

# Lessard-Sams Outdoor Heritage CouncilSwift Coulee Channel Restoration/ Enhancement - Phase 2ML 2026 Request for Funding

## General Information

**Date:** 06/26/2025

**Proposal Title:** Swift Coulee Channel Restoration/ Enhancement - Phase 2

**Funds Requested:** $3,564,000

**Confirmed Leverage Funds:** $1,036,700

**Is this proposal Scalable?:** Yes

### Manager Information

**Manager's Name:** Morteza Maher **Title:** Administrator **Organization:** Middle-Snake-Tamarac Rivers Watershed District **Address:** 453 North McKinley St.  **City:** Warren, MN 56762 **Email:** morteza.maher@mstrwd.org **Office Number:** 2187454741 **Mobile Number:** 2182305703 **Fax Number:**   **Website:** www.mstrwd.org

### Location Information

**County Location(s):** Marshall.

**Eco regions in which work will take place:**

Prairie

Forest / Prairie Transition

**Activity types:**

Enhance

Restore

**Priority resources addressed by activity:**

Prairie

Habitat

Wetlands

## Narrative

### Abstract

The Swift Coulee Channel Restoration Project is located in Marshall County and considered a Prairie Ecological-section.
Phase 2 of this project when completed will create perpetually protected habitat under the RIM program. Phase 2 will restore over 6 miles of altered natural channel and create a habitat corridor over 400 acres through an E-channel design (low-flow meander with floodplain valley).
LSOHC funded the RIM easement acquisition of Phase 1 in 2024 and that is currently under construction.
The 2024 allocation will cover the easement acquisition of phase 2. This application is for engineering, permitting and construction costs of Phase 2.

### Design and Scope of Work

Problem:
The Swift Coulee is not an exception to what is known as problem in the Prairie region of MN consisting of an altered natural waterway with degraded grasslands and native habitat adjacent to the coulee due to agricultural practices. Currently, the situation is unfavorable and fails to benefit the farmers and the ecosystem, as the waterway suffers from issues such as siltation, hybrid cattail proliferation, and recurrent flooding.

This project aims to address these critical challenges through the following initiatives:
1. Creation of a new low-flow meander and floodplain valley designed to reduce further siltation and side slope washouts.
2. Implementation of setback levees on both sides of the low-flow meander to establish a wider protective corridor. This will allow nearby farms to utilize Best Management Practices (BMPs) for effective drainage.
3. Development of habitats within the low-flow meander and floodplain valley corridor that will provide both upland and wetland habitat species, providing essential resources for resting, feeding, and living.
4. Vegetated protection of the entire project footprint through perpetual easements, with the MSTRWD assuming responsibility for ongoing maintenance according to established design criteria.

Scope of work:
The scope of work for Phase 2 related to this application includes: - Engineering, permitting, and construction of the described project in Sections 1, 2, 3, 4, 5, and 8 of McCrea Township, as well as Section 36 of Alma Township in Marshall County, Minnesota.

Priority Setting:
The Swift Coulee project has been a priority for the Middle-Snake-Tamarac Rivers Watershed District (MSTRWD) for over two decades and has consistently been included in the Watershed Management Plan. From the early 2000s, MSTRWD adopted a structured approach by forming a project work team that engaged all relevant state and federal agencies involved in permitting, as well as local authorities and landowners. This collaborative effort led to the development of an agreed-upon Purpose and Need statement (P&N) and resulted in the identification of 13 alternative solutions to address this statement. After screening these alternatives, the team reached consensus on the most feasible option in 2021. The project directly enhances fish and wildlife habitat by enhancing and restoring wetlands and uplands and converting agricultural lands to habitat for waterfowl, grassland and migratory birds as well as grazing animals through a natural channel design that supports pool-riffle sequences for aquatic species and low-flow conditions suitable for fish passage. This is a sustainable solution that not only enhances the environment, through use of BMPs and the environment resiliency design will meet the agricultural drainage needs.
This project is now recognized as a high priority in the MSTR Comprehensive Watershed Management Plan (CWMP), which has been reviewed and approved by the Board of Water and Soil Resources (BWSR), endorsed by the Department of Natural Resources (DNR), and the Minnesota Pollution Control Agency (MPCA).

