

Lessard-Sams Outdoor Heritage Council

Laws of Minnesota 2017 Final Report

General Information

Date: 11/12/2021

Project Title: Wolverton Creek Habitat Restoration

Funds Recommended: \$1,877,000

Legislative Citation: ML 2017, Ch. 91, Art. 1, Sec. 2, subd. 5(i)

Appropriation Language: \$1,877,000 the first year is to the commissioner of natural resources for an agreement with the Buffalo-Red River Watershed District to acquire permanent conservation easements and restore and enhance aquatic and upland habitat associated with Wolverton Creek in the Buffalo-Red River watershed. A list of proposed acquisitions, restoration, and enhancements must be provided as part of the required accomplishment plan.

Manager Information

Manager's Name: Kristine Altrichter

Title: District Administrator

Organization: Buffalo-Red River Watershed District

Address: 1303 4th Avenue NE City: Barnesville, MN 56514 Email: kaltrichter@brrwd.org Office Number: 218-789-3100

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Fax Number: 218-789-3900 **Website:** www.brrwd.org

Location Information

County Location(s): Wilkin and Clay.

Eco regions in which work will take place:

Prairie

Activity types:

- Protect in Easement
- Restore
- Enhance

Priority resources addressed by activity:

- Prairie
- Habitat

Narrative

Summary of Accomplishments

Through 6/30/2021, the project has made great progress. The project construction has recreated 23 miles of prairie stream and once fully vegetated will have established 650 acres of prairie stream habitat corridor. 383 acres have been acquired by permanent conservation easement and the stream restored. An additional 267 acres have easement options or are in the CREP or RIM process of conservation easement acquisition and have been restored. The BRRWD has closed on 26 easements through 6/30/2021.

Process & Methods

The project identified reaches of Wolverton Creek for restoration and expansion of riparian buffers. The buffer widths vary from a minimum of 200 feet with to over 750 feet wide. The minimum buffer width was determined by designating a 10-year floodplain. The areas of land that were acquired help to provide connectivity between the Manston Slough WMA and the Red River of the North with Wolverton Creek providing the corridor for that connection. The Wolverton Creek is a unique resource in that it is one of only a few prairie streams in the Red River basin that is located entirely within the Lake Agassiz Plain. The project was constructed in two phases. Phase 1 began in 2018 and was hampered by wet conditions. Phase 1 was completed in 2020. Phase 2 began in 2020 with some clean up in 2021.

How did the program address habitats of significant value for wildlife species of greatest conservation need, threatened or endangered species, and/or list targeted species?

This project restored 23 miles of stream and over 650 acres of prairie stream riparian habitat for associated fish and wildlife communities. This project benefits mussel and insect populations along and downstream of Wolverton Creek by improving water quality. Pollinator seed mixes were used along the habitat corridor. The project provides a continuous wildlife corridor from a Wetland Reserve Program site and the Manston Slough Restoration project at the upper end of the project to the Red River. Native mussel beds are located the lowest reach of Wolverton Creek and the Red River which benefits from a reduced sediment loading to the creek as a result of the project. Acquisition and restoration of the stream channel corridor improved habitat for Channel Catfish, Northern Pike, and another 70+ fish species present in Red River Basin. Some species of fish also benefit from the project as a result of a larger quantity of better quality spawning habitat.

How did the program use science-based targeting that leveraged or expanded corridors and complexes, reduced fragmentation, or protected areas in the MN County Biological Survey.

Reference stream reaches were used to set the geometry for the Wolverton Channel Restoration based on survey work completed by the MN Department of Natural Resources. Geometry used is characteristic of Rosgen E-channels in low gradient streams. Stream channel survey work was leveraged to complete hydraulic modeling. Hydraulic Modeling to determine the 10-year floodplain of Wolverton Creek was used to establish the extents of the expanded vegetative buffers. The Minnesota Prairie Plan also lists restoration of channelized prairie river segments and cultivation of lands immediately adjacent to streams and ditches as "critical challenges". In addition, the BRRWD completed GIS-based terrain analysis to identify, prioritize, and target conservation best management practices in the contributing agricultural watershed. Many best management practices have been implemented.

Explain Partners, Supporters, & Opposition

The project has received significant support from landowners. The landowners have expressed gratitude for the channel restoration work. Other project partners and supporters included the MN Department of Natural Resources, the Wilkin and Clay Soil and Water Conservation Districts, and the MN Board of Water and Soil Resources (BWSR). BWSR and the BRRWD partnered on the land acquisition through the establishment of an Memorandum of Understanding that allowed the use of the Conservation Reserve Enhancement Program to provide funding for part of the land rights acquisition.

Exceptional challenges, expectations, failures, opportunities, or unique aspects of program

The major challenge for the project was down time created during the ongoing COVID pandemic. It made it difficult to meet with landowners for the land acquisition. A second challenge was working a number of landowners through the Conservation Reserve Enhancement Program (CREP) to allow additional funding to be brought to bear on the land easement acquisition process. Using the CREP program for land easement acquisition did slow down the process, as the CREP easement needed to close prior to closing on the BRRWD Conservation easement. Often more than 2 years passed for the CREP process to run its course, delaying the BRRWD easement. In the end the wait was worth it since it allowed more land to be permanently protected through easement.

