



Lessard-Sams Outdoor Heritage Council

Laws of Minnesota 2016 Accomplishment Plan

General Information

Date: 10/15/2020

Project Title: MNDNR Aquatic Habitat Protection Phase VIII

Funds Recommended: \$1,578,000

Legislative Citation: ML 2016, Ch. 172, Art. 1, Sec. 2, Subd. 5(a)

Appropriation Language: \$1,578,000 the second year is to the commissioner of natural resources to acquire land in fee and permanent conservation easements for aquatic management purposes under Minnesota Statutes, sections 86A.05, subdivision 14, and 97C.02, to acquire permanent conservation easements under the Minnesota forests for the future program pursuant to Minnesota Statutes, section 84.66, and to restore and enhance aquatic and adjacent upland habitat. Of this amount, up to \$153,000 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, conservation easements, restorations, and enhancements must be provided as part of the required accomplishment plan.

Manager Information

Manager's Name: Martin Jennings

Title: Fisheries Habitat Program Manager

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Location Information

County Location(s): Hubbard, Chisago, Carlton, Kanabec, Itasca, Clearwater, Becker, Cass, Beltrami, Aitkin, Lake, Olmsted, St. Louis, Cook, Houston, Fillmore, Winona, Goodhue, Crow Wing, Wabasha, Wadena, Morrison, Mille Lacs and Pine.

Eco regions in which work will take place:

- Northern Forest
- Southeast Forest

Activity types:

- Protect in Easement
- Protect in Fee

Priority resources addressed by activity:

- Forest
- Habitat

Narrative

Abstract

We will use a programmatic approach to achieve prioritized aquatic habitat protection. We will acquire shoreline on outstanding lakes and conservation easements on trout streams, and use working forest easements to protect water quality in targeted watersheds.

Design and Scope of Work

Minnesota's lakes and rivers continue to be threatened by the loss of natural land cover to agricultural, recreational, and urban development, all of which have consequences for water quality and fish habitat. This proposal uses a programmatic approach to achieve prioritized aquatic habitat protection for lakes and trout streams across Minnesota, building on previous work and utilizing expertise in the Minnesota Department of Natural Resources (MNDNR). We propose to protect 33 acres (approximately 1.3 miles) of shoreline on our most outstanding lake resources, 3 miles of trout streams, and 333 acres of forested upland to protect water quality in targeted watersheds.

Aquatic habitat protection will occur within the Aquatic Management Area (AMA) designation of the Outdoor Recreation System. AMA's have strong support from conservation groups and anglers because of the multiple benefits of habitat protection and recreational access they provide. The AMA program currently has more than 830 miles of shoreline in over 330 fee title AMA's and more than 600 conservation easements that provide permanent protection of riparian habitat, perpetuate fish and wildlife populations, safeguard water quality, and offer recreational access. Acquisition of AMA's will be a mix of fee title and conservation easements.

We propose to focus AMA conservation easement acquisition in trout streams of Southeast and Northeast Minnesota. Criteria to prioritize potential acquisitions include fishery quality, potential to link with existing easements to increase protected corridors, and the need for access to conduct habitat restoration and enhancement projects. The trout easement program protects the stream bank and riparian area, provides access for anglers, and provides access for restoration and enhancement projects conducted by MNDNR and partner organizations such as Trout Unlimited. The parcel list indicates a representative stream in each county where we may acquire easements; we will use a programmatic approach and may not have acquisitions in all counties, or at the precise location listed.

Fee title AMA acquisition will employ a programmatic approach that provides potential for protection in many areas of the state, but contains clear, objective, and transparent criteria that limit opportunities to "the best of the best." As a primary screening tool, we will use "Lakes of Biological Significance" scores, which reflect a comprehensive rating system developed by DNR staff, including the presence of outstanding fisheries. Scoring also takes into account wildlife habitat and plant communities. The rating system is described in more detail in an attachment. Rating criteria to prioritize parcels will also include the potential to expand and link existing protected areas, and the presence of sensitive shoreline habitat and vegetation. Lakes facing higher threat levels

from development potential will be a higher priority than lakes with sufficient protection already in place. The parcel list indicates a representative lake in counties with Lakes of Biological Significance scores that meet "outstanding" criteria overall and for fisheries. The parcel list and map provide a general guide; several counties have more than one eligible lake, and we do not expect to acquire land in all of the counties listed. With the revised funding recommendation, we anticipate one or two acquisitions, and have reduced the parcel (county) list to focus on the Northern Forested section.

