

Lessard-Sams Outdoor Heritage Council

Laws of Minnesota 2018 Accomplishment Plan

Date: October 16, 2017

Program or Project Title: DNR Trout Stream Conservation Easements

Funds Recommended: \$ 642,000

Manager's Name: Martin Jennings

Title: Fisheries Habitat Program Manager

Organization: Minnesota Department of Natural Resources

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Legislative Citation: ML 2018, Ch. X, Art. 1, Sec. 2, subd XX

Appropriation Language:

County Locations: Carlton, Fillmore, Goodhue, Houston, Lake, Olmsted, St. Louis, Wabasha, and Winona.

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 across Minnesota, but emphasizing Southeast and Northeast Minnesota. We propose to protect 5 miles of trout streams 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, with recent sales of trout stamps at record high levels. 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, but emphasizing Southeast and Northeast Minnesota. We propose to protect 5 miles of trout streams 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. Specifically, trout stream easement payments are calculated using a formula that relies on 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).

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. Scoring criteria to prioritize easements will also include the percentage of easement value that the landowner is willing to donate. Please refer to the attachments for details. Estimates of acres and miles protected are based on recent values for easements, and assume full price.

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 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. We will use a scoring system that takes into account multiple considerations including presence of species of greatest conservation need. Some 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.

Describe the science based planning and evaluation model used:

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 program:

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

Which other plans are addressed in this program:

- Minnesota DNR AMA Acquisition Plan
- Minnesota DNR Fish Habitat Strategic Plan

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:

Scoring criteria to rank candidate parcels include points for landowner donation of partial value. Among parcels of similar ecological value, those with leverage from landowner donation will be favored.

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:

This request supplements existing sources of funding by accomplishing work that would not have been implemented but for the appropriation, or accomplishing work at a level not attainable but for the appropriation.

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

Not Listed

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 Guidance.

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

Not Listed

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

Trout stream conservation easements are open to anglers making their way along the streambank for the purpose of fishing.

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

Who will manage the easement?

Minnesota DNR, Division of Fish and Wildlife.

Who will be the easement holder?

Minnesota DNR

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**

Accomplishment Timeline:

Activity	Approximate Date Completed
Identify parcels with willing sellers of easements on priority streams	Fall of 2019
Rank parcels based on DNR prioritization criteria	Fall of 2019
Complete purchase of easements	June, 2021
Baseline easement monitoring	June, 2021

Federal Funding:

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

Outcomes:

Programs in the northern forest region:

- Improved aquatic habitat indicators *Acquired easements will be monitored by DNR staff following standard protocols. Monitoring will document compliance with terms of easement agreement.*

Programs in southeast forest region:

- Rivers, streams, and surrounding vegetation provide corridors of habitat *Acquired easements will be monitored by DNR staff following standard protocols. Monitoring will document compliance with terms of easement agreement.*

Budget Spreadsheet

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

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

Easement acquisition is programmatic and scaleable. The reduction in funding changes the proposed level of protection from 25 miles of trout streams to 5 miles of trout streams.

Total Amount of Request: \$ 642000

Budget and Cash Leverage

BudgetName	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	\$525,000	\$0		\$525,000
Easement Stewardship	\$52,500	\$0		\$52,500
Travel	\$0	\$0		\$0
Professional Services	\$52,500	\$0		\$52,500
Direct Support Services	\$2,500	\$0		\$2,500
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$0	\$0		\$0
Supplies/Materials	\$9,500	\$0		\$9,500
DNR IDP	\$0	\$0		\$0
Total	\$642,000	\$0		\$642,000

Amount of Request: \$642,000

Amount of Leverage: \$0

Leverage as a percent of the Request: 0.00%

DSS + Personnel: \$2,500

As a % of the total request: 0.39%

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

DNR uses a standard calculator developed by Administrative staff to determine costs.

