

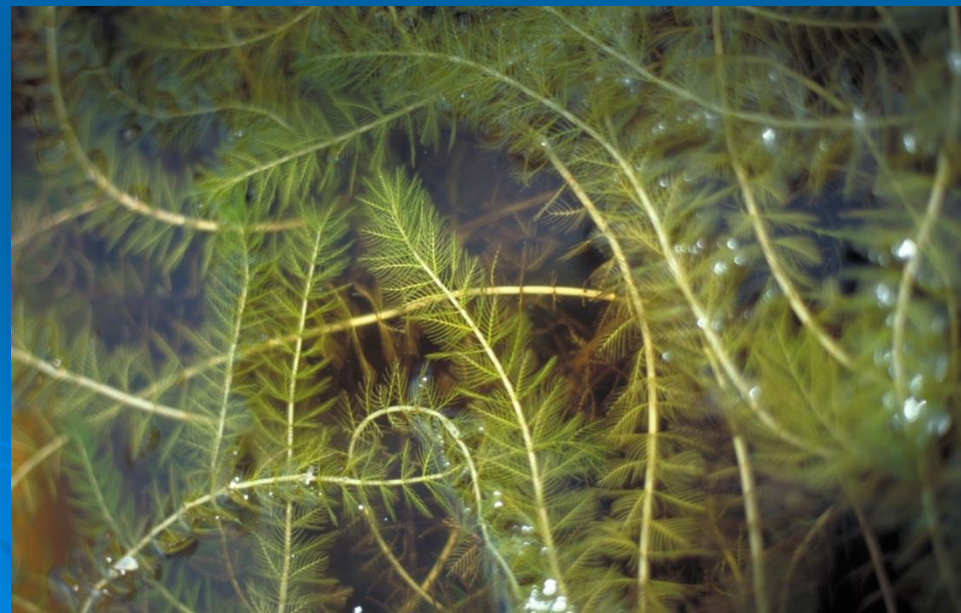


Aquatic Plants in NW Wisconsin

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Main Topics

- **Our Lakes** – native species and importance
- **Our Work** – How to identify plants
- **Our problem** - aquatic invasive hitchhikers
 - **Species Profiles** - more info on a few species causing the problem
- **Laws & Regulations** on AIS

Lake Ecosystems

- Diverse community of plants, animals and other organisms
- All interacting with each other
- One species suffers it can affect the whole community



Plant Benefits to the Community

What do Plants Provide

- Habitat for animals
- Spawning areas
- Food
- Cover
- Oxygen
- Nesting Area

What do plants do

- Absorb/hold Phosphorus and Nitrogen
- Stabilization of sediment at shoreline

4 Types of Aquatic Plants

➤ Emergent



➤ Free Floating



➤ Submergent

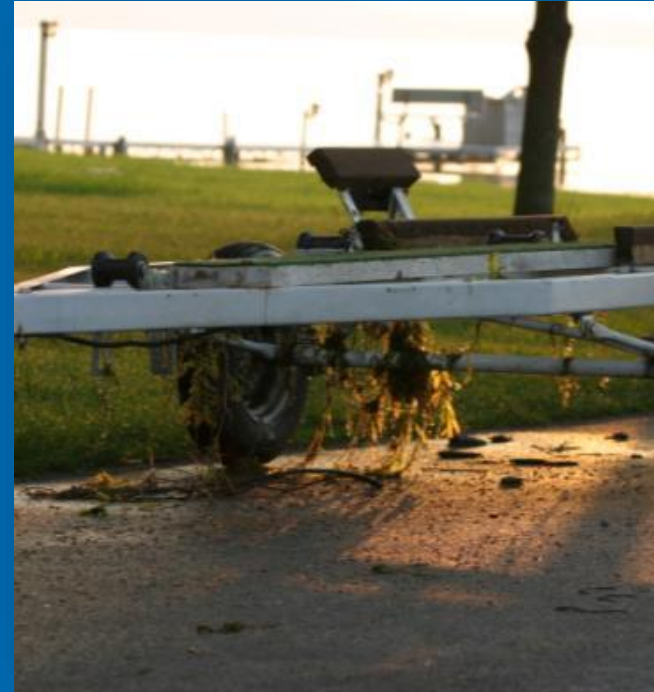


➤ Floating Leaf



What are Invasive Species?

- Non-native species that can “take over”
- Not all non-native/Exotic species are invasive
- Successful because:
 - No natural predators, parasites, etc.
 - Native species can't hide, compete, or fight back
 - Often aggressive, prolific, and mature early



So, What's the Problem?

- Take over native plant habitat
- Accidentally introduced
- Difficult to eradicate



Destructive to Native Ecosystems

➤ Less Diversity

➤ Less habitat

➤ Less Food

➤ Less recreation



How do they get here?

- Shipping - ballast water
- Intentional introduction - stocking
- Canals - migration from the ocean
- Nursery industry
- Anglers/Bait industry
- Aquaculture
- Aquarium trade



How do they spread?



- Boaters
- Anglers
- Other water users
(sea planes, SCUBA, etc)
- Water garden & aquarium owners
- Natural dispersal



Zebra Mussels



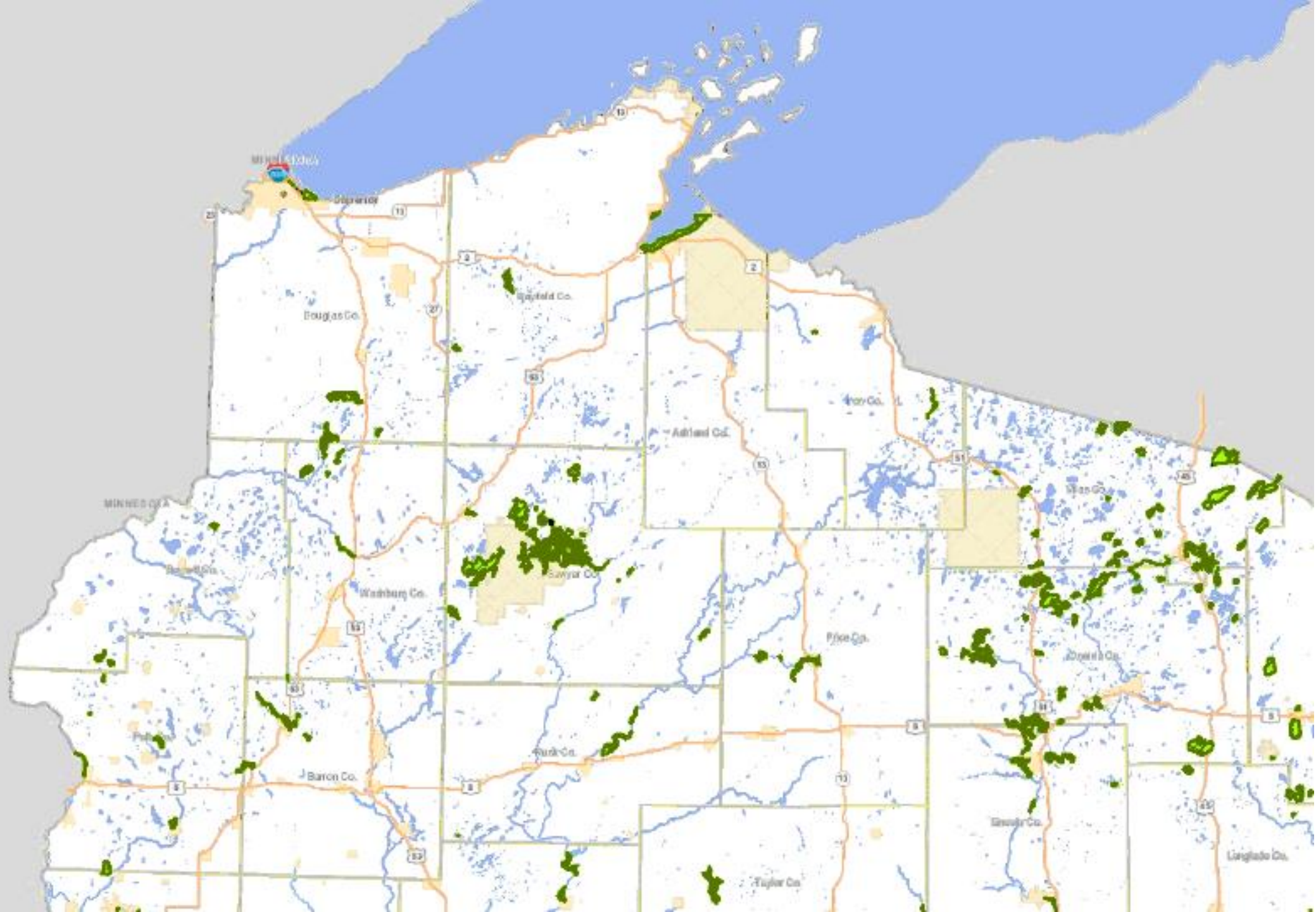
- Ballast water introduction to the Great Lakes in 1980s
- Present in 121 WI inland lakes (March 2009)
- Attach to any hard surface - may reach tens of thousands per square meter!
- Are microscopic in early life stages
- Female can produce 1 million eggs/season

Eurasian Water-milfoil



- First found in WI in 1960s
- Currently found in 479 WI lakes
(March 2009)
- Forms dense mats - interferes with water recreation
- Can spread from small fragments



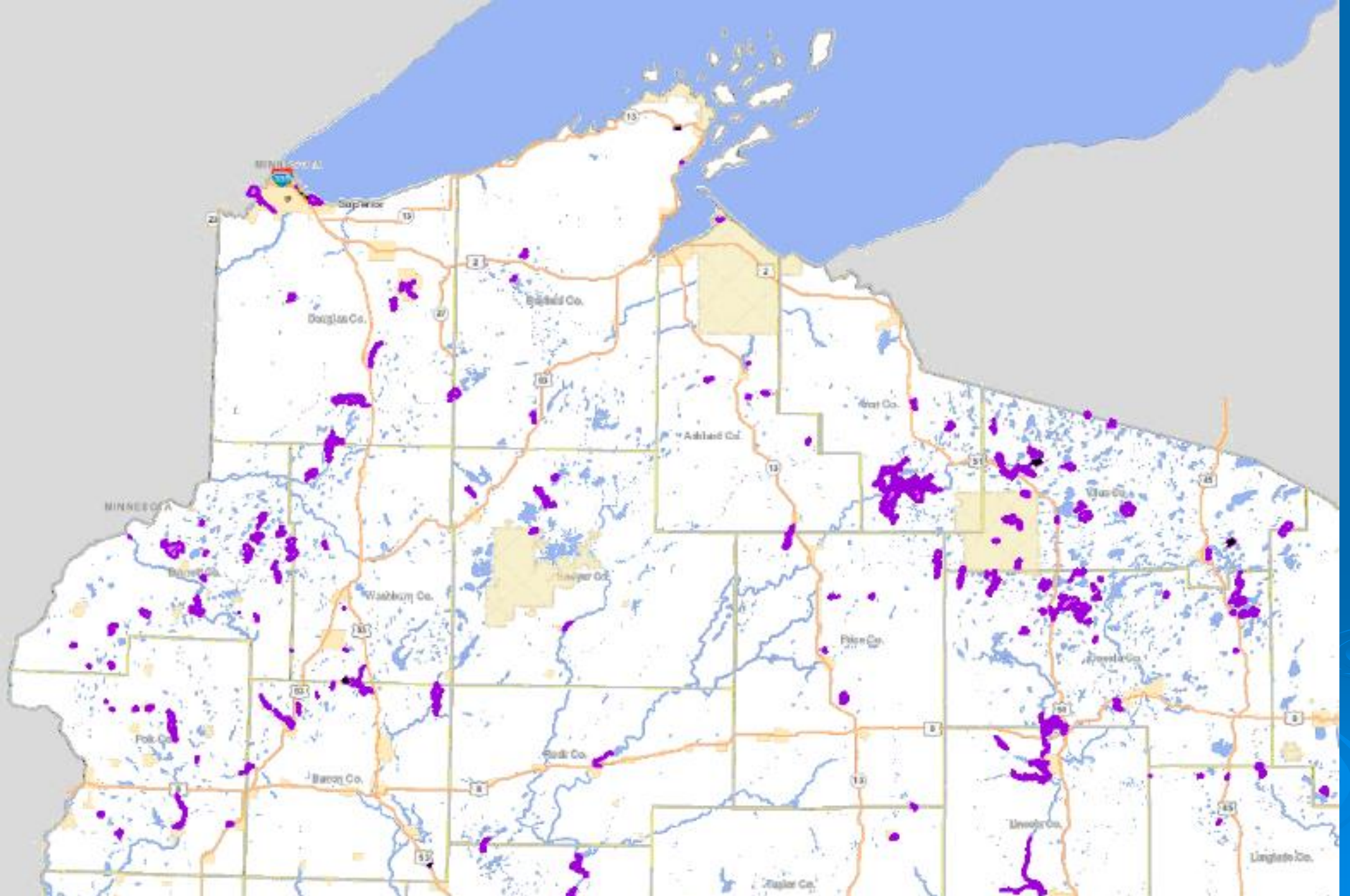


Purple Loosestrife



Linda Wilson, University of Idaho, Bugwood.org

- Imported from Europe for gardens (late 1800s), also seeds in ballast water
- Crowds out native wetland species
- Spreads rapidly: >1 million seeds annually, plus vegetative spread

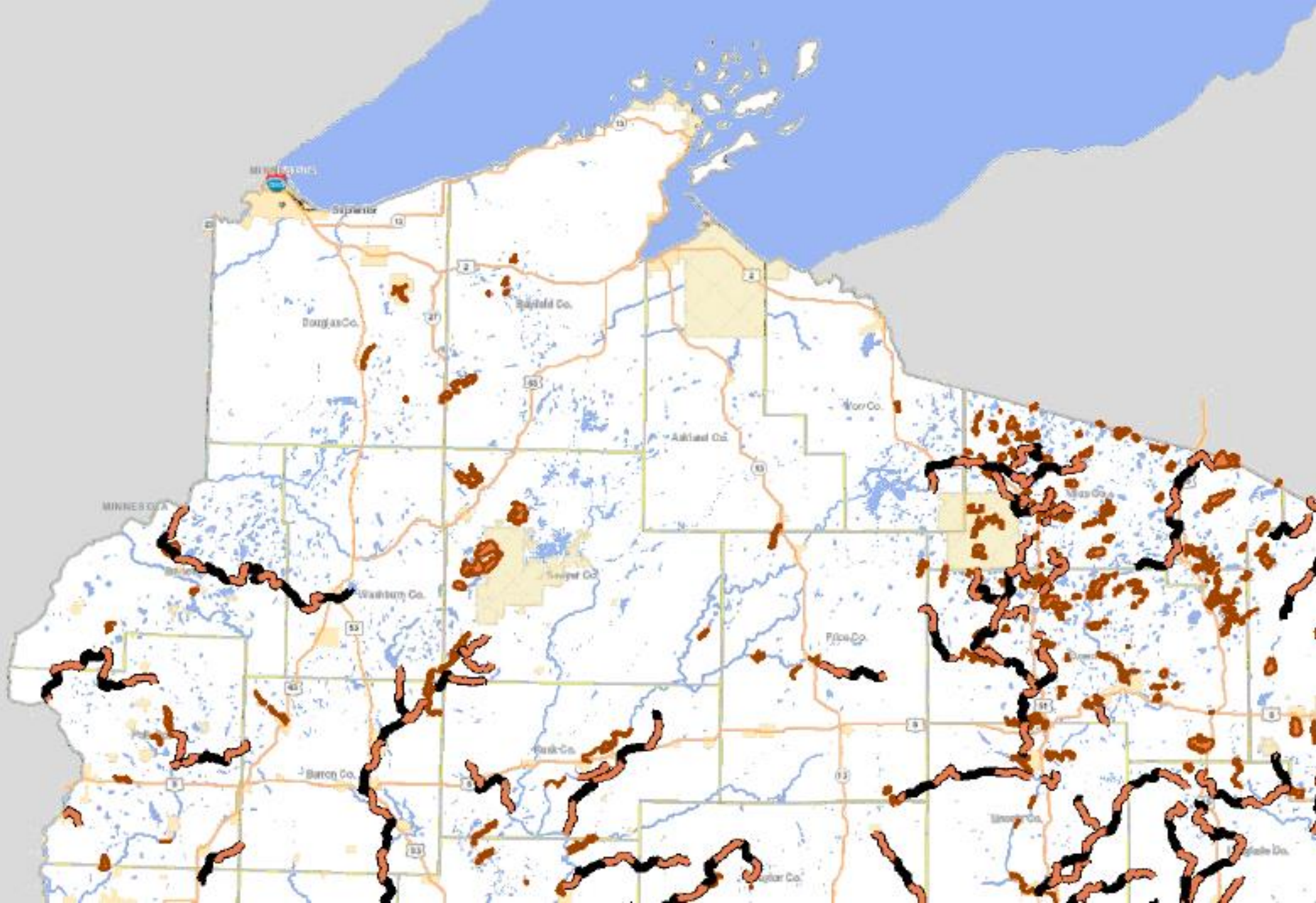


Rusty Crayfish



ID tip: Dark, rusty spot on each side of carapace

- Brought to WI as bait 1960s
- In 456 inland lakes and streams (March 2009)
- Severely reduce aquatic vegetation, impacting spawning
- Aggressive; compete with native crayfish and fish for cover and food

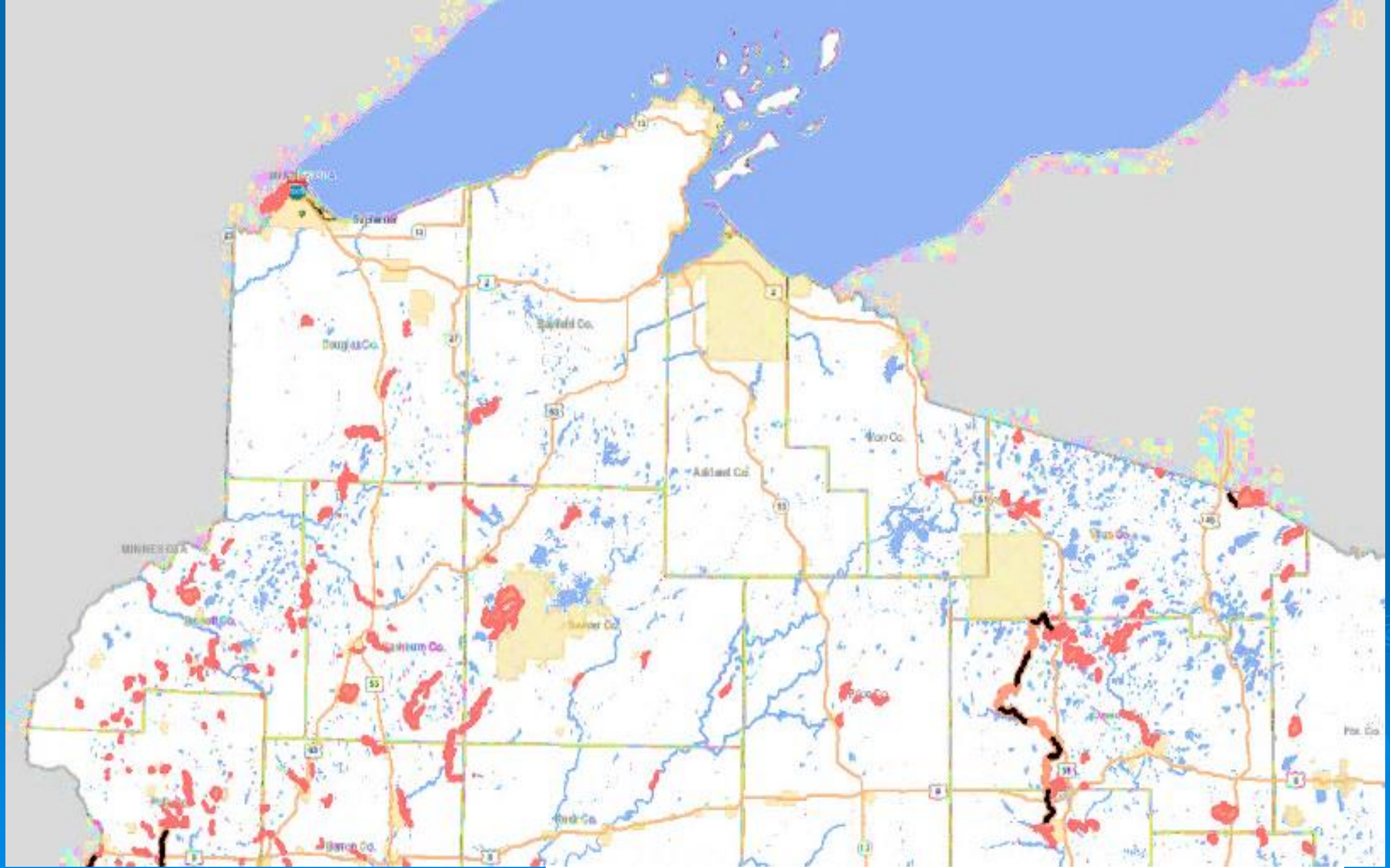


Curly-leaf Pondweed



Chris Evans, River to River CWMA, Bugwood.org

- Accidentally introduced as aquarium plant (1880s)
- Fairly widespread – in 307 waterbodies (March 2009)
- Active very early in growing season – even under ice
- Can form dense mats, interfering with recreation and native plants





Many More in Wisconsin...



STOP AIS: It's the Law

- Must remove aquatic plants and animals from boat, trailer, and other equipment
- Must drain all water from boat before leaving boat landing



A landscape photograph of a sunset over a body of water. The sky is filled with horizontal bands of orange and red clouds. The water is calm, reflecting the colors of the sky. In the foreground, there are dark silhouettes of pine branches. In the middle ground, there are several small, dark islands or peninsulas. The overall mood is peaceful and contemplative.

Questions?