the fish habitat directly provided in the 8 to 9 mile stream channel, the associated floodplain grassland and wetland habitat elements in the restored and protected 442 acre river corridor will provide year-round wildlife habitat. An estimated 90% of Minnesota's prairie wetlands have been lost due to agricultural drainage and development. The land adjacent to the Mustinka river was historically wet prairie and wetlands but was converted to farmland more than 80 years ago.

The Bois de Sioux Watershed District has led the development of this project through a "project team" process. This process has been a collaborative effort with members of the project team including the Traverse County Soil and Water Conservation District, the Natural Resource Conservation Service, MN DNR, MPCA, USFWS, conservation groups, and landowners. The Bois de Sioux Watershed District will continue to lead the project and the MNDNR, as a non-funded collaborator, will provide technical assistance during the structure design phase and the development of the operating plan as well as ongoing project monitoring and evaluation of the operation, outcomes, and user groups.

The watershed district will be responsible for final design, engineering, and construction of the project. Minnesota Department of Natural Resource stream habitat experts will be consulted throughout project development and implementation. If funding for this corridor rehabilitation is not secured, the opportunity to rehabilitate this reach of the Mustinka River Corridor will be lost and it will remain a ditch.

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

- H2 Protect critical shoreland of streams and lakes
- H5 Restore land, wetlands and wetland-associated watersheds
- H6 Protect and restore critical in-water habitat of lakes and streams
- H7 Keep water on the landscape
- LU6 Reduce Upland and gully erosion through soil conservation practices

Which other plans are addressed in this program:

- Long Range Plan for Fisheries Management
- Minnesota DNR Strategic Conservation Agenda
- Minnesota Prairie Conservation Plan
- Minnesota Sustainability Framework
- Minnesota's Wildlife Action Plan 2015-2025
- National Fish Habitat Action Plan
- Northern Tallgrass Prairie Ecoregion: A River and Stream Conservation Portfolio
- Outdoor Heritage Fund: A 25 Year Framework
- Red River of the North Fisheries Management Plan
- Minnesota Fish Habitat Plan, Bois de Sioux Watershed District Plan; Minnesota DNR Stream Habitat Program Restoration Priority List

Which LSOHC state-wide priorities are addressed in this program:

- Are ongoing, successful, transparent and accountable programs addressing actions and targets of one or more of the ecological sections
- Attempts to ensure conservation benefits are broadly distributed across the LSOHC sections
- Ensures activities for "protecting, restoring and enhancing" are coordinated among agencies, non profits and others while doing this important work; provides the most cost-effective use of financial resources; and where possible takes into consideration the value of local outreach, education, and community engagement to sustain project outcomes
- Leverage effort and/or other funds to supplement any OHF appropriation
- Produce multiple enduring conservation benefits
- Provide Minnesotans with greater public access to outdoor environments with hunting, fishing and other outdoor recreation opportunities
- Restore or enhance habitat on permanently protected land
- Use a science-based strategic planning and evaluation model to guide protection, restoration and enhancement, similar to the United States Fish and Wildlife Service's Strategic Habitat Conservation model

Which LSOHC section priorities are addressed in this program:

Prairie:

- Protect, enhance, or restore existing wetland/upland complexes, or convert agricultural lands to new wetland/upland habitat complexes
- Restore or enhance habitat on public lands

Relationship to other funds:

- Not Listed

Describe the relationship of the funds:

Not Listed

How does this program accelerate or supplement your current efforts in this area:

The Bois de Sioux Watershed District initiates projects based on priority problems, including natural resource issues that are identified in their comprehensive plan. The watershed district sets priorities in this plan and initiates projects to meet those priorities as opportunities for land acquisition become available and when there is landowner interest. Projects that restore and protect stream, riparian, wetland and upland habitats are identified as desired projects in the district's plan.

The Minnesota DNR prioritizes stream restoration projects statewide based on their ecological benefit, degree of impact, merit, and feasibility. The Mustinka River ranks number 7 among streams on the DNR's stream restoration list.

This project presents the greatest opportunities that we are aware of in Minnesota to convert a ditch back to a functional natural channel. Final engineering is complete under watershed law. Environmental review, permitting, and the land acquisition associated with this project is in process. Without additional funding for the stream and riparian wetland habitat benefits of this project, the district will likely proceed to improve the ditch using established methods in ditch law rather than restore and protect 359 acres of a functional riparian corridor to this area.

Per MS 97A.056, Subd. 24, Any state agency or organization requesting a direct appropriation from the OHF must inform the LSOHC at the time of the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose:

Not Listed

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

The Bois de Sioux Watershed District will own the property in fee title and be responsible for long term maintenance of this project. Sustainability and maintenance of this channel rehabilitation is required within watershed district law (Minnesota Statutes 103D). Long term project maintenance is authorized and funded through established watershed district construction and maintenance funds.