### Explain how the proposal addresses habitat protection, restoration, and/or enhancement for fish, game & wildlife, including threatened or endangered species conservation

This project is designed to permanently restore and enhance a vital ecological corridor within the Lake Agassiz Glacial Plain, a region that once supported vast upland and wetland prairie communities. This phase of the project will reestablish over 6 miles of previously straightened and farmed stream into a sinuous, functioning two-stage channel with native vegetation and broad riparian buffers, creating approximately 400 acres of perpetual conservation easements for upland and wetland habitat. These easements are secured through the BWSR Reinvest in Minnesota (RIM) program, ensuring long-term habitat protection.
The project directly enhances fish and wildlife habitat by enhancing and restoring wetlands and uplands and converting agricultural lands to habitat for waterfowl, grassland and migratory birds as well as grazing animals through a natural channel design that supports pool-riffle sequences for aquatic species and low-flow conditions suitable for fish passage. Grade control structures in the form of rock riffles will be installed at key locations, helping maintain streambed stability while facilitating fish movement across varied flows.
This project in total (phase 1 and 2) will set the stage for a long-term plan to provide fish habitat and passage to places over 25 miles away from Red River of the North. It will reduce sediment by 8,200 tons per year and phosphorus by 7,600 pounds per year, greatly improving water clarity and reducing turbidity—a key limiting factor for aquatic habitat quality.
The broader wildlife benefits include approximately 750 acres of restored and protected wetland and upland prairie habitat across Phases 1 and 2 combined, providing critical refuge for migratory birds, game species, pollinators, and other wildlife. The site falls within the Lake Agassiz Aspen Parklands ecoregion, a transition zone between tallgrass prairie and forest ecosystems, and the restored habitat will reconnect fragmented wildlife corridors within an intensively farmed landscape.
Through a science-based and community-supported approach, the Swift Coulee project will transform a degraded watercourse into a resilient, diverse, and permanently protected landscape supporting fish, game, and wildlife for generations to come.

### What are the elements of this proposal that are critical from a timing perspective?

Several elements of the Swift Coulee Phase 2 proposal are time-sensitive:
1st, timely completion of engineering and permitting in 2026 is critical to meet the projected construction window beginning in 2026-7.Delays in planning would postpone project readiness and jeopardize coordination with state agencies and contractors.
2nd, landowner confidence hinges on a clear and credible timeline. The RIM easement sign-up period benefits from visible momentum, and uncertainty can slow enrollment.
3rd, alignment with funding cycles—particularly LSOHC and other state programs—requires adherence to established milestones to secure construction funding and leverage match sources.
4th, delaying construction could lead to increased costs and obviously delay realization of benefits.

### Describe how the proposal expands habitat corridors or complexes and/or addresses habitat fragmentation:

Phase 2 will add over 400 acres of perpetual habitat corridor to the 250 acres already protected under Phase 1, expanding the Swift Coulee complex to more than 700 acres of continuous restored wetland, riparian, and upland prairie habitat. This project reconnects fragmented habitats within an otherwise agriculturally dominated landscape by restoring a meandering stream system with wide native buffers, functioning as a linear wildlife corridor. The location within the Lake Agassiz Aspen Parklands ecoregion enhances the strategic value of this restoration by providing connectivity between isolated habitat patches that support migratory birds, pollinators, grassland species, and aquatic life. The wide channel corridor further serves as a buffer from adjacent land uses, improving ecological function and long-term habitat viability.

### Which top 2 Conservation Plans referenced in MS97A.056, subd. 3a are most applicable to this project?

Minnesota Prairie Conservation Plan

Northern Tallgrass Prairie Ecoregion: A River and Stream Conservation Portfolio

### Explain how this proposal will uniquely address habitat resilience to climate change and its anticipated effects on game, fish & wildlife species utilizing the protected or restored/enhanced habitat this proposal targets.

This project is designed to increase ecosystem resilience in the face of more frequent extreme precipitation events and fluctuating flow regimes driven by climate change. By reintroducing a sinuous channel, constructing floodplain connectivity, and establishing native vegetation, the system will better manage both high-flow and drought conditions—enhancing habitat continuity across seasons and hydrologic extremes. The restored corridor will buffer temperature fluctuations, filter runoff, and reduce erosion, thereby supporting healthier aquatic ecosystems. The extensive prairie and wetland habitat is better adapted to climate variability and will provide refuge for species displaced by changing conditions. These design features will help ensure long-term viability of fish and wildlife populations in the region.

