Lessard-Sams Outdoor Heritage Council
Laws of Minnesota 2017 Accomplishment Plan

Date: October 10, 2016

Program or Project Title: Minnesota Trout Unlimited Coldwater Fish Habitat Enhancement and Restoration

Funds Recommended: $ 2,403,000

Manager's Name: John Lenczewski
Title: Executive Director
Organization: Minnesota Trout Unlimited
Address: P O Box 845
City: Chanhassen, MN 55317
Mobile Number: 612-670-1629
Email: jlenczewski@comcast.net

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

Appropriation Language:

County Locations: Carlton, Clearwater, Cook, Fillmore, Goodhue, Lake, St. Louis, Wabasha, and Winona.

Regions in which work will take place:

- Northern Forest
- Southeast Forest

Activity types:

- Enhance

Priority resources addressed by activity:

- Habitat

Abstract:

Minnesota Trout Unlimited will enhance and restore habitat for fish and wildlife in and along priority coldwater streams located on existing Aquatic Management Areas and public lands around the state. Accelerating habitat work to reduce the backlog of degraded streams is urgent given the increasing threats to these scarce coldwater fisheries. Population outcomes will be maximized by improving the connectivity of habitat and fish and wildlife populations, and building upon earlier work on adjacent stream segments. Durable habitat improvements will be completed on nine or more streams, creating more productive, self-sustaining fisheries.

Design and scope of work:

Just six percent of Minnesota's streams are capable of supporting any trout, and degraded habitat conditions severely limit the productivity of many, or even most, of them. The riparian corridors of many streams are largely protected from future harm, but this protection cannot reverse past habitat degradation. Minnesota Trout Unlimited ("MNTU") proposes to directly restore or enhance degraded habitat on nine or more priority streams with existing protections under the Aquatic Management Area system or public ownership. We propose to restore or enhance habitat in and along the following public waters (in these counties):

1. Sucker Brook (Clearwater)
2. Miller Creek (St. Louis)
3. Stewart River (Lake)
4. Fiddle Creek (Cook)
5. Timber Creek (Cook)

6. West Indian Creek (Wabasha)
7. Wisel Creek (Fillmore)
8. Rush Creek (Winona)
9. Long Creek (Wabasha)
10. Numerous streams statewide (prioritized maintenance list)

We will also design and permit the project proposed for the South Branch of Whitewater River (Winona).

If we realize significant contracting efficiencies and/or leverage substantial other funding we may also design and permit the project proposed for Keene Creek (St. Louis) and construct these or additional projects.

Individual project descriptions are provided in a revised attachment.

Goals and scope of work.
The goals of each project are to increase the carrying capacity and trout population of the stream, increase angling access and participation, improve water quality and provide other benefits to aquatic and terrestrial wildlife. Each project will accomplish one or more of these objectives: (a) increase adult trout abundance, (b) reduce stream bank erosion and associated sedimentation downstream, (c) reconnect streams to their floodplains to reduce negative impacts from severe flooding, (d) increase natural reproduction of trout and other aquatic organisms, (e) increase habitat for invertebrates and non-game species, (f) improve connectivity of habitat along aquatic and riparian (terrestrial) corridors, (g) improve angler access and participation, and (h) protect productive trout waters from invasive species. The scope of work and methods utilized vary by project and are discussed in the individual project descriptions provided in the attachment.

How priorities were set.
MNTU focuses on those watersheds likely to continue to support viable, fishable populations of naturally reproducing trout and steelhead fifty years and more from now. Work is done only where degraded habitat is a limiting factor for a quality, sustainable fishery. Priority locations are determined using MNTU members' extensive knowledge of the watersheds, MNDNR management plans and surveys, other habitat and conservation planning efforts, consultations with MNDNR professionals, and science based criteria. All things being equal, we consider the potential to draw new anglers outdoors, increase public awareness, engage landowners in conservation, foster partnerships, and increase public support for OHF projects.

