

Setting A Good Example

Local Innovation in Shoreland Management

By Susan Tesarik, Education Director, Wisconsin Lakes

Over the years, many counties have upgraded their shoreland zoning rules to be more protective than the statewide minimums required by state law. While recent changes to state law increase some development standards (such as capping impervious surface areas on waterfront lots and requiring mitigation to offset negative effects of certain developments very close to the water), there already is a rich set of experience among Wisconsin counties in implementing more progressive shoreland development standards.

To date most of the counties that have completed classification projects have chosen to address shoreland development concerns and adopted stronger local shoreland regulations. Some counties are using their classification projects to guide watershed and countywide lake planning efforts as well.

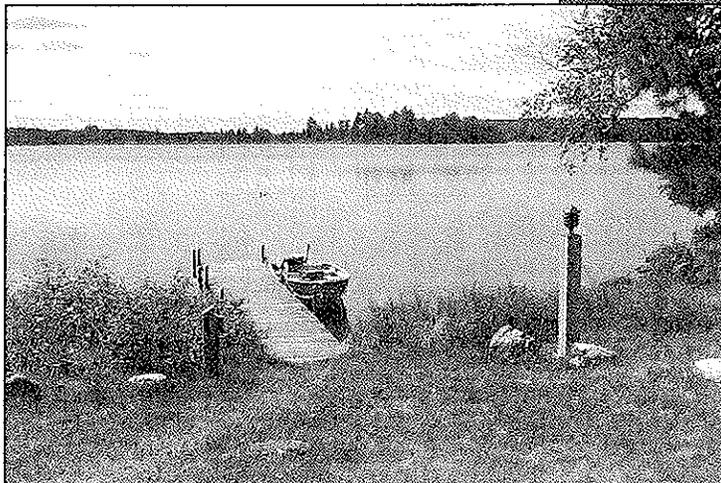
Thirty-three counties, mostly in the lake-rich areas of Northern Wisconsin, have grouped their waters according to common characteristics and are using their classification systems to better manage those waters. Most counties have tailored shoreland development standards (such as lot sizes, structure setbacks and buffer areas) to better protect the most pristine and sensitive waters, while leaving more basic standards on waters that are already heavily developed.

Statewide minimum shoreland zoning rules for counties are in ch. NR 115, WI Adm. Code. Changes to NR 115 went into effect Feb. 1, 2010. All counties will need to review their shoreland zoning ordinances for consistency with the new rule. Counties have until February 1, 2012 to update their shoreland ordinances to be consistent with or exceed the new standards identified in NR 115.

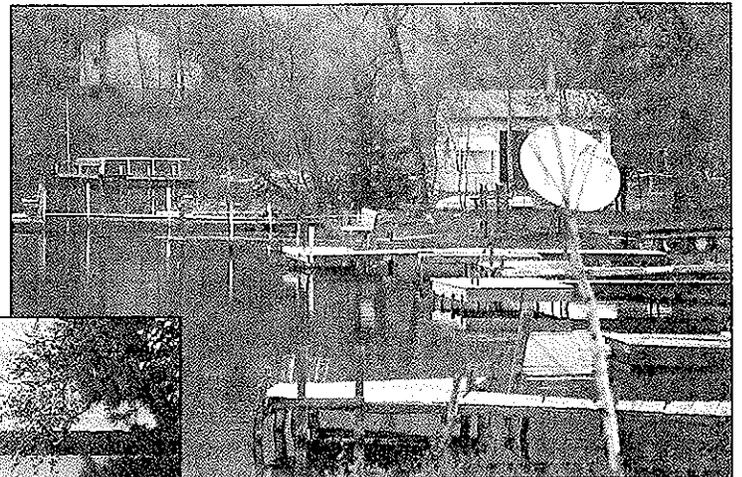
County Lake Classification

Local innovation in shoreland zoning over the past decade has been fostered by lake classification grant funding offered through the Department of Natural Resources (DNR) Lake Protection Grants Program. These grants help counties inventory surface waters and then use that information to design and implement local land and water resource management programs.

