

Lessard-Sams Outdoor Heritage Council

Fiscal Year 2017 / ML 2016 Request for Funding



Date: June 04, 2015

Program or Project Title: Wolverton Creek Habitat Restoration

Funds Requested: \$4,963,000

Manager's Name: Bruce Albright

Title: District Administrator

Organization: Buffalo-Red River Watershed District

Address: 1303 4th Avenue NE

Address 2: PO Box 341

City: Barnesville, MN 56514

Office Number: 218-354-7710

Email: brrwd@bvillemn.net

County Locations: Clay, and Wilkin.

Regions in which work will take place:

- Prairie

Activity types:

- Protect in Easement
- Restore
- Enhance
- Protect in Fee

Priority resources addressed by activity:

- Prairie
- Habitat

Abstract:

This comprehensive stream corridor project will restore 20 channelized stream miles to 26.2 miles of natural stream channel and protect and restore over 740 acres of floodplain wetland and grassland habitat along the Wolverton Creek.

Design and scope of work:

Beginning over a century ago, streams in the Red River Basin have been straightened, ditched, cleared and snagged with the goal of improving drainage. Wolverton Creek, a Red River tributary, was among these streams that experienced straightening decades ago. Along with the straightening, soil leaving the contributing agricultural fields filled many of these waterways leaving them choked with sediment. Combined these activities destroyed miles of aquatic habitat and eliminated habitat along these vital wildlife corridors. These habitat losses have had the direct effect of reducing fish and wildlife not only within the channelized reaches of these streams but downstream reaches of these streams as well.

The Wolverton Creek is a significant Red River Tributary, with a drainage area encompassing approximately 104 square miles. The Wolverton Creek is a unique resource in the Red River basin with its contributing area located entirely in the Lake Agassiz plain. The Buffalo-Red River Watershed District (BRRWD), in partnership with federal, state, and local agencies has developed a long term plan to restore the Wolverton Creek. Acquisition of the habitat corridor and restoration of the middle third of the Wolverton Creek Channel is the first phase on this long-term project. Ultimately, this project will restore 26.2 miles of natural channel on over 740 acres of riparian wetland, and prairie habitat. The long-term vision for the project includes establishment of a permanently protected habitat corridor along this prairie stream, expansion of riparian buffers, installation of sediment best management practices along the waterway, construction of natural river habitat, and restoration of perennial wetland and prairie plant communities. 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 wetlands will improve habitat for Channel Catfish, Northern Pike, and another 50+ fish

species documented in the Red River Basin.

In addition to the fish habitat directly provided in the 26.2 mile restored prairie stream, the associated floodplain wetland, and grassland habitat will provide critical wildlife habitat. The Minnesota Prairie Conservation Plan lists restoration of channelized prairie river segments and cultivation of lands immediately adjacent to streams and ditches as critical challenges. This project addresses both of these concerns. Currently, 35% of the 750 acres within the primary Wolverton Creek land acquisition area is classified as cropland. The remaining acreage is non-crop and consists mainly of a mix of open water (channel), wetland, and grassland.

Phase 1 of this project includes the overall project land acquisition for the full 26.2 mile stream restoration and the physical stream restoration in the middle third of the Wolverton Creek. This portion of the Wolverton Creek is the most severely impacted. As part of the long term plan, the river has been divided into three reaches (A-C). The downstream most reach (A) is the portion of Wolverton Creek from Trunk Highway 75 upstream to a point a half mile south of the Clay-Wilkin County line. The second (reach B) is in the center reach of the stream and runs upstream to Wilkin County Highway 30. The third and final reach (C) is located upstream of County Highway 30 and runs upstream to the headwaters of Wolverton Creek in Section 17 of Mitchell Township. This funding request will target acquisition along the entire Wolverton Creek and restoration to the middle reach (B) of the corridor. This reach was selected for Phase 1 due to expressed landowner interest. Of the 287 acres within the primary corridor of this reach, 81 acres (28%) are classified as cropland. While the first land acquisition effort will initially be focused on the Reach B, acquisition of lands in Reaches A and C will also be pursued. Additional expansion of the upland buffer will be pursued as budget allows adjacent lands to the primary conservation easement corridor. Over 740 acres of land is targeted for acquisition in this phase of the project (287 acres within the Phase B reach and 453 acres for adjacent land and for acquisition in other reaches).

