

Lessard-Sams Outdoor Heritage Council

Minnesota Trout Unlimited Coldwater Fish Habitat Enhancement and Restoration, Phase 11 Laws of Minnesota 2019 Accomplishment Plan

General Information

Date: 12/22/2023

Project Title: Minnesota Trout Unlimited Coldwater Fish Habitat Enhancement and Restoration, Phase 11

Funds Recommended: \$2,359,000

Legislative Citation: ML 2019, 1st Sp. Session, Ch. 2, Art. 1, Sec. 2, subd, 5(f)

Appropriation Language: \$2,359,000 the first year is to the commissioner of natural resources for an agreement with Trout Unlimited to acquire permanent conservation stream easements using the payment method prescribed in Minnesota Statutes, section 84.0272, subdivision 2, and to restore and enhance habitat for trout and other species in and along coldwater rivers, lakes, and streams in Minnesota. Up to \$40,000 is to establish a monitoring and enforcement fund as approved in the accomplishment plan and subject to Minnesota Statutes, section 97A.056, subdivision 17. A list of proposed land acquisitions and restorations and enhancements must be provided as part of the required accomplishment plan.

Manager Information

Manager's Name: John Lenczewski

Title:

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Location Information

County Location(s): Fillmore, Pine, St. Louis, Houston, Lake, Winona, Wabasha and Dakota.

Eco regions in which work will take place:

- Northern Forest
- Metro / Urban
- Southeast Forest

Activity types:

- Protect in Easement
- Enhance

Priority resources addressed by activity:

Habitat

Narrative

Abstract

Minnesota Trout Unlimited will enhance and restore habitat for fish and wildlife in and along priority coldwater streams located on existing conservation easements and public lands around the state. Trout streams are a relatively scarce resource and increasing threats to them require accelerating habitat work to reduce the backlog of degraded stream reaches. Population outcomes will be maximized by improving the connectivity of habitat and fish and wildlife populations, and building upon work on adjacent sections. Stream easements will be acquired in Pine County and the Duluth area to project the highest quality trout habitat and facilitate habitat enhancement.

Design and Scope of Work

Minnesota Trout Unlimited ("MNTU") proposes to directly restore or enhance degraded habitat on priority streams with existing protections under the Aquatic Management Area system or public ownership. We propose to restore or enhance habitat in and along these public waters (and counties):

Trout Brook (Dakota);
Hay Creek (Pine County);
Beaver Creek (Houston);
Cedar Valley Creek (Winona);
Rice Creek (Fillmore);
Split Rock River (Lake);
Manitou River (Lake);
Keene Creek (St. Louis);
Duluth area streams (St. Louis);
Numerous streams statewide (prioritized maintenance list).

We will also protect via trout stream easements segments of native brook trout streams in Pine County and the Duluth area. Once acquired the easements will be held by the MNDNR.

If contracting efficiencies or success leveraging funding enable us to, we will extend project lengths, work on one or more of the projects originally proposed but temporarily "cut" by us due to lower funding than requested [Gilbert Creek (Wabasha), Mill Creek (Fillmore), Pine Creek (New Hartford Creek) (Winona), and Torkelson Creek (Fillmore)], and/or work on additional streams. The Split Rock River project will be designed and permitted, and construction funding sought in the next funding cycle.

Individual project descriptions are provided in an 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 the stream to its 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 riparian forests as appropriate, (h) improve angler access and participation, and (i) 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' knowledge of 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 receiving strong support from local communities, anglers, landowners, partners and the public.

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

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 supply vitally important cold water inputs. 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 for future generations.

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

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 are selected to expand or connect gaps in these corridors. We are increasingly targeting stream segments which build off earlier habitat or protection work in the same stream or watershed.

Which two sections of the Minnesota Statewide Conservation and Preservation Plan are most applicable to this project?

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

Which two 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?

Metro / Urban

Enhance and restore coldwater fisheries systems

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

Outcomes

Programs in metropolitan urbanizing 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 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:

Other ~

Does this program include leveraged funding?

-

Per MS 97A.056, Subd. 24, Please explain whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.

Not applicable.

Non-OHF Appropriations

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

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.

Actions to Maintain Project Outcomes

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

Activity Details

Requirements

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

Is the land you plan to acquire (easement) free of any other permanent protection?

Yes

Who will manage the easement?

MNDNR

Who will be the easement holder?