Classification systems have been adopted in 17 counties, with different shoreland zoning rules for each water class — ranging from very protective to the status quo of statewide



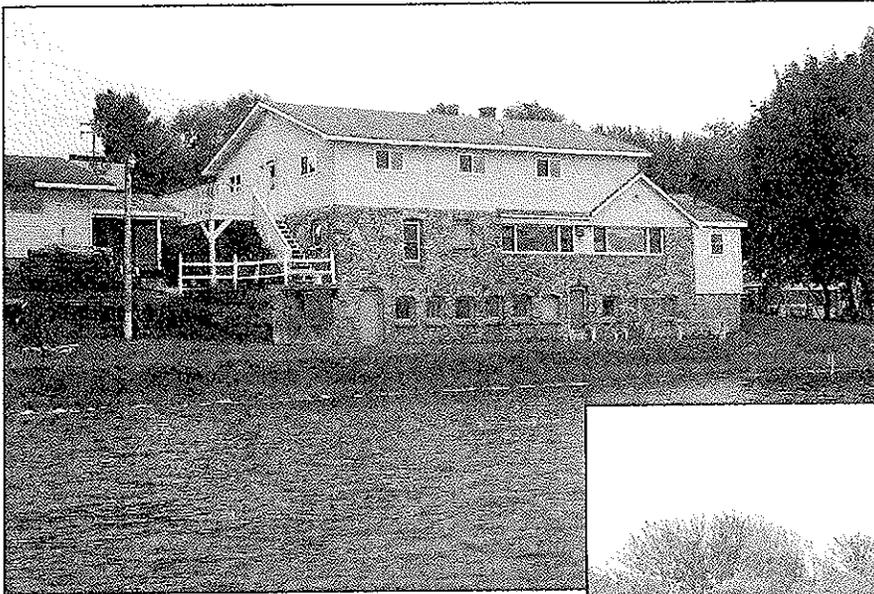
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R. Korfh

Above is an example of a heavily-developed shoreline.

To the left is an example of a well-managed shoreline using native plants as a buffer between the land and the water. This lake also appears to be less developed.



To the left you see a lakefront property that includes a considerable amount of impervious surface. The structure is also extremely close to the water's edge.

minimum rules. A few more counties are currently working on classification projects that may include significant shoreland zoning upgrades when completed, and a few others have adopted significant shoreland zoning upgrades without a classification system.

Counties are successfully using many innovations in their shoreland zoning rules, such as performance standards, impervious surface area caps, and mitigation. A few examples follow.

Impervious Surface Area Standards

Impervious areas are hard surfaces such as pavement, buildings, driveways and compacted soils that prevent infiltration of water, increasing the amount and velocity of runoff to lakes and streams. As we discussed in the last issue of *Lake Tides*, impervious surface area limits are one of the new standards in NR 115. Counties will have some flexibility in determining how to administer this new standard in their shoreland ordinances.

Approximately 21 counties currently address impervious surface areas for some or all shoreland lots. Some have set an impervious area cap on a per lot basis: for instance, the total square footage (in ground floor area) of all structures on any shoreland lot cannot exceed 20% in Sheboygan County. Waupaca County requires that at least 75% of a shoreland lot remain in vegetative cover.



Below is an example of how natural habitat can minimize runoff from impervious surfaces to the lake.

R. Korth

Sawyer County's shoreland ordinance states that the maximum total area of impervious surfaces shall not exceed 15% of a total shoreland lot area within 300 ft. of the ordinary high-water mark (OHWM). The limitation on impervious surfaces may be increased to no more than 25% only with a Conditional Use Permit. The limitation on impervious surfaces located more than 300 feet from the OHWM may be increased to no more than 30% only with the submission and approval of a Rainwater/Snow Run-off Retention Plan.

Counties are successfully using many innovations in their shoreland zoning rules, such as performance standards, impervious surface area caps, and mitigation.

Combining a percentage limit with a square footage limit is one way to prevent very large areas of impervious surfaces on large lots. For example, in Price County no more than 15% or 10,000 square feet, whichever is less, of the area located within 200 feet of a navigable lake, river, or stream of any lot may be impervious. The impervious surface limit may be exceeded if a stormwater management plan shows that there will be no increase in

(Continued on page 12)

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stormwater discharge from the lot as a result of the proposed construction for a specified storm event.

Bayfield County limits impervious surfaces on shoreland lots within 300 feet of the OHWM to no more than 4,500 square feet or 15% of the lot area, whichever is greater. To exceed this limit, a performance standard of no increase in storm water discharge from the lot development must be met. Others have refined their standards to include separate limits for buildings and other hard surfaces. For example, in Langlade County no more than 15% of a shoreland lot within 200 feet of the OHWM may be covered by buildings, and no more than an additional 5% may be covered by other impervious surfaces.