The BRRWD will lead this project. Numerous partners will be needed to ensure success. In the land acquisition process of the project, the local Soil and Water Conservation District and Natural Resources Conservation Service will be critical to success. The largest impediment to acquiring land in this corridor is limiting landowner options for easements. LSOHC funding will strengthen the number of options available for the BRRWD to acquire land in this targeted habitat corridor.

In future phases of the project, the watershed district will continue to be responsible for final design, engineering, and restoration construction of the project. If funding for this stream restoration and habitat enhancement project is not secured, the opportunity to rehabilitate the Wolverton Creek will be lost and it will remain a poor functioning channelized stream segment until outside funding can be secured.

Crops:

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

How does the request address MN habitats that have: historical value to fish and wildlife, wildlife species of greatest conservation need, MN County Biological Survey data, and/or rare, threatened and endangered species inventories:

This project is the first phase of a comprehensive project that will restore 26.2 miles of prairie stream and over 740 acres of habitat for associated fish and wildlife communities. This project will also benefit mussel and insect populations in the Wolverton Creek. Pollinator seed mixes will be used along the proposed project. The project will provide a continuous wildlife corridor from an existing 320 acre Wetland Reserve Program project at the upper end of the project to the Red River. Native mussel beds are located downstream of Reach A in the lowest reach of Wolverton Creek which will benefit from a reduced sediment loading to the creek resulting from the project. Acquisition and restoration of the stream will also improve habitat for Channel Catfish, Northern Pike, and more than 50 other fish species present in Red River Basin. Many species of fish will also benefit from the project as a result of a larger quantity of better quality spawning habitat.

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

The Wolverton Creek has been a degraded resource for decades and what has changed at this point is that landowners now support restoration of the channel. Funding of the restoration is the issue. Project implementation will not occur without outside funding to defray part of the local cost of implementation.

Describe the science based planning and evaluation model used:

Reference Rosgen E-channels stream reaches set the geometry for the Wolverton Channel Restoration based on survey work completed by the MN DNR. Hydraulic modeling of the 10-year floodplain set minimum vegetative buffer expansion areas. The Minnesota Prairie Plan lists restoration of channelized prairie streams as a critical challenge.

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

- H2 Protect critical shoreland of streams and lakes
- H6 Protect and restore critical in-water habitat of lakes and streams

Which other plans are addressed in this proposal:

- Long Range Plan for Fisheries Management
- Red River of the North Fisheries Management Plan

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

Relationship to other funds:

- Not Listed

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

The Watershed District has a long term interest in restoration of the Wolverton Creek. Numerous meetings have been held with project area landowners and there is significant interest in the stream restoration project. More recently in 2013, the Buffalo-Red River Watershed District developed a watershed-wide concept plan for the project. Some features of the 2013 concept plan has since been implemented, however a lack of funding has stalled implementation of this plan. Funding through the LSOHC is critical to accelerating and completing the land acquisition and construction for this phase of this project. Securing funds now will allow the watershed district and partners to create a package of acquisition options for landowners to choose from and will ensure leveraging of available federal conservation program funds. If this LSOHC funding is not secured, the watershed district will continue to work on the project in small scale pieces as opportunities and funding become available. This piece meal approach, however will likely take decades to implement.

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

Appropriation Year	Source	Amount
2007	Clean Water Legacy (through the Clay SWCD)	\$289,000
2011	Clean Water Fund	\$253,229
2011-2014	Local Tax Levy	\$100,000

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

The Buffalo-Red River Watershed District is in the process of setting up a Water Management District for providing long-term maintenance funding for this project.

