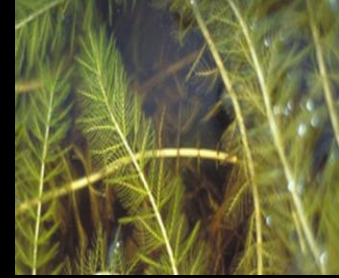


A Brief History of the Keweenaw Bay Indian Community AIS Program



*Gene Mensch, Fisheries and Wildlife Biologist
Keweenaw Bay Indian Community Natural Resources Department (KBIC-NRD)
Ojibwa Community College
14359 Pequaming Road, L'Anse, MI 49946*



Lake Superior

Green
Bay

Lake
Michigan

Chicago

Lake Huron

Detroit

Georgian
Bay

Toronto

Lake Ontario

Lake Erie

Cleveland



100 km



Lake Committee Membership by Lake

LAKE SUPERIOR COMMITTEE

1854 Treaty Authority
Chippewa-Ottawa Resource Authority
Great Lakes Indian Fish & Wildlife Commission
Michigan Dept. of Natural Resources
Minnesota Dept. of Natural Resources
Ontario Ministry of Natural Resources
Wisconsin Dept. of Natural Resources

LAKE MICHIGAN COMMITTEE

Chippewa-Ottawa Resource Authority
Illinois Dept. of Natural Resources
Indiana Dept. of Natural Resources
Michigan Dept. of Natural Resources
Wisconsin Dept. of Natural Resources

LAKE HURON COMMITTEE

Chippewa-Ottawa Resource Authority
Michigan Dept. of Natural Resources
Ontario Ministry of Natural Resources

LAKE ERIE/LAKE ST. CLAIR COMMITTEE

Michigan Dept. of Natural Resources
New York State Dept. of Environmental Conservation
Ohio Dept. of Natural Resources
Ontario Ministry of Natural Resources
Pennsylvania Fish and Boat Commission

LAKE ONTARIO COMMITTEE

New York State Dept. of Environmental Conservation
Ontario Ministry of Natural Resources



The Great Lakes Fishery Commission facilitates the Joint Strategic Plan process.



FEDERAL AGENCIES SIGNATORY TO THE PLAN

Canada

Fisheries & Oceans
Pêches et Océans
Canada



National Marine
Fisheries Service



U.S. Fish &
Wildlife Service



U.S. Geological
Survey, Biological
Resources Division







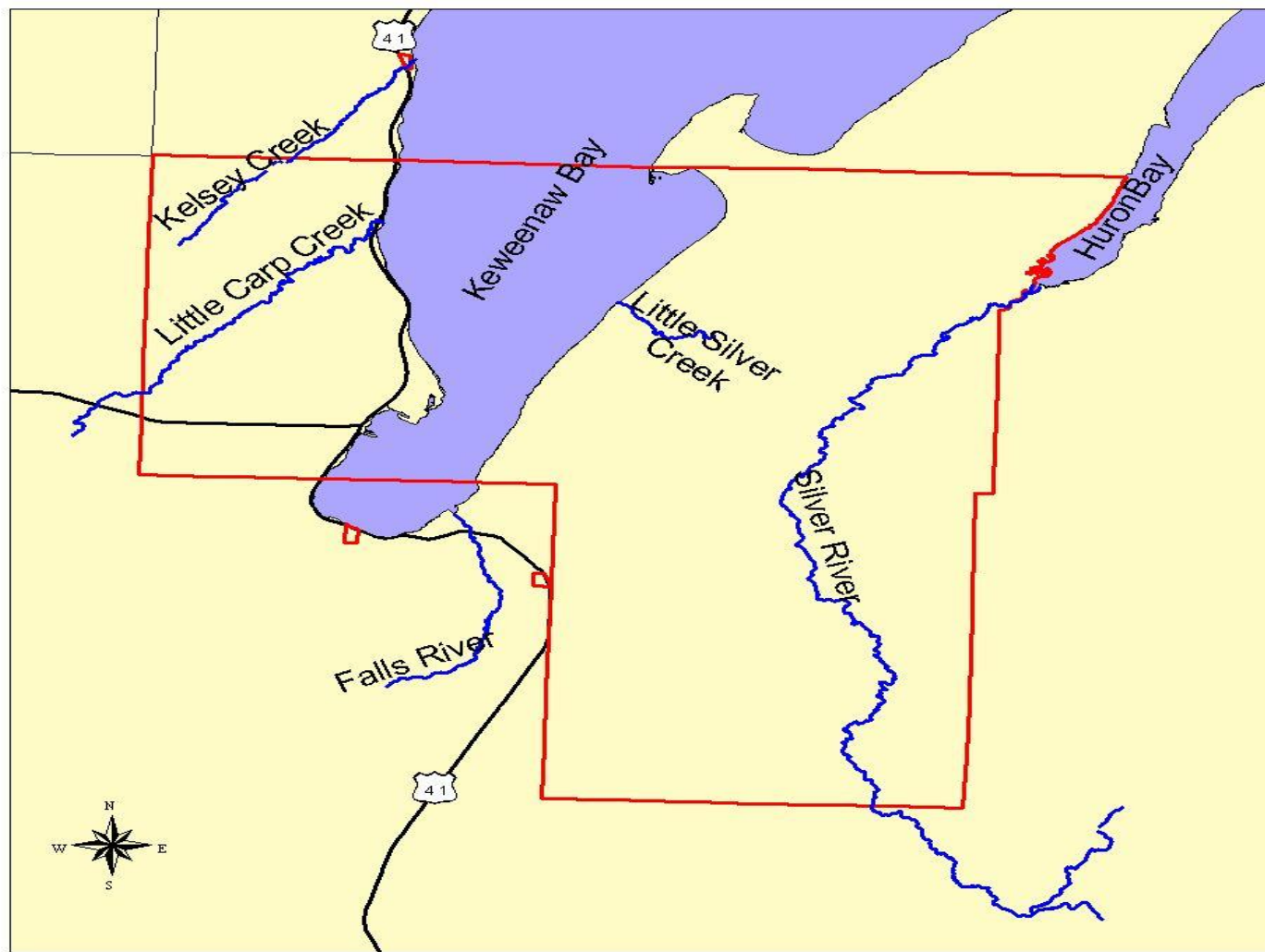
1854

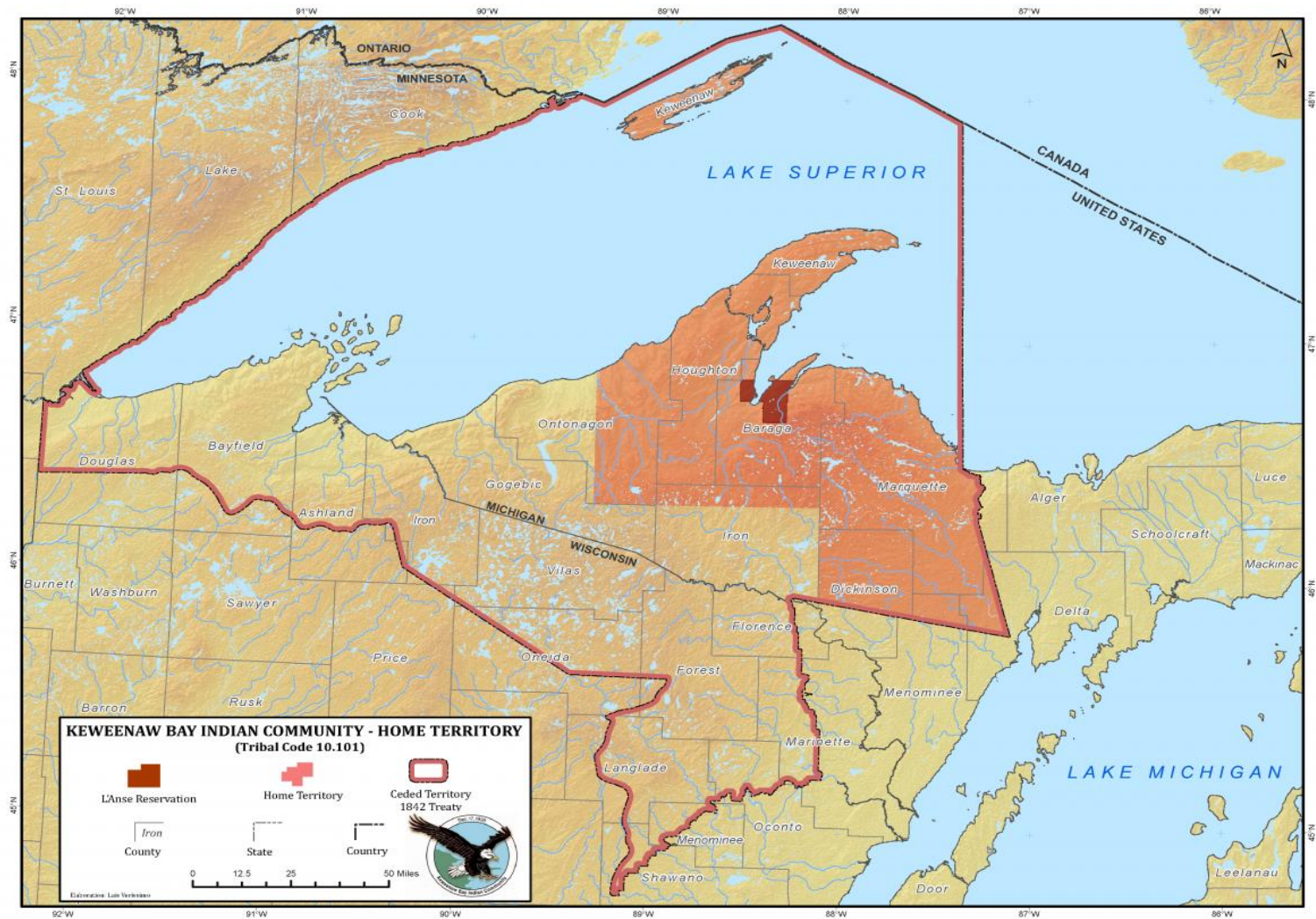
1842

1836

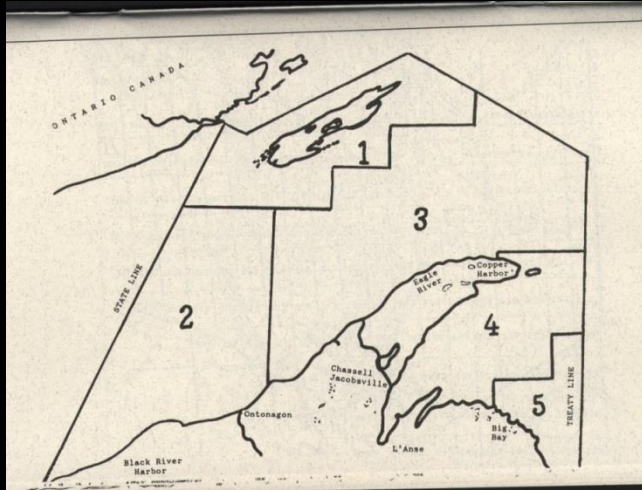
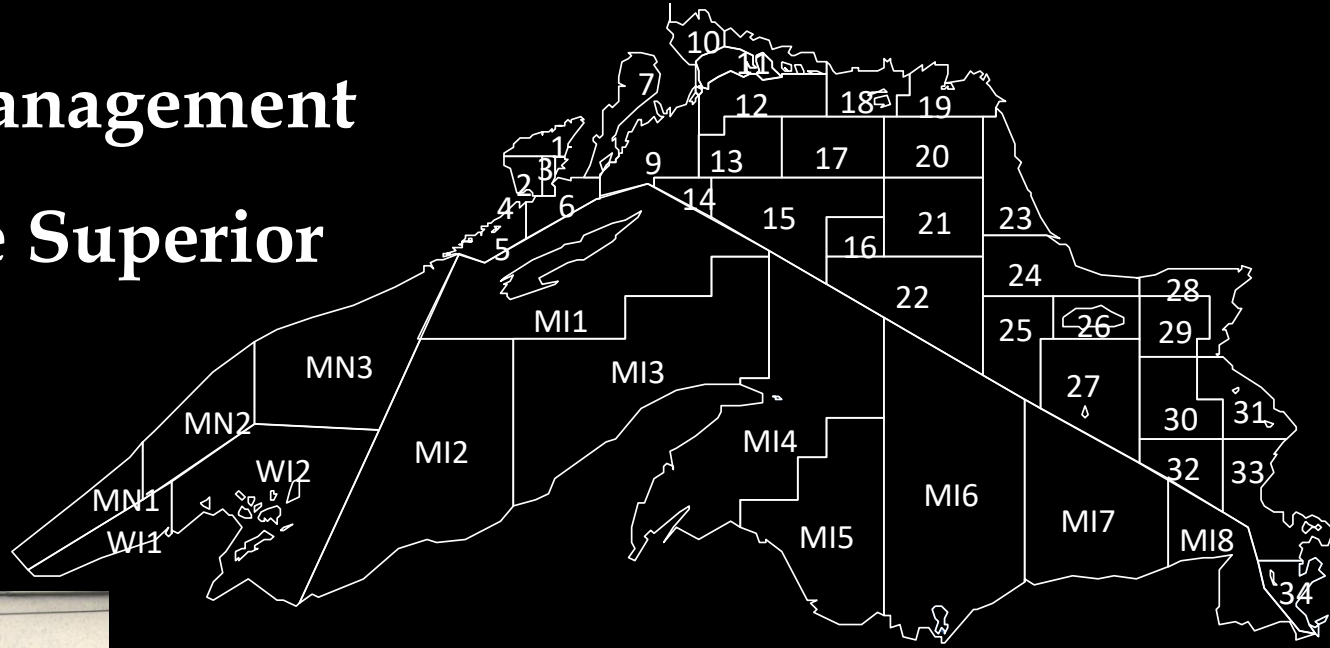
1837



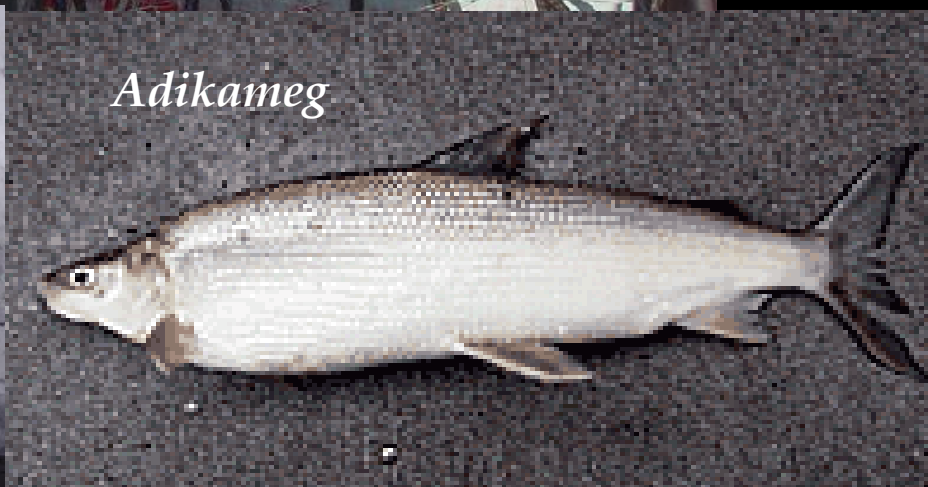




Lake Trout Management Units in Lake Superior



**KBIC Lake Trout Management Units
in 1842 Treaty Waters of Lake
Superior**





Gigoonh



Ogaa

Na'me

Subsistence



Subsistence and Commercial



Manoomin



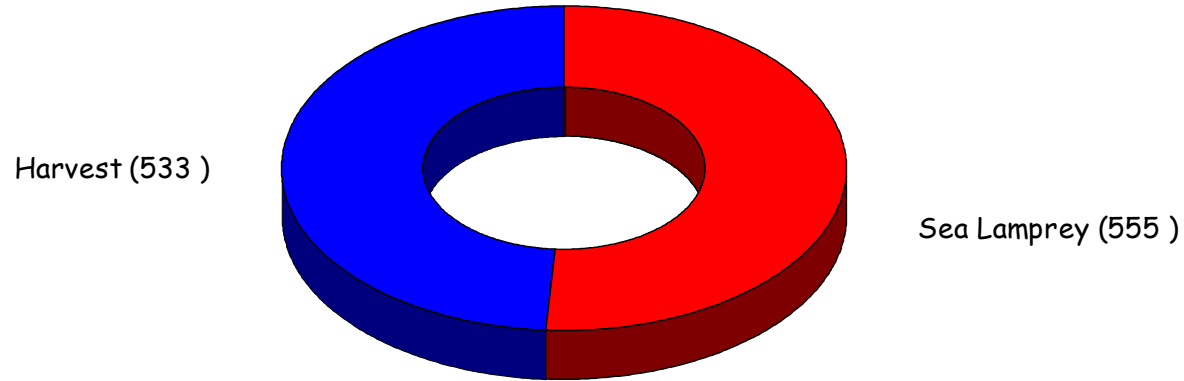




Sea Lamprey Invasion and Predation

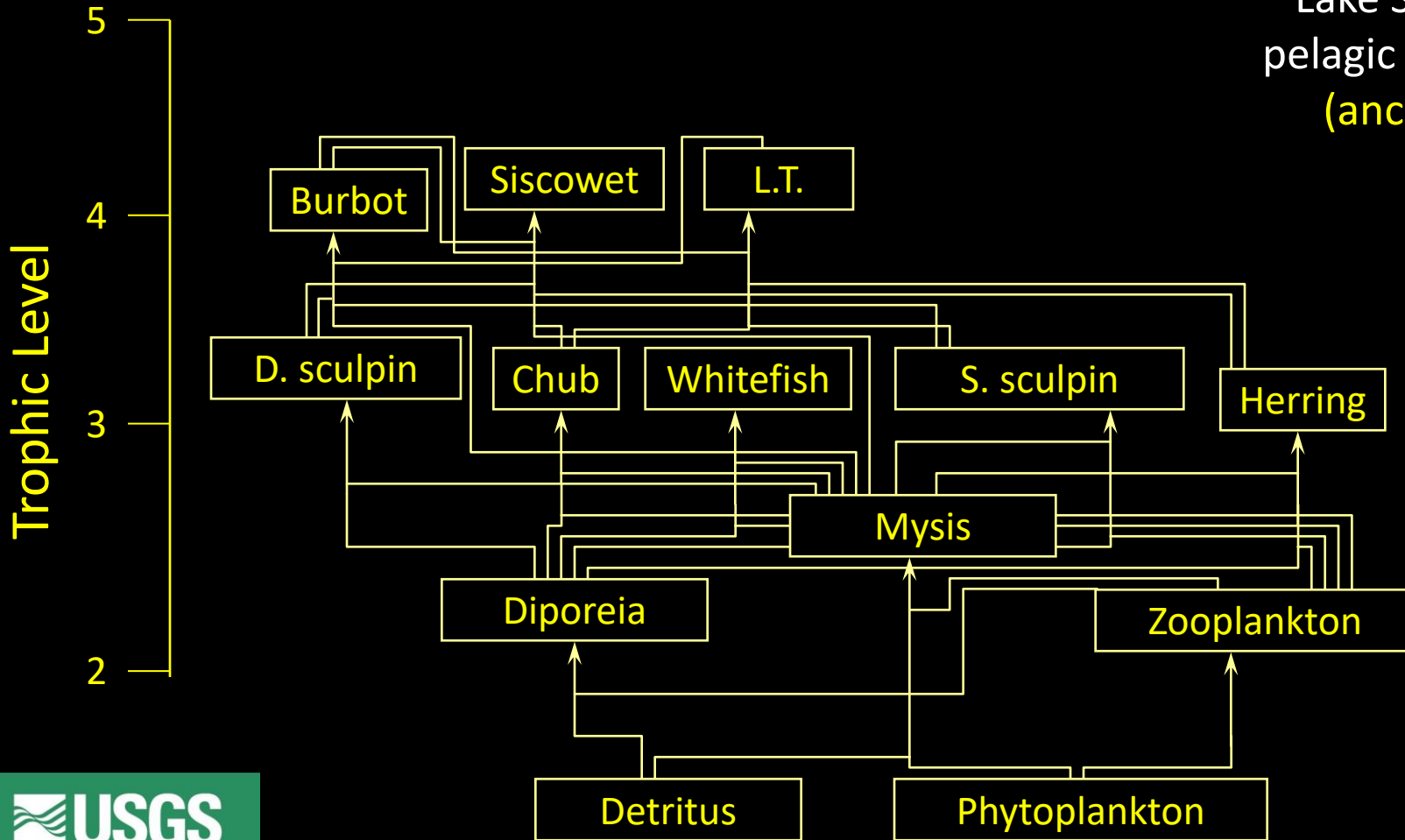


Lake Superior Lake Trout Extractions (in thousands of pounds)

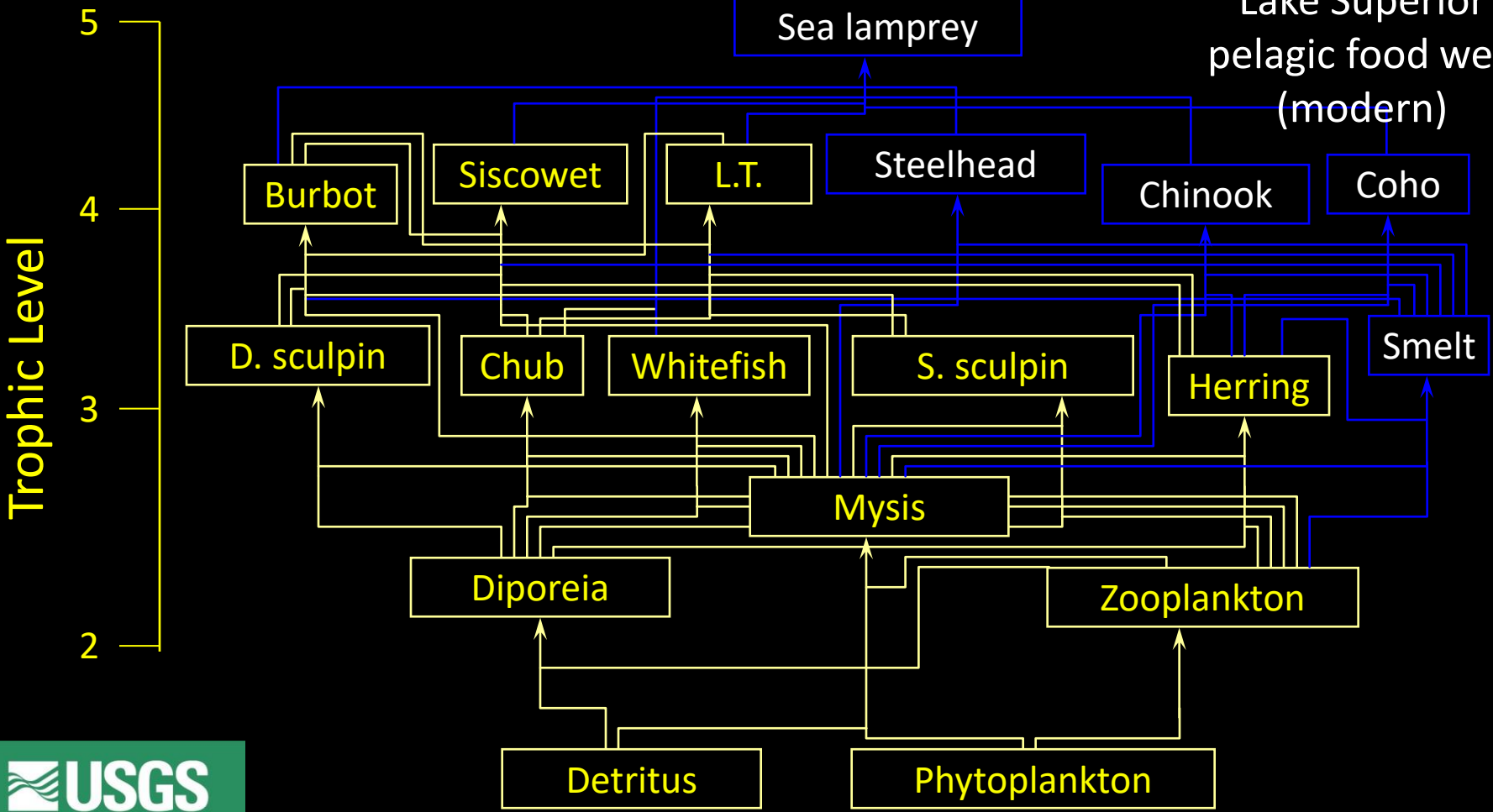




Lake Superior
pelagic food web
(ancestral)



Lake Superior
pelagic food web
(modern)



Hatchery Establishment







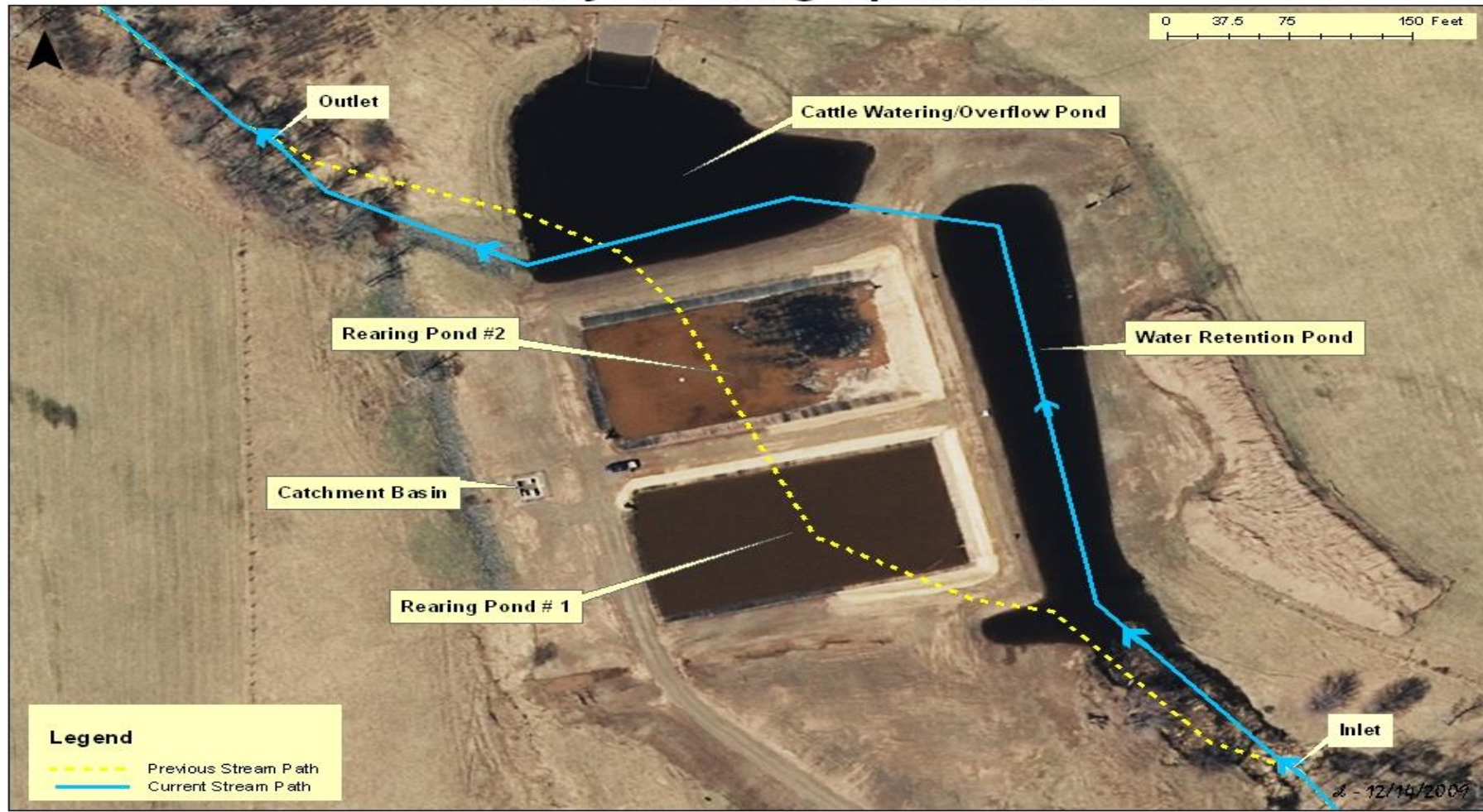
KBIC Hatchery



Isolation Facility



Keweenaw Bay Indian Community Walleye Rearing Operation



Cooperative Agreements



**Isolate certain genetic strains of Lake Superior lake
and brook trout at KBIC Hatchery**

**USFWS rears and stocks lake trout and brook trout
into Keweenaw Bay and/or KBIC Reservation
waters.**



Great Lakes RESTORATION



AIS Plan Development

Keweenaw Bay Indian Community
**Aquatic Invasive Species
Adaptive Management Plan**



December 2014

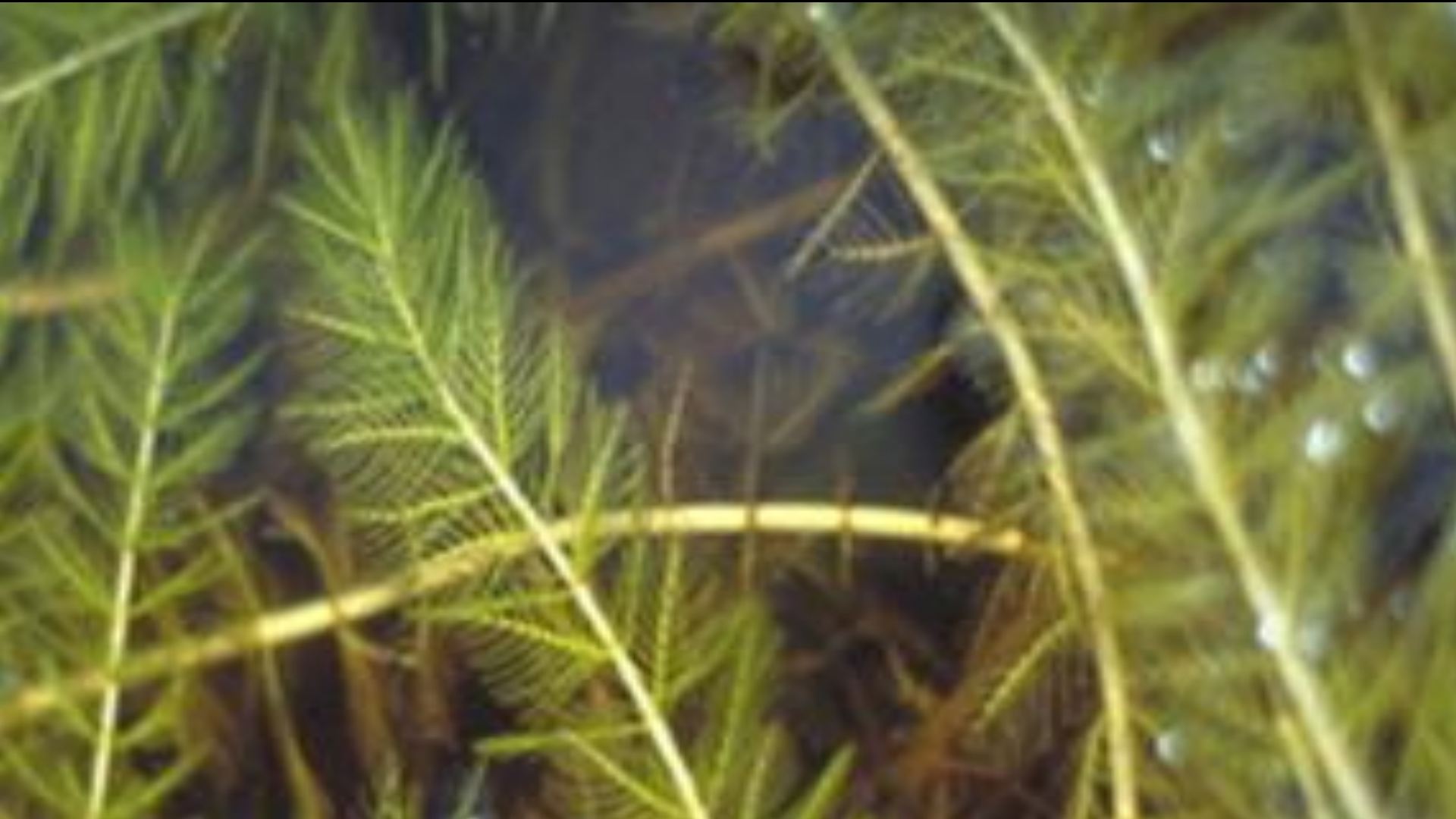


- US Fish & Wildlife Service
Funding for AIS Management
Plan Development
 - KBIC Natural Resources
Department Staff
 - Environmental Consulting Firm -
White Water Associates, Inc.



Plan Purpose/Vision Statement

“While holding great respect for all species, the vision of this Aquatic Invasive Species Adaptive Management Plan is to promote and protect the health and existence of native plants and animals of ecological, cultural, or subsistence significance upon which the Keweenaw Bay Indian Community depends by preventing, monitoring, and managing aquatic invasive species and educating the community about these plants and animals.”









U.S. Fish and Wildlife Service

IMPLEMENTATION PLAN FOR THE EARLY DETECTION OF NON-NATIVE FISHES AND BENTHIC MACROINVERTEBRATES,

LAKE SUPERIOR



March 2015, Version 1.0

U.S. Fish and Wildlife Service
Ashland Fish and Wildlife Conservation Office
2800 Lakeshore Drive East
Ashland, Wisconsin 54806

*Joshua T. Schloesser, Jason E. Ross,
Henry R. Quinlan, and Mark J. Brouder*



Lake Superior



AIS

Early Detection, Rapid Response

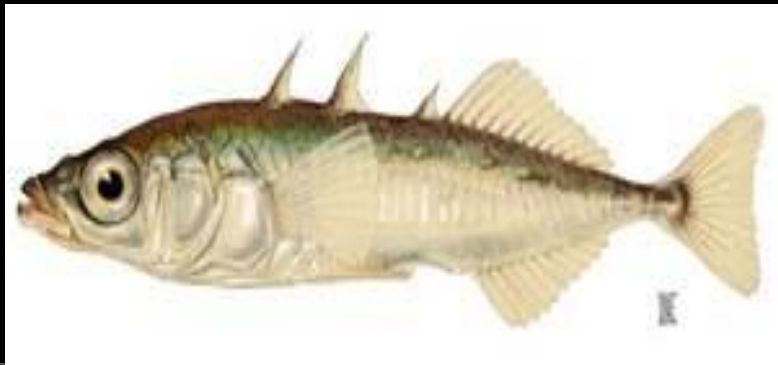
The Ashland Fish and Wildlife Conservation Office is on the front line of defense against the prevention, early detection, and rapid response planning of aquatic invasive species introductions into Lake Superior. We strive to increase awareness of the negative impacts aquatic invasive species can have on the aquatic resources and local economies of Lake Superior and how to prevent their spread. We also implement a rigorous, scientifically based, early-detection sampling protocol in several invasion “hotspots” across Lake Superior to increase the odds of finding a new species before it becomes established. Last, but certainly not least, we work with our partners to develop rapid response plans in the event a new species is detected. USFWS ASHLAND FWCO

Depth (m)





NATURAL
RESOURCES DEPT.











PROTECT OUR RESOURCES STOP AQUATIC HITCHHIKERS!

 Clean  Drain  Dry

All Boats, Trailers & Equipment
Every Time

www.WildlifeForever.org



STOP AQUATIC
HITCHHIKERS!







HELP STOP Aquatic Hitchhikers

AQUATIC INVASIVE SPECIES
Threats to the Lake Superior Basin

Peromyscus leucopus (a fish species)

Minnesota Department of Natural Resources
Division of Aquatic Resources
P.O. Box 2170
Duluth, MN 55802
1-800-552-6747
www.dnr.state.mn.us

STOP AQUATIC HITCHHIKERS!

HELP STOP AQUATIC HITCHHIKERS!

To avoid spreading aquatic invasive species
BEFORE launching ... BEFORE leaving:

- **Remove** aquatic plants and aquatic animals
- **Drain** lake or river water away from the landing
- **Dispose** of unwanted live bait in the trash

It's the Law ... Do Not:

- Transport aquatic plants, zebra mussels, or other prohibited species on public roads
- Launch a watercraft or place a trailer in the water if it has aquatic plants, zebra mussels, or other prohibited species attached
- Transport watercraft without draining water, removing the drain plug, and opening water-draining devices

Minnesota Department of Natural Resources

HELP SLOW THE SPREAD!

VIRAL HEMORRHAGIC SEPTICEMIA (VHS)

Be aware of this disease and other serious ecological threats in Lake Superior and surrounding waters.

Minnesota Bay Indian Community
Natural Resources Department
P.O. Box 100
Tahquamenon Falls, MN 55783
1-800-552-6747
www.dnr.state.mn.us

Purple Loosestrife: What You Could Know, What You Can Do

Asian Carp

Keep your facts and know how to prevent them

Zebra Mussel WATCH

Didymo WATCH

Ruffe WATCH

Red Swamp Crayfish WATCH

Mystery Snail WATCH

CLEAN BOATS CLEAN WATERS

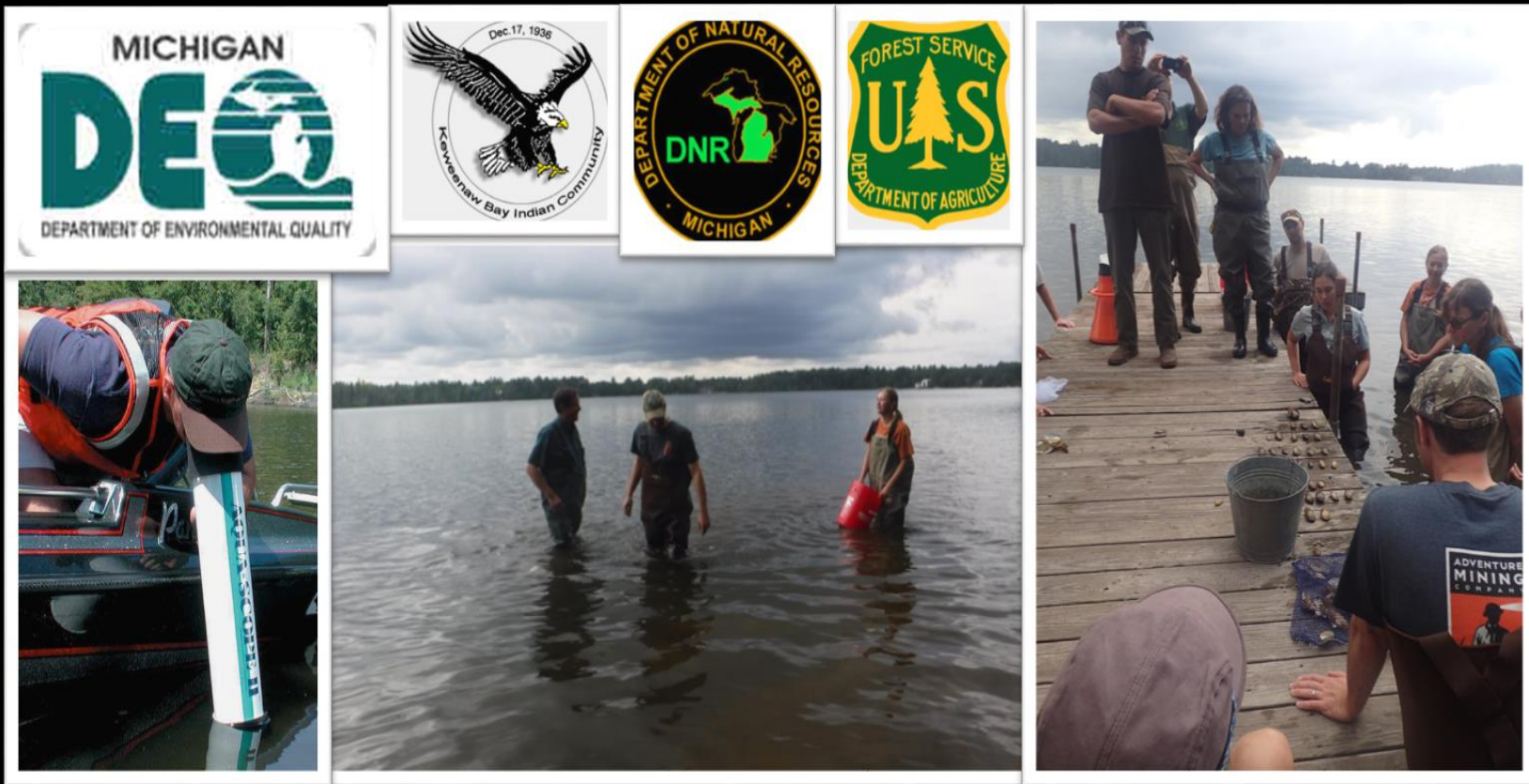
Drain, Clean, and Dry in 7 Simple Steps

Michigan Department of Natural Resources

INVADERS of the Great Lakes

Interdepartmental Training Session

Multi-Agency Training Session on Mussel Surveying and Identification Techniques (August 2016).













Miigwech!
Thanks!

