

# Eagle Spring Lake Meeting

## October 15, 2024

Patrick Siwula - WDNR Southeast Region AIS Biologist  
Amanda Schmitz – Waukesha County AIS Coordinator





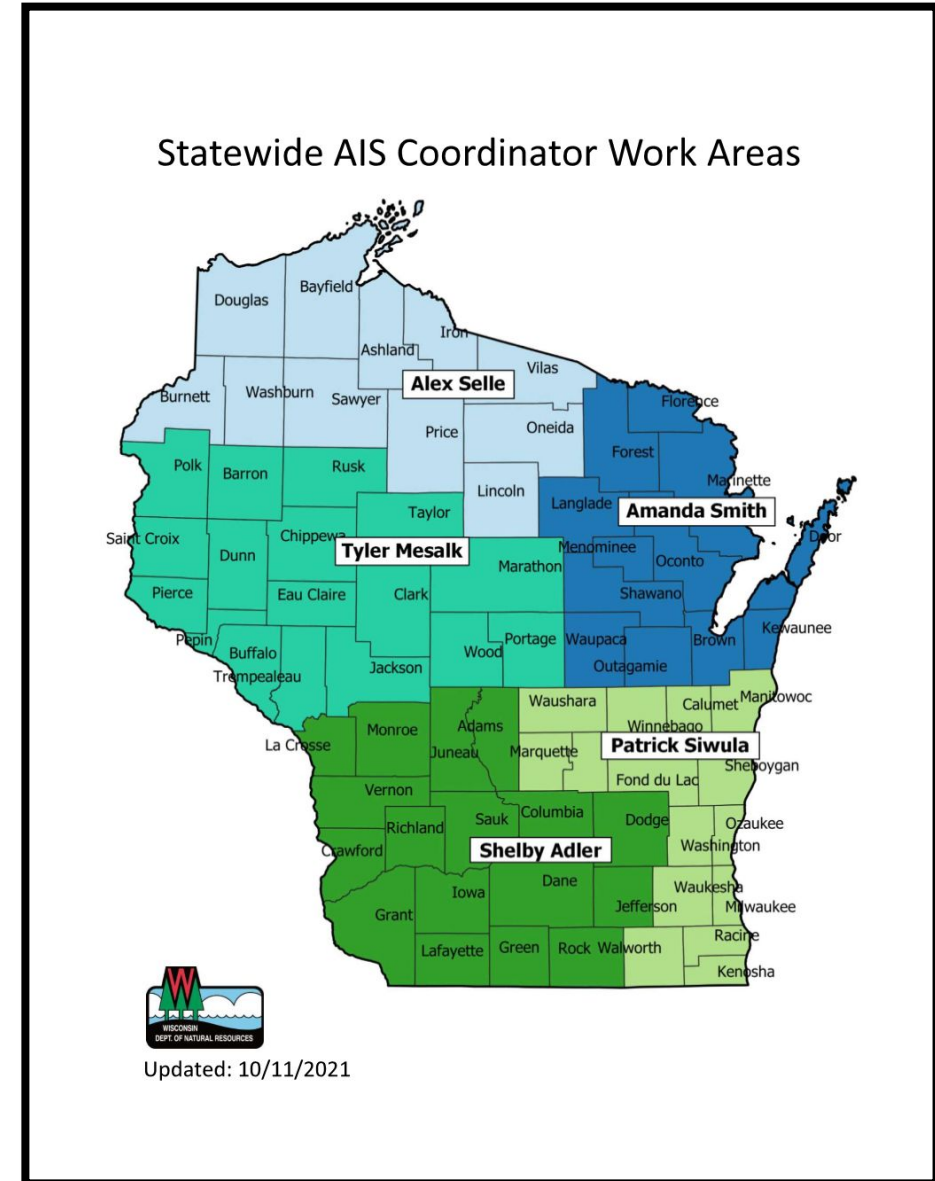
## Aquatic Invasive Species Coordinator - Washington & Waukesha Counties

- AIS Reponse - Local Contact
- AIS Monitoring
- Education & Outreach
- Program Implementation - CLMN, CBCW, Snapshot Day, Project RED, Purple Loosestrife Biocontrol



# Southeast Region Aquatic Invasive Species (AIS) Biologist

- AIS Response
  - Respond to new AIS findings in or near surface waters
  - High profile / prohibited species not yet present in WI or with low geographic footprint
- AIS Pathways management
  - Organisms in Trade – prevent the trade and introduction of regulated species
- Regional Point of Contact (SE)
  - AIS grant administration, technical assistance
  - Monitoring, research, data management
  - Outreach, education