What other fund may contribute to this program?

- Clean Water Fund
- Other: BWSR Conservation Reserve Enhancement Program (CREP)

How were the funds used to advance the program?

Clean Water Funds paid for a significant amount of the restoration work along the stream. The CREP program allowed for additional land acquisition.

What is the plan to sustain and/or maintain this work after the Outdoor Heritage Funds are expended?

The BRRWD has set up a Water Management District (local tax levy) that will provide long-term funding for this project. The Water Management District will provide an annual revenue stream for maintenance. The BRRWD has this assessment process up and running at this time. Post-project monitoring will be conducted by the BRRWD. Water samples will be collected and analyzed through the BRRWD's Regional Assessment Locations (water quality monitoring network) and River Watch process.

Actions to Maintain Project Outcomes

Year	Source of Funds	Step 1	Step 2	Step 3
Annual	Watershed District -	Monitoring and	Make repairs as	-
	Local Tax Levy	Maintenance of the	needed (identify	
		stream restoration	outside funding with	
			help from project	
			partners in addition to	
			locally raised funds)	
Annual	Watershed District -	Monitoring and	Manage vegetation as	-
	Local Tax Levy	Maintenance of the	needed (identify	
		habitat corridor	outside funding with	
			help from project	
			partners in addition to	
			locally raised funds)	
Annual	Watershed District -	Conservation BMP	As interest is	-
	Local Tax Levy	promotion throughout	expressed identify	

the project watershed	additional outside
	funding with help
	from project partners
	in addition to locally
	raised funds

Budget

Totals

Item	Requested	AP Amount	Spent	Antic.	Received	Leverage	Original	Final Total
D 1				Leverage	Leverage	Source	Total	
Personnel Contracts	\$450,000	\$750,000	\$750,000	\$2,979,600	\$2,204,900	Watershed District Levy Funds, Clean Water Fund Target Watershed Grant, Enbridge Ecofootprint Grant, NRCS	\$3,429,600	\$2,954,900
Fee Acquisition w/ PILT	-	-	-	-	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-	-	-	-	-
Easement Acquisition	\$1,265,000	\$815,000	\$815,300	\$179,400	\$501,100	Watershed District Levy Funds, NRCS, Ecofootprint Grant	\$1,444,400	\$1,316,400
Easement Stewardship	-	-	-	-	-	-	-	-
Travel	-	-	-	-	-	-	-	-
Professional Services	\$159,000	\$309,000	\$309,000	\$341,000	\$528,500	Watershed District Levy Funds, Clean Water Funds, Ecofootprint Grant	\$500,000	\$837,500
Direct Support Services	-	-	-	-	-	-	-	-
DNR Land Acquisition Costs	-	-	-	-	-	-	-	-
Capital Equipment	-	-	-	-	-	-	-	-
Other Equipment/Tools	-	-	-	-	-	-	-	-
Supplies/Materials	\$3,000	\$3,000	\$2,700	-	-	-	\$3,000	\$2,700
DNR IDP	-	-	-	-	-	-	-	-
Grand Total	\$1,877,000	\$1,877,000	\$1,877,000	\$3,500,000	\$3,234,500	-	\$5,377,000	\$5,111,500

Explain any budget challenges or successes:

By mixing various local and state funding streams we were able to accomplish much more restoration than originally identified in the original accomplishment plan. However, that came with a delay in acquisition of all of the easements which will extend beyond the 6/30/2021 deadline. Worked with LSOHC staff which were accommodating to the situation. The \$1,877,000 OHF grant will get 650 acres permanently protected and 23 miles of stream and its associated corridor have been restored. That greatly exceeds the 357 acres of protection and 8-9 miles of stream restoration contemplated in the original AP.

Total Revenue: \$0

Revenue Spent: \$0

Revenue Balance: \$0

Of the money disclosed above, what are the appropriate uses of the money:

• E. This is not applicable as there was no revenue generated.

Output Tables

Acres by Resource Type (Table 1)

Туре	Wetland (AP)	Wetland (Final)	Prairie (AP)	Prairie (Final)	Forest (AP)	Forest (Final)	Habitat (AP)	Habitat (Final)	Total Acres (AP)	Total Acres (Final)
Restore	0	0	261	249	0	0	73	73	334	322
Protect in Fee with State PILT	0	0	0	0	0	0	0	0	0	0
Liability Protect in Fee w/o State PILT Liability	0	0	0	0	0	0	0	0	0	0
Protect in Easement	0	0	20	259	0	0	3	69	23	328
Enhance Total	0 0	0 0	0 281	0 508	0 0	0 0	0 76	0 142	0 357	6 50

Total Requested Funding by Resource Type (Table 2)