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

Year	Source of Funds	Step 1	Step 2	Step 3
Annual	Watershed District - Local Tax Levy	Monitoring and Maintenance of Channel Restoration		
Annual	Watershed District - Local Tax Levy	Monitoring and Maintenance of Restoration on acquired lands		

Activity Details:

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

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

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

Is this land currently open for hunting and fishing - **No**

Will the land be open for hunting and fishing after completion - **Yes**

All waters will be open for fishing. Any land purchased in fee will be open to hunting. Land with easement acquisitions will likely remain closed to hunting.

Will the eased land be open for public use - **No**

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, Public Waters)**

Accomplishment Timeline:

Activity	Approximate Date Completed
Finalize Restoration Project Construction Plans (Pre-grant)	August 2015
Establish Local Funding Source for Project (Pre-grant)	December 2015
Finalize Acquisition and Marketing Plan with Partners	September 2016
Contact Landowners along Stream Restoration - Begin Land Acquisition	October 2016
Complete Land Acquisition	June 2017
Begin Construction	July 2017
Complete Construction	December 2018

Federal Funding:

Do you anticipate federal funds as a match for this program - **Yes**

Are the funds confirmed - **No**

What is the approximate date you anticipate receiving confirmation of the federal funds - **12/31/2015**

Outcomes:

Programs in prairie region:

- Key core parcels are protected for fish, game and other wildlife *The outcome of the Wolverton Creek Restoration project will be a stable prairie stream with an expanded and enhanced permanently protected habitat corridor. This will provide 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 the Wolverton Creek through their Regional Assessment Location (RAL) system.*

Budget Spreadsheet

Total Amount of Request: \$4,963,000

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$0	\$0		\$0
Contracts	\$2,625,000	\$500,000	NRCS / Watershed District Levy Funds	\$3,125,000
Fee Acquisition w/ PILT	\$0	\$0		\$0
Fee Acquisition w/o PILT	\$142,000	\$0		\$142,000
Easement Acquisition	\$1,891,000	\$811,300	NRCS / Watershed District Levy Funds	\$2,702,300
Easement Stewardship	\$0	\$0		\$0
Travel	\$0	\$0		\$0
Professional Services	\$300,000	\$200,000	Watershed District Levy Funds	\$500,000
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	\$5,000	\$0		\$5,000
DNR IDP	\$0	\$0		\$0
Total	\$4,963,000	\$1,511,300	-	\$6,474,300

Amount of Request: \$4,963,000
 Amount of Leverage: \$1,511,300
 Leverage as a percent of the Request: 30.45%

Output Tables

Table 1a. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	260	0	73	333
Protect in Fee with State PILT Liability	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	37	0	0	37
Protect in Easement	0	258	0	112	370
Enhance	0	0	0	0	0
Total	0	555	0	185	740

Table 1b. How many of these Prairie acres are Native Prairie?

Type	Native Prairie
Restore	260
Protect in Fee with State PILT Liability	0
Protect in Fee W/O State PILT Liability	0
Protect in Easement	0
Enhance	0
Total	260

Table 2. Total Requested Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$0	\$1,099,200	\$0	\$2,142,300	\$3,241,500
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$298,400	\$0	\$0	\$298,400
Protect in Easement	\$0	\$1,090,700	\$0	\$332,400	\$1,423,100
Enhance	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$2,488,300	\$0	\$2,474,700	\$4,963,000

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	0	0	0	333	0	333
Protect in Fee with State PILT Liability	0	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	37	0	37
Protect in Easement	0	0	0	370	0	370
Enhance	0	0	0	0	0	0
Total	0	0	0	740	0	740

Table 4. Total Requested Funding within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	\$0	\$0	\$0	\$3,241,500	\$0	\$3,241,500
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$298,400	\$0	\$298,400
Protect in Easement	\$0	\$0	\$0	\$1,423,100	\$0	\$1,423,100
Enhance	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$4,963,000	\$0	\$4,963,000

Table 5. Average Cost per Acre by Resource Type

Type	Wetlands	Prairies	Forest	Habitats
Restore	\$0	\$4,228	\$0	\$29,347
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$8,065	\$0	\$0
Protect in Easement	\$0	\$4,228	\$0	\$2,968
Enhance	\$0	\$0	\$0	\$0