The watershed district is leading the land acquisition, project development, and engineering of this project with full cooperation of a watershed-based "project team" composed of landowners and representatives of local, state, and federal agencies.

Activity Details:

Will there be planting of corn or any crop on OHF land purchased or restored in this program - **Not Listed**

Will local government approval be sought prior to acquisition - **Yes**

Is the land you plan to acquire (fee title) free of any other permanent protection - **Yes**

Is this land open for hunting and fishing - **Yes**

No variation from state regulations.

Is the activity on permanently protected land per 97A.056, subd 13(f) and/or public waters per MS 103G.005, Subd. 15 - **Yes (Public Waters, no)**

Accomplishment Timeline:

Activity	Approximate Date Completed
Environmental Review	July, 2014
Finalize Plans and Specifications	December 2017
Land Acquisition	December 30, 2017
Construction	June 30, 2019
Post-Construction Maintenance - Vegetation establishment; stable channel	June 2022

Date of Final Report Submission: 6/30/2022

Federal Funding:

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

Outcomes:

Programs in prairie region:

- Expiring CRP lands are permanently protected *Several parcels along proposed corridor are currently enrolled in CRP. The amount of CRP converted to permanent protection will be reported.*
- Protected, restored, and enhanced shallow lakes and wetlands *The amount of riparian wetland restored and protected will be measured and reported.*
- Restored and enhanced upland habitats *The amount of riparian grassland acres restored and protected will be measured and reported.*
- Agriculture lands are converted to grasslands to sustain functioning prairie systems *Pre and post project amounts of agricultural lands will be measured and reported.*
- Increased wildlife productivity *The project will restore and protect 260 acres of fish and wildlife habitat including conversion of a 5.5 mile ditch into 8-9 miles of meandering channel. Fish and wildlife use of these habitats will be monitored and reported.*
- Water is kept on the land to reduce flood potential and degradation of aquatic habitat *Creating the 260 acre stream corridor will provide additional floodplain storage not currently present along the ditch. The amount of floodplain storage will be measured and the increase in stream habitats and stream stability will be assessed.*
- The enhanced stream channel and associated riparian wetland and grassland habitats will provide seasonal spawning and nursery habitat to a variety of fish species including northern pike and walleye and some of the other 30+ fish species that are found in the Lake Traverse watershed.

This project presents the greatest opportunities that we are aware of in the prairie region of Minnesota at this time to convert a ditch back to a functional stream channel. If funding for this corridor rehabilitation is not secured, the opportunity to rehabilitate this reach of the Mustinka River Corridor will be lost and it will remain a ditch.

Budget Spreadsheet

Budget reallocations up to 10% do not require an amendment to the Accomplishment Plan

How will this program accommodate the reduced appropriation recommendation from the original proposed requested amount

Not Listed

Total Amount of Request: \$ 2440000

Budget and Cash Leverage

BudgetName	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$0	\$0		\$0
Contracts	\$2,440,000	\$2,592,400	Bois De Sioux watershed district, Red River Watershed Management Board, Flood Hazard Mitigation Program	\$5,032,400
Fee Acquisition w/ PILT	\$0	\$0		\$0
Fee Acquisition w/o PILT	\$0	\$344,700	Bois De Sioux watershed district, Red River Watershed Management Board, Flood Hazard Mitigation Program	\$344,700
Easement Acquisition	\$0	\$0		\$0
Easement Stewardship	\$0	\$0		\$0
Travel	\$0	\$0		\$0
Professional Services	\$0	\$118,600	Bois De Sioux watershed district, Red River Watershed Management Board, Flood Hazard Mitigation Program	\$118,600
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	\$2,440,000	\$3,055,700		\$5,495,700

Output Tables

Table 1a. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	442	442
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	0	0
Enhance	0	0	0	0	0
Total	0	0	0	442	442

Table 2. Total Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$0	\$0	\$0	\$2,440,000	\$2,440,000
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	\$0	\$0
Enhance	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$2,440,000	\$2,440,000

Table 3. Acres within each Ecological Section

Type	Metro Urban	ForestPrairie	SE Forest	Prairie	N Forest	Total
Restore	0	0	0	442	0	442
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	0	0	0
Enhance	0	0	0	0	0	0
Total	0	0	0	442	0	442

Table 4. Total Funding within each Ecological Section

Type	Metro Urban	ForestPrairie	SE Forest	Prairie	N Forest	Total
Restore	\$0	\$0	\$0	\$2,440,000	\$0	\$2,440,000
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	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$2,440,000	\$0	\$2,440,000

Target Lake/Stream/River Feet or Miles

Parcel List

For restoration and enhancement programs ONLY: Managers may add, delete, and substitute projects on this parcel list based upon need, readiness, cost, opportunity, and/or urgency so long as the substitute parcel/project forwards the constitutional objectives of this program in the Project Scope table of this accomplishment plan. The final accomplishment plan report will include the final parcel list.

