



Lessard-Sams Outdoor Heritage Council

Swift Coulee Channel Restoration/ Enhancement - Phase 2
ML 2027 Request for Funding

General Information

Date: 06/24/2026

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

Funds Requested: \$2,043,000

Confirmed Leverage Funds: \$739,900

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:

Habitat

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 a natural channel design.

While phase 1 indirectly received funds from LSOHC for land acquisition through RIM in 2024 and constructed using other funds in 2025. This application will cover construction cost for phase 2 which will complete the whole (10 miles long) project.

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: - Finalize engineering, permitting, and begin construction in 2027 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 (just in phase 2) 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 720 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 and we are currently on path to meet this, with the proposed construction window beginning in 2027. Delays in planning would postpone project readiness and jeopardize coordination with state agencies on permits and inflation of contractor bid prices.

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 approximately over 470 acres of perpetual habitat corridor to the 247.2 acres already protected under Phase 1, expanding the Swift Coulee complex to approximately 720 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

Which LSOHC section priorities are addressed in this proposal?

Forest / Prairie Transition

Protect, restore, and enhance habitat for waterfowl, upland birds, and species of greatest conservation need

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:

This phase will secure over 400 acres of new habitat under easements through BWSR’s RIM program and local MSTRWD, 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.

If this project/program does not have permanent outcomes, describe why it is important to undertake at this time:

Not applicable

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.

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.

This request/ proposal is neither supplanting nor a substitution for any previous fund from any legacy fund.

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.

Actions to Maintain Project Outcomes

Year	Source of Funds	Step 1	Step 2	Step 3
Annual	Established Water Management District through the MSTRWD	Inspection of the project performance in coordination with BWSR/SWCD staff	Monitor & maintain vegetation	Monitor & maintain vegetation

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 land use 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

Previous OHF Appropriations

Have you received OHF dollars through LSOHC for this program or project in the past?

Yes

Are there any of these past appropriations still OPEN?

Yes

If needed, please include any explanation of unspent funds.

The 2024 appropriation that was used for easement acquisition of Phase 1 and is proposed for easement acquisition of Phase 2 was awarded through the Red River Watershed Management Board and those funds are used up and down the Red River Basin on multiple projects in the easement establishment of the Reinvest in Minnesota Program. The MSTRWD is still waiting to receive last year's appropriation of \$2,635,000, which was only a portion of the requested amount and the reasoning for the request again this fiscal year. The appropriation coming from last year will work towards finalizing design/engineering, permitting and part of construction. The requested fund for this year will work toward construction engineering/management tasks and remainder of construction with the intention of starting construction in 2027.

Open OHF Appropriations - Data from Most Recent Status Update

Project	Funding Amount Received	Amount Spent to Date	Funding Remaining	% Spent to Date
ML 2026 - Swift Coulee Channel Restoration/ Enhancement - Phase 2	\$2,635,000	-	\$2,635,000	0.0%
ML 2024 - Red River Basin Riparian Habitat Program - Phase I	\$5,119,000	\$1,110,300	\$4,008,700	21.69%
Totals	\$7,754,000	\$1,110,300	\$6,643,700	14.32%

Timeline

Activity Name	Estimated Completion Date
Engineering - Construction Management - Other sources are sought to aid this as well as OHF	July 2028
Permitting	May 2027
Construction	July 2028

Budget

Totals

Item	Funding Request	Total Leverage	Leverage Source	Total
Personnel	-	\$152,900	MSTRWD	\$152,900
Contracts	\$1,893,000	\$443,000	WBIF (BWSR), Red River Watershed Management Board (RRWMB)	\$2,336,000
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	-	\$2,000	MSTRWD	\$2,000
Professional Services	\$150,000	\$142,000	MSTRWD, RRWMB	\$292,000
Direct Support Services	-	-	-	-
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	-	-	-	-
Supplies/Materials	-	-	-	-
DNR IDP	-	-	-	-
Grand Total	\$2,043,000	\$739,900	-	\$2,782,900

Personnel

Position	Annual FTE	Years Working	Funding Request	Total Leverage	Leverage Source	Total
Administrator / Project Manager	0.3	2.0	-	\$95,500	MSTRWD	\$95,500
Administrative assistant	0.3	2.0	-	\$57,400	MSTRWD	\$57,400

Amount of Request: \$2,043,000

Amount of Leverage: \$739,900

Leverage as a percent of the Request: 36.22%

DSS + Personnel: -

As a % of the total request: 0.0%

Easement Stewardship: -

As a % of the Easement Acquisition: -

Leverage Funding Table

	Leverage Amount Committed	Leverage Amount Confirmed (of Committed Funds)	Leverage Amount Anticipated	Total Leverage
Amount:	\$739,900	\$739,900	-	\$739,900
% of Total Leverage:	100.0%	100.0%	0.0%	

Detail leverage sources and confirmation of funds:

- 1- BWSR's WBIF through 2025-2027 for \$300,000 - Secured.
- 2- RRWMB's through Clean Water Base Funding program for \$200,000 - Secured
- 3- MSTRWD's project fund for \$239,900 - 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 corridor.