Describe and explain leverage source and confirmation of funds:

Not Listed

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	62	62
Enhance	0	0	0	0	0
Total	0	0	0	62	62

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	\$642,000	\$642,000
Enhance	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$642,000	\$642,000

Table 3. Acres within each Ecological Section

Type	Metro Urban	ForestPrairie	SEForest	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	37	0	25	62
Enhance	0	0	0	0	0	0
Total	0	0	37	0	25	62

Table 4. Total Funding within each Ecological Section

Type	Metro Urban	ForestPrairie	SEForest	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	\$385,200	\$0	\$256,800	\$642,000
Enhance	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$385,200	\$0	\$256,800	\$642,000

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	\$10355
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	\$10411	\$0	\$10272
Enhance	\$0	\$0	\$0	\$0	\$0

Target Lake/Stream/River Feet or Miles

5 miles of trout stream

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

No parcels with an activity type restore or enhance.

Section 2 - Protect Parcel List

Carlton

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Blackhoof River	04717210	12	\$40,000	No	No	Full
Blackhoof River	04717210	0	\$125,000	No	No	Full

Fillmore

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Middle Branch Root River	10412226	14	\$100,000	No	No	Full
Rice Creek	10411233	0	\$250,000	No	No	Full
South Branch Root River	10310228	10	\$90,000	No	No	Full
Spring Valley Creek	10312217	45	\$250,000	No	No	Full
Spring Valley Creek	10313226	0	\$300,000	No	No	Full
Vesta Creek	10208210	3	\$15,300	No	No	Full
Vesta Creek	10208210	7	\$30,000	No	No	Full
Watson Creek	10310220	4	\$20,000	No	No	Full
Wisel Creek	10108206	4	\$20,000	No	No	Full

Goodhue

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Bullard Creek	11214202	8	\$50,000	No	No	Full
Hay Creek	11215224	22	\$150,000	No	No	Full

Houston

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Silver Creek	10406211	9	\$55,000	No	No	Full
West Beaver Creek	10206219	18	\$130,000	No	No	Full
Winnebago Creek	10105217	10	\$50,000	No	No	Full

Lake

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Stewart River	05311214	0	\$250,000	No	No	Full

Olmsted

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Middle Branch Whitewater	10611202	0	\$250,000	No	No	Full

St. Louis

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Chester Creek	05014216	5	\$20,000	No	No	Full

Wabasha

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
East Indian Creek	10610226	5	\$25,000	No	No	Full
East Indian Creek	10910227	0	\$250,000	No	No	Full
Gilbert Creek	11113201	15	\$75,000	No	No	Full
Mazeppa Creek	11014230	15	\$75,000	No	No	Full
Mazeppa Creek	11014232	0	\$250,000	No	No	Full
North Fork Zumbro River	10914210	10	\$60,000	No	No	Full
Spring Creek	11215206	3	\$15,000	No	No	Full

Winona

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Garvin Brook	10708234	5	\$30,000	No	No	Full
Little Pickwick	10605219	10	\$68,000	No	No	Full
Little Pickwick	10605232	6	\$30,000	No	No	Full
Pine NewHartford	10505232	16	\$90,000	No	No	Full
Rollingstone Creek	10708213	2	\$10,000	No	No	Full