Table 6. Average Cost per Acre by Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest
Restore	\$0	\$0	\$0	\$9,734	\$0
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$8,065	\$0
Protect in Easement	\$0	\$0	\$0	\$3,846	\$0
Enhance	\$0	\$0	\$0	\$0	\$0

Target Lake/Stream/River Feet or Miles

Parcel List

Section 1 - Restore / Enhance Parcel List

Wilkin

Name	TRDS	Acres	Est Cost	Existing Protection?
22-004-0600	13648204	18	\$70,176	No
22-004-0700	13648204	5	\$17,418	No
22-009-0100	13648209	22	\$85,856	No
22-009-0600	13648209	21	\$77,371	No
22-010-0500	13648210	11	\$42,446	No
22-014-0300	13648214	16	\$60,070	No
22-014-0400	13648214	12	\$45,408	No
22-015-0200	13648215	24	\$98,215	No
22-015-0210	13648215	3	\$8,672	No
22-015-0300	13648215	34	\$137,962	No
22-015-0400	13648215	13	\$49,995	No
22-015-0500	13648215	8	\$30,896	No
22-023-0100	13648223	2	\$5,015	No
22-023-0200	13648223	21	\$72,654	No
22-023-0300	13648223	1	\$6,301	No
22-023-0400	13648223	31	\$103,987	No
22-023-0500	13648223	0	\$178	No
22-026-0100	13648226	29	\$103,241	No
22-026-0600	13648226	16	\$56,904	No
22-026-0700	13648226	0	\$1,307	No

Section 2 - Protect Parcel List

Clay

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
15.000.0050	13748216	0	\$986	No	Limited	Full
15.009.3301	13748209	0	\$1,082	No	Limited	Full
15.009.3700	13748209	7	\$27,660	No	Limited	Full
15.016.1600	13748216	20	\$83,825	No	Limited	Full
15.016.1800	13748216	8	\$33,799	No	Limited	Full
15.016.2600	13748216	7	\$27,144	No	Limited	Full
15.016.4000	13748216	16	\$57,959	No	Limited	Full
15.021.1000	13748221	9	\$34,760	No	Limited	Full
15.021.3500	13748221	2	\$5,836	No	Limited	Full
15.022.0200	13748222	32	\$133,252	No	Limited	Full
15.022.0201	13748227	0	\$2	No	Limited	Full
15.027.2000	13748227	20	\$86,834	No	Limited	Full
15.027.2001	13748227	0	\$1,176	No	Limited	Full
15.027.3000	13748234	18	\$82,371	No	Limited	Full
15.034.1000	13748234	1	\$5,697	No	Limited	Full
15.034.2000	13748234	19	\$77,567	No	Limited	Full
15.034.3001	13748234	4	\$16,761	No	Limited	Full
15.034.4000	13748234	23	\$95,235	No	Limited	Full
15.034.4301	13748234	1	\$2,341	No	Limited	Full

Wilkin

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
15-007-0300	13547207	13	\$47,073	No	Limited	Full
15-007-0310	13547217	2	\$7,164	No	Limited	Full
15-017-0100	13547217	5	\$20,558	No	Limited	Full
15-017-0200	13547217	9	\$38,497	No	Limited	Full
15-017-0300	13547218	17	\$67,918	No	Limited	Full
15-018-0100	13547218	9	\$37,492	No	Limited	Full
15-018-0200	13547218	11	\$43,009	No	Limited	Full
15-018-0600	13548201	5	\$23,210	No	Limited	Full
19-001-0500	13548212	9	\$29,715	No	Limited	Full
19-002-0100	13548202	17	\$56,693	No	Limited	Full
19-002-0210	13548202	15	\$56,376	No	Limited	Full
19-002-0500	13548202	15	\$51,801	No	Limited	Full
19-002-0510	13548202	0	\$40	No	Limited	Full
19-012-0200	13548212	2	\$6,655	No	Limited	Full
19-012-0300	13548212	25	\$81,441	No	Limited	Full
19-012-0500	13548212	31	\$100,313	No	Limited	Full
22-004-0100	13648204	14	\$53,794	No	Limited	Full
22-004-0200	13648204	5	\$14,833	No	Limited	Full
22-035-0100	13648235	7	\$33,078	No	Limited	Full
22-035-0200	13648235	24	\$108,875	No	Limited	Full
22-035-0210	13648235	2	\$8,794	No	Limited	Full
22-035-0300	13648235	0	\$834	No	Limited	Full
22-035-0305	13648235	12	\$53,639	No	Limited	Full
22-035-0310	13648235	13	\$56,239	No	Limited	Full