Stakeholder support.
We continue to receive strong support for these projects from landowners, rural communities, and local civic and sporting organizations. We will continue gathering local input and developing partnerships in the planning and implementation stages. Landowners typically become very enthusiastic partners, working alongside TU.

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 projects will restore or enhance degraded habitat for fish and wildlife in and along coldwater streams and rivers which historically supported naturally reproducing trout or steelhead populations enjoyed by generations of anglers. While trout are the apex predator and key indicator species in coldwater systems, a host of rare aquatic species are uniquely associated with these systems. Well-functioning coldwater aquatic ecosystem are far less "common" than the 6% of Minnesota's total stream and river miles which theoretically can still support trout. They are very rare in the western half of the state. Even many streams considered to be the best remaining trout streams have badly degraded segments which disrupt connectivity and have significant impacts on the productivity and long term resilience (and self-sustainability) of the overall trout population. Our trout streams face growing threats from warming temperatures, increased frequency of severe flooding, and rising demand for groundwater pumping from the aquifers which sustain cold stream flows. The proposed projects are focused on streams and stream segments which will benefit from improved connectivity and help ensure Minnesota retains at least some high quality coldwater fisheries into the future.

Describe the science based planning and evaluation model used:

In selecting project sites, MNTU reviews MNDNR watershed specific fisheries management plans and other conservation planning efforts, consults with MNDNR professionals, and applies ranking criteria developed by the MNDNR. Projects must have the potential to increase the carrying capacity (fish numbers), the streams have natural reproduction, and the public have access to them. Improving the connectivity of good aquatic and riparian habitat is an important consideration and the projects selected address this. We are increasingly targeting stream segments which build off earlier habitat or protection work in the same stream or watershed.

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:

- Driftless Area Restoration Effort
- Strategic Plan for Coldwater Resources Management in Southeastern Minnesota

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

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:

- Not Listed

Describe the relationship of the funds:

Not Listed

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

We anticipate that a number of the individual projects will leverage substantial other funding, including especially federal NRCS funding on the southeast Minnesota projects. Our partner on the Miller Creek project in Duluth believes it will secure approximately $400,000 in federal funding for this project. It is also likely that we will leverage USFWS grants on several projects. We will also leverage not only volunteer labor from TU members and others, but several partners (MNDNR, SWCD offices, etc.) will contribute significant amounts of time and/or dollars assisting on the projects. If we succeed in leveraging substantial federal funding (including NRCS funding) we will utilize any increased OHF "budget space" to enhance more habitat on additional segments of these streams, and even enhance habitat on other streams, after consultation with LSOHC staff.

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

Appropriation Year	Source	Amount
n/a	n/a - each project proposed is a new stand alone project	0

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

MNTU's coldwater aquatic habitat restoration and enhancement projects are designed for long-term ecological and hydraulic stability. Once in-stream work is completed and riparian vegetation well established, no significant maintenance is usually required in order to sustain the habitat outcomes for several decades. Reconnected floodplains allow floodwater to quickly spread out and dissipate energy, reducing the destructive impact of a flood. Flood waters typically flatten streamside vegetation temporarily and do not damage the in-stream structures. The tenfold increase in trout populations and threefold increase in large trout which are common following completion of a southeast Minnesota project, are gains which are sustainable long-term through natural reproduction.

We anticipate that long-term monitoring of the integrity of the improvements will be done in conjunction with routine inspections and biological monitoring conducted by local MNDNR staff, MNTU members, or landowners as appropriate. This monitoring will not require separate OHF or other constitutional funding. In the event that there are other maintenance costs, potential sources of funding and volunteer labor include MNTU, MNDNR AMA maintenance funding, and other grant funds and organizations. MNTU volunteers will help provide long-term monitoring and periodic labor.