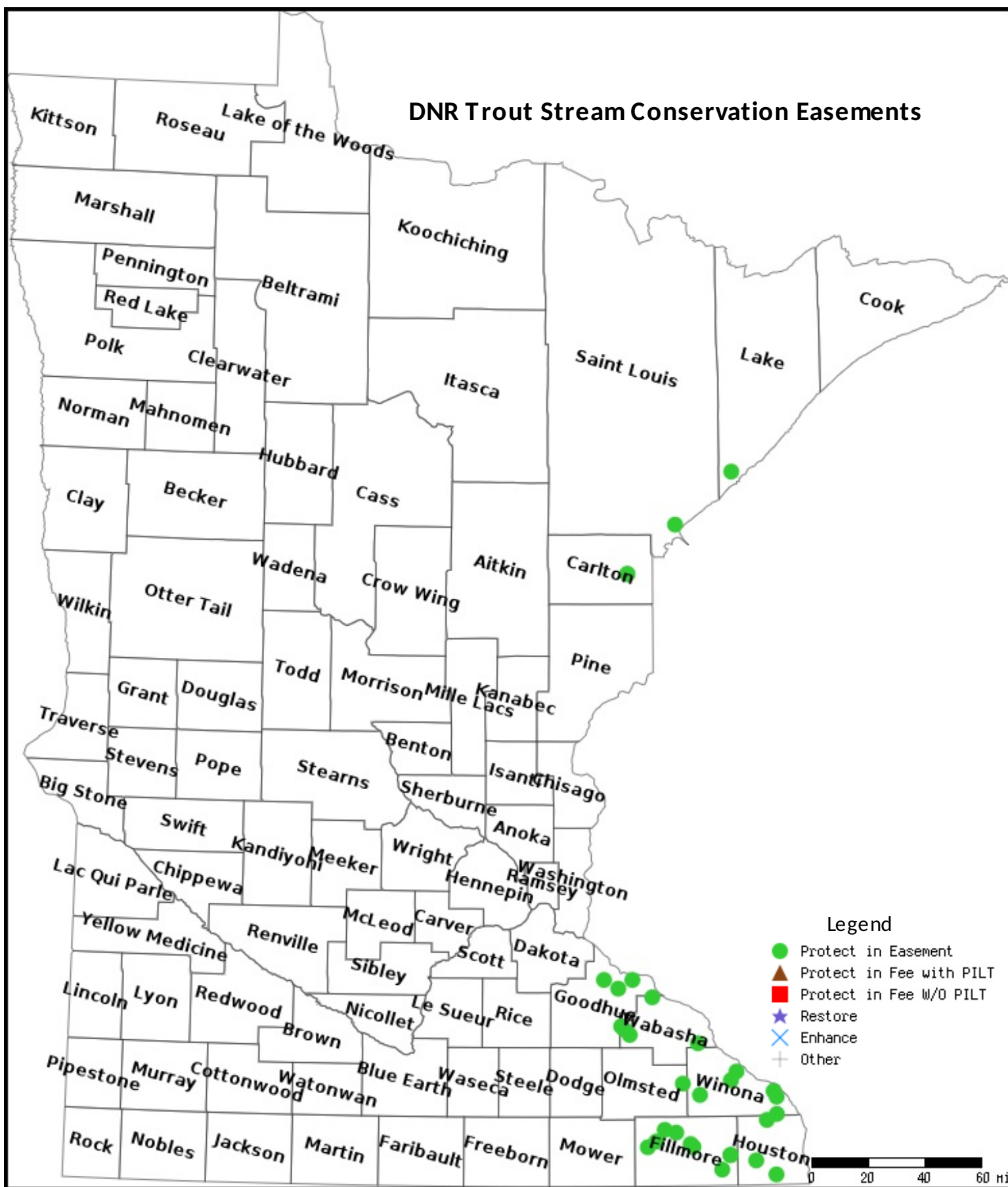
Section 2a - Protect Parcel with Bldgs

No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.

Parcel Map



Data Generated From Parcel List

Criteria to score and rank parcels as candidates for trout stream conservation easement acquisition

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

Adjacent to existing state ownership/easement Points are awarded by GIS tool. 0 = no existing easement on stream, 1 = easements on stream, but not touching, 3 = touches existing easement, 6 = touches existing easement on both side.

Easement Size GIS calculated. 0 points if proposed easement is 0 to 999 feet, 1 points if proposed easement is 1000 to 1999 feet, 2 points if proposed easement is 2000-2999 feet. 3 points if proposed easement 3000 feet or greater.

Instream habitat Condition Points based on site-specific conditions determined during site visit. Up to 6 points for the following features: stable bank, confined channel, substrate not dominated by fines, pool/riffle complex, in-stream cover or woody debris, overhead bank cover.

Riparian Condition Points are awarded by GIS tool using the watershed health assessment framework layers. Scoring- 1 point for 60-74% riparian area in natural cover, 2 points 75-90%, 3 points for >90.

Fish population abundance Award 1, 2, or 4 points based on the stretch's trout density. Scoring would use current fish assessment data with different scales for NE and SE. Draft thresholds: SE 0 pts <50 lbs/acre, 1 point 50-99 lbs/acre, 2 points 100-200 lbs/acre, 4 points >200 lbs/acre. NE- 0 points <5 trout/1000 ft., 1 point 5-14 trout/1000 ft, 2 points 14-36 trout/1000 ft, 4 points >36 trout/1000 ft.