Section 2a - Protect Parcel with Bldgs

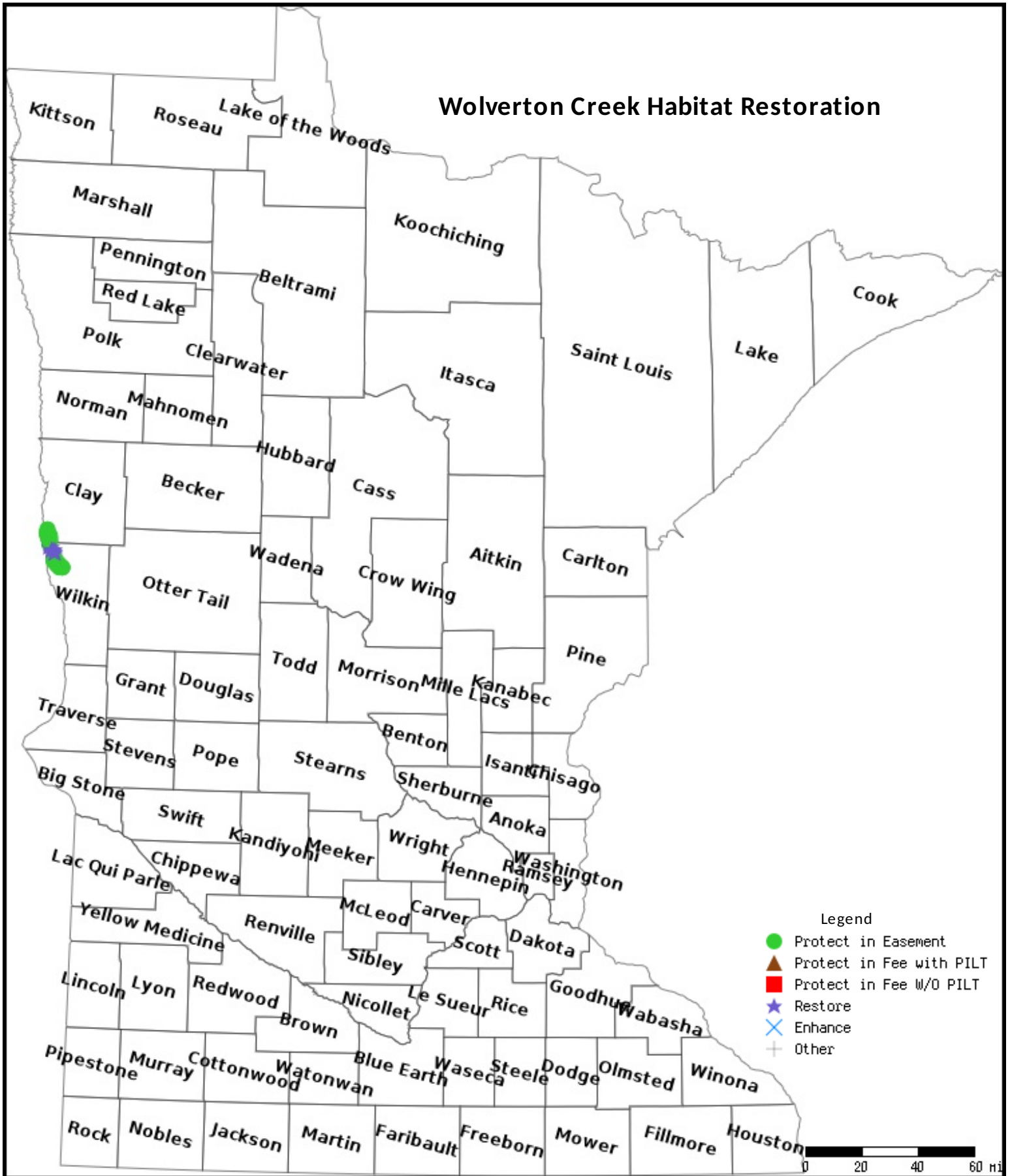
No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