# WI Invasive Species Management Plan and Response Framework

1800s-1900s: First introductions of AIS to WI

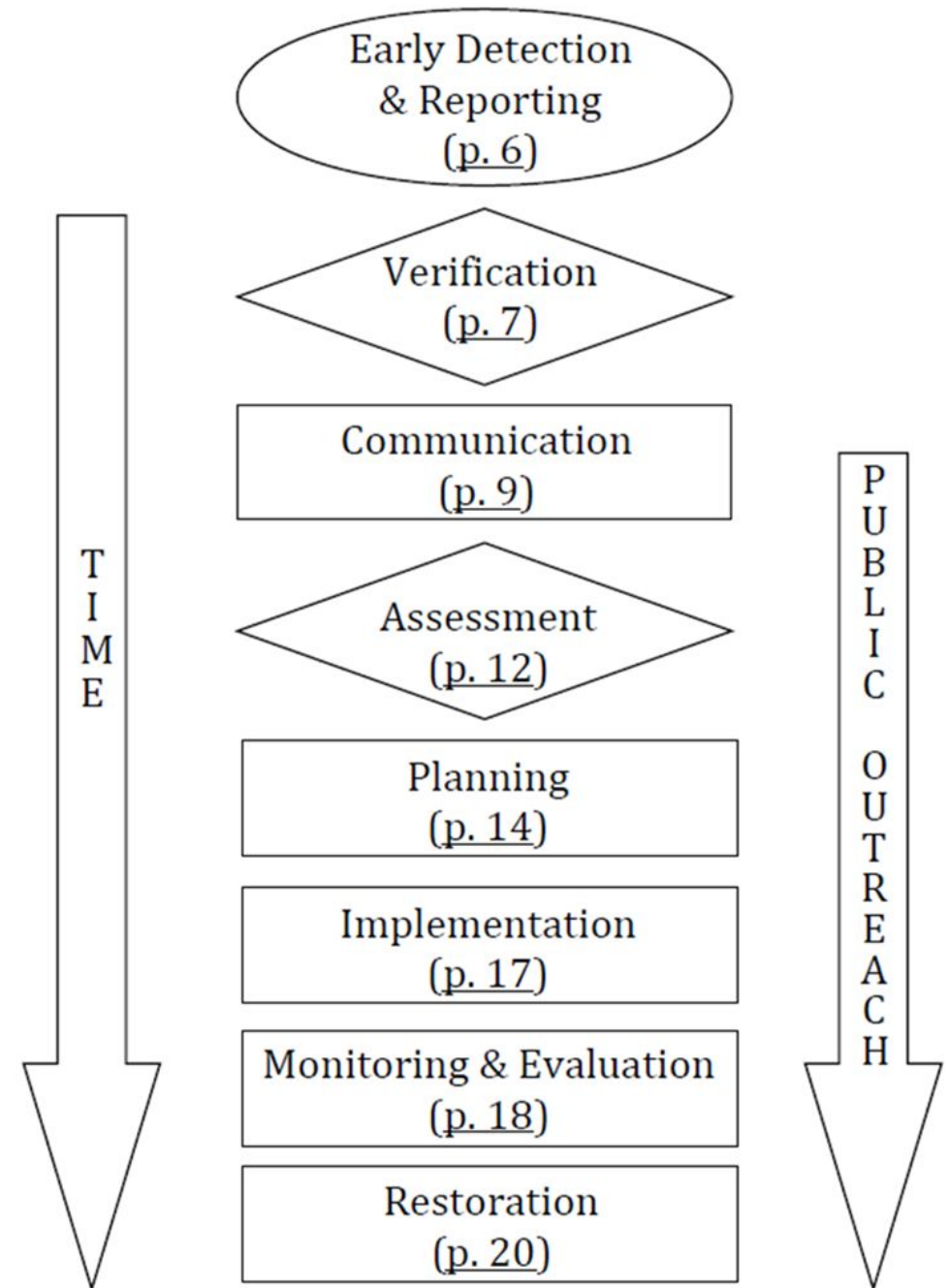
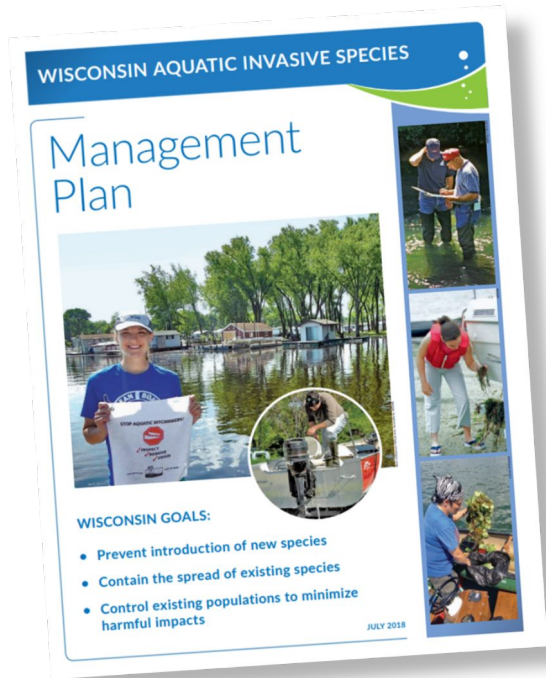
2003: First Statewide AIS Management Plan

2009: Creation of Invasive Species Rule (NR40)

