

Lessard-Sams Outdoor Heritage Council

Fiscal Year 2017 / ML 2016 Request for Funding



Date: June 17, 2015

Program or Project Title: MNDNR Aquatic Habitat Protection Phase VIII

Funds Requested: \$6,444,700

Manager's Name: Martin Jennings

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County Locations: Aitkin, Becker, Beltrami, Carlton, Cass, Chisago, Clearwater, Cook, Crow Wing, Douglas, Fillmore, Goodhue, Houston, Hubbard, Itasca, Kanabec, Lake, Le Sueur, Mille Lacs, Morrison, Murray, Olmsted, Otter Tail, Pine, Stearns, St. Louis, Todd, Wabasha, Winona, and Wright.

Regions in which work will take place:

- Northern Forest
- Forest / Prairie Transition
- Southeast Forest
- Prairie

Activity types:

- Protect in Easement
- Protect in Fee

Priority resources addressed by activity:

- Forest
- Habitat

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 200 acres of shoreline on our most outstanding lake resources, 7 miles of trout streams, and 1290 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.

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 the region 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.

Crops:

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

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.

What is the nature of urgency and why it is necessary to spend public money for this work as soon as possible:

Encroaching residential development and conversion of natural land cover to agricultural use threaten water quality of Minnesota's waters. In north-central Minnesota, several lakes with excellent water quality and fisheries retain the potential to achieve critical levels of protection. Protecting these waters now will be more cost-effective than restoring them later.

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. Their work indicates that water quality is maintained when natural land cover is present in >75% of the watershed, and that a secondary target of 60% protection provides benefits.

Which sections of the Minnesota Statewide Conservation and Preservation Plan are 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 other plans are addressed in this proposal:

- Minnesota DNR Strategic Conservation Agenda
- Minnesota DNR Fisheries Habitat Plan

Which LSOHC section priorities are addressed in this proposal:

Prairie:

- Not Listed

Forest / Prairie Transition:

- Protect, enhance, and restore wild rice wetlands, shallow lakes, wetland/grassland complexes, aspen parklands, and shoreland that provide critical habitat for game and nongame wildlife

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

How does this proposal accelerate or supplement your current efforts in this area:

The proposed funding for aquatic habitat protection would allow continued acquisition of high priority parcels following the framework of the MNDNR Aquatic Habitat Plan. Limited funding for acquisition is currently available for this purpose from sources other than LSOHC. The addition of Forests for the Future easements provides a different protection tool through a partnership with DNR Forestry, allowing watershed protection that could not be accomplished by the Fisheries program alone.

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

| Appropriation 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 | Acquisition, 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.

Explain the things you will do in the future 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 easements) 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:

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

Will local government approval be sought prior to acquisition - **No**

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

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

Is this land currently open for hunting and fishing - **No**

Will the land be open for hunting and fishing after completion - **Yes**

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**

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.

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

Accomplishment Timeline:

| Activity | Approximate Date Completed |
|--|----------------------------|
| 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 | 6/30/2021 |
| Monitor easements and enforce easement terms | perpetually |
| Monitor fee title AMAs and update/implement management guidance | perpetually |

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 *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 forest-prairie transition region:

- Protected shoreline of high quality lakes

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.*

Programs in prairie region:

- protect shoreline of high quality lakes with outstanding fisheries

Budget Spreadsheet

Total Amount of Request: \$6,444,700

Budget and Cash Leverage

| BudgetName | LSOHC Request | Anticipated Leverage | Leverage Source | Total |
|----------------------------|---------------|----------------------|-----------------|-------------|
| Personnel | \$0 | \$0 | | \$0 |
| Contracts | \$0 | \$0 | | \$0 |
| Fee Acquisition w/ PILT | \$3,000,000 | \$0 | | \$3,000,000 |
| Fee Acquisition w/o PILT | \$0 | \$0 | | \$0 |
| Easement Acquisition | \$2,610,000 | \$0 | | \$2,610,000 |
| Easement Stewardship | \$463,700 | \$0 | | \$463,700 |
| Travel | \$0 | \$0 | | \$0 |
| Professional Services | \$371,000 | \$0 | | \$371,000 |
| 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 | \$6,444,700 | \$0 | - | \$6,444,700 |

Amount of Request: \$6,444,700

Amount of Leverage: \$0

Leverage as a percent of the Request: 0.00%

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 | 200 | 200 |
| Protect in Fee W/O State PILT Liability | 0 | 0 | 0 | 0 | 0 |
| Protect in Easement | 0 | 0 | 1,290 | 131 | 1,421 |
| Enhance | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 1,290 | 331 | 1,621 |

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 | \$3,060,000 | \$3,060,000 |
| Protect in Fee W/O State PILT Liability | \$0 | \$0 | \$0 | \$0 | \$0 |
| Protect in Easement | \$0 | \$0 | \$2,385,000 | \$999,700 | \$3,384,700 |
| Enhance | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total | \$0 | \$0 | \$2,385,000 | \$4,059,700 | \$6,444,700 |

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 | 50 | 0 | 50 | 100 | 200 |
| Protect in Fee W/O State PILT Liability | 0 | 0 | 0 | 0 | 0 | 0 |
| Protect in Easement | 0 | 0 | 98 | 0 | 1,323 | 1,421 |
| Enhance | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 50 | 98 | 50 | 1,423 | 1,621 |

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 | \$765,000 | \$0 | \$765,000 | \$1,530,000 | \$3,060,000 |
| Protect in Fee W/O State PILT Liability | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Protect in Easement | \$0 | \$0 | \$749,800 | \$0 | \$2,634,900 | \$3,384,700 |
| Enhance | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total | \$0 | \$765,000 | \$749,800 | \$765,000 | \$4,164,900 | \$6,444,700 |

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 | \$15,300 |
| Protect in Fee W/O State PILT Liability | \$0 | \$0 | \$0 | \$0 |
| Protect in Easement | \$0 | \$0 | \$1,849 | \$7,631 |
| 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 | \$15,300 | \$0 | \$15,300 | \$15,300 |
| Protect in Fee W/O State PILT Liability | \$0 | \$0 | \$0 | \$0 | \$0 |
| Protect in Easement | \$0 | \$0 | \$7,651 | \$0 | \$1,992 |
| Enhance | \$0 | \$0 | \$0 | \$0 | \$0 |

Target Lake/Stream/River Feet or Miles

10

Parcel List

Section 1 - Restore / Enhance Parcel List

No parcels with an activity type restore or enhance.

Section 2 - Protect Parcel List

Aitkin

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|---------|----------|-------|----------|----------------------|----------|----------|
| AMA TDB | 04923204 | 0 | \$0 | No | Full | Full |

Becker

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|---------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 14136214 | 0 | \$0 | No | Full | Full |

Beltrami

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|---------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 15035220 | 0 | \$0 | No | Full | Full |

Carlton

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|------------------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 04919225 | 0 | \$0 | No | Full | Full |
| trout stream TBD | 04717226 | 0 | \$62,000 | No | No | Full |

Cass

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|-----------------------|----------|-------|-----------|----------------------|----------------|----------------|
| AMA TBD | 14329202 | 0 | \$0 | No | Full | Full |
| Ten Mile L. watershed | 14031202 | 258 | \$477,000 | No | Not Applicable | Not Applicable |

Chisago

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|---------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 03722223 | 0 | \$0 | No | Full | Full |

Clearwater

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|---------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 14437225 | 0 | \$0 | No | Full | Full |

Cook

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|------------------|----------|-------|----------|----------------------|----------|----------|
| trout stream TBD | 06201232 | 0 | \$62,000 | No | No | Full |

Crow Wing

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|------------------------|----------|-------|-----------|----------------------|----------------|----------------|
| AMA TBD | 04428210 | 0 | \$0 | No | Full | Full |
| Big Trout L. watershed | 13828236 | 258 | \$477,000 | No | Not Applicable | Not Applicable |
| Pelican L. watershed | 13628205 | 258 | \$477,000 | No | Not Applicable | Not Applicable |

Douglas

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|---------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 12838223 | 0 | \$0 | No | Full | Full |

Fillmore

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|------------------|----------|-------|-----------|----------------------|----------|----------|
| trout stream TBD | 10108205 | 16 | \$125,000 | No | No | Full |

Goodhue

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|------------------|----------|-------|-----------|----------------------|----------|----------|
| trout stream TBD | 11215226 | 16 | \$125,000 | No | No | Full |

Houston

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|------------------|----------|-------|-----------|----------------------|----------|----------|
| trout stream TBD | 10205221 | 16 | \$125,000 | No | No | Full |

Hubbard

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|-----------------------|----------|-------|-----------|----------------------|----------------|----------------|
| AMA TBD | 14032206 | 0 | \$0 | No | Full | Full |
| Big Sand L. watershed | 14134226 | 258 | \$477,000 | No | Not Applicable | Not Applicable |
| Kabekona L. watershed | 14332230 | 258 | \$477,000 | No | Not Applicable | Not Applicable |

Itasca

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|---------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 05423231 | 0 | \$0 | No | Full | Full |

Kanabec

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|---------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 04024202 | 0 | \$0 | No | Full | Full |

Lake

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|------------------|----------|-------|----------|----------------------|----------|----------|
| trout stream TBD | 05608222 | 0 | \$62,000 | No | No | Full |

Le Sueur

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|---------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 10924224 | 0 | \$0 | No | Full | Full |

Mille Lacs

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|---------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 04325215 | 0 | \$0 | No | Full | Full |

Morrison

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|---------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 04228204 | 0 | \$0 | No | Full | Full |

Murray

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|---------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 10841216 | 0 | \$0 | No | Full | Full |

Olmsted

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|------------------|----------|-------|-----------|----------------------|----------|----------|
| trout stream TBD | 10711235 | 16 | \$125,000 | No | No | Full |

Otter Tail

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|---------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 13638209 | 0 | \$0 | No | Full | Full |

Pine

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|---------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 03921222 | 0 | \$0 | No | Full | Full |

Stearns

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|---------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 12430229 | 0 | \$0 | No | Full | Full |

St. Louis

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|------------------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 05412208 | 0 | \$0 | No | Full | Full |
| trout stream TBD | 05114201 | 0 | \$62,000 | No | No | Full |

Todd

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|---------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 12732202 | 0 | \$0 | No | Full | Full |

Wabasha

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|------------------|----------|-------|-----------|----------------------|----------|----------|
| trout stream TBD | 10911216 | 16 | \$125,000 | No | No | Full |

Winona

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|------------------|----------|-------|-----------|----------------------|----------|----------|
| trout stream TBD | 10509212 | 16 | \$125,000 | No | No | Full |

Wright

| Name | TRDS | Acres | Est Cost | Existing Protection? | Hunting? | Fishing? |
|---------|----------|-------|----------|----------------------|----------|----------|
| AMA TBD | 12226231 | 0 | \$0 | No | Full | Full |

Section 2a - Protect Parcel with Bldgs

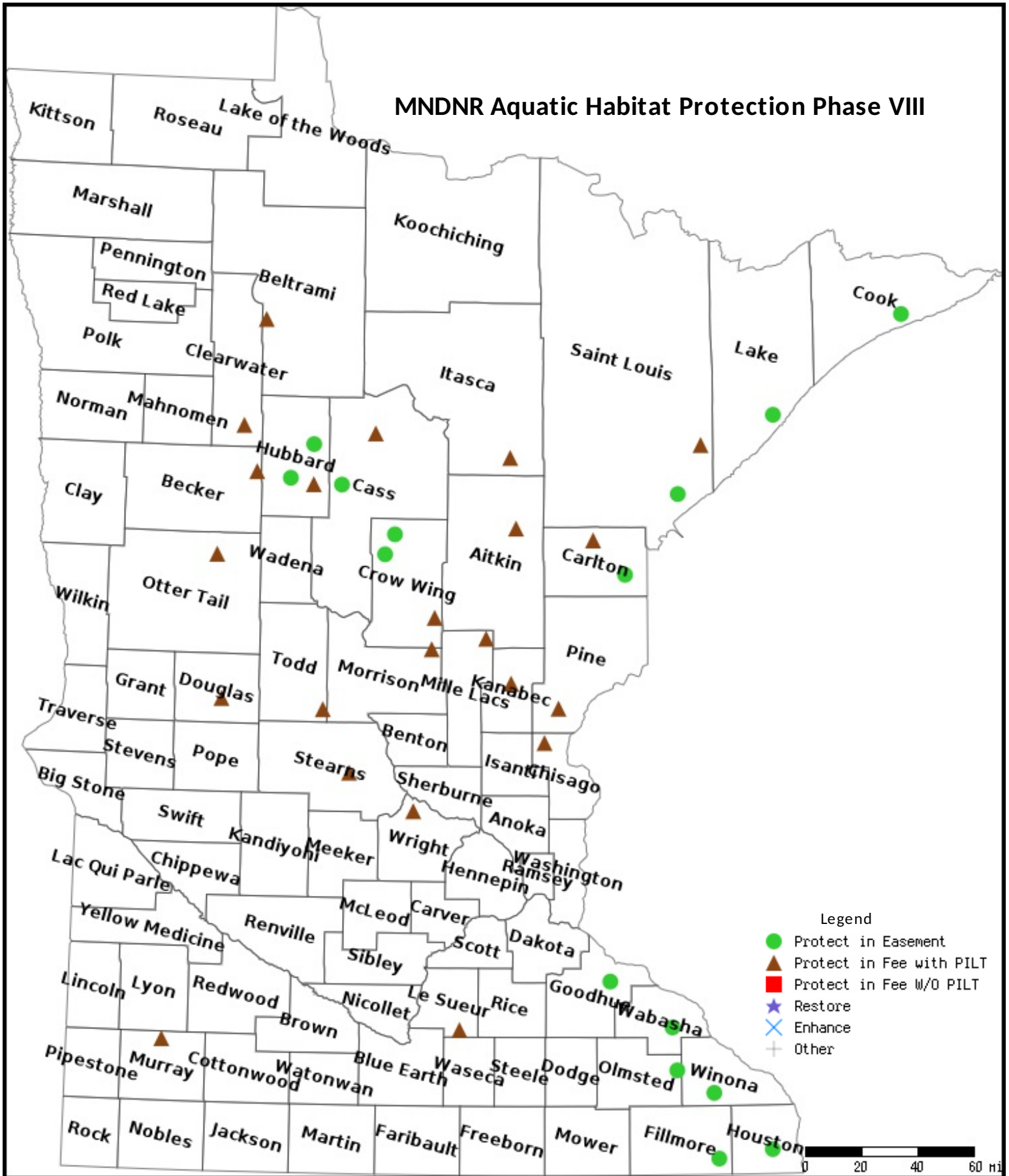
No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.

Parcel Map

MNDNR Aquatic Habitat Protection Phase VIII



Data Generated From Parcel List



Lakes of Biological Significance

April 23, 2015

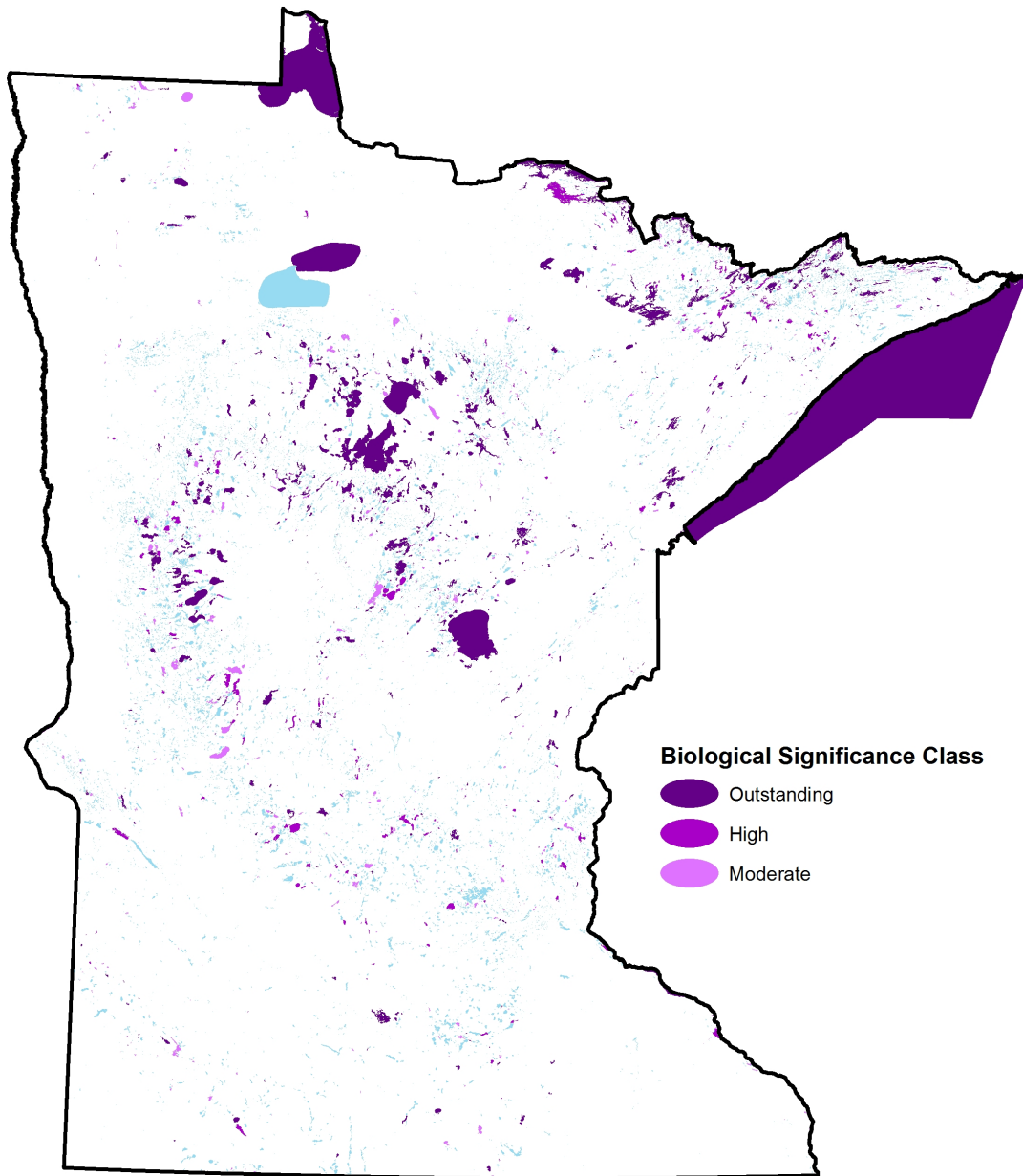
A list of high quality lakes based on dedicated biological sampling that can be used to focus protection efforts.

Criteria: Unique plant or animal presence was the primary measure of a lake's biological significance. Lakes were rated and grouped for each of the following communities: aquatic plants, fish, birds, and amphibians. Lakes were assigned one of three biological significance classes (**outstanding**, **high**, or **moderate**), which are defined in the table below. Many Minnesota lakes have not been sampled for plants and/or animals, so this list of lakes will be periodically revised as additional biological data become available.

Analysis: The goal of this list was to identify lakes that exhibit the highest quality features within any of the four assessed biological communities (as opposed to identification of lakes that exhibit diversity across communities). Therefore, a lake needed to meet criteria for only one of the community types (aquatic plants, fish, birds, amphibians) to be identified as a lake of biological significance. Occurrences of high-quality features within the community types determined the biological significance rank.

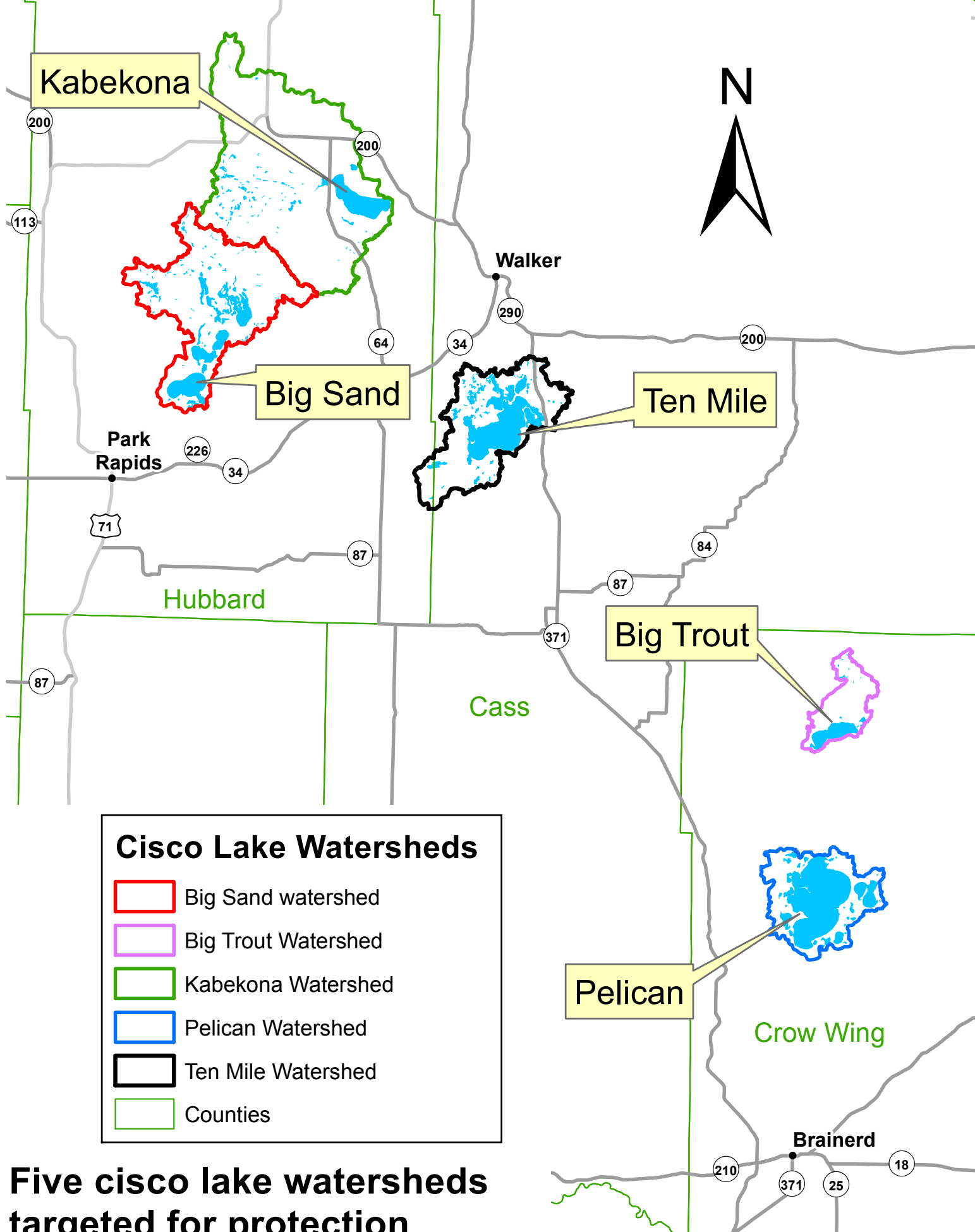
| Outstanding | High | Moderate |
|--|---|---|
| <ul style="list-style-type: none"> High aquatic plant richness, high floristic quality, and a population of an endangered or threatened plant species. Important wild rice lakes. Exceptional fishery for selected game fish or an outstanding nongame fish community. One or more of the following: endangered or threatened colonial waterbird nesting area, presence of several endangered, threatened, or special concern lake bird species, or six or more lake bird Species of Greatest Conservation Need. | <ul style="list-style-type: none"> Two of the following: high aquatic plant richness, high floristic quality, or a population of an endangered or threatened plant species. Populations of more than one fish species of special concern and/or Species of Greatest Conservation Need. One or more of the following: colonial waterbird nesting area, history of endangered or threatened colonial waterbird nesting, presence of endangered, threatened, or special concern lake bird species, or five lake bird Species of Greatest Conservation Need. Mudpuppy presence. | <ul style="list-style-type: none"> High aquatic plant richness, high floristic quality, or a population of an endangered or threatened plant species. Populations of one fish species of special concern and/or fish Species of Greatest Conservation Need. One or more of the following: history of colonial waterbird nesting, presence of a endangered, threatened, or special concern lake bird species, or several lake bird Species of Greatest Conservation Need. |

Lakes of Biological Significance

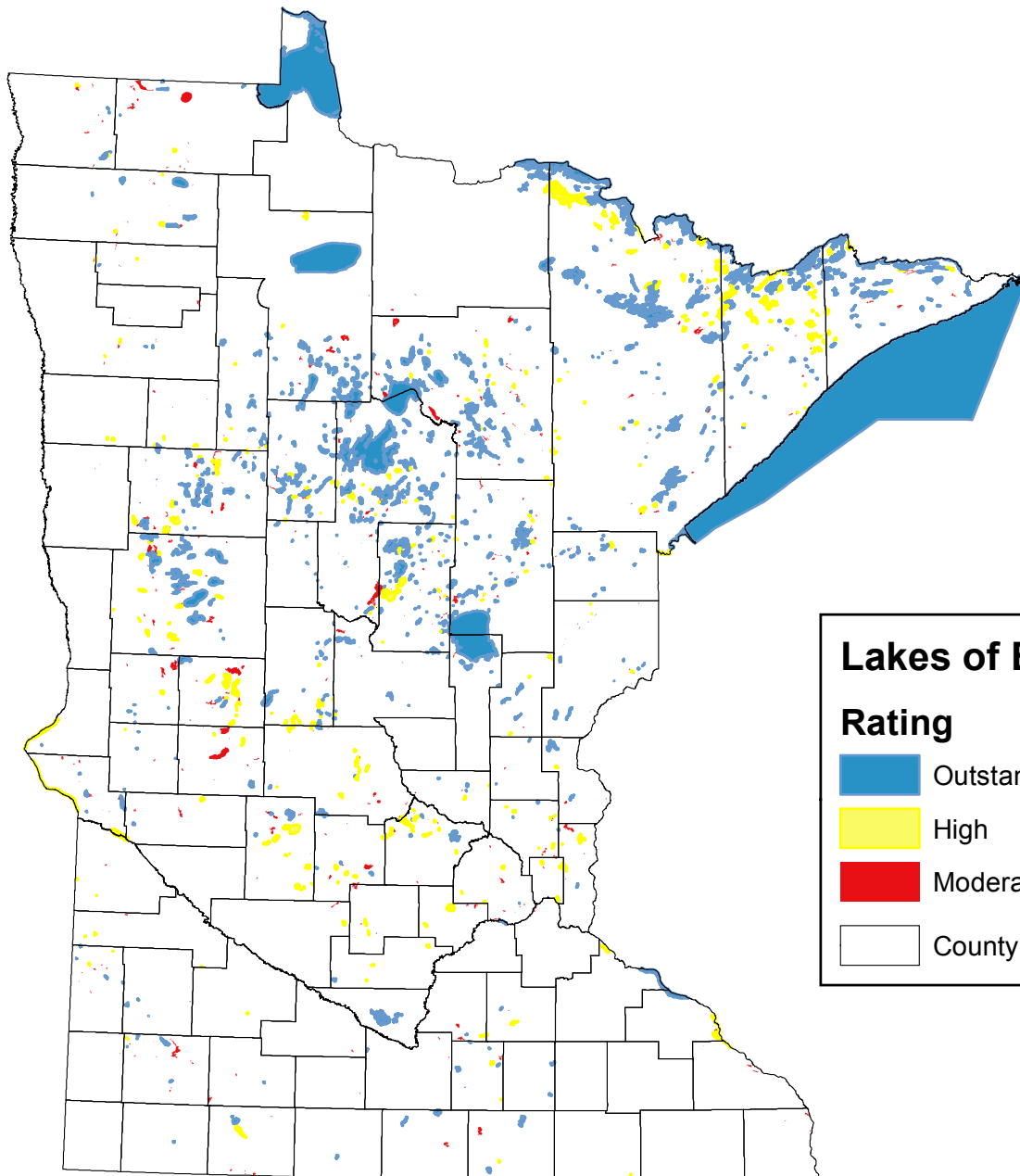


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**Five cisco lake watersheds
targeted for protection
with Forests for the Future easements**



Lakes of Biological Significance

Rating

 Outstanding

 High

 Moderate

 County Boundaries

AMA acquisition will be restricted to lakes with rating of Outstanding

Protecting Forest Lands and Aquatic Habitats: Tullibee Lakes Project Information Sheet



The Minnesota Forests for the Future Program is partnering with Minnesota Department of Natural Resources (MN DNR) Division of Fisheries, Aquatic Habitat Program to protect forested lands in key watersheds of high quality cisco (tulibee, *Coregonus artedii*) lakes. The watershed of a lake or river is the area of land in which all the water that runs off it flows into one location, a lake or river. By protecting the forests in the watersheds of high quality lakes we preserve the filter that protects lakes from increases in nutrients and sediment. Increases in nutrients and sediment into lakes can degrade water quality and fish habitat for species such as cisco.

Eligible lands will be primarily forest lands. Limited area of other land uses may be considered.

High quality cisco lakes included in this program are: Big Sand and Kabekona Lakes in Hubbard County, Ten Mile Lake in Cass County, and Big Trout and Pelican Lakes in Crow Wing County. See map on the second page for details.

Purpose of the Minnesota Forests for the Future Program: The overall purpose of the Minnesota Forests for the Future Programs is to protect and conserve private working forests through the use of permanent conservation easements and other tools.

Purpose of the Aquatic Habitat Program: To work with partners to protect and restore high quality fish habitats in lakes and stream in Minnesota.

Applications: Applications will be prioritized based on a competitive application process as determined by MN DNR and are subject to funding availability. All acquisitions are conducted on a willing seller/willing buyer basis. The State's purchase of a conservation easement cannot exceed fair market value of the conservation easement as determined by an appraisal meeting state appraisal standards.

Deadline for consideration in the priority ranking process is July 2016. Applications received after this date may be considered pending the availability of funds.

Tullibee (*Coregonus artedii*)



Questions? Or to request an application Contact:

Heather Baird-Aquatic Habitat Specialist Sr.
Department of Natural Resources –Fisheries
1601 Minnesota Drive
Brainerd, MN 56401
Phone: 218-203-4345
Email: Heather.Baird@state.mn.us

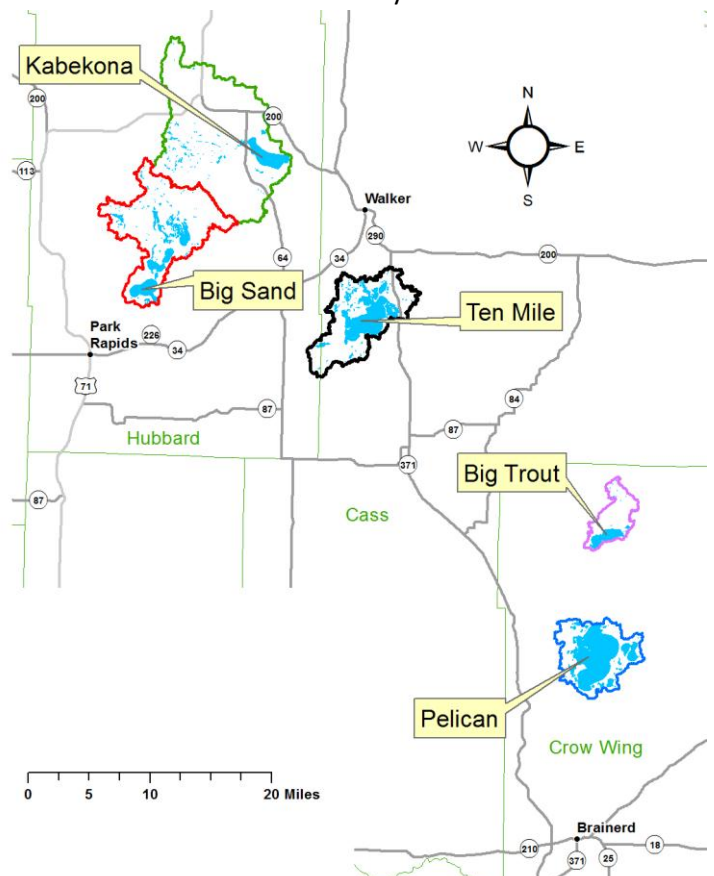
or:

Richard Peterson – Forest Legacy Coordinator
Department of Natural Resources –Forestry
1810-30th St. NW
Faribault, MN 55021
Phone: 507/333-2012 x222
Email: Richard.F.Peterson@state.mn.us

A conservation easement is a legal agreement between the holder of the easement and a landowner that places permanent restrictions on the land for long-term conservation purposes. Lands with conservation easements remain in private ownership. The easement property may be sold or transferred, but the conservation easement will permanently encumber the land. The following terms are typically part of a forest conservation easement.

- Development and subdivision. This would limit the rights of the landowner to subdivide, construct buildings or have commercial, industrial or residential developments or uses on the easement property. Existing houses, barns, or other buildings or developed areas are generally not included as part of the easement property. Forest management activities and recreational uses are allowed.
- The easement would restrict surface disturbances such as mining, drilling or excavation.
- Roads and trails are allowed subject to some limitations.
- All conservation easements must have a current, DNR approved multi-resource forest management plan such as a Forest Stewardship Plan. Any forest management activities would be subject to the plan and would require that the landowner follow best management practices to protect habitat, water quality and other natural resources.
- The easement would prohibit the conversion of forest to non-forest uses. Forests must remain as forest.

- On a case by case basis, limited non-forest areas may be included in the easement areas.
- The easement would prohibit trash dumps, waste disposal and hazardous materials on the property.
- While public access is sometimes sought, public access is **not** required by the Minnesota Forests for the Future Program.
- The State of Minnesota will be the holder of the easement and the easements will be administered by DNR Forestry.
- All easements properties will have a monitoring plan and will be monitored regularly for compliance with the easement terms by DNR staff.



Map indicating the five tullibee lake watersheds targeted for protection in north central Minnesota.

Equal opportunity to participate in and benefit from programs of the Minnesota Department of Natural Resources is available to all individuals regardless of race, color, creed, religion, national origin, sex, marital status, public assistance status, age, sexual orientation, disability, or activity on behalf of a local human-rights commission. Discrimination inquiries should be sent to Minnesota DNR, 500 Lafayette Road, St. Paul, MN 55155-4049 or to the Equal Opportunity Office, Department of the Interior, Washington, D.C. 20240