



Lessard-Sams Outdoor Heritage Council

Buffalo-Red River Watershed District Stream Habitat Program – Phase 3
ML 2023 Request for Funding

General Information

Date: 06/16/2022

Proposal Title: Buffalo-Red River Watershed District Stream Habitat Program – Phase 3

Funds Requested: \$9,428,000

Manager Information

Manager's Name: Kristine Altrichter

Title: Administrator

Organization: Buffalo-Red River Watershed District

Address: 1303 4th Ave NE

City: Barnesville, MN 56514

Email: kaltrichter@brrwd.org

Office Number: 218-789-3100

Mobile Number:

Fax Number: 218-789-3900

Website: www.brrwd.org

Location Information

County Location(s): Wilkin, Becker and Clay.

Eco regions in which work will take place:

- Prairie

Activity types:

- Restore
- Enhance
- Protect in Easement

Priority resources addressed by activity:

- Prairie
- Habitat

Narrative

Abstract

A century of channel straightening has significantly reduced the habitat quality within the BRRWD. The BRRWD has identified, with preliminary designs completed, a number of straightened streams. In several multi-phase projects, the BRRWD in partnership with landowners, federal, state, and local agencies, will restore 4.2 miles of the South Branch Buffalo River, and 5.1 miles of Stony Creek and their respective riparian habitat corridors. Additional restorations of straightened streams include Upper Buffalo River, Whisky Creek, and Whiskey's Creek southern tributary (Phase 4). Easement acquisition of conservation lands will be required in corresponding project corridors.

Design and Scope of Work

Throughout the last century, channel straightening efforts and poor field practices have significantly reduced the habitat quality within BRRWD. Channel straightening efforts have eliminated hundreds of acres of quality stream habitat. Straightened channels create homogenous habitats that no longer have the shallow riffles and deeper pools that are required by fish at various stages in their life cycle. 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, 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 these multi-phase projects, the BRRWD plans to restore 4.2 miles of the South Branch Buffalo River with 894-acres of associated riparian habitat corridor to be acquired and restored, and 5.1 miles of Stony Creek with 190-acres of associated riparian habitat corridor to be acquired and restored. Requiring land often creates time constraints and delays project progress. To ensure timely progress on proposed and future phases of these projects, easement acquisition for additional future phases are considered in this proposal. The South Branch Buffalo River and Stony Creek will be restored using natural channel design principles. River restorations have been designed with direct input from the MN DNR River Ecology Unit 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 channel. Naturally stable restored channels will not only recreate lost habitat but will reduce the current erosion that is overloading downstream reaches of the South Branch Buffalo River and Stony Creek. The easement acquisition part of this project is proposed to be completed using the Reinvest in Minnesota project implemented by MN BWSR. As part of their comprehensive subwatershed planning process, BRRWD 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 (14.5 miles), Whiskey Creek, its south tributary (1.18 miles, Phase 4), and the Upper Buffalo River (16 miles) and their associated riparian corridors. Additional stream restoration enhancement along Whisky Creek, Whiskey Creek, and the Upper Buffalo River 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 32 miles of natural prairie stream. Ultimately, over 1,750 acres of stream, river, floodplain, wetland, and grassland habitat along these restoration reaches will be protected and restored.

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?

These stream restoration projects, South Branch Buffalo River (4.2 miles) and Stony Creek (5.1 miles), will restore a combined total of 9.5 miles of stream and riparian habitat for associated fish and wildlife communities and are a part of the long-term effort within the BRRWD. These projects will also benefit mussel and insect populations along and downstream of the South Branch Buffalo River and Stony Creek by improving water quality. Pollinator seed mixes will be used along the habitat corridors. These projects will provide enhanced wildlife corridors. 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 is one upland species that will also benefit from the permanent protection of upland areas.

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 Buffalo River and Stony Creek have been degraded for some time. What has changed is that landowners are ready to implement the proposed project. Some RIM and WRP easements have closed in the last several years along the corridor. 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 projects 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.

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 South Branch project is located in the vicinity of the Rothsay WMA (4 miles east), Manston WMA (2 miles southwest), Atherton WMA (1 mile northeast), soon to be established Rogelstad WMA (1 mile east) and a designated trout stream (Lawndale Creek). In addition, RIM easements, an SNA, and a number of WRP projects in the South Branch project area connect the project in a continuous habitat corridor directly to the Rothsay WMA. The South Branch project would be adjacent to the Rothsay Prairie which is identified in the MN Prairie Conservation Plan as a core area. The Upper Buffalo project is located in the vicinity of the Ogema WMA (1 mile east), Riparia WMA (adjacent to project), Pednor WMA (2 miles northwest), Matter WPA, Donley/Tillman WPA, Buchl WPA, and Hamden Slough NWR. The Upper Buffalo project is in the Waubun 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.

