

Lessard-Sams Outdoor Heritage Council

Fiscal Year 2022 / ML 2021 Request for Funding



Date: May 28, 2020

Program or Project Title: DNR Aquatic Habitat Restoration and Enhancement - Phase 4 (HRE02)

Funds Requested: \$6,489,600

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County Locations: Carver, Clay, Olmsted, Otter Tail, Pine, and St. Louis.

Eco regions in which work will take place:

- Northern Forest
- Forest / Prairie Transition
- Southeast Forest
- Prairie
- Metro / Urban

Activity types:

- Restore
- Enhance

Priority resources addressed by activity:

- Habitat

Abstract:

Diverse habitat is critical to sustaining quality fish populations in lakes and rivers. The Minnesota Department of Natural Resources (MNDNR) will complete six fish passage projects to restore habitat connectivity for fish and other aquatic life, and restore reaches of four different rivers, creating 24.4 miles of diverse aquatic habitat. Though the actual footprint of fish passage projects is relatively small, these projects will reconnect over 27,000 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. Project submittals 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 six fish passage projects and four channel restorations, leveraging a confirmed \$3,225,000 and an additional \$980,000 requested from other sources.

Access to diverse habitats is critical for fish and other aquatic organisms to complete various life stages. The habitats they use at different life stages may all vary widely. 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. Research by MNDNR River Ecologist Luther Aadland found that on average, species richness declined by 37% upstream of near complete barriers to fish passage. Subsequent removal of 11 barriers in this study resulted in upstream recolonization of an average of 66% of the species that had been absent.

Modifying or removing the barriers through our two proposed fish passage projects would have a total footprint of 6 acres, but create upstream access to over 27,000 acres of lake and river habitat. This will benefit fish such as Walleye and Brook Trout present in these rivers, as well as five mussel species classified as threatened or special concern. Restoring connectivity also expands fishing opportunities by acting as a conduit for recolonization should something catastrophic such as drought happen in one portion of a watershed.

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. Channel restoration projects will utilize reference locations with high-quality habitat to improve habitat. Working with partners, we will restore 24.4 miles of habitat on four streams.

How does the proposal address habitats that have significant value for wildlife species of greatest conservation need, and/or threatened or endangered species, and list targeted species:

The Otter Tail River dams 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, these dams are blocking upstream migrations of mature Lake Sturgeon on the Otter Tail River. Removing these barriers to fish passage is key to restoring a naturally reproducing population of Lake Sturgeon in the Red River basin.

The Otter Tail River dams and Buffalo River culverts fish passage projects are known to have rare mussel species in the vicinity. These projects have the potential to benefit those species by allowing their upstream movement past the barriers. Restoration of fish passage will help to return fish and mussel diversity that was present upstream of dams prior to their construction. Potential to benefit rare species is one of the criteria by which stream projects are ranked.

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 is the degree of timing/opportunistic urgency and why it is necessary to spend public money for this work as soon as possible:

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 two of our projects. Completing these projects would take advantage of those funds while they are available.

Describe how the proposal uses science-based targeting that leverages or expands corridors and complexes, reduces fragmentation or protects areas identified in the MN County Biological Survey:

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.

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 should something catastrophic 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 sections of the Minnesota Statewide Conservation and Preservation Plan are applicable to this project:

- H5 Restore land, wetlands and wetland-associated watersheds
- H6 Protect and restore critical in-water habitat of lakes and streams

Which other plans are addressed in this proposal:

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

Describe how your program will advance the indicators identified in the plans selected:

The DNR's Strategic Conservation Agenda includes strategies to identify priority land and waters at greatest risk, and manage lands and waters for ecosystem health and resilience. Our proposal will address each of these initiatives through our prioritization of projects, and the management actions we will take.

The Red River of the North Fisheries Management plan includes goals to re-establish a self-sustaining population of Lake Sturgeon, reconnect the Red River and its tributaries, and rehabilitate habitat in the watershed to support viable native fish populations. The Otter Tail Lakes Dams, Buffalo River fish passage, and Whiskey Creek projects all work toward those goals by restoring and enhancing connectivity and in stream habitat.