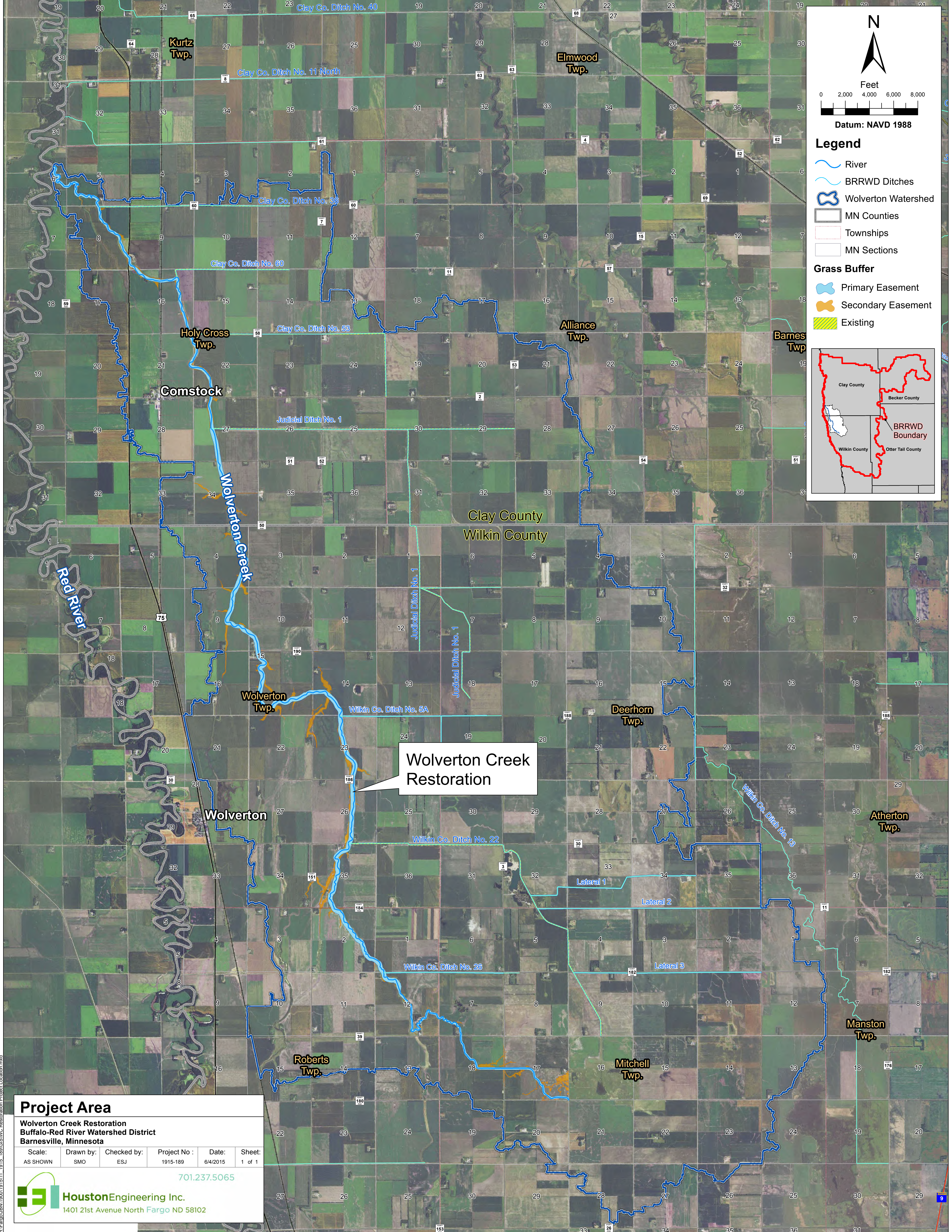
No parcels with an other activity type.