Which two sections of the Minnesota Statewide Conservation and Preservation Plan are most 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 two 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 these multi-phase projects, the BRRWD plans to restore 9.5 miles of natural stream with an associated river habitat corridor along the South Branch Buffalo River and Stony Creek. 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 projects, South Branch Buffalo River and Stony Creek, will restore 9.5 miles of in-stream habitats. Riparian vegetation will be restored to stabilize stream banks (several state and federal programs, such as RIM and CREP, may potentially provide financial assistance). Natural channel restoration designs will be constructed where streams have been channelized to provide better access of floodplain to dissipate stream energy and allow the river room to meander, which will provide more diverse habitat for aquatic organisms. This project will build on previous conservation efforts in the areas. The project adds onto a significant block of habitat previously restored wetlands and upland vegetation that were established under RIM and WRP as well as on State and Federal lands. These efforts combined with the proposed project hold water on the landscape and allow for increased infiltration, which will help mitigate the altered hydrology of the watershed and helps habitat by providing a more natural flow regime.

What other fund may contribute to this proposal?

- Clean Water Fund

Does this proposal include leveraged funding?

Yes

Explain the leverage:

The BRRWD has existing Clean Water Fund Grants through with the MN BWSR and will work with and encourage landowners to utilize programs (CREP, RIM) to implement the project to the extent possible. These programs require landowners to apply and it is expected that landowners will participate. Local tax levy funds will also be used as leverage funds. The BRRWD also expects to receive funding from the NRCS through their National Water Quality Initiative (NWQI) program.

Per MS 97A.056, Subd. 24, Please explain 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.

The funding provided by the Outdoor Heritage Fund does not supplant or substitute for any previous funding.

Non-OHF Appropriations

Year	Source	Amount
2010	MN BWSR - RIM	478,094.83
2013	Clean Water Fund	336,000
2013-2021	Local Tax Levy	400,000
2016	MN BWSR - RIM	1,063,106.25
2020-2023	National Water Quality Initiative (NRCS)	2,900,000
2020-2023	Conservation Reserve Enhancement Project	1,500,000
2020-2023	National Water Quality Initiative (NRCS)	39,000
2021	Clean Water Fund	300,000
2021	USFWS – Great Plains Fish Habitat Partnership	50,000
2021	Clean Water Fund	320,000
2021	Watershed Based Implementation Funding	400,000
2021	DNR Flood Hazard Mitigation Program	320,000
2022	National Water Quality Initiative (NRCS)	45,500
2022	Clean Water Fund	350,000

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 the project. The locally raised levy will provide an annual revenue stream for maintenance. Post-project monitoring will be conducted by the BRRWD, the Riverwatch Program, and the International Water Institute, as project partners. Additionally, once RIM easement is acquired, BWSR is responsible for monitoring and enforcement into perpetuity. The BWSR partners with local SWCDs to carry-out oversight, monitoring, and inspection of its conservation easements. On-site inspections are conducted every three years and compliance checks are performed every two years. SWCDs report to BWSR on each site inspection. Perpetual monitoring and enforcement cost have been calculated at \$6,500 per easement based on local SWCD rates.

Actions to Maintain Project Outcomes

Year	Source of Funds	Step 1	Step 2	Step 3
2021 - Ongoing	Stewardship Account	Inspection every year for first 5-years; then every 3rd year	Corrective actions on any violations	Enforcement action taken by MN Attorney General Office
2021 - Ongoing	Landowner Responsibility	Maintain compliance with easement terms	-	-

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

Restoration of the South Branch Buffalo River and Stony Creek will provide 9.5 miles of improved stream channel and riparian corridor 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. 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 channel 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 1,084 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 1,084 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.

How will the program directly involve, engage, and benefit BIPOC (Black, Indigenous, People of Color) and diverse communities:

The Upper Buffalo project is located within the White Earth Indian Reservation. The 150 acres of restored floodplain, wetland, and grassland habitat area, in addition to the 7 miles of restored channel, will have a direct positive impact on the Indigenous community throughout the White Earth Indian Reservation.

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 (easement) 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 restoration and enhancement activity on permanently protected land per 97A.056, Subd 13(f), tribal lands, and/or public waters per MS 103G.005, Subd. 15?

Yes

Where does the activity take place?

- Permanently Protected Conservation Easements
- Public Waters

Land Use

Will there be planting of 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 proposed acquisitions?

Yes

Describe the types of trails or roads and the allowable uses:

Roads or trails are typically excluded from the easement area if they serve no beneficial purpose to easement maintenance, monitoring, or enforcement. Existing trails and roads are identified during the easement acquisition process. Some roads and trails, such as agricultural field accesses, are allowed to remain.

Will the trails or roads remain and uses continue to be allowed after OHF acquisition?

Yes

How will maintenance and monitoring be accomplished?

The easements secured under this project will be managed as part of the MN Board of Water and Soil Resources (BWSR) RIM Reserve Program that has over 7,196 easements currently in place. Easements are monitored annually for each of the first 5 years and then every 3rd year after that. BWSR, in cooperation with Soil and Water Conservation Districts (SWCD), implement a stewardship process to track, monitor quality and assure compliance with easement terms. Under the terms of the Reinvest In Minnesota (RIM) Easement Program, landowners are required to maintain compliance with the easement. A conservation plan is developed with the landowner and maintained as part of each easement. Basic easement compliance costs are borne by the landowner, periodic enhancements may be cost shared from a variety of sources.

