



## Lessard-Sams Outdoor Heritage Council

DNR Trout Stream Conservation Easements - Phase 3

ML 2023 Request for Funding

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### General Information

**Date:** 06/23/2022

**Proposal Title:** DNR Trout Stream Conservation Easements - Phase 3

**Funds Requested:** \$1,360,000

### Manager Information

**Manager's Name:** Rick Walsh

**Title:** FAW Land Acquisition Consultant

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### Location Information

**County Location(s):** Houston, Fillmore, Winona and St. Louis.

**Eco regions in which work will take place:**

- Northern Forest
- Southeast Forest

**Activity types:**

- Protect in Easement

**Priority resources addressed by activity:**

- Habitat

## Narrative

### Abstract

We propose a programmatic approach to achieve prioritized aquatic habitat protection for trout streams in Minnesota, with an emphasis on Southeast and Northeast Minnesota. We propose to protect approximately 180 acres and 11 miles of trout stream corridor with permanent conservation easements on private land. Protected lands will be designated as Aquatic Management Areas (AMA's) administered by the Minnesota DNR Division of Fish and Wildlife.

### Design and Scope of Work

Trout fishing in Minnesota is enjoyed by thousands of anglers. The MNDNR Section of Fisheries administers a conservation easement program that has strong stakeholder support, and protects the habitat that is the foundation of our successful trout management program. Over 90% of our conservation easements protect trout streams. In addition to protecting the riparian corridor of trout streams, easements provide access for the angling public, and also provide access for restoration and enhancement projects. We propose a programmatic approach to achieve prioritized aquatic habitat protection for trout streams across Minnesota. Most trout streams are found in Southeast and Northeast Minnesota, but conservation opportunities in other areas of the state will be evaluated by scoring and ranking candidate parcels as they become available.

The current parcel list, upon which accomplishment plan goals are based would protect 11 miles of trout streams and approximately 180 acres with permanent conservation easements on private land. Protected lands will be designated as Aquatic Management Areas (AMA's) administered by the Minnesota DNR Division of Fish and Wildlife.

The dollar value of trout stream conservation easements is set by formula described in M.S.84.0272 subd. 2. The formula uses the length of stream being placed under easement and the area of the easement footprint. The length of the stream easement in feet (length is measured in GIS from a current aerial photo) is multiplied by \$5 per foot. The area of the easement foot print is also measured in GIS. The area in acres is multiplied by the average per acre estimated market value of Agricultural, Rural Vacant, and Managed Forest Land within the township where the easement lies. Estimated market value and total acres by land type for every township in the state are supplied by the Department of Revenue and revised annually. So, easement price is calculated as (feet of stream under easement x \$5) + (acres of easement foot print x average market value/acre within that township).

Scoring and ranking candidate parcels for trout stream conservation easement acquisition is based on multiple criteria. Criteria include fishery quality, rare natural features and other ecological attributes, potential to link with existing easements to increase protected corridors, and the need for access to conduct habitat restoration and enhancement projects with potential to improve the fishery. Please refer to the attachments for details.

The current parcel list is based on parcels meeting a minimum scoring threshold and with landowners expressing an interest in selling an easement. The proposal includes the cost of easements, professional services to complete the transactions, and a deposit to the Easement Stewardship Account to cover future costs of stewardship. The proposal can be scaled by dropping lower scoring parcels.

### **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 focus of the protection work in this proposal is trout streams and the riparian corridor. Although benefits to fisheries are a primary consideration of the program, riparian areas are also important to game and nongame

wildlife, including species of greatest conservation need (SGCN). We will use a scoring system that takes into account multiple considerations including Minnesota Biological Survey sites of biodiversity significance. Some scoring criteria, such as the potential to expand corridors and protected areas benefit many species. The scoring system is described in more detail in the attachment.

The use of scoring criteria allow a programmatic approach that fairly evaluates candidate parcels without eliminating the potential for protection in any geographic region. Because species distribution is not uniform across the state, species benefitting from conservation easements will vary across regions. SCGN's that depend on aquatic and riparian habitat include several turtle species, common mudpuppy, two frog species, and several species of waterfowl and shorebirds.