2017-18: Invasive Species Response Framework

2018: Updated Statewide AIS Management Plan

2021: Full-time regional AIS staff throughout WI





# WI AIS Management Plan – Pathways

## AQUATIC INVASION PATHWAYS:



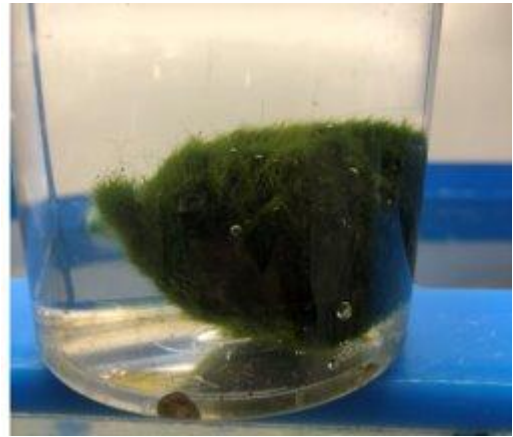
# Organisms in Trade

- Invasive plants and animals introduced through trade (sell, trade, give away)
- Desirable traits are similar to traits commonly found in invasive species
  - Quick to establish and spread
  - Fast growing
  - Resilient/easy to take care of
- Can be introduced to the environment
  - Unintentional escapes
  - Intentional releases

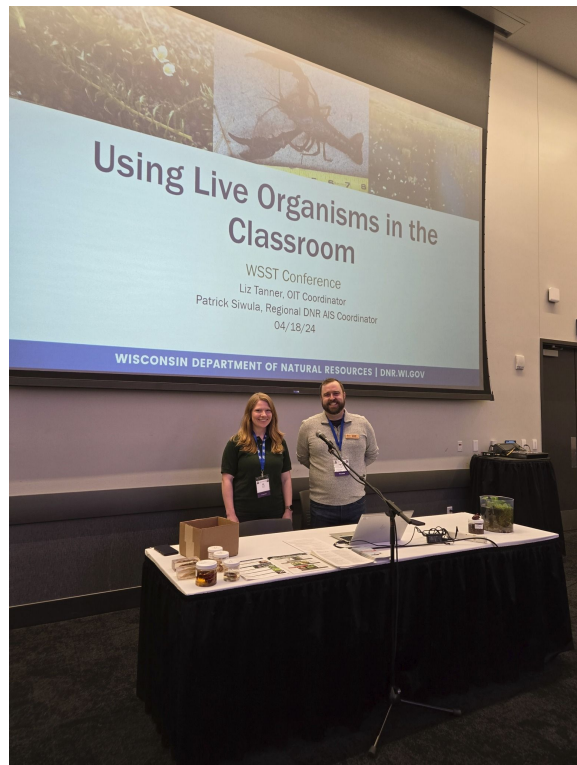
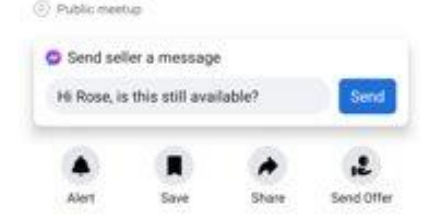




# Organisms in Trade



**Aquarium Water Lettuce**  
\$5 - In Stock



# WI AIS Management Plan – Pathways

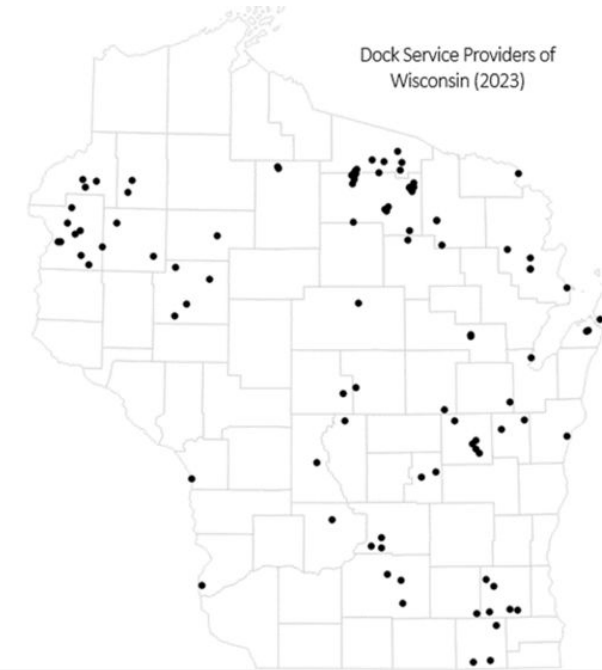
## AQUATIC INVASION PATHWAYS:





# Recreational Activities and Service Providers

## *Dock Service Providers (DSPs)*



**Your Customer's Lake & Rivers at Risk of Invasive Species**

**INVASIVE SPECIES** cause the most significant damage over the near-shore areas of your customers dock space.

**WHAT DOCK SERVICE PROVIDERS NEED TO KNOW ABOUT INVASIVES**

- Invasive species are nonnative plants, animals, and diseases that can cause harm to the economy, environment, and human health.
- Invasive plants reproduce and grow quickly, easily invading natural areas. They often spread & reproduce in numerous ways, even by small plant fragments or microscopic eggs/larvae.
- Invasive species pose a threat to Wisconsin's waterbodies and waterfront properties that are critical for fishing, boating, and swimming.

**WHAT DOES THIS HAVE TO DO WITH DOCK SERVICE PROVIDERS?**

- Invasives such as zebra mussels can be moved on equipment, sediment and plants, and other debris.
- Invasives can diminish customer base by interfering with recreational activities and the need for docks and other in-water structures.

**WHAT YOU CAN DO**

- Minimize the movement of invasive species to non-infested areas within a waterbody during work activities.
- Follow the mandatory prevention steps.
- Consider implementing at least one decontamination option.
- Work with your client to meet timelines/requests while prioritizing the resource.