Section 1 - Restore / Enhance Parcel List

Grant

Name	TRDS	Acres	Est Cost	Existing Protection?
Parcel 13	12844219	35	\$203,300	no

Traverse

Name	TRDS	Acres	Est Cost	Existing Protection?
Parcel 1	12845216	23	\$154,800	no
Parcel 10	12844219	0	\$179,100	no
Parcel 2	12845216	24	\$156,300	No
Parcel 3	12845216	46	\$264,500	no
Parcel 4	12845215	45	\$261,200	no
Parcel 5	12845215	40	\$234,100	no
Parcel 6	12845223	58	\$338,800	no
Parcel 7	12845223	39	\$228,600	no
Parcel 8	12845224	55	\$318,900	no
Parcel 9	12845224	17	\$99,300	no

Section 2 - Protect Parcel List

No parcels with an activity type protect.

Section 2a - Protect Parcel with Bldgs

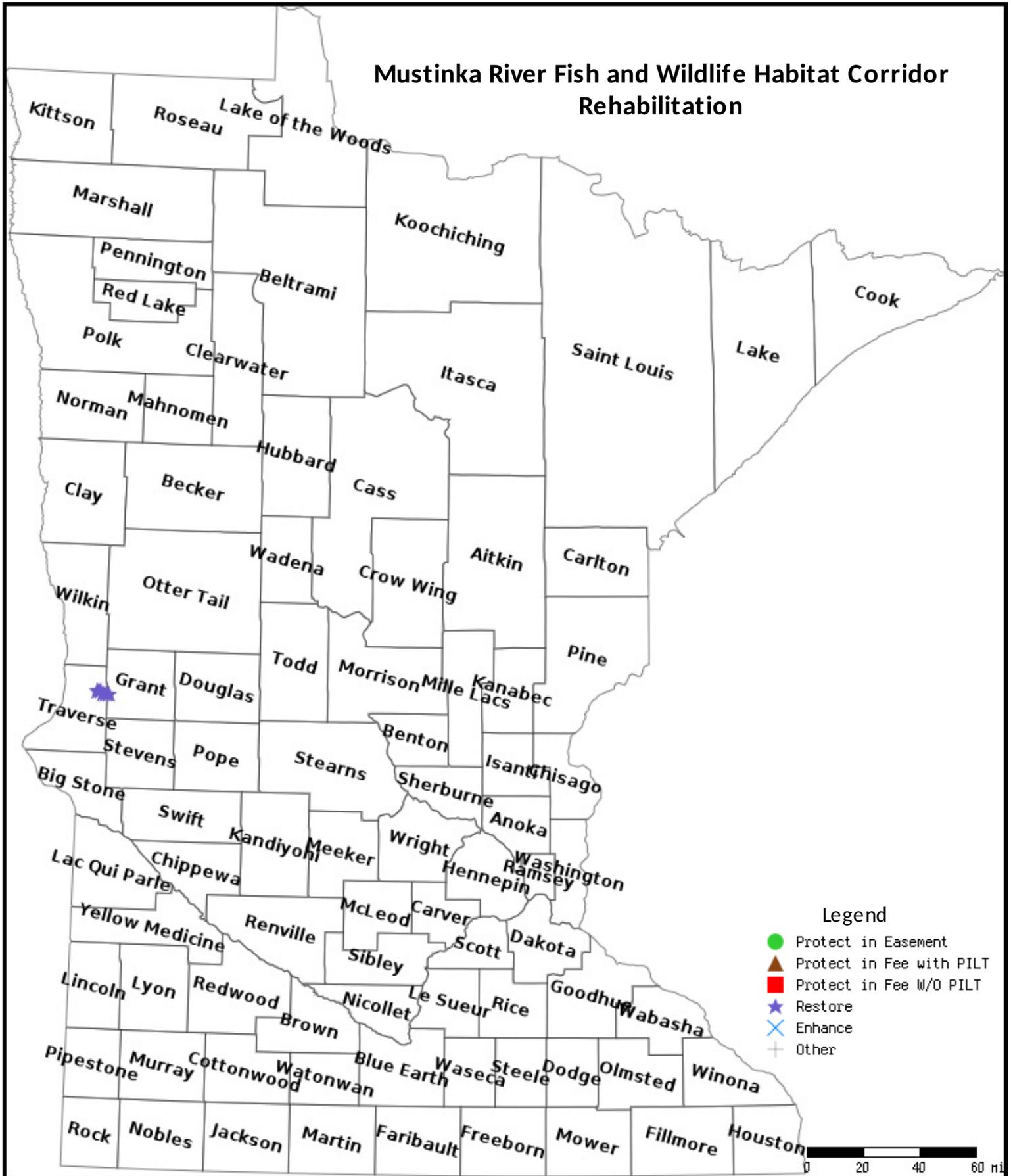
No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.

Parcel Map

Mustinka River Fish and Wildlife Habitat Corridor Rehabilitation



Data Generated From Parcel List