Lincoln County varies dimensional standards for shoreland development for three classes of lakes and rivers. Larger lot sizes, frontage widths, building setbacks, and buffer area requirements are required on their most sensitive waterbodies. Waterbody class also determines impervious surface coverage limits in Langlade:

- 15% of the lot can be impervious on high sensitivity waters,
- 18% on moderate sensitivity waters, and
- 20% on low sensitivity waters.

Similarly, on Class 1 waters in Washington County, principal structures cannot cover more than 15% of the lot area, and the total amount of impervious surfaces cannot exceed 30% (Class 2 and 3 waters have different impervious surface area limits).

Mitigation

Mitigation is another standard in NR 115 that counties will have flexibility in administering at the local level. While it's a new requirement in the statewide minimum standards, a number of counties have experience with mitigation requirements already in their ordinances. Mitigation offers reasonable choices for property owners to improve infiltration of runoff, restore shoreline buffer functions, or take other measures to offset development impacts in exchange for exceeding the 15%

impervious surface area cap, expansion of structures closer than the required shoreline setback, and development on lots that do not meet current size requirements.

To increase the flexibility and acceptability of mitigation many counties allow property owners to choose mitigation measures from a list of options with point values assigned to them. Counties set the number of mitigation points required for proposed activities (proportional to the amount/degree of impacts from the proposed project), and then allow landowners to choose from a menu of mitigation options to obtain the necessary points.

For example, Waupaca County uses a menu approach to mitigation which first requires privately owned wastewater treatment systems to be evaluated and upgraded as needed to comply with current code, and that erosion and stormwater control practices be implemented. The county then provides a menu of mitigation options— with point values assigned to each— from which landowners choose practices up to the total number of required points. Other practices to choose from include:

- restoring shoreland and sideyard buffer areas (points vary by amount of area restored to natural vegetation),
- removing accessory structures within the setback area,
- using exterior building materials that blend with natural shoreland vegetation,
- removing artificial sand beaches,
- replacing seawalls for shoreline protection with bioengineering techniques, or
- other practices as agreed upon by the Zoning Department.

Polk County gives us another example of a flexible mitigation standard. In response to property owners' need for flexibility in development standards, their ordinance includes mitigation options that take into account unique property characteristics.

If a property owner wishes to improve or expand a nonconforming structure or increase a lot's impervious surface area within 300 ft.

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Shoreland Development Guides and Technical Assistance

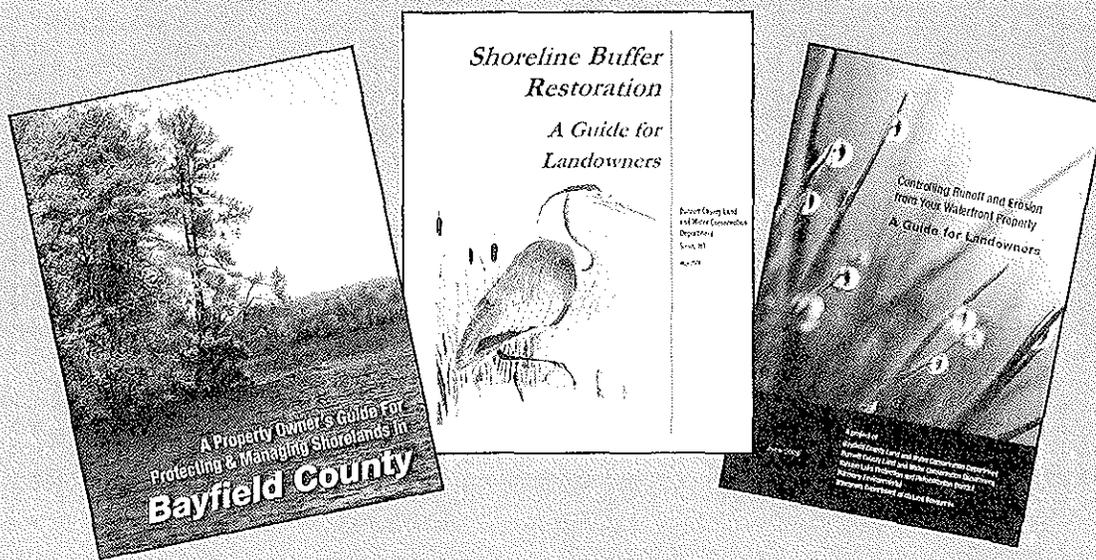
Several other counties have also created shoreland development guides after adopting significant shoreland zoning changes. These guides are colorfully illustrated booklets that simply and visually describe shoreland zoning and land development rules. The guides also offer tips on lake-friendly waterfront living, such as:

- ◆ Ways to add beauty to yards, attract beneficial wildlife, and deter nuisance wildlife.
- ◆ Simply answering the question, "Why do we have this in our shoreland zoning ordinance," helps explain the benefits of sound development practices.

Many counties also have active shoreland restoration technical assistance programs. They are largely a result of shoreland zoning upgrades that have strengthened shoreland buffer standards or set mitigation requirements in exchange for permitted expansion of nonconforming structures or reduced building setbacks on substandard lots. In other cases, counties have developed educational programs to encourage waterfront property owners to voluntarily restore natural shoreland vegetation.

Activities include:

- ◆ Demonstration sites in public parks.
- ◆ Tours of restorations on private properties.
- ◆ How-to manuals or guidebooks for property owners. These are tailored to local conditions with lists of appropriate native plant species, places to get materials, etc.
- ◆ Workshops to provide training and updates for contractors, landscapers, and developers about appropriate erosion control methods in shoreland areas, restoration techniques, and mitigation requirements associated with county zoning ordinances.
- ◆ County staff to assist landowners with site planning, design, and appropriate plants to use.
- ◆ Cost-sharing programs that provide financial incentives for landowners to install shoreland restoration projects.



(Setting a Good Example continued from page 11)

of the OHWM, mitigation is required. The simplest option is to limit the lot's impervious surface areas to 15% and restore a shoreland buffer area so it meets the ordinance standards. However, if that doesn't work for a property owner, they can instead calculate other ways to achieve compliance with the Land Use Runoff Rating (LURR).

The LURR calculates the amount of stormwater runoff under various types of land cover, slope, and soil types. Polk County's target number is 69, representing the allowable runoff from developed lots. Higher LURR

numbers indicate that too much runoff is being generated on the lot and corrections need to be made to either intercept the runoff (such as retention ponds or diversions) or improve the land cover.

LURR, choose mitigation options, and better understand other development rules.

Making It Work for Your County

If you are hoping to emulate some of the aforementioned standards in your shoreland zoning rules, we suggest you contact that specific county zoning office. You can also contact Susan at the Wisconsin Lakes office if you have questions about the process.

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Find out what lake organizations have done in the way of shoreland restoration and protection by checking out the *Lake List* on the UWEX Lakes web site. Just go to www.uwsp.edu/cnr/uwexlakes and click on Lake List in the left column. You can then choose "Shoreland Restoration/Protection" as one of the management activities, and see what is listed in the directory. If the lake organization you belong to should be included, but is not there, tell us by emailing uwexlakes@uwsp.edu or calling 715-346-2116. ☺

NR 115 Resources

Looking for resources regarding NR 115? Look no further! Go to the "Shorelands & Shallows" area of the UWEX Lakes web site and click "NR 115 Resources".

www.uwsp.edu/cnr/uwexlakes

To help implement the ordinance changes, Polk County created a shoreland property owners handbook to help people calculate the

Get Involved in AIS Prevention – Attend a Workshop



'Tis the season for aquatic invasive species (AIS) volunteer opportunities! If you're interested in learning more about how to monitor your lake for AIS or would like to share AIS prevention information with others, consider attending a Citizen Lake Monitoring Network workshop and/or a Clean Boats, Clean Waters workshop. Participating in either of these trainings is FREE, and you'll learn more about AIS and how you can take action to protect Wisconsin lakes!



Find out where workshops have been planned so far by visiting the links below.
CBCW schedule: www.uwsp.edu/cnr/uwexlakes/cbcw/workshops-schedule.asp
CLMN schedule: www.uwsp.edu/cnr/uwexlakes/clmn/schedule.asp

You can also check the online Lakes Calendar at www.uwsp.edu/cnr/uwexlakes for these workshops and other lake related opportunities.