Lessard-Sams Outdoor Heritage Council Fiscal Year 2021 / ML 2020 Request for Funding

Date: May 30, 2019

Program or Project Title: DNR Aquatic Habitat Restoration and Enhancement - Phase 3

Funds Requested: \$10,442,600

Manager's Name: Jamison Wendel Organization: Minnesota DNR Address: 500 Lafayette Road City: St. Paul, MN 55155 Office Number: 651-259-5205 Email: jamison.wendel@state.mn.us

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

Eco regions in which work will take place:

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

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 two fish passage projects to restore habitat connectivity for fish and other aquatic life, and restore reaches of five different rivers, creating 10.4 miles of diverse aquatic habitat. Though the actual footprint of fish passage projects is relatively small, these projects will reconnect over 600 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 two fish passage projects and five channel restorations, leveraging over a confirmed \$73,000 and an additional \$1,390,000 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. Modifying or removing the barriers through our two proposed fish passage projects would have a total footprint of 2 acres, but create upstream access to over 600 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.

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 10.4 miles of habitat on five streams.

Department resources for stream habitat work falls far short of the need; funding from the Outdoor Heritage Fund (OHF) has been critical to an acceleration of stream habitat work by the department and partners such as Trout Unlimited, as well as smaller groups such as lake associations. We propose to continue funding for one stream habitat coordinator and two stream habitat specialist positions to enable this increased effort. They provide technical assistance and oversight on Legacy-funded projects by MNDNR and partners, improve efficiency of coordination by providing single points of contact, and enhance outcomes of aquatic habitat projects through technical guidance.

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 Pelican Rapids Dam, Stony Creek, and Whisky 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

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 Pelican Rapids Dam 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.

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.

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 Pelican Rapids Dam and Hockamin Creek 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. Projects with the 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.

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 Hockamin Creek, Kingsbury Creek, and North Branch Whitewater projects we expect to raise the brook trout abundance to 40 lbs/acre. For the Grindstone River, Stony Creek, Pelican Rapids, and Whiskey Creek projects we expect to support northern pike at 10 adults/acre, and mussels at 8000/acre.

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 Hockamin Creek project, brook trout catch rates will be compared before and after project completion to evaluate the success of restoring fish passage upstream of these barriers.

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 Pelican River. For the Pelican Rapids 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 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:

• Two stream channel restorations in this region will improve in-channel and riparian habitat. We will use metrics that evaluate instream and floodplain habitat to assess our success.

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	Controlinvasives	Make instream adjustments as needed

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.

Does this program include leverage in funds:

Yes

The Fargo Moorhead Diversion Authority and Red River Flood Damage Reduction funds are committed as a match toward restoration of Whisky Creek. In addition to the habitat benefits of this project, a reconnected floodplain will increase flood storage on Whisky Creek and reduce flooding downstream on the Red River. An additional \$1,000,000 of federal CREP and local funding has been requested for the Stony Creek (\$350,000) and Whisky Creek (\$650,000) projects but those funds have not been confirmed. An application has been submitted to Sustain Our Great Lakes grant funds for the Hockamin Creek project. If successful, that grant would provide a 1:1 match.

Relationship to other funds:

• Not Listed

Describe the relationship of the funds:

Not Listed

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
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
2014	Game and Fish, Heritage Enhancement, and Federal Grants	4,062,000

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

Accomplishment Timeline

Activity	Approximate Date Completed
Design of fish passage and channel restoration projects	March, 2021
Permitting and environmental review of fish passage and channel restoration projects	December, 2021
Construction of fish passage and channel restoration projects	September, 2022
Vegetation maintenance on fish passage and channel restoration projects	June, 2024

Budget Spreadsheet

Total Amount of Request: \$10,442,600

Budget and Cash Leverage

BudgetName	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$940,000	\$0		\$940,000
Contracts	\$8,795,500	\$73,400	Buffalo Red River Watershed District	\$8,868,900
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	\$48,000	\$0		\$48,000
Pro fessio nal Services	\$533,000	\$0		\$533,000
Direct Support Services	\$114,100	\$0		\$114,100
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$0	\$0		\$0
Supplies/Materials	\$12,000	\$0		\$12,000
DNR IDP	\$0	\$0		\$0
Total	\$10,442,600	\$73,400	-	\$10,516,000

Personnel

Position	FTE	Over#ofyears	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Stream Restoration Coordinator	1.00	2.00	\$250,000	\$0		\$250,000
Stream Restoration Intern	2.00	2.00	\$65,000	\$0		\$65,000
Stream Habitat Specialists	2.00	3.00	\$625,000	\$0		\$625,000
Total	5.00	7.00	\$940,000	\$0	-	\$940,000

Amount of Request:	\$10,442,600
Amount of Leverage:	\$73,400
Leverage as a percent of the Request	: 0.70%
DSS + Personnel:	\$1,054,100
As a % of the total request:	10.09%
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.

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:

Not Listed

Describe and explain leverage source and confirmation of funds:

The Buffalo Red River Watershed District has \$73,400 in confirmed funds from Fargo-Moorhead Diversion Authority (\$60,800) and Red River Basin Flood Damage Reduction Workgroup (\$12,600).