Rare Natural Features As identified by Minnesota Biological Survey (MBS) existing GIS layer. Points are awarded by GIS tool. 1 point if proposed easement (buffered by 20m) touches a polygon on the rare natural features GIS layer.

MBS Sites of Biodiversity Significance Points are awarded by GIS tool. 2 points if proposed easement (buffered by 20m) touches a polygon on the MBS site of biodiversity significance GIS layer.

Recreation Potential Points are awarded by GIS tool querying census data for total population within 50 miles. 0 = <10,000, 1 = 10,001 to 20,000, 3 = 20,001 to 50,000, 4 = >50,000.

Natural Reproduction Points are based on professional judgement or existing data regarding the quality of the stretch as trout spawning habitat. Scores would be 0 for populations originating mostly from stocking, 2 for streams with mixed natural recruitment and stocking, or 4 points if self-sustaining without stocking.

Springs Award 3 points awarded if the site has a spring. This would be based on info gather during site visit.

Temperature Resiliency Award 0 - 6 points based on the stretch's temperature profile/stability. For 0 points-temp exceeds 68 F > 5% of summer days, 3 points temp exceeds 68 F on <5% summer days, 6

points if temperatures do not exceed 68 F. If the site 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.

Longitudinal connectivity Deduct 1 point if impassible barrier downstream of parcel.

Restoration potential Award 3 points if habitat is limiting and survey data indicate quality trout populations in reaches of same stream with better habitat.

Identified anadromous importance If the stream stretch is known to support anadromous spawning runs, 1 point is awarded.

Existing/potential angler use Award up to 3 points based on professional judgement of factors including the stretch's current angler use and demand for additional access.

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.

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

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

Lessard-Sams Outdoor Heritage Council

Comparison Report

Program Title: 2018 - DNR Trout Stream Conservation Easements

Organization: Minnesota Department of Natural Resources

Manager: Martin Jennings

Budget

Requested Amount: \$3,030,000

Appropriated Amount: \$642,000

Percentage: 21.19%

Budget Item	Total Requested		Total Appropriated		Percentage of Request	
	LSOHC Request	Anticipated Leverage	Appropriated Amount	Anticipated Leverage	Percentage of Request	Percentage of Leverage
Personnel	\$0	\$0	\$0	\$0	-	-
Contracts	\$0	\$0	\$0	\$0	-	-
Fee Acquisition w/ PILT	\$0	\$0	\$0	\$0	-	-
Fee Acquisition w/o PILT	\$0	\$0	\$0	\$0	-	-
Easement Acquisition	\$2,500,000	\$0	\$525,000	\$0	21.00%	-
Easement Stewardship	\$250,000	\$0	\$52,500	\$0	21.00%	-
Travel	\$0	\$0	\$0	\$0	-	-
Professional Services	\$250,000	\$0	\$52,500	\$0	21.00%	-
Direct Support Services	\$5,000	\$0	\$2,500	\$0	50.00%	-
DNR Land Acquisition Costs	\$0	\$0	\$0	\$0	-	-
Capital Equipment	\$0	\$0	\$0	\$0	-	-
Other Equipment/Tools	\$0	\$0	\$0	\$0	-	-
Supplies/Materials	\$25,000	\$0	\$9,500	\$0	38.00%	-
DNR IDP	\$0	\$0	\$0	\$0	-	-
Total	\$3,030,000	\$0	\$642,000	\$0	21.19%	-

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

Easement acquisition is programmatic and scalable. The reduction in funding changes the proposed level of protection from 25 miles of trout streams to 5 miles of trout streams.

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	300	62	20.67%
Enhance	0	0	-

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	3,030,000	642,000	21.19%
Enhance	0	0	-

Table 3. Acres within each Ecological Section

Type	Total Proposed	Total in AP	Percentage of Proposed
Restore	0	0	-
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Protect in Easement	3,030,000	642,000	21.19%
Enhance	0	0	-