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

Date: May 31, 2017

Program or Project Title: Buffalo River Watershed Stream Habitat Program – Phase 1

Funds Requested: $1,700,000

Manager's Name: Bruce Albright
Title: Administrator
Organization: Buffalo-Red River Watershed District
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County Locations: Clay, and Wilkin.

Regions in which work will take place:

- Prairie

Activity types:

- Restore
- Enhance

Priority resources addressed by activity:

- Prairie
- Habitat

Abstract:

Over a century ago, the construction of Judicial Ditch No. 3 resulted in the rerouting of the South Branch of the Buffalo River, completely changing its flow characteristics. In the first phase of this multi-phase project, the Buffalo-Red River Watershed District (BRRWD) in partnership with landowners, federal, state, and local agencies, will put much of the rerouted channel back restoring 4.6 miles of the South Branch river channel with more than 100 acres of associated riparian habitat corridor. Additional restorations of straightened stream and river channels along the South Branch and Whisky Creek will be completed as funding permits.

Design and scope of work:

Over a century ago, the construction of several legal ditch systems and other channel straightening efforts eliminated hundreds of acres of quality of stream habitat within the BRRWD. In some cases, the channelization simply straightened the stream channel and in others the constructed ditch diverted water away from the natural stream. Straightened channels create homogenous habitats, they no longer have the shallow riffles and deeper pools that are required by fish at various stages in their life cycle. The straightened reaches also tend to lose access to their floodplains which increases erosion in the channel and causes downstream flooding. In addition, aggradation of the downstream channel due to increased sediment loading reduces habitat quality and makes flooding worse.
Over the last several years, the BRRWD, with input and in partnership with landowners, federal, state, and local agencies, designed comprehensive subwatershed restoration plans and intends to implement these plans over the next several years. A component of these plans includes the restoration of numerous reaches of straightened and abandoned creek and river channels throughout the Watershed District. Prioritization of projects is largely based on ecological benefits, being shovel-ready and having landowner and other stakeholder support.
In the first phase of this multi-phase project, the BRRWD plans to restore 4.6 miles of perennial stream with a 100 plus acres of associated riparian corridor habitat along the South Branch of the Buffalo River. The project will divert water from Wilkin County Ditch No. 44 (formerly called Judicial Ditch 3) back into the abandoned South Branch channel. The South Branch will be restored using natural channel design principles. The river restoration has been designed with direct input from the MN DNR Stream Habitat Program

as well as the MN Board of Water & Soil Resources (BWSR). A sinuous riffle-pool natural channel design is proposed to recreate the aquatic habitat diversity that was lost in the straightened ditch. The naturally stable restored channel will not only recreate lost habitat, but will reduce the current erosion that is overloading downstream reaches of the South Branch. This project is being completed in conjunction with a Reinvest in Minnesota project being implemented by the MN BWSR.
As part of their comprehensive subwatershed planning process, the District has completed planning and design on three additional stream reaches which are included as part of this application package. These include the restoration of Whisky Creek, its tributary, and the South Branch of the Buffalo River and their associated riparian corridors. Additional stream restoration enhancement along the South Branch of the Buffalo River and Whisky Creek will be completed as funding permits when and if additional sources of match funding become available. Combined, these comprehensive projects have the potential to restore and enhance more than 38 miles of natural prairie stream. Ultimately, over 1400 acres of floodplain wetland and grassland habitat along these restoration reaches will be protected and restored.

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:

- National Fish Habitat Action Plan
- Red River of the North Fisheries Management Plan

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

In the first phase of this multi-phase project, the BRRWD plans to restore 4.6 miles of natural stream with a 100 plus acres of associated river habitat corridor along the South Branch of the Buffalo River. This program addresses goals 3 and 4 of the National Fish Habitat Action Plan: Goal #3 is to reverse declines in the quality and quantity of aquatic habitats to improve the overall health of fish and other aquatic organisms. Goal #4 is to increase the quality and quantity of fish habitats that support a broad natural diversity of fish and other aquatic species. The program also addresses several objectives from the Red River of the North Fisheries Management Plan: Objective #1: Establish and maintain stable stream channels. Objective #4: Provide heterogeneous and complex physical habitat components consistent with the physiographic setting and important to aquatic species in the Red River basin.

