



Northern Waters Land Trust

Preserving Land

To Protect Water



Annie Knight
Executive Director

**Northern Waters
Land Trust**





Northern Waters Land Trust

- **Service Area:** North Central Minnesota
- **Prioritization Tool**
 - Protect environmentally-sensitive lakeshore & watershed parcels to create more resilient ecosystems, preserving water quality & wildlife habitat.
- **Staff of Specialists**
- **Volunteer Board of Directors and Committees**
- **Non-profit:** 501(c)(3) organization
- **Accredited Land Trust**



Methods of Conservation



Land
Acquisitions



Conservation
Easements



Community
Outreach





Why Conservation Matters





Everything we do on land
impacts our water.

Threats to Freshwater Ecosystems

- Ecosystem: all organisms and their physical environment are linked. Components of one system
- Land taken out of its natural state and threatens water quality, habitat, and migratory flyways





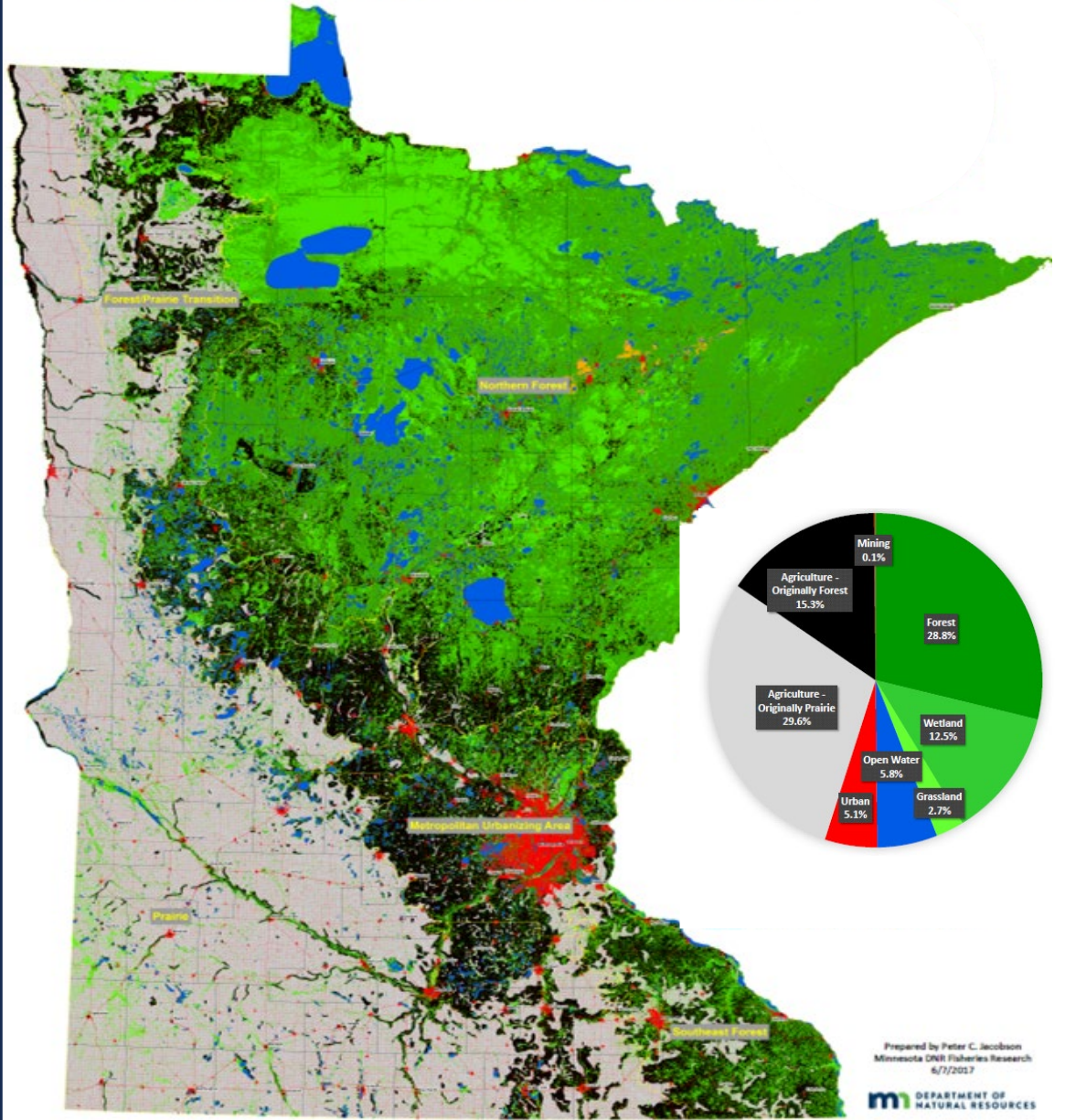
Lakes are a shared space
between people and wildlife.

Threats to loons

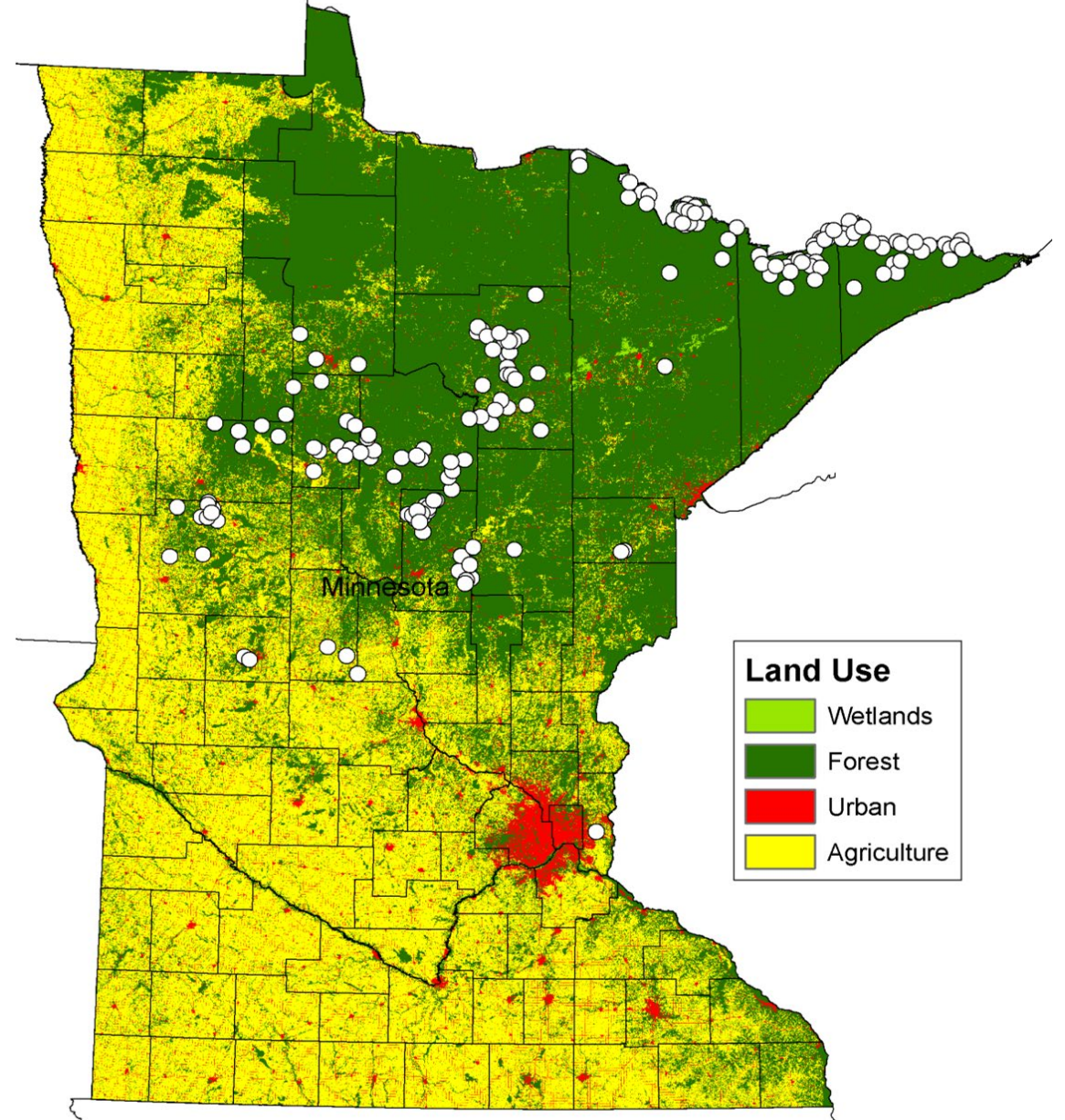
- Shoreline development
- Loss of water quality, aquatic invasive species
- Lead poisoning
- Increased human activity on lakes



Minnesota Land Use Change 1847-2011: Remaining forest, wetlands, and grasslands



Identified Cisco Refuge Lakes in MN Under Future Climate Scenarios (Fang et al 2012)

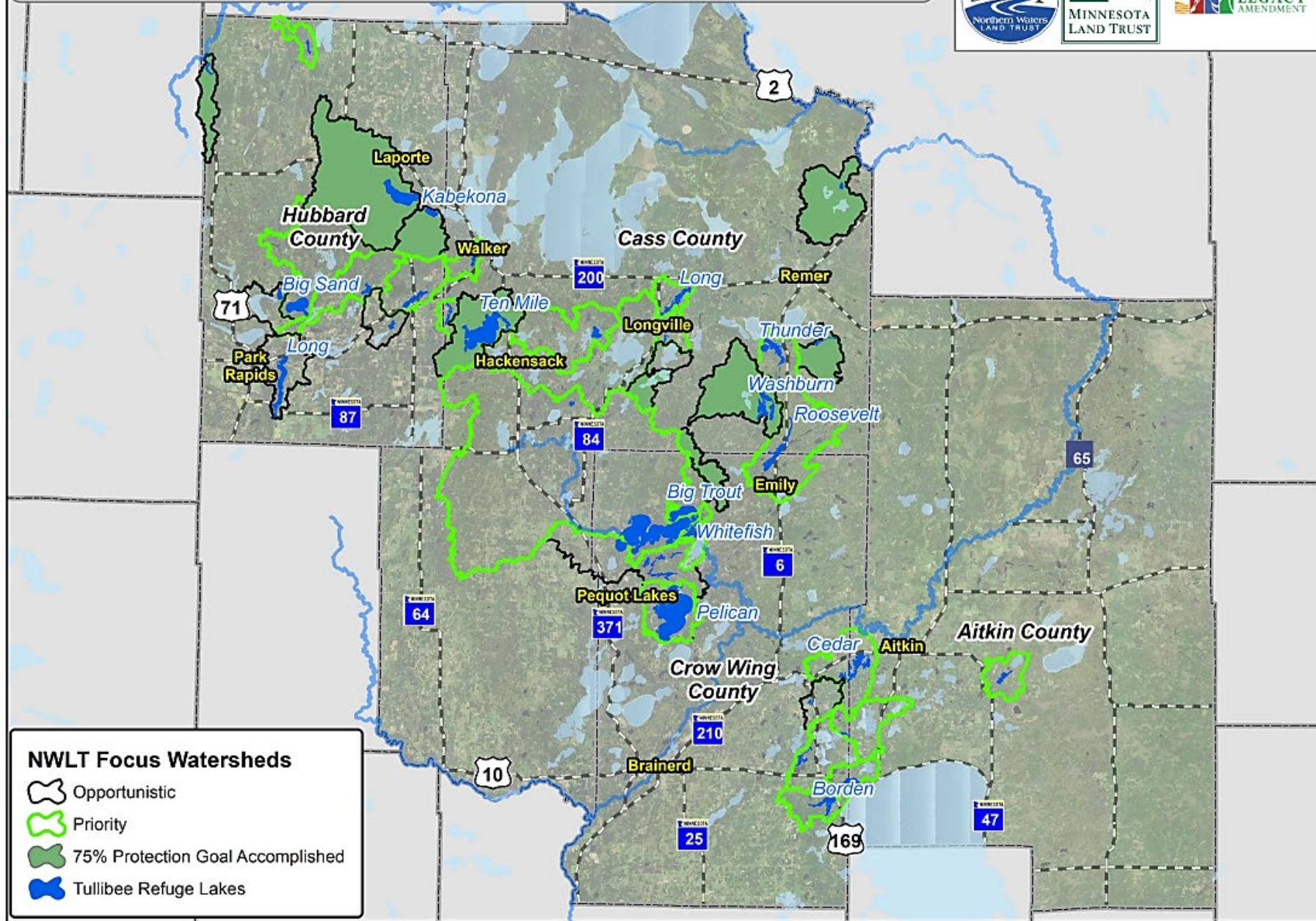


Fisheries Habitat Protection on Strategic North Central Lakes: Priority tullibee refuge watersheds



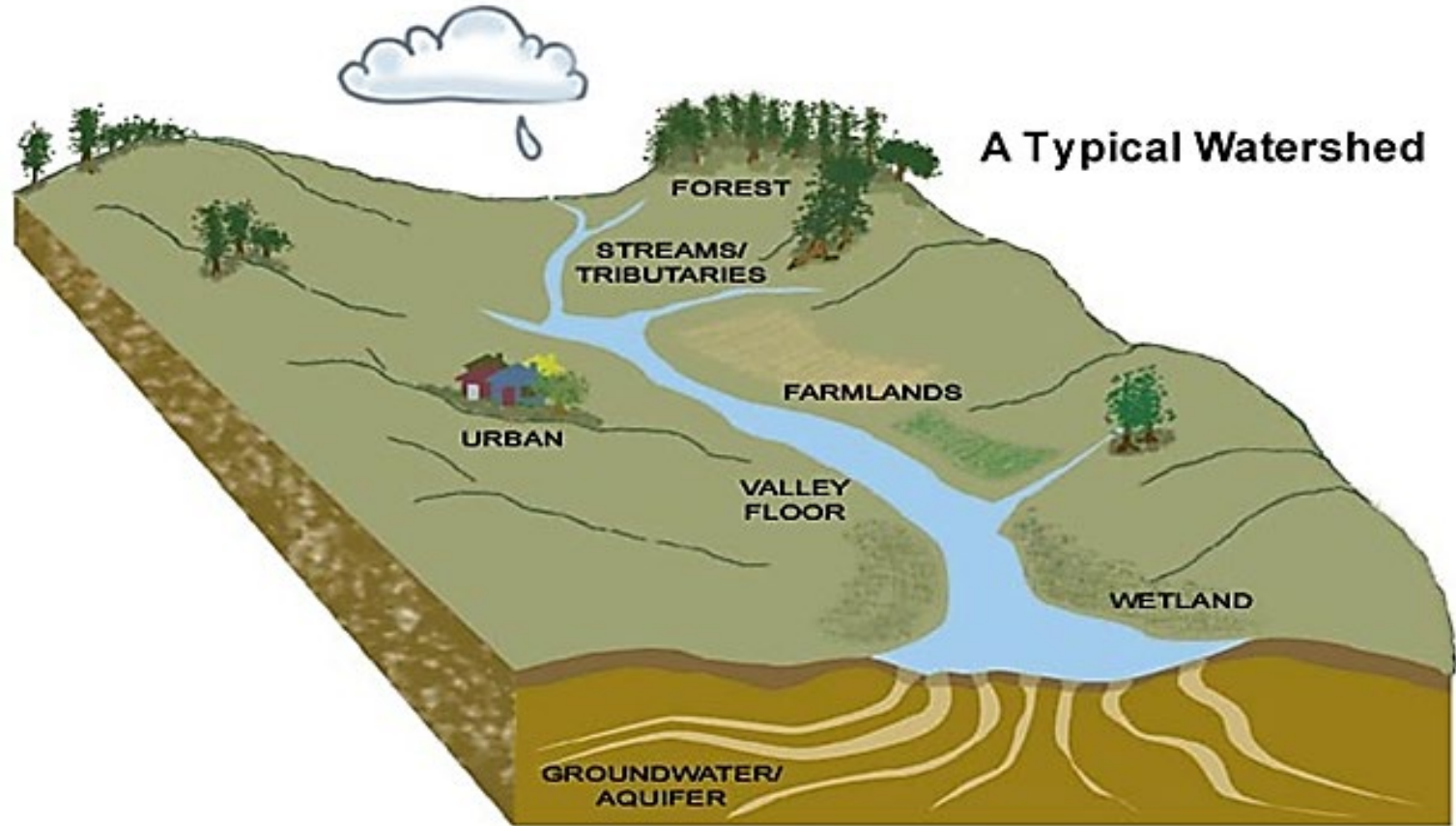
Land Protection Program since 2014

- \$23 million in grant funding received
- More than 6,000 acres protected so far



What is a watershed?

A watershed is an area of land where all of the precipitation (rain or snow) that falls in it drains into a common outlet, such as a river, lake, or stream.

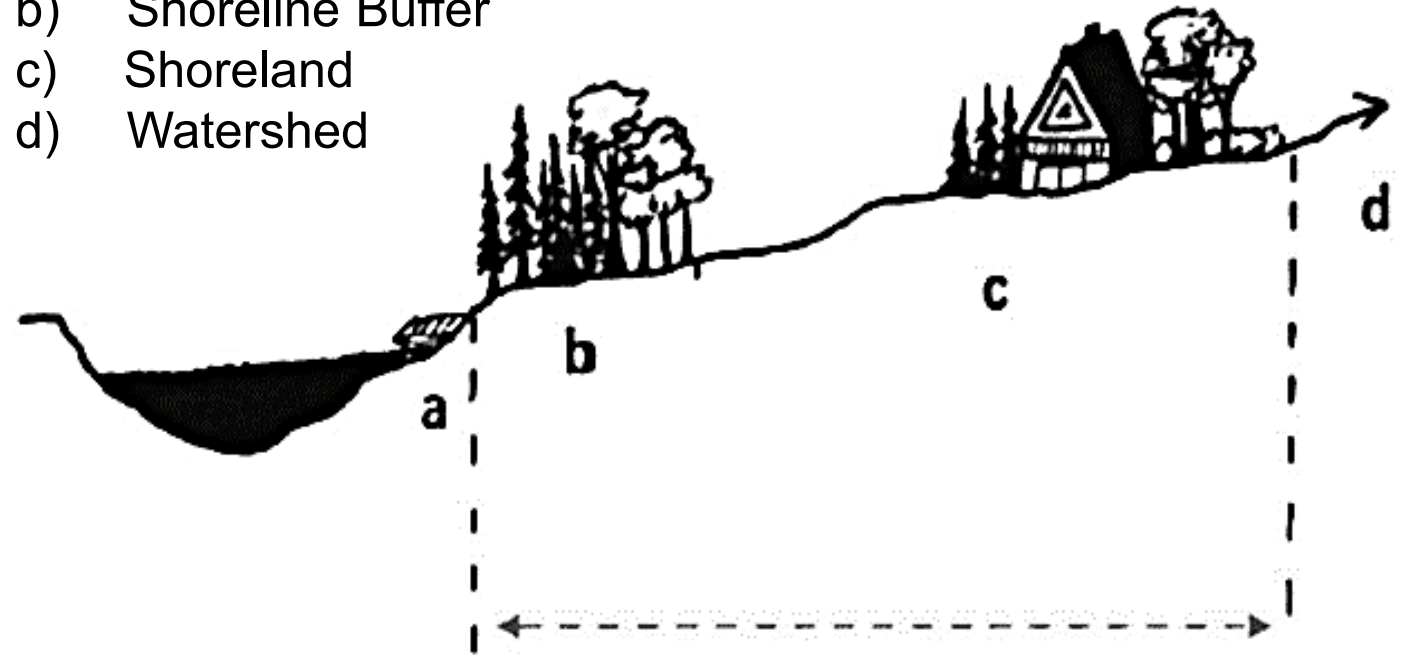


Role of watersheds in water quality

- Water quality dependent on watershed activity
- Conservation protects water quality and wildlife habitat.
- Forests filter and absorb runoff before it enters a lake, protecting water quality.

Major Zones of Lake Protection:

- a) Shoreline
- b) Shoreline Buffer
- c) Shoreland
- d) Watershed



A healthy lake depends on a healthy watershed.



Why 75%?

Protect the forested “Sponge”.



Ways to Get Involved Easements / Acquisitions

Why this is important

- Replenish Groundwater
- Reduce runoff to surface waters
- Capture and store carbon dioxide
- Produce oxygen and reduce airborne pollution
- Improve resiliency against pests and weather changes
- Provide wildlife habitat

How lake associations can help

- Identify key nesting habitat on their lake
- Help NWLT and/or the MN DNR connect with landowners near these areas
- Advocate for why land conservation is important

Land Protection Options

Conservation Easement

- Continue owning your land
- Receive compensation or tax benefit
- Agreed terms between landowner and land trust
- Limits or prohibits future development
- Your property is protected forever

Fee Title Acquisition

- Sell or donate land to NWLT
- Receive compensation or tax benefit
- NWLT transfers property to public agency for long-term management
- Land protected forever



Conservation Easement – 200 ft.

Shoreline _____ 100 ft. _____ 200 ft. _____



Objectives: No development on the 200 feet and retention of open space



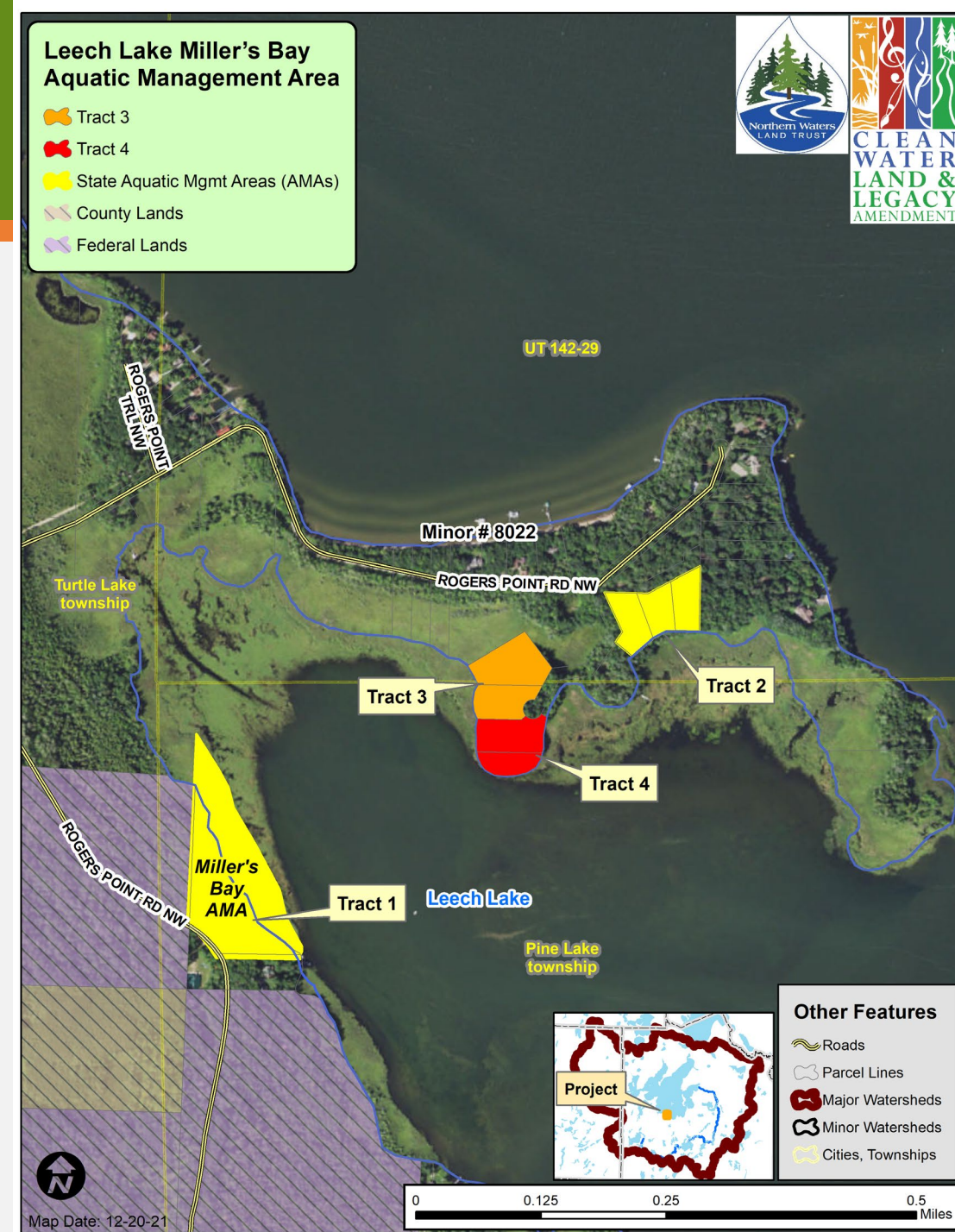
Fee Title Acquisition Example

Leech Lake Miller's Bay Aquatic Management Area (AMA)

- Acres Protected:
 - Total: 14.28 acres
 - Recent project: 5.5 acres
- Muskie Spawning Habitat Preserved
- Locally Supported
- Long term management

"The undeveloped shoreline includes riparian and submerged vegetation and wild rice that supports critical muskellunge spawning and nursery habitat."

- Doug Schultz, DNR Walker Area Fisheries Supervisor



NWLT Conservation Programs



Clean Water Critical Habitat

- Conserving land within deep cold water tullibee refuge lake watersheds
 - Funding: Outdoor Heritage Fund

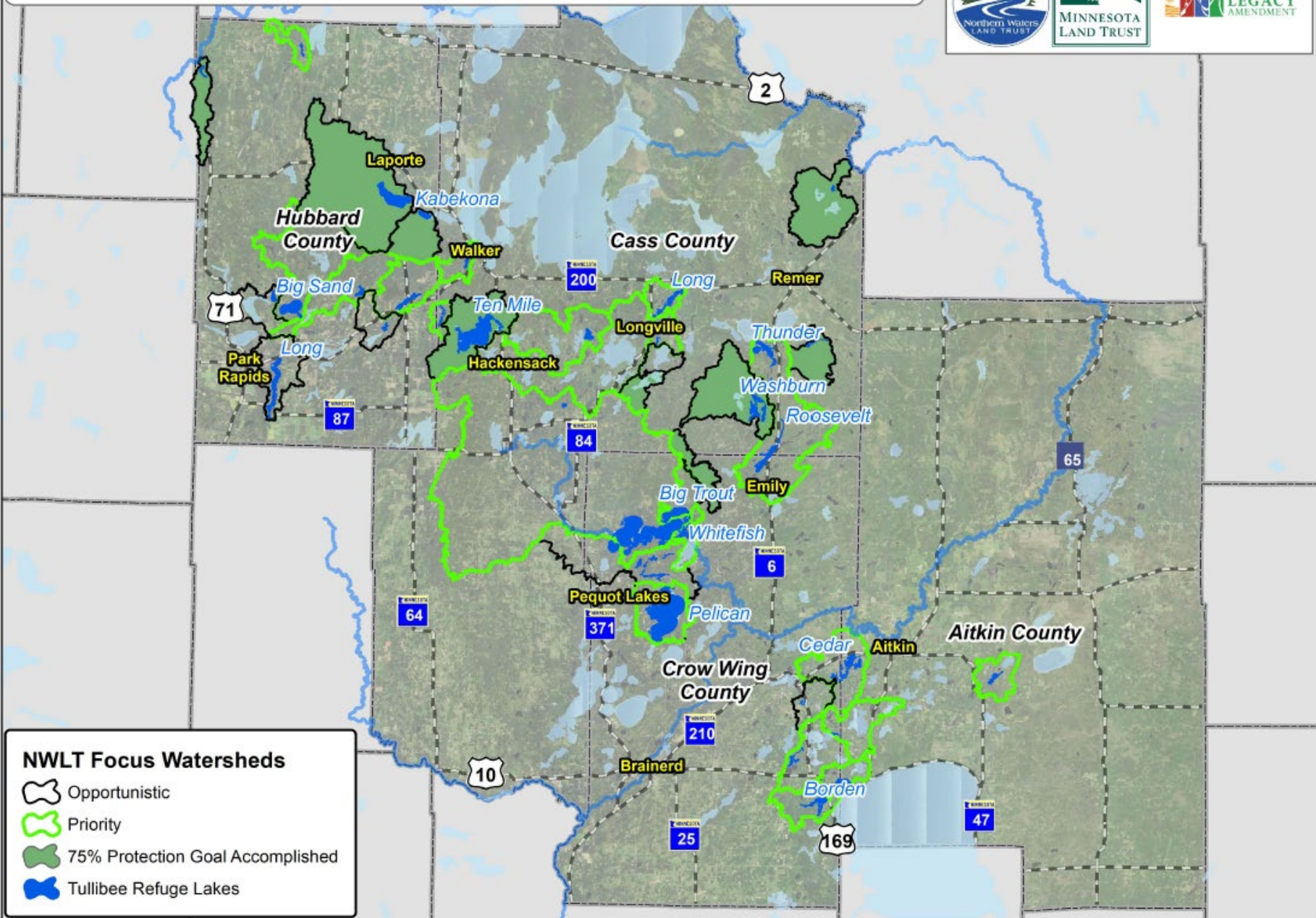
Carbon Sequestration

- Pilot program exploring carbon sequestration and conservation easements
 - Funding: Initiative Foundation

Lakes of Outstanding Biological Significance

- Conserving land within LOBS watersheds
 - Funding: Outdoor Heritage Fund

Fisheries Habitat Protection on Strategic North Central Lakes: Priority tullibee refuge watersheds



Land Protection Program, since 2014:

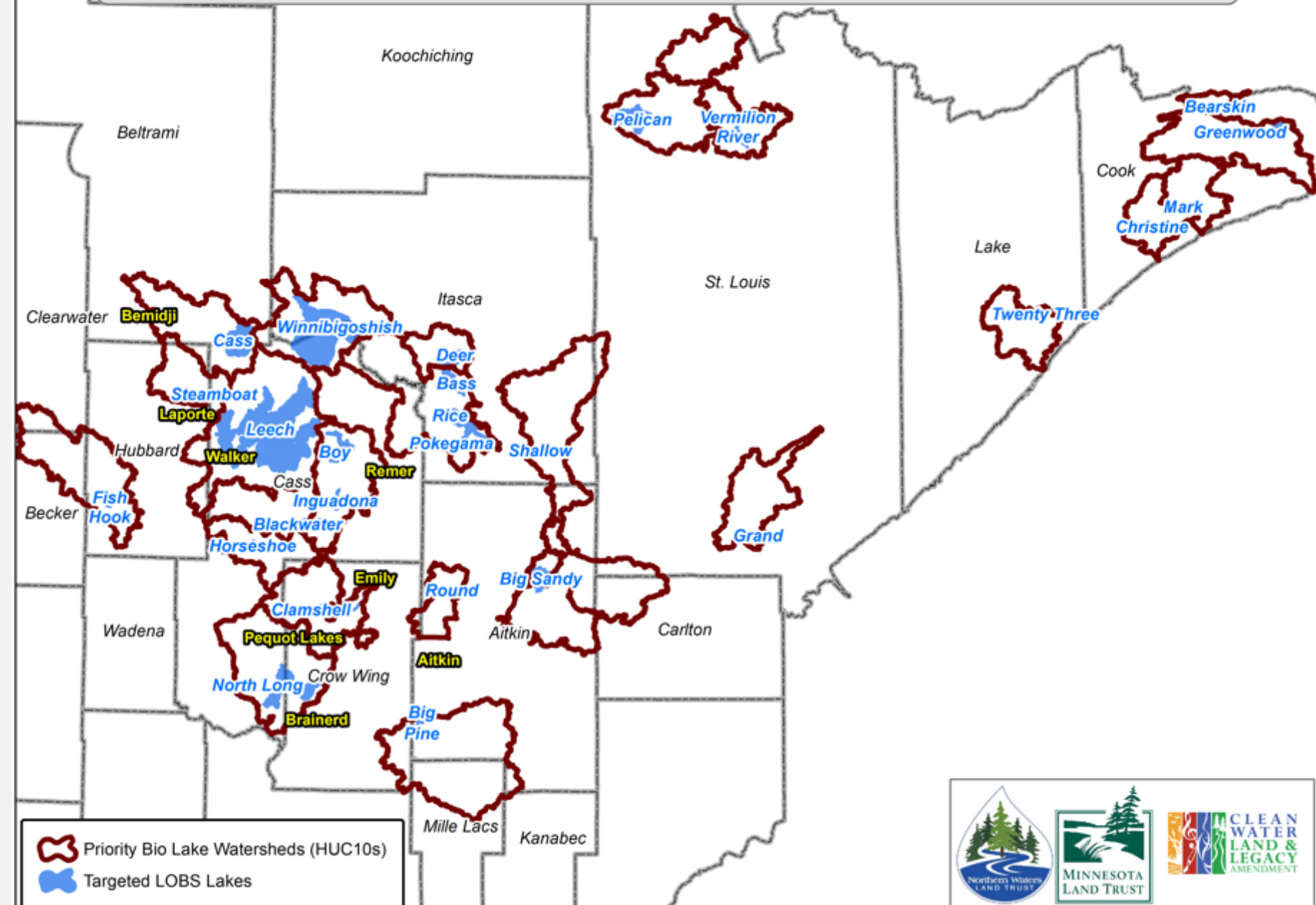
- \$23 million in grant funding received
- More than 6,000 acres protected so far



Protecting Minnesota's Lakes of Outstanding Biological Significance (LOBS), Priority LOBS watersheds

Funded from OHF since 2020:

- \$5 million received in grant funding
- 158 acres and 7,392 feet of shoreline protected so far



Priority Bio Lake Watersheds (HUC10s)
 Targeted LOBS Lakes



Carbon Sequestration Grant Goals

- Explore the **feasibility of forest carbon sequestration within land conservation easement** programs throughout Minnesota.
- White paper with framework
- Outreach and education to landowners about carbon sequestration





Conservation Significance

Big Mantrap Lake

- Lake of Outstanding Biological Significance
- In Big Sand Lake watershed
- Loon Habitat
- High percentage of unaltered shoreline habitat



Let's look at Big Mantrap Lake – Hubbard County!



DNR has estimated that more than 200 acres of Mantrap Lake are prime wild rice habitat.



The DNR estimates that there are approximately 796 acres of sensitive shoreline on Mantrap Lake.



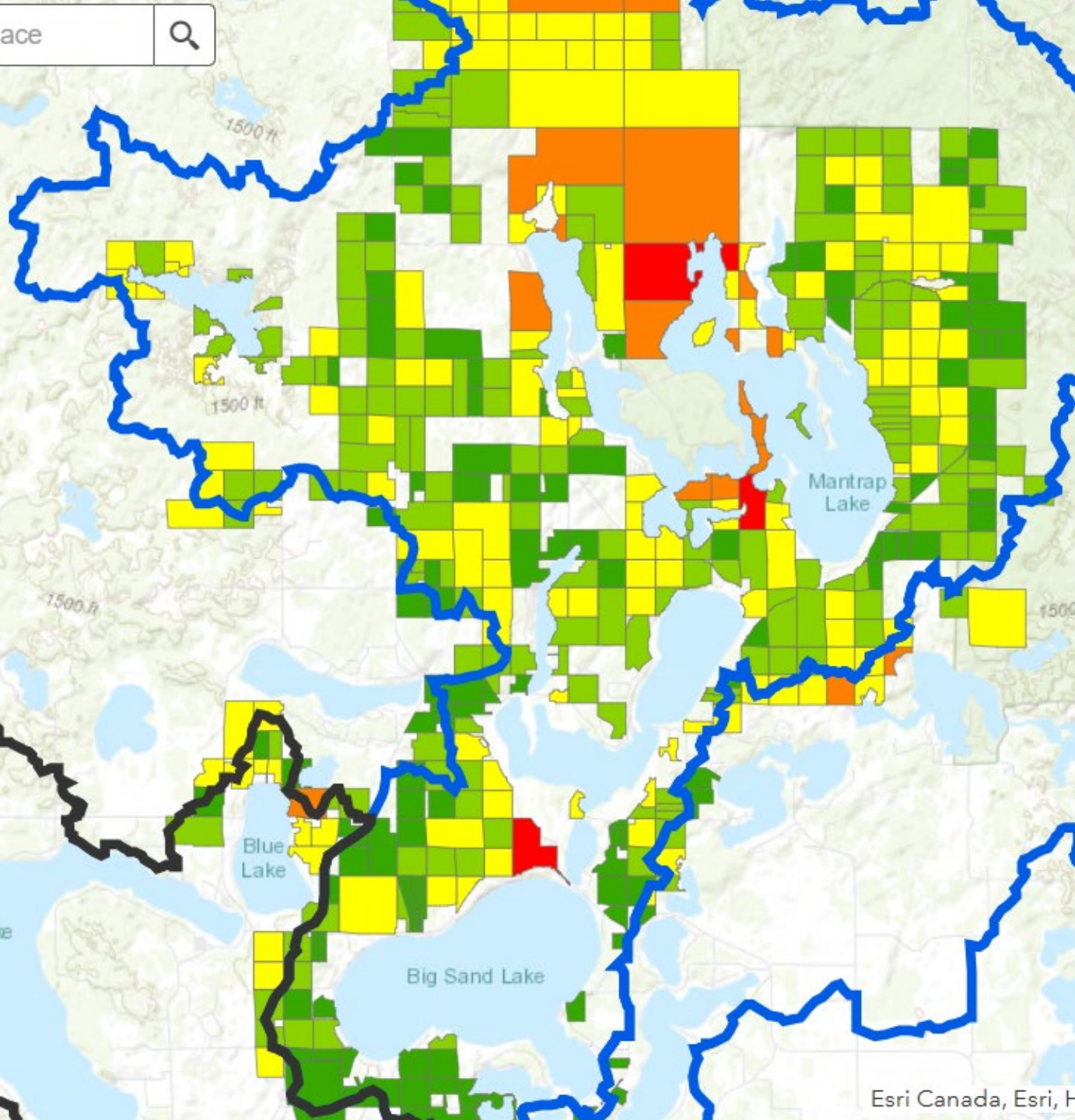
habitat for cool and cold-water fish including northern pike, muskie, bass and panfish.



recognized by the National Audubon Society as an Important Bird Area because of its pristine shoreline and forest habitats.



Provides important nesting and feeding habitat in the region for Minnesota's State bird – the common loon.



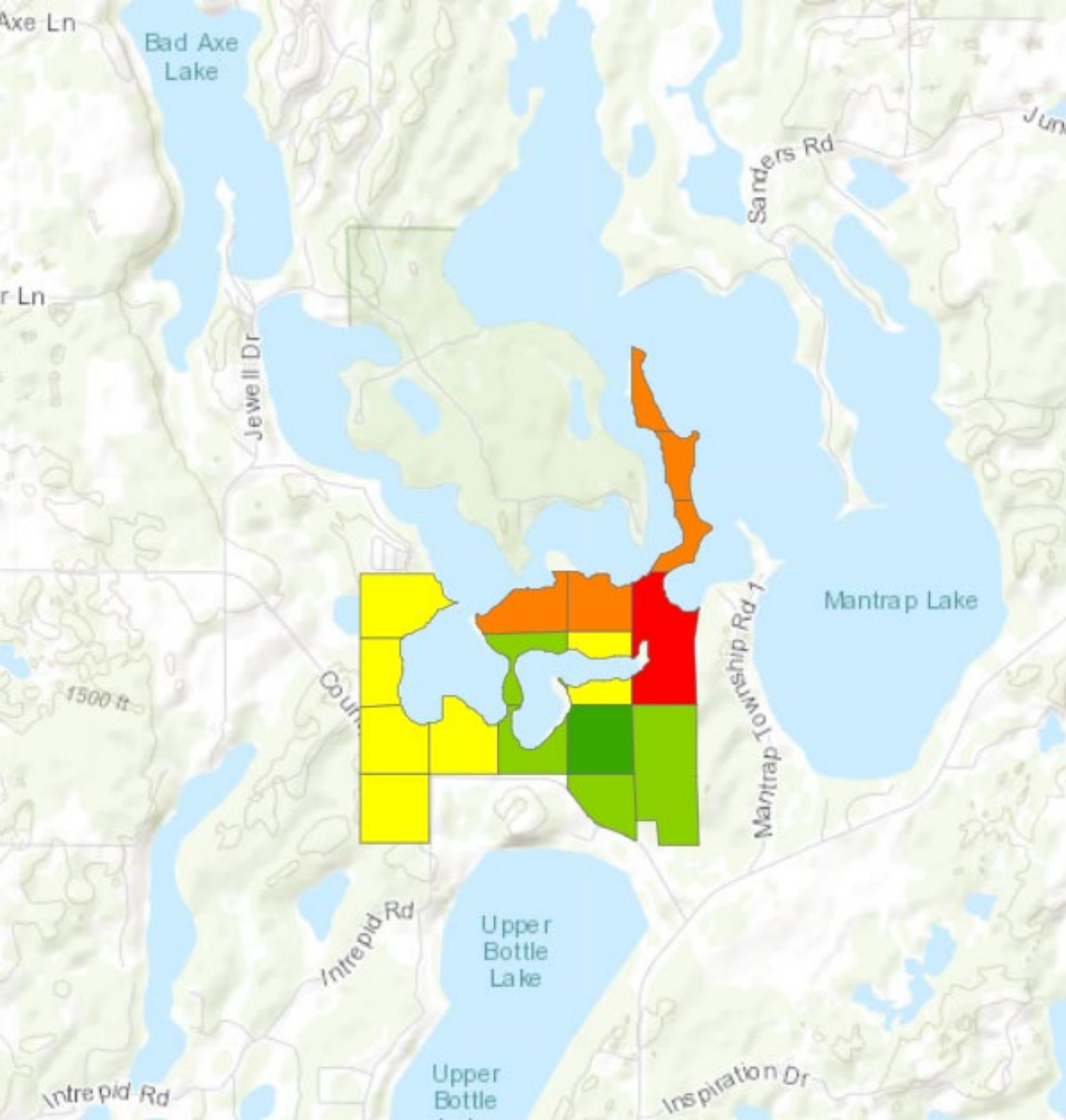
Clean Water Critical Habitat Map

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- Environmentally significant land
- Priority for permanent protection
- NWLT has been actively working with other conservation groups to look at options for protection

Current Status:

- *The NWLT land protection team continues to work on this and look at options for conserving this property*
- *Thank you for your patience and continued support!*



Partnership with Big Mantrap Lake Association

- Support on conservation efforts
- Connecting with interested landowners
- Sharing & promoting successes
- Offering resources
- Conservation Representative, Workshop



Questions?





Northern Waters Land Trust

Contact Information

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NorthernWatersLandTrust.org