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

Strong public support helps facilitate successful conservation. Popularity of trout fishing is at an all-time high in Minnesota, and its important to be responsive to the current support for expanding protection of the resource. Expanding protected riparian corridors on coldwater streams reduces risk of habitat fragmentation and degraded water quality, reducing the future costs of restoration and enhancement. Expanding opportunity for outdoor recreation also better connects Minnesotans with the outdoors, increasing awareness of, and support for conserving the water that sustains the state.

### **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:**

The scoring criteria include linking with existing easements to expand protected riparian corridors. The scoring criteria also award points to parcels with rare natural features identified in the MBS GIS layer.

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

- H2 Protect critical shoreland of streams and lakes
- H3 Improve connectivity and access to recreation

### **Which two other plans are addressed in this proposal?**

- Other : MN DNR Fisheries Habitat Strategic Plan
- Strategic Plan for Coldwater Resources Management in Southeastern Minnesota

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

The fish habitat plan identifies continued threats to riparian habitat and water quality, and emphasizes strategic investment in protection. Protecting habitat that supports healthy fisheries, with willing partners and stakeholder support are key elements of the plan and this proposal. The Southeastern MN coldwater plan shares habitat protection priorities, with additional emphasis on the need to provide access for angling opportunities. This proposal advances the concepts of protection of intact, high quality resources, and expansion of angling opportunity.

The Fish Habitat Plan also recognizes that although protection is often the best investment, many ecological systems in Minnesota that have been degraded still retain potential for improvement if properly restored or

enhanced. The conservation easement program provides access for restoration and enhancement projects conducted by DNR and partners.

## Which LSOHC section priorities are addressed in this proposal?

### 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:

Trout stream conservation easements provide permanent protection. DNR is committed to easement stewardship, including maintaining positive relations with current and future landowners, monitoring to ensure compliance with conservation terms, and enforcement in the rare cases where needed to ensure compliance. The combination of habitat protection, access for restoration/enhancement work, and public access for angling represents a significant benefit to fish, wildlife, and anglers. The program goals for both the southeast forest and northern forest explicitly recognize the importance of coldwater streams and rivers.

## What other fund may contribute to this proposal?

- N/A

## Does this proposal include leveraged funding?

No

## 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.

OHF funding accelerates trout stream acquisition work beyond what is possible with other funding sources. It does not supplant or substitute other program funds.

## Non-OHF Appropriations

Year	Source	Amount
2017-2021	RIM Critical Habitat Match	\$270,000
2017-2021	Trout and Salmon Account (Trout Stamp)	\$200,000

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

The request includes funds to deposit in the Easement Stewardship Account, an interest-bearing account authorized in MS 84.69. Funds will support easement monitoring to be conducted following DNR Operational Order 128 and Division of Fish and Wildlife Easement Monitoring Guidelines.

## Actions to Maintain Project Outcomes

Year	Source of Funds	Step 1	Step 2	Step 3
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2023	OHF appropriation (this proposal)	baseline easement report	Future monitoring per MNDNR guidelines	-
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### Identify indicator species and associated quantities this habitat will typically support:

Trout numbers will vary among streams. In the Southeast, brook trout and brown trout are indicator species, with typical biomass of 100

lbs/acre for brook, and 130 lbs/acre for brown trout. In the northeast, the combined total of trout species is typically 40 lbs/acre.

### How will the program directly involve, engage, and benefit BIPOC (Black, Indigenous, People of Color) and diverse communities:

DNR's OHF projects aim to serve all Minnesotans. At the same time, we are bringing more focus in all our work to BIPOC and diverse communities. The Minnesota DNR has adopted advancing diversity, equity and inclusion (DEI) as a key priority in its 2020-22 strategic plan. The plan focuses on increasing the cultural competence of our staff, creating a workforce that is reflective of Minnesota, continuing to strengthen tribal consultation and building partnerships with diverse communities.

The OHF funds high quality habitat projects that provide ecosystem services like clean water and carbon sequestration that support environmental justice. OHF also supports public access and recreational opportunities on these lands. OHF projects and outcomes benefit BIPOC and diverse communities through recreational opportunities that are close-to-home, culturally responsive and accessible to Minnesotans with disabilities.