Which LSOHC section priorities are addressed in this proposal:

Prairie:

- Restore or enhance habitat on public lands

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:

A priority for prairie zones of Minnesota is to reverse the negative effects of stream channelization on in-stream habitats for fish and other aquatic organisms. Channelization has changed the hydrology of streams, which has then made them wider and more deeply incised. The proposed project will restore 4.6 miles of in-stream habitats. Riparian vegetation will be restored to stabilize stream banks (several state and federal programs, such as RIM, CRP, and CREP, will potentially provide financial assistance). Natural channel restoration designs will be constructed where streams have been channelized to provide better access of flood plain to dissipate stream energy and allow the channel room to meander, which will provide more diverse habitat for aquatic organisms. This project will build on previous conservation efforts in this area. The project adds onto a significant block of habitat previously restored wetlands and upland vegetation that were established under RIM and WRP. These efforts combined with the proposed project hold water on the landscape and allows for increased infiltration, which will help mitigate the altered hydrology of the watershed and helps habitat by providing a more natural flow regime.

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 BRRWD uses a science-based planning model for the selection of stream projects. The targeted projects involve straightened reaches that have lost much of their habitat diversity. Reference stream reaches set the geometry for all of the proposed stream restoration based on survey work completed by the MN Department of Natural Resources (DNR). Geometry used is characteristic of Rosgen E-channels in low gradient streams.

The project is located in the vicinity of the Rothsay WMA (2 miles east), Manston WMA (2 miles southwest), Atherton WMA (1 mile

north) and a designated trout stream. In addition, RIM easements, an SNA, and a number of WRP projects in the project area connect the project in a continuous habitat corridor directly to the Rothsay WMA. This project would be adjacent to the Rothsay Prairie which is identified in the MN Prairie Conservation Plan as a core area.

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 has completed GIS-based terrain analysis to identify, prioritize, and target conservation best management practices in the contributing agricultural watershed. Many of these best management practices have been implemented, with more planned.

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:

This project will restore 4.6 miles of stream and over 100 acres of riparian habitat for associated fish and wildlife communities. This project is the first phase of a long-term effort within the BRRWD. This project will also benefit mussel and insect populations along and downstream of the South Branch of the Buffalo River by improving water quality. Pollinator seed mixes will be used along the habitat corridor. The project will provide a continuous wildlife corridor from the Rothsay Wildlife Management Area downstream to MN Highway 9. The South Branch downstream of the restoration reach will benefit from a reduced sediment loading to the river resulting from the project. Acquisition and restoration of the stream channel corridor will also improve habitat for Channel Catfish, Northern Pike, and another 70+ fish species present in Red River Basin. Some species of fish will also benefit from the project as a result of a larger quantity of better quality spawning habitat. Less than one mile away, Lawndale Creek is a designated trout stream. DNR studies show that throughout the year, the trout migrate to the South Branch. Restoration of the nearby channel will increase fish usage of this perennial stream. Greater Prairie Chicken are one upland species that will also benefit from the permanent protection of upland areas.

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

Restoration of the South Branch will provide 4.6 miles of stream channel and riparian corridor, improving habitat for Channel Catfish, Northern Pike, and another 70+ fish species present in Red River Basin. The restored channel will have higher quality, more complex habitat than is currently provided in the County Ditch that diverted flow from the historic channel. Some species of fish will also benefit from the project as a result of a larger quantity of better quality spawning habitat. Northern pike would be a likely fish species to utilize the restored segment for spring spawning along the stream. Amphibians such as the Canada Toad, Great Plains Toad, Leopard Frog, Cope Toad, Western Chorus Frog and Spotted Salamander, would also benefit, especially with the expanded riparian buffer area. The 100 acres of prairie riparian habitat would be expected to support 20 nesting pairs of each upland species such as Ring-necked Pheasant and Meadowlark. Pollinator seed mixes are proposed along the stream restoration to enhance opportunities for honey bees, native bees, butterflies, and other insects. The Greater Prairie Chicken (MN Special Concern) is an additional upland species that will also benefit from the permanent protection of upland areas. The project, with 100 plus acres of permanently protected riparian habitat alongside the existing RIM, SNA, and WMA land, could support an estimated 20 breeding pair of prairie chickens. The DNR has also identified breeding pairs of Bobolink using the area, which should increase with increased prime habitat.

Outcomes:

Programs in prairie region:

- Protected, restored, and enhanced habitat for migratory and unique Minnesota species *The outcome of the Buffalo River Watershed Stream Restoration Program will be the 4.6 miles of restoration of the South Branch of the Buffalo River into a stable prairie stream with more than 100 acres of expanded and enhanced permanently protected habitat corridor. This will provide significantly improved terrestrial and aquatic habitat for fish and wildlife, such as prairie chickens, using the stream corridor. Improvements in water quality are also expected.*

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

In accordance with Minnesota Watershed Law and the Red River Basin Flood Damage Reduction Work Group Mediation agreement, projects implemented under this grant will be monitored to ensure they are working as intended. It is expected that there will be some maintenance in the first few years to ensure native vegetation is established. The stream restoration projects are designed following natural channel design principles and are expected to be largely self-sustaining. Significant long-term maintenance costs are not expected, however, the BRRWD will set up a local tax levy that will provide long-term maintenance funding for this project. The locally raised levy will provide an annual revenue stream for maintenance. Post-project monitoring will be conducted by the BRRWD and the Barnesville Riverwatch Program.

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 the Habitat Corridor		
Annual	Watershed District – Local Tax Levy	Conservation BMP Promotion throughout the project watershed		

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

The South Branch has been degraded for some time. What has changed is that landowners are ready to implement the proposed project. A large RIM easement has recently closed in 2016. Funding for the complete restoration is the issue. Locally raised funding will be part of the overall project funding package. However, without outside funding to help defray the implementation cost, the project may not happen. The existing stream function is degraded and restoration will return the functions of the stream which will have many ecological and water quality benefits in the upstream portion of this watershed.

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

The BRRWD is coordinating with BWSR and landowners to utilize programs (CRP, CREP, RIIM) to implement the project to the extent possible. These programs require landowners to apply and it is expected that landowners will participate.

Relationship to other funds:

- Clean Water Fund

Describe the relationship of the funds:

The BRRWD was awarded $336,000 in a Clean Water Fund grant which has been used to implement agricultural sediment best management practices with in the South Branch of the Buffalo River watershed. This grant will continue to be used to address sediment sources in the watershed but will be expended by the end of 2017.

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

Appropriation Year	Source	Amount
2010	MN BWSR - RIM	478094.83
2013	Clean Water Fund	336000
2013-2017	Local Tax Levy	100000
2016	MN BWSR - RIM	1063106.25

Activity Details

Requirements:

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

Are the funds confirmed - **No**

What is the approximate date you anticipate receiving confirmation of the federal funds - **12/31/2017**

Land Use:

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

Accomplishment Timeline

Activity	Approximate Date Completed
Formally Contact Landowners along Stream Restoration – Begin Acquisition Process	August 2017
Finalize South Branch Restoration Project Construction Plans (Pre-grant)	December 2017
Establish Local Funding Source (Pre-grant)	June 2018
Complete Land Acquisition	August 2018
Begin Construction	September 2018
Complete Construction (South Branch Phase 1)	July 2019

Budget Spreadsheet

Total Amount of Request: $1,700,000

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	$0	$0		$0
Contracts	$1,500,000	$0		$1,500,000
Fee Acquisition w/ PILT	$0	$0		$0
Fee Acquisition w/o PILT	$0	$0		$0
Easement Acquisition	$0	$300,000	CREP, RIM, Local Tax Levy	$300,000
Easement Stewardship	$0	$0		$0
Travel	$0	$0		$0
Professional Services	$200,000	$50,000	Local Tax Levy	$250,000
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	$0	$0		$0
DNR IDP	$0	$0		$0
Total	$1,700,000	$350,000	-	$2,050,000

Amount of Request:	$1,700,000
Amount of Leverage:	$350,000
Leverage as a percent of the Request:	20.59%
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?

All of the Contract amount is for Restoration and Enhancement work

Describe and explain leverage source and confirmation of funds:

The BRRWD is coordinating with BWSR and landowners to utilize programs (CRP, CREP, RIIM) to implement the project to the extent possible. These funds have not been confirmed. The Watershed District has tax levy authority to raise some project funding as well.

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:

Reduced funding will limit the length of stream restoration work that can be completed. The restoration reach will be shortened as needed given the length that can be funded. As funding allows, additional stream restoration work will occur upstream or downstream. The BRRWD will continue to look for additional funding to stretch what funding the LSOHC provides.

Output Tables

Table 1a. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	55	55
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	45	0	0	45
Total	0	45	0	55	100

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

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

Table 2. Total Requested Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	$0	$0	$0	$1,600,000	$1,600,000
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	$100,000	$0	$0	$100,000
Total	$0	$100,000	$0	$1,600,000	$1,700,000

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	0	0	0	55	0	55
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	45	0	45
Total	0	0	0	100	0	100

Table 4. Total Requested Funding within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	$0	$0	$0	$1,600,000	$0	$1,600,000
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	$100,000	$0	$100,000
Total	$0	$0	$0	$1,700,000	$0	$1,700,000

Table 5. Average Cost per Acre by Resource Type

Type	Wetlands	Prairies	Forest	Habitats
Restore	$0	$0	$0	$29,091
Protect 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	$0	$0	$0	$0
Enhance	$0	$2,222	$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	$29,091	$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	$0	$0
Enhance	$0	$0	$0	$2,222	$0

Target Lake/Stream/River Feet or Miles

4.6

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:

While numerous reaches in the Buffalo River watershed are identified, the South Branch of the Buffalo River restoration reach is being prioritized for implementation. This project is nearly shovel ready and will be by the time LSOHC funding is available. Significant benefits both habitat and secondarily to water quality and flood damage reduction are expected by this project.

Section 1 - Restore / Enhance Parcel List

Clay

Name	TRDS	Acres	Est Cost	Existing Protection?
01.010.3770	13747210	0	$0	No
01.010.4001	13747210	0	$0	No
01.014.3000	13747214	0	$0	No
01.015.0300	13747215	0	$0	Yes
01.015.1000	13747215	0	$0	No
01.015.2000	13747215	0	$0	No
01.023.0100	13747223	0	$0	No
01.023.2201	13747223	0	$0	No
01.023.4000	13747223	0	$0	No
01.023.4002	13747223	0	$0	No
01.024.0000	13747224	0	$0	No
01.024.4000	13747224	0	$0	No
01.025.1000	13747225	0	$0	No
01.025.4000	13747225	0	$0	No
01.036.0100	13747236	0	$0	No
01.036.1100	13747236	0	$0	No
02.018.3000	13746218	0	$0	No
02.019.0200	13746219	0	$0	No
02.019.1101	13746219	0	$0	No
02.019.1500	13746219	0	$0	No
02.020.1000	13746220	0	$0	No
02.020.1101	13746220	0	$0	No
02.020.2000	13746220	0	$0	No
02.020.2201	13746220	0	$0	No
02.021.1800	13746221	0	$0	No
02.021.2000	13746221	0	$0	No
02.021.4000	13746221	0	$0	No
02.021.4330	13746221	0	$0	No
02.022.3000	13746222	0	$0	No
02.022.4400	13746222	0	$0	Yes
02.022.4600	13746222	0	$0	No
02.023.3001	13746223	0	$0	No
02.023.3301	13746223	0	$0	No
02.023.3701	13746223	0	$0	No
02.030.0300	13746230	0	$0	No
02.031.0400	13746231	0	$0	No
02.031.2000	13746231	0	$0	No
02.031.2001	13746231	0	$0	No
02.031.3000	13746231	0	$0	No
02.032.1000	13746232	0	$0	No
02.032.2000	13746232	0	$0	No

Wilkin

Name	TRDS	Acres	Est Cost	Existing Protection?
03-018-0100	13646218	0	$0	Yes
03-018-0110	13646218	0	$0	No
03-018-0200	13646218	0	$0	Yes
03-018-0400	13646218	0	$0	No
03-018-0500	13646218	0	$0	No
03-019-0100	13646219	0	$0	No
03-019-0115	13646219	0	$0	No
03-019-0500	13646219	0	$0	No
03-020-0200	13646220	0	$0	Yes
03-020-0300	13646220	0	$0	Yes
03-029-0300	13646229	0	$0	No
03-029-0310	13646229	0	$0	No
03-029-0400	13646229	0	$0	No
03-029-0500	13646229	0	$0	No
03-030-0100	13646230	0	$0	No
03-030-0400	13646230	0	$0	Yes
03-031-0100	13646231	0	$0	Yes
03-031-0200	13646231	0	$0	Yes
03-031-0400	13646231	0	$0	Yes
03-031-0500	13646231	0	$0	Yes
10-001-0300	13647201	0	$0	No
10-001-0500	13647201	0	$0	Yes
10-002-0100	13647202	0	$0	No
10-002-0200	13647202	0	$0	No
10-002-0400	13647202	0	$0	No
10-011-0100	13647211	0	$0	Yes
10-011-0300	13647211	0	$0	No
10-012-0100	13647212	0	$0	No
10-012-0200	13647212	0	$0	Yes
10-012-0300	13647212	0	$0	No
10-012-0400	13647212	0	$0	Yes
10-013-0100	13647213	0	$0	No
12-004-0400	13546204	0	$0	Yes
12-005-0200	13546205	0	$0	Yes
12-005-0300	13546205	0	$0	Yes
12-005-0600	13546205	0	$0	Yes
12-006-0100	13546206	0	$0	Yes
12-009-0100	13546209	0	$200,000	Yes
12-010-0100	13546210	0	$600,000	No
12-011-0100	13546211	0	$500,000	Yes
12-011-0200	13546211	0	$400,000	Yes