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

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

Metro / Urban:

- Protect habitat corridors, with emphasis on the Minnesota, Mississippi, and St. Croix rivers (bluff to floodplain)

Southeast Forest:

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

Describe how your program will produce and demonstrate a significant and permanent conservation legacy and/or outcomes for fish, game, and wildlife as indicated in the LSOHC priorities:

The fish passage and channel restoration projects included in this proposal represent opportunities to make major and lasting positive changes for those streams. Fish passage projects such as at the Otter Tail River Dams 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.

Relationship to other funds:

- Clean Water Fund

Describe the relationship of the funds:

Wilkin County SWCD was awarded a \$280,000 Clean Water Fund grant for the Whiskey Creek project.

Does this program include leverage in funds:

Yes

The Natural Resources Conservation Service has committed \$3,200,000 to the Whiskey Creek stream restoration project through the National Water Quality Initiative. Landowner buy-in will be required to fully utilize this grant. Given the high interest of local landowners in the project, we hope that most of this grant will be utilized for this project.

Carver County Watershed Management Organization has committed \$25,000 to the Beven's Creed Dam project.

Per MS 97A.056, Subd. 24, Any state agency or organization requesting a direct appropriation from the OHF must inform the LSOHC at the time of the request for funding is made, 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.

Describe the source and amount of non-OHF money spent for this work in the past:

Appropriation Year	Source	Amount
2019	Game and Fish, Heritage Enhancement, and Federal Grants	\$4,094,900
2018	Game and Fish, Heritage Enhancement, and Federal Grants	\$3,618,100
2017	Game and Fish, Heritage Enhancement, and Federal Grants	\$3,681,500
2016	Game and Fish, Heritage Enhancement, and Federal Grants	\$3,267,000
2015	Game and Fish, Heritage Enhancement, and Federal Grants	\$3,596,000

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, people who volunteer to help the department with projects, and future potential OHF appropriations.

Explain the things you will do in the future 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

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

The estimated abundances below provide general averages for potential aquatic indicator species in Minnesota. These averages are generated from available data and published sources, and do not capture the variability inherent in populations of fish and mussels. Natural populations, including healthy populations with good habitat, vary among locations, and also rise and fall within lakes and rivers. Most fish surveys conducted by DNR produce an index of abundance (catch per unit effort) rather than a population estimate. For the Kingsbury Creek, and North Branch Whitewater projects we expect to raise the brook trout abundance to 40 lbs/acre. For the Grindstone River, Otter Tail River, Buffalo River, Beven's Creek, and Whiskey Creek projects we expect to support northern pike at 10 adults/acre, and mussels at 8000/acre.

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 - **Yes (AMA, County/Municipal, Public Waters)**

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

Land Use:

Will there be planting of corn or any crop on OHF land purchased or restored in this program - **No**

Land Use:

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

Past appropriations and spending to date:

Apprp Year	Approp Amount Received	Approp Amount Spent to Date	Leverage as Reported in AP/th>	Leverage Realized to Date	Total Acres Affected in AP	Total Acres Affected to Date	Program Complete and Final Report Approved?
ML 2019	3208000	10500	279000	120000	959		No
ML 2018	2834000	282500	0		280		No
ML 2017	2166000	1130700	1003000	934000	17	16	No
ML 2016	2074000	620500	85000	392000	14	6	No
ML 2015	4540000	4287100	0	880864	1263	908	No
ML 2014	2560000	2483200	250000	660000	1440	2507	Yes
ML 2013	5250000	5249800	0	2502900	14025	1849	Yes
ML 2012	3480000	3480000	0	2736400	359	224	Yes

Accomplishment Timeline

Activity	Approximate Date Completed
Design of fish passage and channel restoration projects	March 2022
Permitting and environmental review of fish passage and channel restoration projects	December 2022
Construction of fish passage and channel restoration projects	September 2024
Vegetation maintenance on fish passage and channel restoration projects	June 2025