Will new trails or roads be developed or improved as a result of the OHF acquisition?

Yes

Describe the types of trails or roads and the allowable uses:

Roads or trails are typically excluded from the easement area if they serve no beneficial purpose to easement maintenance, monitoring, or enforcement. Existing trails and roads are identified during the easement acquisition process. Some roads and trails, such as agricultural field accesses, are allowed to remain.

How will maintenance and monitoring be accomplished?

The easements secured under this project will be managed as part of the MN Board of Water and Soil Resources (BWSR) RIM Reserve Program that has over 7,196 easements currently in place. Easements are monitored annually for each of the first 5 years and then every 3rd year after that. BWSR, in cooperation with Soil and Water Conservation Districts (SWCD), implement a stewardship process to track, monitor quality and assure compliance with easement terms. Under the terms of the Reinvest In Minnesota (RIM) Easement Program, landowners are required to maintain compliance with the easement. A conservation

plan is developed with the landowner and maintained as part of each easement. Basic easement compliance costs are borne by the landowner, periodic enhancements may be cost shared from a variety of sources.

Will the land that you acquire (fee or easement) be restored or enhanced within this proposal's funding and availability?

Yes

Other OHF Appropriation Awards

Have you received OHF dollars in the past through LSOHC?

Yes

Approp Year	Approp Amount Received	Amount Spent to Date	Leverage Reported in AP	Leverage Realized to Date	Acres Affected in AP	Acres Affected to Date	Complete/Final Report Approved?
2021	\$2,335,000	\$100,000	-	-	-	0	No
2018	\$1,195,000	\$200,000	\$355,000	\$55,000	78	0	No
2017	\$1,877,000	\$1,877,000	\$3,234,500	\$3,234,500	650	650	Yes

Timeline

Activity Name	Estimated Completion Date
Establish local funding source (pre-grant)	June 2023
Contact landowners along stream restoration as part of the acquisition process	Ongoing through August 2023
Finalize construction plans for the South Branch Buffalo River and Stony Creek projects (pre-grant)	December 2023
Begin construction	May 2024
Complete land acquisition	August 2025
Complete construction and restoration (South Branch Buffalo River and Stony Creek)	June 2028

Budget**Grand Totals Across All Partnerships**

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Personnel	\$360,200	-	-	\$360,200
Contracts	\$4,102,000	\$4,055,000	Clean Water Fund, NWQI, USFWS	\$8,157,000
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	\$3,764,500	\$900,000	-, CREP, RIM, Local Tax Levy, DNR FHMP	\$4,664,500
Easement Stewardship	\$331,500	-	-	\$331,500
Travel	\$8,100	-	-	\$8,100
Professional Services	\$800,000	\$400,000	Local Tax Levy, Clean Water Fund	\$1,200,000
Direct Support Services	\$45,600	-	-	\$45,600
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	\$11,600	-	-	\$11,600
Supplies/Materials	\$4,500	-	-	\$4,500
DNR IDP	-	-	-	-
Grand Total	\$9,428,000	\$5,355,000	-	\$14,783,000

Partner: BWSR

Totals

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Personnel	\$360,200	-	-	\$360,200
Contracts	\$102,000	-	-	\$102,000
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	\$3,764,500	-	-	\$3,764,500
Easement Stewardship	\$331,500	-	-	\$331,500
Travel	\$8,100	-	-	\$8,100
Professional Services	-	-	-	-
Direct Support Services	\$45,600	-	-	\$45,600
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	\$11,600	-	-	\$11,600
Supplies/Materials	\$3,500	-	-	\$3,500
DNR IDP	-	-	-	-
Grand Total	\$4,627,000	-	-	\$4,627,000

Personnel

Position	Annual FTE	Years Working	Funding Request	Antic. Leverage	Leverage Source	Total
Easement Processing	0.65	5.0	\$360,200	-	-	\$360,200

Partner: BRRWD**Totals**

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Personnel	-	-	-	-
Contracts	\$4,000,000	\$4,055,000	Clean Water Fund, NWQI, USFWS	\$8,055,000
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	\$900,000	CREP, RIM, Local Tax Levy, DNR FHMP	\$900,000
Easement Stewardship	-	-	-	-
Travel	-	-	-	-
Professional Services	\$800,000	\$400,000	Local Tax Levy, Clean Water Fund	\$1,200,000
Direct Support Services	-	-	-	-
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	-	-	-	-
Supplies/Materials	\$1,000	-	-	\$1,000
DNR IDP	-	-	-	-
Grand Total	\$4,801,000	\$5,355,000	-	\$10,156,000

Amount of Request: \$9,428,000**Amount of Leverage:** \$5,355,000**Leverage as a percent of the Request:** 56.8%**DSS + Personnel:** \$405,800**As a % of the total request:** 4.3%**Easement Stewardship:** \$331,500**As a % of the Easement Acquisition:** 8.81%**Describe and explain leverage source and confirmation of funds:**

The BRRWD is coordinating with BWSR and landowners to utilize programs (CREP, RIM) 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

If the project received 70% of the requested funding**Describe how the scaling would affect acres/activities and if not proportionately reduced, why?**

Reduced funding will limit the length of stream restoration and acres of conservation easement work. Restoration reaches would be shortened by more than 30%. As funding allows, additional stream restoration work will occur upstream or downstream. The BRRWD will continue to look for additional funding to stretch what LSOHC provides.

Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?

Reduced funding will limit the number of completed easements. The number of easements would be reduced by approximately 30%. As funding allows, additional easements would be completed. The BRRWD will continue to look for additional funding to stretch what LSOHC provides.

If the project received 50% of the requested funding

Describe how the scaling would affect acres/activities and if not proportionately reduced, why?

Reduced funding will limit the length of stream restoration and acres of conservation easement work. Restoration reaches would be shortened by more than 50%. As funding allows, additional stream restoration work will occur upstream or downstream. The BRRWD will continue to look for additional funding to stretch what LSOHC provides.

Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?

Reduced funding will limit the number of completed easements. The number of easements would be reduced by approximately 50%. As funding allows, additional easements would be completed. The BRRWD will continue to look for additional funding to stretch what LSOHC provides.

Personnel

Has funding for these positions been requested in the past?

No

Contracts

What is included in the contracts line?

Restoration and enhancement work to include the implementation of the project, including 9.5 miles of stream restoration and over 1,084 acres of associated riparian habitat to be acquired and restored. The contract line will also be used for payments to SWCD staff for easement implementation.

Easement Stewardship

What is the number of easements anticipated, cost per easement for stewardship, and explain how that amount is calculated?

Perpetual monitoring and enforcement costs have been calculated at \$6,500 per easement. This value is based on using local SWCD staff for monitoring and landowner relations and existing enforcement authorities. The amount listed for easement stewardship covers cost of the SWCD regular monitoring, BWSR oversight and any enforcement necessary.

Travel

Does the amount in the travel line include equipment/vehicle rental?

No

Explain the amount in the travel line outside of traditional travel costs of mileage, food, and lodging

The travel line will only be used for traditional costs with the addition of vehicle lease costs that are directly attributable to work completed with this appropriation. It is estimated that lease costs may amount to approximately 40% of travel costs for this appropriation.

I understand and agree that lodging, meals, and mileage must comply with the current MMB Commissioner Plan:

Yes

Direct Support Services

How did you determine which portions of the Direct Support Services of your shared support services is direct to this program?

BWSR calculates direct support services costs that are directly related to and necessary for each request based on the type of work being done.

Other Equipment/Tools

Give examples of the types of Equipment and Tools that will be purchased?

Signs, posts and field equipment.

Federal Funds

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?

12/31/2022

Output Tables**Acres by Resource Type (Table 1)**

Type	Wetland	Prairie	Forest	Habitat	Total Acres
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	974	0	110	1,084
Enhance	0	-	0	-	0
Total	0	974	0	110	1,084

Total Requested Funding by Resource Type (Table 2)

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	\$4,627,000	-	\$4,801,000	\$9,428,000
Enhance	-	-	-	-	-
Total	-	\$4,627,000	-	\$4,801,000	\$9,428,000

Acres within each Ecological Section (Table 3)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
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	1,084	0	1,084
Enhance	0	0	0	-	0	0
Total	0	0	0	1,084	0	1,084

Total Requested Funding within each Ecological Section (Table 4)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
Restore	-	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	\$9,428,000	-	\$9,428,000
Enhance	-	-	-	-	-	-
Total	-	-	-	\$9,428,000	-	\$9,428,000

Average Cost per Acre by Resource Type (Table 5)

Type	Wetland	Prairie	Forest	Habitat
Restore	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	\$4,750	-	\$43,645
Enhance	-	-	-	-

Average Cost per Acre by Ecological Section (Table 6)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-

Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	\$8,697	-
Enhance	-	-	-	-	-

Target Lake/Stream/River Feet or Miles

9.5

Outcomes

Programs in prairie region:

- Protected, restored, and enhanced habitat for migratory and unique Minnesota species ~ *Project outcomes are measured by the total acres of acquired and restored riparian habitat, in addition to the total stream miles restored.*

Parcels**Sign-up Criteria?**

No

Explain the process used to identify, prioritize, and select the parcels on your list:

While numerous reaches in the BRRWD are identified, the South Branch Buffalo River and Stony Creek restoration reaches are being prioritized for implementation. These projects are nearly shovel ready and will be by the time LSOHC funding is available. Significant benefits to habitat, water quality, and flood damage reduction are expected by these projects.