Section 2 - Protect Parcel List

No parcels with an activity type protect.

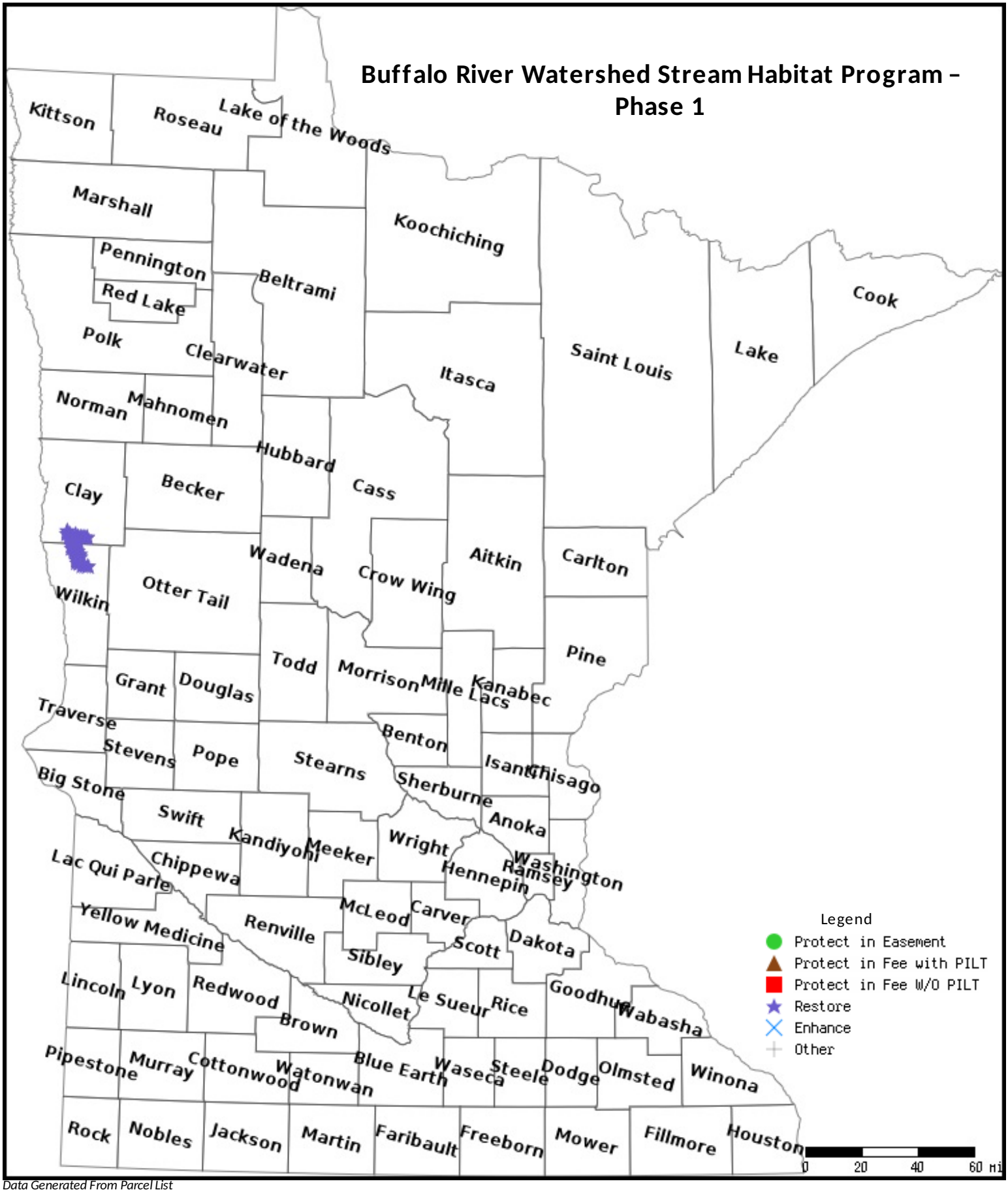
Section 2a - Protect Parcel with Bldgs

No parcels with an activity type protect and has buildings.

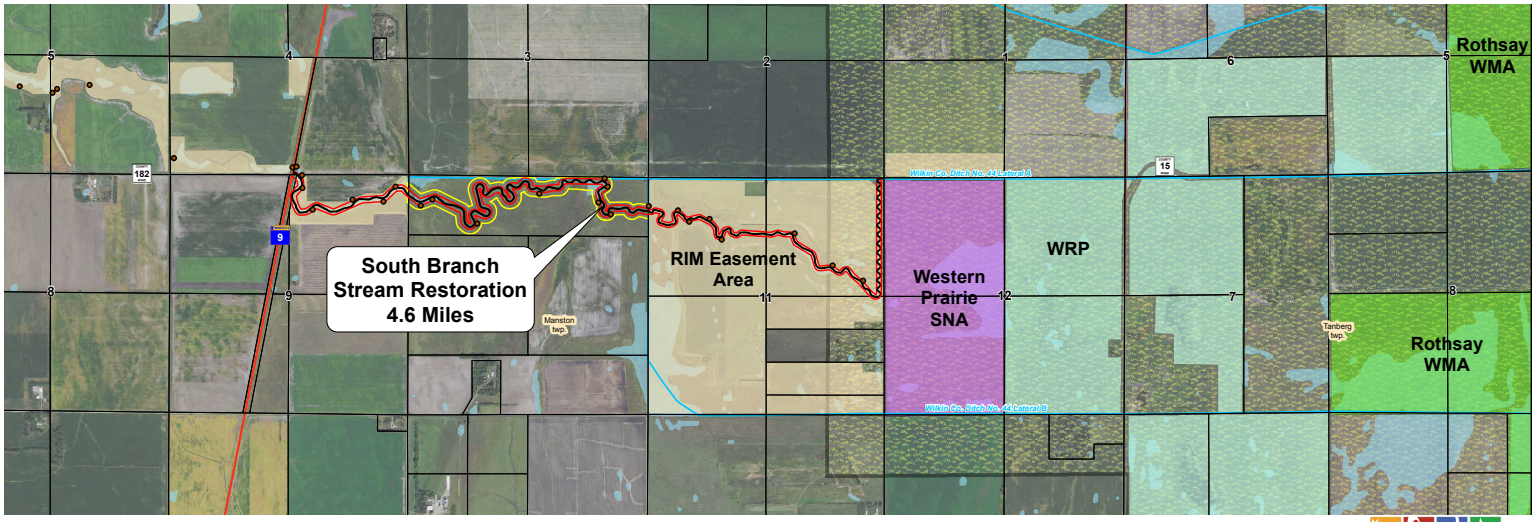
Section 3 - Other Parcel Activity

No parcels with an other activity type.

Parcel Map



Data Generated From Parcel List



Buffalo River Watershed Stream Habitat Program—Phase 1

BUFFALO-RED RIVER WATERSHED DISTRICT

CLEAN WATER LAND & LEGACY AMENDMENT

Project Background & Scope

Over a century ago, the construction of several legal ditch systems and other channel straightening efforts eliminated hundreds of acres of quality of stream habitat within the Buffalo-Red River Watershed District (BRRWD). In some cases, the channelization simply straightened the stream channel and in others the constructed ditch diverted water away from the natural stream. Straightened channels create homogenous habitats, they no longer have the shallow riffles and deeper pools required by fish at various stages in their life cycle. The straightened reaches also tend to lose access to their floodplains which increases erosion in the channel and downstream flooding. In addition, aggradation of the downstream channel due to increased sediment loading reduces downstream habitat quality and makes downstream flooding worse.

Over the last several years, the BRRWD—with input and in partnership with landowners, federal, state, and local agencies—designed comprehensive subwatershed restoration plans and intends to implement these plans over the next several years. A component of these plans includes the restoration of numerous reaches of straightened and abandoned creek and river channel throughout the Watershed District. Prioritization of projects is largely based on projects ecological benefits, being shovel-ready and landowner and other stakeholder support.