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. Personnel requests are not scaleable.

Output Tables

Table 1a. Acres by Resource Type

Туре	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	125	125
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	2	2
Total	0	0	0	127	127

Table 2. Total Requested Funding by Resource Type

Туре	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$0	\$0	\$0	\$7,898,100	\$7,898,100
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	\$2,544,500	\$2,544,500
Total	\$0	\$0	\$0	\$10,442,600	\$10,442,600

Table 3. Acres within each Ecological Section

Туре	Metro/Urban	Forest/Prairie	SEForest	Prairie	Northern Forest	Total
Restore	0	0	26	80	19	125
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	0	1	2
Total	0	1	26	80	20	127

Table 4. Total Requested Funding within each Ecological Section

Туре	Metro/Urban	Forest/Prairie	SEForest	Prairie	Northern Forest	T o tal
Restore	\$0	\$0	\$1,880,600	\$4,253,800	\$1,763,700	\$7,898,100
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	\$2,020,600	\$0	\$0	\$523,900	\$2,544,500
Total	\$0	\$2,020,600	\$1,880,600	\$4,253,800	\$2,287,600	\$10,442,600

Table 5. Average Cost per Acre by Resource Type

Туре	Wetlands	Prairies	Forest	Habitats
Restore	\$0	\$0	\$0	\$63,185
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	\$1,272,250

Table 6. Average Cost per Acre by Ecological Section

Туре	Metro /Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest
Restore	\$0	\$0	\$72,331	\$53,173	\$92,826
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	\$2,020,600	\$0	\$0	\$523,900

Automatic system calculation / not entered by managers

Target Lake/Stream/River Feet or Miles

10.4

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.

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

Clay

Name	T RDS	Acres	EstCost	Existing Protection?
Stony Creek	13746202	9	\$335,800	Yes
Whisky Creek	13746218	72	\$3,918,000	Yes

Lake

Name	T RDS	Acres	EstCost	Existing Protection?
Hockamin Creek	05707219	1	\$523,900	Yes

Olmsted

Name	T RDS	Acres	EstCost	Existing Protection?
North Branch Whitewater River	10712216	26	\$1,880,600	Yes

Otter Tail

Name	T RDS	Acres	EstCost	Existing Protection?
Pelican River	13643222	1	\$2,020,600	Yes

Pine

Name	T RDS	Acres	EstCost	Existing Protection?
Grindstone River	04121224	11	\$1,141,800	Yes

St. Louis

Name	T RDS	Acres	EstCost	Existing Protection?
Kingsbury Creek	04915210	7	\$621,900	Yes

Section 2 - Protect Parcel List

No parcels with an activity type protect.

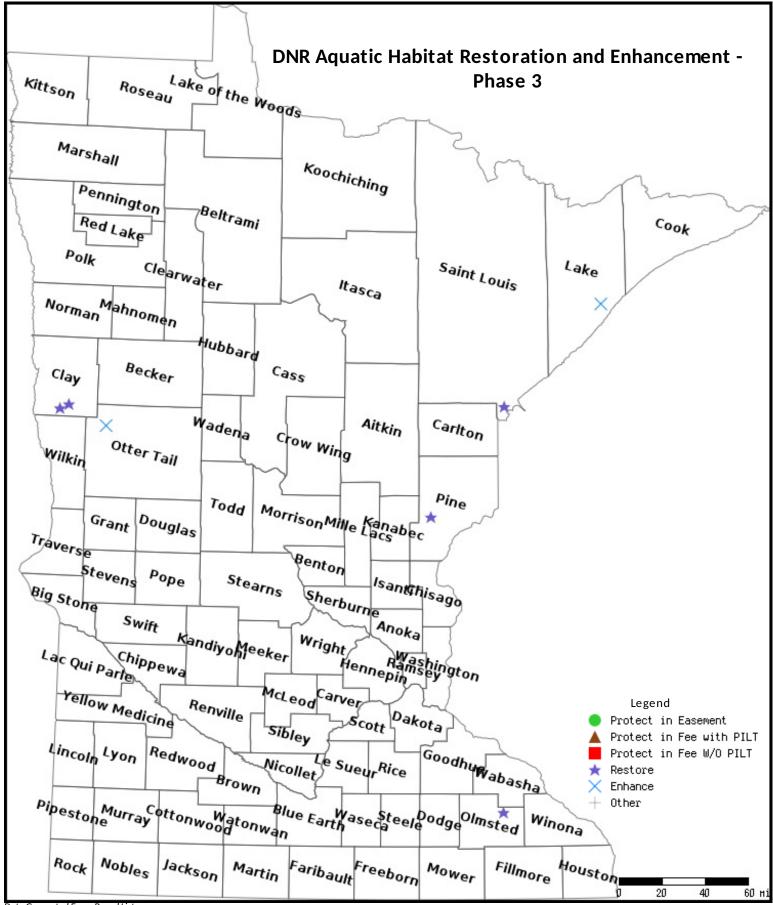
Section 2a - Protect Parcel with Bldgs

No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.