Restore / Enhance Parcels

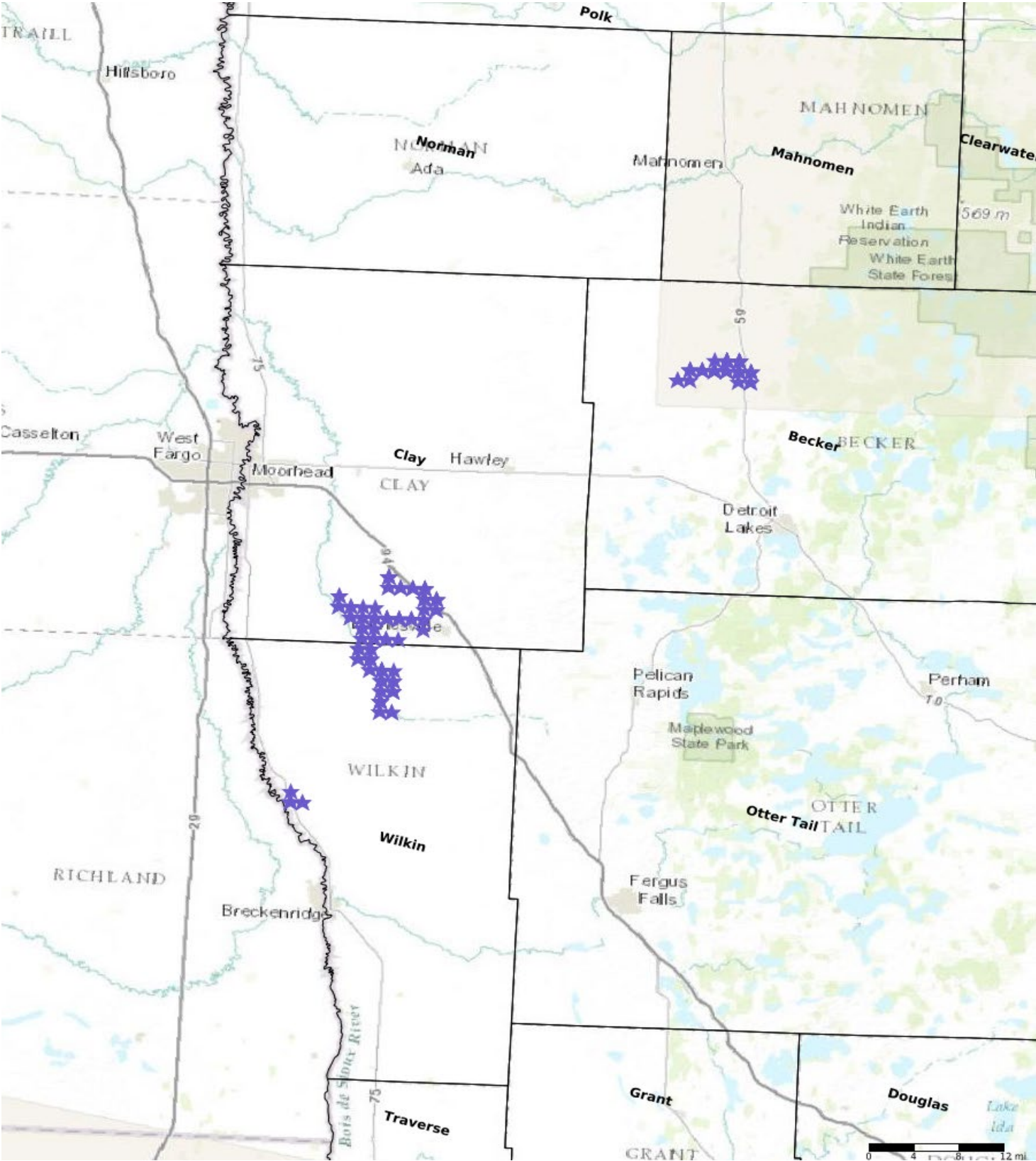
Name	County	TRDS	Acres	Est Cost	Existing Protection
23.0106.000	Becker	14142220	0	\$0	No
04.0031.000	Becker	14141207	5	\$0	No
04.0034.000	Becker	14141207	22	\$0	No
04.0035.000	Becker	14141207	4	\$0	No
04.0036.000	Becker	14141207	3	\$0	No
04.0038.000	Becker	14141207	37	\$0	No
23.0048.000	Becker	14142211	24	\$0	No
23.0052.000	Becker	14142212	37	\$0	No
23.0053.000	Becker	14142212	3	\$0	No
23.0054.000	Becker	14142212	2	\$0	No
23.0054.001	Becker	14142212	1	\$0	No
23.0055.000	Becker	14142212	15	\$0	No
23.0055.001	Becker	14142212	5	\$0	No
23.0056.000	Becker	14142212	26	\$0	No
23.0056.001	Becker	14142212	33	\$0	No
23.0060.000	Becker	14142213	12	\$0	No
23.7018.001	Becker	14142214	0	\$0	No
04.0033.000	Becker	14141207	10	\$0	No
04.0036.000	Becker	14141207	0	\$0	No
04.0038.000	Becker	14141207	46	\$0	No
04.0084.001	Becker	14141217	0	\$0	No
04.0084.002	Becker	14141217	1	\$0	No
04.0085.000	Becker	14141217	3	\$0	No
04.0089.000	Becker	14141217	14	\$0	No
04.0090.000	Becker	14141218	8	\$0	No
04.0090.001	Becker	14141218	15	\$0	No
04.0091.000	Becker	14141218	23	\$0	No
04.0092.000	Becker	14141218	19	\$0	No
04.0092.003	Becker	14141218	0	\$0	No
04.0093.000	Becker	14141218	17	\$0	No
04.0094.000	Becker	14141218	0	\$0	No
04.0094.001	Becker	14141218	9	\$0	No
04.0098.000	Becker	14141219	0	\$0	No
04.0101.000	Becker	14141220	2	\$0	No
04.0103.000	Becker	14141220	25	\$0	No
04.8901.000	Becker	14141218	3	\$0	No
23.0055.000	Becker	14142212	2	\$0	No
23.0055.001	Becker	14142212	45	\$0	No
23.0056.001	Becker	14142212	11	\$0	No
23.0060.000	Becker	14142213	19	\$0	No
23.0063.000	Becker	14142214	39	\$0	No

23.0066.000	Becker	14142215	19	\$0	No
23.0068.000	Becker	14142215	21	\$0	No
23.0069.000	Becker	14142215	4	\$0	No
23.0075.000	Becker	14142216	12	\$0	No
23.0077.000	Becker	14142216	30	\$0	No
23.0078.000	Becker	14142216	0	\$0	No
23.0080.000	Becker	14142216	16	\$0	No
23.0105.000	Becker	14142220	0	\$0	No
23.7022.000	Becker	14142215	33	\$0	No
23.7021.000	Becker	14142214	1	\$0	No
23.7020.000	Becker	14142214	0	\$0	No
23.7018.001	Becker	14142214	0	\$0	No
23.7018.000	Becker	14142214	20	\$0	No
23.7017.000	Becker	14142214	17	\$0	No
23.7015.000	Becker	14142213	10	\$0	No
23.0108.000	Becker	14142221	61	\$0	No
02.011.4702	Clay	13746211	11	\$97,066	No
02.020.1101	Clay	13746220	24	\$0	No
02.020.1000	Clay	13746220	19	\$0	No
02.019.1500	Clay	13746219	38	\$0	No
02.019.1101	Clay	13746219	4	\$0	No
02.019.0200	Clay	13746219	16	\$0	No
02.018.3000	Clay	13746218	39	\$0	No
01.036.1100	Clay	13747236	2	\$0	No
01.036.0100	Clay	13747236	25	\$0	No
01.025.4600	Clay	13747225	1	\$0	No
01.025.4000	Clay	13747225	39	\$0	No
01.025.1000	Clay	13747225	41	\$0	No
01.024.4000	Clay	13747224	15	\$0	No
01.024.0000	Clay	13747224	49	\$0	No
01.023.4002	Clay	13747223	8	\$0	No
01.023.4000	Clay	13747223	16	\$0	No
01.023.2201	Clay	13747223	2	\$0	No
01.023.0100	Clay	13747223	53	\$0	No
01.015.2000	Clay	13747215	2	\$0	No
01.015.1000	Clay	13747215	48	\$0	No
01.015.0300	Clay	13747215	9	\$0	Yes
01.014.3000	Clay	13747214	31	\$0	No
01.014.2000	Clay	13747214	1	\$0	No
01.013.4700	Clay	13747213	2	\$0	No
01.010.4001	Clay	13747210	3	\$0	No
01.010.3770	Clay	13747210	3	\$0	No
02.013.2500	Clay	13746213	6	\$0	No
05.032.3700	Clay	13846232	1	\$0	No
05.032.3500	Clay	13846232	1	\$0	No
02.012.3500	Clay	13746212	18	\$0	No
02.011.1800	Clay	13746211	5	\$0	No
02.005.1000	Clay	13746205	6	\$0	No
02.004.2000	Clay	13746204	41	\$0	No
02.003.0100	Clay	13746203	42	\$0	No
02.003.0300	Clay	13746203	9	\$0	No
02.002.3100	Clay	13746202	0	\$0	No
02.002.4401	Clay	13746202	1	\$0	No
02.011.1600	Clay	13746211	41	\$0	No
02.011.4701	Clay	13746211	7	\$0	No
02.014.0170	Clay	13746214	0	\$0	No
02.013.2200	Clay	13746213	2	\$0	No

