Shoreland Zoning

How Does It Impact Me?

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The Red Cedar: Land, Water, and People Coming Together Conference, March 14, 2013

Outline for this session

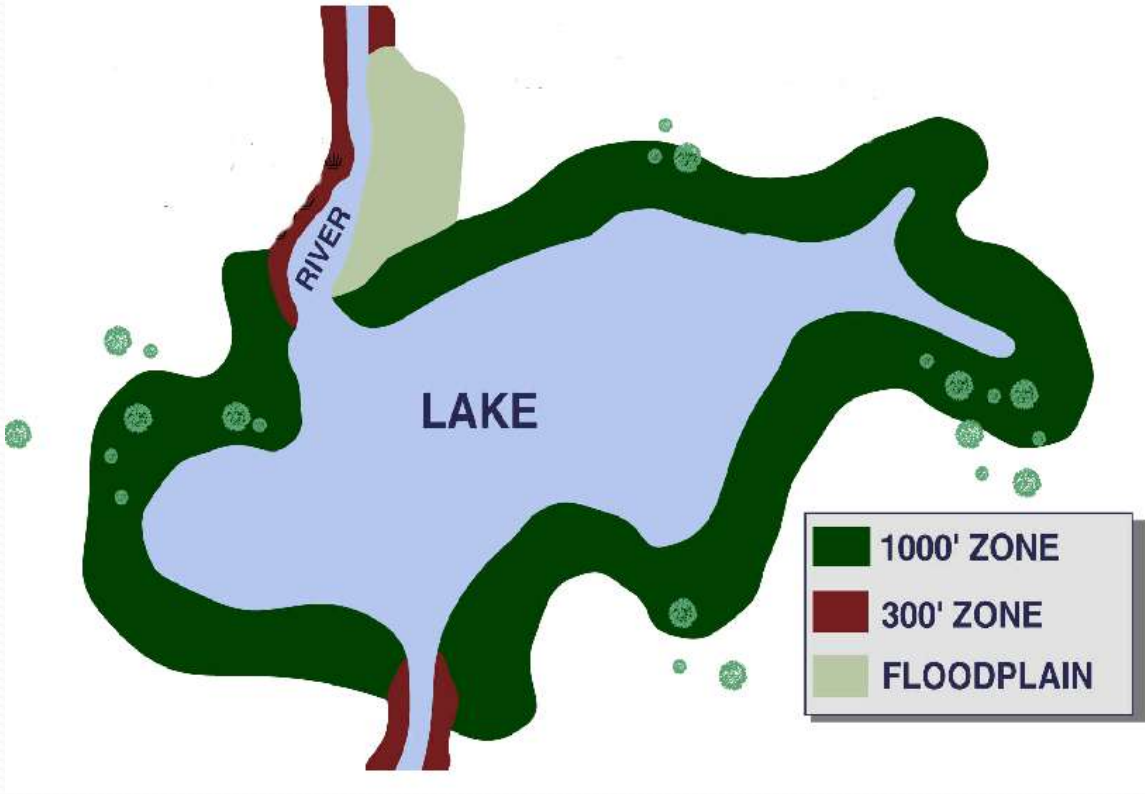
1) What is shoreland zoning?

2) Why care about shoreland zoning?

3) What are the primary standards in the Dunn County Shoreland Wetland Ordinance, and how they may impact you?

Shoreland Zoning

What is it?



- Zoning for shoreland areas
- June 1966, Water Resources Act passed (now called NR 115) – rule revised in 2010
- Applies statewide to all unincorporated areas
- Applies to areas annexed after May 7, 1982

Why Care About Shoreland Zoning?

- Goal of shoreland zoning is to limit direct and cumulative impacts of shoreland development on:
  - Water quality
  - Near-shore aquatic, wetland, and upland wildlife habitat
  - Natural scenic beauty

Why Care About Shoreland Zoning?

Enjoying healthy lakes & rivers: Part of who we are in WI

Why Care About Shoreland Zoning?
Lake Quality & Economics: Is there a connection?

- "More polluted lakes have less valuable property than do cleaner lakes."

E.L. David, *Water Resources Research*, 1968

- A study of over 1200 waterfront properties in Minnesota found when water clarity changed by 3 feet changes in property prices for these lakes are in the magnitude of tens of thousands to millions of dollars.

Krysel et al, 2003

Higher Property Values
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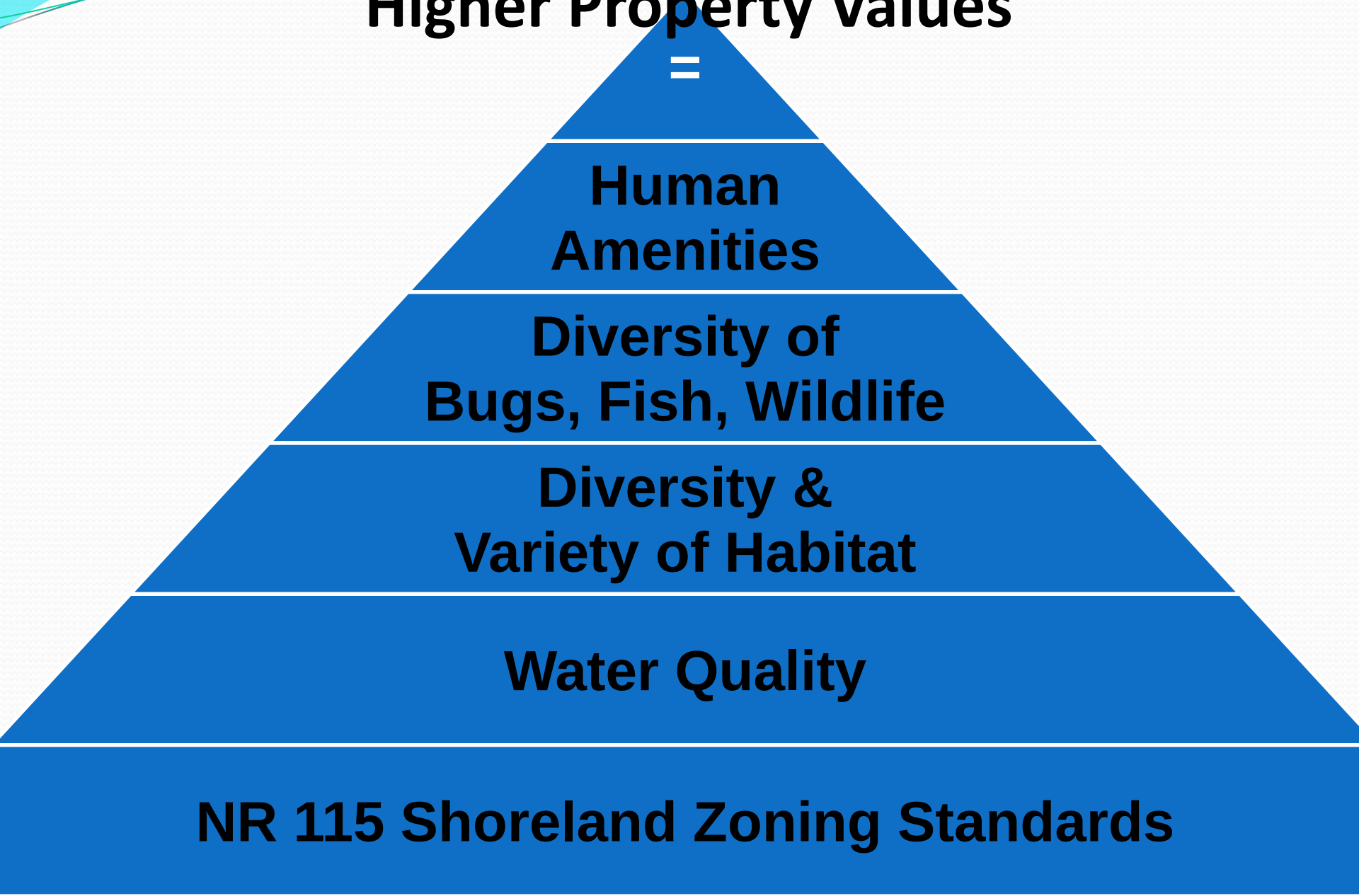
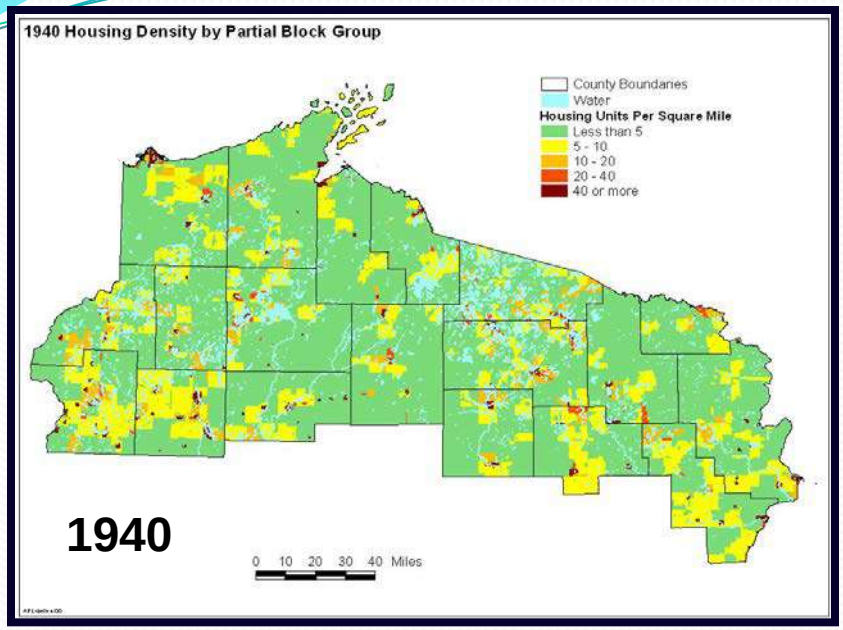


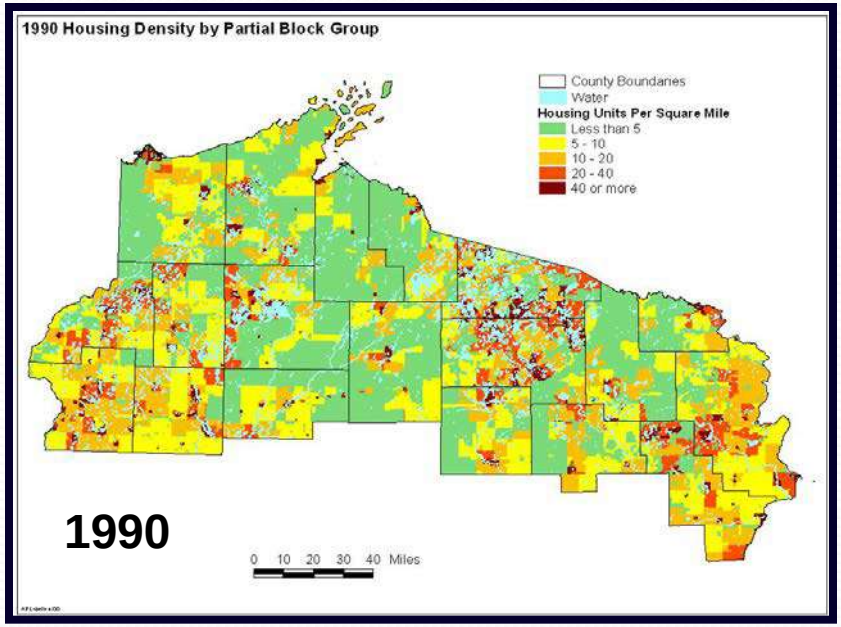
Why were Shoreland Zoning Rules Revised?

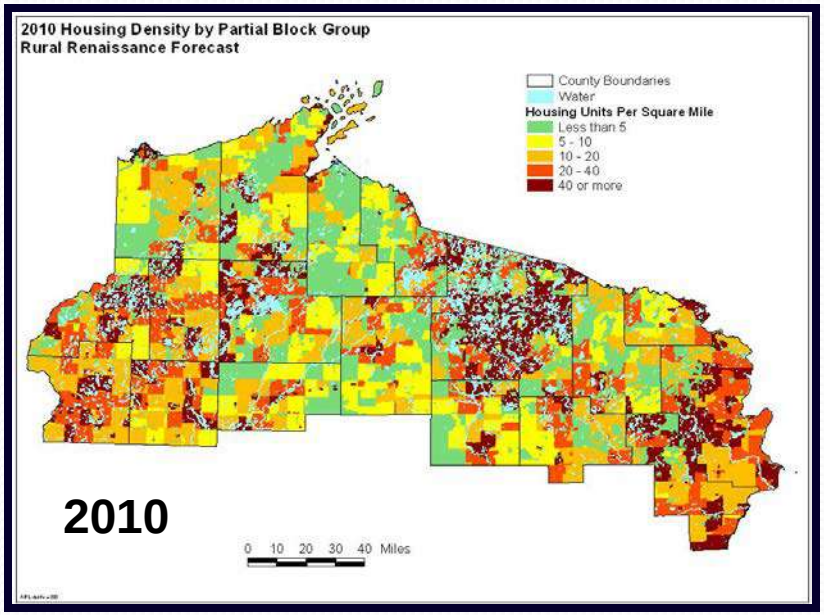
Why were Shoreland Zoning Rules Revised?

VS

Why were Shoreland Zoning Rules Revised?



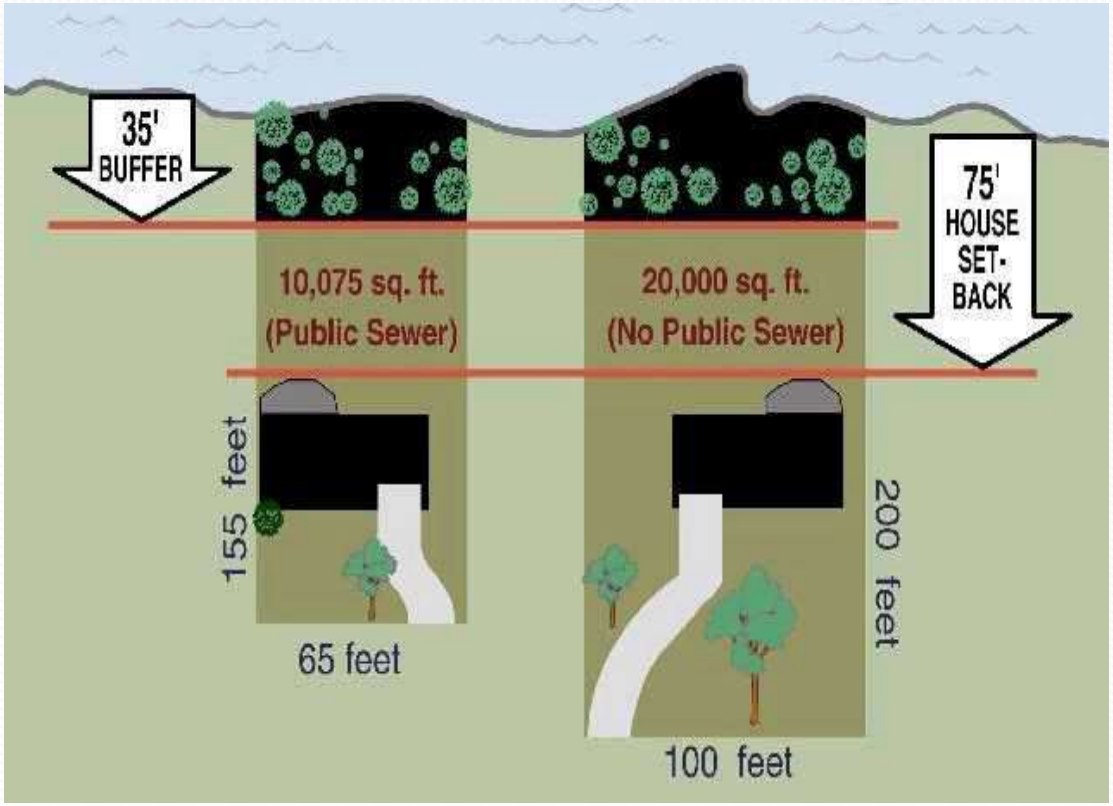




Shoreland Zoning

Long-Standing Standards

- Lot sizes
- Shoreland setbacks, including averaged setbacks
- Shoreland buffer sizes
- Standards for land disturbing activities
- Shoreland – Wetland standards
- Structure exemptions

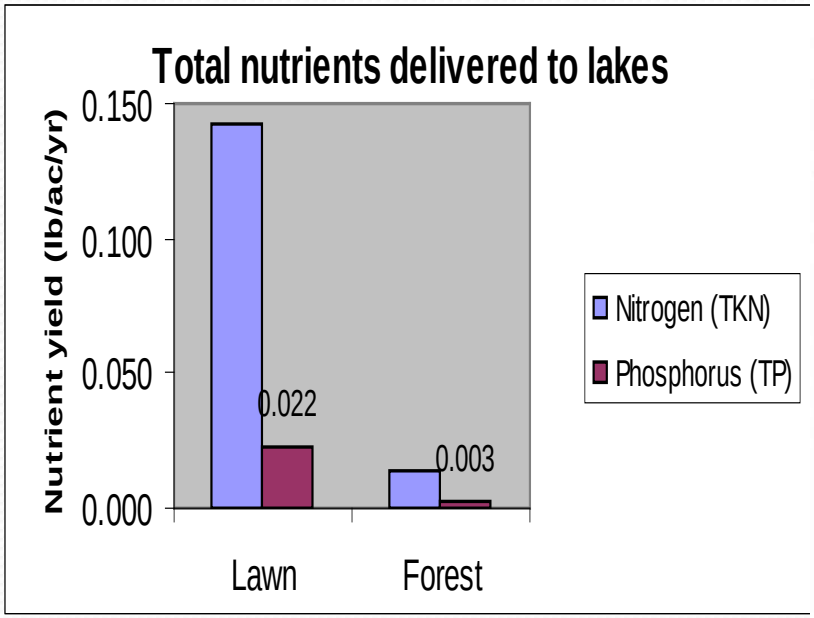


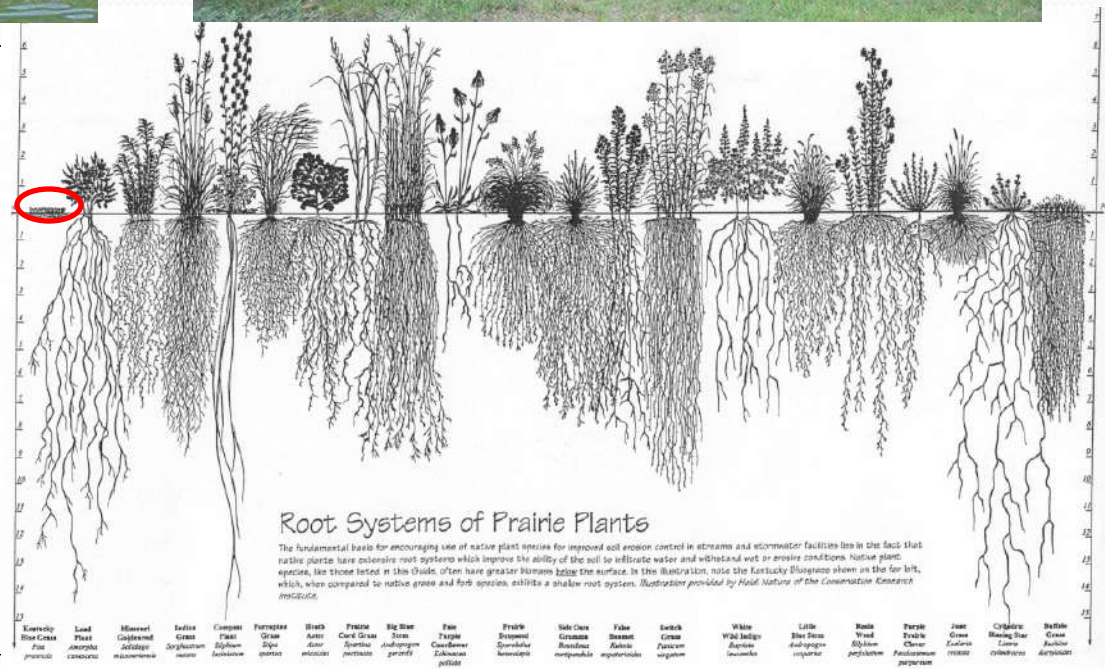
Shoreland Zoning

Updated and New Standards

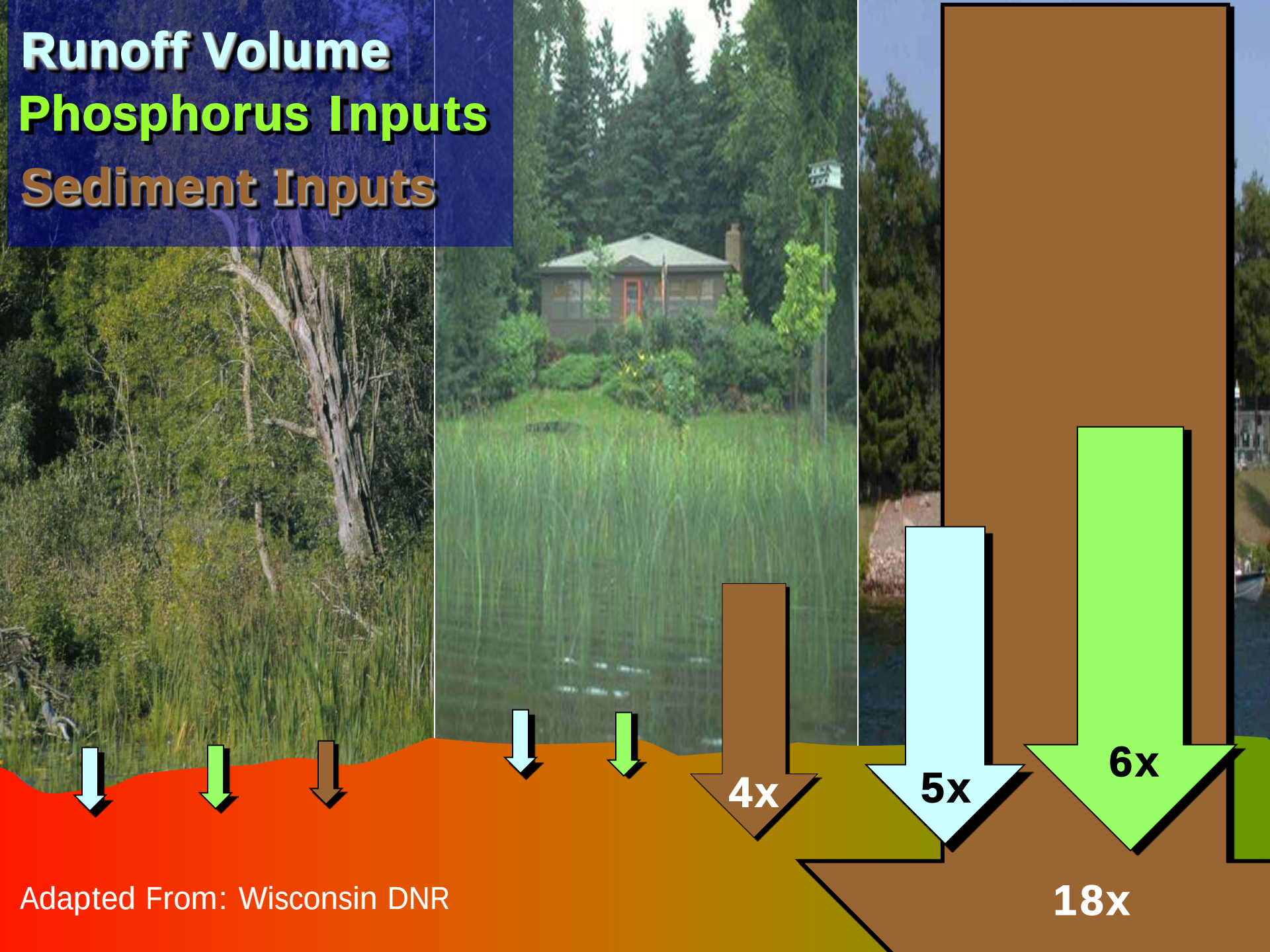
- Shoreline Buffers – greater clarity and specification
- Impervious Surface Limits
- Nonconforming Principal Structures – increased flexibility and options
- Shoreland Mitigation

Shoreline Buffers



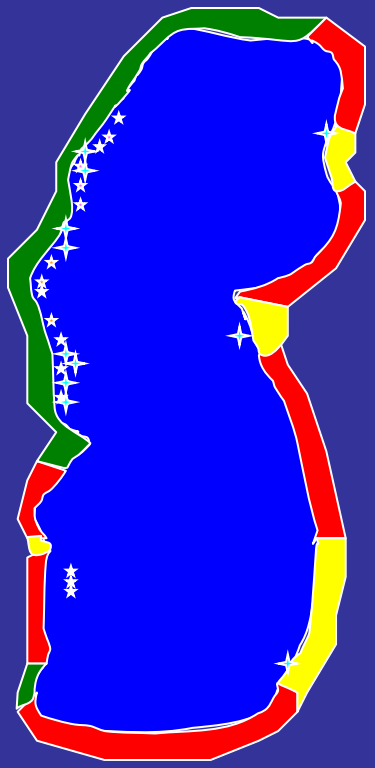


Shoreline Buffers

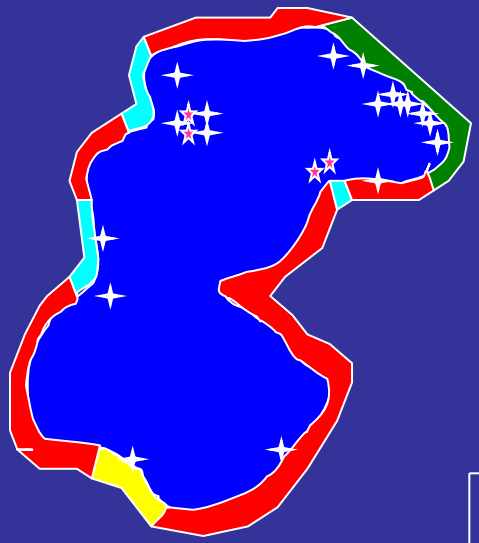

Runoff Volume
Phosphorus Inputs
Sediment Inputs
4x
5x
6x
18x
Adapted From: Wisconsin DNR

Largemouth bass & black crappie nests

Jeffrey Reed, MN DNR, 2001



Bergen Lake



Cowdry Lake

Crooked Lake

Highly Developed Shoreline

Developed Shoreline with Dwelling

Developed Shoreline w/out Dwelling

Undeveloped Shoreline

Represents 5 Black Crappie Nests

Represents 1 Largemouth Bass Nest

Shoreland Zoning
Impervious Surface Standards

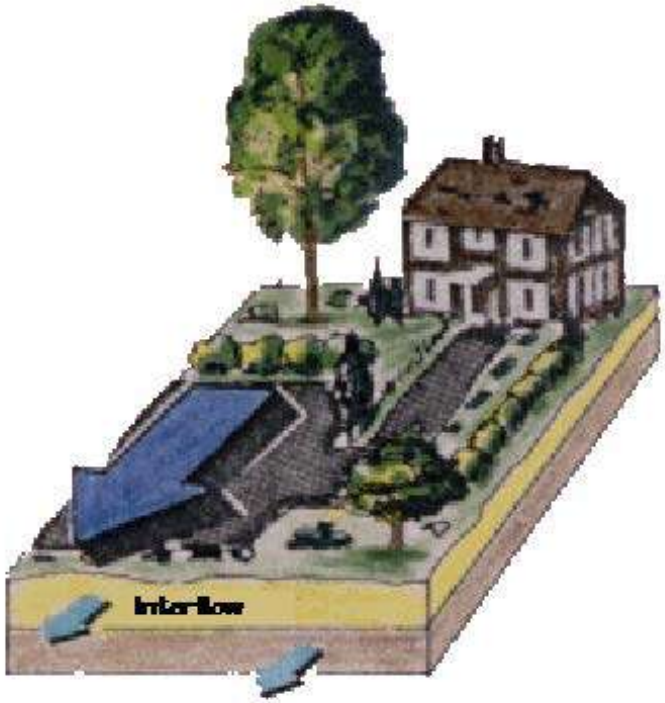
- What is an impervious surface?
  - An area that releases all or a majority of the precipitation that falls on it.
  - Includes rooftops, sidewalks, driveways, parking lots, etc.

- What are the Water Quality Impacts of Impervious Surfaces?
  - Erosion
  - More pollutants entering the water
  - Increased algae growth
  - Fewer fish, insect, and other aquatic species

Impervious Surfaces and Runoff

Less impervious surface

Less runoff



More impervious surface

More runoff

Increasing impervious surface in the watershed
Decreasing number of fish & fish species

Fish found in streams when impervious surface in the watershed was:

Less than 8%	8 - 12%	Greater than 12%
Iowa darter Black crappie Channel catfish Yellow perch Rock bass Hornyhead chub Sand shiner Southern redbelly dace		
Golden shiner Northern pike Largemouth bass Bluntnose minnow Johnny darter Common shiner	Golden shiner Northern pike Largemouth bass Bluntnose minnow Johnny darter Common shiner	
Creek chub Fathead minnow Green sunfish White sucker Brook stickleback	Creek chub Fathead minnow Green sunfish White sucker Brook stickleback	Creek chub Fathead minnow Green sunfish White sucker Brook stickleback

2008 study of 164 WI lakes found the same trend

Wang et al. 2000

Shoreland Zoning
Nonconforming Principal Structures

Nonconforming Structure = pre-existing structure that does not meet current standards

NR 115 now provides numerous options, which should reduce the number of variances needed

The Legislature eliminated the use of a 50% increase in valuation (i.e. 50% Rule) in 2012

