

From Land to Water: Conserving Minnesota's Loons



National Loon Center
Minnesota DNR
Northern Waters Land Trust



Agenda

- **Welcome**
- **Overview - Northern Waters Land Trust**
- **Why Conservation Matters for Loons**
- **Overview – DNR Loon Restoration Program**
- **Overview – National Loon Center**
- **Researching Minnesota Loons**
- **Loon Conservation Efforts**
- **The StewardShip**





Answer the Call

Workshop Goals

- Why conservation is key to preserving our freshwater habitats and the loons that inhabit them
- To learn your role in contributing to loon research



Elizabeth Mboutchom

Education & Development

Director

Overview of Northern Waters Land Trust



Northern Waters Land Trust

Preserving Land to Protect Water

- **Service Area:** Northern Minnesota
- **Prioritization Tool:** Protect environmentally-sensitive land to create more resilient ecosystems to preserve water quality and wildlife habitat
- **Staff of Specialists**
- **Volunteer Board of Directors and Committees**
- **Non-profit Sec. 501(c)(3) organization**
- **Accredited Land Trust**



Methods of Conservation



Land Acquisitions



Conservation Easements



Community Outreach





Why Conservation Matters





Conservation protects water quality and wildlife habitat.

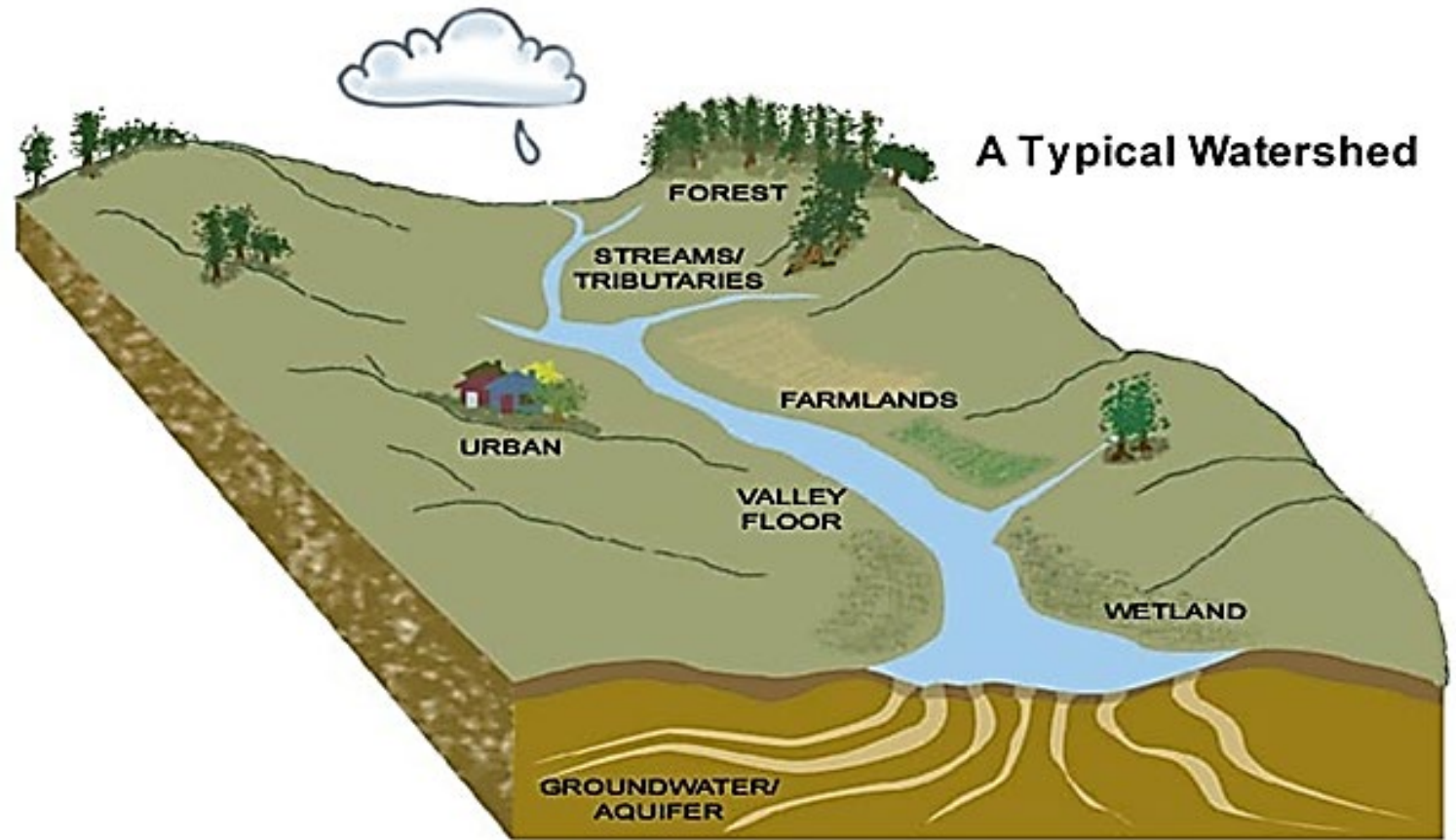
Threats to Freshwater Ecosystems

- Ecosystem: all organisms and their physical environment are linked. Components of one system
- Development takes land out of its natural state and threatens habitat and migratory flyways



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.



Do you know your watershed?

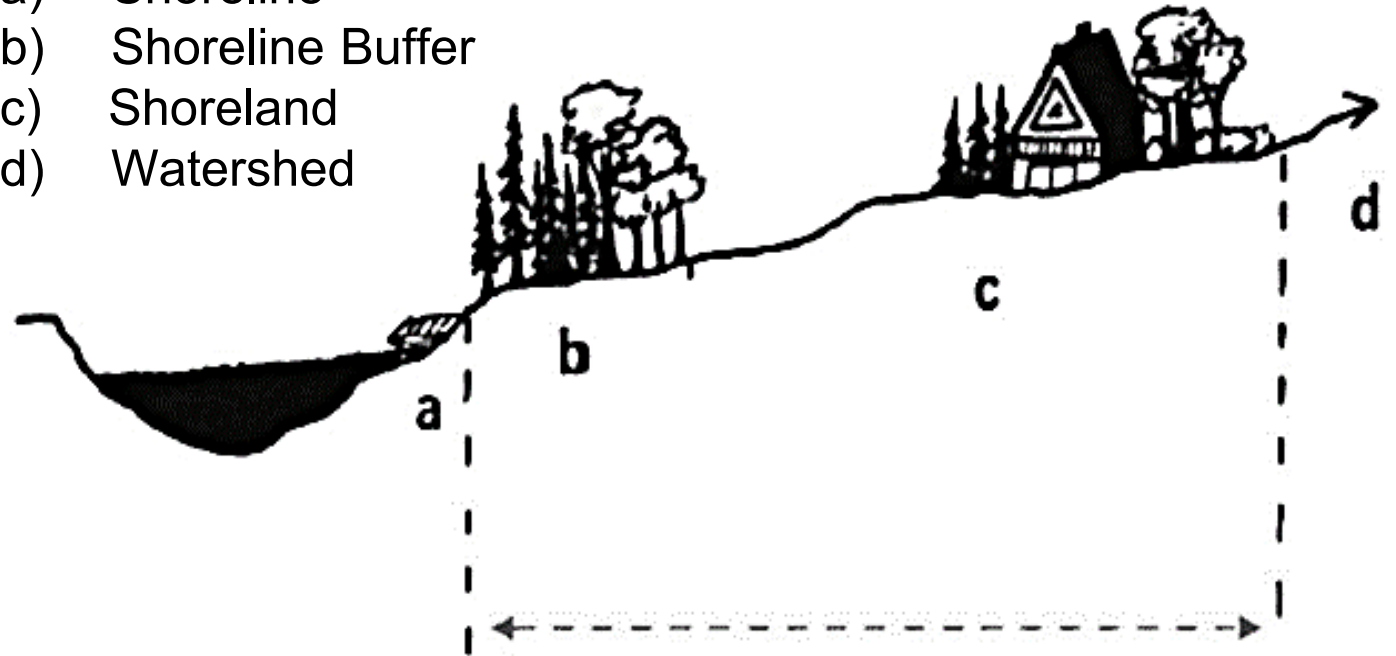


Why is a watershed important?

- Water quality is primarily dependent on what happens on the land around a lake and throughout a lake's watershed.
- Conservation in a lake's watershed increases the lake's probability of sustaining clean water and healthy, resilient ecosystems.

Major Zones of Lake Protection:

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



A healthy lake depends on a healthy watershed.





The 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





Rob Rabasco

Program Coordinator

MN DNR - Loon Restoration
Program

Minnesota Loon Conservation



Deepwater Horizon Oil Spill

The Deepwater Horizon drilling unit exploded on April 20, 2010, resulting in a massive release of oil and causing loss of life and natural resource injuries

- Deepwater Horizon Natural Resource Trustees (state & federal) conducted assessment of damages.
- In 2016, BP reached \$8.1 billion settlement with additional \$700 million set aside for adaptive management.
- \$70 million for restoration of birds within the Open Ocean Restoration Area.



Minnesota Loon Restoration Project Background





Minnesota Department of Natural Resources

Funding Restoration of MN Loons

In 2019, the Open Ocean Trustees completed a restoration plan that included funding for the **Restoration of Common Loons in Minnesota**.

- \$7,520,000 towards reducing mortality and increasing reproductive success of common loons at breeding, nesting, and migration staging locations in Minnesota

Minnesota Department of Natural Resources, Nongame Wildlife Program - \$4,800,000

- Acquisition and/or easements of lakeshore loon nesting habitat
- Engaging Minnesota lake associations in loon conservation activities and enhancing loon productivity by providing artificial nesting platforms in targeted lakes

Minnesota Pollution Control Agency - \$1,270,600

- Reducing loon exposure to lead-based fishing tackle



Everything we do on land
impacts our water.

Ways you can help

DNR

- Loon Restoration Project
- Loon Monitoring Program
- Loon-Friendly Lake Registry

MPCA

- Get the Lead Out

Public Access Points –
rivers/lakes

- AIS

Ways to Get Involved

Loon Watcher Survey

- Volunteers observe loons at least once per month (May-August), report findings at the end of breeding season
- Goal: collect data on loon breeding behavior and productivity

MN Loon Monitoring Program

- Long-term Study of 600 lakes
- Volunteers count the number of adult and juvenile loons
- The observations are shared with the DNR

Loon-Friendly Lake Registry

- Lake Association commitment to ensure lake is loon-friendly
- Develop and implement a Loon-Friendly Lake Plan
- Nominate Loon Liaison



Natasha Bartolotta
Stewardship & Outreach
Manager

Overview of the National Loon Center



Rendering by Widseth



National Loon Center

Answering the Call of the Loon

- **Common loon and freshwater education, conservation, and research**
- **Mission:** Restore and protect loon breeding habitats, promote responsible recreation where loons thrive, and serve as a national leader in advancing loon and freshwater research and education.
- **Upcoming facility on track to open in 2025**
- **Non-profit Sec. 501(c)(3) organization**



NATIONAL

LOON CENTER



Brandi Grahl

Researching Minnesota Loons



Loon Productivity Surveys

Nesting status & success
Re-nest attempts
Nesting
Failure/Abandonment
Chick hatching & Survival
Interesting behaviors



Whitefish Chain of Lakes



Examples of Loon Nesting Habitat



Judd Brink



Steve Masimore

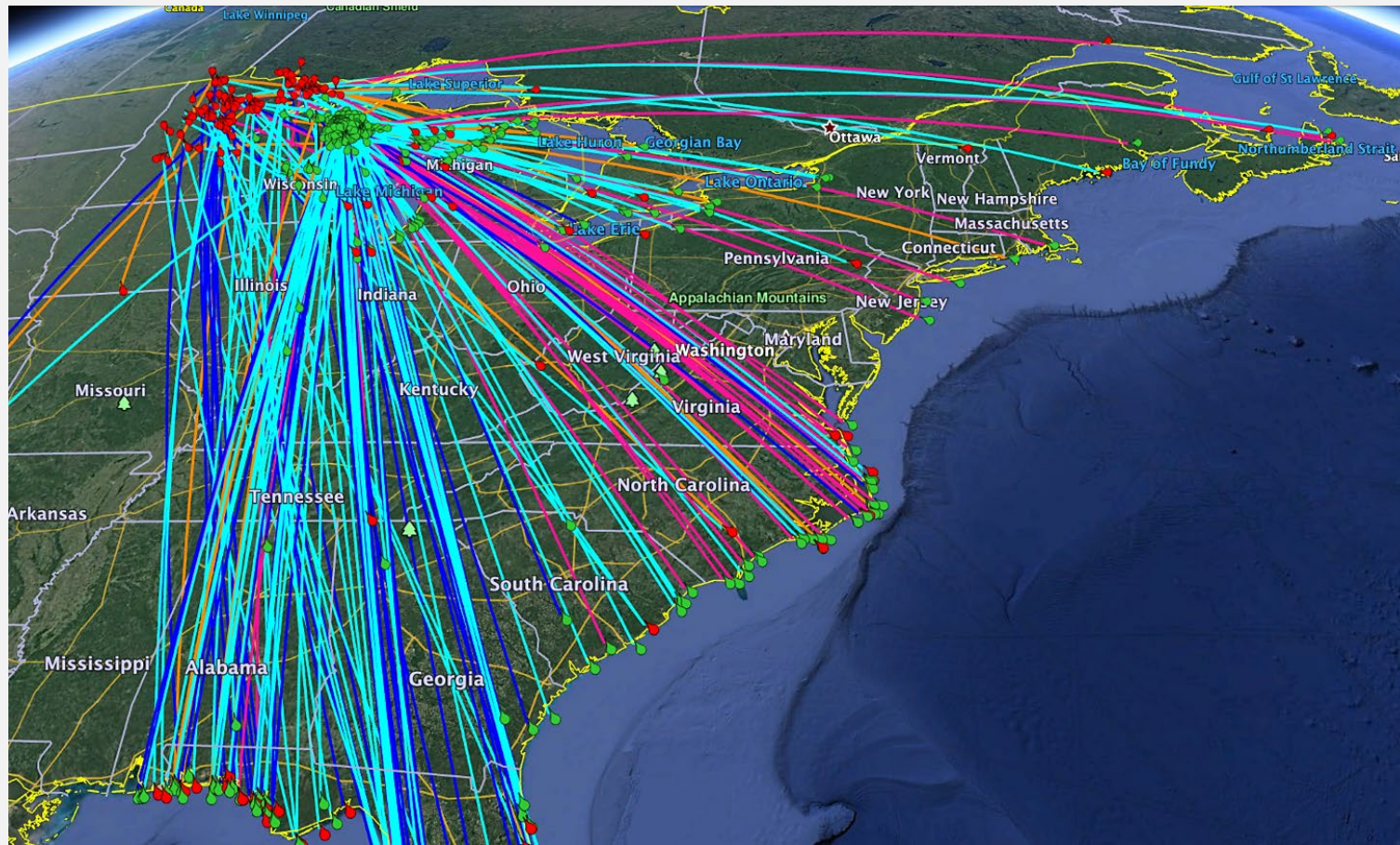


Resighting banded loons

Ongoing loon banding projects

- Minnesota
- Wisconsin
- Michigan
- Washington
- New York
- New Hampshire
- Vermont
- Maine





Data obtained from loon banding:

- Return rates
- Survival of individuals
- Where loons migrate

Lines connect banding sites in MN and WI for wintering adults (light blue) and wintering first year loons(dark blue). Data via the United States Geological Survey. Map: Google Earth



Loon Mortality Study

Loon-focused “CSI” effort to understand factors affecting loon survival.

Necropsies often reveal causes of death as a result of people’s actions:

- Boat strikes
- Lead poisoning
- Entanglement
- Gun shots



Photo of a necropsy of a common loon revealing ingested lead tackle via Cummings School of Veterinary Medicine at Tufts University and the Loon Preservation Committee

Loon Mortality Study

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Take a photo of the loon where it was found, if possible.



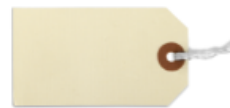
Wear gloves to retrieve the loon if it is safe to do so and the loon is not already badly decomposed.



Double bag the loon in two garbage bags.



Place the loon in a freezer to prevent further decomposition



Write down the date found, finder's name & info, lake name, and county.



The StewardShip



Questions?



Contact Information

Presenters

National Loon Center

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Thanks For Attending