02.000.0050	Clay	13746212	3	\$0	No
02.002.3700	Clay	13746202	31	\$273,550	No
02.000.0050	Clay	13746212	1	\$7,806	No
05.032.4000	Clay	13846232	37	\$313,916	No
02.004.1000	Clay	13746204	41	\$360,774	No
02.013.9001	Clay	13746213	0	\$0	No
02.005.1801	Clay	13746205	20	\$168,341	No
02.002.3200	Clay	13746202	12	\$105,890	No
02.003.0310	Clay	13746203	37	\$293,923	No
02.060.0101	Clay	13746220	1	\$0	No
02.033.2060	Clay	13746233	0	\$0	No
02.032.3000	Clay	13746232	1	\$0	No
02.032.2000	Clay	13746232	32	\$0	No
02.032.1000	Clay	13746232	31	\$0	No
02.031.3000	Clay	13746231	22	\$0	No
02.031.2002	Clay	13746231	0	\$0	No
02.031.2001	Clay	13746231	1	\$0	No
02.031.2000	Clay	13746231	25	\$0	No
02.031.0400	Clay	13746231	64	\$0	No
02.030.0300	Clay	13746230	6	\$0	No
02.026.2000	Clay	13746226	1	\$0	No
02.023.3701	Clay	13746223	30	\$0	No
02.023.3001	Clay	13746223	8	\$0	No
02.022.4600	Clay	13746222	20	\$0	Yes
02.022.4400	Clay	13746222	13	\$0	Yes
02.022.3000	Clay	13746222	30	\$0	No
02.021.4330	Clay	13746221	1	\$0	No
02.021.4000	Clay	13746221	15	\$0	No
02.021.2000	Clay	13746221	47	\$0	No
02.021.1800	Clay	13746221	3	\$0	No
02.020.2201	Clay	13746220	28	\$0	No
02.020.2000	Clay	13746220	19	\$0	No
12.005.0300	Wilkin	13546205	23	\$193,599	Yes
12.005.0200	Wilkin	13546205	13	\$114,587	Yes
12.006.0100	Wilkin	13546206	44	\$375,790	Yes
12.006.0100	Wilkin	13546206	1	\$8,795	Yes
03.017.0430	Wilkin	13646217	1	\$4,397	No
03.018.0500	Wilkin	13646218	18	\$149,039	No
03.018.0400	Wilkin	13646218	24	\$208,705	No
03.018.0110	Wilkin	13646218	3	\$27,438	Yes
03.018.0100	Wilkin	13646218	36	\$311,089	Yes
03.018.0200	Wilkin	13646218	64	\$550,376	Yes
03.020.0300	Wilkin	13646220	51	\$416,804	Yes
03.019.0500	Wilkin	13646219	10	\$86,945	No
03.019.0115	Wilkin	13646219	2	\$16,582	No
03.019.0110	Wilkin	13646219	0	\$291	No
03.020.0200	Wilkin	13646220	29	\$240,457	Yes
03.019.0100	Wilkin	13646219	34	\$291,134	No
03.030.0400	Wilkin	13646230	45	\$361,785	Yes
03.029.0500	Wilkin	13646229	24	\$200,466	No
03.029.0400	Wilkin	13646229	9	\$80,284	No
03.030.0100	Wilkin	13646230	7	\$56,290	Yes
03.029.0310	Wilkin	13646229	4	\$35,756	No
03.029.0300	Wilkin	13646229	8	\$67,971	No
03.031.0400	Wilkin	13646231	17	\$138,559	Yes
03.031.0500	Wilkin	13646231	11	\$88,694	Yes
03.031.0100	Wilkin	13646231	33	\$289,240	Yes

03.031.0200	Wilkin	13646231	8	\$62,605	Yes
03.031.0300	Wilkin	13646231	0	\$949	No
10.012.0300	Wilkin	13647212	52	\$474,062	No
10.012.0400	Wilkin	13647212	74	\$663,185	Yes
10.012.0210	Wilkin	13647212	0	\$0	No
10.011.0100	Wilkin	13647211	18	\$165,818	Yes
10.012.0220	Wilkin	13647212	15	\$137,575	Yes
10.012.0100	Wilkin	13647212	18	\$165,818	Yes
10.011.0300	Wilkin	13647211	6	\$51,877	No
10.013.0100	Wilkin	13647213	21	\$188,383	No
10.013.0100	Wilkin	13647213	1	\$7,787	No
10.001.0500	Wilkin	13647201	31	\$270,556	Yes
10.002.0400	Wilkin	13647202	50	\$460,982	Yes
10.001.0300	Wilkin	13647201	2	\$21,146	Yes
10.002.0100	Wilkin	13647202	21	\$196,492	No
10.002.0200	Wilkin	13647202	33	\$308,252	No
10.012.0200	Wilkin	13647212	35	\$316,149	Yes
17.019.0400	Wilkin	13447219	32	\$0	No
17.019.0300	Wilkin	13447219	7	\$0	No
13.024.0110	Wilkin	13448224	11	\$0	No
13.024.0600	Wilkin	13448224	4	\$0	No
13.024.0200	Wilkin	13448224	4	\$0	No
13.024.0100	Wilkin	13448224	13	\$0	No
13.013.0510	Wilkin	13448213	1	\$0	No

Parcel Map



- Protect in Easement
- ▲ Protect in Fee with PILT
- Protect in Fee W/O PILT
- ★ Restore
- ✕ Enhance
- ⊕ Other



Buffalo River Watershed Stream Habitat Program—Phase 3

Project Background & Scope

Throughout the last century, channel straightening efforts and poor field practices have significantly reduced the habitat quality within the Buffalo-Red River Watershed District (BRRWD). Channel straightening efforts have eliminated hundreds of acres of quality stream habitat. Straightened channels create homogenous habitats that 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 third phase of this multi-phase project, the BRRWD plans to restore 4.2 miles of the South

Branch Buffalo River with 894 acres associated riparian habitat corridor, and 5.1 miles of the Stony Creek with 190-acres associated riparian habitat corridor. Requiring land often creates time constraints and delays project progress. To ensure timely progress on proposed and future phases of these projects, easement acquisition for additional future phases are considered in this proposal.