Туре	Wetlan d (AP)	Wetlan d (Final)	Prairie (AP)	Prairie (Final)	Fores t (AP)	Fores t (Final	Habitat (AP)	Habitat (Final)	Total Funding (AP)	Total Funding (Final)
Restore	-	-	\$1,094,60	\$749,600	-	-	\$686,50	\$208,40	\$1,781,10	\$958,000
Protect in Fee with State PILT Liability Protect	-	-	-	-	-	-	-	-	-	-
in Fee w/o State PILT Liability										
Protect in Easeme nt	-	-	\$83,900	\$719,100	-	-	\$12,000	\$199,90 0	\$95,900	\$919,000
Enhance Total	-	-	\$1,178,50	\$1,468,70	-	-	\$698,50	\$408,30	\$1,877,00	\$1,877,00
			0	0			0	0	0	0

Acres within each Ecological Section (Table 3)

Type	Metro / Urban (AP)	Metro / Urban (Final)	Forest / Prairie (AP)	Forest / Prairie (Final)	SE Forest (AP)	SE Forest (Final)	Prairie (AP)	Prairie (Final)	N. Forest (AP)	N. Forest (Final)	Total (AP)	Total (Final)
Restore	0	0	0	0	0	0	334	322	0	0	334	322
Protect in	0	0	0	0	0	0	0	0	0	0	0	0
Fee with												
State												
PILT												
Liability												ļ

Protect in	0	0	0	0	0	0	0	0	0	0	0	0
Fee w/o												
State												
PILT												
Liability												
Protect in	0	0	0	0	0	0	23	328	0	0	23	328
Easement												
Enhance	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	357	650	0	0	357	650

Total Requested Funding within each Ecological Section (Table 4)

Туре	Metro / Urban (AP)	Metro / Urban (Final)	Forest / Prairi e (AP)	Forest / Prairi e (Final)	SE Fores t (AP)	SE Fores t (Final	Prairie (AP)	Prairie (Final)	N. Fores t (AP)	N. Fores t (Final	Total (AP)	Total (Final)
Restore	-	-	-	-	-	-	\$1,781,10 0	\$958,000	-	-	\$1,781,10 0	\$958,000
Protect in Fee with State PILT Liability	-	-	-	-	-	-	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	1	-	-	-	-	-	-	-	-	-
Protect in Easeme nt	-	-	-	-	-	-	\$95,900	\$919,000	-	-	\$95,900	\$919,000
Enhance Total	-	-	-	-	-	-	\$1,877,00 0	\$1,877,00 0	-	-	\$1,877,00 0	\$1,877,00 0

Target Lake/Stream/River Feet or Miles

23

Outcomes

Programs in prairie region:

• Key core parcels are protected for fish, game and other wildlife ~ The outcome of the Wolverton Creek Restoration is a stable prairie stream with an expanded and enhanced permanently protected habitat corridor. This project provides significantly improved terrestrial and aquatic habitat to fish and wildlife using the stream corridor. Improvements in water quality are also expected. Biological assessment by MPCA at three sites on Wolverton Creek is planned on a 10 -year cycle (2008, 2018, etc.) as part of their Intensive Watershed Monitoring Program which will assess after project biology. In addition, the BRRWD monitors water quality trends on Wolverton Creek through their Regional Assessment Location (RAL) system.

Parcels

Sign-up Criteria?

<u>Yes</u>

Restore / Enhance Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection
Restoration/Enhance - Clay County	Clay	13748234	63	\$191,600	No
Restoration/Enhance - Wilkin County	Wilkin	13648226	259	\$766,400	No

Protect Parcels

Name	County	TRDS	Acres	Est Cost	Existing
45.005.004		10510005		#4.000	Protection
15.027.2001	Clay	13748227	0	\$1,300	No
15.027.3000	Clay	13748234	19	\$88,200	No
15.027.2000	Clay	13748227	19	\$75,800	No
15.034.3001	Clay	13748234	2	\$8,200	No
15.034.2000	Clay	13748234	20	\$88,100	No
22-015-0310	Wilkin	13648215	26	\$40,000	No
22-009-0100	Wilkin	13648209	10	\$75,600	No
22-014-0400	Wilkin	13648214	9	\$37,300	No
22-010-0510	Wilkin	13648210	5	\$41,100	No
22-004-0100	Wilkin	13648204	17	\$63,500	No
22-004-0200	Wilkin	13648204	3	\$10,400	No
19-012-0200	Wilkin	13548212	3	\$12,000	No
19-012-0300	Wilkin	13548212	32	\$148,000	No
22-009-0600	Wilkin	13648209	17	\$93,900	No
22-026-0100	Wilkin	13648226	2	\$148,300	No
19-001-0500	Wilkin	13548212	10	\$43,900	No
22-023-0300	Wilkin	13648223	3	\$8,900	No
22-015-0500	Wilkin	13648215	8	\$29,000	No
22-015-0210	Wilkin	13648215	3	\$8,800	No
22-015-0200	Wilkin	13648215	23	\$90,100	No
22-015-0400	Wilkin	13648215	13	\$48,200	No
22-026-0600	Wilkin	13648226	21	\$94,400	Yes
22-015-0300	Wilkin	13648215	3	\$110,100	No
19-012-0500	Wilkin	13548212	38	\$198,000	No
22-023-0100	Wilkin	13648223	2	\$9,600	No
22-023-0200	Wilkin	13648223	24	\$90,000	No

