

## What is a shoreland buffer?

Stewardship Series

horeland buffers provide a link between the worlds of water and land. They are essential for the existence of many plants and animals and to the health of our lakes and streams. These places are called many things...riparian area, buffer zone, shorelands, and shoreline.

## Buffers – a close-up look

The dictionary describes a buffer as a shield or cushion to reduce shock or the danger of interaction. The trees and plants that make up a shoreland buffer shield our waters and the creatures that live there from human activities. The impacts on water quality, habitat, and aesthetics are three criteria we often use to determine the extent and nature of a shoreland buffer. The proper buffer size is unique to each site and is a choice people make depending on what they want a buffer to accomplish. We commonly consider a buffer to be adequate if it starts in shallow waters and extends onto the land far enough to provide an effective shield and good habitat.

Think of a shoreland buffer as a living ecosystem. When intact, these margins support a full complement of plants, insects, fish, birds, amphibians, reptiles, and mammals. The soils and plants that make up a buffer also filter nutrients and pollutants before they wash into lakes and streams. Finally, a shoreland buffer slows the movement of water and acts like a sponge, releasing water gradually during dry periods. Studies show that most people consider natural shorelands among the most pleasing vistas on the Wisconsin landscape.

Buffers include both shallow waters and adjacent uplands. In the waters out from

shore you may find submerged aquatic plants like coontail and pondweeds. Closer to shore, plants such as water lilies float on the surface. On the water's edge, aquatic plants like rushes and pickerel weed emerge and fallen trees provide cover. As you move onto the land you may notice different layers of vegetation, from low ground cover up to shrubs and trees. On low wet shores you may recognize water-loving plants like cattails and, extending far inland, trees such as ash, cedar and tag alders. On steeper 🔬 drier shores, stands of maple, birch, or oak may dominate, with an undergrowth of grasses and ferns.

**Buffers:** A Legal Definition

Wisconsin laws safeguard waters and the shoreland buffers that shield them. In the 1960s the state legislature established the Wisconsin Shoreland Management Program. It directed the Department of Natural Resources to adopt an admin-

istrative rule (NR 115) to provide guidelines for county

shore-



land protection ordinances.

The rule describes a shoreland buffer as a strip of land extending 35 feet inland from the ordinary high water mark (OHWM),

where no more than 30 feet in any 100 feet of shoreline may be clear cut to remove

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trees and shrubbery.

Other state and federal agencies have defined standards for shoreland buffers in agricultural and forest areas. These standards apply in addition to the NR 115 requirements. For more information, check with a county or DNR forester, or with the Natural Resources Conservation Service (a part of the U.S. Department of Agriculture).

## What is a shoreland buffer?

aintaining a 35-foot buffer on our shores is the law, but ultimately the fate of our waters depends on a sense of environmental responsibility and individual actions. Owners and users of waterfront property have the potential to directly improve or impair Wisconsin's legacy of clean water. Preserving or improving a shoreland buffer can also benefit the landowner in these ways:

**Good "cents"** – Leaving native vegetation in place can be less expensive and less time-consuming than maintaining a lawn. Buffers also prevent destructive and expensive shoreland erosion and filter nutrients (like fertilizers) from the water. Ultimately, keeping the water clean can be far less costly than cleaning up a damaged lake or river, and lots along clean waters

## Things to know about Wisconsin's Shoreland Management Program

- Wisconsin laws require counties to adopt and enforce local shoreland protection standards.
- The regulations apply within 1,000 feet of the ordinary high water mark (OHWM) of navigable lakes, ponds, and flowages and within 300 feet of navigable rivers and streams, or to the landward side of the floodplain of rivers and streams, whichever distance is greater (s.59.692 (1) Wisconsin statutes).

A significant body of research suggests that a 35-foot shoreland buffer is inadequate.

• A significant body of research suggests that a 35-foot shoreland buffer is inadequate for many buffer functions. Accordingly, many Wisconsin counties have classified their waters based on size, biological indicators and sensitivity to development and have established greater building setbacks and buffer requirements.

framed by natural vegetation often have the highest property values.

**Good neighbors** – Diverse native vegetation on shore and fallen trees left in the water can improve fishing by providing and shading shallow-water habitat. Vegetation furnishes cover, food, nesting places and travel corridors for wildlife, so you and your neighbors can enjoy a variety of butterflies, birds, amphibians and mammals. **Peace and quiet** – Buffers can provide screening and privacy from neighbors and recreational lake users. Trees and shrubs around your property can muffle the noise of gas-powered tools, motor boats and personal watercraft. Trees, shrubs and tall grasses discourage unwanted species (like geese or purple loosestrife) from invading your property.

Additional sources of information can be found in the following publications:

Lakescaping for Wildlife and Water Quality (9-53); Landscaping for Wildlife (9-15); The Water's Edge: Helping fish and wildlife on your lakeshore property – Minnesota Department of Natural Resources, 1-800-657-3757.

Life on the Edge: Owning Waterfront Property; and Through the Looking Glass...A Field Guide to Aquatic Plants – Wisconsin Lakes Partnership, (715) 346-2116.

Shoreline Plants and Landscaping (GWQ014); The Shoreland Stewardship Series...A fresh look at shoreland restoration (GWQ027) – University of Wisconsin–Extension Publications, (608) 262-3346.

Shorelandscaping: A guide for waterfront property owners – available from county UW–Extension offices or Wisconsin DNR area offices.

USDA Natural Resources Conservation Service web sites: http://www.nhq.nrcs.usda.gov/CCS/buffers.html http://www.nhq.nrcs.usda.gov/CCS/BufrsPub.html

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