The South Branch Buffalo River and Stony Creek will be restored using natural channel design principles. The river restorations have been designed with direct input from the Minnesota Department of Natural Resources (DNR) River Ecology Unit as well as the Minnesota Board of Water and Soil Resources (BWSR).

A sinuous riffle-pool natural channel design is proposed to recreate the aquatic habitat diversity that was lost in the straightened channel. 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 Buffalo River and Stony Creek.

The easement acquisition part of this project is proposed to be completed using the Reinvest in Minnesota project implemented by BWSR. As part of their comprehensive subwatershed planning process, the District has completed planning and design on three additional stream reaches that are included as part of this application package.



These include the restoration of Whiskey Creek (14.5 miles), Whiskey Creek, its south tributary (1.18 miles, Phase 4), and the Upper Buffalo River (16 miles) and their associated riparian corridors. Additional stream restoration enhancement along the Whiskey Creek, Whiskey Creek, and the Upper Buffalo River 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 32 miles of natural prairie stream. **Ultimately, over 1,750 acres of stream, river, floodplain, wetland, and grassland habitat along these restoration reaches will be protected and restored.**

Outcomes/Benefits

- Over 1,084 acres of permanently protected, restored, and enhanced riparian prairie habitat
- 9.5 miles of restored stable natural meandering stream with functional floodplain
- Restored hydrology for riparian wetlands and uplands
- Runoff Reduction
- Improved water quality

Timeline

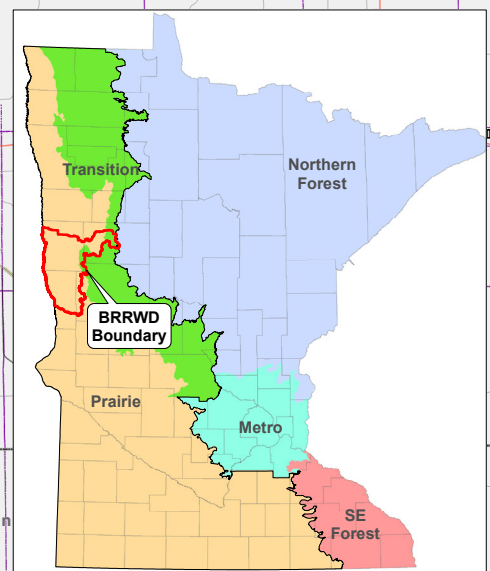


Buffalo River Watershed Stream Habitat Restoration

This map illustrates the Buffalo River Watershed, outlined in red, spanning across Clay, Wilkin, and Otter Tail counties. The map highlights stream habitat restoration projects:

- 2023-2026 Restorations:** Indicated by pink lines, these projects are located along Stony Creek, Buffalo River South Branch, and Whiskey Creek.
- Future Restorations:** Indicated by yellow lines, these projects are located along Whiskey Creek, Buffalo River South Branch, and the Red River of the North.

The map includes a north arrow, a scale bar (0 to 18 miles), and an inset map showing the location of the Buffalo River Watershed within the state of Minnesota. The inset map identifies the Transition, Northern Forest, Prairie, Metro, and SE Forest regions, with the BRRWD Boundary highlighted in green.



Future Restorations

0 4.5 9 18 Miles



May 19, 2022

Kristine Altrichter
Administrator
Buffalo-Red River Watershed District
1303 4th Ave NE
Barnesville, MN 56514

Dear Ms. Altrichter,
BWSR is pleased to partner with BRRWD on the Stream Habitat Program and application to the Lessard Sams Outdoor Heritage Council using the RIM Reserve easement program.

We look forward to working with you on this important project to restore habitat along portions of the South Branch Buffalo River, Stony Creek, Upper Buffalo River, Whisky Creek and Whiskey Creek.

Sincerely,

Sharon Doucette
Conservation Easement Section Manager

CC: Bennett Uhler, Erik Jones, Tyson Jeannotte, Houston Engineering
John Voz

Equal Opportunity Employer

Bemidji Brainerd Detroit Lakes Duluth Mankato Marshall Rochester St. Cloud St. Paul

St. Paul HQ

520 Lafayette Road North

St. Paul, MN 55155

Phone: (651) 296-3767

www.bwsr.state.mn.us

TTY: (800) 627-3529

An equal opportunity employer