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

Personnel would be reduced but not proportionately as phasing physical activity does not necessarily reduce logistical tasks.

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?

Personnel would be reduced but not proportionately as phasing physical activity does not necessarily reduce logistical tasks.

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

Clean Water Fund

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	0	98	98
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	17	0	0	-	17
Total	17	0	0	98	115

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

	RESTORE: Lands acquired with OHF	RESTORE: Lands NOT acquired with OHF	ENHANCE: Lands acquired with OHF	ENHANCE: Lands NOT acquired with OHF
DNR Lands (WMA, State Forests, etc.)	-	-	-	-
Non-DNR Lands (city, state, federal, etc.)	-	-	-	-
Easements	98	-	17	-
Total	98	-	17	-

Total Requested Funding by Resource Type (Table 2)

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	-	-	\$1,735,700	\$1,735,700
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	\$307,300	-	-	-	\$307,300
Total	\$307,300	-	-	\$1,735,700	\$2,043,000

Acres within each Ecological Section (Table 3)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
Restore	0	39	0	59	0	98
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	7	0	10	0	17
Total	0	46	0	69	0	115

Total Requested Funding within each Ecological Section (Table 4)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
Restore	-	\$694,000	-	\$1,041,700	-	\$1,735,700
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-
Enhance	-	\$123,000	-	\$184,300	-	\$307,300
Total	-	\$817,000	-	\$1,226,000	-	\$2,043,000

Average Cost per Acre by Resource Type (Table 5)

Type	Wetland	Prairie	Forest	Habitat
Restore	-	-	-	\$17,711
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	-	-
Enhance	\$18,076	-	-	-

Average Cost per Acre by Ecological Section (Table 6)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	-	\$17,794	-	\$17,655	-
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	\$17,571	-	\$18,430	-

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:

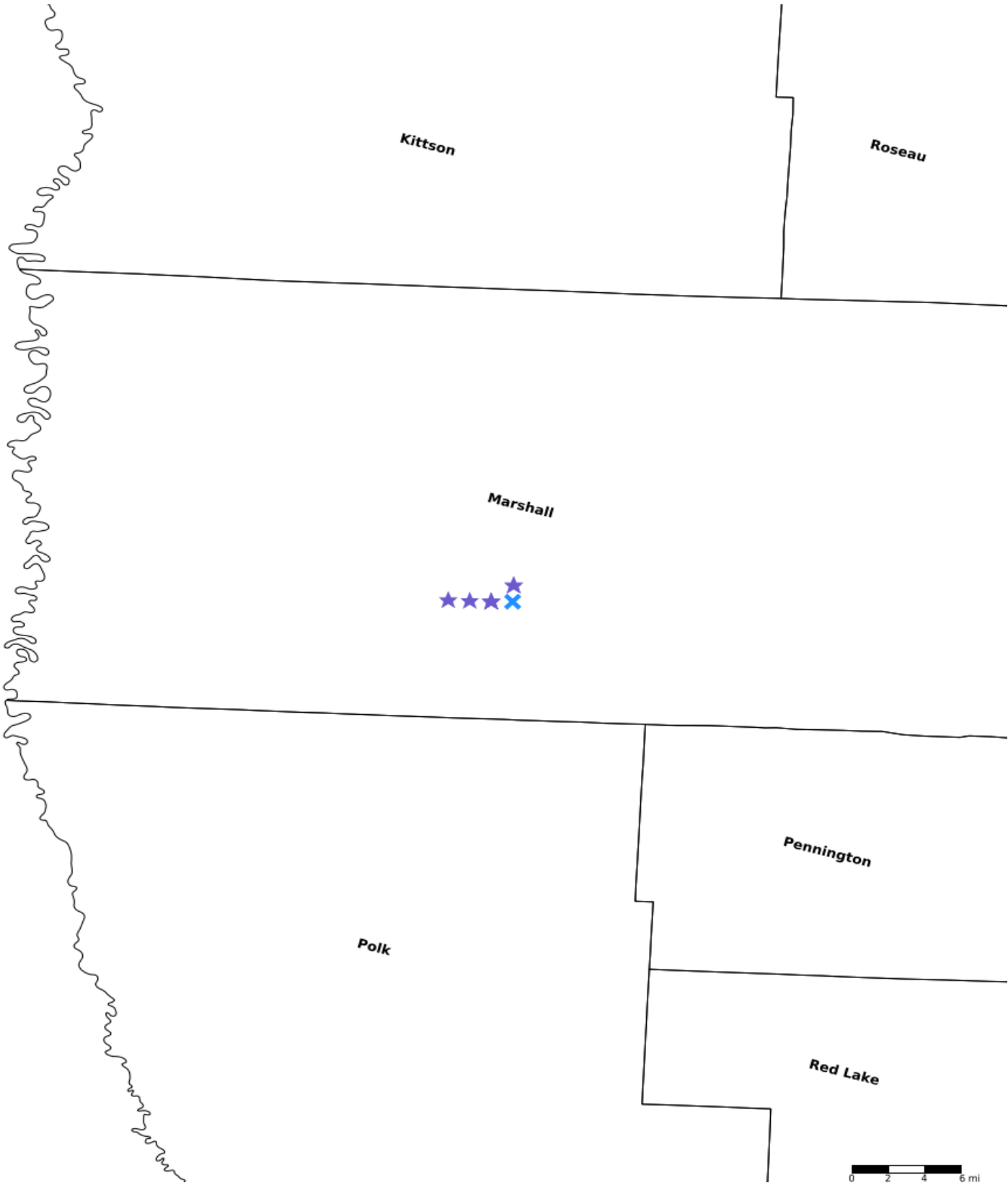
Items on this list are reflective of the balance of what we had in original ML 2026 application and then adjusted through accomplishment plans and also more refined acres based on current project design information as it has progressed since then. acres under Kruger and Fagerstrom Trust adjusted on 6-18-26 to reflect the total acres of the phase 2 considering the ML 2026.