Investing in AMA's, including both fee title and easements protects stream banks and lakeshores, which are critical components of aquatic systems. However, an exclusive focus on riparian lands is not sufficient by itself to protect aquatic habitat from impacts in the watershed. Conversion of natural cover types to agriculture and urban land cover leads to runoff of nutrients and sediment that diminish water quality and change physical habitat, including the composition and extent of aquatic plant communities. Loss of oxygen in cold, deep water during summer leads to loss of coldwater fishes, including lake trout and cisco. We propose to protect water quality and cold water fish habitat through the use of working forest conservation easements in the watersheds of selected high priority lakes in North-Central Minnesota.

This proposed protection follows the framework of MN DNR's Fish Habitat Plan, which considers both threats and existing levels of protection and puts resources where they have the most significant conservation potential. Research conducted by MNDNR biologists provided compelling evidence that watersheds maintaining 75% of the watershed in natural land cover maintain the excellent water quality necessary to support cisco (tullibee). Many of the lakes in North-Central Minnesota contain lands in permanent protection, including state and national forest, WMA's, AMA's, and private lands with conservation easements. The existing protection is significant, but not sufficient to ensure maintenance of current water quality and habitat as threats of land conversion and development continue. To diversify the protection options available, we propose to continue our partnership with MNDNR Forestry with Forests for the Future easements in targeted watersheds. This program purchases permanent conservation easements on private forest land that continues to function as working forest, subject to a management plan employing best management practices. While these easements protect fish habitat, they also provide benefits to wildlife. Sign-up criteria are provided in an attachment in place of a parcel list.

In last year's proposal, we identified 5 watersheds with outstanding fisheries, including healthy cisco populations, in which achieving a critical level of protection possible, and were recommended for funding to initiate this strategy. A map with the lakes and their watersheds is attached for reference. Additional funding will be required to achieve protection goals. This year, we propose to continue progress, remaining focused on the same lakes in North-Central Minnesota. We are currently developing a prioritized parcel list for the 5 watersheds in cooperation with conservation partners in the region. Continuing the work under way, this proposal will continue to complement, rather than compete with other conservation efforts in the region. As we further develop a comprehensive list of willing sellers, and assess protection achieved by partners, we anticipate a final phase next year to complete the project.

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?

Aquatic habitat protection is proposed for systems that have outstanding fisheries. AMA acquisition will be prioritized by several criteria, including an "outstanding" rating in the DNR's "Lakes of Biological Significance" initiative. The scoring includes fisheries-based criteria including natural reproduction of important game fish such as walleye or muskellunge, and the presence of sensitive species and high quality fish communities. Other criteria include aquatic vegetation communities and sensitive shoreline habitat. Trout stream conservation easement

acquisition will be prioritized by criteria that include the presence of a high quality trout fishery. Working forest easements to protect water quality and forest habitat will be applied to 5 targeted watersheds with outstanding fisheries and the presence of cisco, a sensitive coldwater species.

Describe the science based planning and evaluation model used:

MNDNR research scientists Tim Cross and Pete Jacobson have examined the relation between land cover and water quality in Minnesota lakes. Watershed protection targets are based on their work. Good water quality is an essential component of habitat for coldwater fishes including cisco.

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
- H6 Protect and restore critical in-water habitat of lakes and streams

Which two other plans are addressed in this program?

- Minnesota DNR Strategic Conservation Agenda
- Other : Minnesota DNR Fisheries Habitat 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

Does this program include leveraged funding?