The DNR has diversity, equity and inclusion strategies that benefit all OHF projects:

- Multilingual and culturally specific hunting and fishing education programs take place on public lands.
- All hiring is equal opportunity, affirmative action, and veteran-friendly. Contracting seeks out Targeted Group, Economically Disadvantaged and Veteran-Owned businesses.
- Public engagement seeks out BIPOC voices and involves diverse communities. Outreach and marketing of projects has this focus as well.
- Partnerships are at the center of all projects. Tribes in particular are consulted in all pertinent areas of the DNR's work, under EO 19-24.

## Activity Details

### Requirements

**If funded, this proposal 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

### Land Use

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

No

**Will the eased land be open for public use?**

Yes

**Describe the expected public use:**

In addition to the conservation terms of the easements, access is provided for angling; other public activities are not allowed.

**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 land that you acquire (fee or easement) be restored or enhanced within this proposal's funding and availability?**

No

**Explain how, when, and source of the R/E work:**

The easement terms include access for restoration and enhancement work. Although no work specific to the parcel list is currently planned or funded, future work may be done by DNR or partner organizations using funding from various sources, including OHF.

**Other OHF Appropriation Awards****Have you received OHF dollars in the past through LSOHC?**

Yes

Approp Year	Approp Amount Received	Amount Spent to Date	Leverage Reported in AP	Leverage Realized to Date	Acres Affected in AP	Acres Affected to Date	Complete/Final Report Approved?
2021	\$500,000	\$63,700	-	-	90	0	No
2018	\$642,000	\$640,400	-	\$123,000	62	115	No
2016	\$1,578,000	\$1,023,200	-	-	56	22	Yes
2015	\$4,540,000	\$4,481,400	-	-	82	132	Yes

**Timeline**

Activity Name	Estimated Completion Date
final parcel scores and ranks, initiate acquisitions	July 2023
complete acquisitions	spring 2026
complete baseline easement reports	spring 2026
monitoring and enforcement	ongoing, no end date

**Budget****Totals**

<b>Item</b>	<b>Funding Request</b>	<b>Antic. Leverage</b>	<b>Leverage Source</b>	<b>Total</b>
Personnel	-	-	-	-
Contracts	-	-	-	-
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	\$1,000,000	-	-	\$1,000,000
Easement Stewardship	\$160,000	-	-	\$160,000
Travel	-	-	-	-
Professional Services	\$200,000	-	-	\$200,000
Direct Support Services	-	-	-	-
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	-	-	-	-
Supplies/Materials	-	-	-	-
DNR IDP	-	-	-	-
<b>Grand Total</b>	<b>\$1,360,000</b>	<b>-</b>	<b>-</b>	<b>\$1,360,000</b>

**Amount of Request:** \$1,360,000**Amount of Leverage:** -**Leverage as a percent of the Request:** 0.0%**DSS + Personnel:** -**As a % of the total request:** 0.0%**Easement Stewardship:** \$160,000**As a % of the Easement Acquisition:** 16.0%**Does this proposal have the ability to be scalable?**

Yes

**If the project received 70% of the requested funding****Describe how the scaling would affect acres/activities and if not proportionately reduced, why?**

A 70% reduction in funding would result in an approximate 70% reduction in acres protected.

**Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?**

Not applicable

**If the project received 50% of the requested funding****Describe how the scaling would affect acres/activities and if not proportionately reduced, why?**

A 50% reduction in funding would result in an approximate 50% reduction in acres protected.

**Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?**

Not applicable

### **Easement Stewardship**

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

We anticipate approximately 20 easements to be acquired with this funding. We have estimated about \$8K per easement (varies based on size and complexity of easement) using a calculator produced by staff in the DNR Lands and Minerals Division. The calculator takes into account frequency of monitoring events and associated staff time and expenses, and probability of future enforcement needs.

### **Federal Funds**

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

No



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	180	180
Enhance	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>180</b>	<b>180</b>

**Total Requested Funding by Resource Type (Table 2)**

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	\$1,360,000	\$1,360,000
Enhance	-	-	-	-	-
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$1,360,000</b>	<b>\$1,360,000</b>

**Acres within each Ecological Section (Table 3)**

Type	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	0	0	135	0	45	180
Enhance	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>135</b>	<b>0</b>	<b>45</b>	<b>180</b>

**Total Requested Funding within each Ecological Section (Table 4)**

Type	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	-	-	\$1,020,000	-	\$340,000	\$1,360,000
Enhance	-	-	-	-	-	-
<b>Total</b>	<b>-</b>	<b>-</b>	<b>\$1,020,000</b>	<b>-</b>	<b>\$340,000</b>	<b>\$1,360,000</b>