All the parcels on our list are the ones the Swift Coulee directly runs through. 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 funds, this project/ funding request would be allocated towards the overall engineering and construction of phase 2. Hence not really excluded from this application.

Restore / Enhance Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection	Description
Fagerstrom Revocable Trust	Marshall	15547202	6	\$106,591	Yes	-
Jacob Anderson	Marshall	15547201	17	\$302,008	Yes	10 acres of this parcel included in ML 2026 accomplishment plan.
Jacob Anderson	Marshall	15547204	20	\$355,304	Yes	-
Loren Anderson ETAL	Marshall	15647236	20	\$355,304	Yes	-
Michele Diehl/ETAL	Marshall	15547202	9	\$159,886	Yes	-
Robert Fagerstrom ETAL	Marshall	15647236	19	\$337,539	Yes	-
Tracy Anderson	Marshall	15547203	9	\$159,886	Yes	107 acres of this parcel included in ML 2026 accomplishment plan.
Virginia Kruger	Marshall	15547202	15	\$266,478	Yes	-

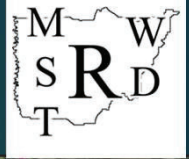
Parcel Map



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

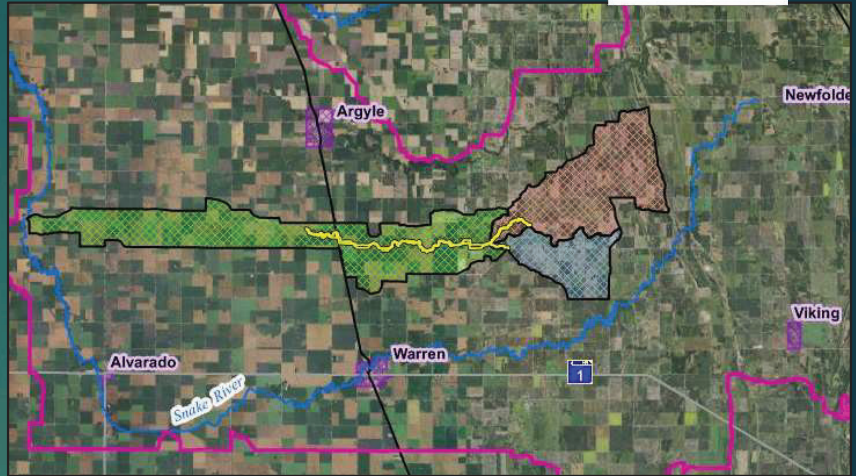
Swift Coulee Channel Restoration Project