More information on mandatory Prevention Steps and optional decontamination options can be found on the back of this document.

**Help prevent the spread of Aquatic Invasive Species (AIS)...**

### BEST MANAGEMENT PRACTICES FOR DOCK SERVICE PROVIDERS

<p><b>GOOD</b></p> <p>Wisconsin law requires all water users, including water-related businesses like Dock Service Providers, to take the following steps when leaving a public access:</p> <p><b>INSPECT</b> boats, trailers, and equipment</p> <p><b>REMOVE</b> all attached aquatic plants, animals, and sediment</p> <p><b>DRAIN</b> all water from boats, vehicles, and equipment</p> <p><b>NEVER MOVE</b> plants or live fish away from a waterbody</p>	<p><b>BEST</b></p> <p>To further minimize the risk of spreading AIS, your company could also consider decontaminating all equipment and gear. Some options for decontamination include:</p> <p>Have a <b>dedicated set of equipment</b> to use in waterbodies that you visit frequently</p> <p>Spray equipment with a <b>bleach solution</b> *Use a ratio of 2.5 Tablespoons/gallon of water</p> <p>Use a <b>hot water pressure washer</b> or steam cleaner to clean equipment *contact temperature of 140°F</p> <p>Allow equipment to <b>dry</b> for at least 5 days</p> <p>If working on multiple waterbodies within a day, plan to work from <b>least to most infested</b> to reduce risk of spread.</p>
---	---

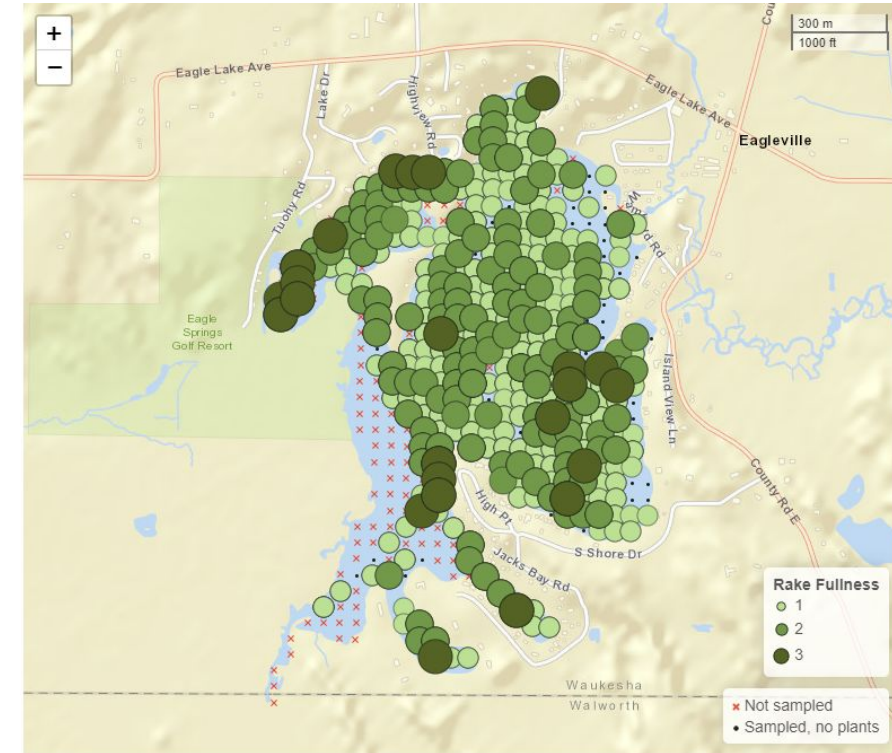


- DSP Database; Targeted outreach letters
- Social Science Survey
- Decon kits, 1:1 training module



# Native Plants Documented in Eagle Spring Lake

Bullhead Pond Lily	Hard-Stem Bulrush	Small Bladderwort
Bur-Reed	Illinois Pondweed	Soft-Stem Bulrush
Common Bladderwort	Leafy Pondweed	Southern Naiad
Common Waterweed	Long-Leaf Pondweed	Variable-Leaf Pondweed
Coontail	Needle Spikerush	Various-Leaved Water-Milfoil
Chara	Nitella	Water Bulrush
Creeping Bladderwort	Northern Water-Milfoil	Water Star-Grass
Flat-Stem Pondweed	Richardson's Pondweed	Water Celery
Floating Leaf Pondweed	Sago Pondweed	White Water Lily
Forked Nitella	Slender Naiad	Whorled Water-Milfoil



30+ species



# Native Plants Documented in Eagle Spring Lake



Sago Pondweed



Bladderwort  
*Utricularia* species  
Photo by Lyn Gettys  
© 2010 University of Florida

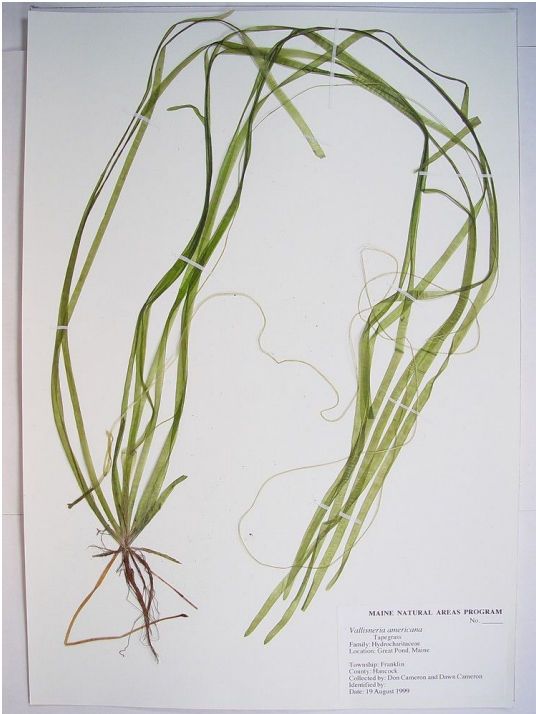
Common Bladderwort



Illinois Pondweed



Chara



Water Celery



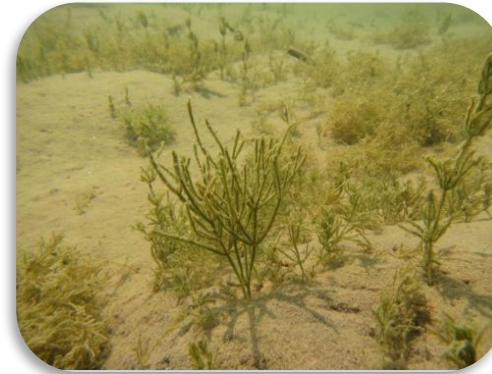
# AIS Documented in Eagle Spring Lake



Zebra Mussel (2005)



Eurasian Water-Milfoil (1994)



Starry Stonewort (2024)



Curly-Leaf Pondweed (2005)



Hybrid Water-Milfoil (2019)



Corbicula (2013)

Chinese Mystery Snail (2014)



Purple Loosestrife (2010)





Eurasian Water-Milfoil  
*Myriophyllum spicatum*



Coontail  
*Ceratophyllum demersum*



Northern Watermilfoil  
*Myriophyllum sibiricum*



Whorled Watermilfoil  
*Myriophyllum verticillatum*





**Curly Leaf Pondweed  
Look-alikes**



**Curly-Leaf Pondweed**  
(*Potamogeton crispus*)



**Clasp Leaf Pondweed**  
(*Potamogeton Richardsonii*)



**Illinois Pondweed**  
(*Potamogeton illinoensis*)



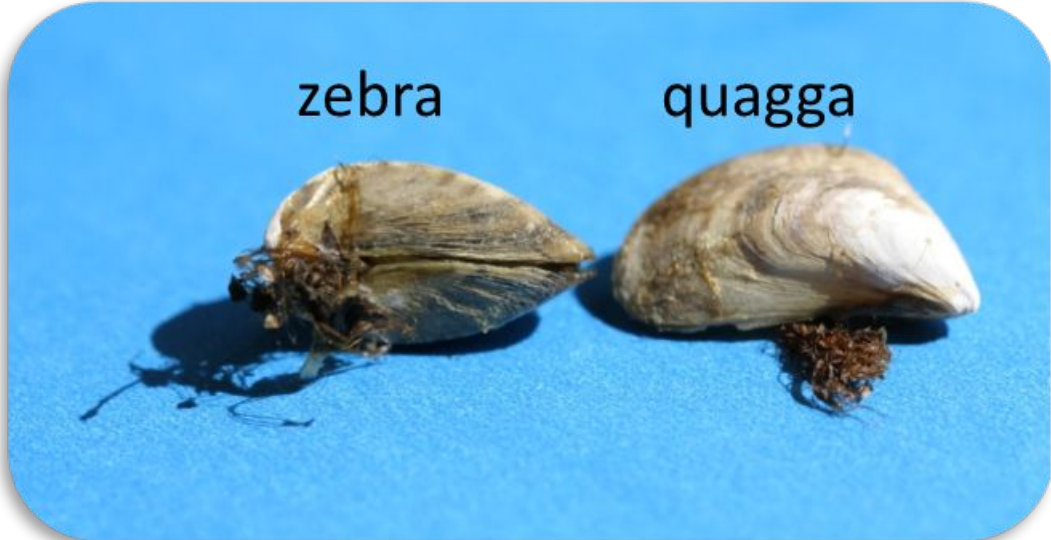
**White Stem Pondweed (2013)**  
(*Potamogeton praelongus*)

**Variable Pondweed**  
(*Potamogeton gramineus*)





# Dreissenid mussels



Shell shape comparison of zebra mussel (*D. polymorpha*) on left and quagga mussel (*D. bugensis*) on right. USGS

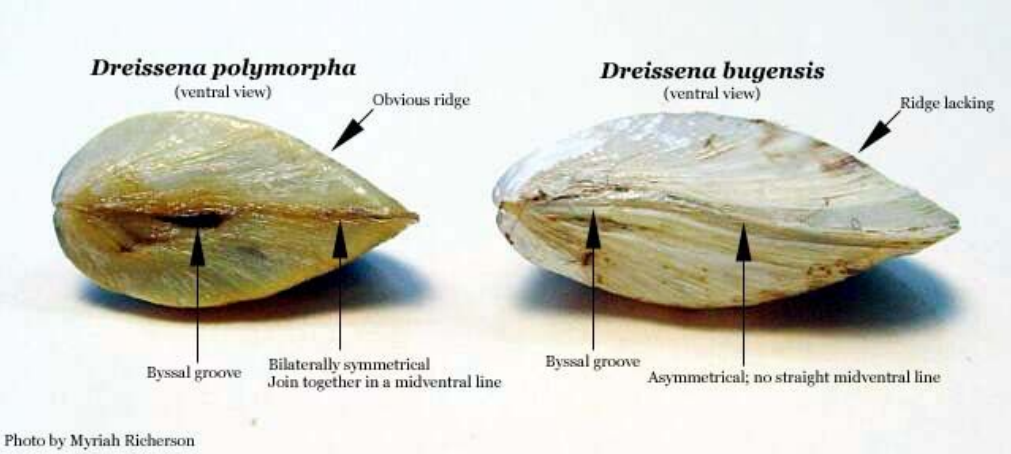
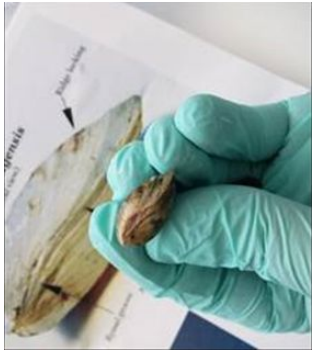


Photo by Myriah Richerson

# Dreissenid Mussels in WI



## 2024 — First inland detection of quagga mussels in WI

Lake Geneva, Walworth Co.; based on age/size of specimens collected, it is likely they have been present at least 2-3 years, but have gone undetected

## 2000s — Quagga mussels displace zebra mussels in Lake Michigan

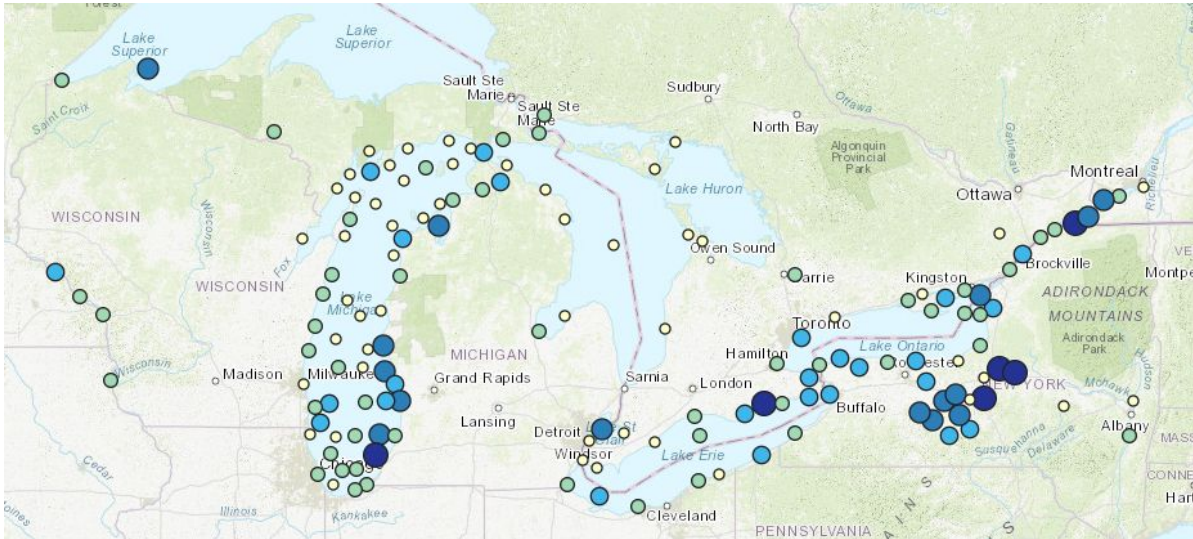
Due to competitive advantages, quagga mussels entirely displace zebra mussels in offshore areas; zebra mussels continue to persist in nearshore / shallow areas

## 1990s — Zebra mussels move inland, first Quagga mussel finding in Lake Michigan

First inland WI Lakes to get zebra mussels: Elkhart Lake, Geneva Lake, Green Lake

## 1980s — Zebra mussels found in Lake St. Claire

Transported via ballast water of a transatlantic freighter, establishing a population in Lake St. Claire. Within 10 years, zebra mussels will have spread to all five Great Lakes









# Muskgrass

vs.

# Starry Stonewort





# Native charophytes



*Lychnothamnus barbatus*  
'Bearded Stonewort'

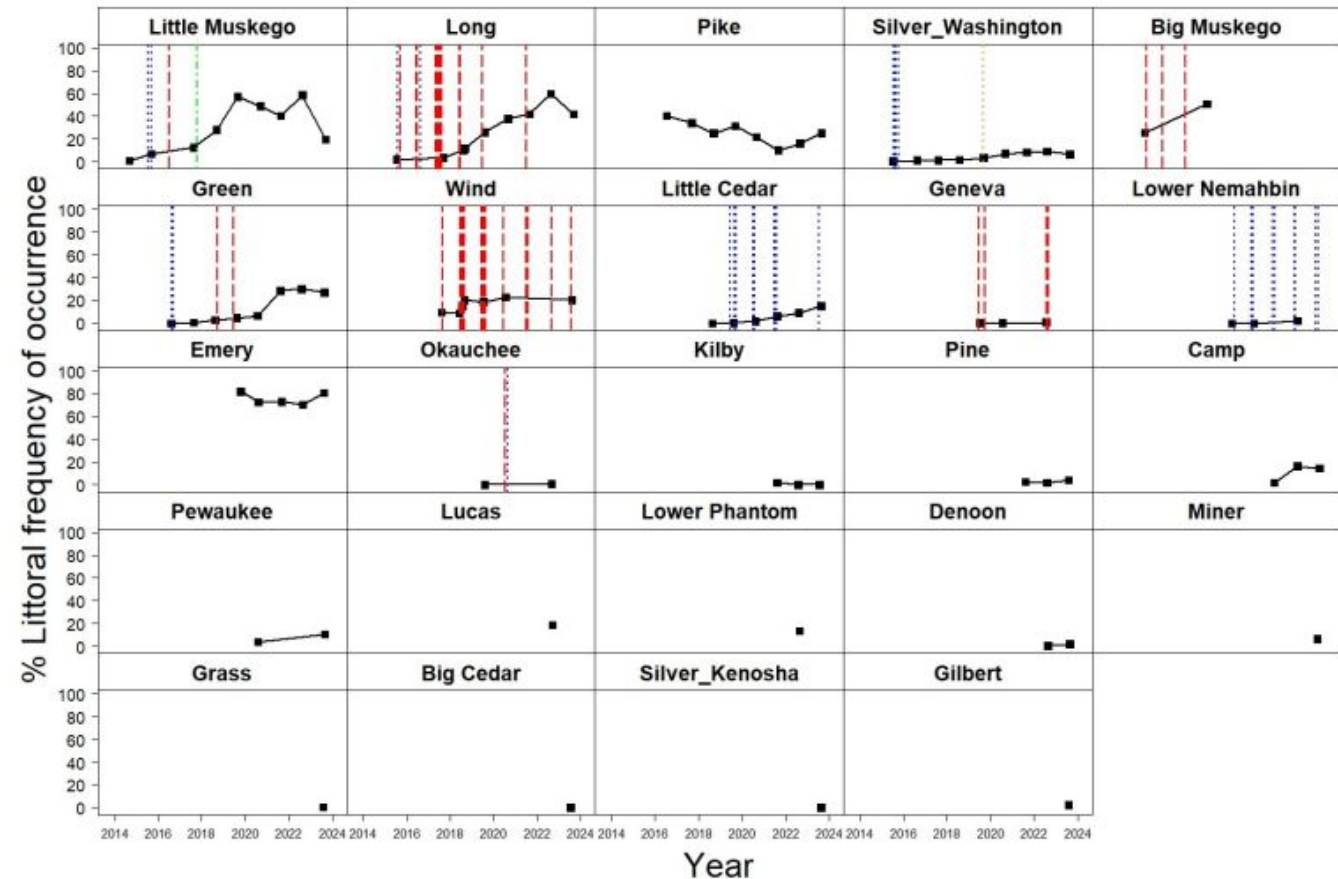


# Starry Stonewort in WI



- Thus far, no management techniques have been effective long-term in Wisconsin lakes
  - Some management attempts have increased SSW FOO or height of patches
- Pike Lake, Kilby Lake → no active SSW management
- Ideal scenario → SSW integrates into plant community without causing nuisance conditions
- Current WDNR policy → focus on monitoring, containment and prevention
  - Only attempt management in certain situations

### Starry Stonewort % Frequency





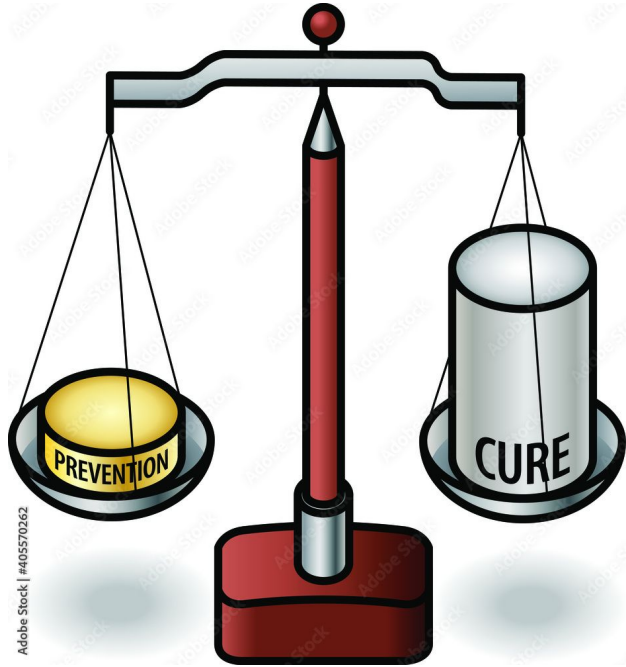






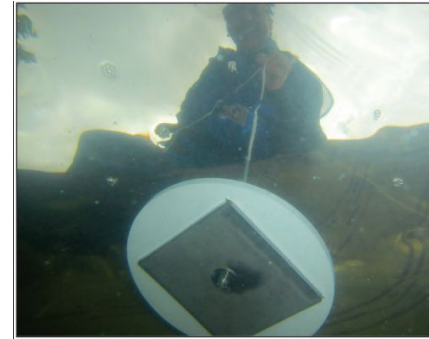


# The Big Picture



Adobe Stock | #405570262

Maintaining and restoring our waters and landscapes can reduce impacts even when we don't have other management options to an invasive species.



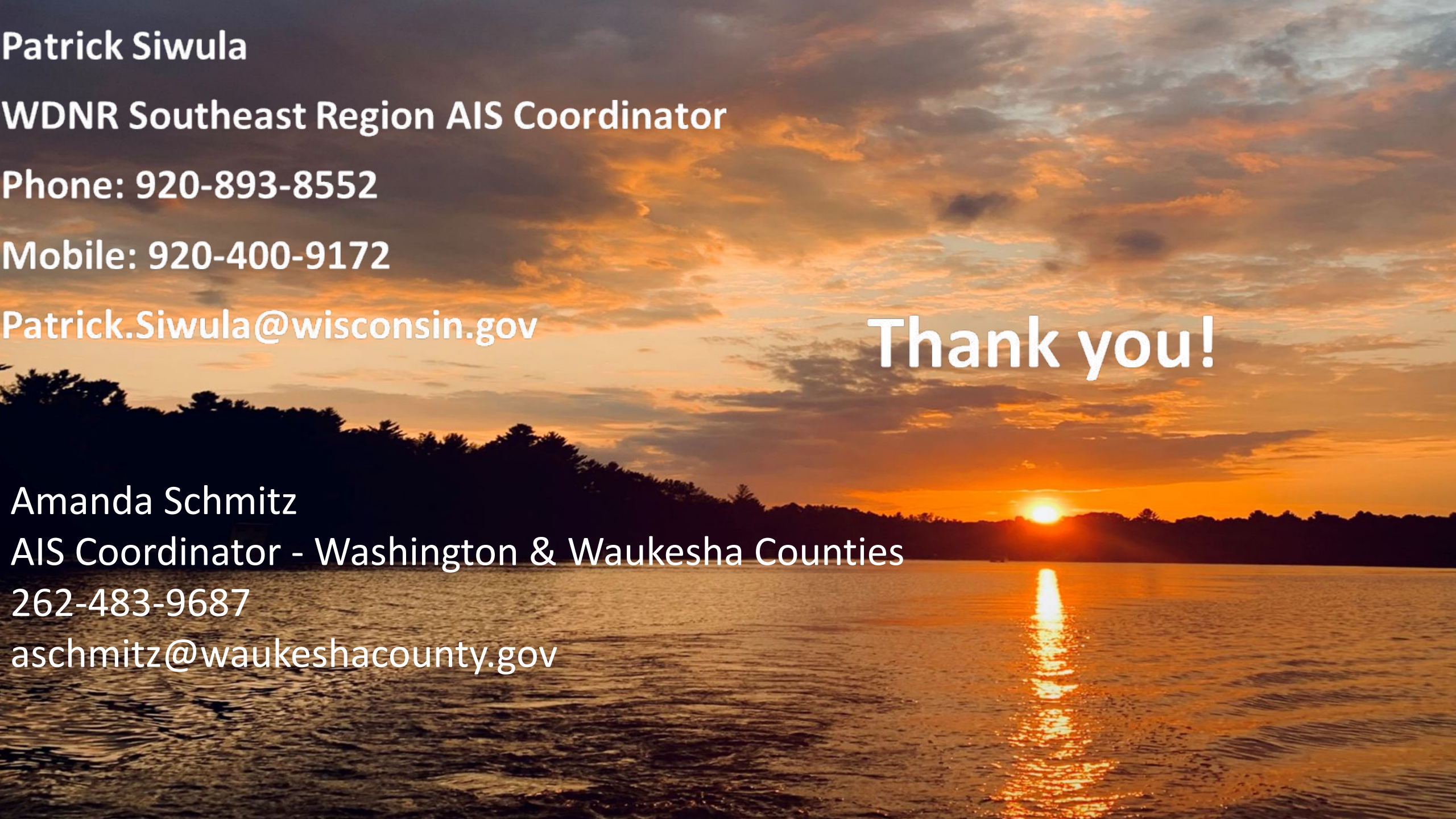


# It Takes a Village

- Wisconsin Lakes Partnership
  - DNR, UW Extension, Citizens
- Citizen / Volunteer Programs
  - Citizen Lake Monitoring Network
  - Clean Boats Clean Waters
  - Snapshot Day
  - Project RED
  - Purple Loosestrife Biocontrol
  - WAV monitoring
- **Over half of WI AIS monitoring data comes from citizen programs!**
- Lake Monitoring and Protection Network (Amanda Schmitz, Waukesha County)





A scenic sunset over a body of water. The sun is low on the horizon, creating a bright orange glow and a long, shimmering reflection on the water's surface. The sky is filled with soft, orange and yellow clouds. In the background, a dark silhouette of a forest line is visible against the bright sky.

**Patrick Siwula**

**WDNR Southeast Region AIS Coordinator**

**Phone: 920-893-8552**

**Mobile: 920-400-9172**

**[Patrick.Siwula@wisconsin.gov](mailto:Patrick.Siwula@wisconsin.gov)**

**Thank you!**

**Amanda Schmitz**

**AIS Coordinator - Washington & Waukesha Counties**

**262-483-9687**

**[aschmitz@waukeshacounty.gov](mailto:aschmitz@waukeshacounty.gov)**