

Lessard-Sams Outdoor Heritage Council

Laws of Minnesota 2017 Accomplishment Plan



Date: October 10, 2016

Program or Project Title: DNR Stream Habitat - Phase II

Funds Recommended: \$ 2,166,000

Manager's Name: Brian Nerbonne
Title: Stream Habitat Consultant
Organization: MN DNR
Address: 500 Lafayette Rd.
Address 2: Box 20
City: St. Paul, MN 55155
Office Number: 651-259-5205
Email: brian.nerbonne@state.mn.us
Website: mndnr.gov

Legislative Citation: ML 2017, Ch. X, Art. X, Sec. X

Appropriation Language:

County Locations: Big Stone, Crow Wing, Douglas, Goodhue, Houston, Kittson, Olmsted, Otter Tail, Rock, Todd, and Watonwan.

Regions in which work will take place:

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

Activity types:

- Restore

Priority resources addressed by activity:

- Habitat

Abstract:

The Minnesota Department of Natural Resources will restore or enhance habitat to facilitate fish passage, restore degraded streams, and enhance habitat critical to fish and other aquatic life. Projects are prioritized based on ecological benefit, urgency, feasibility, and stakeholder support.

Design and scope of work:

Streams in Minnesota support a wealth of biodiversity, including 162 fish species and 48 mussel species of which 23 are listed as special concern, threatened or endangered. In some parts of the state that lack natural lakes, such as southeast Minnesota and the Red River Valley, streams represent the only local opportunity for fishing. Trout, smallmouth bass, lake sturgeon, and walleye are among the species stream anglers pursue.

Streams can be degraded by habitat alterations such as dams, channelization (straightening), and streambank erosion. Barriers such as dams block fish from migrating to key habitats such as spawning areas, and can lead to reduced abundance or even the loss of fish and mussel species. Past fish passage projects have returned up to 10 species, including walleye, sauger, and channel catfish, to miles of river where they had disappeared. All proposed fish passage projects have no known potential to enable access by invasive species.

Past channelization of streams simplified habitat and eliminated the shallow riffles and deeper pools required by different life stages of fish. Streambank erosion results in a loss of important undercut bank and overhanging vegetation, and contributes excess sediment that degrades habitat. Channel restoration and enhancement projects can address these impacts by recreating appropriate habitat, and stabilizing eroding banks. This benefits not only the project area, but reaches that lie downstream that are no longer affected by eroded sediment.

Our original proposal included 12 projects in four LSOHC planning regions (refer to Figure 1). Although the footprint of projects is 54 acres which includes 2.6 miles of stream, the projects would benefit over 10,900 acres of lakes and streams through restoration or enhancement of fish passage (refer to Table 1). Projects were selected from a prioritized list using criteria such as ecological benefit, feasibility, urgency, and stakeholder support. Two of the projects on our parcel list (Whetstone River and Fish Lake Dam) would involve partners, who will contribute in-kind staff time as well as financial resources toward the projects' completion. Allocated funds will only allow completion of our highest priority project, restoration of Mounds Creek. If matching funds are found for that project, remaining OHF money will be shifted to fund other projects on our priority list.

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 who seek funding through the Conservation Partners Legacy program. We propose to continue funding for two stream habitat specialist positions to enable this increased effort. They provide technical assistance and oversight on Legacy-funded projects by MNDNR and partners, improving efficiency of coordination by providing single points of contact, and enhancing outcomes of stream projects through technical guidance.

How does the request address MN habitats that have: historical value to fish and wildlife, wildlife species of greatest conservation need, MN County Biological Survey data, and/or rare, threatened and endangered species inventories:

The highest-ranking project in our proposal is a fish passage/channel restoration on Mound Creek which will benefit the federally endangered Topeka Shiner. The project will restore 7 acres of stream channel habitat in a former impoundment, and will provide access to an additional 6 acres of habitat.

The Hallock Dam modification will all create access to 31 miles (372 acres) of upstream habitat for Creek Heelsplitter and the Black Sandshell mussels, both species of special concern in Minnesota. The North Fork Watonwan dam removal will create access to 19 miles (228 acres) of habitat for the Creek Heelsplitter mussel. The Whetstone River restoration will create 0.8 miles (10 acres) of habitat for the Creek Heelsplitter.

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.

Describe the science based planning and evaluation model used:

One of the criteria to rank our proposed projects is the amount of habitat that is created, or acres of habitat made accessible through the removal or modification of barriers. This reduces fragmentation of aquatic systems, providing access to key habitats such as spawning grounds. In addition, numerous fish and mussel species are currently found downstream from the barriers but not upstream. For example, the Hallock Dam modification will provide access for 13 fish species, including important game species of channel catfish and sauger, not currently found upstream of the dam.

Which sections of the Minnesota Statewide Conservation and Preservation Plan are applicable to this program:

- H3 Improve connectivity and access to recreation
- H6 Protect and restore critical in-water habitat of lakes and streams

Which other plans are addressed in this program:

- Minnesota DNR Nongame Wildlife Plans
- Red River of the North Fisheries Management Plan

Which LSOHC section priorities are addressed in this program:

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:

- Restore or enhance habitat on public lands

Southeast Forest:

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

Relationship to other funds:

- Clean Water Fund

Describe the relationship of the funds:

The Clean Water Fund supports local governments in implementing projects in lakes and rivers to address known or potential impairments. However, they do not typically fund "habitat" projects such as dam removals or modifications. In addition, MNDNR is not eligible for implementation money from the Clean Water Fund.

How does this program include leverage in funds or other effort to supplement any OHF appropriation:

For the Whetstone River restoration project, the Upper Minnesota River Watershed District (\$100,000) and Citizens for Big Stone County (\$50,000) have offered local funds to assist with the project. In addition to but not included in match totals is spending by South Dakota of over \$4 million toward restoration work in their portion of the Whetstone River. For the Fish Lake dam modification project, the Pelican Group of Lakes Improvement District has pledged to contribute \$28,700 in additional funds.

Not listed in leverage totals is the numerous in-kind time that DNR staff not supported by OHF spend in supporting the proposed projects.

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

Appropriation Year	Source	Amount
2015	Game and Fish, Heritage Enhancement, and Federal Grants	1,083,717
2014	Game and Fish, Heritage Enhancement, and Federal Grants	764,917
2013	Game and Fish, Heritage Enhancement, and Federal Grants	596,168
2012	Game and Fish, Heritage Enhancement, and Federal Grants	848,571

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
First year post-project	OHF	Inspect completed project	Make any minor modifications to projects as needed using funds OHF funds allocated for project maintenance	Perform vegetation maintenance such as mowing or spot-spraying to control invasive species
Second year	OHF	Inspect completed project	Perform vegetation maintenance such as mowing or spot-spraying to control invasive species	
All following years	Multiple	Inspect completed project	Make any minor modifications to projects as needed.	

Activity Details:

If funded, this program will meet all applicable criteria set forth in MS 97A.056 - **Yes**

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

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

Is the 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, Public Waters, State Park)**

Accomplishment Timeline:

Activity	Approximate Date Completed
Survey and design of projects	March, 2019
Permitting and hiring of construction contractors	March, 2020
Construction of projects	March, 2021
Monitoring and initial vegetation maintenance	June, 2022

Date of Final Report Submission: 10/31/2022

Federal Funding:

Do you anticipate federal funds as a match for this program - **Yes**

Are the funds confirmed - **No**

What is the approximate date you anticipate receiving confirmation of the federal funds - **November 2017**

Outcomes:

Programs in the northern forest region:

- Improved aquatic habitat indicators *For fish passage projects we will use routine fish surveys to gauge changes to the fish community, and compare with 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 *For fish passage projects 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 *For stream habitat enhancement projects we will use routine fish surveys to gauge changes to the fish community, and compare with pre-project data.*

Programs in prairie region:

- Protected, restored, and enhanced habitat for migratory and unique Minnesota species *For fish passage projects we will use routine fish surveys to gauge changes to the fish community, and compare with pre-project data. Specialized sampling to evaluate Topeka Shiner population response to the Blue Mounds project will be done, tracking colonization from downstream areas.*

Budget Spreadsheet

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

How will this program accommodate the reduced appropriation recommendation from the original proposed requested amount

Allocated funding will allow us to complete our top-priority project (the Mounds Creek restoration), as well as maintain the stream habitat specialist positions for 3 years. We will seek match money for Mounds Creek that may free up additional money to complete other projects on the parcel list.

Total Amount of Request: \$ 2166000

Budget and Cash Leverage

BudgetName	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$556,900	\$0		\$556,900
Contracts	\$1,470,000	\$0		\$1,470,000
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	\$24,700	\$0		\$24,700
Professional Services	\$50,000	\$0		\$50,000
Direct Support Services	\$63,400	\$0		\$63,400
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$0	\$0		\$0
Supplies/Materials	\$1,000	\$0		\$1,000
DNR IDP	\$0	\$0		\$0
Total	\$2,166,000	\$0		\$2,166,000

Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Stream Habitat Specialists	2.00	3.00	\$556,900	\$0		\$556,900
Total	2.00	3.00	\$556,900	\$0		\$556,900

Amount of Request: \$2,166,000

Amount of Leverage: \$0

Leverage as a percent of the Request: 0.00%

DSS + Personnel: \$620,300

As a % of the total request: 28.64%

How did you determine which portions of the Direct Support Services of your shared support services is direct to this program:

The DNR uses a formula based on expected departmental expenses incurred as a result of the appropriation.

Does the amount in the contract line include R/E work?

100% of the contract money will be spent on restoration.

Describe and explain leverage source and confirmation of funds:

At this time we have no confirmed leverage, but we are actively seeking match money from the US Fish and Wildlife Service because the Mounds Creek project will benefit Topeka shiner, a federally endangered fish species. If obtained, remaining OHF money may be used to complete additional projects.

Output Tables

Table 1a. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	13	13
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	0	0
Total	0	0	0	13	13

Table 2. Total Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$0	\$0	\$0	\$2,166,000	\$2,166,000
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	\$0	\$0
Total	\$0	\$0	\$0	\$2,166,000	\$2,166,000

Table 3. Acres within each Ecological Section

Type	Metro Urban	ForestPrairie	SE Forest	Prairie	N Forest	Total
Restore	0	0	0	13	0	13
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	0	0	0	0	0
Total	0	0	0	13	0	13

Table 4. Total Funding within each Ecological Section

Type	Metro Urban	ForestPrairie	SE Forest	Prairie	N Forest	Total
Restore	\$0	\$0	\$0	\$2,166,000	\$0	\$2,166,000
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	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$2,166,000	\$0	\$2,166,000

Table 5. Average Cost per Acre by Resource Type

Type	Wetlands	Prairies	Forest	Habitats
Restore	\$0	\$0	\$0	\$166615
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	\$0

Table 6. Average Cost per Acre by Ecological Section

Type	Metro /Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest
Restore	\$0	\$0	\$0	\$166615	\$0
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	\$0	\$0

Target Lake/Stream/River Feet or Miles

1.1

Parcel List

For restoration and enhancement programs ONLY: Managers may add, delete, and substitute projects on this parcel list based upon need, readiness, cost, opportunity, and/or urgency so long as the substitute parcel/project forwards the constitutional objectives of this program in the Project Scope table of this accomplishment plan. The final accomplishment plan report will include the final parcel list.

Section 1 - Restore / Enhance Parcel List

Big Stone				
Name	TRDS	Acres	Est Cost	Existing Protection?
Whetstone River Restoration	12146216	11	\$2,000,000	Yes
Crow Wing				
Name	TRDS	Acres	Est Cost	Existing Protection?
Red Sand Lake Dam	13329210	1	\$68,000	Yes
Douglas				
Name	TRDS	Acres	Est Cost	Existing Protection?
Long Prairie River Dam Modification	12937216	1	\$180,000	Yes
Goodhue				
Name	TRDS	Acres	Est Cost	Existing Protection?
North Branch Middle Fork Zumbro River	10916233	7	\$65,000	Yes
Houston				
Name	TRDS	Acres	Est Cost	Existing Protection?
Pine Creek Habitat Enhancement	10506213	7	\$169,000	Yes
Kittson				
Name	TRDS	Acres	Est Cost	Existing Protection?
Hallock Dam Modificaiton	16149213	1	\$375,000	Yes
Olmsted				
Name	TRDS	Acres	Est Cost	Existing Protection?
North Branch Whitewater River Habitat Enhancement	10811232	15	\$300,000	Yes
Otter Tail				
Name	TRDS	Acres	Est Cost	Existing Protection?
Crane Lake Fish Passage	13240225	1	\$65,000	Yes
Fish Lake Dam Modification	13742217	1	\$400,000	Yes
Rock				
Name	TRDS	Acres	Est Cost	Existing Protection?
Mound Creek Dam Removal	10345224	13	\$1,400,000	Yes
Todd				
Name	TRDS	Acres	Est Cost	Existing Protection?
Fish Creek Dam Removal	12732229	1	\$85,000	Yes
Watonwan				
Name	TRDS	Acres	Est Cost	Existing Protection?
North Fork Watonwan Dam Removal	10733214	1	\$200,000	Yes