-

Non-OHF Appropriations

Year	Source	Amount
2010	Acquisition, all non-LSOHC sources (RIM, Bonding, LCCMR, Game & Fish)	264,000
2011	Acquisition, all non-LSOHC sources	602,000
2012	Aquisition, all non-LSOHC sources	230,000
2013	Acquisition, all non-LSOHC sources	456,000
2014	Acquisition, all non-LSOHC sources	560,000

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

Funding for easement stewardship is included in the current proposal. Stewardship funds will be transferred to a Dedicated Stewardship Account and interest earned from the account will fund the annual stewardship and monitoring work for the easement. Trout stream and Forest easements will have baseline property reports, compliance monitoring, enforcement protocols, record-keeping, and landowner relations protocols following DNR Operational Order 128 "Conservation Easement Stewardship" and applicable DNR Division (Fish & Wildlife or Forestry) guidance. Forest easements will have forest stewardship plans and easement monitoring plans prepared prior to closing of the project. Forest easement standards and practices for conservation easement stewardship

have been developed and implemented in the forest easement program over the past 15 years.

Fee title Aquatic Management Areas will have site-specific plans developed by DNR Section of Fisheries staff, including positions currently supported by LSOHC (funded through 2016). LSOHC also provides support for AMA enhancement work. Permanent Fisheries staff funded by the Game and Fish account also provide support for maintenance and enhancement of AMA's.

Actions to Maintain Project Outcomes

Year	Source of Funds	Step 1	Step 2	Step 3
2019 or as easements are completed	LSOHC	Transfer funds to dedicated stewardship account per OHF appropriation and accomplishment plan for easement stewardship	Develop easement monitoring/stewardship plans (forest easements)and baseline property reports (trout stream and forest easments) prior to closing	Develop forest stewardship plans (applies to forest easements only)prior to closing
perpetually/Annually	Dedicated stewardship account (LSOHC funded)	Monitor easements according to easement monitoring plan and enforce easement terms	Annual landowner meetings and on-site visits to easement properties.	Review forest management activities annually and review and update Forest Stewardship Plans periodically.
2019 or as fee title AMAs acquired	LSOHC	Address initial site development (signs, boundary surveys)	Develop site specific management guidance document identifying maintenance/enhancement needs	Review and prioritize AMA enhancement projects
perpetually	Game & Fish, Heritage,	monitor fee title AMAs for management needs including ecological values and issues such as encroachment or other violations.	Update management guidance document	Prioritize and implement management activities

Activity Details

Requirements

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

Yes

Will local government approval be sought prior to acquisition?

No

Describe any measures to inform local governments of land acquisition under their jurisdiction:

Approval is not required for AMA acquisition, however we will inform local governments and consider any feedback.

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

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

Is this land currently open for hunting and fishing?

No

Will the land be open for hunting and fishing after completion?

Yes

Describe any variation from the State of Minnesota regulations:

AMA fee title and conservation easements will be open to fishing. AMA fee title lands will most likely be "general use" AMA's, which allow hunting and trapping. Trout stream easements on private land are "restricted use AMA's" that allow fishing, but do not allow public hunting and trapping. Forests for the Future easements may allow hunting but are not required to have this provision, which is negotiated with the landowner.

Will the eased land be open for public use?

Yes

Describe the expected public use:

Trout stream conservation easements are open to anglers. Forests for the Future easements may allow public use, but are not required to allow public use. Use is negotiated with the landowner.

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

Yes

Describe the types of trails or roads and the allowable uses:

No parcels being considered for AMA acquisition have known trails, and we will not develop trails. Forest for the Future easements will have timber harvest. Forest Access roads have been developed and are maintained to provide access for timber management on the property.

Will the trails or roads remain and uses continue to be allowed after OHF acquisition?

Yes

How will maintenance and monitoring be accomplished?

The changes in the accomplishment plan are on private lands that are protected by the Forest for the Future conservation easements that have forest management activities. The private landowner will be responsible for maintaining the current access roads for forest management purposes. Monitoring will be ongoing as part of the annual easement monitoring on the property.

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

Yes

Describe the types of trails or roads and the allowable uses:

New forest access routes will be developed as needed to provide forest management access to portions of the property. These frequently will be re-opening older routes to allow timber harvest. AMA acquisition lands will not have trails and no changes occur to the acquisition piece of this plan.

How will maintenance and monitoring be accomplished?

Maintenance will be the responsibility of the owner. The monitoring will be ongoing as part of the annual easement monitoring process on the private property.

Timeline

Activity Name	Estimated Completion Date
purchase trout stream conservation easements	6/30/2019
purchase Forests for the Future easements	6/30/2019
purchase fee title Aquatic Management Areas	6/30/2019
Develop monitoring plan (forest easements) and dedicate easement stewardship funds (trout stream and forest easements)	6/30/2019
Initial site development (signs and boundary surveys) and management guidance developed for fee title AMAs and trout stream easements	6/30/2021
Monitor easements and enforce easement terms	perpetually
Monitor fee title AMAs and update/implement management guidance	perpetually

Date of Final Report Submission: 11/01/2019

Budget

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

Totals

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Personnel	-	-	-	-
Contracts	\$12,000	-	-	\$12,000
Fee Acquisition w/ PILT	\$490,000	-	-	\$490,000
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	\$790,000	-	-	\$790,000
Easement Stewardship	\$153,000	-	-	\$153,000
Travel	-	-	-	-
Professional Services	\$126,000	-	-	\$126,000
Direct Support Services	\$3,000	-	-	\$3,000
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	-	-	-	-
Supplies/Materials	\$4,000	-	-	\$4,000
DNR IDP	-	-	-	-
Grand Total	\$1,578,000	-	-	\$1,578,000

Amount of Request: \$1,578,000

Amount of Leverage: -

Leverage as a percent of the Request: 0.0%

DSS + Personnel: \$3,000

As a % of the total request: 0.19%

Easement Stewardship: \$153,000

As a % of the Easement Acquisition: 19.37%

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

The original proposal used a programmatic approach for fee title and easement acquisition based on set criteria. We will use the same criteria but reduce the targeted acreage for protection.

Direct Support Services

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

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	33	33
Protect in Fee w/o State PILT Liability	0	0	0	0	0
Protect in Easement	0	0	333	56	389
Enhance	0	0	0	0	0
Total	0	0	333	89	422

Total Requested Funding by Resource Type (Table 2)

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	\$528,000	\$528,000
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	\$613,000	\$437,000	\$1,050,000
Enhance	-	-	-	-	-
Total	-	-	\$613,000	\$965,000	\$1,578,000

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	33	33
Protect in Fee w/o State PILT Liability	0	0	0	0	0	0
Protect in Easement	0	0	28	0	361	389
Enhance	0	0	0	0	0	0
Total	0	0	28	0	394	422

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	-	-	-	-	\$528,000	\$528,000
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	\$218,500	-	\$831,500	\$1,050,000
Enhance	-	-	-	-	-	-
Total	-	-	\$218,500	-	\$1,359,500	\$1,578,000

Average Cost per Acre by Resource Type (Table 5)

Type	Wetland	Prairie	Forest	Habitat
Restore	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	\$16,000
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	\$1,840	\$7,803
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	-	-	-	-	\$16,000
Protect in Fee w/o State	-	-	-	-	-

PILT Liability					
Protect in Easement	-	-	\$7,803	-	\$2,303
Enhance	-	-	-	-	-

Target Lake/Stream/River Feet or Miles

4

Outcomes

Programs in the northern forest region:

- Improved aquatic habitat indicators ~ *Indicators of aquatic habitat are excellent for the systems we will protect, so maintaining these indicators would be a more accurate way to state the outcome. Surveys of game fish and fish communities, are conducted by DNR biologists. DNR also monitors aquatic vegetation. Fish community and plant community monitoring is funded by the Clean Water Fund.*

Programs in southeast forest region:

- Rivers, streams, and surrounding vegetation provide corridors of habitat ~ *Stream corridors protected by conservation easements will be monitored to assure compliance with terms of the easement.*

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?

[Yes](#)

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

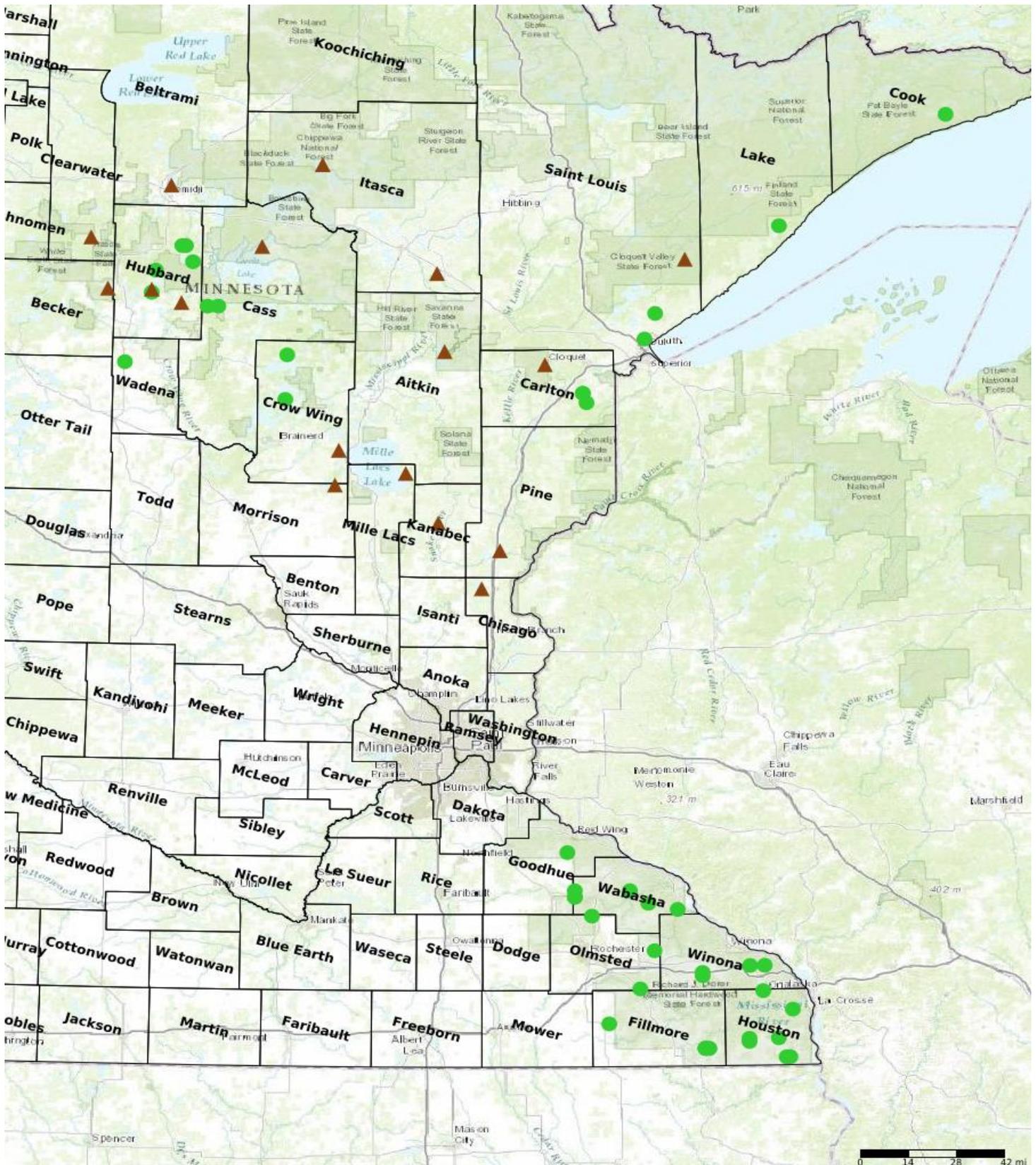
Protect Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection
AMA TBD	Aitkin	04923204	0	\$0	No
AMA TBD	Becker	14136214	0	\$0	No
AMA TBD	Beltrami	14733234	0	\$0	No
trout stream TBD	Carlton	04717226	0	\$0	No
Blackhoof River	Carlton	04717210	12	\$40,000	No
AMA TBD	Carlton	04919225	0	\$0	No
Blackhoof River	Carlton	04717210	3	\$15,000	No
AMA TBD	Cass	14329202	0	\$0	No
McGill Ten Mile lake	Cass	14031208	121	\$181,000	No
Ten Mile Chafee	Cass	14031211	40	\$45,000	No
AMA TBD	Chisago	03722223	0	\$0	No
AMA TBD	Clearwater	14437225	0	\$0	No
trout stream TBD	Cook	06201232	0	\$0	No
AMA TBD	Crow Wing	04428210	0	\$0	No
Laurel Big Trout Lake	Crow Wing	13828225	110	\$126,000	No
Pelican Lake Elks camp	Crow Wing	13528202	193	\$289,000	No
Wisel Creek	Fillmore	10108206	1	\$10,000	No
trout stream TBD	Fillmore	10108205	0	\$0	No
Wisel Creek	Fillmore	10108205	6	\$40,000	No
Wisel Creek	Fillmore	10108206	1	\$10,000	No
Wisel Creek	Fillmore	10108206	2	\$10,000	No
Spring Valley Creek	Fillmore	10313226	45	\$250,000	No
trout stream TBD	Goodhue	11215226	0	\$0	No
Spring Creek	Goodhue	10814201	2	\$15,000	No
trout stream TBD	Houston	10205221	0	\$0	No
Looney Creek	Houston	10406202	9	\$50,000	Yes
Winnebago Creek	Houston	10105223	30	\$140,000	No
Winnebago Creek	Houston	10105224	65	\$290,000	No
Larson Creek	Houston	10206219	19	\$125,000	No
Thompson Creek	Houston	10304206	12	\$70,000	No
West Beaver Creek	Houston	10206230	3	\$25,000	No
West Beaver Creek	Houston	10606230	5	\$35,000	No
Kabekona Anderson	Hubbard	14332205	34	\$51,000	No
Kabekona Plemmons	Hubbard	14332206	40	\$25,000	No
Camp Wilderness FFF	Hubbard	14234213	320	\$410,000	No
Kabekona Rogness	Hubbard	14332234	17	\$20,000	No
Kabekona Roerick 1, 2 and 3	Hubbard	14134223	251	\$384,000	No
AMA TBD	Hubbard	14032206	0	\$0	No
Lower Bottle Lake	Hubbard	14134214	25	\$150,000	No

AMA TBD	Itasca	05423231	0	\$0	No
AMA TBD	Kanabec	04024202	0	\$0	No
trout stream TBD	Lake	05608222	0	\$0	No
AMA TBD	Mille Lacs	04325215	0	\$0	No
AMA TBD	Morrison	04228204	0	\$0	No
trout stream TBD	Olmsted	10711235	0	\$0	No
Mill Creek tr8a	Olmsted	10511231	1	\$5,000	No
AMA TBD	Pine	03921222	0	\$0	No
AMA TBD	St. Louis	05412208	0	\$0	No
trout stream TBD	St. Louis	05114201	0	\$0	No
Chester Creek	St. Louis	05014216	4	\$20,000	No
trout stream TBD	Wabasha	10911216	0	\$0	No
East Indian Creek	Wabasha	10910226	5	\$35,000	Yes
Spring Creek AMA, Tr 16	Wabasha	11012227	2	\$20,000	No
North Fork Zumbro River	Wabasha	10914206	4	\$30,000	No
North Fork Zumbro River	Wabasha	10914206	12	\$90,000	No
Mazeppa Creek	Wabasha	11014230	11	\$75,000	No
Cat Creek	Wadena	13735210	7	\$25,000	No
trout stream TBD	Winona	10509212	0	\$0	No
Pickwick Creek	Winona	10606226	10	\$55,000	No
Rush Creek	Winona	10509201	9	\$65,000	No

Protect Parcels with Buildings

Name	County	TRDS	Acres	Est Cost	Existing Protection	Buildings	Value of Buildings
Birds Eye Lake	Itasca	14826228	70	\$600,000	No	3	\$2,500



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

Parcel Map
MNDNR Aquatic Habitat Protection Phase VIII
(Data Generated From Parcel List)