Budget Spreadsheet

Total Amount of Request: \$6,489,600

Budget and Cash Leverage

BudgetName	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$0	\$0		\$0
Contracts	\$6,468,500	\$3,225,000	Buffalo Red River Watershed District, NRCS, Carver County WMO	\$9,693,500
Fee Acquisition w/ PILT	\$0	\$0		\$0
Fee Acquisition w/o PILT	\$0	\$0		\$0
Easement Acquisition	\$0	\$0		\$0
Easement Stewardship	\$0	\$0		\$0
Travel	\$0	\$0		\$0
Professional Services	\$7,800	\$0		\$7,800
Direct Support Services	\$13,300	\$0		\$13,300
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$0	\$0		\$0
Supplies/Materials	\$0	\$0		\$0
DNR IDP	\$0	\$0		\$0
Total	\$6,489,600	\$3,225,000		\$9,714,600

Amount of Request: \$6,489,600

Amount of Leverage: \$3,225,000

Leverage as a percent of the Request: 49.69%

DSS + Personnel: \$13,300

As a % of the total request: 0.20%

Easement Stewardship: \$0

As a % of the Easement Acquisition: -%

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.

What is included in the contracts line?

100% of contracts are for R/E work.

Describe and explain leverage source and confirmation of funds:

The Natural Resources Conservation Service has committed \$3,200,000 to the Whiskey Creek stream restoration project through the National Water Quality Initiative.

Carver County Watershed Management Organization has committed \$25,000 to the Beven's Creek Dam project.

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

Tell us how this project would be scaled and how administrative costs are affected, describe the "economy of scale" and how outputs would change with reduced funding, if applicable:

Projects come from a prioritized list. If we do not receive our full request, we would fund only the top projects from our list that fit within the amount allocated. Outputs would be impacted, corresponding to the output of dropped projects.

Output Tables

Table 1a. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	287	287
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	6	6
Total	0	0	0	293	293

Table 2. Total Requested Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$0	\$0	\$0	\$4,672,000	\$4,672,000
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	\$1,817,600	\$1,817,600
Total	\$0	\$0	\$0	\$6,489,600	\$6,489,600

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	0	0	26	244	17	287
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	1	4	0	1	0	6
Total	1	4	26	245	17	293

Table 4. Total Requested Funding within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	\$0	\$0	\$1,401,300	\$2,003,100	\$1,267,600	\$4,672,000
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	\$264,300	\$1,151,300	\$0	\$402,000	\$0	\$1,817,600
Total	\$264,300	\$1,151,300	\$1,401,300	\$2,405,100	\$1,267,600	\$6,489,600

Table 5. Average Cost per Acre by Resource Type

Type	Wetlands	Prairies	Forest	Habitats
Restore	\$0	\$0	\$0	\$16,279
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$302,933

Table 6. Average Cost per Acre by Ecological Section

Type	Metro /Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest
Restore	\$0	\$0	\$53,896	\$8,209	\$74,565
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	\$264,300	\$287,825	\$0	\$402,000	\$0

Automatic system calculation / not entered by managers

Target Lake/Stream/River Feet or Miles

24.4

I have read and understand Section 15 of the Constitution of the State of Minnesota, Minnesota Statute 97A.056, and the Call for Funding Request. I certify I am authorized to submit this proposal and to the best of my knowledge the information provided is true and accurate.

Outcomes

Programs in the northern forest region:

- Improved aquatic habitat indicators *For the Kingsbury Creek project, we will evaluate instream habitat as well as brook trout populations to assess success. For the Grindstone Dam project, we will use routine fish surveys to gauge changes to the fish community and compare to pre-project data.*

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 *Both MNDNR and PCA conduct periodic surveys of the Otter Tail River watershed. For the Otter Tail Lakes Dams 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 metropolitan urbanizing region:

- Improved aquatic habitat indicators *For the Beven's Creek dam 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 *We will evaluate instream and riparian habitat measures to evaluate the success of the North Branch Whitewater River restoration. Changes in fish populations will also be evaluated.*

Programs in prairie region:

- The Whiskey 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. For the Buffalo River fish passage project, we will use routine fish surveys to gauge changes to the fish community, and compare with pre-project data.

Parcel List

Explain the process used to select, rank and prioritize the parcels:

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.

Section 1 - Restore / Enhance Parcel List

Carver

Name	TRDS	Acres	Est Cost	Existing Protection?
Bevens Creek	11524233	1	\$263,000	Yes

Clay

Name	TRDS	Acres	Est Cost	Existing Protection?
Buffalo River	14248230	1	\$400,000	Yes
Whiskey Creek	13746218	243	\$2,000,000	Yes

Olmsted

Name	TRDS	Acres	Est Cost	Existing Protection?
North Branch of Whitewater River	10712216	26	\$1,400,000	Yes

Otter Tail

Name	TRDS	Acres	Est Cost	Existing Protection?
Otter Tail River	13340205	4	\$1,150,000	Yes

Pine

Name	TRDS	Acres	Est Cost	Existing Protection?
Grindstone River	04121224	10	\$900,000	Yes

St. Louis

Name	TRDS	Acres	Est Cost	Existing Protection?
Kingsbury Creek	04915210	7	\$355,500	Yes

Section 2 - Protect Parcel List

No parcels with an activity type protect.

Section 2a - Protect Parcel with Bldgs

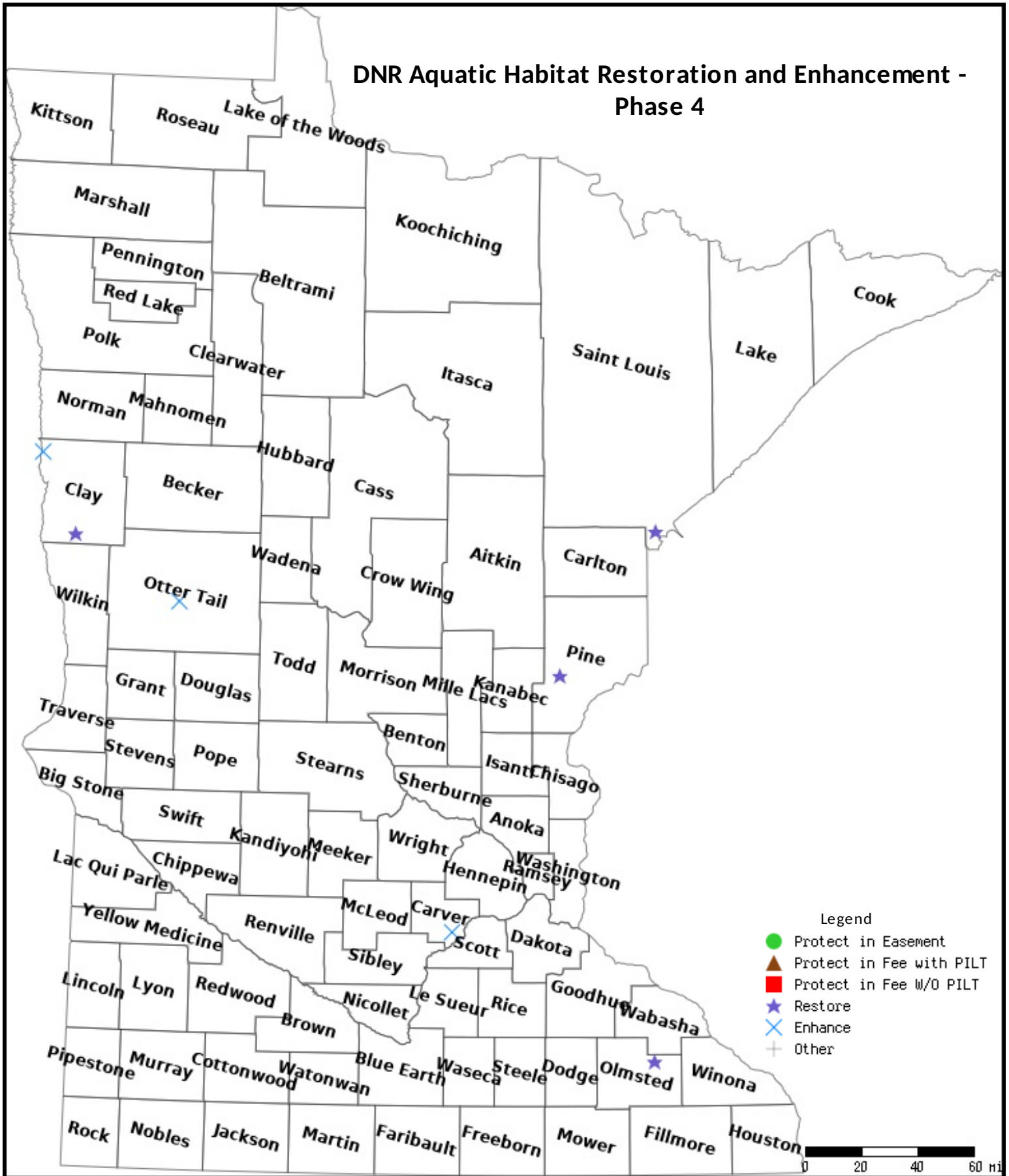
No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.

Parcel Map

DNR Aquatic Habitat Restoration and Enhancement - Phase 4



Data Generated From Parcel List

Grindstone River dam removal and channel restoration

- Dam is currently a complete barrier to fish passage.
- Restores connectivity to 24 miles of stream
- Stabilizes the newly formed channel after dam removal



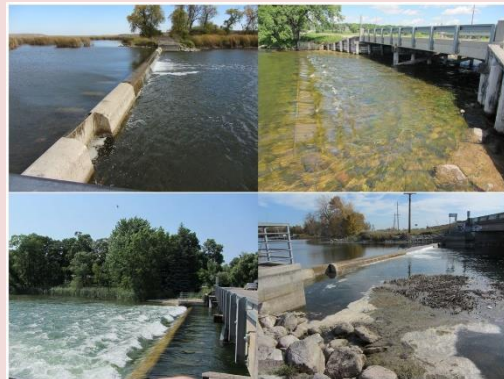
Whiskey Creek

- Restores over 20 miles of a straightened river to a meandering stream.
- Will reestablish a 340 foot wide healthy riparian corridor along the restored stream.
- Federal, state, and local match.
- Partnership with the Buffalo-Red River Watershed District.



Otter Tail River Dams

- Four lake outlet dams on Otter Tail River that currently obstruct fish passage.
- Restoring fish passage at these dams is a critical component of Lake Sturgeon restoration in Red River basin.
- Will reconnect over 118 stream miles and a number of biologically significant lakes.



Beven's Creek Dam

- Bevens Creek Dam failed in 2014 resulting in an unstable reach of stream.
- Dam removal will permanently reconnect 15 miles of stream habitat for 39 species of fish found downstream of the dam and stabilize the streambank.
- Partnership with Carver County.



Figure 5: Right Bank Scour

North Branch Whitewater River

- Restoration of approximately one mile of previously straightened river.
- Creates a new floodplain that will store floodwater and provide riparian habitat.
- Partnership with Olmsted SWCD.



Buffalo River Culverts

- Targeted and prioritized replacement of barrier culverts. Sites have been identified that would reconnect over 80 miles of stream for 53 species of fish.
- Identified as a priority in several local and agency plans.
- Partnership with BRRWD and USFWS.



Kingsbury Creek

- Restoration of approximately 0.6 miles of straightened river.
- Restores floodplain connectivity
- Partnership with South St. Louis Soil and Water Conservation District



Contact

Jamison Wendel, Stream Habitat Supervisor, MNDNR Fisheries, jamison.wendel@state.mn.us, (651) 259-5205

Stream Name	Project Type	Project Type	Resource Potential	Scale of Impact	Critical Habitat	Invasive Species	Community Support/Acceptance	Timing	Technical Feasibility	Compatibility with other initiatives	Professional Judgement	Total Score	DNR Share of Project Cost	Total Project Cost	Region	Current Contact and Year Submitted
Grindstone Dam	Dam Removal	10	10	10	8	9	3	5	5	3	5	68	\$900,000	\$1,200,000	2	Leslie George, FAW (2019)
Whiskey Creek	Channel Restoration	10	10	10	7	9	5	5	4	3	5	68	\$2,000,000	\$6,180,000	1	Bruce Albright, BRRWD (2019)
Otter Tail Dams (4 dams)	Dam Modifications	8	10	10	10	9	5	4	3	3	4	66	\$1,150,000	\$1,150,000	1	Howard Fullhart, FAW (2019)
Roseau River Phase II	Channel Restoration	10	10	10	7	9	4	3	4	3	5	65	\$1,500,000	\$7,200,000	1	Torin McCormack, RRWD (2019)
Whiskey Creek	Channel Restoration	10	9	10	9	9	5	3	4	3	3	65	\$3,500,000	\$3,900,000	1	Bruce Albright, BRRWD (2017)
Otter Tail River	Channel Restoration	10	10	10	10	9	3	1	4	3	4	64	\$30,000,000	\$30,000,000	1	Jamison Wendel, FAW (2014)
Wild Rice River	Channel Restoration	10	10	10	8	9	5	1	4	3	4	64	\$46,000,000	\$46,000,000	1	Jamison Wendel, FAW (2015)
N. Br. Whitewater	Channel Restoration	10	10	10	7	9	4	3	4	3	3	63	\$1,400,000	\$1,400,000	3	Jeff Weiss, EWR (2018)
Bevens Creek Dam	Dam Removal	10	10	2	9	9	5	4	5	3	3	60	\$263,000	\$288,000	3	Tim Sundby, Carver County WMO (2020)
Buffalo River Culverts Phase I	Culvert Replacements	8	10	10	9	9	3	2	3	3	3	60	\$400,000	\$1,500,000	1	Bruce Albright, BRRWD (2020)
Florida Creek	Channel Restoration	10	10	10	8	9	4	1	2	3	3	60	TBD	TBD	4	Brooke Hacker, EWR (2020)
Kingsbury Creek	Channel Restoration	10	7	7	8	9	4	4	4	3	3	59	\$355,540	\$555,540	2	Ann Thompson, St. Louis SWCD (2019)
S. Trib of Whiskey Creek	Channel Restoration	10	7	10	7	9	5	2	4	3	0	57	\$2,250,000	\$2,500,000	1	Bruce Albright, BRRWD (2017)
Whetstone	Channel Reconnection	9	10	10	7	9	2	1	1	3	0	52	\$2,000,000	\$6,600,559	4	SHP and Chris Domeier (2016)
Eden Lake Dam	Dam Modification	8	7	5	7	9	4	3	5	2	0	50	\$375,000	\$375,000	3	Nicola Blake-Bradely, EWR (2019)
Bucks Mill Dam	Dam Modification	6	9	7	10	8	3	1	2	3	0	49	\$2,000,000	\$2,000,000	1	Nick Kludt, FAW (2020)
Elizabeth Dam/Pelican River	Dam Modification	4	9	9	8	8	2	1	3	3	2	49	\$451,000	\$451,000	1	Jim Wolters, FAW (2017)
Tischer Creek Dam	Dam Removal with Channel Restoration	8	8	2	6	8	5	3	3	3	2	48	\$1,000,000	\$1,000,000	2	Deserae Hendrickson, FAW (2012)
Sand Lake Dam	Dam Modification	8	7	2	7	9	4	3	4	2	0	46	\$250,000	\$250,000	2	Dana Dostert and REU EWR (2018)
Seven Mile Creek Dam	Dam Removal	4	8	5	7	9	2	1	4	3	2	45	\$350,000	\$350,000	4	Brooke Hacker, EWR (2017)
Cannon River- Malt-O-Meal Dam	Dam Modification	4	8	9	8	8	1	1	1	1	0	41	\$500,000	\$2,300,000	4	Ian Chisholm, EWR (before 2010)

Not requesting funding for ML2021