Explain the things you will do in the future to maintain project outcomes:

Year	Source of Funds	Step 1	Step 2	Step 3
Year after grant ends	volunteer or part of regular agency visit	Inspect structural elements and vegetation	Alert DNR and devise actions needed	Conduct maintenance with volunteers or contractors if DNR does not
Every 3 years thereafter	volunteer or agnecy staff	Inspect structural elements and vegetation	Develop action plan if needed	Perform/assist with maintenance if DNR does not

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 (WMA, AMA, County/Municipal, Public Waters, State Forests, Federal forests)**

Accomplishment Timeline:

Activity	Approximate Date Completed
Begin projct planning, design and permitting work following the July 2017 appropriation availability	Begin July 2017
Begin habitat enhancements during 2018 fieldwork season	2018 field work season to June 2022
Habitat enhancement, including establishment of riparian vegetation	June 2022

Date of Final Report Submission: 11/1/2022

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 - **August 1, 2017**

Outcomes:

Programs in the northern forest region:

- Improved aquatic habitat indicators *Measured through surveys of fish, macro invertebrates and/or exposed substrates. Abundance, size structure and species diversity are considered.*

Programs in southeast forest region:

- Rivers, streams, and surrounding vegetation provide corridors of habitat *Enhancement of in-stream and riparian corridor habitat creates miles of connected habitat. Outcomes in aquatic life are measured through surveys of fish, macro invertebrates and/or exposed substrates. Abundance, size structure and species diversity are considered.*

Budget Spreadsheet

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

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

The Keene Creek project was postponed. The South Branch Whitewater River project will be designed and permitted, but not constructed yet. The length of the Rush Creek project was shortened. The number priority maintenance projects (miles enhanced) was reduced proportionally.

Total Amount of Request: $ 2403000

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	$110,000	$0		$110,000
Contracts	$1,156,000	$300,000	SWCD, NRCS, USFWS	$1,456,000
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	$5,000	$0		$5,000
Professional Services	$445,000	$0		$445,000
Direct Support Services	$22,000	$22,000	TU	$44,000
DNR Land Acquisition Costs	$0	$0		$0
Capital Equipment	$0	$0		$0
Other Equipment/Tools	$20,000	$0		$20,000
Supplies/Materials	$645,000	$300,000	SWCD, NRCS, USFWS	$945,000
DNR IDP	$0	$0		$0
Total	$2,403,000	$622,000		$3,025,000

Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Program manager	0.40	3.00	$65,000	$0		$65,000
Watershed coordinator	0.10	3.00	$10,000	$0		$10,000
Program assistant	0.25	3.00	$25,000	$0		$25,000
Field work interns	0.20	3.00	$10,000	$0		$10,000
Total	0.95	12.00	$110,000	$0		$110,000

Amount of Request:	$2,403,000
Amount of Leverage:	$622,000
Leverage as a percent of the Request:	25.88%
DSS + Personnel:	$132,000
As a % of the total request:	5.49%

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

It is based only upon personnel costs.

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

Yes, 100% of it.

Describe and explain leverage source and confirmation of funds:

The leverage estimates are estimates only. We anticipate $400,000 in federal funds to be secured by our SWCD partner on one project, but will not have confirmation until 8/01/2017. We anticipate that NRCS funding will be secured on several projects totaling $150,000 to $200,000, but cannot be confirmed until the particular projects are fully designed and permitted (likely late 2017 or in 2018). We anticipate USFWS funding on several projects totaling approximately $50,000.

Output Tables

Table 1a. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	0	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	153	153
Total	0	0	0	153	153

Table 2. Total Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	$0	$0	$0	$0	$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	$2,403,000	$2,403,000
Total	$0	$0	$0	$2,403,000	$2,403,000

Table 3. Acres within each Ecological Section

Type	Metro Urban	Forest Prairie	SE Forest	Prairie	N Forest	Total
Restore	0	0	0	0	0	0
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	88	0	65	153
Total	0	0	88	0	65	153

Table 4. Total Funding within each Ecological Section

Type	Metro Urban	Forest Prairie	SE Forest	Prairie	N Forest	Total
Restore	$0	$0	$0	$0	$0	$0
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	$1,428,000	$0	$975,000	$2,403,000
Total	$0	$0	$1,428,000	$0	$975,000	$2,403,000

Table 5. Average Cost per Acre by Resource Type

Type	Wetlands	Prairies	Forest	Habitats
Restore	$0	$0	$0	$0
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	$15706