Parcel Map

Wolverton Creek Habitat Restoration



Data Generated From Parcel List



N

Feet

0 2,000 4,000 6,000 8,000

Datum: NAVD 1988

Legend

- River
- BRRWD Ditches
- Wolverton Watershed
- MN Counties
- Townships
- MN Sections

Grass Buffer

- Primary Easement
- Secondary Easement
- Existing

Project Area

Wolverton Creek Restoration
 Buffalo-Red River Watershed District
 Barnesville, Minnesota

Scale:	Drawn by:	Checked by:	Project No.:	Date:	Sheet:
AS SHOWN	SMO	ESJ	1915-189	6/4/2015	1 of 1

701.237.5065

HoustonEngineering Inc.
 1401 21st Avenue North Fargo ND 58102

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Clay Soil and Water Conservation District

1615 30th Avenue South ❖ Moorhead MN 56560

Phone: (218)287-2255

Fax: (218)287-1787

Our 70th Anniversary

1945 - 2015

May 19, 2015

Board of Managers
Buffalo-Red River Watershed District
1303 4th Avenue NE
Barnesville, MN 56514-0341

RE: Wolverton Creek Restoration Project Letter of Support

Dear Watershed District Board of Managers:

Please accept this letter acknowledging Clay Soil and Water Conservation District's (SWCD) support for the Lessard-Sams Outdoor Heritage Council "Wolverton Creek Restoration Project" as proposed by Bruce Albright, Administrator – Buffalo-Red River Watershed District (BRRWD).

Through sound resource planning, this project provides for returning the creek to a more natural state. Numerous environmental benefits such as reduced impacts of annual flooding, enhanced wildlife habitat, and improved water quality will be realized for those downstream and those who live and farm next to it.

The Clay SWCD looks forward to discussions and working with your Board and staff on how to implement your restoration project. The Council's funding will be an essential component to restoring the creek and improving the riparian corridor.

Sincerely,

A handwritten signature in blue ink that reads "Kevin Kassenborg". The signature is written in a cursive, flowing style.

Kevin Kassenborg
Clay SWCD Manager



1150 Hwy 75 North, Breckenridge, MN 56520 (218) 643-2933

May 15, 2015

Board of Managers
Buffalo Red River Watershed District
1303 4th Ave NE
Barnesville, MN 56514

RE: Support for Lessard-Sams Outdoor Heritage Council "Wolverton Creek Restoration and Sediment Reduction Project"

Dear Board of Managers:

The Wilkin Soil and Water Conservation District would like to offer support for this stream restoration project to enhance wildlife habitat and improve water quality.

Restoring the creek to a more natural state will reduce flooding, improve water quality and enhance riparian health and wildlife habitat. The two-stage channel will restore sinuosity, create pools and riffles and a stable flood plain. Together these features will benefit aquatic life.

Permanent buffers will be planted to a variety of native grasses and forbs and will be designed to adequately protect floodplains in the project area. These permanent buffers will vary from 200 to 400 feet in width depending on location providing valuable wildlife habitat and connectivity within the riparian corridors.

We hope the Lessard-Sams Outdoor Heritage Council can see the merits and funds your project. We fully support this application for funding. We believe this project addresses local resource problems with a comprehensive watershed-wide solution. When completed this project will improve wildlife habitat, improve water quality, reduce flooding and provide enhancements to our natural resources.

Sincerely,

Don Bajumpaa
District Manager
Wilkin Soil and Water Conservation District

It is the mission of the Wilkin Soil and Water Conservation District to provide local leadership in the conservation of soil, water, and related natural resources through programs and partnerships with individuals, businesses, organizations and government.