



## Lessard-Sams Outdoor Heritage Council

Fisheries Habitat Protection on Strategic North Central Minnesota Lakes - Phase X  
ML 2024 Request for Funding

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### General Information

**Date:** 06/23/2023

**Proposal Title:** Fisheries Habitat Protection on Strategic North Central Minnesota Lakes - Phase X

**Funds Requested:** \$7,798,000

**Confirmed Leverage Funds:** -

**Is this proposal Scalable?:** Yes

### Manager Information

**Manager's Name:** Annie Knight

**Title:** Grants Manager & Conservation Specialist

**Organization:** Northern Waters Land Trust

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### Location Information

**County Location(s):** Cass, Crow Wing, Hubbard and Aitkin.

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

- Northern Forest

**Activity types:**

- Protect in Easement
- Protect in Fee

**Priority resources addressed by activity:**

- Forest
- Habitat

## Narrative

### **Abstract**

The Northern Waters Land Trust (NWLTL) and Minnesota Land Trust (MLT) will protect critical fish habitat within 48 tullibee "refuge" lakes and their minor watersheds by securing conservation easements and fee title acquisitions. These efforts are prioritized toward the 23 highest priority tullibee refuge lakes. Through this Fisheries Habitat Protection program, NWLTL and MLT are working to protect 75% of each targeted watershed, a measure that provides a high probability of maintaining clean water and healthy lake ecosystems. We will permanently protect approximately 1,150 acres of land through this grant.

### **Design and Scope of Work**

Sustaining a strong angling heritage in North Central Minnesota (along with the local economy it drives) revolves around protecting fisheries habitat. Resurging shoreland development pressures and climate change are direct threats to the ecology of Minnesota's lakes. Fisheries research shows that healthy watersheds with intact forests are fundamental to sustaining good fish habitat over the long term; achieving a 75% lake watershed protection goal ensures a resilient and healthy lake ecosystem.

Our protection efforts are focused on tullibee (aka cisco), a preferred forage fish of walleye, northern pike, muskellunge and lake trout. They require cold, well oxygenated waters, a condition most common in lakes with deep water and healthy watersheds. Minnesota DNR Fisheries researchers studied tullibee lakes and designated 68 lakes in Minnesota as "refuge lakes" for tullibee that need protection. Our four-county area (Aitkin, Cass, Crow Wing, Hubbard) includes 48 of these tullibee refuges. We are prioritizing 23 of these lakes and their minor watersheds. Many are Minnesota's premier recreational lakes.

The Clean Water Critical Habitat Technical Committee evaluated all tullibee lakes in our project area and prioritized 23 lakes and their minor watersheds for action. In assigning priorities, the committee considered: (1) ecological value of the lake, (2) percent of the minor watershed currently protected, (3) number of parcels in the watershed greater than 20 acres in size, (4) partner organizations available for advising on outreach efforts, and (5) investment by other agencies and organizations to protect lands and watersheds.

The Clean Water Critical Habitat Technical Committee has also developed a scoring framework to evaluate specific parcels within these priority watersheds (Attachment A). This framework takes four factors into consideration: Program Requirements (at least 20 acres in size, within our service area, and on a refuge lake), Ecological Factors (size, quality/condition of the resource, and landscape context), Threat/Urgency (development or disturbance in the minor watershed and the risk classification from water plans), and Cost (cost of project and donative value). These factors are scored on a scale of 0-210, with the highest score indicating the greatest need for conservation action. These scored parcels are made available in a user-friendly format on the online Clean Water Critical Habitat map. This map has directly resulted in the protection of numerous high priority parcels.

Due to the high level of interest in the program and its great success to date, we are applying for a Phase 10 of this effort. In this phase, we will protect 1,150 strategically important acres of land through conservation easements and fee title acquisitions. Program partners will include County Soil & Water Conservation Districts, MN DNR, and County land departments. This team will conduct outreach to potential landowners and help evaluate the projects to assure we are prioritizing those projects with the greatest conservation outcomes. In addition, to ensure the best conservation return on the state's investment, landowner willingness to donate a portion of the easement value will be a key component of the parcel's evaluation. MLT will hold and defend the easements.

## **Explain how the proposal addresses habitat protection, restoration, and/or enhancement for fish, game & wildlife, including threatened or endangered species conservation**

Tullibee (aka cisco) is the preferred forage fish for walleye, northern pike, muskellunge and lake trout. They require cold, well oxygenated waters - a condition most common in lakes with deep water and healthy watersheds. Tullibee populations are the "canary in the coal mine" for three significant threats to Minnesota's sport fisheries: shoreland development, watershed health and climate warming. Deep, cold water lakes with high quality, well-oxygenated waters and natural, undisturbed land cover along the shorelines and within their watersheds will have the best chance to sustain tullibee populations in the face of these threats and will serve as a "refuge" for the tullibee if annual temperatures increase.

Minnesota DNR Fisheries Research scientists studied tullibee lakes and designated 68 lakes in Minnesota as primary "refuge lakes" for tullibee that need protection. Forty-eight of these lakes and their minor watersheds are located in Crow Wing, Aitkin, Cass and Hubbard counties. These lakes are premier recreational and sport fishery lakes. Fisheries research has shown that healthy watersheds with intact forest are fundamental to good fish habitat. MN DNR Fisheries Habitat Plan, states near shore fish habitat affected by shoreland disturbance can impact fisheries. Maintaining good water quality is critical to sustaining tullibeas as determined by the water's oxygen level and nutrient content. Lakeshore development decreases a lake's ability to function as a healthy ecosystem for sport fish and their forage, due to increased runoff, but also through physical alternation by lakeshore owners.

## **What are the elements of this proposal that are critical from a timing perspective?**

Right now is a critical time to protect some of the "best of the best" sport fishery lakes in Minnesota. With the hit of the COVID-19 pandemic, many people have opted to move out of their urban homes and relocate to their seasonal homes in Northern Minnesota. Landowners can work, live, and play from the same location. Realtors in our four-county service area have reported a rapid increase in demand for lakeshore property. With land values rising in the region and development pressures looming, now is the time to protect these tullibee "refugee" lakes and maximize the effectiveness of this fisheries habitat protection project. We are building considerable momentum with effective partnerships with local lake associations, local SWCD's, Counties, MN DNR, and the North Central Conservation Roundtable. We believe these synergistic efforts will increase leveraging and maximize results.

## **Describe how the proposal expands habitat corridors or complexes and/or addresses habitat fragmentation:**

Timothy Cross and Peter Jacobson in their white paper, "Landscape factors influencing lake phosphorus concentrations across Minnesota," determined coldwater fish communities are especially vulnerable to eutrophication from increased phosphorus concentrations. Decreases in hypolimnetic oxygen concentrations have direct negative effects on fish such as tullibee that physiologically require oxygenated cold water to survive, grow and reproduce. Protection is viewed as the most cost-effective strategy when applied to watersheds where human activities have not already significantly elevated phosphorus levels.

Peter Jacobson and Mike Duval, in "Protecting Watershed of Minnesota Lakes with Private Forest Conservation Easements: A Suggested Strategy", stated that protecting the forests in these watersheds from development is critical for maintaining water quality in these lakes. While large areas of land in forested portions are under public ownership, a considerable amount is also owned by private individuals in some of our most critical lake watersheds. These parcels are increasingly being "split up" and sold. Modelling by MN DNR Fisheries research unit suggests that total phosphorus concentrations remain near natural background levels when less than 25% of a lake's watershed is disturbed. Tullibee "refuge" lakes have watersheds with less than 25% disturbed land uses and are good candidates for protection. Very deep lakes with exceptional water quality to support coldwater fish

populations like tullibee were considered priorities by the report.

Minnesota DNR Fisheries researchers studied tullibee lakes and designated 68 lakes in Minnesota as the primary “refuge lakes” for tullibee. We focused our protection efforts of the highest quality tullibee lakes that will require modest to moderate levels of land protection to achieve 75% protection levels. Protecting the habitats of tullibee "refuge" lakes along the shoreline and surrounding forest lands is essential to a sustained sport fishery.

**Which Conservation Plans referenced in MS97A.056, subd. 3a are most applicable to this project?**

- Long Range Plan for Fisheries Management
- Other : Leech Lake River Comprehensive Watershed Management Plan (LLRCWMP)

**Explain how this proposal will uniquely address habitat resilience to climate change and its anticipated effects on game, fish & wildlife species utilizing the protected or restored/enhanced habitat this proposal targets.**

Tullibee "refuge" lakes can generally be assured to maintain high water quality and resiliency in the face of climate change, and support tullibee populations if 75% of the land area within the watershed is permanently protected. In addition to directly protecting tullibee, land protection actions through this grant help preserve a vital carbon sink through the forests, peatlands and other habitats protected. This will reduce the concentration of greenhouse gases and mitigate the effects of climate change on water resources and fish habitats.

The Minnesota Climate Action Framework’s Initiative 2.1 is to “manage forests, grasslands, and wetlands for increased carbon sequestration and storage”. It is clear that preserving forested watersheds directly mitigates the impacts of climate change in northern Minnesota, making forest and aquatic habitat more resilient. Additionally, The Nature Conservancy climate resilience data is a key element in ranking criteria for land protection within this grant.

**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

**Describe how this project/program will produce and demonstrate a significant and permanent conservation legacy and/or outcomes for fish, game, and wildlife, and if not permanent outcomes, why it is important to undertake at this time:**

Priority private shoreline habitat and forested parcels totaling 1,150 acres will be permanently protected from development and fragmentation through conservation easements and fee title acquisitions. Riparian forest lands under easement will maintain healthy habitat complexes for upland and aquatic species; forest cover will enhance water quality habitat for tullibee lakes. Greater public access for wildlife and outdoors-related recreation will be attained through fee title acquisition, with properties being open to public for hunting and fishing.

**Outcomes**

**Programs in the northern forest region:**

- Forestlands are protected from development and fragmentation ~ *Private shoreline habitat and forested parcels totaling 1,150 acres will be permanently protected from development and fragmentation through*

*conservation easements. Riparian forest lands under easement will maintain healthy habitat complexes for upland and aquatic species; forest cover will enhance water quality habitat for tullibee lakes. Conservation easement properties will protect fish habitat to ensure high quality fishing opportunities. Greater public access for wildlife and outdoors-related recreation will be attained through fee-title acquisition of properties to be conveyed to a governmental organization to be managed consistent with the agency's land management policies.*

**What other dedicated funds may collaborate with or contribute to this proposal?**

- N/A

**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.**

Funding procured by NWLT and MLT through this Outdoor Heritage Fund proposal will not supplant or substitute any previous funding from a non-Legacy fund used for the same purpose.

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

NWLT and MLT are long standing accredited conservation organizations that do not depend on Outdoor Heritage Funds to sustain or maintain our work. The majority of financial support for both NWLT and MLT must be raised on an annual basis. The work in this proposal allows both organizations to enhance and accelerate ongoing conservation efforts in North Central Minnesota; these grant funds will not substitute for or supplant other funding sources.

The Fee-title acquisitions will be owned and managed by a governmental agency.

The Minnesota Land Trust will hold the conservation easements acquired, which will be sustained through the best standards and practices for conservation easement stewardship. The Minnesota Land Trust is a nationally-accredited land trust with a very successful stewardship program that includes annual property monitoring, effective records management, addressing inquiries and interpretations, tracking changes in ownership, investigating potential violations and defending the easement in case of a true violation. In addition, MLT encourages landowners to undertake active ecological management of their properties, provides them with habitat management plans, and works with them over time to secure resources (expertise and funding) to undertake these activities over time.

**Actions to Maintain Project Outcomes**

Year	Source of Funds	Step 1	Step 2	Step 3
2029 and in perpetuity	MLT Stewardship and Enforcement Fund	Annual monitoring of easements	Enforcement as necessary	-
2029 and in perpetuity	Managing governmental agency	Ongoing management in line with developed management plans	-	-

**Provide an assessment of how your program may celebrate cultural diversity or reach diverse communities in Minnesota, including reaching low- and moderate-income households:**

One of the Minnesota Land Trust’s core public values is a commitment to diversity, equity, and inclusion. We have been engaged in a multi-year-long process to assess how the conservation community—and the Minnesota Land Trust in particular—can better address these issues. To date, we have demonstrated this commitment when possible given the funding parameters and our unique role in working with private landowners, including

numerous projects to protect the camps and nature centers that serve a diversity of Minnesota youth and a long-term partnership with the Fond du Lac Band of Lake Superior Chippewa on wild rice restoration.

Going forward, we intend to build on this engagement by using diversity, equity, and inclusion as a lens in project, partner, and contractor selection. In each of our program areas, we intend to listen and seek out potential, authentic partnerships that can advance our goals of conserving the best of Minnesota’s remaining habitats and, at the same time, being a more inclusive organization.

MLT recently launched is the “Ambassador Lands Program” which connects willing conservation landowners to diverse community groups that desire access to private land for a variety of programming purposes, such as youth mentor hunts, cultural or ceremonial use, conservation employment training, nature-based education, and much more. This will add to the more universal public benefits of conserved lands such as wildlife habitat, clean water, and climate mitigation.

NWLT deeply values inclusiveness, collaboration, teamwork and diversity in all of our programs, projects, and community work. We believe that enduring conservation success depends on the active involvement of people and partners whose lives and cultures are linked to the natural systems we seek to conserve. Currently, NWLT is directly including the Leech Lake Band of Ojibwe in these protection efforts by engaging in quarterly discussions, acknowledging which lands have cultural and ecological significance, and engaging in partnership on conservation projects where possible. NWLT is focused on building relationships based on trust, listening, and mutual respect.

### Activity Details

#### Requirements

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

Yes

**Will county board or other local government approval be formally sought\*\* prior to acquisition, per 97A.056 subd 13(j)?**

Yes

**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

**Will neonicotinoid pesticide products be used within any activities of this proposal?**

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:**

All fee title acquisitions will be open to hunting and fishing.

**Who will eventually own the fee title land?**

- State of MN
- County
- Tribal
- Local Unit of Government

**Land acquired in fee will be designated as a:**

- WMA
- AMA
- State Forest
- County Forest
- SNA
- Tribal

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

No

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

Yes

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

Most conservation easements are established on private lands, many of which have driveways, field roads and trails located on them. Often, the conservation easement permits the continued usage of established trails and roads so long as their use does not significantly impact the conservation values of the property. Creation of new roads/trails or expansion of existing ones is typically not allowed.

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

Yes

**How will maintenance and monitoring be accomplished?**

Existing trails and roads on easement lands are identified in the project baseline report and will be monitored annually as part of the Land Trust's stewardship and enforcement protocols.

Maintenance of permitted roads/trails in accordance with the terms of the easement will be the responsibility of the landowner.

**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:**

MLT - We do not anticipate that R/E work will be necessary for the significant majority of lands protected through conservation easement associated with this program. If needs are evident, we will amend the accomplishment plan to accommodate for those needs.

NWLT does not anticipate that R/E funds through this grant will not be needed for fee title acquisitions.

**Other OHF Appropriation Awards**

**Have you received OHF dollars in the past through LSOHC that are current OPEN appropriations?**

Yes

Approp Year	Funding Amount Received	Amount Spent to Date	Funding Remaining	% Spent to Date
2023	\$3,719,000	-	-	-
2022	\$4,536,000	\$604,000	\$3,932,000	13.32%
2021	\$2,838,000	\$900,000	\$1,938,000	31.71%
2020	\$2,814,000	\$1,618,000	\$1,196,000	57.5%
2019	\$3,230,000	\$3,113,000	\$117,000	96.38%
2018	\$2,801,000	\$2,753,000	\$48,000	98.29%
2017	\$1,716,000	\$1,685,000	\$31,000	98.19%
2016	\$1,425,000	\$1,258,300	\$166,700	88.3%
2014	\$2,130,000	\$1,786,200	\$343,800	83.86%
Totals	\$25,209,000	\$13,717,500	\$11,491,500	54.42%

**Timeline**

Activity Name	Estimated Completion Date
Landowner outreach, consultation, technical assistance and easement preparation	Ongoing through June 2028
Protection of 270 acres via fee acquisition; conveyance to a governmental agency.	June 2028
Protection of 880 acres of targeted parcels via conservation easement.	June 2028



**Budget**

**Grand Totals Across All Partnerships**

<b>Item</b>	<b>Funding Request</b>	<b>Total Leverage</b>	<b>Leverage Source</b>	<b>Total</b>
Personnel	\$520,000	-	-	\$520,000
Contracts	\$90,000	-	-	\$90,000
Fee Acquisition w/ PILT	\$1,750,000	\$175,000	-, Landowners, Lake Associations	\$1,925,000
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	\$4,480,000	\$448,000	Landowner donation of easement value.	\$4,928,000
Easement Stewardship	\$280,000	-	-	\$280,000
Travel	\$24,000	-	-	\$24,000
Professional Services	\$436,000	-	-	\$436,000
Direct Support Services	\$151,000	-	-	\$151,000
DNR Land Acquisition Costs	\$40,000	-	-	\$40,000
Capital Equipment	-	-	-	-
Other Equipment/Tools	\$1,000	-	-	\$1,000
Supplies/Materials	\$6,000	-	-	\$6,000
DNR IDP	\$20,000	-	-	\$20,000
<b>Grand Total</b>	<b>\$7,798,000</b>	<b>\$623,000</b>	-	<b>\$8,421,000</b>

**Partner: Northern Waters Land Trust**

**Totals**

Item	Funding Request	Total Leverage	Leverage Source	Total
Personnel	\$220,000	-	-	\$220,000
Contracts	\$20,000	-	-	\$20,000
Fee Acquisition w/ PILT	\$1,750,000	\$175,000	Landowners, Lake Associations	\$1,925,000
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	\$7,000	-	-	\$7,000
Professional Services	\$172,000	-	-	\$172,000
Direct Support Services	\$70,000	-	-	\$70,000
DNR Land Acquisition Costs	\$40,000	-	-	\$40,000
Capital Equipment	-	-	-	-
Other Equipment/Tools	-	-	-	-
Supplies/Materials	\$3,000	-	-	\$3,000
DNR IDP	\$20,000	-	-	\$20,000
<b>Grand Total</b>	<b>\$2,302,000</b>	<b>\$175,000</b>	-	<b>\$2,477,000</b>

**Personnel**

Position	Annual FTE	Years Working	Funding Request	Total Leverage	Leverage Source	Total
NWLT Land Protection Staff	0.5	4.0	\$220,000	-	-	\$220,000

**Partner: Minnesota Land Trust**

**Totals**

Item	Funding Request	Total Leverage	Leverage Source	Total
Personnel	\$300,000	-	-	\$300,000
Contracts	\$70,000	-	-	\$70,000
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	\$4,480,000	\$448,000	Landowner donation of easement value.	\$4,928,000
Easement Stewardship	\$280,000	-	-	\$280,000
Travel	\$17,000	-	-	\$17,000
Professional Services	\$264,000	-	-	\$264,000
Direct Support Services	\$81,000	-	-	\$81,000
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	\$1,000	-	-	\$1,000
Supplies/Materials	\$3,000	-	-	\$3,000
DNR IDP	-	-	-	-
<b>Grand Total</b>	<b>\$5,496,000</b>	<b>\$448,000</b>	-	<b>\$5,944,000</b>

**Personnel**

Position	Annual FTE	Years Working	Funding Request	Total Leverage	Leverage Source	Total
MLT Land Protection Staff	0.75	4.0	\$300,000	-	-	\$300,000

**Amount of Request:** \$7,798,000

**Amount of Leverage:** \$623,000

**Leverage as a percent of the Request:** 7.99%

**DSS + Personnel:** \$671,000

**As a % of the total request:** 8.6%

**Easement Stewardship:** \$280,000

**As a % of the Easement Acquisition:** 6.25%

Total Leverage (from above)	Amount Confirmed	% of Total Leverage	Amount Anticipated	% of Total Leverage
\$623,000	-	0.0%	\$623,000	100.0%

**Detail leverage sources and confirmation of funds:**

NWLT: Works with landowners and corresponding lake associations to donate funds. We anticipate \$175,000 of leverage; not confirmed. Any expenses not covered by this grant will be funded through general operating income.  
 MLT: Full or partially donation of conservation value from landowners. A conservative estimate (\$448,000); not confirmed.

**Does this proposal have the ability to be scalable?**

Yes

### If the project received 50% of the requested funding

**Describe how the scaling would affect acres/activities and if not proportionately reduced, why?**

This proposal is true to its budget and protection goals and would be most effective if funded fully. However, if 50% funding was received, outputs would be reduced by 50-60%. NWLT would protect 135 acres in fee. MLT's reduction in outputs would be modestly less than proportional.

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

Personnel and DSS will be scaled, but moderately less than proportional. Some costs are fixed (landowner recruitment; grant management) and must occur regardless of grant amount. Projects can fail midstream after investment of time. Donation of easement value (high in this program) can inflate the number of projects pursued/completed.

### If the project received 30% of the requested funding

**Describe how the scaling would affect acres/activities and if not proportionately reduced, why?**

This proposal is true to budget and protection goals and would be most effective if funded fully. If 30% funding was received, outputs would be reduced by 70-80%. NWLT would protect 80 acres in fee. MLT 's reduction in outputs would modestly less than proportional.

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

Personnel and DSS will be scaled, but moderately less than proportional. Some costs are fixed (landowner recruitment; grant management) and must occur regardless of grant amount. Projects can fail midstream after investment of time. Donation of easement value (high in this program) can inflate the number of projects pursued/completed.

### Personnel

**Has funding for these positions been requested in the past?**

Yes

**Please explain the overlap of past and future staffing and position levels previously received and how that is coordinated over multiple years?**

NWLT estimates the personnel costs for fee title acquisition, conservation easement outreach and grant administration activities to accomplish the specific outcomes for each grant.

MLT - FTEs listed in the proposal are a coarse estimate of the personnel time required to produce the grant deliverables put forward in this proposal. An array of staff draw from these funds for legal work, negotiating with landowners, crafting of conservation easements, writing baseline reports and managing the grant.

### Contracts

**What is included in the contracts line?**

MLT - Writing of habitat management plans by vendors, posting of easement boundaries.

NWLT - Contracts for acquisition services; outreach services to connect with prospective landowners.

## Professional Services

### What is included in the Professional Services line?

- Appraisals
- Other : Environmental Assessments, Minerals Assessments, Project Mapping.
- Surveys
- Title Insurance and Legal Fees

## Fee Acquisition

### What is the anticipated number of fee title acquisition transactions?

NWLT expects to complete 6 fee title acquisitions through this proposal.

## Easement Stewardship

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

MLT expects to close up to 10 conservation easements, depending on project size and cost. The average cost per easement to fund the Minnesota Land Trust's perpetual monitoring and enforcement obligations is \$28,000, although in extraordinary circumstances a larger amount may be warranted. This figure is derived from MLT's stewardship funding "cost analysis" which is consistent with Land Trust Accreditation standards. MLT shares periodic updates of this cost analysis with LSOHC staff.

## Travel

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

Yes

### Explain the amount in the travel line outside of traditional travel costs of mileage, food, and lodging

Minnesota Land Trust staff regularly rents vehicles for grant-related purposes, which is a significant cost savings over use of personal vehicles.

NWLT's travel budget does not include equipment/vehicle rental.

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

Yes

## Direct Support Services

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

MLT - In a process that was approved by the DNR on March 17, 2017, Minnesota Land Trust determined our direct support services rate to include all of the allowable direct and necessary expenditures that are not captured in other line items in the budget, which is similar to the Land Trust's proposed federal indirect rate. We will apply this DNR-approved rate only to personnel expenses to determine the total amount of direct support services.

NWLT - In a process approved by MNDNR on March 17, 2023, Northern Waters Land Trust used a simplified allocation methodology that resulted in MNDNR approving an indirect rate of allowable expenses. We anticipate a similar rate for this proposal.

### **Other Equipment/Tools**

**Give examples of the types of Equipment and Tools that will be purchased?**

GPS units; field safety gear, etc.

### **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	270	270
Protect in Fee w/o State PILT Liability	0	0	0	0	0
Protect in Easement	0	0	0	880	880
Enhance	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,150</b>	<b>1,150</b>

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

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	\$2,218,000	\$2,218,000
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	\$5,580,000	\$5,580,000
Enhance	-	-	-	-	-
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$7,798,000</b>	<b>\$7,798,000</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	270	270
Protect in Fee w/o State PILT Liability	0	0	0	0	0	0
Protect in Easement	0	0	0	0	880	880
Enhance	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,150</b>	<b>1,150</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	-	-	-	-	\$2,218,000	\$2,218,000
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	\$5,580,000	\$5,580,000
Enhance	-	-	-	-	-	-
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$7,798,000</b>	<b>\$7,798,000</b>

### Average Cost per Acre by Resource Type (Table 5)

Type	Wetland	Prairie	Forest	Habitat
Restore	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	\$8,214
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	-	\$6,340
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	-	-	-	-	\$8,214

Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	\$6,340
Enhance	-	-	-	-	-

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

1



## Parcels

### Sign-up Criteria?

[Yes - Sign up criteria is attached](#)

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

Criteria based scoring systems provide a standardized set of data from which multiple projects can be compared relative to each other and individual projects can be compared against a baseline. Scoring systems are a set of data, not a final, complete decision making tool. Local expertise and experience, programmatic goals, timelines, available resources, capacity, and other more subjective factors might also come into play in project selection and decision making.

MLT and NWLT accept proposals via a Request for Proposal process from targeted landowners with properties on prioritized tullibee lakes. A technical team of experts scores and ranks each project proposal and identifies priorities from those submitted.

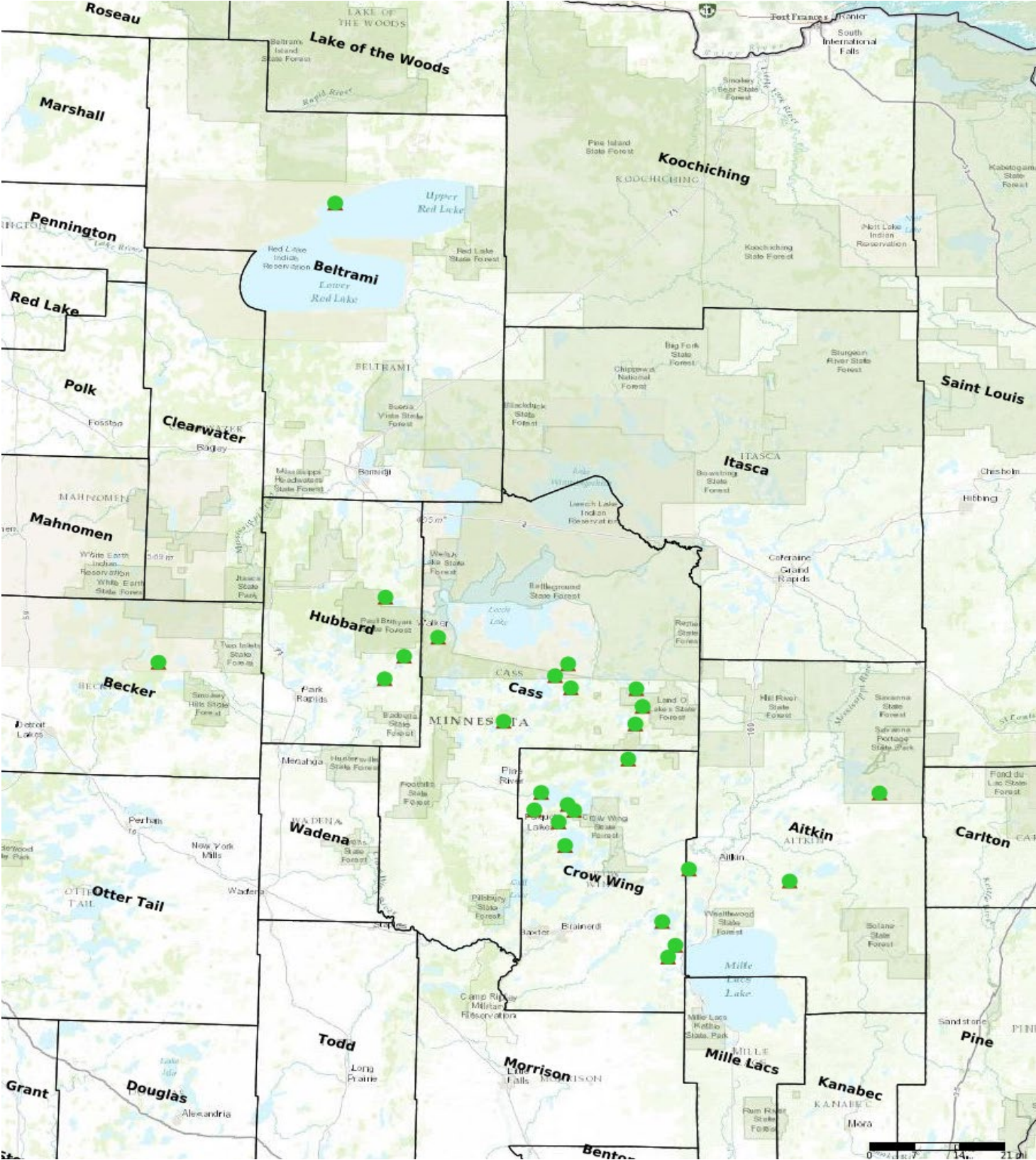
The attached scoresheet provides an approach to criteria based scoring that considers: 1) Ecological Integrity/Viability as current status; 2) Threat/Urgency as a future scenario if protection is not afforded; and 3) Cost reflecting the overall value realized through the acquisition of a conservation easement (including a reflection of donative value). Ecological Integrity weights property size, condition, and context equally (at least as an initial starting point). The three primary factors, when taken together, provide a good estimate of long-term viability for biodiversity at the site: 1) Size of the parcel to be protected, 2) Condition of the habitat on the parcel, and 3) its Landscape context (both from a protection and ecological standpoint).

### Protect Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection
Long Lake	Aitkin	04625210	0	\$0	No
Round Lake	Aitkin	04923225	0	\$0	No
Long Lake	Aitkin	04625210	0	\$0	No
Cedar Lake	Aitkin	04727231	0	\$0	No
Round Lake	Aitkin	04923225	0	\$0	No
Cedar Lake	Aitkin	04727231	0	\$0	No
Bass Lake	Cass	14026227	0	\$0	No
Cooper	Cass	14028211	0	\$0	No
Deep Portage	Cass	13929207	0	\$0	No
Girl Lake	Cass	14128233	0	\$0	No
Long Lake	Cass	14128223	0	\$0	No
Long Lake	Cass	14231233	0	\$0	No
Washburn Lake	Cass	13926209	0	\$0	No
Thunder Lake	Cass	14026209	0	\$0	No
Thunder Lake	Cass	14026209	0	\$0	No
Washburn Lake	Cass	13926209	0	\$0	No
Long Lake	Cass	14231233	0	\$0	No
Long Lake	Cass	14128223	0	\$0	No
Girl Lake	Cass	14128233	0	\$0	No
Deep Portage	Cass	13929207	0	\$0	No
Cooper	Cass	14028211	0	\$0	No
Bass Lake	Cass	14026227	0	\$0	No
Star Lake	Crow Wing	13728225	0	\$0	No
Lower Hay Lake	Crow Wing	13729225	0	\$0	No
Kenny Lake	Crow Wing	04428202	0	\$0	No
Crooked Lake	Crow Wing	04528216	0	\$0	No

Big Trout	Crow Wing	13728223	0	\$0	No
Lower Hay Lake	Crow Wing	13729225	0	\$0	No
Kenny Lake	Crow Wing	04428202	0	\$0	No
Ossawinamakee Lake	Crow Wing	13628204	0	\$0	No
Pelican Lake	Crow Wing	13628227	0	\$0	No
Borden Lake	Crow Wing	04428215	0	\$0	No
Roosevelt Lake	Crow Wing	13826208	0	\$0	No
Whitefish Lake	Crow Wing	13728207	0	\$0	No
Borden Lake	Crow Wing	04428215	0	\$0	No
Whitefish Lake	Crow Wing	13728207	0	\$0	No
Star Lake	Crow Wing	13728225	0	\$0	No
Roosevelt Lake	Crow Wing	13826208	0	\$0	No
Crooked Lake	Crow Wing	04528216	0	\$0	No
Pelican Lake	Crow Wing	13628227	0	\$0	No
Ossawinamakee Lake	Crow Wing	13628204	0	\$0	No
Big Trout	Crow Wing	13728223	0	\$0	No
Kabekona Lake	Hubbard	14332230	0	\$0	No
Kabekona Lake	Hubbard	14332230	0	\$0	No
Eleventh Crow Wing Lake	Hubbard	14132215	0	\$0	No
Eleventh Crow Wing Lake	Hubbard	14132215	0	\$0	No
Ninth Crow Wing Lake	Hubbard	14032206	0	\$0	No
Big Sand Lake	Hubbard	14138228	0	\$0	No
Spearhead Lake	Hubbard	15434223	0	\$0	No
Ninth Crow Wing Lake	Hubbard	14032206	0	\$0	No
Spearhead Lake	Hubbard	15434223	0	\$0	No
Big Sand Lake	Hubbard	14138228	0	\$0	No

### Parcel Map



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

# Fisheries Habitat Protection on Strategic North Central Minnesota Lakes

Phase 10



**Request**      **\$7,798,000**

**Leverage**              **\$897,300**

**Acres protected**              **1,150**

Conservation easements              880

Protect in Fee with State PILT Liability              270

## For more information:

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During the tenth phase of this program, the Northern Waters Land Trust and the Minnesota Land Trust will protect 1,150 acres (880 acres of permanent conservation easement and 270 acres fee-title acquisition) of high priority habitat.

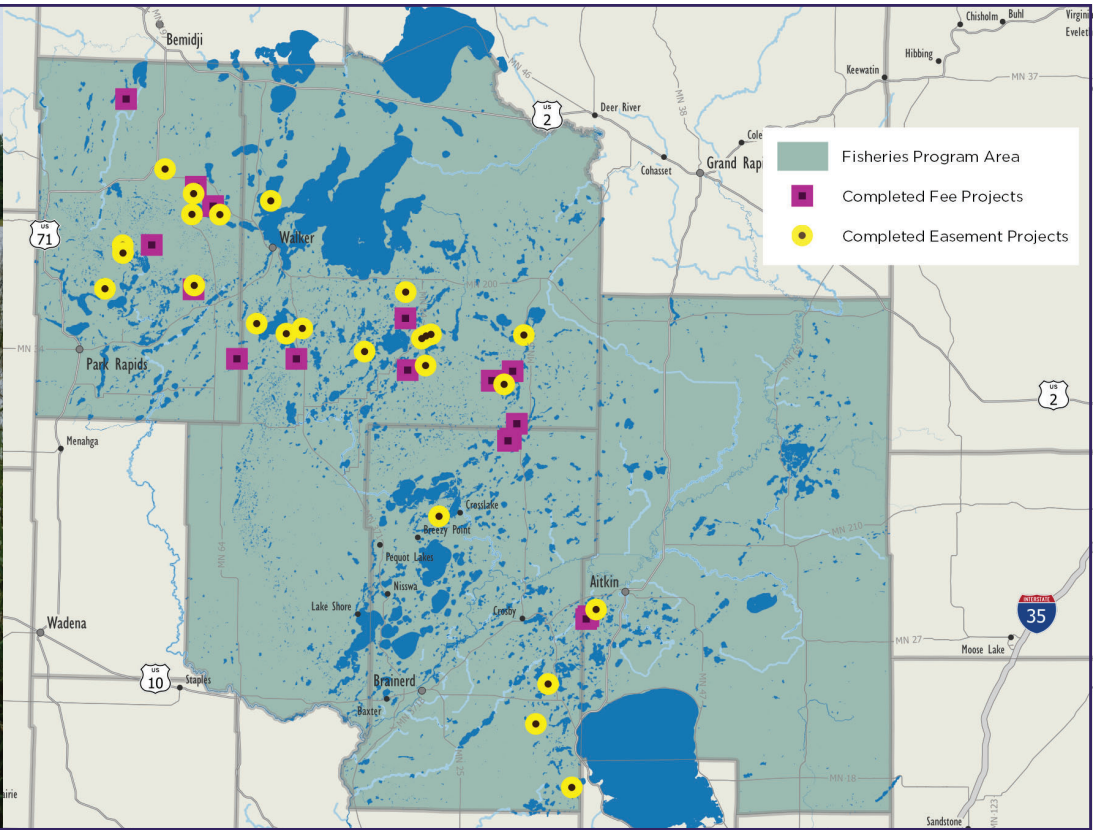
Our efforts will be focused on 23 tullibee refuge lakes and their watersheds. Applications to our easement and acquisition programs will be evaluated and ranked to maximize conservation benefit, leveraging \$897,300 in landowner, lake association, and supporting agency contributions.

## How Does the Program Support State Goals?

This program targets critical near-shore habitats, riparian areas, and key forested parcels within the watersheds of 23 priority tullibee “refuge” lakes prioritized by the Clean Water Critical Habitat technical committee. This work is in line with the goals set out in the *Long Range Plan for Fisheries Management*, *Leech Lake River Comprehensive Watershed Management Plan*, and regional *One Watershed, One Plans*.

## What Are the Outcomes?

- Private forested parcels totaling 1,150 acres and more than 1 mile of shoreline habitat will be protected to the benefit of tullibee and their lake systems.
- Forest lands will maintain healthy habitat and enhance water quality.
- Public access for wildlife and outdoors-related recreation will be attained through 270 acres of fee-title acquisition.



## What has Been Accomplished to Date in the Program?

### Complete (Phases 1, 2, 3, 4):

Completed 23 projects protecting 2,594 acres (4,336 acres conservation easements / 205 acres fee) of habitat and 16.8 miles of shoreline. Leverage in the amount of \$5,020,676 was realized.

### In Progress (Phases 5, 6, 7, 8):

Completed 10 projects protecting 3,467 acres of habitat. We have largely subscribed our grants related to conservation easements and are on track to meet or exceed our goals. Fee title acquisition projects are on target and lands will be conveyed to MN DNR Fisheries and local counties.

### Phase 9 (Planned):

Starting in July, we will begin using Phase 9 of the program to protect 476 acres.

The Fisheries Habitat Protection on Strategic North Central Minnesota Lakes Program has generated considerable interest among landowners in protecting these places. **Collectively these landowners have contributed over \$5 million in value as leverage to the \$13.5 million spent by the Outdoor Heritage Fund.**



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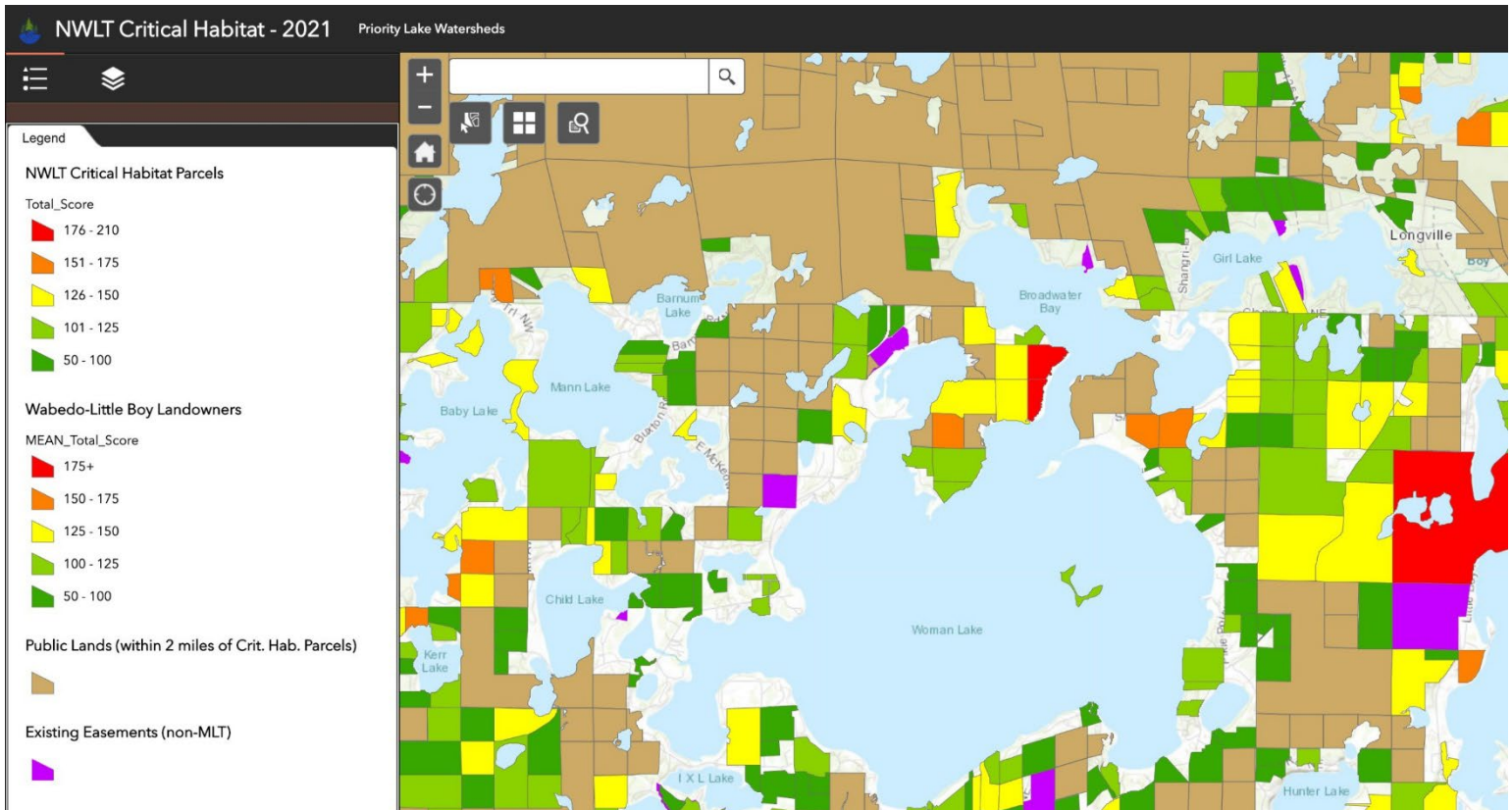


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# Fisheries Habitat Protection on Strategic North Central Minnesota Lakes



Phase 10



Northern Waters Land Trust and Minnesota Land Trust utilize a multi-criteria scoring system to prioritize land protection opportunities in the Fisheries Program Area. Each parcel is scored based on four main factors: Fisheries Program Requirements, Ecological Factors, Threat/Urgency, and Cost. The attached scoresheet describes and quantifies the criteria included.

In conjunction with this scoring system, we have developed a user-friendly Clean Water Critical Habitat map. This resource identifies properties within cold water refuge lake watersheds and utilizes a GIS analysis to score their priority for conservation. The higher the score, the greater the priority for conservation action. The map image highlights the parcel scoring. This scoring tool also provides a quick visual context of how a parcel may build on a larger complex of protected lands by showing public lands and existing easements.

# Clean Water Critical Habitat Project Scoresheet

Program Requirements	Choose Yes or No
In a tullibee lake watershed?	Yes or No
In Aitkin, Cass, Crow Wing or Hubbard County?	Yes or No
At least 20 acres protected in Conservation Easement?	Yes or No
Others?	Yes or No

## ECOLOGICAL FACTORS

### Size/Abundance of Habitat (1/3 of Overall Ecological Score)

Criteria	Score	Max Points	Draft Guidelines -
Feet of Shoreline	0	30	10 points for 0 - 2,000 feet
			15 points for 2,001 - 5,000 feet
			20 points for 5,001 - 10,000 feet
			25 points for 10,001 - 20,000 feet
			30 points for ≥ 20,000 feet
Parcel Acres to be Protected by Easement	0	60	10 points for 10 - 30 acres
			20 points for 31 - 80 acres
			30 points for 81 - 160 acres
			40 points for 161 - 300 acres
			50 points for 301 - 400 acres
			60 points for ≥ 401 acres

Size/Abundance Subtotal Score: \_\_\_\_\_

### Quality/Condition of Resource (1/3 of Overall Ecological Score)

Criteria	Score	Max Points	Draft Guidelines -
Designated Sensitive Shoreland	0	30	10 point for ≤ 33%
			20 points for 34 - 66%
			30 points for 67 - 100%
% Property Developed (more development, less value)	0	30	0 points for ≥ 31% developed
			10 points for 21 - 30% developed
			20 points for 11 - 20% developed
			30 points for 0 - 10% developed
Site visit/Aerial evaluation	0	30	Quality habitat on property
			0 points - Highly impacted (trails, logging, structures etc.)
			10 points - Moderately impacted (significant number of trails, land disturbance)
			20 points - Mostly in natural state (limited natural foot trails, good forest management, no structures etc.)
			30 points - Undisturbed natural state

Quality/Condition of Resource Score: \_\_\_\_\_

### Landscape Context (1/3 of Overall Ecological Score)

Criteria	Score	Max Points	Draft Guidelines -
Adjoining protected land	0	30	All sides=30, One side=10, No=0 Public land would include tribal land.
Near, but not adjoining, protected land within 3 miles of the property	0	30	10 point for 500 - 6,000 acres
			20 points for 6,001 - 12,000 acres
			30 points for 12,001 - 18,000 acres
Wildlife Action Network	0	30	0 points for not in WAN
			10 points Low
			15 points Low-Medium
			20 points Medium
			25 points Medium High
			30 points High

Landscape Context subtotal score: \_\_\_\_\_  
 Ecological Total = (Size + Quality + Landscape)/3: \_\_\_\_\_

## THREAT/URGENCY

Criteria	Score	Max Points	Draft Guidelines -
Urgency - Disturbance in Minor Watershed (more disturbance, higher score)	0	45	45 points for ≥ 31% developed
			30 points for 21 - 30% developed
			20 points for 11 - 20% developed
			10 points for 0 - 10% developed
Risk Classification from Water Plans (more risk, higher score)	0	45	10 = Vigilance
			20 = Protection
			30 = Risk
			45 = High Risk

Threat Urgency Total Score: \_\_\_\_\_

Cost – Consider after initial application screening and landowner knowledge.

Criteria	Score	Max Points	Draft Guidelines -
Cost/donative value (Bang for the buck)	0	90	90 = 90 - 100% donation
			70 = 51 - 89% donation
			50 = 26 - 50% donation
			30 = 5 - 25% donation
			0 = 0 - 4% donation

Scoring Criteria	Score
Landscape Context	0
Threat/Urgency	0
Cost/Donative Value	0

Total Score: \_\_\_\_\_