Parcel Map



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



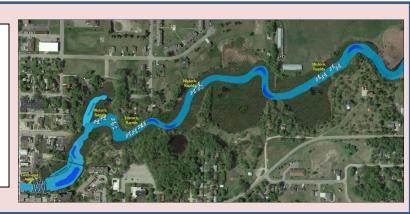
Stony Creek Phase 2

- Restores over 4 miles of a straightened river to a meandering stream.
- High quality habitat is present upstream and downstream of the project section.
- Partnership with the Buffalo-Red River Watershed District.



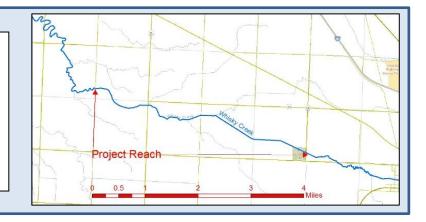
Pelican Rapids Dam

- Dam is currently a complete barrier to fish passage.
- Restores a naturally flowing river, exposes natural historic rapids, and reconnects 30 miles of rare upstream habitat.
- Partnership with city of Pelican Rapids.



Whisky Creek

- Restores 6 miles of straightened river to a meandering stream.
- High-quality habitat is present upstream and downstream.
- Partnership with the Buffalo-Red River Watershed District.



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.



Hockamin Creek Culverts

- Replaces two road crossing that impede passage of native Brook Trout
- Restores connectivity to 23 miles of stream habitat.
- Identified as a priority in several local and agency plans.



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



							Community			Compatibility				Total					
			Resource			Invasive	Support/		Technical	with other			DNR Share of				Townshi		1
Stream Name	Project Type	Туре	Potential	Impact	Habitat	Species	Acceptance	Timing	Feasibility	initiatives	Judgement	Score	Project Cost	Cost	Region	Current Contact and Year Submitted	р	Range	Section
Pelican Rapids Dam	Dam Modificaiton	9	8	8	10	9	4	5	5	3	5	66	\$1,800,000	\$1,800,000	1	Jim Wolters, FAW (2017)	136	43	22
Grindstone Channel																			1
Restoration	Channel Restoration	10	10	-	8	9	3	3	5	3	5	66		/	2	Leslie George, FAW (2019)	41	21	24
Stony Creek Phase II	Channel Restoration	9	10	10	9	9	5	4	4	3	2	65	\$300,000	\$2,160,000	1	Bruce Albright, BRRWD (2019)	137	46	2,3,4,11,12,13
																			19,20/14,21-
Roseau River Phase I	Channel Restoration	10	10	10	7	9	4	3	4	3	5	65	\$1,500,000	\$7,200,000	1	Torin McCormack, RRWD (2019)	163	42/43/44	24/6,14-16,22
Whisky Creek	Channel Restoration	10	9	10	9	9	5	3	4	3	3	65		\$3,900,000		Bruce Albright, BRRWD (2017)	137	46	18-23
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)	143	45	33, 32, 31+
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)	144	46	29, 30
Whiskey Creek	Channel Restoration	10	10	10	7	9	5	3	4	3	2	63	\$5,360,000	\$6,180,000	1	Bruce Albright, BRRWD (2019)	133	46	18
N. Br. Whitewater	Channel Restoration	10	10	10	7	9	4	1	4	3	3	61	\$1,400,000	\$1,400,000	3	Jeff Weiss, EWR (2018)	107	12	16,21
Otter Tail Dams (4 dams)	Dam Modification	8	10	10	10	9	1	1	3	3	4	59	\$1,150,000	\$1,150,000	1	Howard Fullhart, FAW (2019)	133	40	5
S. Trib of Whisky 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)	137	46	14,15,23,24,25,36
Hockamin Creek Culverts	Fish Passage	9	8	4	7	9	4	2	5	3	3	54	\$390,000	\$780,000	2	Dean Paron, FAW (2019)	57	7	19
Kingsbury Creek	Channel Restoration	9	7	7	7	9	4	2	4	3	2	54	\$555,540	\$555,540		Ann Thompson, St. Louis SWCD (2019)	49	15	10
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)	121	46	16
Eden Lake Dam	Dam Modification	8	7	5	7	9	4	3	5	2	2 0	50	\$375,000	\$375,000		Nicola Blake-Bradely, EWR (2019)	122	31	23
Elizabeth Dam/Pelican River	Dam Modification	4	9	9	8	9	2	1	3	3	2	50	• •)	\$451,000		Jim Wolters, FAW (2017)	134	43	32
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)	109	27	4
Sand Lake Dam	Dam Modification	8	7	2	7	9	4	3	4	2	2 0	46	\$250,000	\$250,000	2	Dana Dostert and REU EWR (2018)	60	18	28
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)	111	20	1
	Dam Removal with																		
Tischer Creek Removal	Channel Restoration	3	8	2	5	7	2	1	3	2	2 0	33	\$1,000,000	\$1,000,000	2	Deserae Hendrickson, FAW (2012)	50	14	2, 3

Applying directly to LSOHC Not requesting funding for ML2019