Middle-Snake-Tamarac Rivers WD

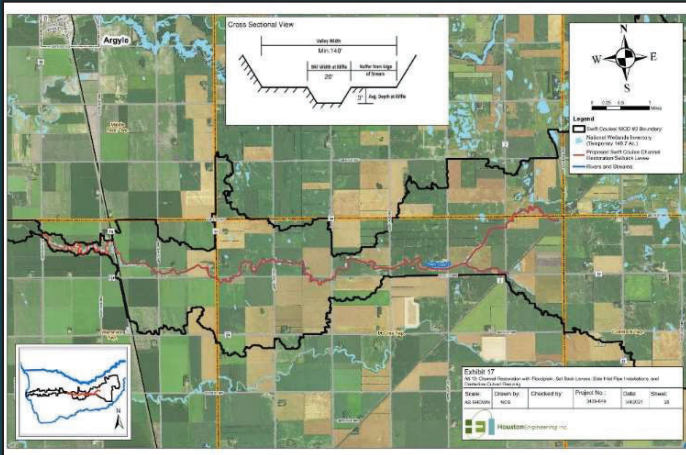


Description/Location:

The Swift Coulee Channel Restoration Project includes restoration of meandering channel across 9 Sections of 3 different Townships in Marshall County, MN. The project includes channel restoration, using the Rosgen E-Channel design with the low frequency meander and a floodplain designed for a 10-year frequency event. Setback levees and spillways would be incorporated into the design for flood damage reduction benefits, along with side water inlet culverts and perpetual native vegetation to improve water quality and wildlife habitat benefits.



Swift Coulee is the Yellow meander in Marshall County NW MN



Project Benefits:

Habitat Restoration (over 740 acres in total (Phase 1: 248 acres, Phase 2: 492 acres)

- Enhance upland and aquatic habitats
- Increase perpetual vegetation footprint adjacent to coulee

Erosion Reduction

- Reduce sediment transfer by over 8,000 tons/yr
- Reduce Phosphorous by over 7,000 lbs/yr

Flood Control (~42 sq miles of Drainage Area)

- Reduce sub-watershed peak volume and flows
- Reduce risk of road damages
- Reduce adjacent agricultural and private land damages
- Improve hydrologic conditions within the sub-watershed

Activities as of May 2025

- Phase 1 in construction
- Phase 2 Survey and preliminary Design
- Phase 2 Easement Funding secured
- Phase 2 EAW is done

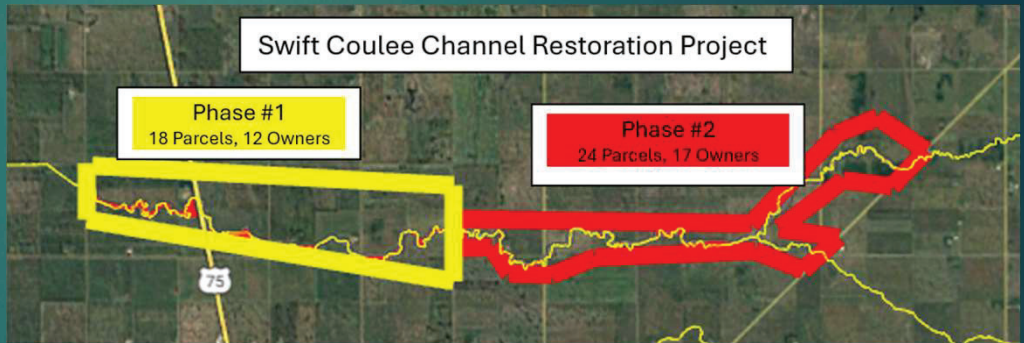
Funding Partners:

- MSTRWD
- BWSR (RIM + 1W1P)
- RRWMB+BWSR (RIM)
- BWSR (Stream Restoration / MPCA)

Potential Future Funding Partners:

- LCCMR, LSOHC, BWSR, RRWMB

Swift Coulee Phasing map



Swift Coulee Project Schedule

	2025				2026				2027			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Phase 1	[Progress bar spanning Q1 2025 to Q3 2026]											
Construction	[Progress bar spanning Q2 2025 to Q3 2026]											
Phase 2	[Progress bar spanning Q1 2025 to Q4 2027]											
Engineering / Permitting	[Progress bar spanning Q2 2025 to Q4 2027]											
Easement Acquisition	[Progress bar spanning Q3 2025 to Q4 2027]											
Construction	[Progress bar spanning Q2 2027 to Q4 2027]											