Shoreland Zoning - Shoreland Mitigation

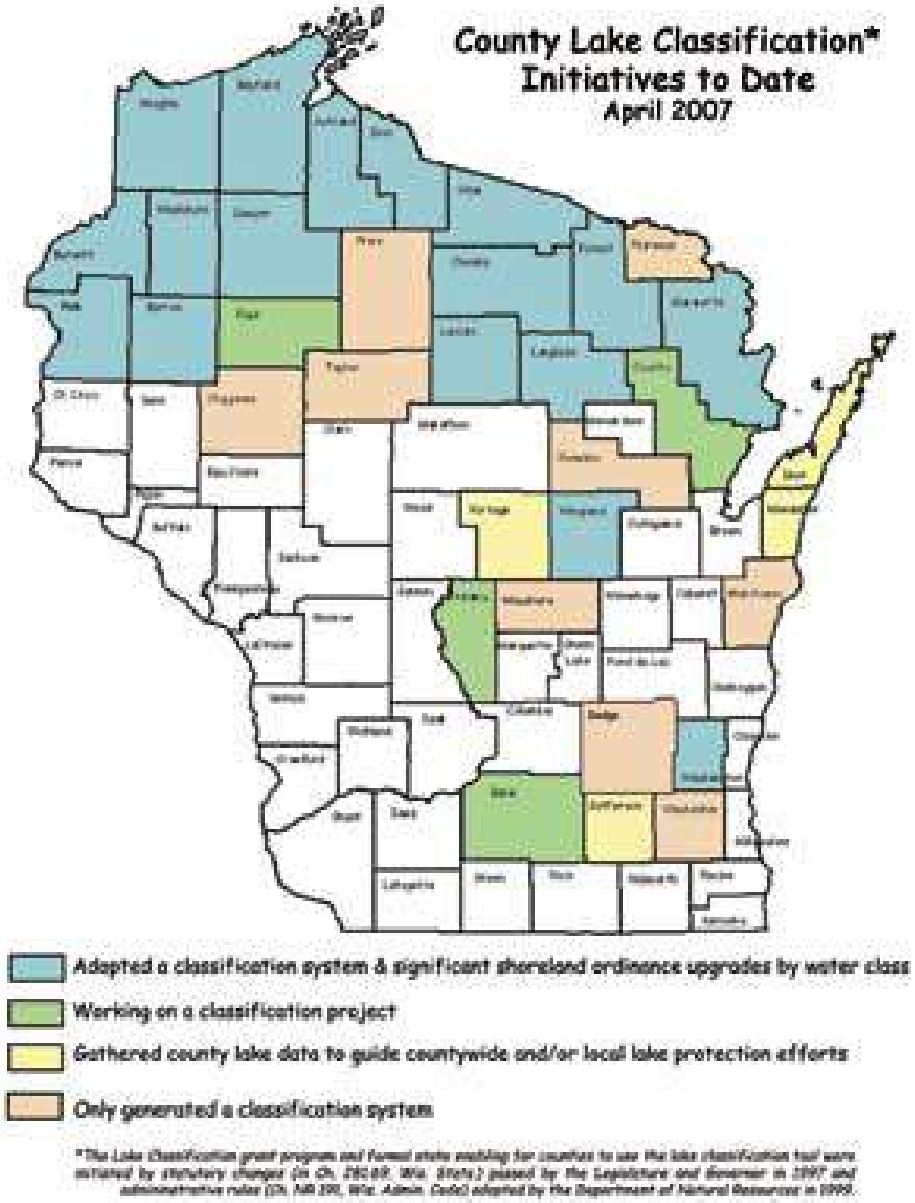
- Definition
  - "balancing measures that are designed, implemented and function to restore natural functions and values that are otherwise lost through development and human activities"
  - Natural Functions = Water quality, near-shore aquatic habitat, upland wildlife habitat and natural scenic beauty
- Mitigation is triggered by:
  - Increasing impervious surfaces over 15%
  - Vertical expansion of nonconforming structures
  - Replacement or Relocation of nonconforming structures

Why Care About Shoreland Zoning?

- Prevent and control water pollution
- Protect habitat for fish and aquatic life
- Reserve shore cover and natural beauty
- Control land use and natural beauty
- Maintain safe and healthful conditions

Shoreland Zoning
Counties going beyond 1968 law

- Counties recognized inadequacies
- Adopted higher standards
- "New" ideas
  - 16 counties have impervious surface stds.
  - 27 counties have shoreland mitigation



Ordinance Timeframe

2010	July – October	Research, drafting and preparation of 1st draft to PR&D Committee
2011	January	Continued drafting and research
	February	Presentation by DNR staff regarding shoreland preservation
	March – May	Continued research and drafting
	June 1	Public educational meeting for shoreland and floodplain ordinances
	June-August	Continued research and drafting

August 23, 2011	1st public hearing for adoption of shoreland ordinance and amendments to floodplain ordinance
	Returned to PR&D Committee for further research and drafting
2012	
January – April	Continued research and drafting
April 10	2nd public hearing for adoption of shoreland ordinance
May 16	Presentation to County Board for approval

Shoreland Zoning

14.6.0 Building Setbacks

14.7.0 Vegetation

14.9.0 Impervious Surface Standards

14.11.0 Nonconforming Uses and Structures

14.12.0 Mitigation

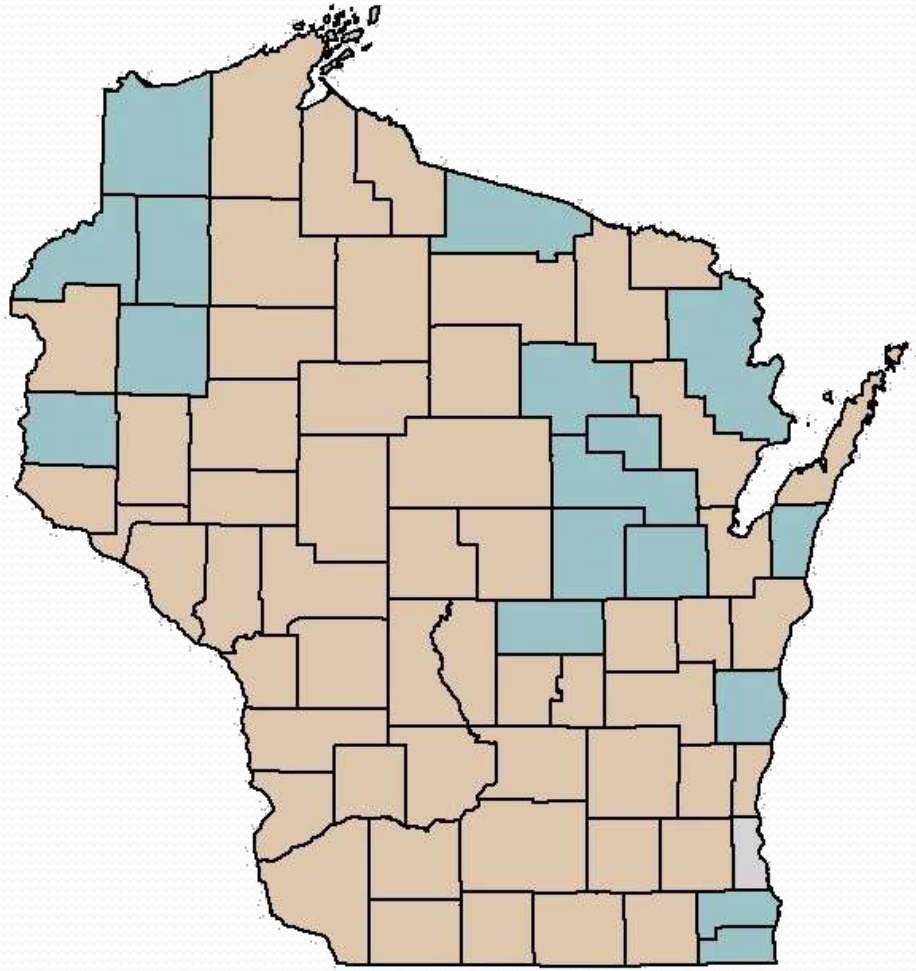
Shoreland Zoning

14.6.0 Building Setbacks

1968 Law allowed reduced setback from required 75' setback using existing principal structures within 200' of requesting lot

2012 Law allows reduced setback from required 75' setback using existing principal structures within 250' of requesting lot

Shoreline Buffer Standards



Requires 35 foot buffer paralleling the OHWM

Requires buffer between 35 and 300 feet deep paralleling the OHWM

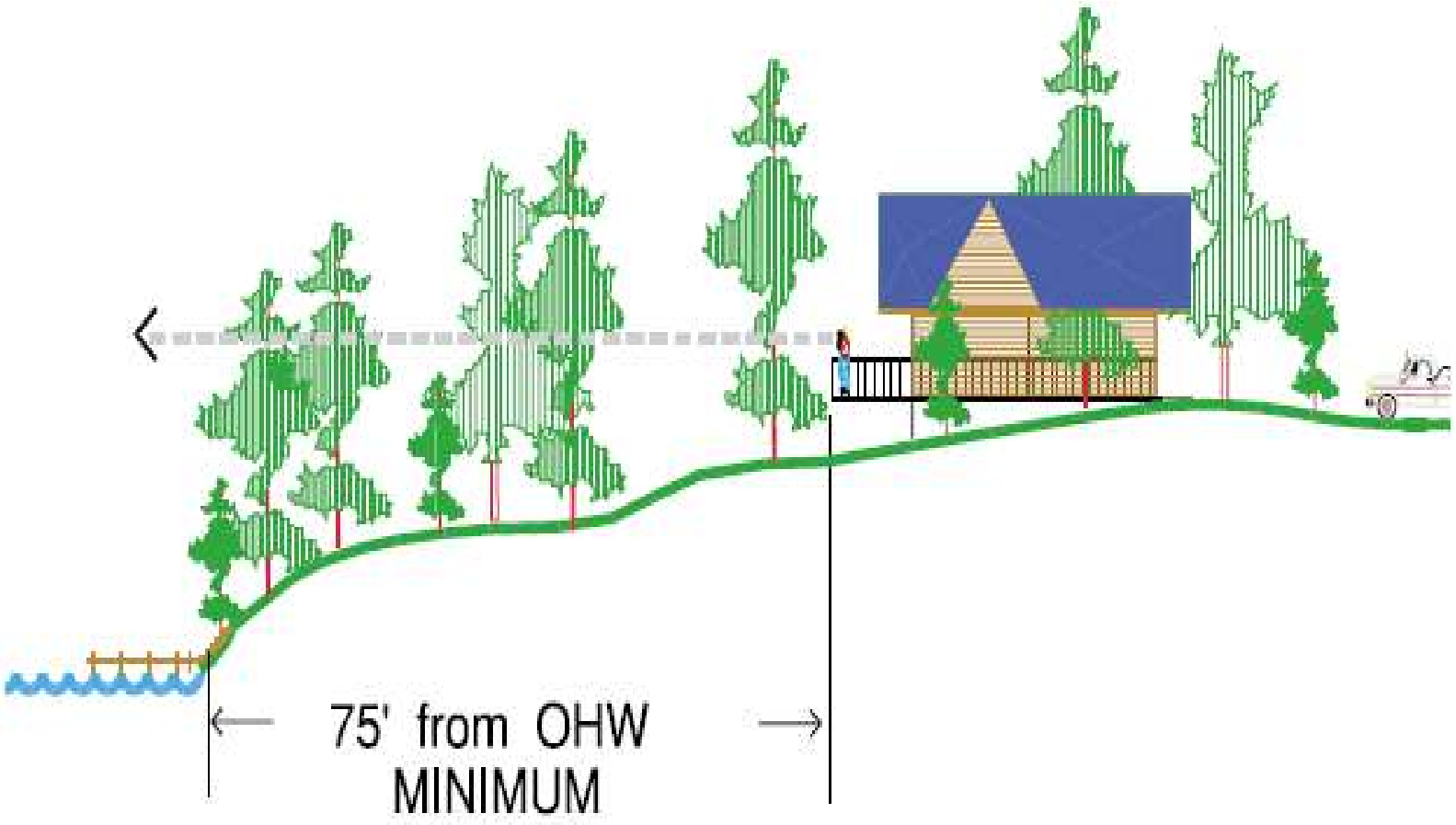
N/A

Shoreland Zoning Changes - Shoreline Buffers

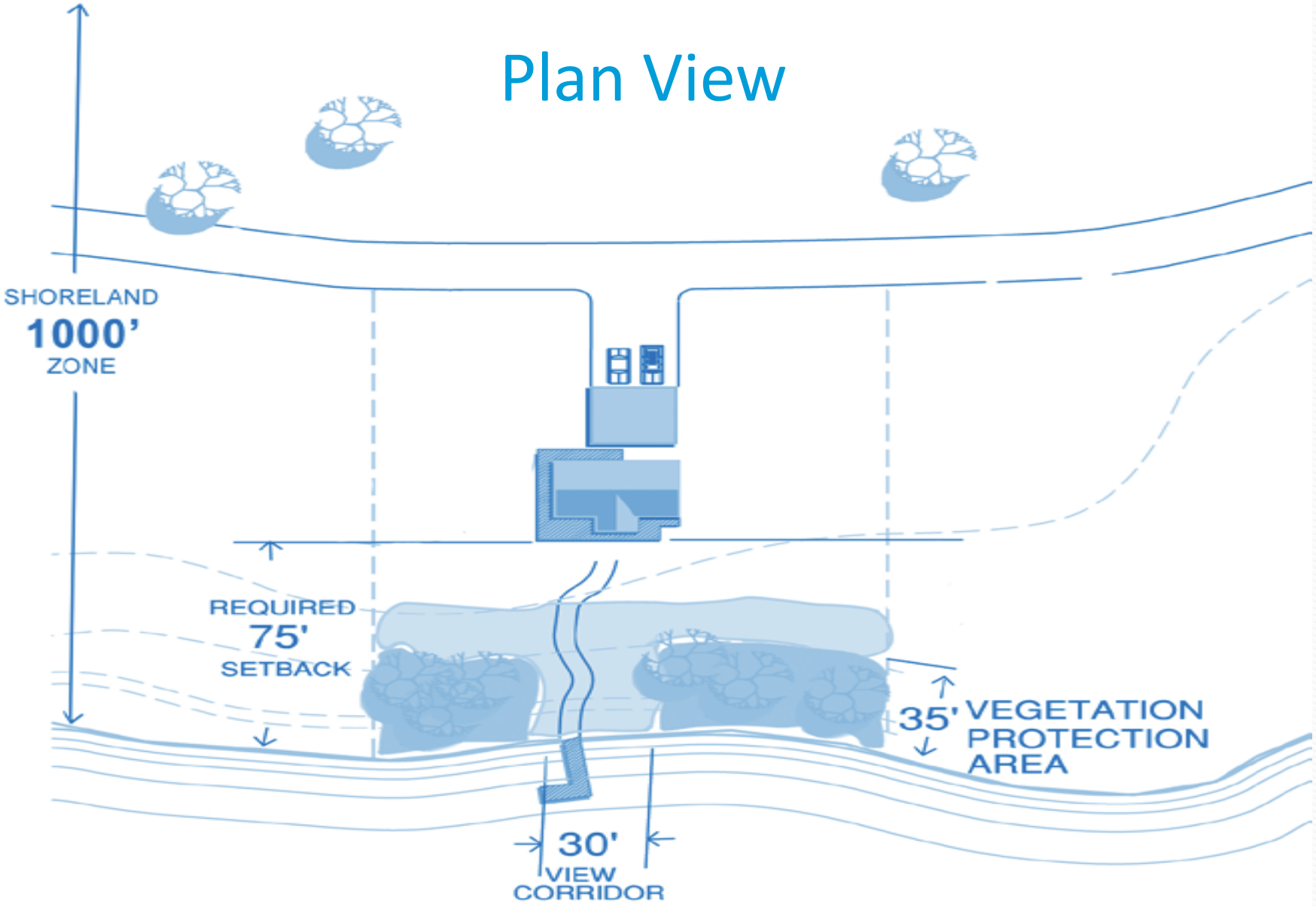
- More clarity and specification than previously

- First 35 feet, no vegetation removal except
  - Access and viewing corridors
  - Shoreline restoration activities & invasive species control
  - Dead, dying or diseased when replaced with native vegetation
  - Sound forestry practices on larger tracts of land
  - Where mowing currently occurs counties may allow “keep what you have”
- Other types of removal allowed with a permit.
  - Vegetation removed with a permit must be replaced.

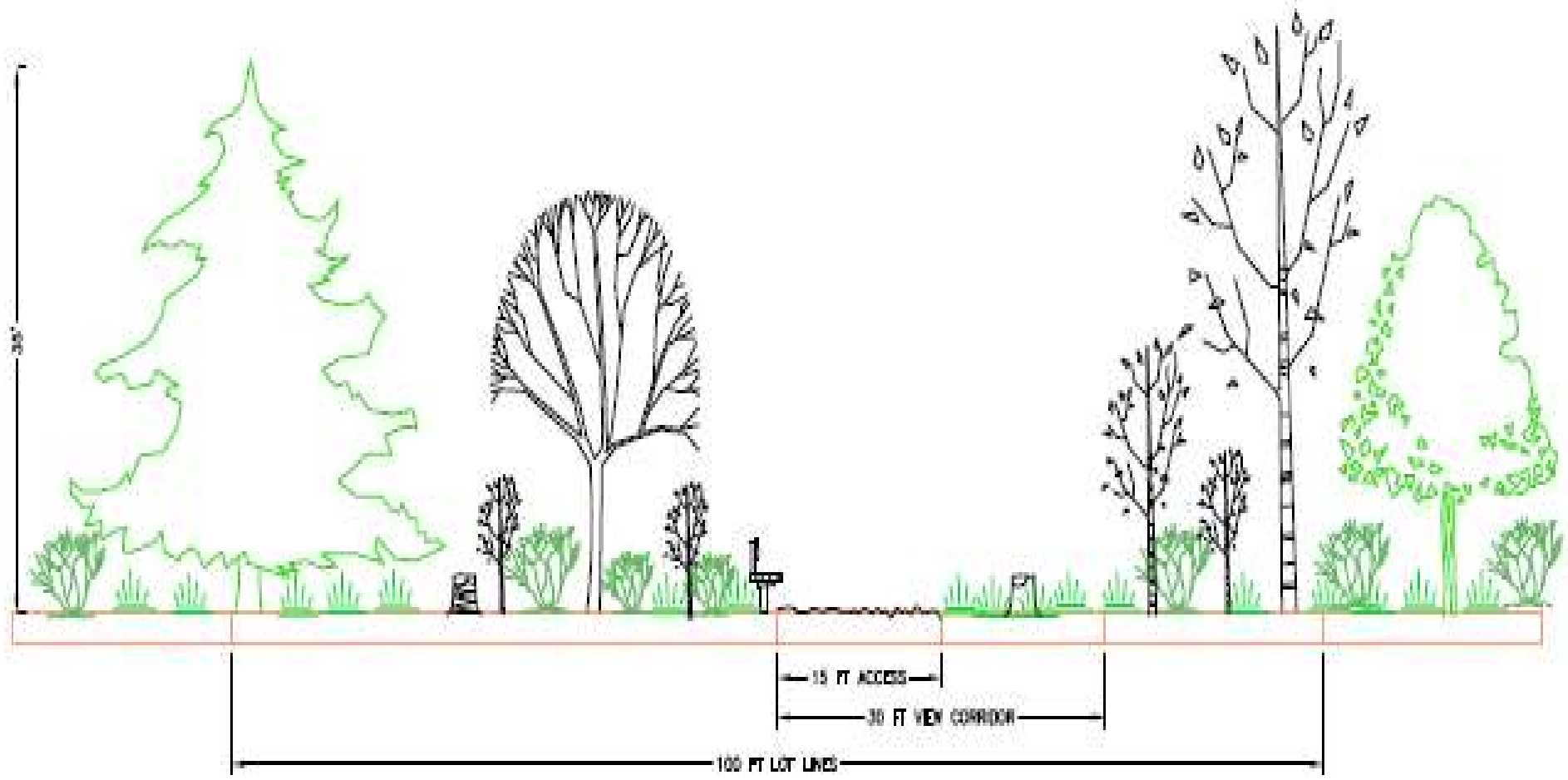
What is the OHWM?



Plan View


SHORELAND
1000'
ZONE
REQUIRED
75'
SETBACK
35'
VEGETATION
PROTECTION
AREA
30'
VIEW
CORRIDOR

Elevation of Typical 100’ Lot



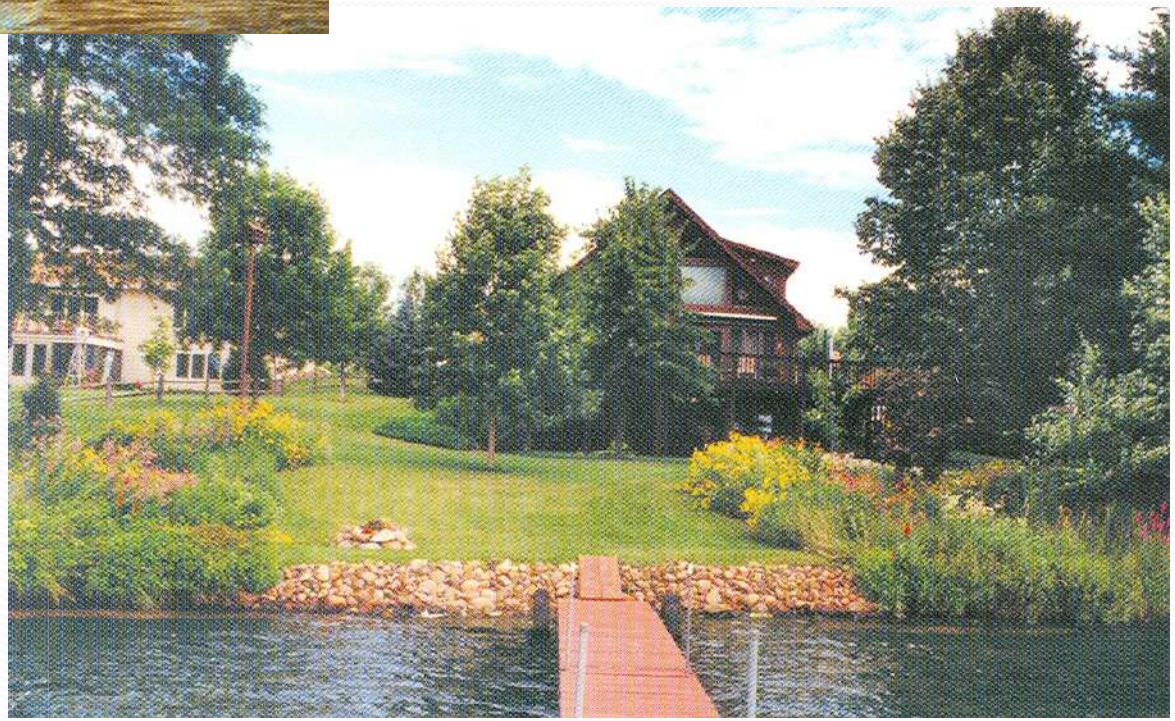
Shoreland Zoning Changes - Shoreline Buffers

- There has been general support for the value of buffer strips and the flexibility of their applications
- Current draft ordinance places greater emphasis on buffer strips in all areas of shoreland activity from agricultural practices to resorts and residential development
- Many farmers have voluntarily initiated effective conservation practices on their shoreland agricultural lands
- Many residential lot owners have already installed buffer areas of native vegetation and creative landscaping
- The challenge lies in making this the norm and not the exception