MNDNR

What is the anticipated number of easements (range is fine) you plan to accomplish with this appropriation?

While only an estimate, we calculate that six miles of stream corridor length will likely encompass 12 to 24 different landowners (based upon 1/2 mile to 1/4 mile of stream length per parcel).

Will restoration and enhancement work follow best management practices including MS 84.973 Pollinator Habitat Program?

Yes

Is the restoration and enhancement activity on permanently protected land per 97A.056, Subd 13(f), tribal lands, and/or public waters per MS 103G.005, Subd. 15 or on lands to be acquired in this program? Yes

Where does the activity take place?

- AMA
- County/Municipal
- Public Waters
- State Forests
- Other : State Park

Land Use

Will there be planting of any crop on OHF land purchased or restored in this program?

Will the eased land be open for public use?

Yes

No

Describe the expected public use:

Fishing

Are there currently trails or roads on any of the proposed acquisitions?

No

Will new trails or roads be developed or improved as a result of the OHF acquisition?

No

Will the acquired parcels be restored or enhanced within this appropriation?

Yes

One or more easement acquired in Pine County will likely need enhancement work, and some of this appropriation is earmarked for that purpose. Other parcels likely will not need restoration or enhancement. However, we will identify those that do and make funding for enhancement of those habitats a priority in future requests.

Timeline

Activity Name	Estimated Completion Date
Begin project planning, survey, design and permitting work	Begin summer 2019
following a July 2019 appropriation.	
Begin communications with riparian landowners re	Summer 2019
easements	
Begin habitat enhancements on several projects in 2020	Begin 2020 field work season
field work season.	
Complete title work and closing on easements throughout	2021
2020 and first half 2021.	
Complete all habitat enhancements, including establishment	June 2024
of riparian vegetation.	

Date of Final Report Submission: 12/01/2024

Availability of Appropriation: Subd. 7. Availability of Appropriation

Money appropriated in this section may not be spent on activities unless they are directly related to and necessary for a specific appropriation and are specified in the accomplishment plan approved by the Lessard-Sams Outdoor Heritage Council. Money appropriated in this section must not be spent on indirect costs or other institutional overhead charges that are not directly related to and necessary for a specific appropriation. Unless otherwise provided, the amounts in this section are available until June 30, 2022. For acquisition of real property, the amounts in this section are available until June 30, 2023, if a binding agreement with a landowner or purchase agreement is entered into by June 30, 2022, and closed no later than June 30, 2023. Funds for restoration or enhancement are available until June 30, 2024, or five years after acquisition, whichever is later, in order to complete initial restoration or enhancement work. If a project receives at least 15 percent of its funding from federal funds, the time of the appropriation may be extended to equal the availability of federal funding to a maximum of six years if that federal funding was confirmed and included in the original draft accomplishment plan. Funds appropriated for fee title acquisition of land may be used to restore, enhance, and provide for public use of the land acquired with the appropriation. Public-use facilities must have a minimal impact on habitat in acquired lands.

Budget

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

Totals

Item	Funding Request	Leverage	Leverage Source	Total
Personnel	\$200,000	-	-	\$200,000
Contracts	\$779,000	\$250,000	NRCS and USFWS	\$1,029,000
Fee Acquisition w/	-	-	-	-
PILT				
Fee Acquisition w/o	-	-	-	-
PILT				
Easement Acquisition	\$380,000	-	-	\$380,000
Easement	\$40,000	-	-	\$40,000
Stewardship				
Travel	\$20,000	-	-	\$20,000
Professional Services	\$380,000	-	-	\$380,000
Direct Support	\$30,000	\$60,000	TU	\$90,000
Services				
DNR Land Acquisition	-	-	-	-
Costs				
Capital Equipment	-	-	-	-
Other	\$20,000	-	-	\$20,000
Equipment/Tools				
Supplies/Materials	\$510,000	\$200,000	NRCS and USFWS	\$710,000
DNR IDP	-	-	-	-
Grand Total	\$2,359,000	\$510,000	-	\$2,869,000

Personnel

Position	Annual FTE	Years	Funding	Leverage	Leverage	Total
		Working	Request		Source	
Project	0.4	3.0	\$55,000	-	-	\$55,000
manager						
Watershed	0.1	3.0	\$10,000	-	-	\$10,000
coordinator						
Habitat	0.25	3.0	\$135,000	-	-	\$135,000
enhancement						
staff						

Amount of Request: \$2,359,000 **Amount of Leverage:** \$510,000

Leverage as a percent of the Request: 21.62%

DSS + Personnel: \$230,000

As a % of the total request: 9.75% Easement Stewardship: \$40,000

As a % of the Easement Acquisition: 10.53%

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

We will temporarily "cut" four projects in southeast MN (Gilbert Creek, Mill Creek, Pine Creek (New Hartford Creek), and Torkelson Creek) and complete design and permitting only on the Split Rock River project. We will seek construction funding for Split Rock in the next funding cycle.