Table 6. Average Cost per Acre by Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest
Restore	$0	$0	$0	$0	$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	$16227	$0	$15000

Target Lake/Stream/River Feet or Miles

12

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

Carlton

Name	TRDS	Acres	Est Cost	Existing Protection?
Numerous streams - northern	04616204	24	$0	Yes

Clearwater

Name	TRDS	Acres	Est Cost	Existing Protection?
Sucker Brook	14436233	3	$0	Yes

Cook

Name	TRDS	Acres	Est Cost	Existing Protection?
Fiddle Creek	06301210	12	$0	Yes
Timber Creek	06301136	12	$0	Yes

Fillmore

Name	TRDS	Acres	Est Cost	Existing Protection?
Wisel Creek	10208232	16	$0	Yes

Goodhue

Name	TRDS	Acres	Est Cost	Existing Protection?
Numerous streams - southern	11316234	36	$0	Yes

Lake

Name	TRDS	Acres	Est Cost	Existing Protection?
Stewart River	05411234	5	$0	Yes

St. Louis

Name	TRDS	Acres	Est Cost	Existing Protection?
Keene Creek	05015236	0	$0	Yes
Miller Creek	05014218	9	$0	Yes

Wabasha

Name	TRDS	Acres	Est Cost	Existing Protection?
Long Creek	10912222	18	$0	Yes
West Indian Creek	10911216	12	$0	Yes

Winona

Name	TRDS	Acres	Est Cost	Existing Protection?
Rush Creek	10508229	6	$0	Yes
S. Branch Whitewater River	10710214	0	$0	Yes

Section 2 - Protect Parcel List

No parcels with an activity type protect.