Cropland Buffers

Before

After



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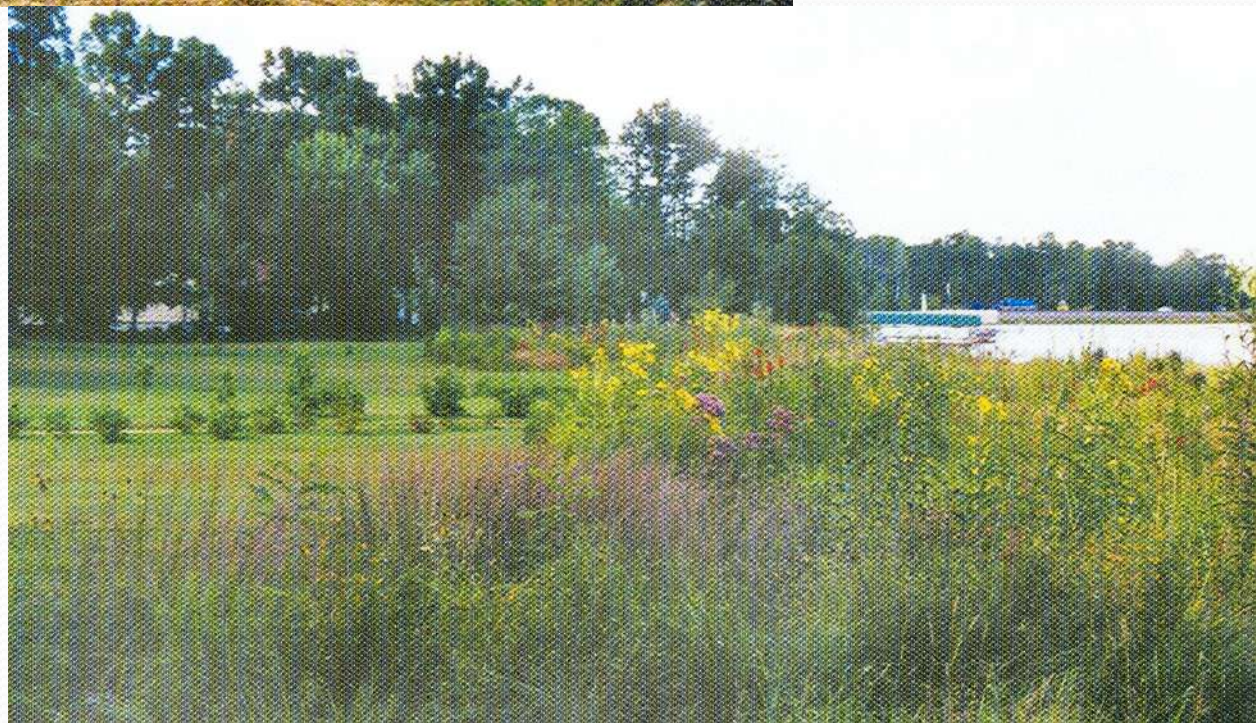
After



Shoreland Zoning Changes
Impervious Surface Standards

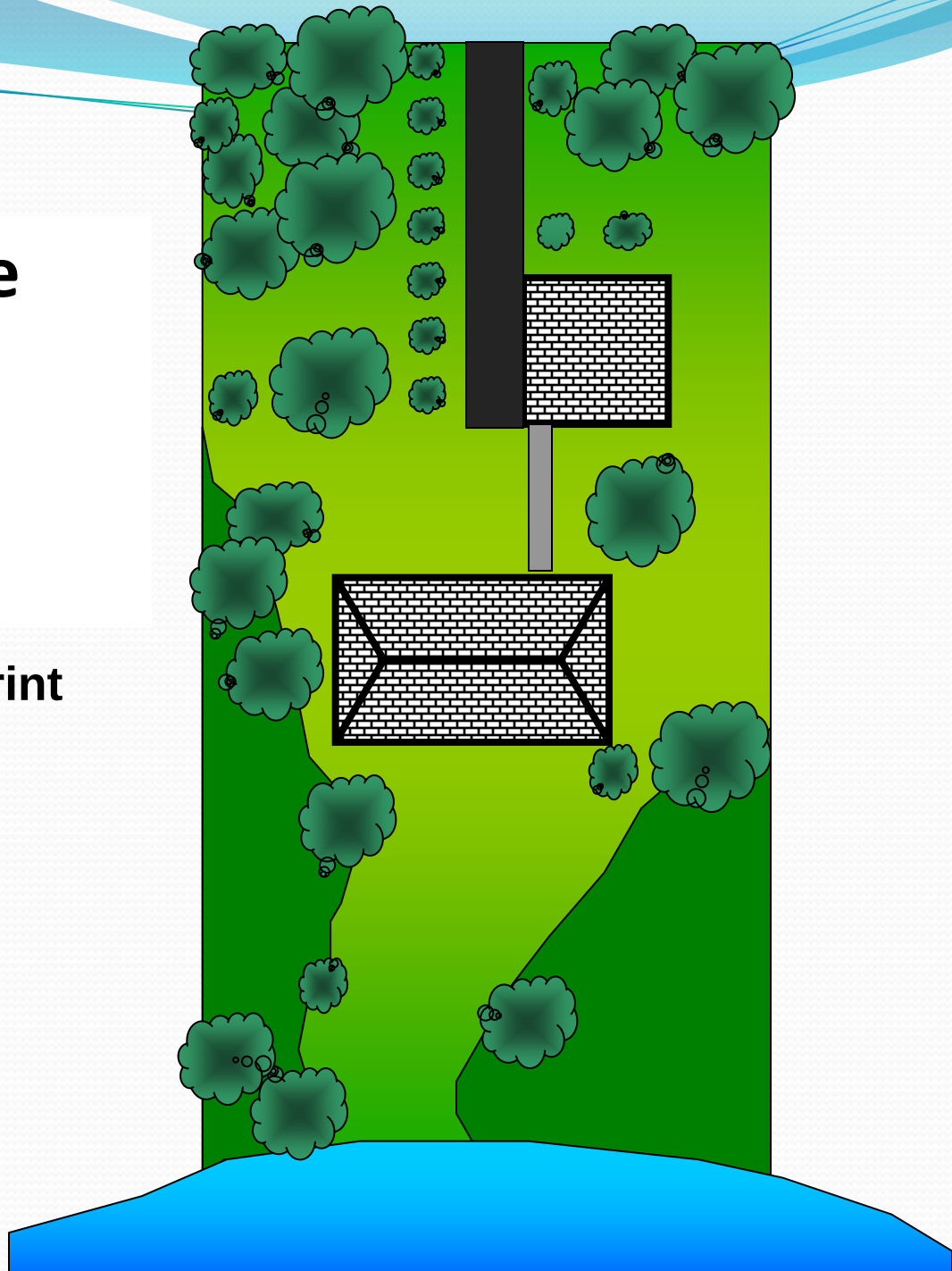
- What are the geographical boundaries of this standard?
  - Applies to property within 300-feet of any waterway

- What is the standard?
  - Keep what you have in terms of existing impervious surfaces
  - Up to 15% impervious no permit is needed
  - Between 15% - 30% allowed with a permit and mitigation
  - Variance required for greater than 30% impervious surface

Impervious Surface Example

15% of 20,000 sq. ft. lot

1500 sq. ft. house footprint
740 sq. ft. garage
660 sq. ft. driveway
100 sq. ft. sidewalk
3000 sq. ft. total



Shoreland Zoning Changes - Shoreland Mitigation

- What might you have to do for a shoreland mitigation project?
  - Dunn County identifies practices that are appropriate for local conditions
    - Rain garden or other stormwater device
    - Restore or maintain a vegetative buffer
    - Remove a non-conforming accessory structure
    - Replace a current patio with impervious materials
    - Install eave troughs/rain barrels

Shoreland Zoning Changes
Nonconforming Principal Structures

- Maintenance
  - unlimited within existing building envelope
- Expansion
  - 0-35 feet from OHWM– prohibited
  - 35-75 feet from OHWM- vertical expansion only
  - 75 feet + from OHWM – vertical or horizontal
- Replacement/Relocation
  - 0-35 feet from OHWM- prohibited
  - Only if no other compliant location available
  - All other non-conforming structures on lot removed

Diagram D:

Nonconforming Principal Structure Located greater than 35 feet from the OHWM. Horizontal Expansion at a setback greater than 75 feet from the OHWM.

115.05(1)(g)5m

- Use has not been discontinued for a period of 12 months or more
- All other provisions apply

Summary

- Healthy, natural shorelands provide lakes and rivers with high water quality, good fishing, and higher property values
- Pollution from one farm/field or residence has been easy to ignore as insignificant, but it cannot be ignored any longer because the sum of the thousands of pollution sources is the main cause of today's water quality problems.
- We all need to take responsibility and actions to reduce our impact on the environment
- Counties need to revise their shoreland ordinances to comply with NR 115 by February 1, 2014
- The new rules provide flexibility that the old rules did not
- Assistance is available through County staff, UW-Extension, and DNR staff

Comments, Questions??

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