### 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

### Describe how this project/program will produce and demonstrate a significant and permanent conservation legacy and/or outcomes for fish, game, and wildlife, and if not permanent outcomes, why it is important to undertake at this time:

This phase will secure over 400 acres of new habitat under perpetual easement through BWSR’s RIM program, adding to the 200+ acres protected under Phase 1. These protected corridors ensure long-term/ perpetual benefits for fish, game, and wildlife by restoring a historically degraded watershed system. Permanent design features such as rock riffles, vegetated buffers, and floodplain reconnection are built to last, reducing sedimentation and improving water quality over time. By leveraging this one-time opportunity to secure landowner interest and inter-agency alignment, the project creates lasting conservation benefits and establishes a replicable model for watershed-scale restoration.

## Outcomes

### Programs in prairie region:

Agriculture lands are converted to grasslands to sustain functioning prairie systems ~ *This phase of the project will reestablish over 6 miles of previously straightened and farmed stream into a sinuous, functioning two-stage channel with native vegetation and broad riparian buffers, creating approximately 400 acres of perpetual conservation easements for upland and wetland habitat. These easements are secured through the BWSR Reinvest in Minnesota (RIM) program, ensuring long-term habitat protection.*

### What other dedicated funds may collaborate with or contribute to this proposal?

Clean Water Fund

Environment and Natural Resource Trust Fund

### 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.

No.

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

The Middle-Snake-Tamarac Rivers Watershed District will assume full responsibility for operation and maintenance under the terms of the RIM easement agreements. Design specifications will include provisions for long-term maintenance of grade control structures, vegetation, and sediment control features. Regular inspections, adaptive management, and coordination with BWSR technical staff will ensure functionality over time. A benefit of the engineered design is the reduced need for future intervention, as naturalized systems are more self-sustaining. Local support and district funding will backstop periodic maintenance needs beyond the grant period.

### Provide an assessment of how your program may celebrate cultural diversity or reach diverse communities in Minnesota, including reaching low- and moderate-income households:

Since the land for this project is through perpetual easement with individual landowners, although we would encourage them to consider the BIPOC priorities if that becomes the case as for their landuse for recreational purposes, as the project sponsor we do not have more authority. However, MSTRWD adheres to non-discriminatory practices when awarding contracts for construction. We at the project management level will do all we can to provide equal opportunity and encourage BIPOC to be involved in this project.

## Activity Details

### Requirements

**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 or on lands to be acquired in this program?**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, either by the proposer or the end owner of the property, outside of the initial restoration of the land?**No

**Will insecticides or fungicides (including neonicotinoid and fungicide treated seed) be used within any activities of this proposal either in the process of restoration or use as food plots?**No

### Other OHF Appropriation Awards

**Have you received OHF dollars through LSOHC in the past?**Yes

**Are any of these past appropriations still OPEN?**Yes

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Approp Year** | **Funding Amount Received** | **Amount Spent to Date** | **Funding Remaining** | **% Spent to Date** |
| 2024 | $1,578,000 | - | - | - |
| 2023 | $4,174,000 | - | - | - |
| Totals | $5,752,000 | - | $5,752,000 | 0.0% |

## Timeline

|  |  |
| --- | --- |
| **Activity Name** | **Estimated Completion Date** |
| Engineering - Construction Management - Other sources are sought to aid this as well as OHF | June 2027 |
| Permitting | December 2026 |
| Construction | October 2027 |

## Budget

### Totals

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item** | **Funding Request** | **Total Leverage** | **Leverage Source** | **Total** |
| Personnel | - | $251,700 | MSTRWD | $251,700 |
| Contracts | $3,414,000 | $500,000 | WBIF (BWSR), Red River Watershed Management Board | $3,914,000 |
| Fee Acquisition w/ PILT | - | - | - | - |
| Fee Acquisition w/o PILT | - | - | - | - |
| Easement Acquisition | - | - | - | - |
| Easement Stewardship | - | - | - | - |
| Travel | - | - | - | - |
| Professional Services | $150,000 | $285,000 | BWSR Stream Restoration | $435,000 |
| Direct Support Services | - | - | - | - |
| DNR Land Acquisition Costs | - | - | - | - |
| Capital Equipment | - | - | - | - |
| Other Equipment/Tools | - | - | - | - |
| Supplies/Materials | - | - | - | - |
| DNR IDP | - | - | - | - |
| **Grand Total** | **$3,564,000** | **$1,036,700** | **-** | **$4,600,700** |