In the first phase of this multi-phase project, the BRRWD plans to restore 4.6 miles of stream with a 100 plus acres of associated river habitat corridor along the South Branch of the Buffalo River. The project will divert water from Wilkin County Ditch No. 44 (formerly called Judicial Ditch 3) back into the abandoned South Branch channel. The South Branch will be restored using natural channel design principles. The river restoration has been designed with direct input from the MN DNR Stream Habitat Program as well as the MN Board of Water & Soil Resources (BWSR). A sinuous riffle-pool natural channel design is proposed to recreate the aquatic habitat diversity that was lost in the straightened ditch. The naturally stable restored channel will not only recreate habitat lost but will reduce the current erosion that is overloading downstream reaches of the South Branch. This project is being completed in conjunction with a Reinvest in Minnesota project being implemented by the MN BWSR.

As part of their comprehensive subwatershed planning process, the District has completed planning and design on three additional stream reaches which are included as part of this application package. These include the restoration of Whisky Creek and its tributary, and the remainder of the South Branch in Wilkin County and their riparian corridors. Additional stream restoration enhancement along the South Branch of the Buffalo River, and Whisky Creek will be completed as funding permits if additional sources of match funding become available. Ultimately these comprehensive projects will restore and enhance more than 38 miles of natural prairie stream channel and protect and restore over 1400 acres of floodplain wetland and grassland habitat along these restoration reaches.

Timeline

August 2017
Formally contact landowners along stream restoration *(begin acquisition)*

December 2017
Finalize restoration project construction plans *(pre-grant)*

June 2018
Establish local funding source *(pre-grant)*

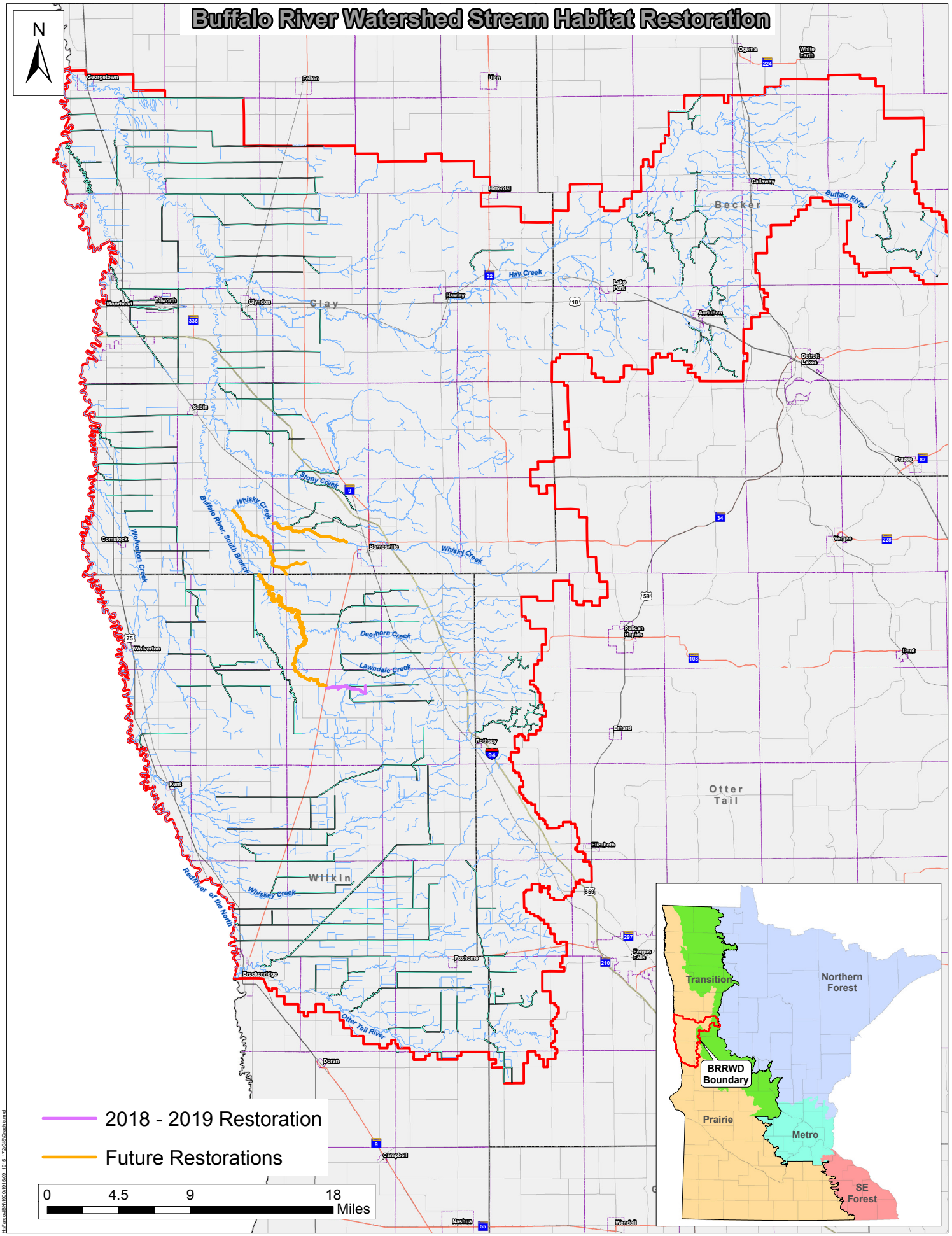
August 2018
Complete land acquisition

September 2018
Begin Construction

July 2019
Complete Construction *(South Branch Phase 1)*

Outcomes/Benefits

- 4.6 miles of restored stable natural meandering stream with functional floodplain to replace 2.7 miles of county ditch
- Habitat Connectivity Corridor provided between river riparian area and larger blocks of wetland and prairie habitat in WRP sites, the Manston Slough WMA, Manston Marsh WPA, Rothsay WMA, and Atherton.
- Runoff reduction
- Improved water quality
- Pollinator habitat buffers
- Over 100 acres of permanently protected, restored, and enhanced riparian prairie habitat.


Buffalo River Watershed Stream Habitat Restoration
N
Georgetown
Felton
Ulen
Ogema
White Earth
Hitterdal
Callaway
Becker
Buffalo River
Hay Creek
Lake Park
Audubon
Detroit Lakes
Hawley
Clay
Moorhead
Dilworth
Glyndon
Sabin
Stony Creek
Whisky Creek
Buffalo River, South Branch
Wolverton Creek
Comstock
Barnesville
Frazee
Vergas
Pelican Rapids
Perham
Wolverton
Deerhorn Creek
Lawndale Creek
Rothsay
Erhard
Otter Tail
Kent
Elizabeth
Wilkin
Red River of the North
Whiskey Creek
Foxhome
Fergus Falls
Breckenridge
Otter Tail River
Doran
Campbell
Nashua
Wendell
2018 - 2019 Restoration
Future Restorations
0
4.5
9
18
Miles
Transition
Northern Forest
BRRWD Boundary
Prairie
Metro
SE Forest

Clay Soil and Water Conservation District

1615 30th Avenue South ❖ Moorhead MN 56560 Phone: (218)287-2255
Fax: (218)287-1787

Our 72nd Anniversary
1945 - 2017

May 22, 2017

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

RE: Lessard Sams Outdoor Heritage Council Grant Application Letter of Support

Dear Buffalo-Red River 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 *"Whisky Creek and South Branch of the Buffalo River Restoration Projects"* grant application as proposed by the Buffalo-Red River Watershed District (BRRWD).

Through sound resource planning, the first phase of this multi-phase project provides for restoring over 4.5 miles of stream 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 the watercourses.

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 stream and river channel and improving the riparian corridor.

Sincerely,

Kevin Kassenborg

Kevin Kassenborg
Clay SWCD

WILKIN SOIL & WATER
CONSERVATION DISTRICT
1150 Hwy 75 North, Breckenridge, MN 56520 (218) 643-2933

May 24, 2017

Gerald Van Amburg, Chair
Buffalo Red River Watershed District
1303 4th Ave NE
PO Box 341
Barnesville, MN 56514

Dear Mr. Van Amburg,

The Wilkin Soil and Water Conservation District (SWCD) would like to express our support of the Buffalo Red River Watershed District's (BRRWD) application to the Lessard Sams Outdoor Heritage Council (LSOHC) for funding to restore high priority streams.

Your project to restore 4.6 miles of natural stream channels with meanders, pools and riffles and more than 100 acres of riparian corridors will result in the restoration and enhancement of valuable wetland and prairie habitats and benefit fish, game and other wildlife.

For decades the Wilkin SWCD has worked collaboratively with the BRRWD, landowners and other partners in the comprehensive watershed planning process and to complete many complex natural resource restoration and enhancement projects. We are confident that the acquisition of LSOHC funding when coupled with existing landowner and stakeholder support will result in another successful project.

Sincerely,

Don Bajumpaa
District Manager
Wilkin SWCD