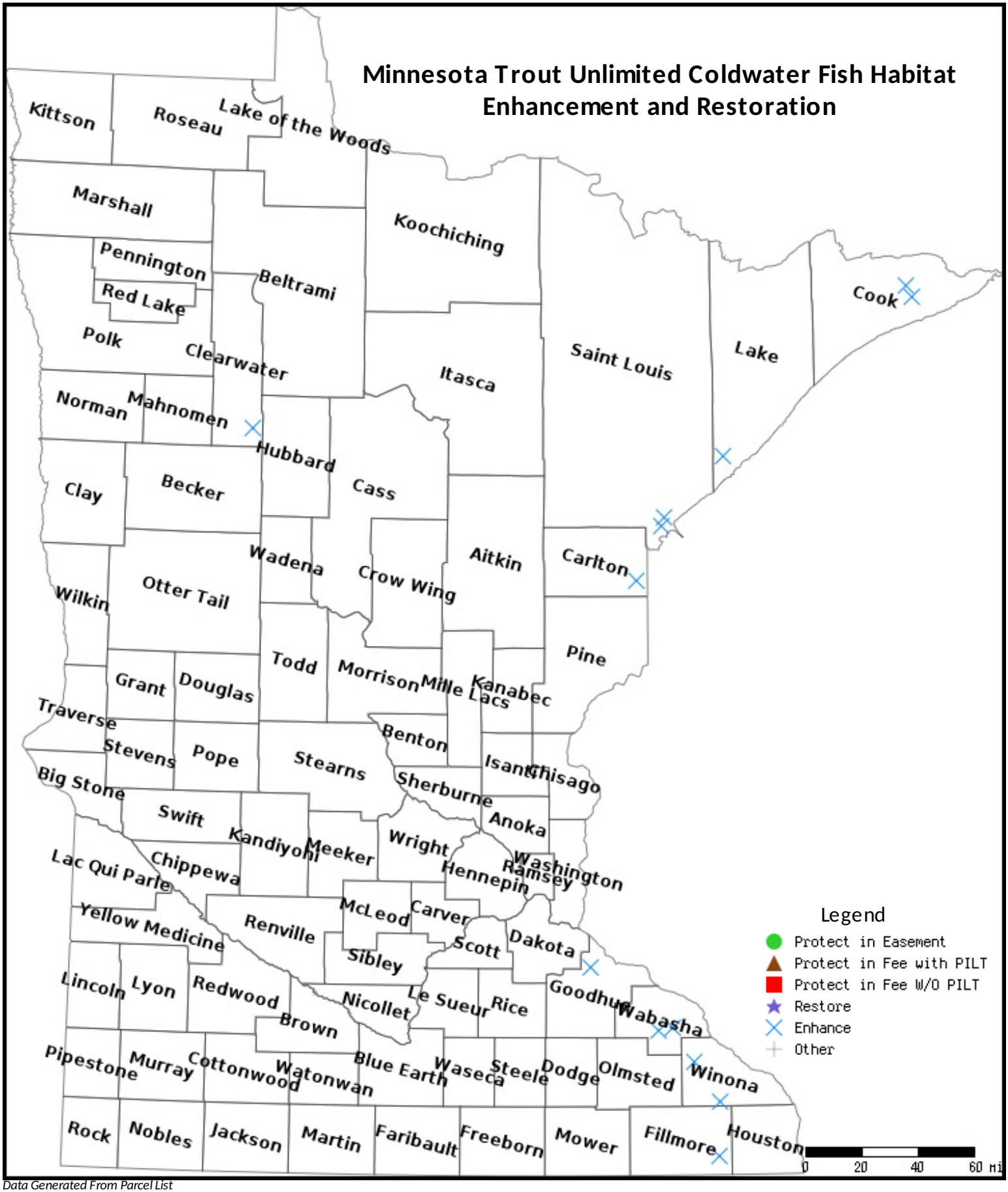
Section 2a - Protect Parcel with Bldgs

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

Lessard-Sams Outdoor Heritage Council
Comparison Report

Program Title: 2017 - Minnesota Trout Unlimited Coldwater Fish Habitat Enhancement and Restoration
Organization: Minnesota Trout Unlimited
Manager: John Lenczewski

Budget

Requested Amount: $3,260,000
Appropriated Amount: $2,403,000
Percentage: 73.71%

	Total Requested		Total Appropriated		Percentage of Request	
Budget Item	**LSOHC Request**	**Anticipated Leverage**	**Appropriated Amount**	**Anticipated Leverage**	**Percentage of Request**	**Percentage of Leverage**
Personnel	$120,000	$0	$110,000	$0	91.67%	-
Contracts	$1,586,000	$300,000	$1,156,000	$300,000	72.89%	100.00%
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	$10,000	$0	$5,000	$0	50.00%	-
Professional Services	$525,000	$50,000	$445,000	$0	84.76%	0.00%
Direct Support Services	$24,000	$24,000	$22,000	$22,000	91.67%	91.67%
DNR Land Acquisition Costs	$0	$0	$0	$0	-	-
Capital Equipment	$0	$0	$0	$0	-	-
Other Equipment/Tools	$20,000	$0	$20,000	$0	100.00%	-
Supplies/Materials	$975,000	$300,000	$645,000	$300,000	66.15%	100.00%
DNR IDP	$0	$0	$0	$0	-	-
Total	$3,260,000	$674,000	$2,403,000	$622,000	73.71%	92.28%

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

The Keene Creek project was postponed. The South Branch Whitewater River project will be designed and permitted, but not constructed yet. The length of the Rush Creek project was shortened. The number priority maintenance projects (miles enhanced) was reduced proportionally.

Output

Table 1a. Acres by Resource Type

Type	Total Proposed	Total in AP	Percentage of Proposed
Restore	0	0	-
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	201	153	76.12%

Table 2. Total Funding by Resource Type

Type	Total Proposed	Total in AP	Percentage of Proposed
Restore	0	0	-
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	3,260,000	2,403,000	73.71%

Table 3. Acres within each Ecological Section

Type	Total Proposed	Total in AP	Percentage of Proposed
Restore	0	0	-
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	201	153	76.12%

Table 4. Total Funding within each Ecological Section

Type	Total Proposed	Total in AP	Percentage of Proposed
Restore	0	0	-
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	3,260,000	2,403,000	73.71%