### Personnel

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Position** | **Annual FTE** | **Years Working** | **Funding Request** | **Total Leverage** | **Leverage Source** | **Total** |
| Administrative assistant | 0.3 | 2.0 | - | $95,300 | MSTRWD | $95,300 |
| Administrator / Project Manager | 0.3 | 2.0 | - | $156,400 | MSTRWD | $156,400 |

**Amount of Request:** $3,564,000 **Amount of Leverage:** $1,036,700 **Leverage as a percent of the Request:** 29.09% **DSS + Personnel:** - **As a % of the total request:** 0.0% **Easement Stewardship:** - **As a % of the Easement Acquisition:** -

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Total Leverage (from above)** | **Amount Confirmed** | **% of Total Leverage** | **Amount Anticipated** | **% of Total Leverage** |
| $1,036,700 | $1,036,700 | 100.0% | - | 0.0% |

**Detail leverage sources and confirmation of funds:**1- BWSR's WBIF through 2025-2027 for $300,000 + BWSR's Stream Restoration for Engineering for $285,000 - Secured.
2- RRWMB's through Clean Water Base Funding program for $200,000 - Secured
3- MSTRWD's project fund for $300,000 - secured

**Does this proposal have the ability to be scalable?**Yes

### If the project received 50% of the requested funding

**Describe how the scaling would affect acres/activities and if not proportionately reduced, why?**Another phase could be added to the project and make the proposed Phase 2 into two separate phases and shorten the upstream length of channel to be restored. This would not only reduce the restored channel length by approximately 3 miles, but also reduce the 400 acres of proposed habitat.

**Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?**DSS is to cover the project management scope of work. Due to the nature of the project, although the scope of implementation will decrease, the project will still need to be designed, receive permits, get funded, bid out for construction and be managed for construction.

### If the project received 30% of the requested funding

**Describe how the scaling would affect acres/activities and if not proportionately reduced, why?**It would not be feasible to break the project in smaller phases as it will lose the local trust and will create political issues for the future of the project.

**Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?**It would not be feasible to break the project in smaller phases as it will lose the local trust and will create political issues for the future of the project.

### Contracts

**What is included in the contracts line?**Construction Contract

### Professional Services

**What is included in the Professional Services line?**

Design/Engineering

Other : Project Management

Surveys

Title Insurance and Legal Fees

## Federal Funds

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

## Output Tables

### Acres by Resource Type (Table 1)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Type** | **Wetland** | **Prairie** | **Forest** | **Habitat** | **Total Acres** |
| Restore | 0 | - | 0 | 418 | 418 |
| 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 | 74 | - | 0 | - | 74 |
| **Total** | **74** | **0** | **0** | **418** | **492** |

### Restoration/Enhancement Acres Breakdown of Existing Protected Lands (Table 1a.2)

|  | **RESTORE** |  | **ENHANCE** |  |
| --- | --- | --- | --- | --- |
|  | **Lands acquired with OHF** | **Lands NOT acquired with OHF** | **Lands acquired with OHF** | **Lands NOT acquired with OHF** |
| DNR Lands (WMA, State Forests, etc) | - | - | - | - |
| Non-DNR Lands (city, state, federal, etc.) | - | - | - | - |
| Easements | 418 | - | 74 | - |
| **Total** | **418** | **-** | **74** | **-** |

### Total Requested Funding by Resource Type (Table 2)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Type** | **Wetland** | **Prairie** | **Forest** | **Habitat** | **Total Funding** |
| Restore | - | - | - | $3,028,000 | $3,028,000 |
| Protect in Fee with State PILT Liability | - | - | - | - | - |
| Protect in Fee w/o State PILT Liability | - | - | - | - | - |
| Protect in Easement | - | - | - | - | - |
| Enhance | $536,000 | - | - | - | $536,000 |
| **Total** | **$536,000** | **-** | **-** | **$3,028,000** | **$3,564,000** |