**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	-	-	-	\$7,555
Enhance	-	-	-	-

**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	-	-	\$7,555	-	\$7,555
Enhance	-	-	-	-	-

### Target Lake/Stream/River Feet or Miles

11

## Outcomes

### Programs in the northern forest region:

- Other ~ *MN DNR conducts scheduled monitoring inspections of all conservation easements. Fish populations and habitat conditions are also assessed on a regular basis. These activities allow us to ensure easement terms are being followed, as well as identify the need for habitat improvement/restoration.*

### Programs in southeast forest region:

- Rivers, streams, and surrounding vegetation provide corridors of habitat ~ *MN DNR conducts scheduled monitoring inspections of all conservation easements. Fish populations and habitat conditions are also assessed on a regular basis. These activities allow us to ensure easement terms are being followed, as well as identify the need for habitat improvement/restoration.*

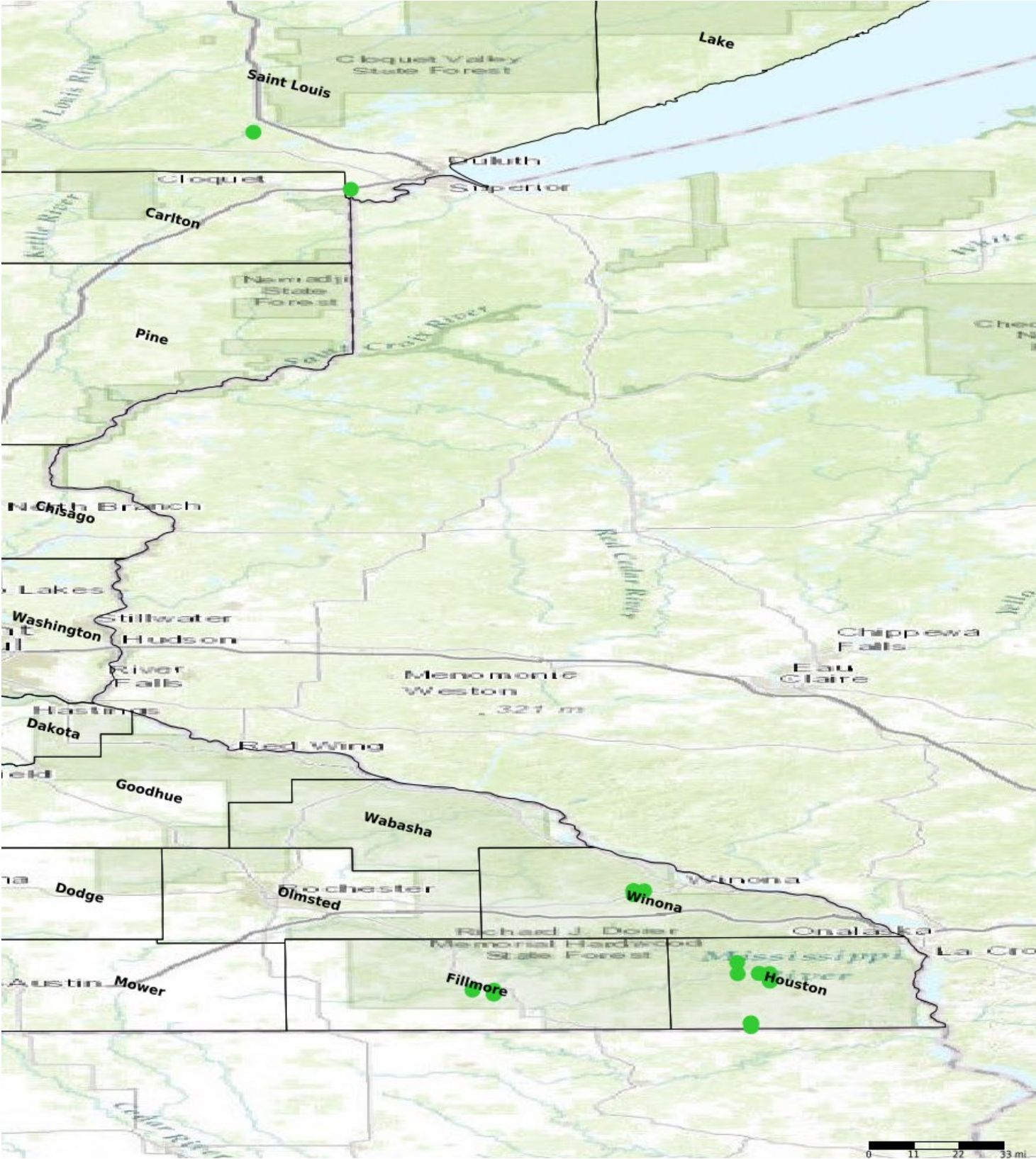
Parcels**Sign-up Criteria?**

No

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

Name	County	TRDS	Acres	Est Cost	Existing Protection
Camp Creek	Fillmore	10210208	11	\$78,000	No
Camp Creek	Fillmore	10210217	10	\$76,000	No
Willow Creek	Fillmore	10211212	13	\$89,000	No
Camp Creek	Fillmore	10210217	14	\$97,000	No
Badger Creek	Houston	10306234	3	\$23,000	No
Beaver Creek	Houston	10306219	25	\$150,000	No
Bee Creek	Houston	10106229	1	\$11,000	No
Bee Creek	Houston	10106229	1	\$10,000	No
Bee Creek	Houston	10106229	1	\$14,000	No
Bee Creek	Houston	10106232	1	\$7,000	No
Badger Creek	Houston	10306221	1	\$10,000	No
Badger Creek	Houston	10306222	6	\$38,000	No
Badger Creek	Houston	10306221	7	\$43,000	No
Badger Creek	Houston	10306234	1	\$7,000	No
Thompson Creek	Houston	10306206	2	\$22,000	No
Chalberg Creek	St. Louis	05117210	10	\$29,000	No
Mission Creek	St. Louis	04915230	25	\$82,000	No
Garvin Brook	Winona	10708233	1	\$9,000	No
Garvin Brook	Winona	10608204	1	\$8,000	No
Garvin Brook	Winona	10708233	2	\$20,000	No
Garvin Brook	Winona	10708234	3	\$24,000	No
Garvin Brook	Winona	10608204	1	\$10,000	No
Garvin Brook	Winona	10708233	5	\$38,000	No
Garvin Brook	Winona	10608204	1	\$9,000	No
