



## Lessard-Sams Outdoor Heritage Council

DNR Aquatic Habitat Restoration and Enhancement - Phase 7  
ML 2024 Request for Funding

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### General Information

**Date:** 06/23/2023

**Proposal Title:** DNR Aquatic Habitat Restoration and Enhancement - Phase 7

**Funds Requested:** \$14,510,200

**Confirmed Leverage Funds:** \$3,559,000

**Is this proposal Scalable?:** Yes

### Manager Information

**Manager's Name:** Jamison Wendel

**Title:** Stream Habitat Supervisor

**Organization:** Minnesota DNR

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### Location Information

**County Location(s):** Yellow Medicine, Cass, Kittson, Wilkin, Roseau, Olmsted and Becker.

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

- Northern Forest
- Forest / Prairie Transition
- Prairie
- Southeast Forest

**Activity types:**

- Restore
- Enhance

**Priority resources addressed by activity:**

- Habitat

## Narrative

### Abstract

The Minnesota Department of Natural Resources (MNDNR) will complete three fish passage projects to reconnect reaches of habitat for fish and other aquatic life and restore reaches of four different rivers, creating over 25 miles of diverse habitat. The footprint of fish passage projects is small, but projects will reconnect 24,000 acres of lake and river habitat. Stream projects were selected from a statewide list, prioritized by factors such as ecological benefit, scale of impact, urgency of completion, and local support.

### Design and Scope of Work

The Minnesota Department of Natural Resources (MNDNR) annually updates a statewide list of stream habitat projects. Submissions come both from MNDNR staff and from partner organizations. Projects are prioritized based on scale-of-impact, urgency, local support, and critical habitat for rare species. Based on this list, MNDNR and our partners are proposing three fish passage projects and four channel restorations, leveraging \$3,559,000.

Access to different habitats is critical for fish and other aquatic organisms to complete various life stages. The habitats they use to spawn, live as juveniles, over-winter, and feed as adults may all be different. These habitats can be fairly unique, such as high-gradient riffles favored by many spawning fish and may be miles apart. When dams or other obstructions prevent aquatic life from reaching ideal habitat, they are forced to use less optimal locations that can reduce their success. In some cases, this leads to the complete loss of sensitive species upstream of a barrier. Modifying or removing the barriers through our three proposed fish passage projects would have a footprint of 3 acres but create upstream access to 24,000 acres of lake and river habitat. This will benefit fish such as Walleye, Northern Pike, and Lake Sturgeon present in these rivers, as well as five mussel species classified as threatened or special concern.

Streams naturally form habitat through the meandering of the river. Deeper, slower habitat is created by scour into the bed of the river around the outside of bends, while faster water and a rockier bottom is found in the straight sections in between. Wood, overhanging vegetation, and boulders serve as cover and current breaks for fish. In degraded sections of river, these natural processes are disrupted. Some reaches have been artificially straightened, preventing the meandering that forms diverse habitat. In other places, streams have become surrounded by tall banks that prevent high flows from spilling out onto a floodplain. When floods are trapped within the stream channel, the river erodes the banks. This not only mobilizes tons of sediment that degrades downstream habitat, but results in a wide, shallow channel during low-flow periods that is avoided by adult fish. Working with partners, we will restore over 25 miles of habitat on four streams. These restored reaches also will connect reaches of quality habitat.

Department resources for stream habitat work falls short of the need; funding from the Outdoor Heritage Fund has been critical to an acceleration of stream habitat work by the department and partners. Funding for two stream habitat specialist positions are included in this proposal. These positions provide critical technical assistance, and construction oversight to partners working on Legacy-funded stream restoration and enhancement projects. These two positions focus on partner led projects and rarely work on projects funded through this proposal. The remaining positions included in this proposal work directly on projects funded through this request. These positions improve coordination efficiency by providing single points of contact and enhance outcomes of aquatic habitat projects through technical expertise.

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

The Bucks Mill Dam project is a key component to Lake Sturgeon restoration efforts in the Red River basin. Lake Sturgeon are an important game species and also listed as a species of Special Concern in Minnesota. Dams that blocked migrations to spawning habitat, overharvest, and poor water quality contributed to the extirpation of Lake Sturgeon from the Red River basin in the early 1900's. Lake Sturgeon reintroduction in the Red River basin has been ongoing for 20 years and mature fish are being captured during spring surveys now. However, barriers such as this dam, block upstream migrations of mature Lake Sturgeon on the Pelican River. Removing the Bucks Mill Dam barrier to fish passage is key to restoring a naturally reproducing population of Lake Sturgeon in the Red River basin.

There are 68 species of greatest conservation need that utilize headwaters to large streams, including birds, turtles, frogs, fish, and insects. Stream habitat projects are not designed with one species in mind, but instead are intended to benefit multiple functions and habitats of the river both within the stream and in the riparian area, which will have benefits for rare species.

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

The projects on our list have local support that may not be present in the future if public sentiment were given time to change, which can happen with dam removal or modification projects.

Matching funds are currently available for \$3,559,00 of our projects. Completing these projects would take advantage of those funds while they are available.

There are multiple one-time federal funding opportunities for aquatic habitat restoration and enhancement through the Bipartisan Infrastructure Law. We have been aggressively pursuing these funding sources using Outdoor Heritage Fund appropriations as leverage. Working out the timing between federal funding and Outdoor Heritage Fund appropriations is always challenging so we only include federal funding that has already been secured as leverage. However, we will continue to aggressively pursue all federal funding opportunities with these appropriations.

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

Science-based targeting was used to identify, design, and prioritize restoration and enhancement projects included in this proposal. Projects were prioritized based on multiple criteria, including scale-of-impact, critical habitat, technical feasibility, and compatibility with other resource initiatives. Projects that benefit or reconnect areas of high or outstanding biological significance or lakes of biological significance are targeted and prioritized.

Our proposal features projects intended to reduce fragmentation. Dams and other obstructions in rivers fragment areas of suitable habitat, similar to when pieces of prairie are separated by large areas of row-crop farmland. By removing or modifying barriers in streams, we will allow fish and other aquatic life to move between different patches of habitat that may be critical for their life-processes, such as spawning. Connectivity also expands fishing opportunities by acting as a conduit for recolonization after catastrophic events such as drought happen in one portion of a watershed. We have prioritized fish passage projects that connect large areas of high-quality habitat.

Similarly, our stream channel restoration projects target reaches of river where habitat is poor due to past alterations. Lengths of poor habitat can themselves act as barriers to animal movement, where a fish may choose

not to migrate through a reach without adequate depth or cover to reach more suitable habitat upstream.

Restoring the stream channel removes that "barrier" of poor habitat that fragments the stream. In the process, we also create high-quality habitat within the formerly degraded reach.

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

- Minnesota DNR Strategic Conservation Agenda
- Red River of the North Fisheries Management Plan

### **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.**

Improving fish passage is one of the most effective ways to help conserve vulnerable species and improving climate resilience. Access to different habitats is critical for fish and other aquatic organisms to complete various life stages. The habitats they use to spawn, live as juveniles, over-winter, and feed as adults may all be different. These habitats can be fairly unique, such as high-gradient riffles favored by many spawning fish, and may be miles apart. When dams or other obstructions prevent aquatic life from reaching ideal habitat, they are forced to use less optimal locations that can reduce their success.

### **Which LSOHC section priorities are addressed in this proposal?**

#### **Forest / Prairie Transition**

- Protect, enhance, and restore wild rice wetlands, shallow lakes, wetland/grassland complexes, aspen parklands, and shoreland that provide critical habitat for game and nongame wildlife

#### **Northern Forest**

- Protect shoreland and restore or enhance critical habitat on wild rice lakes, shallow lakes, cold water lakes, streams and rivers, and spawning areas

#### **Prairie**

- Protect, enhance, or restore existing wetland/upland complexes, or convert agricultural lands to new wetland/upland habitat complexes

#### **Southeast Forest**

- Protect, enhance, and restore habitat for fish, game, and nongame wildlife in rivers, cold-water streams, and associated upland habitat

### **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:**

The fish passage and channel restoration projects included in this proposal represent opportunities to make major and lasting positive changes for those watersheds. Fish passage projects such as at the Bucks Mill Dam project have the potential to create access to high-quality upstream habitat for species that are currently blocked, which includes game fish and state-listed mussel species. A defined project done in one location can benefit several of miles of river upstream, and the benefit will last in perpetuity. Little to no follow-up maintenance is needed. Similarly, our stream channel restoration projects would restore previously-altered reaches of river back to high quality habitats. This not only creates habitat within the project area, but also makes it easier for fish and other

aquatic life to move between upstream and downstream habitats. All of this enhanced connectivity makes for much healthier and resilient populations.

### Outcomes

#### Programs in forest-prairie transition region:

- Rivers and streams provide corridors of habitat including intact areas of forest cover in the east and large wetland/upland complexes in the west ~ *The Roseau River channel restoration project in this region will improve in-channel and riparian habitat. We will use metrics that evaluate instream and floodplain habitat to assess our success. For the Bucks Mill Dam project, we will compare warmwater fish communities before and after project completion. We will also compare catch rates for critical species before and after project completion as indicators of population density changes.*

#### Programs in the northern forest region:

- Improved aquatic habitat indicators ~ *For the Boy River Dam project, warmwater fish communities will be assessed before and after project completion.*

#### Programs in prairie region:

- Other ~ *The South Branch of the Buffalo River and Lac qui Parle River channel restoration projects in this region will improve in-channel and riparian habitat. We will use metrics that evaluate instream and floodplain habitat to assess our success. For the Northcote Dam fish passage project, we will use routine fish surveys to gauge changes to the fish community, and compare with pre-project data.*

#### Programs in southeast forest region:

- Rivers, streams, and surrounding vegetation provide corridors of habitat ~ *The Cascade Creek channel restoration project in this region will improve in-channel and riparian habitat. We will use metrics that evaluate instream and floodplain habitat to assess our success.*

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

- Clean Water 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.

This request is an acceleration of DNR aquatic habitat work to a level not attainable but for the appropriation.

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

MNDNR has multiple potential avenues that could be used for ongoing maintenance of projects, including the Game and Fish Fund which is supported by license sales, the Heritage Enhancement account funded by taxes on lottery tickets, funds raised through the sale of Trout Stamps, the General Fund, and people who volunteer to help the department with projects.

#### Actions to Maintain Project Outcomes

Year	Source of Funds	Step 1	Step 2	Step 3
Annual	Game and Fish	Inspect Project	Control Invasives	Make instream adjustments as needed

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

The DNR Aquatic Habitat Restoration and Enhancement proposal has the following specific ties to BIPOC and diverse communities:

- Projects included in this proposal provide benefits at the watershed scale. These benefits extend well beyond the footprint of each individual project and benefit all Minnesotans.
- Tribal partners have been significant partners in efforts to restore Lake Sturgeon in the Red River basin. Multiple projects included in this proposal contribute to these efforts.

DNR's OHF projects aim to serve all Minnesotans. At the same time, we are bringing more focus in all our work to BIPOC and diverse communities. The Minnesota DNR has adopted advancing diversity, equity and inclusion (DEI) as a key priority in its 2020-22 strategic plan. The plan focuses on increasing the cultural competence of our staff, creating a workforce that is reflective of Minnesota, continuing to strengthen tribal consultation and building partnerships with diverse communities.

The OHF funds high quality habitat projects that provide ecosystem services like clean water and carbon sequestration that support environmental justice. OHF also supports public access and recreational opportunities on these lands. OHF projects and outcomes benefit BIPOC and diverse communities through recreational opportunities that are close-to-home, culturally responsive and accessible to Minnesotans with disabilities.

The DNR has diversity, equity and inclusion strategies that benefit all OHF projects:

- Multilingual and culturally specific hunting and fishing education programs take place on public lands.
- All hiring is equal opportunity, affirmative action, and veteran-friendly. Contracting seeks out Targeted Group, Economically Disadvantaged and Veteran-Owned businesses.
- Public engagement seeks out BIPOC voices and involves diverse communities. Outreach and marketing of projects has this focus as well.
- Partnerships are at the center of all projects. Tribes in particular are consulted in all pertinent areas of the DNR's work, under EO 19-24.

**Activity Details**

**Requirements**

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

Yes

**Will restoration and enhancement work follow best management practices including MS 84.973 Pollinator Habitat Program?**

Yes

**Is the 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?**

- AMA
- County/Municipal
- Public Waters

- WMA

**Land Use**

**Will there be planting of any crop on OHF land purchased or restored in this program?**

No

**Will neonicotinoid pesticide products be used within any activities of this proposal?**

No

**Other OHF Appropriation Awards**

**Have you received OHF dollars in the past through LSOHC that are current OPEN appropriations?**

Yes

Approp Year	Funding Amount Received	Amount Spent to Date	Funding Remaining	% Spent to Date
2023	\$4,122,000	-	-	-
2022	\$5,177,000	\$51,000	\$5,126,000	0.99%
2021	\$2,790,000	\$554,472	\$2,235,528	19.87%
2020	\$3,790,000	\$2,104,500	\$1,685,500	55.53%
2019	\$3,208,000	\$1,485,617	\$1,722,383	46.31%
2018	\$2,834,000	\$2,401,639	\$432,361	84.74%
Totals	\$21,921,000	\$6,597,228	\$15,323,772	30.1%

**Timeline**

Activity Name	Estimated Completion Date
Design of fish passage and channel restoration projects	March 2025
Permitting and environmental review of fish passage and channel restoration projects	December 2025
Construction of fish passage and channel restoration projects	September 2027
Vegetation maintenance on fish passage and channel restoration projects	June 2028

**Budget**

**Totals**

Item	Funding Request	Total Leverage	Leverage Source	Total
Personnel	\$1,824,000	-	-	\$1,824,000
Contracts	\$12,287,500	\$3,559,000	Red River Watershed Management Board, Roseau River Watershed District, Buffalo Red River Watershed District, Watershed Management District Funds	\$15,846,500
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	\$80,000	-	-	\$80,000
Professional Services	\$119,000	-	-	\$119,000
Direct Support Services	\$164,700	-	-	\$164,700
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	-	-	-	-
Supplies/Materials	\$35,000	-	-	\$35,000
DNR IDP	-	-	-	-
<b>Grand Total</b>	<b>\$14,510,200</b>	<b>\$3,559,000</b>	-	<b>\$18,069,200</b>

**Personnel**

Position	Annual FTE	Years Working	Funding Request	Total Leverage	Leverage Source	Total
Stream Habitat Specialists	2.0	5.0	\$1,100,000	-	-	\$1,100,000
Stream Restoration Interns	0.5	4.0	\$64,000	-	-	\$64,000
Stream Restoration Specialist	1.0	4.0	\$360,000	-	-	\$360,000
Stream Restoration Coordinator	1.0	2.0	\$300,000	-	-	\$300,000

**Amount of Request:** \$14,510,200

**Amount of Leverage:** \$3,559,000

**Leverage as a percent of the Request:** 24.53%

**DSS + Personnel:** \$1,988,700

**As a % of the total request:** 13.71%



**Easement Stewardship: -**

**As a % of the Easement Acquisition: -**

Total Leverage (from above)	Amount Confirmed	% of Total Leverage	Amount Anticipated	% of Total Leverage
\$3,559,000	\$3,559,000	100.0%	-	0.0%

**Detail leverage sources and confirmation of funds:**

Roseau River project: Red River Watershed Management Board water quality fund and Roseau River Watershed District

South Branch of Buffalo River project: National Water Quality Initiative, Buffalo River Watershed District, and Clean Water Grants

**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?**

Projects come from a prioritized list. With partial funding, we would fund only the top projects from our list that fit within the amount allocated. At 50% funding, we estimate that we would still be able to achieve approximately 40-50% of our initial acres of restoration and enhancement.

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

Personnel would reduce to 60-70% of the requested amount. Staff time would focus on completing project design and construction oversight.

Direct Support Services is determined by a standard DNR process taking into account the amount of funding and the number of allocations made with that funding.

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

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

Projects come from a prioritized list. With partial funding, we would fund only the top projects from our list that fit within the amount allocated. At 30% funding, we estimate that we would still be able to achieve approximately 30-40% of our initial acres of restoration and enhancement.

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

Personnel would reduce to 40-55% of the requested amount. Staff time would focus on completing project design and construction oversight.

Direct Support Services is determined by a standard DNR process taking into account the amount of funding and the number of allocations made with that funding.

**Personnel**

**Has funding for these positions been requested in the past?**

Yes

**Please explain the overlap of past and future staffing and position levels previously received and how that is coordinated over multiple years?**

Funding for the positions included in this request were previously funded in our ML18 and ML 20 appropriations. Once the personnel funds from those appropriations are extinguished, we will shift to charging salary to this appropriation.

## **Contracts**

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

100% of contracts are for R/E work.

## **Professional Services**

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

- Design/Engineering

## **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**

All travel line costs will be used for mileage, food, and lodging.

**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?**

DNR calculates the program's fair share to pay for support costs directly related to and necessary for the appropriation, and an internal Service Level Agreement (contract) guarantees each program will receive the services for the calculated amount.

## **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	301	301
Protect in Fee with State PILT Liability	0	0	0	0	0
Protect in Fee w/o State PILT Liability	0	0	0	0	0
Protect in Easement	0	0	0	0	0
Enhance	0	0	0	3	3
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>304</b>	<b>304</b>

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

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	-	-	\$8,499,700	\$8,499,700
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	-	-	\$6,010,500	\$6,010,500
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$14,510,200</b>	<b>\$14,510,200</b>

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

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
Restore	0	15	19	267	0	301
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	1	0	1	1	3
<b>Total</b>	<b>0</b>	<b>16</b>	<b>19</b>	<b>268</b>	<b>1</b>	<b>304</b>

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

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
Restore	-	\$2,185,600	\$1,821,400	\$4,492,700	-	\$8,499,700
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-
Enhance	-	\$2,428,500	-	\$3,035,600	\$546,400	\$6,010,500
<b>Total</b>	<b>-</b>	<b>\$4,614,100</b>	<b>\$1,821,400</b>	<b>\$7,528,300</b>	<b>\$546,400</b>	<b>\$14,510,200</b>

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

Type	Wetland	Prairie	Forest	Habitat
Restore	-	-	-	\$28,238
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	-	-
Enhance	-	-	-	\$2,003,500

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

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	-	\$145,706	\$95,863	\$16,826	-
Protect in Fee with State PILT Liability	-	-	-	-	-

Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	\$2,428,500	-	\$3,035,600	\$546,400

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

25 Miles

Parcels

**Sign-up Criteria?**

No

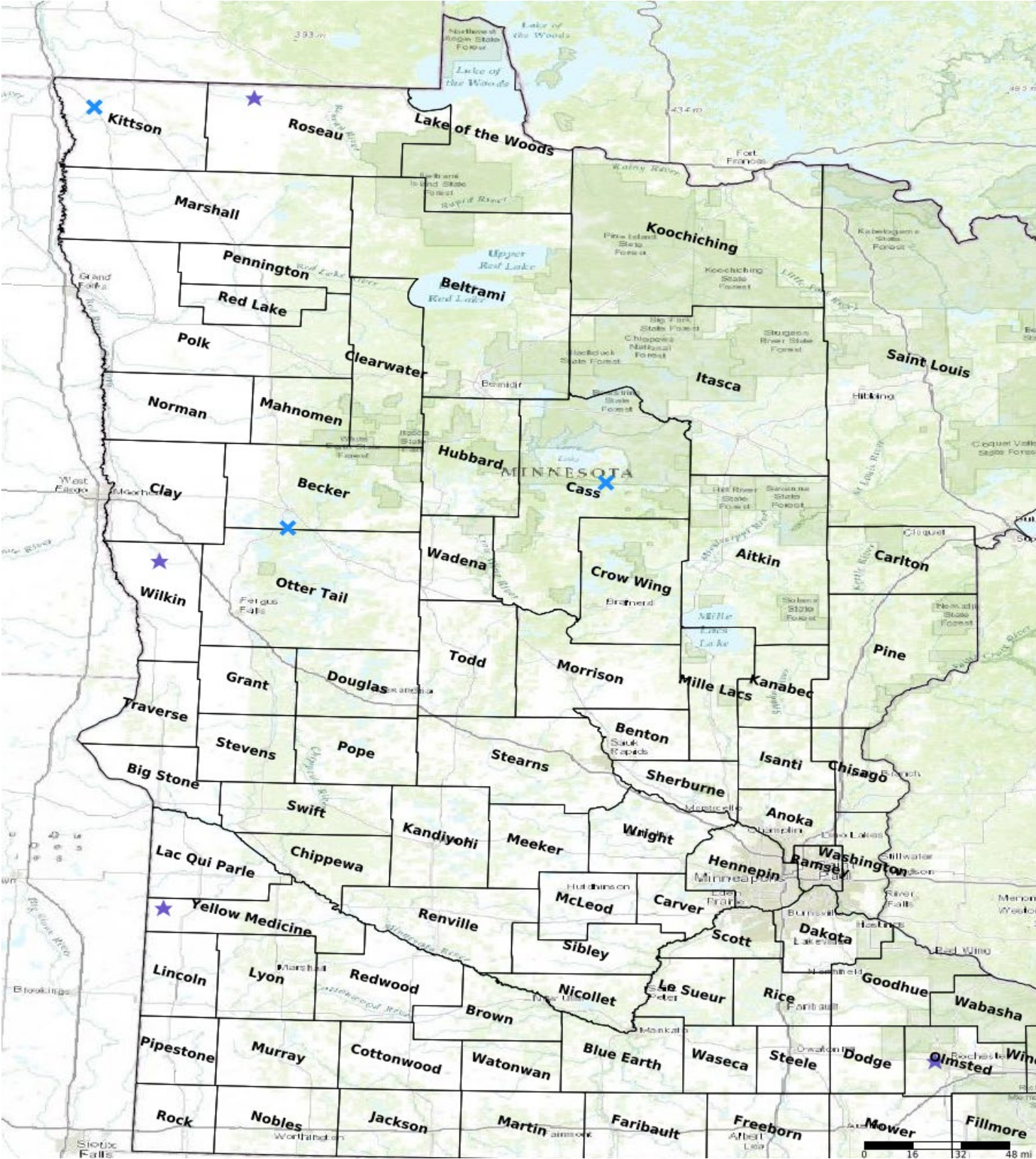
**Explain the process used to identify, prioritize, and select the parcels on your list:**

MN DNR uses a prioritized list to select stream habitat projects for submission. Project submissions are solicited from MN DNR staff as well as partner organizations. Criteria used to rank projects includes the scale of impact, critical habitat for rare species, the urgency of completing the project, feasibility, and local support. From that list we select the highest-ranked projects that we feel could be completed during the life of the OHF appropriation. AMA Enhancement projects are selected based on management guidance documents that have been written for each AMA.

**Restore / Enhance Parcels**

<b>Name</b>	<b>County</b>	<b>TRDS</b>	<b>Acres</b>	<b>Est Cost</b>	<b>Existing Protection</b>
Bucks Mill Dam	Becker	13841234	1	\$2,000,000	Yes
Boy River Dam	Cass	14128234	1	\$450,000	Yes
Northcote Dam	Kittson	16249216	1	\$2,500,000	Yes
Cascade Creek	Olmsted	10614205	19	\$1,500,000	Yes
Roseau River	Roseau	16343224	38	\$1,800,000	Yes
South Branch of the Buffalo River	Wilkin	13546205	54	\$2,700,000	Yes
Lac qui Parle River	Yellow Medicine	11546223	51	\$1,000,000	Yes

### Parcel Map



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



Photo:  
Amy Nelson

# Aquatic Habitat Restoration and Enhancement—Phase 7

## Summary

Diverse habitat is critical to sustaining quality fish populations in lakes and rivers. The Minnesota Department of Natural Resources (DNR) will complete three fish passage projects to restore habitat connectivity for fish and other aquatic life, and restore reaches of four different rivers, creating 25.3 miles of diverse aquatic habitat. Though the actual footprint of fish passage projects is relatively small, these projects will reconnect approximately 24,000 acres of lake and river habitat. Aquatic habitat projects were selected from a statewide list, prioritized by factors such as ecological benefit, scale of impact, urgency of completion, and local support.

## Project Partners

- Buffalo Red River Watershed District
- U.S. Fish and Wildlife Service (USFWS)
- Roseau River Watershed District
- Olmsted Soil and Water Conservation District (SWCD)
- Two Rivers Plus Joint Powers Board
- City of Rochester
- Becker County
- Pelican River Watershed District
- Yellow Medicine County
- Kittson County SWCD
- Melissa Sallie Lake Association
- Pelican Group of Lakes Improvement District

**\$ Requested Amount: \$14,510,200 Leverage Amount: \$3,559,000**

## Projects in Progress



### Roseau River Phase II

- Restores State Ditch 51 back to original channel
- Adds 12.5 miles of stream habitat
- Partnership with Roseau River Watershed District



### Upper South Branch Buffalo

- Large scale, 18 mile restoration project
- Reconnect historic meanders and remeander straightened portions of the river
- Will improve habitat for 23 species of fish
- Partnership with Buffalo Red River Watershed District

–continued on reverse

## Projects in Progress continued



### Lac qui Parle River

- Reconnect 4.25 miles of historic channel
- Will improve habitat for 28 species of fish
- Partnership with Yellow Medicine County



### Bucks Mill

- 14 miles of stream will be reconnected
- Fish passage will benefit 23 species of fish
- Partnership with USFWS and supported by Pelican River Watershed District and Melissa and Sallie Lake Associations



### Northcote Dam

- This project will reconnect 48 miles of stream
- Will reconnect and improve habitat for 38 species of fish
- Partnership with Kittson County SWCD and Two Rivers Joint Power Board



### Boy River Dam

- 31 miles of stream will be reconnected
- Will improve and reconnect habitat for 55 species of fish
- Identified as a priority of watershed planning



### Cascade Creek

- 8,350 ft of channel restoration
- Will improve habitat for 18 species of fish
- Benefit turbidity and fish impairments
- Partnership with Olmsted County and City of Rochester

## Questions?

Jamison Wendel

Stream Habitat Supervisor

Minnesota Department of Natural Resources

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