Section 2 - Protect Parcel List

No parcels with an activity type protect.

Section 2a - Protect Parcel with Bldgs

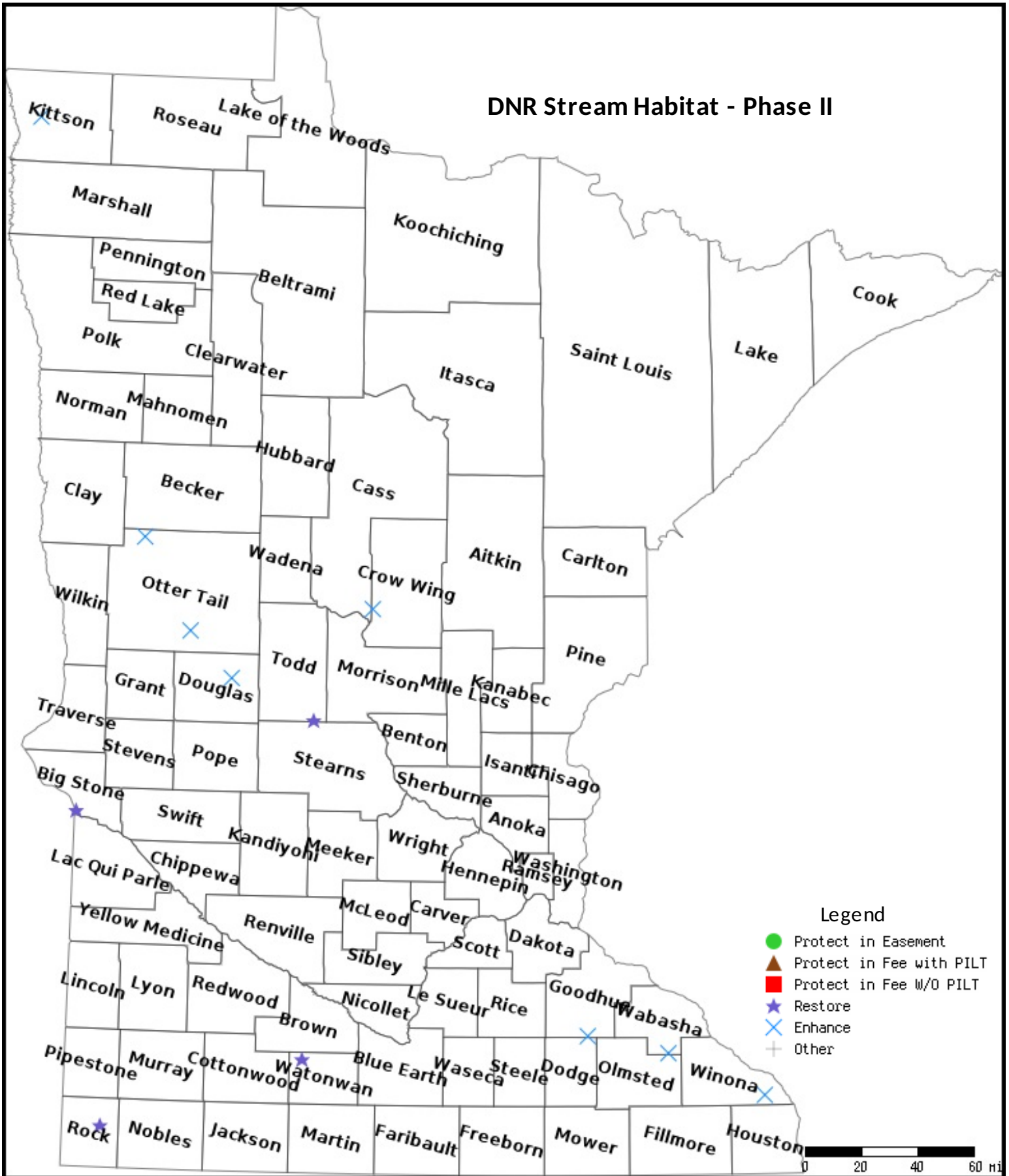
No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.

Parcel Map

DNR Stream Habitat - Phase II



Data Generated From Parcel List

Lessard-Sams Outdoor Heritage Council Comparison Report

Program Title: 2017 - DNR Stream Habitat - Phase II

Organization: MN DNR

Manager: Brian Nerbonne

Budget

Requested Amount: \$6,130,000

Appropriated Amount: \$2,166,000

Percentage: 35.33%

Budget Item	Total Requested		Total Appropriated		Percentage of Request	
	LSOHC Request	Anticipated Leverage	Appropriated Amount	Anticipated Leverage	Percentage of Request	Percentage of Leverage
Personnel	\$726,000	\$0	\$556,900	\$0	76.71%	-
Contracts	\$4,792,000	\$179,000	\$1,470,000	\$0	30.68%	0.00%
Fee Acquisition w/ PILT	\$0	\$0	\$0	\$0	-	-
Fee Acquisition w/o PILT	\$0	\$0	\$0	\$0	-	-
Easement Acquisition	\$0	\$0	\$0	\$0	-	-
Easement Stewardship	\$0	\$0	\$0	\$0	-	-
Travel	\$101,000	\$0	\$24,700	\$0	24.46%	-
Professional Services	\$280,000	\$0	\$50,000	\$0	17.86%	-
Direct Support Services	\$95,000	\$0	\$63,400	\$0	66.74%	-
DNR Land Acquisition Costs	\$0	\$0	\$0	\$0	-	-
Capital Equipment	\$0	\$0	\$0	\$0	-	-
Other Equipment/Tools	\$0	\$0	\$0	\$0	-	-
Supplies/Materials	\$136,000	\$0	\$1,000	\$0	0.74%	-
DNR IDP	\$0	\$0	\$0	\$0	-	-
Total	\$6,130,000	\$179,000	\$2,166,000	\$0	35.33%	0.00%

How will this program accommodate the reduced appropriation recommendation from the original proposed requested amount?

Allocated funding will allow us to complete our top-priority project (the Mounds Creek restoration), as well as maintain the stream habitat specialist positions for 3 years. We will seek match money for Mounds Creek that may free up additional money to complete other projects on the parcel list.

Output

Table 1a. Acres by Resource Type

Type	Total Proposed	Total in AP	Percentage of Proposed
Restore	20	13	65.00%
Protect in Fee with State PILT Liability	0	0	-
Protect in Fee W/O State PILT Liability	0	0	-
Protect in Easement	0	0	-
Enhance	34	0	0.00%

Table 2. Total Funding by Resource Type

Type	Total Proposed	Total in AP	Percentage of Proposed
Restore	4,280,000	2,166,000	50.61%
Protect in Fee with State PILT Liability	0	0	-
Protect in Fee W/O State PILT Liability	0	0	-
Protect in Easement	0	0	-
Enhance	1,850,000	0	0.00%

Table 3. Acres within each Ecological Section

Type	Total Proposed	Total in AP	Percentage of Proposed
Restore	20	13	65.00%
Protect in Fee with State PILT Liability	0	0	-
Protect in Fee W/O State PILT Liability	0	0	-
Protect in Easement	0	0	-
Enhance	34	0	0.00%

Table 4. Total Funding within each Ecological Section

Type	Total Proposed	Total in AP	Percentage of Proposed
Restore	4,280,000	2,166,000	50.61%
Protect in Fee with State PILT Liability	0	0	-
Protect in Fee W/O State PILT Liability	0	0	-
Protect in Easement	0	0	-
Enhance	1,850,000	0	0.00%