Garvin Brook	Winona	10708233	1	\$12,000	No

Parcel Map



- Protect in Easement
- ▲ Protect in Fee with PILT
- Protect in Fee W/O PILT
- ★ Restore
- ✕ Enhance
- ✚ Other



# Trout Stream Conversation Easements

**Conservation easements protect the stream corridor.** Habitat is protected for the benefit of trout, other fish and aquatic life, and numerous species of mammals, birds, reptiles, amphibians, and invertebrates.

**Conservation easements provide access for habitat enhancement, and provide angler access to private land.** Easements are open to public angling, and allow for investment of state funding into habitat improvement and bank stabilization projects.

**This proposal:**

- \$1.36M request
- Protection goal of 180 acres
- Build on past efforts



## Highlights

- Trout fishing is growing in popularity
- Land remains in private ownership
- Stream corridor connectivity is protected
- Healthy trout habitat is protected
- Opportunity for habitat enhancement
- Ground water sources are protected
- Easement values determined by formula
- Emphasis on SE and NE Minnesota streams
- Emphasis on adding to existing easements

### **Program outputs last five appropriations:**

- 2014 = 131 acres and 7.8 miles protected
- 2015 = 132 acres and 5.9 miles protected
- 2016 = 22 acres and 1.7 miles protected
- 2018 = 115 acres and 7.2 miles protected
- 2021 = ongoing with projected 125 to 145 acres protected

### **Program leverage FY19-22:**

- Trout & Salmon Stamp = \$200,000
- Critical Habitat Match = \$215,000
- Sales & Reinvestment = \$30,000



## **Scoring Criteria for candidate trout stream easement acquisitions**

These criteria were developed with input from MNDNR Fisheries staff who manage trout water and Fish and Wildlife Division (FAW) Acquisition Unit staff. This tool is new, and some criteria and scoring thresholds may still be adjusted.

Scoring may eventually be integrated into FAW's Strategic WMA and AMA Acquisition Tool (SWAAT) GIS application. For the time being however, scores will be calculated "on paper" by staff familiar with the stream & easement candidate, as well as information taken from GIS data. This scoring sheet is intended to walk through the various criteria and give guidance on scoring.