### Acres within each Ecological Section (Table 3)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Type** | **Metro/Urban** | **Forest/Prairie** | **SE Forest** | **Prairie** | **N. Forest** | **Total Acres** |
| Restore | 0 | 0 | 0 | 418 | 0 | 418 |
| 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 | 74 | 0 | 74 |
| **Total** | **0** | **0** | **0** | **492** | **0** | **492** |

### Total Requested Funding within each Ecological Section (Table 4)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Type** | **Metro/Urban** | **Forest/Prairie** | **SE Forest** | **Prairie** | **N. Forest** | **Total Funding** |
| Restore | - | - | - | $3,028,000 | - | $3,028,000 |
| Protect in Fee with State PILT Liability | - | - | - | - | - | - |
| Protect in Fee w/o State PILT Liability | - | - | - | - | - | - |
| Protect in Easement | - | - | - | - | - | - |
| Enhance | - | - | - | $536,000 | - | $536,000 |
| **Total** | **-** | **-** | **-** | **$3,564,000** | **-** | **$3,564,000** |

### Average Cost per Acre by Resource Type (Table 5)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type** | **Wetland** | **Prairie** | **Forest** | **Habitat** |
| Restore | - | - | - | $7,244 |
| Protect in Fee with State PILT Liability | - | - | - | - |
| Protect in Fee w/o State PILT Liability | - | - | - | - |
| Protect in Easement | - | - | - | - |
| Enhance | $7,243 | - | - | - |

### Average Cost per Acre by Ecological Section (Table 6)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Type** | **Metro/Urban** | **Forest/Prairie** | **SE Forest** | **Prairie** | **N. Forest** |
| Restore | - | - | - | $7,244 | - |
| Protect in Fee with State PILT Liability | - | - | - | - | - |
| Protect in Fee w/o State PILT Liability | - | - | - | - | - |
| Protect in Easement | - | - | - | - | - |
| Enhance | - | - | - | $7,243 | - |

### Target Lake/Stream/River Feet or Miles

## Parcels

**Sign-up Criteria?**No

**Explain the process used to identify, prioritize, and select the parcels on your list:**All the parcels on our list are the ones the Swift Coulee runs through them. So, they are equally important and highly prioritized as for acquisition. While many of them are eligible under RIM program some are not due to the total acres. Although those excluded from RIM will be acquired through local fund, this project/ funding request will be spent on their engineering and construction. Hence not really excluded from this application.

### Protect Parcels

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name** | **County** | **TRDS** | **Acres** | **Est Cost** | **Existing Protection** |
| Cory Robert Jones | Marshall | 15547204 | 2 | $18,110 | - |
| Darla Jones, Living Trust | Marshall | 15547203 | 51 | $370,163 | - |
| David & Stacy Nicholls ETAL | Marshall | 15647236 | 1 | $724 | - |
| Fagerstrom Revocable Trust | Marshall | 15547202 | 84 | $605,590 | - |
| Jacob Anderson | Marshall | 15547201 | 22 | $161,539 | - |
| Jacob Anderson | Marshall | 15547204 | 16 | $114,454 | - |
| Jacob Anderson | Marshall | 15547204 | 4 | $27,527 | - |
| Jacob Anderson | Marshall | 15547204 | 10 | $71,715 | - |
| Jimmie & Linda Potucek | Marshall | 15547205 | 5 | $38,393 | - |
| Jimmie & Linda Potucek | Marshall | 15547205 | 21 | $155,744 | - |
| Joseph & Casey Pierce/ETAL | Marshall | 15547204 | 13 | $91,273 | - |
| Loren Anderson ETAL | Marshall | 15647236 | 13 | $95,620 | - |
| Margery Riopelle Trust | Marshall | 15547204 | 5 | $36,944 | - |
| Michele Diehl/ETAL | Marshall | 15547202 | 15 | $105,761 | - |
| Rebecca Jorgenson | Marshall | 15547204 | 21 | $149,224 | - |
| Robert Fagerstrom ETAL | Marshall | 15647236 | 19 | $139,807 | - |
| Tim Mortensen | Marshall | 15547205 | 7 | $52,156 | - |
| Tony & Lindsey Johnson | Marshall | 15547205 | 37 | $270,922 | - |
| Tracy Anderson | Marshall | 15547203 | 112 | $808,420 | - |
| Virginia Kruger | Marshall | 15547202 | 34 | $249,915 | - |

## Parcel Map