Describe and explain leverage source and confirmation of funds:

Leverage estimates are estimates only. We anticipate securing approximately \$400,000 in NRCS funding and \$50,000 in USFWS funding.

We also hope to secure federal funds for our projects in the Lake Superior basin.

Contracts

What is included in the contracts line?

Construction related services other than professional services. Does not include strictly material costs, but does include some materials where construction bid item is a blend of materials and the labor to install it.

Easement Stewardship

What is the number of easements anticipated, cost per easement for stewardship, and explain how that amount is calculated?

Estimated 10% of the easement purchase price, based upon experience of the MNDNR.

Travel

Does the amount in the travel line include equipment/vehicle rental?

No

Explain the amount in the travel line outside of traditional travel costs of mileage, food, and lodging None

I understand and agree that lodging, meals, and mileage must comply with the current MMB Commissioner Plan:

No

Direct Support Services

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

Based upon approved federal rate applied only to personnel, travel and contracted "staff" costs.

Federal Funds

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? October 2020 or later, since they need completed designs and permits first.

Output Tables

Acres by Resource Type (Table 1)

Type	Wetland	Prairie	Forest	Habitat	Total Acres
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	72	72
Enhance	0	0	0	133	133
Total	0	0	0	205	205

Total Requested Funding by Resource Type (Table 2)

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	ı	ı	ı	-
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	\$540,000	\$540,000
Enhance	-	-	-	\$1,819,000	\$1,819,000
Total	-	•	-	\$2,359,000	\$2,359,000

Acres within each Ecological Section (Table 3)

Туре	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
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	36	0	0	0	36	72
Enhance	12	0	74	0	47	133
Total	48	0	74	0	83	205

Total Requested Funding within each Ecological Section (Table 4)

Туре	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
Restore	-	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	\$270,000	-	-	-	\$270,000	\$540,000
Enhance	\$316,000	-	\$1,070,000	-	\$433,000	\$1,819,000
Total	\$586,000	-	\$1,070,000	-	\$703,000	\$2,359,000

Average Cost per Acre by Resource Type (Table 5)

Type	Wetland	Prairie	Forest	Habitat
Restore	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	-	\$7,500
Enhance	-	-	-	\$13,676

Average Cost per Acre by Ecological Section (Table 6)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	-	-	-	-	-
Protect in Fee with State	-	-	-	-	-
PILT Liability					
Protect in Fee w/o State	-	-	-	-	-
PILT Liability					
Protect in Easement	\$7,500	-	-	-	\$7,500
Enhance	\$26,333	-	\$14,459	-	\$9,212

Target Lake/Stream/River Feet or Miles

11

Parcels

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.

Parcel Information

Sign-up Criteria?

No

Explain the process used to identify, prioritize, and select the parcels on your list:

Restore / Enhance Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection
Trout Brook	Dakota	11317226	7	\$0	Yes
Mill Creek	Fillmore	10411206	7	-	Yes
Mill Creek	Fillmore	10411205	0	-	Yes
Mill Creek	Fillmore	10511231	0	\$0	Yes
Rice Creek	Fillmore	10411223	11	\$0	Yes
Torkelson Creek	Fillmore	10410225	0	\$0	Yes
Beaver Creek	Houston	10207224	7	\$0	Yes
Split Rock River	Lake	05408206	0	\$0	Yes
Manitou River	Lake	05806217	5	\$0	Yes
Hay Creek	Pine	04118232	5	\$0	Yes
Keene Creek	St. Louis	05015236	3	\$0	Yes
Gilbert Creek	Wabasha	11113211	0	\$0	Yes
Pine Creek (New Hartford Creek)	Winona	10505219	0	\$0	Yes
Cedar Valley Creek	Winona	10606232	7	\$0	Yes

Easement Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection
Hay Creek	Pine	04018208	36	\$0	No
White Pine River	St. Louis	05016217	36	\$0	No