Overall score is derived from sub-scores in six categories: 1) size and proximity; 2) habitat conditions; 3) thermal conditions; 4) fish population characteristics; 5) fish movement; 6) angler use. Some criteria pertain to parcel specific conditions, some pertain to stream stretch conditions, and some on entire stream.

Stream Name \_\_\_\_\_ Easement length (ft) \_\_\_\_\_ width (ft) \_\_\_\_\_  
 Landowner Name \_\_\_\_\_  
 County \_\_\_\_\_ Twp/Rng/Sec \_\_\_\_\_

### **Size & Proximity Criteria**

**Adjacent to existing public ownership/easement** 0 points if no existing easement/public land on stream, 1 points if there are easements/public land on stream, but not touching proposed easement, 3 points if proposed easement touches existing easement(s) or public land, 6 points if proposed easement touches existing easements/public land on upstream and downstream ends.

Comments:

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_

**Easement Size** 0 points if proposed easement is 0 to 999 stream-feet in length, 1 points if proposed easement is 1,000 to 1,999 stream-feet, 2 points if proposed easement is 2,000-2,999 stream-feet, 3 points if proposed easement is 3,000 stream-feet or greater. Stream length should be measured using current aerial imagery and GIS.

Comments:

Easement length in feet \_\_\_\_\_

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_

### **Habitat Condition Criteria**

**Existing Instream Habitat Condition** Points based on site-specific conditions determined. When scoring, consider overall conditions across the entire proposed easement. Conditions in proposed easement should be “measured against” the reference condition in local streams. For instance if instream woody cover is common in local streams, the presence of a few branches in the proposed easement would not justify a “Yes”. Up to 6 points (1 for each) based on the following features: stable bank, channel connected to floodplain, substrate not dominated by fines, pool/riffle complex, in-stream cover or woody debris, overhead bank cover.

Comments:

Overall stable banks (Y/N)\_\_\_\_  
 Channel connected to floodplain (Y/N)\_\_\_\_  
 Overall lack of fine substrate dominance (Y/N)\_\_\_\_  
 Pool/riffle complex present (Y/N)\_\_\_\_  
 Instream or woody cover present (Y/N)\_\_\_\_  
 Overhead bank cover present (Y/N)\_\_\_\_

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_

**Restoration Potential** If existing instream habitat is limiting and based on professional judgment could be improved through standard techniques, award up to 3 points. As with the above criterion, consider the potential against reference condition on local streams. Rely on population data from reaches on the same stream that have better habitat as an indicator of potential for improved trout fishery. **Note: High scores in the existing habitat criterion above, presumably indicate low restoration potential score. A proposed easement should not get high scores in both existing and potential habitat conditions.**

Comments:

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_

**Riparian Condition** Based on the Watershed Health Assessment Scores - Catchment Scale - Hyd Index – Perennial Cover 2011, GIS layer. Award 1 points for 61-70% cover, 2 points 71-80%, 3 points for 81-90%. **Note: Zero points awarded for catchments with poor (less than 60%) perennial cover, and exceptional (over 90%) perennial cover because additional protection is not likely to have significant effect in either of those circumstances.**

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Comments:

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_



**Rare Natural Features** Award 1 points if proposed easement (buffered by 20m) touches a rare natural feature polygon as identified by in the NHIS Nonpublic Data GIS layer.

Comments:

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_

**MBS Sites of Biodiversity Significance** Award 2 points if proposed easement (buffered by 20m) touches a polygon on the MBS Sites of Biodiversity Significance GIS layer.

Comments:

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_

### **Fish Population Criteria**

**Trout Population Abundance** Award 1, 2, or 4 points based on the stretch's adult trout density. Score using most current trout assessment data with different scales for NE and SE. Draft thresholds:

SE: 0 points <50 lbs/acre, 1 point 50-99 lbs/acre, 2 points 100-200 lbs/acre, 4 points >200 lbs/acre.

NE: 0 points <5 fish/1,000', 1 point 5-14 fish/1,000', 2 points 14-36 fish/1,000', 4 points >36 fish/1,000'.

