Why Should We Care?

In the United States, costs associated with damage and control of invasive species is estimated at around $137 billion per year and the amount is increasing each year.

In Wisconsin, many industries are negatively impacted by invasive species including sport and commercial fishing, forestry, power companies and utilities. These expenses are passed on to Wisconsin consumers in the form of higher water and electric bills.

In 2001, Wisconsin Electric Power Company reported that they were spending $1.2 million per year in the control of zebra mussels alone.

Eurasian water milfoil can damage boat motors by clogging them. Invasive animals such as the rusty crayfish gobble up aquatic plants like underwater lawn mowers, reducing habitat for native fish at every stage of their life cycle.

What Can We Do?

The main way aquatic invasive species like zebra mussels and Eurasian water milfoil spread to new waters is often by hitching a ride on the boats and trailers of the very people who enjoy the water the most.

INSPECT your boat, trailer, and equipment.
REMOVE attached aquatic plants or animals
DRAIN water from boats and equipment
NEVER MOVE live fish away from a water body
DISPOSE of unwanted bait in the trash.
DON'T RELEASE animals into lakes or streams

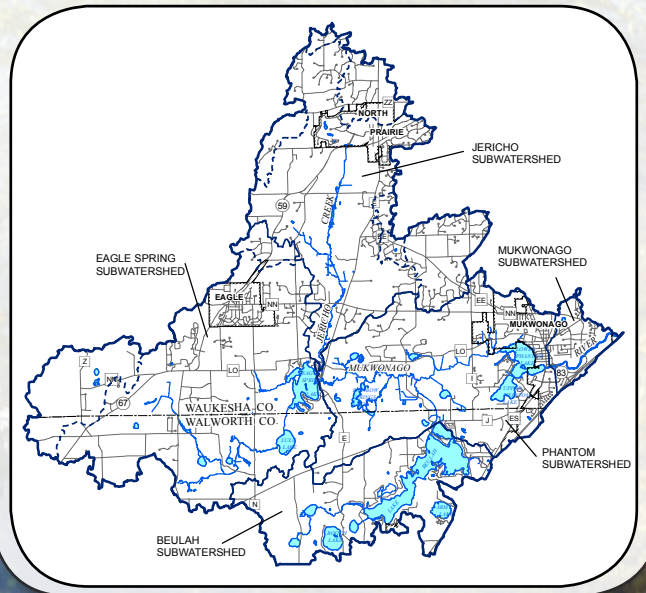
Mukwonago River Watershed

The Mukwonago River is home to over 50 different species of fish and 15 different species of freshwater mussels, including the endangered Rainbow Shell and the threatened Slippershell and Ellipse mussels. Only much larger systems have comparable levels of fish diversity.

The Mukwonago River watershed also features a diverse and extensive system of intact wetlands. These wetlands are one of the important reasons explaining why the Mukwonago River is known as one of the most biologically diverse and highest quality rivers in the state.

Due to its excellent water quality, minimal level of disturbance, and diverse habitat types, the river also supports a high diversity of waterfowl, reptiles, amphibians, insects, aquatic plants, and wetland types.

The increasing amount of invasive species in the watershed threaten this unique Wisconsin treasure.



Invasive Species of the Mukwonago River Watershed

Friends of the Mukwonago River

Non-Native Invasive Species in the Mukwonago River Watershed

Asiatic Clam - *Corbicula fluminea*

These mollusks have a yellowish brown or black shell with a blue or white interior. They are usually about one inch across but can grow up to 2 inches. There are very pronounced ridges that are evenly spaced along the shell.

The Asiatic clam can be easily spread by human transport. Asiatic clams are spread by water currents. They are also sold as a food item.

Why is it a problem?

- The Asiatic clam is capable of self-fertilization and one clam can lay up to 70,000 eggs a year.
- Because they are so prolific they compete with native species for food and space.
- Asiatic clams can cause major bio-fouling in power plants, water treatment systems and pipes.

Purple loosestrife - *Lythrum salicaria*

Purple loosestrife can grow 3'-7' tall, with up to 50 stems topped with purple flower spikes. Clipped plants grow back, and cut stems re-root in soil to produce new plants.

Why is it a problem?

This species grows in moist soils and shallow waters where it out-competes native wetland plants. This reduces nesting locations and food sources for local animals.

Zebra Mussel - *Dreissena polymorpha*

Zebra mussels look like small clams with a yellowish or brownish D-shaped shell, usually with alternating dark- and light colored stripes. They can be up to two inches long, but most are under an inch.

Why is it a problem?

- Zebra Mussels feed by filtering out most of the suspended microscopic plants, animals and debris in the water for food. This process can lead to increased water clarity and a depleted food supply for other aquatic organisms, including fish.
- Zebra mussels attach to the shells of native mussels in great masses, effectively smothering them.
- Zebra mussels are notorious for colonizing water supply pipes of hydroelectric and nuclear power plants, public water supply plants, and industrial facilities.

Eurasian Water-milfoil - *Myriophyllum spicatum*

This plant usually grows between 3 to 10 feet, but can reach as much as 33 feet in length. The stems are reddish-brown to whitish-pink. It forms dense mats on the surface of water bodies.

Why is it a problem?

- Invades lakes and rivers especially in areas that have been subjected to natural and manmade disturbance.
- Can form large, floating mats of vegetation on the surface of water bodies, preventing light penetration for native aquatic plants and impeding water traffic.
- Winter-hardy, able to overwinter in frozen lakes and ponds.

Curly-leaf pondweed- *Potamogeton crispus*

Curly-leaf pondweed has oblong, still, translucent leaves (4-10 cm long, 5-10 mm wide) have distinctly wavy edges with fine teeth and no leaf stalks. It tolerates fresh or slightly brackish water and can grow in shallow, deep, still, or flowing water.

Why is it a problem?

- Can become dominant due to its tolerance for low light and low water temperatures.
- Can form dense mats that interfere with recreational activities.
- The pondweed can cause an increase in algae blooms and then leave piles of dying crispus on the shores.