Lessard-Sams Outdoor Heritage Council

DNR Aquatic Habitat Restoration and Enhancement - Phase 8

Laws of Minnesota 2025 Accomplishment Plan

General Information

Date: 06/17/2025

Project Title: DNR Aquatic Habitat Restoration and Enhancement - Phase 8

Funds Recommended: $3,800,000

Legislative Citation: ML 2025, Ch. 36, Art. 1, Sec. 2, subd. 5(s)

Appropriation Language: $3,800,000 the first year is to the commissioner of natural resources to restore and enhance aquatic habitat in degraded streams and aquatic management areas and to facilitate fish passage throughout Minnesota.

Manager Information

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Location Information

County Location(s): Becker, Olmsted, Lac qui Parle, Pine, Stevens and Big Stone.

Eco regions in which work will take place:

Prairie

Northern Forest

Southeast Forest

Forest / Prairie Transition

Activity types:

Enhance

Restore

Priority resources addressed by activity:

Habitat

Narrative

Abstract

The Minnesota Department of Natural Resources (MNDNR) will complete two fish passage projects (Whetstone and Upper Otter Tail Hwy 10 project) to reconnect reaches 71.5 miles of habitat for fish and other aquatic life and restore reaches on Whetstone River creating over 18 acres of diverse habitat. The footprint of fish passage projects is small, but projects will reconnect 6,689 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 approved funding $3,800,000 MNDNR and our partners are proposing to complete two fish passage projects (Whetstone and Upper Otter Tail Hwy 10 project) leveraging $11,306,000 of matching funds.

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 four proposed fish passage projects would have a footprint of 2 acres but create upstream access to 6689 acres of lake and river habitat and restore river ecological processes that have ecosystem wide benefits. 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 18 acres of habitat on Whetstone River. 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 one restoration coordinator, river specialist, and interns are included in this proposal. These positions provide critical technical assistance, and construction oversight to partners working on Legacy-funded stream restoration

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

The Upper Otter Tail Connectivity 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 project, block upstream migrations of mature Lake Sturgeon on the Otter Tail River.

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 plan 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 $11,306,000 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 committed as leverage. However, we will continue to aggressively pursue all federal funding opportunities with these appropriations.

Describe how the plan 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 top 2 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 plan 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. This project will also allow for rivers and streams to adjust to climate induced changing hydrology by removing human constraints on river processes and allowing rivers and streams to naturally adjust to changing hydrological regime.

Which LSOHC section priorities are addressed in this program?

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

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 ~ *This project aligns with "Reconnect the Red" efforts (Goal #3, Red River Fisheries Management plan; Phase 2 Lake Sturgeon Restoration Plan), and the Otter Tail River 1W1P ("enhancing aquatic connectivity" goal). This multi-phase collaboration builds on 30 years of Red River connectivity progress*

to date, 47 of 79 major barriers on the Red River and Minnesota tributaries have been removed or modified to allow fish passage. For this 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

Programs in the northern forest region:

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

Programs in prairie region:

Other ~ *The Whetstone, Upper Buffalo River, Florida Creek 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 Long Lake 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.*

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 celebrates cultural diversity or reaches 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 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 program 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?

Public Waters

AMA

WMA

County/Municipal

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 program either in the process of restoration or use as food plots?
No

Timeline

Activity Name	Estimated Completion Date
Vegetation maintenance on fish passage and channel restoration projects	June 2028
Construction of fish passage and channel restoration projects	September 2028
Permitting and environmental review of fish passage and channel restoration projects	December 2026
Design of fish passage and channel restoration projects	March 2026

Date of Final Report Submission: 10/21/2030

Availability of Appropriation: Subd. 7. Availability of Appropriation
(a) Money appropriated in this section may not be spent on activities unless they are directly related to and necessary for a specific appropriation and are specified in the accomplishment plan approved by the Lessard-Sams Outdoor Heritage Council. Money appropriated in this section must not be spent on indirect costs or other institutional overhead charges that are not directly related to and necessary for a specific appropriation. Money appropriated for fee title acquisition of land may be used to restore, enhance, and provide for public use of the land acquired with the appropriation. Public-use facilities must have a minimal impact on habitat in acquired lands.
(b) Money appropriated in this section is available as follows:
(1) money appropriated for acquiring real property is available until June 30, 2029;
(2) money appropriated for restoring and enhancing land acquired with an appropriation in this section is available for four years after the acquisition date with a maximum end date of June 30, 2033;
(3) money appropriated for restoring or enhancing other land is available until June 30, 2030;
(4) notwithstanding clauses (1) to (3), money appropriated for a project that receives at least 15 percent of its funding from federal funds is available until a date sufficient to match the availability of federal funding to a maximum of six years if the federal funding was confirmed and included in the original approved draft accomplishment plan; and
(5) money appropriated for other projects is available until the end of the fiscal year in which it is appropriated.

Budget

Budget reallocations up to 10% do not require an amendment to the Accomplishment Plan.

Totals

Item	Funding Request	Leverage	Leverage Source	Total
Personnel	$600,000	-	-	$600,000
Contracts	$3,082,900	$11,306,000	BIP, ABTC, UMRWD, Flood damage reduction state of MN	$14,388,900
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	$30,000	-	-	$30,000
Professional Services	-	-	-	-
Direct Support Services	$67,100	-	-	$67,100
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	-	-	-	-
Supplies/Materials	$20,000	-	-	$20,000
DNR IDP	-	-	-	-
Grand Total	**$3,800,000**	**$11,306,000**	**-**	**$15,106,000**

Personnel

Position	Annual FTE	Years Working	Funding Request	Leverage	Leverage Source	Total
River Specialist	1.0	2.0	$200,000	-	-	$200,000
Restoration Coordinator	1.0	2.0	$300,000	-	-	$300,000
Interns	1.0	2.0	$100,000	-	-	$100,000

Amount of Request: $3,800,000
Amount of Leverage: $11,306,000
Leverage as a percent of the Request: 297.53%
DSS + Personnel: $667,100
As a % of the total request: 17.56%
Easement Stewardship: -
As a % of the Easement Acquisition: -

How will this program accommodate the reduced appropriation recommendation from the original proposed requested amount?
We will implement stream projects based on our prioritized list, completing the highest priority projects with available funding and leveraging $11,306,000 of federal grants. Salary was reduced to 33% while travel, supplies/materials, and direct support services were reduced to to 35% of original proposed requested amount.

Detail leverage sources and confirmation of funds:
Whetstone: $3.3M Bipartisan Infrastructure Deal (BIL), $610,000 Upper Minnesota River Watershed District; $1.8M Flood Damage Reduction;
Otter tail River: $2.2M NFWF America the Beautiful Grant, $3.9M BIL,

Does this project 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 enhancement and restoration acres.

Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?
Personnel would reduce to 30 to 40% of the requested amount. Staff time would focus on project coordination, administration, and project development.

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

Contracts

What is included in the contracts line?
100% of contracts are for R/E work

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	-	-	-	19	19
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	-	-	2	2
Total	**-**	**-**	**-**	**21**	**21**

Total Requested Funding by Resource Type (Table 2)

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	-	-	$3,180,400	$3,180,400
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	-	-	$619,600	$619,600
Total	**-**	**-**	**-**	**$3,800,000**	**$3,800,000**

Acres within each Ecological Section (Table 3)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
Restore	-	-	-	19	-	19
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-
Enhance	-	2	-	0	-	2
Total	**-**	**2**	**-**	**19**	**-**	**21**

Total Requested Funding within each Ecological Section (Table 4)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
Restore	-	-	-	$3,180,400	-	$3,180,400
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-
Enhance	-	$619,600	-	-	-	$619,600
Total	**-**	**$619,600**	**-**	**$3,180,400**	**-**	**$3,800,000**

Average Cost per Acre by Resource Type (Table 5)

Type	Wetland	Prairie	Forest	Habitat
Restore	-	-	-	$167,389
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	-	-
Enhance	-	-	-	$309,800

Average Cost per Acre by Ecological Section (Table 6)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	-	-	-	$167,389	-
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	$309,800	-	-	-

Target Lake/Stream/River Feet or Miles

Parcels

Parcel Information

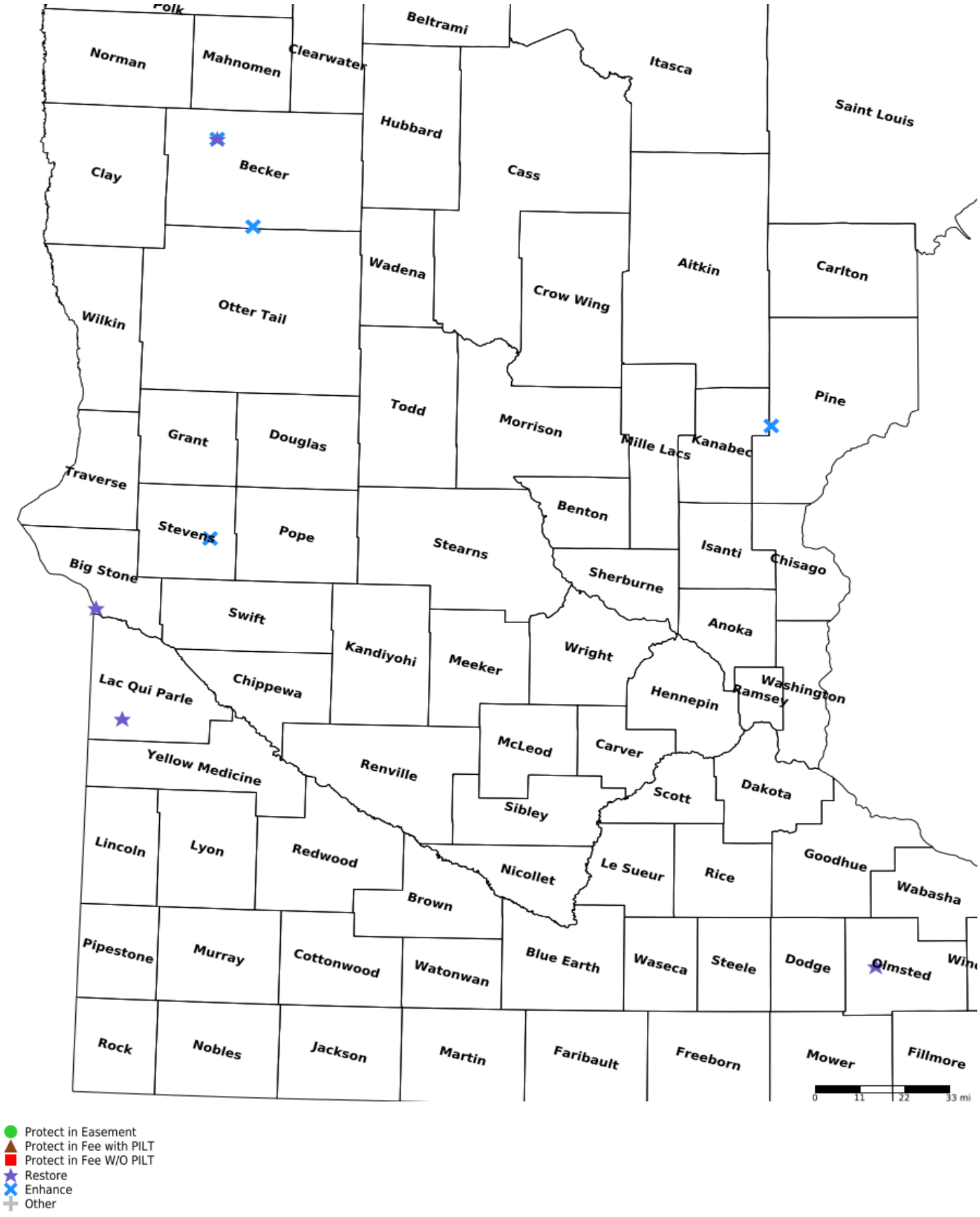
Sign-up Criteria?
No

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.

Restore / Enhance Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection	Description
Otter Tail River	Becker	13840234	2	$500,000	Yes	Culvert Removal
Upper Buffalo River	Becker	14141207	5	$1,500,000	Yes	Culvert Replacements
Upper Buffalo River	Becker	14141207	132	$2,500,000	Yes	Channel Restoration
Whetstone	Big Stone	12146216	21	$3,000,000	Yes	Channel Restoration and Fish Passage
Florida Creek Phase II	Lac qui Parle	11645204	22	$1,000,000	Yes	Channel Restoration
Cascade Creek Phase II	Olmsted	10614205	8	$952,000	Yes	Channel Restoration
Grindstone Dam	Pine	04121219	1	$1,200,000	Yes	Dam Removal
Crissy Lake	Stevens	12442212	1	$100,000	Yes	Dam Removal

Parcel Map



- Protect in Easement
- Protect in Fee with PILT
- Protect in Fee W/O PILT
- Restore
- Enhance
- Other