



Shoreland Mitigation

Lessons from a Mandatory Shoreland
Protection Ordinance

Langlade County

Land Records & Regulations

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Quick Overview

- Lakes – 843
- Rivers and Streams – 225
- Other Trout Streams– 182
- Total Acres of lakes - 8,864
- Total Mileage of River - 914
- Total Acres of Wetland – 110,000





Langlade County Zoning Ordinance

- Classification of waterways determine the extent of regulations
 - Ranking waterways by sensitivity to development and regulating them accordingly
 - Created new regulations in 1998 and revised in 2002



Regulations for Lake Classifications

Class One

- 125 ft setback for structures
- Minimum 120,000 sq ft lot
- Boathouses are prohibited

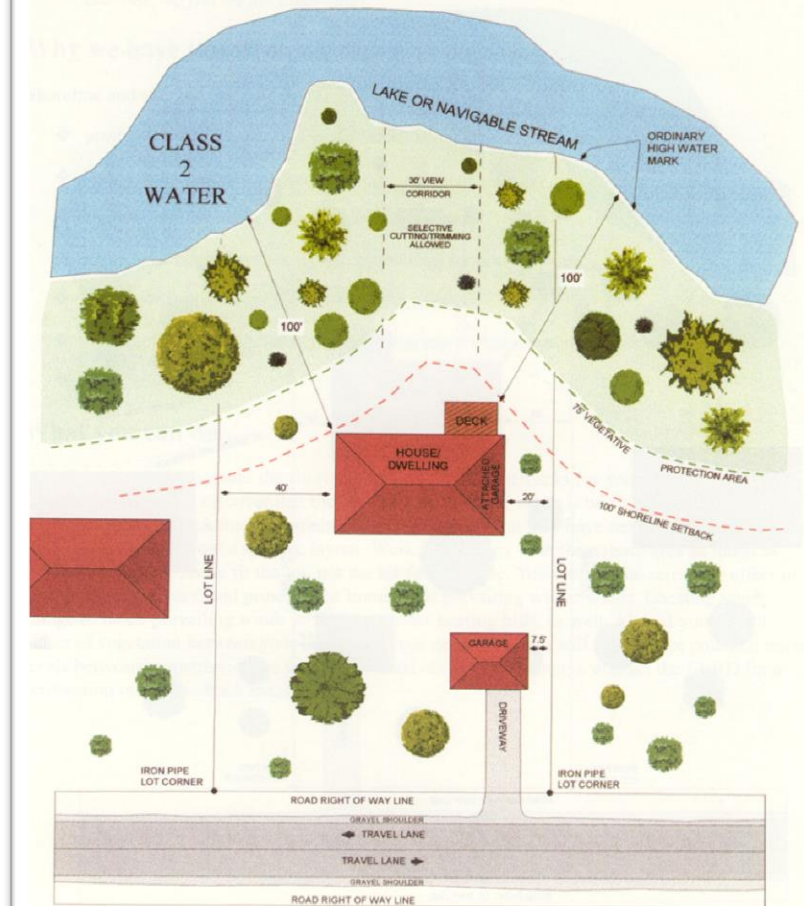
Class Two

- 100 ft setback for structures
- Minimum 80,000 sq ft lot
- Boathouses are prohibited; boat shelter allowed

Class Three

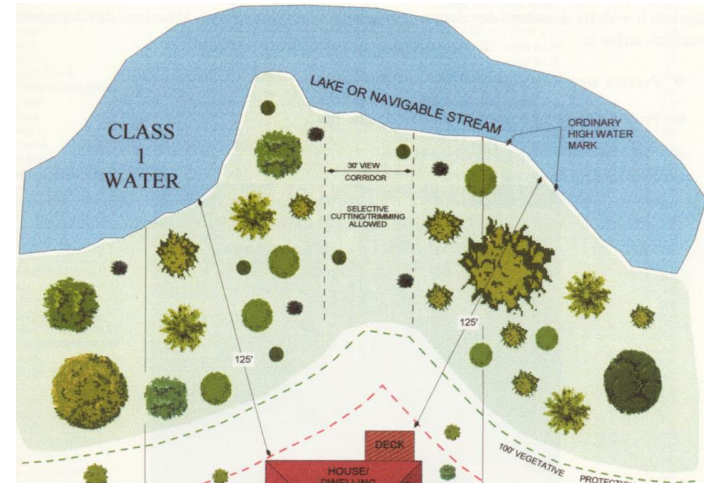
- 75 ft setback for structures
- Minimum 20,000 sq ft lot
- One boathouse and one boat shelter allowed

❖ *Class 2 Lakes – The required shoreline setback is 100 feet from the OHWM. The side lot line setback is a minimum of 20 feet on one side, 60 feet in total (if 20 feet on one side, 40 feet on the other side).*



All Waterway Classes Have a Vegetation Protection Area

- Extends from OHWM to a line that is 25 feet less than the required shoreline setback
- Removal of trees, shrubs, groundcover or any filling or land disturbing activities are prohibited in the Vegetative Protection Area with exceptions.



When and How to Apply the Ordinance?

Shoreland Mitigation is required to compensate for lost shore buffer area functions when legal pre-existing structures are improved or expanded.

- New construction or additions to principal structures.
- Mitigation for improvements to non-conforming structure.
- Building permits won't be issued until the shoreland restoration plan has been approved

Following the standards of Section 17.30 (13)

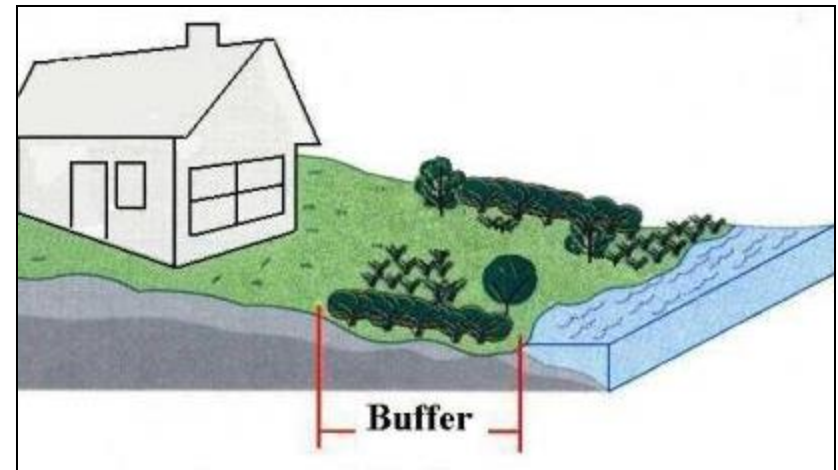
- Applicant shall restore water quality, habitat, and natural beauty protection functions of the shoreline buffer



- When to restore
 - Zoning permits required for principle structure
- Exemptions of restoration
 - Projects involving ordinary maintenance

17.30 (13) Continued

- Restoration plan requirements
 - Plan can be written by LRR staff or by the property owner.
 - Approval of plan by LRR Staff.
- Restorable Area
 - 50ft from OHWM
 - 15ft building envelope
 - 30ft viewing corridor
 - Paths/swimming access/ etc.
- Restoration Standards
 - No mow/raking/cutting
 - Native plants
 - 1 tree 2 shrubs per 100 ft²

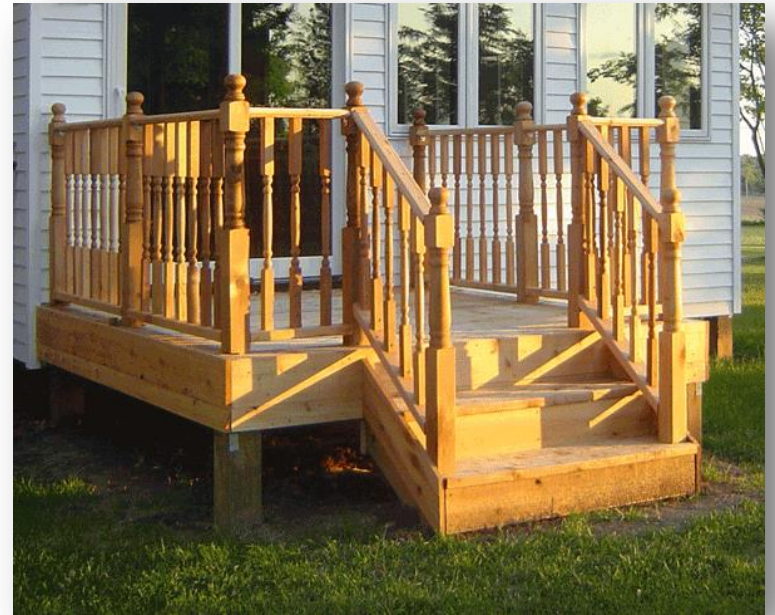


Other Regulations when Mitigating

- Removal of nonconforming accessory structures
- Standard erosion & storm water runoff controls are implemented
- Building materials shall blend in with ground cover
- Wastewater treatment system meets COMM83 =, Wis. Administrative Code

Additional Exemptions

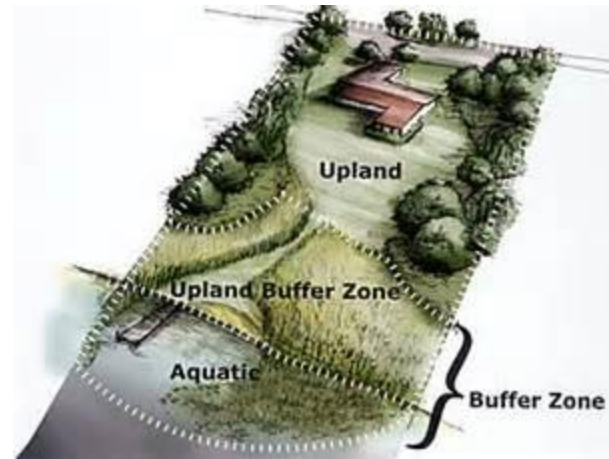
- Additions of small decks or landings which do not exceed 225 square feet.
- Construction of principle structures which are located 300 feet or greater from the ordinary high water mark.
 - Result of 2002 revisions



Shoreland Owner Applies for a Building Permit

- Preliminary restoration inspection by zoning staff

- Educate them



- Work with landowner on what goals they want to achieve with the restoration

Already Have a Natural Buffer

- For natural shorelines – landowner must sign vegetation protection agreement



Protecting the Undeveloped

Langlade County Natural Shoreland Certification & Vegetation Protection Agreement

Please read, sign, and return this Natural Shoreland Certification and Vegetation Protection Agreement to the Langlade County Land Records & Regulations Department as soon as possible to expedite obtaining your zoning permit.

The vegetation protection area (buffer zone) on your shoreland property has been visited and photographed by an employee (s) of the Langlade County Land Records and Regulations Department (LRRD). It has been determined that your shoreland property is natural and should remain so into perpetuity. Some conditions may apply to your buffer zone area, see below.



Standard Guidelines in the Vegetation Protection Area (Buffer Zone):

- ✓ Vegetation cutting, mowing, trimming, weed-whacking, and raking is prohibited.
- ✓ Vegetation removal is not allowed except for dead, diseased, dying trees which are a safety hazard or which threaten structures. However, vegetation may be selectively pruned (not clear cut) within the 30 foot filtered viewing corridor. Please contact the LRRD for all cutting questions, as this is regulated within our ordinance at 837 Clermont Street, Antigo, WI 54409 or call 715-617-6206.
- ✓ Additional vegetation may be planted but must be native to northern Wisconsin and Langlade County. A majority of landscape plants available at nurseries are non-native and could be invasive. If you have native plant questions, contact the LRRD. You can also search our website to find which native plant species will grow on your shoreland property <http://lrrd.co.lanlade.wi.us/shoreland/index.asp>
- ✓ Please be advised that many landscape plants can become invasive and spread into the shoreland area. Please consult with the LRRD for a list of plants to avoid. Also, do not allow any lawn that you install landward of the buffer zone to encroach into the buffer.
- ✓ Please consult our "Caring For Our Shores: A Property Owners Guide for Shoreland Protection" about other ordinances that may apply to your shoreland property.

Site Inspections:

By signing this document, the permittee grants Langlade County personnel permission to access the property for the purposes of monitoring the vegetation protection area.

Conditions specific to your property:

I, the undersigned, have read and understood the above information and agree to the guidelines and conditions. I understand that failure to comply with vegetation protection provisions may result in enforcement action and that said vegetation protection is to occur into perpetuity.

Printed Name: _____ Date: _____

Signature: _____

Landowner's Name(s) _____	
Parcel Number _____	Waterbody: _____
Permit #: _____	Physical Address _____
FOR OFFICE USE AND EFFICIENCY ONLY	

Revised - June 2013

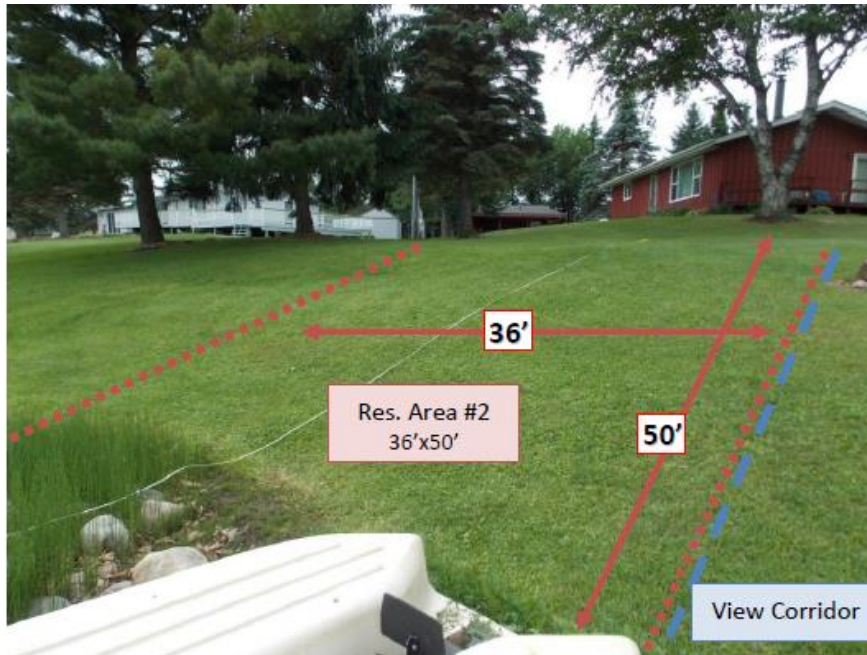


In need of a Natural Buffer

- For an unnatural shoreline – Landowner must sign a Shoreland Restoration Permit



Restoring the Developed



Lanlade County Shoreland Restoration Permit

PLEASE READ AND SIGN. Pay particular attention to Special Conditions on next page.

Name:	
Permit #:	Parcel #:
Lake/Stream:	
Site Address:	

Standard Guidelines in the Vegetation Protection Area:

- 1) Vegetation cutting, e.g. mowing, is not permitted except where explicitly allowed by special conditions (see next page).
- 2) No vegetation removal except for diseased and/or dying trees which are safety hazards or which threaten structures. Vegetation may be selectively pruned within your 30ft. view corridor. When in doubt, consult with the zoning office before vegetation removal.
- 3) Additional vegetation may be planted but must be native to Wisconsin. The majority of landscape plants available at nurseries are non-native. Only plants native to Wisconsin plant communities may be installed in the vegetation protection area. Contact the Land Records office and we will provide you with list of acceptable native plants, or visit <http://land.co.lanlade.wi.us/shoreland/index.asp> for information on the native status of species that you prefer or that you find at your chosen nursery.
- 4) Please consult our *Caring for Our Shores - A Property Owner's Guide for Shoreland Protection* about other ordinances that may apply to your property.

Site Inspections:

By signing this document the permittee grants Lanlade County permission to access the restoration site during and after the restoration. Access is granted for the purpose of monitoring the restoration site.

Planting area - densities; watering; turf and weed control; wildlife damage control:

Please be advised of certain threats to your investment in native plantings. Failure to manage the following issues may result in additional restoration costs:

- 1) Species should be planted and maintained at densities suggested by nursery professionals and sufficient to guarantee survival and spread or plant according to the following typical spacings:
 - a) Trees: 1 tree every 100 square feet.
 - b) Shrubs: 6 feet apart (1 every 25 sq. ft.). 3 feet for low shrubs (1 every 7 square ft.); plant flowers no closer than 2 feet to the base of shrubs.
 - c) Flowers & grasses: 1 plant per 2 square feet.

Lanlade County will require supplemental plantings if inadequate plant coverage is observed in the weeks and/or years following restoration.
- 2) Newly installed plants must be watered to ensure survival, i.e. one inch of water per week by overhead sprinkler.
- 3) Native plantings are very often out-competed by established turf grasses. At most sites where turf grasses are present, grass should be killed prior to installation of native plants. Contact county staff about appropriate methods of turf removal (black plastic or herbicide). Where grass turf remains adjacent to native plantings, a barrier may be required which prevents encroachment of turf grasses into restoration area. Landowner must prevent invasion of turf.
- 4) Disturbed soils around native plantings are vulnerable to invasions of weeds. The landowner is responsible for controlling weeds so as to ensure the success of the restoration. Mulching and hand-pulling are acceptable methods of weed control. All mulch or erosion matting used must be clean, completely bio- and photo-degradable, and weed-free. Lanlade County can provide you with lists of problem weeds.
- 5) Wildlife may damage native plantings. To protect your investment in native plantings, inquire with your landscaping professional about the availability of wildlife repellents. Pepper-based solutions can be applied to plants to repel rabbits and rodents. Other products are available to control deer. Permittee is responsible for replacement of wildlife-damaged plant material.

Restoration Planning

- Write up plan locating restoration areas and view corridors
- Plant density
 - 1 tree 2 shrubs per 100ft²
- Recommended plants
- Offer Restoration resources
 - Nurseries & Greenhouse list
 - Planting Notes
 - Removing existing Sod
 - Transplanting Guide



Pre-Restoration



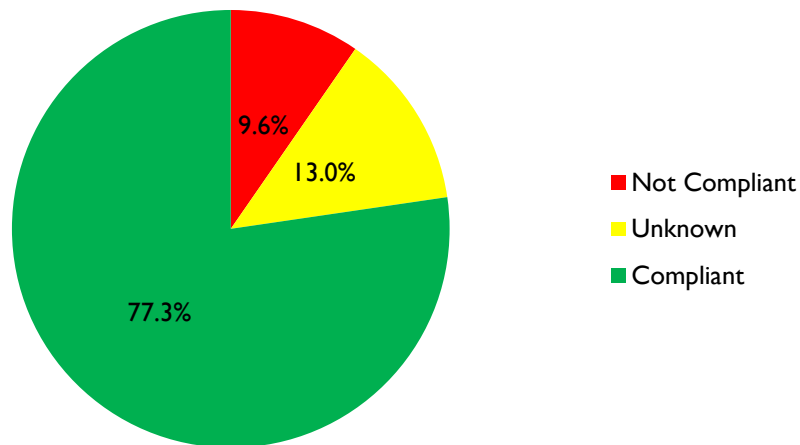
Post-Restoration



Permits within the County

- Currently Active 532 Shoreland Permits
 - 232 SRP
 - 300 NSC
- Monitoring during summer months

Permit Breakdown



What are we Doing?

- Monitoring Buffers
 - 89 Buffers Monitored by SPS
- Perform Site Visits/Offer Assistance
- Working with Landowners to Become Compliant
- Becoming More Consistent
- Education
- Demo Sites



Some Challenges...



CHALLENGES - Physical

- Planting Issues
 - Soil/hemlock over story/hard surfaces
- Nonconforming Structures
- Scale of the restoration
- Price



CHALLENGES - Psychological

- Why me and not my neighbor?
- I own the property and pay taxes!
- Will this really make a difference?
- Native plants will attract bugs/critters.



Special problems

- Too much mitigation? Septic replacement AND restoration AND relocation of structures?
- For a home set 30ft from the water, must they restore all the way back to 50ft?



Lessons / Conclusions

- Financial incentives and personal assistance works
- Monitoring
- Friendly reminders “persistence pays”
- Flexibility
 - Phasing
- Regulations must not erode their sense of ownership
- Education for shoreland owners / including Demo Sites

Demo Sites



Otter Lake



Failing Retaining Wall



Steep Slope



Remove Retaining Wall



Installing Erosion Control Blanket





Added Trees & Shrubs



Installing A Walkway



Black Plastic Barrier



Supplemental Planting









One Year Later





Rocks







Signage Added





Five Years Later



Present Year



Post Lake Dam









A photograph of a garden or park area. On the left, a concrete staircase with black metal railings leads up a slope. To the right of the stairs is a dense garden bed filled with various green plants and some tall purple flowers. A wooden boardwalk path runs along the right side of the garden, bordered by a low wooden railing. The background is filled with tall, leafy trees under a bright sky. The text "Present Year" is overlaid in the center of the image.

Present Year







Thank You

- Questions/Comments or Concerns?



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