Comments:

Fish density \_\_\_\_\_

Data Source \_\_\_\_\_

Data year \_\_\_\_\_

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_

**Natural Reproduction** Points are based on professional judgement and existing data regarding trout recruitment in that stretch. Award 0 points for trout populations maintained mostly by stocking, 2 points for stretches with mixed natural recruitment and stocking, or 4 points if population in that stretch is self-sustaining without stocking.

Comments:

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_

**Heritage Brook Trout or Coaster Brook Trout** Award 3 points if the stretch has a known population of heritage brook trout or coaster run brook trout.

Comments:

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_

**Fish Movement Criteria**

**Longitudinal Connectivity** Deduct 1 point if there is an impassible barrier downstream of parcel on same stream.

Comments:

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_

**Identified Anadromous Importance** Award 1 point if the stream stretch is known to support anadromous spawning runs.

Comments:

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_

**Thermal Criteria**

**Springs** Award 3 points if the proposed easement site has known groundwater springs/seeps.

Comments:

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_

**Temperature Resiliency** Points based on the stretch's temperature profile using available long-term average data. Award 0 points if water temp exceeds 68 F > 5% of summer (June 1 to September 30) days, 3 points if temp exceeds 68 F on <5% summer days, 6 points if temps do not exceed 68 F. If the stretch exceeds 68 F > 5% of summer days but has a nearby thermal refuge where temperature exceeds 68 F <5% of summer days, award 2 points.

Comments:

% summer days exceeding 68 F \_\_\_\_\_

Data Source \_\_\_\_\_

Data year \_\_\_\_\_

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_

**Angler Use Criteria**

**Recreation Potential** GIS query of Census 2010 data for population within 30 miles of proposed easement. Award 0 points if <10,000, 1 point if 10,001 to 20,000, 3 if 20,001 to 50,000, 4 if >50,000.

V:\gdrs\data\pub\us\_mn\_state\_leg\_commissions\_lcc\_gis\society\_census\_2010\_mn\society\_census\_2010\_mn.gdb.

Comments:

Population within 30 miles \_\_\_\_\_

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_

**Existing/potential angler use** Award 1, 2, or 3 points based on professional judgement regarding the stretch's current angler use and potential future use. 1 point for low use, 2 for moderate, 3 for high use.

Comments:

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_

**Accessible** Award 1 point if the proposed easement is crossed by a road or trail that would provide angler access other than from adjoining easement or public land.

Comments:

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_

**Landowner Donation** Award 1 point per 10% of landowner donation of easement value (e.g., 3 points awarded where landowner donates 30% of value) **CAP OF 4 POINTS**

Comments:

Score \_\_\_\_\_

Scored by \_\_\_\_\_ on date \_\_\_\_\_

Stream Name \_\_\_\_\_

Landowner Name \_\_\_\_\_

County \_\_\_\_\_

**Scoring Summary**

<b>Adjacent to existing state ownership/easement</b>	<b>score = _____ of 6</b>
<b>Easement Size</b>	<b>score = _____ of 3</b>
<b>Existing Instream Habitat Condition</b>	<b>score = _____ of 6</b>
<b>Restoration Potential</b>	<b>score = _____ of 3</b>
<b>Riparian Condition</b>	<b>score = _____ of 3</b>
<b>Rare Natural Features</b>	<b>score = _____ of 1</b>
<b>MBS Sites of Biodiversity Significance</b>	<b>score = _____ of 2</b>
<b>Trout Population Abundance</b>	<b>score = _____ of 4</b>
<b>Natural Reproduction</b>	<b>score = _____ of 4</b>
<b>Heritage Brook Trout or Coaster Brook Trout</b>	<b>score = _____ of 3</b>
<b>Longitudinal Connectivity</b>	<b>score = _____ of -1</b>
<b>Identified Anadromous Importance</b>	<b>score = _____ of 1</b>
<b>Springs</b>	<b>score = _____ of 3</b>
<b>Temperature Resiliency</b>	<b>score = _____ of 6</b>
<b>Recreation Potential</b>	<b>score = _____ of 4</b>
<b>Existing/potential angler use</b>	<b>score = _____ of 3</b>
<b>Accessible</b>	<b>score = _____ of 1</b>
<b>Landowner Donation</b>	<b>score = _____ of up to 4</b>

**Overall Score**                      **score = \_\_\_\_\_****(Maximum score = 57 points)**

Comments: