

Lessard-Sams Outdoor Heritage Council

Fiscal Year 2022 / ML 2021 Request for Funding



Date: May 28, 2020

Program or Project Title: MNDNR Trout Stream Conservation Easements (HA08)

Funds Requested: \$1,201,000

Manager's Name: Martin Jennings
Title: Fisheries Habitat Program Manager
Organization: Minnesota Department of Natural Resources
Address: 500 Lafayette Road
City: St Paul, MN 55155
Office Number: 651-259-5176
Mobile Number: 612-248-4138
Email: martin.jennings@state.mn.us

County Locations: Cook, Fillmore, Houston, St. Louis, and Winona.

Eco regions in which work will take place:

- Northern Forest
- Southeast Forest

Activity types:

- Protect in Easement

Priority resources addressed by activity:

- Habitat

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 11 miles of trout streams, including approximately 221 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.

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 221 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 footprint 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). Dollar estimates in this proposal are based on current estimated market value, and are subject to change.

Scoring and ranking candidate parcels for trout stream conservation easement acquisition is based on multiple criteria as described in the proposal attachment. 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 attachments.

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

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

Which other plans are addressed in this proposal:

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

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 LSOHC goals for both the southeast forest and northern forest explicitly recognize the importance of coldwater streams and rivers.

Relationship to other funds:

- Not Listed

Describe the relationship of the funds:

Not Listed

Does this program include leverage in funds:

No

Per MS 97A.056, Subd. 24, Any state agency or organization requesting a direct appropriation from the OHF must inform the LSOHC at the time of the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose:

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

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

Appropriation Year	Source	Amount
15-20	RIM	\$265,000
15-20	Trout and Salmon Account (Trout Stamp)	\$90,000

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.

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

Year	Source of Funds	Step 1	Step 2	Step 3
2022	OHF appropriation (this proposal)	baseline easement report	Future monitoring per MNDNR guidelines	

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.

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**

Do you anticipate federal funds as a match for this program - **No**

Land Use:

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

Will the eased land be open for public use - **Yes**

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 acquisitions on the parcel list - **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 proposals 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.

Land Use:

Have you received OHF dollars in the past through LSOHC? - **Yes**

Past appropriations and spending to date:

Apprp Year	Approp Amount Received	Approp Amount Spent to Date	Leverage as Reported in AP/th>	Leverage Realized to Date	Total Acres Affected in AP	Total Acres Affected to Date	Program Complete and Final Report Approved?
2015	4540000	4287100	0	0	82	109	trout streams complete, other work pending. acres reported are specific to trout stream easements.
2016	1578000	767200	0	0	56	22	trout steam work complete, other work in progress. Acres reported are trout stream easements only.
2018	642000	366200	0	0	62	115	Final transactions in progress; billing and final report not complete.

Accomplishment Timeline

Activity	Approximate Date Co mpleted
final parcel scores and ranks, initiate acquisitions	July 2021
complete acquisitions	spring 2024
complete baseline easement reports	spring 2024
monitoring and enforcement	ongoing, no end date

Budget Spreadsheet

Total Amount of Request: \$1,201,000

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$0	\$0		\$0
Contracts	\$0	\$0		\$0
Fee Acquisition w/ PILT	\$0	\$0		\$0
Fee Acquisition w/o PILT	\$0	\$0		\$0
Easement Acquisition	\$910,000	\$0		\$910,000
Easement Stewardship	\$200,000	\$0		\$200,000
Travel	\$0	\$0		\$0
Professional Services	\$91,000	\$0		\$91,000
Direct Support Services	\$0	\$0		\$0
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$0	\$0		\$0
Supplies/Materials	\$0	\$0		\$0
DNR IDP	\$0	\$0		\$0
Total	\$1,201,000	\$0	-	\$1,201,000

Amount of Request: \$1,201,000
 Amount of Leverage: \$0
 Leverage as a percent of the Request: 0.00%
 DSS + Personnel: \$0
 As a % of the total request: 0.00%
 Easement Stewardship: \$200,000
 As a % of the Easement Acquisition: 21.98%

Describe and explain leverage source and confirmation of funds:

not applicable

Does this proposal have the ability to be scalable? - Yes

Tell us how this project would be scaled and how administrative costs are affected, describe the “economy of scale” and how outputs would change with reduced funding, if applicable:

The proposal is for acquisition of easements, with 25 easements on current parcel list. Individual easements can be dropped from the list to scale back the proposal. No personnel costs are included, so reductions would be result in proportional reduction in outputs.

What is the cost per easement for stewardship and explain how that amount is calculated?

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.

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	221	221
Enhance	0	0	0	0	0
Total	0	0	0	221	221

Table 2. Total Requested 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	\$1,201,000	\$1,201,000
Enhance	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$1,201,000	\$1,201,000

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern 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	87	0	134	221
Enhance	0	0	0	0	0	0
Total	0	0	87	0	134	221

Table 4. Total Requested Funding within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern 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	\$472,800	\$0	\$728,200	\$1,201,000
Enhance	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$472,800	\$0	\$728,200	\$1,201,000

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	\$5,434
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	\$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	\$5,434	\$0	\$5,434
Enhance	\$0	\$0	\$0	\$0	\$0

Automatic system calculation / not entered by managers

Target Lake/Stream/River Feet or Miles

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I have read and understand Section 15 of the Constitution of the State of Minnesota, Minnesota Statute 97A.056, and the Call for Funding Request. I certify I am authorized to submit this proposal and to the best of my knowledge the information provided is true and accurate.

Outcomes

Programs in the northern forest region:

- coldwater stream corridors have protection and angler access

Programs in southeast forest region:

- coldwater stream corridors have protection and angler access

Parcel List

Explain the process used to select, rank and prioritize the parcels:

Not Listed

Section 1 - Restore / Enhance Parcel List

No parcels with an activity type restore or enhance.

Section 2 - Protect Parcel List

Cook

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Two Island River	05805202	77	\$255,000	No	Not Applicable	Full

Fillmore

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Camp Creek	10210208	11	\$78,000	No	Not Applicable	Full
Camp Creek	10210217	10	\$76,000	No	Not Applicable	Full
Camp Creek	10210217	14	\$97,000	No	Not Applicable	Full
Willow Creek	10211212	13	\$89,000	No	Not Applicable	Full

Houston

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Badger Creek	10306221	1	\$10,000	No	Not Applicable	Full
Badger Creek	10306221	7	\$43,000	No	Not Applicable	Full
Badger Creek	10306222	6	\$38,000	No	Not Applicable	Full
Badger Creek	10306234	1	\$7,000	No	Not Applicable	Full
Badger Creek	10306234	3	\$23,000	No	Not Applicable	Full
Bee Creek	10106229	1	\$10,000	No	Not Applicable	Full
Bee Creek	10106229	1	\$11,000	No	Not Applicable	Full
Bee Creek	10106229	1	\$14,000	No	Not Applicable	Full
Bee Creek	10106232	1	\$7,000	No	Not Applicable	Full

St. Louis

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Chalberg Creek	05117203	22	\$62,000	No	Not Applicable	Full
Chalberg Creek	05117210	10	\$29,000	No	Not Applicable	Full
Mission Creek	04915230	25	\$82,000	No	Not Applicable	Full

Winona

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Garvin Brook	10608204	1	\$8,000	No	Not Applicable	Full
Garvin Brook	10608204	1	\$9,000	No	Not Applicable	Full
Garvin Brook	10608204	1	\$10,000	No	Not Applicable	Full
Garvin Brook	10708233	1	\$9,000	No	Not Applicable	Full
Garvin Brook	10708233	1	\$12,000	No	Not Applicable	Full
Garvin Brook	10708233	2	\$20,000	No	Not Applicable	Full
Garvin Brook	10708233	5	\$38,000	No	Not Applicable	Full
Garvin Brook	10708234	2	\$15,000	No	Not Applicable	Full
Garvin Brook	10708234	3	\$24,000	No	Not Applicable	Full

Section 2a - Protect Parcel with Bldgs

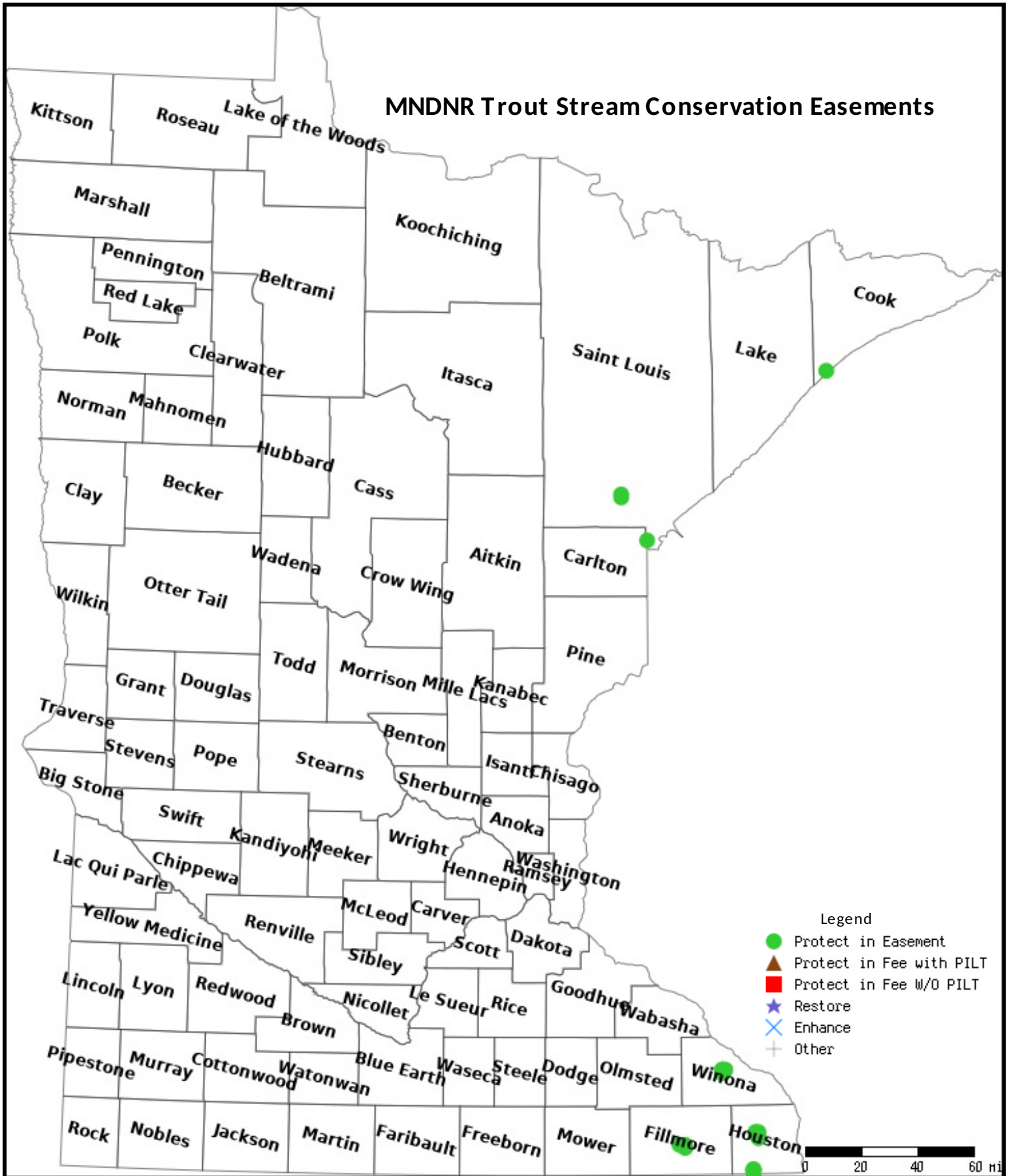
No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.

Parcel Map

MNDNR Trout Stream Conservation Easements



Data Generated From Parcel List

MNDNR Trout Stream Conservation 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.

Minnesotans love trout fishing! Strong program support for the easement program exists among partners, public.

ML21 proposal: 221 acres, >11 miles of stream protected, \$1.2M.

Easement value determined by formula.

Transparent scoring and ranking.

Programmatic with SE and NE emphasis (that's where most of our trout waters are), but candidate parcels considered statewide.

Outcomes:

- Healthy habitat supporting brook trout, brown trout statewide plus rainbow trout on North Shore.
- Stream corridors with habitat supporting diverse biological communities.
- More public access to fishing, more Minnesotans connecting to the outdoors.



Program outputs, last 5 years:

- OHF Accomplishment Plan acres, ML15, ML16, and ML18* totaled 200 acres.
- Total of 246 acres (13 miles of trout stream) protected with OHF and leverage from other funds.

*No OHF funding for this program ML17, ML19, ML20

Table 1. Spending on trout stream conservation easements by MNDNR during fiscal years 16-20

Source of Funds	Dollars spent
OHF Trout Easement Expenditures FY 16-20	\$1,070,000
RIM Trout Easement Expenditures FY16-20	\$265,000
Trout Stamp Easement Expenditures FY16-20	\$90,000





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.

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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

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

Overall Score score = _____

(Maximum score = 57 points)

Comments: