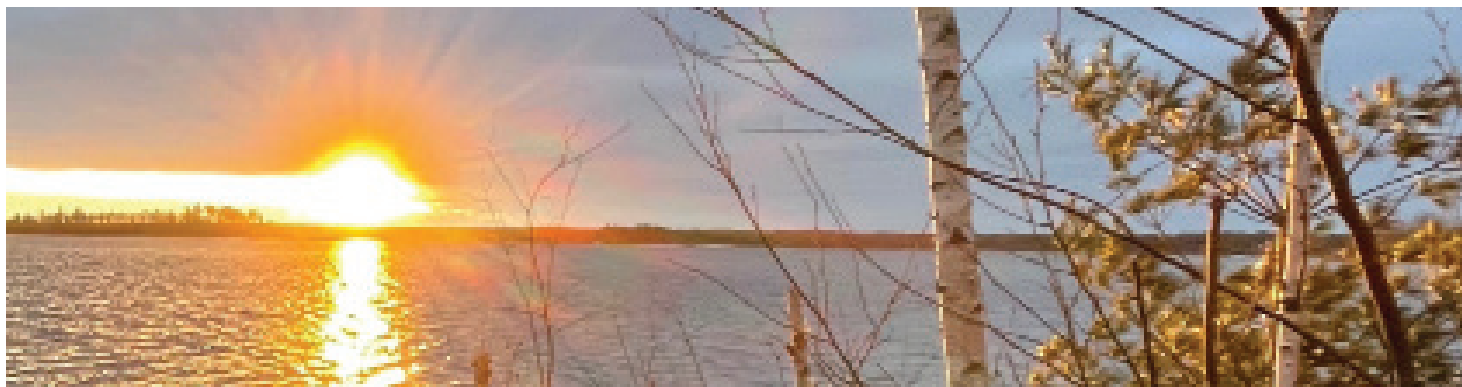
A scenic sunset over a body of water. The sky is filled with soft, horizontal clouds in shades of blue, orange, and pink. The sun is low on the horizon, creating a bright glow. The water reflects the colors of the sky. In the foreground, a silhouette of a duck is swimming, leaving a trail of ripples behind it. The overall mood is peaceful and serene.

# **Washburn County Waters Let's Keep Them Healthy**

**Washburn County Lakes and Rivers Association**

# Washburn County Waters

Let's keep them healthy



## Our County's water resources

Washburn County is rich in waters with many lakes and rivers for recreation, fishing, and wildlife habitat. Protecting these waters benefits all of us. This special publication shares simple things that we can all do to assure this richness is preserved for our families, future generations, and the flora and fauna that depend on clean water and healthy habitat.

## What WCLRA does

As a county-wide organization, Washburn County Lakes and Rivers Association (WCLRA) is an advocate to protect waters in many ways:

- Collaborating with partner lake and river associations and districts on special projects or issues
- Participating in efforts to prevent the spread of aquatic invasive species
- Publishing our "On the Waterfront" newsletter and sharing water protection articles with local media
- Sponsoring education programs for Washburn County students at Hunt Hill Audubon Sanctuary
- Monitoring county and state government issues affecting lake, river, groundwater, and wetland protection

## What you can do

Washburn County Lakes and Rivers Association encourages you to join us in practicing everyday, common sense actions that will help preserve our beautiful waters for generations to come. Here's a quick list, along with more ideas and advice in this brochure:

- Avoid shoreland activities that would cause erosion and impair habitat, particularly through runoff of water laden with sediment, nitrogen, and phosphorus
- Clean boats and gear when moving from lake to lake and after each use to avoid spreading invasive species
- Practice safe and considerate boating including observing slow-no wake zones

## Help protect and preserve

We invite you to join our county-wide association to support preserving and protecting Washburn County waters. We also encourage you to join the lake or river group protecting the waterbody where you live or one formed on your favorite lake or river. See the list of local associations and districts on our website, [wclra.org](http://wclra.org).

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Cover photo: Shell Lake's South Bay

Courtesy of Ann Sheldon

## The Next Fishing Hot Spot? It may be right out your back door

We are very fortunate that many of our lakes and rivers have good fishing in Washburn County. However, it's uncommon that one lake "has it all." Often some lakes are better for certain fish species than others. If you want to catch largemouth bass, northern pike, and panfish, almost every lake with public access will have them. In addition, the County has many lakes that are good for walleye, muskie, and smallmouth bass, and they are often just a short drive away. With so many great fishing opportunities, it pays to think ahead to keep fishing great. "As a fisheries biologist, this is part of my job," said Craig Roberts with Wisconsin DNR said. "We have three main tools to manage fisheries populations: fishing regulations, fish stocking, and fisheries habitat. We often focus on length/bag limits for fish or fish stocking, but fish habitat can be more important in the long term to have healthy fish populations."

### What is considered fish habitat?

One way to think about habitat is areas that provide for a fish's needs at each stage of life. Fish need areas where eggs can successfully hatch (spawning habitat), areas where young fish can find food and hide from predators (juvenile habitat), and areas where adults can get food and be protected from predators. In our area, three key habitats provide for all ages of fish: aquatic vegetation, wood, and rocks. If you are an angler, you know these habitats are good spots to catch adult fish. They provide key spawning habitats as well as shelter and food for young fish. For example, aquatic plants are spawning habitat for yellow perch, northern pike, and musky. Aquatic plants provide areas for panfish to feed and hide and also are feeding areas for pike, musky, and bass. While fish habitat is different on each lake, the lakes with the highest diversity of habitats often have more fish. Protecting habitat makes a lot of sense in the long term, as even stocked fish will need food and shelter to grow to a catchable size.

### Help keep habitat

Waterfront owners play a critical role in maintaining high quality habitats in a lake. While it may seem like a waterfront lot is such a small part of the lake, even small areas of habitat add up to benefit fish which then have many areas for food and shelter. The flip

side is also true: if habitat is removed from waterfront properties, it will result in fewer fish since there will be less area for food, shelter, and spawning. Waterfront owners can help in a number of ways. You can keep downed trees and branches in the water or add trees to the water through a DNR permit. Waterfront owners can help with aquatic plants by keeping them in the water and by having a shoreline rich with native plants. The shoreline provides food and shelter for young fish when it has aquatic plants along with abundant plants, shrubs, and trees on land. Keeping existing rocks in the water is critical to walleye spawning areas. These areas are very difficult to replace once they are lost.

Wisconsin DNR offers a program called Healthy Lakes, which has two great options to create fish habitat: fish sticks and shoreline native plantings. Read more about Healthy Lakes later in this booklet or check their website for more information: <https://healthylakeswi.com>.

## Get the Lead Out!

Did you know that one lead fishing sinker can poison a loon or other waterfowl? This is because loons routinely swallow pea-sized pebbles on the bottom of lakes. The pebbles pass to the stomach and help in digestion, like grit in the stomach of a chicken. When fishing sinkers are lost during fishing and drop to the bottom of the lake, they can be picked up by loons or by waterfowl like ringneck ducks and trumpeter swans. As the lead sinker or lure is exposed to the acids of the stomach and contacts the other pebbles, lead enters the bird's system and slowly poisons the bird. Eagles, osprey, and other aquatic birds of prey are also susceptible to lead poisoning from eating smaller creatures that contain lead.



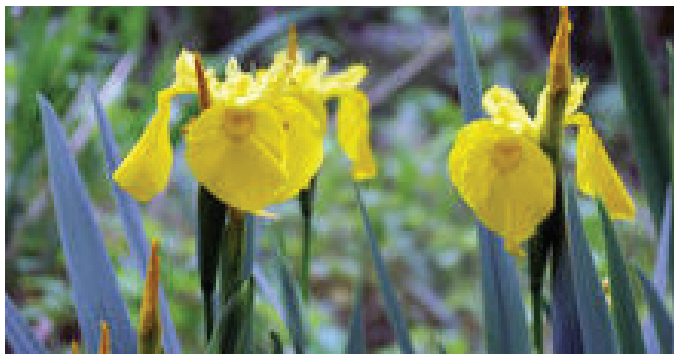
Get the lead out! Non-lead sinkers and other tackle made of non-toxic materials are available at most sports shops.

## Aquatic Invasive Species (AIS): A growing risk

Invasive species include plants, fish, and animals that are not native to our area, which grow quickly, are difficult to get rid of, and displace native species. “Invasives” upset the entire ecosystem and threaten the shelter and food sources for native animals. The main examples of aquatic invasives found in Washburn County include:

- Zebra mussels
- Eurasian watermilfoil
- Curly-leaf pondweed

Many other species are present in the Midwest and pose a threat to our waters. New Zealand mud snails, for example, are a major threat to stream and river habitat.



**Zebra mussels** (upper left) and **Eurasian watermilfoil** (upper right) are two dreaded in-water invasive species. **Yellow iris** (lower left) and **Purple loosestrife** (lower right) are found growing along shorelines.

### Do what's right and required

Both property owners and visitors play a key role in controlling invasives before they get established. These invaders can spread through water transported from one spot to another. One of the complicating factors is that the small size of zebra mussel larvae and spiny water fleas makes it impossible to see them until they get well established. Therefore, Wisconsin law requires that anyone using our waters take these steps:

- **INSPECT** all boats, motors, trailers, and equipment.
- **REMOVE** all attached aquatic plants, animals, and mud.
- **DRAIN** all water from boats, vehicles, and equipment.
- **NEVER** move plants or live fish away from a waterbody. You can use leftover minnows again on the same water body or on other waters if they are transported without adding any water or fish.



Washburn County Ordinance requires use of decontamination equipment before entering and leaving boat landings (where provided) to stop the spread of invasive species. Burnett, Polk, Bayfield, Barron, and Sawyer counties have similar ordinances and requirements. Lakeshore property owners can help as well by ensuring service providers for installing and removing docks and boats have cleaned equipment between lakes.

**Google “Washburn County AIS Story Map” to find locations of invasive species in the County.**

## Be Safe on the Water

Boating is an important part of shoreland ownership and recreation. Use of our waters is a public privilege available to everyone. But, of course, exercising this right carries with it responsibilities to operate watercraft safely with respect for other people, for wildlife, and for the waterway itself. Reckless use of boats endangers all of these, and therefore, it is important to be aware of the laws and responsibilities for boating.



### Know the law

The State has published a useful pamphlet, *Handbook of Wisconsin Boating Laws and Responsibilities*, found online at <https://www.boat-ed.com/wisconsin/handbook/> and in print at DNR offices. Some highlights include:

- Children under 12 years of age may operate a boat only if accompanied by an adult and may not operate a personal watercraft at all
- Boats must be operated safely and must be licensed
- Life jackets are required
- Running lights are needed to assure safety if operating at night
- It is unlawful to drive a boat or waterski when under the influence of alcohol

### Safe Speed and Distances

- All watercraft must operate with no-wake (the slowest speed at which you can still steer your boat) within 100 feet from shore, docks, and swim rafts. This is especially important for “wake boats” which create high and wide wakes.
- For personal watercraft, the slow-no-wake distance is 200 feet from shore. Excessive speed near the shore creates erosion and can harm docks or other boats, (especially when water levels are high), and poses a threat to safety.
- Avoid getting close to loons and other wildlife. Loons nest in shallow waters and are easily disturbed.
- Be aware that some towns may have additional requirements for boaters, for example, designated quiet hours, no-wake any time or non-motorized boating only.

## Buffers Are Better

Preserving trees and native vegetation should be a priority for all property owners. Viewing corridors for lake-front property, under current statute, are permitted to be 35 ft for every 100 ft of shoreline frontage. Equally important is establishing and maintaining a buffer to help preserve water quality.

### What is a buffer?

A buffer is an area of native vegetation along the shoreline which includes a combination of native trees, shrubs, flowers, and grasses. The wider the buffer, the greater the protection for shoreland property and the water. Ideally it should extend at least 35 feet above the ordinary high-water mark.

### Buffers offer many benefits

Buffers not only protect the fragile shoreline, they provide a pleasant view and help protect property value. They provide these many benefits:

- Filtering out pollutants and runoff that degrade water quality. For example, nitrogen, phosphorus, and soil particles in yard runoff feed lake plants and increase algae blooms
- Protecting shorelines by limiting erosion due to boat wave action and heavy wind and rain
- Providing habitat for a wide variety of wildlife such as spawning grounds for frogs and fish
- Helping absorb water in times of flooding and releasing water in times of drought
- Deterring geese that love manicured lawns since geese do not come into tall grasses and vegetation along the shoreline

### Go native

Buffers don't have to be a lot of work. A shoreline will revert to its natural state eventually by just doing nothing. Give shorelands a little help by planting a buffer using native trees, shrubs, flowers, and grasses. Why native plants? They belong there. Native plants have been growing and thriving in Wisconsin for hundreds of years. They are well adapted to the climate and don't require extra watering, fertilizer, or herbicides. Natives can better withstand competition from invasive, non-native plants. Natives are also the best attractors of birds, butterflies, and crucial pollinators.



There are native plants suitable for all lake situations; they can be planted in the water, at lake edge, in wet soil, and in drier upland soils.

For information and help with shoreland restorations and buffers contact the Washburn County Land and Water Conservation Coordinator. For information on building setbacks and clearing regulations, contact the County Zoning office.

## Hooray for Native Aquatic Plants!!

Although a weed is often defined as a plant that's growing where it isn't wanted, it is doubtful any turtles, frogs, toads, fish, or aquatic insects would consider the native plants in our lakes, rivers, and streams to be "weeds." We shouldn't either! Plants are very important to the health of our waters for biological diversity, food for wildlife, providing oxygen from photosynthesis, creating habitat for many creatures, helping sustain and improve water quality, and keeping lake and river bed and bank material in place. The flowering plants are important for pollinators and the beauty we enjoy when we explore a local lake or river.

In fact, beds of native plants are considered to be "critical habitat areas," as are spawning reefs and other natural aquatic features. Let's protect these important features of our lake and river biology by going slowly around plant beds, and not uprooting them with out-board motors and boat wakes.

For more information on aquatic plants go <https://dnr.wisconsin.gov/topic/lakes/plants>



For people living along a lakeshore or riverfront, the Wisconsin Healthy Lakes and Rivers program offers five simple, inexpensive and long-lasting projects to sustain or improve habitat on shoreland property and help maintain water quality.

If you have a natural shoreline, the best thing you can do is to leave it that way. But if your shoreland has been developed or disturbed over time, the Healthy Lakes and Rivers program has a set of five “Best Practices for Healthy Lakes and Rivers” that can improve on-shore and near-shore habitat, provide wildlife cover, and improve water quality. Most are fairly simple to design and install. Materials and assistance can be found at [healthylakeswi.com](http://healthylakeswi.com).

Three of the practices are water diversions, rain gardens, and rock infiltration areas designed to capture runoff from roofs, lawns and driveways, and allow space for rainwater to seep back into the ground, rather than running straight to a storm sewer or flowing directly to a waterway. These practices are good ideas for yards that aren’t on the shoreline as well. They help filter contaminants out of runoff to help improve water quality. Rain gardens also have native plants that can tolerate both dry and wet weather, while providing beautiful blooms and insect habitat.

Another “blooming” practice that helps with water quality and habitat is a “buffer zone” along the shore where native plants are either planted or allowed to grow by not mowing close to shore. Shoreland buffers can have beautiful flowers, attract birds and wildlife, provide privacy, and like the other practices, filter rainwater flowing toward the lake or river. Native flowers and shrubs also provide food and shelter for native insects, and are relied on for pollination and as a food source for returning spring birds.

Another practice, “fish sticks,” takes more time and planning. “Fish sticks” are trees anchored in the water along the shore for fish, insect, wildlife, and bird habitat. They can also help prevent bank erosion. Some lake associations in our county have completed fish stick installation projects, and more are currently planned.

## Score Your Shore

Want to find out how your shoreline vegetation, waterfront activities, and landscaping either protect or affect the lake or river where you live? The Wisconsin Healthy Lakes and Rivers program provides a shoreland evaluation tool called “Score My Shore.” This tool walks you through questions about the physical aspects of your lake or river property, as well as how you manage it. The tool rates how well you are protecting water quality and shoreline habitat. Finally, the tool provides recommendations for specific projects that could not only improve your score but help your lake or river, too. You can decide whether to register for an account or answer the survey questions anonymously. Please try it out!

**You can find the survey here:**  
[survey.healthylakeswi.com/](http://survey.healthylakeswi.com/).

### Our Rights and Responsibilities in Public Waters

Wisconsin’s Public Trust Doctrine applies to all navigable waters, which are defined as any waterway on which it is possible to float a canoe or small watercraft at some time during the year. The Public Trust Doctrine protects the people’s rights to:

- transportation and navigation on waterways.
- protection of water quality and aquatic habitat.
- recreation, including boating, fishing, hunting, trapping and swimming in waterways.
- enjoyment of natural scenic beauty while on the water.

[https://dnr.wisconsin.gov/topic/Waterways/about\\_us/whyRegulate.html](https://dnr.wisconsin.gov/topic/Waterways/about_us/whyRegulate.html)

## Ensure Safe Drinking Water Test your well

Protecting groundwater quality and quantity is vital to assuring safe and healthy drinking water for everyone. Assuring private wells are properly-constructed and maintained, being careful about household chemical use and storage, and properly maintaining septic systems are simple ways to protect groundwater from contamination at our waterfront properties.

### Recommended tests

Wisconsin DNR recommends that private wells be tested annually for coliform bacteria and nitrates.

Coliform bacteria tests are an easy way to determine whether your water supply is free from harmful bacteria. Coliform bacteria are common in soils and are not generally considered harmful to health, however; they are also found in human and animal waste.

A properly constructed well should not contain any coliform bacteria; presence of these bacteria in well water means that a pathway exists for other potentially dangerous pathogens such as *E. coli* (a type of fecal coliform) to enter the water supply. If pathogens are present, a variety of illnesses could occur from drinking the water. You should test your well water any time you notice a sudden change in color, odor, or taste.

In addition to coliform bacteria, there are a number of other contaminants to consider testing. Some of these include human-related contaminants such as nitrates and pesticides or naturally-occurring contaminants such as arsenic.

### Testing resources

The local UW-Extension office has water test kits available. The office is located at 304 2nd St. in Shell Lake. Test kits can be picked up in the office lobby on weekdays during office hours. The kits include instructions, costs, and contact information for the Water and Environmental Analysis Lab in Stevens Point.

## Maintain Your Septic System

The Washburn County Zoning Department provides the following guidelines for keeping your septic system working properly.

Septic tanks must be pumped to remove accumulated solids every three years (or as needed based on inspection) to prevent premature failure. The frequency of pumping depends on several factors: size of the tank, usage, and the volume of solids in wastewater. A tank requires pumping when it is 1/3 full of scum and sludge. Holding tanks need to be pumped regularly when nearly full. Contact County Zoning or a professional septic servicing company for assistance in determining if system maintenance, repairs, or replacement are needed. Ways to prolong the life of septic systems:

- Install water-saving devices and be on-guard for leaky fixtures
- Practice water conservation to reduce the amount of liquid going into the drainfield or mound
- Have the tank(s) pumped and inspected regularly
- Keep surface water away from the septic system area
- Keep driveways, parked vehicles, and buildings off the drainfield area. Soil compaction can cause premature failure by restricting evaporation and soil infiltration

It is important to understand what can and cannot be put into the septic tank. Do not flush vegetable trimmings, coffee grounds, cigarette butts, personal hygiene products, diapers, and baby wipes, etc. Do not use biological and chemical additives; they are not needed to aid or accelerate decomposition.

If you think your system may be malfunctioning, you can have a dye test performed. Contact Washburn County Zoning at 715-468-4690 for more information.

