

Iron County

Protecting Water Resources Through Environmental Education & Civic Leadership



Engaging students, landowners, lake groups, & elected officials one day at a time.

Land & Water Conservation Department

Works with private landowners, Townships, and partners to promote sound land & water stewardship through education, technical support, and programs.

Funded through Department of Agriculture, Trade, and Consumer Protection

- DATCP funds staff & conservation projects

LWCDs are the primary means of delivering state conservation programs, technical assistance, and cost share to Wisconsin landowners.

Locally lead conservation implemented is arguably the most efficient and comprehensive model existing at this time.

2008-2010 funds leveraged 19:1 from state & federal

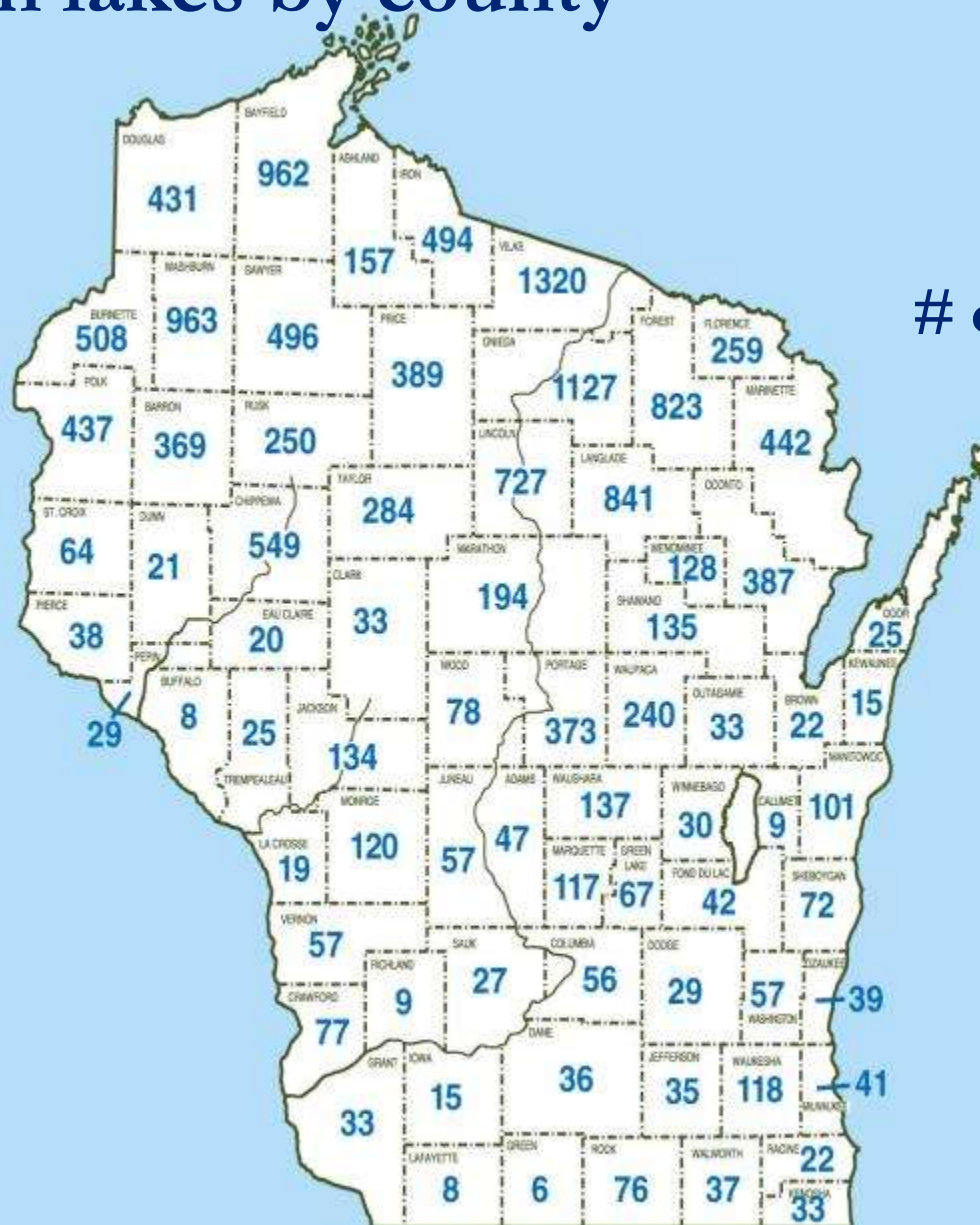
ALL work focuses on soil & WATER resources.

Wisconsin's lakes



Wisconsin has the 3rd largest concentration of fresh water, glacial lakes on the planet.

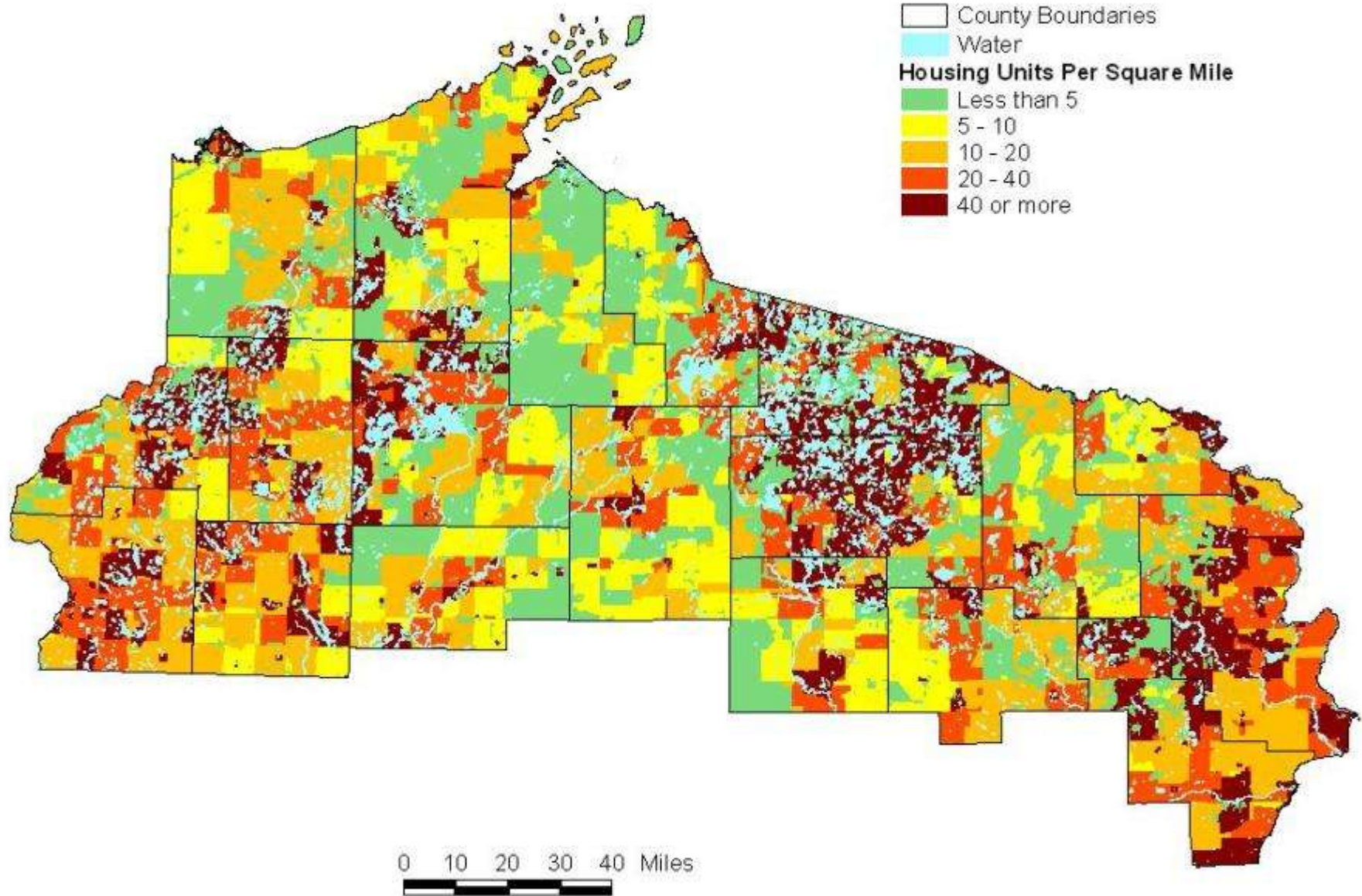
Wisconsin lakes by county



of lakes per county

Iron County =
~ 3.3%

2010 Housing Density by Partial Block Group Rural Renaissance Forecast

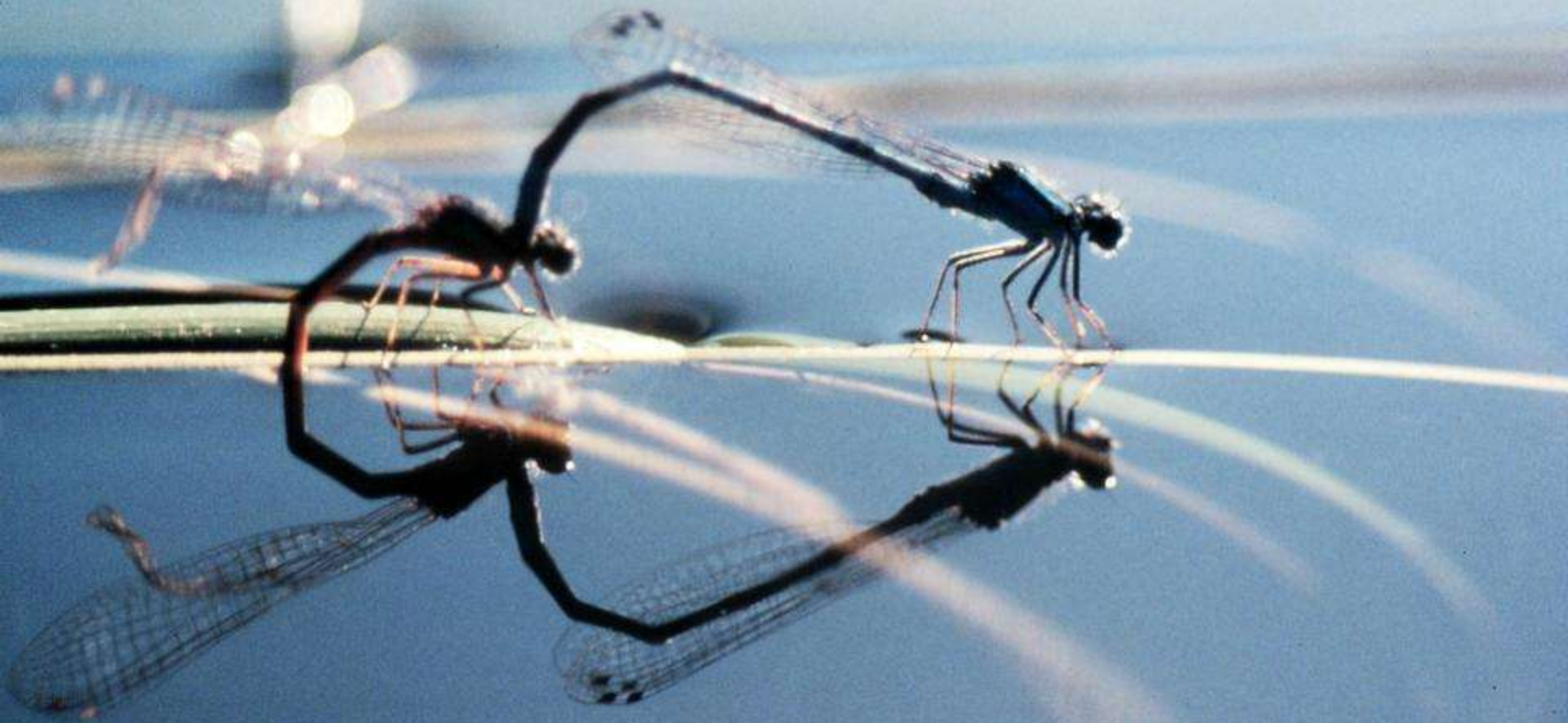




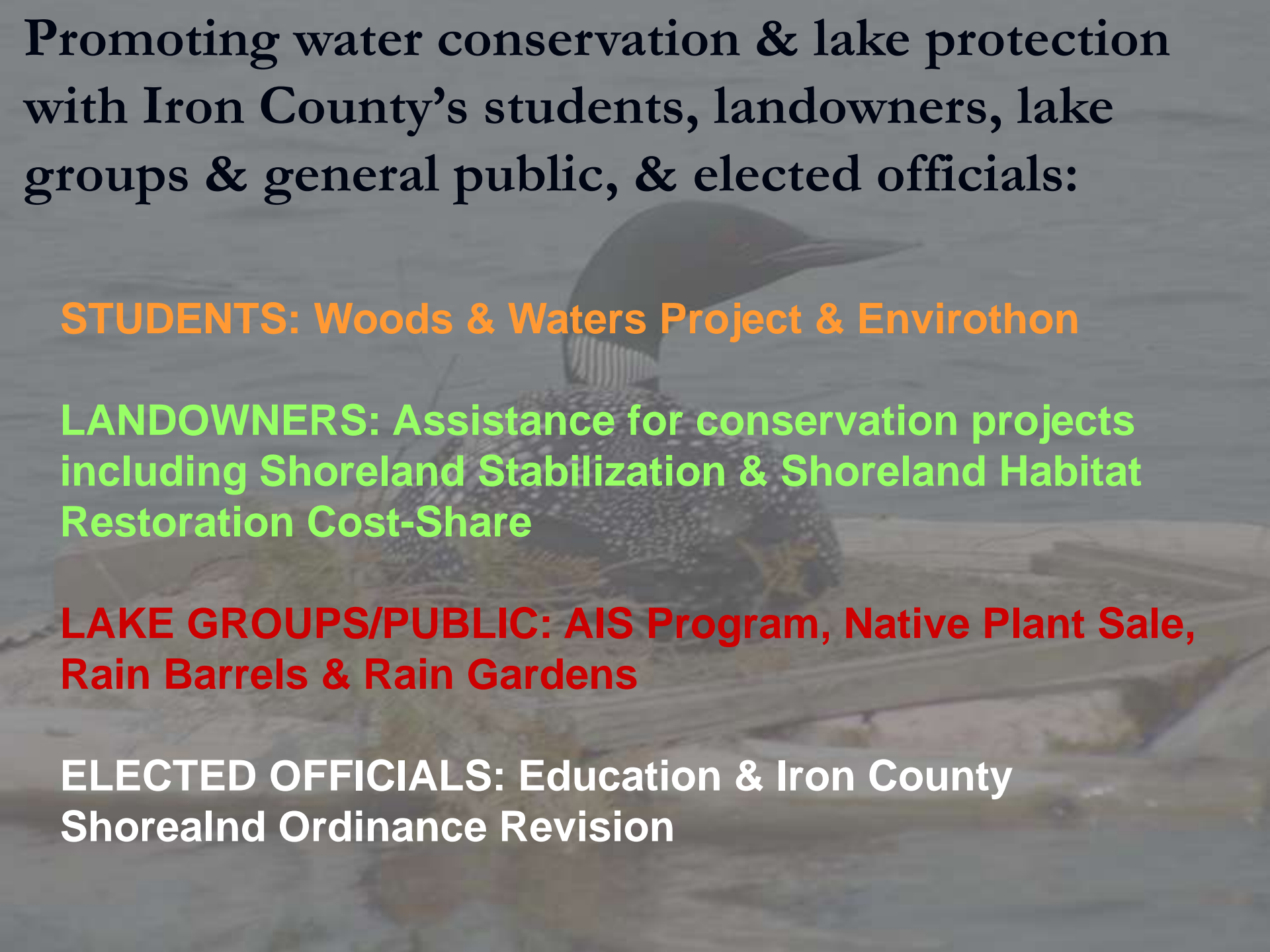
**90% of all lake life is born, raised and fed in the
area where land and water meet.**

(Ontario, Ministry of Natural Resources)

80% of plants & animals listed as endangered species live all or part of their lives in the littoral (near-shore) zone.



Many important benefits of the near-shore zone.

A loon is shown sitting on a nest of sticks in a lake. The loon has a dark cap and a striped throat. The water is calm and reflects the sky.

Promoting water conservation & lake protection with Iron County's students, landowners, lake groups & general public, & elected officials:

STUDENTS: Woods & Waters Project & Envirothon

LANDOWNERS: Assistance for conservation projects including Shoreland Stabilization & Shoreland Habitat Restoration Cost-Share

LAKE GROUPS/PUBLIC: AIS Program, Native Plant Sale, Rain Barrels & Rain Gardens

ELECTED OFFICIALS: Education & Iron County Shoreland Ordinance Revision

Woods & Waters Project



Mercer
& Hurley Schools

Woods & Waters Project

- Student-based field research; since 1999 500+
- Students monitor water quality & loon reproduction (April- July)
- Students study Pine Martin territory & forest habitat (September-March)
- Present at state & local conferences
- 500+ students



Mercer & Hurley Schools

Envirothon

- Hands-on environmental problem-solving competition for high school students.
- Teams of 5 students compete at state.
- Test stations: Aquatic Ecology, Forestry, Soils, Wildlife & oral current issue.
- Gain knowledge & problem-solving skills to apply principles of resource management.



WI High School Conference

- Student research poster session
- Judged against other schools
- Students vote for the best project
- Attend breakout sessions
- Groundwater, Climate Change, Wildlife, AIS, Stream Monitoring



Other Education:



- Field days (Bog Walk), Lake Visits, Snowshoe trails, etc.

Other Education:



- Local & State Conservation Poster Contest
- Classroom visits
- Conservation Camp
- 550 student interactions
- 40 programs



Landowner Focused:

Technical Assistance:

We provide conservation planning & technical assistance for a variety of projects, including:

- **Erosion control & natural resource management practices**
- **Access roads & stream crossings**
- **Shoreland restoration & shoreland mitigation**
- **Non-metallic Mining Reclamation Plan review**
- **Workshops & presentations**



Financial Assistance:

Financial assistance is provided through Cost-Share.

Cost-Share Program-

***Projects focus on reducing sediments in our waterways and implementing goals identified by citizens the county's Land & Water Resource Management Plan.**

Eligible practices include:

- Access Road**
- Cattle Crossing and Barnyard Runoff Control Systems**
- Streambank Fencing**
- Streambank and Shoreline Stabilization**
- Riparian Habitat Restoration**
- Well Decommisioning**
- Wetland Restoration**

Riparian Habitat Restoration

Town Park



Before

Total Plants = 1065

Total Cost: \$6,540

DATCP: \$4,220

Landowner: \$2,320

After

Access Road / Stream Crossing



Before

Total Cost: \$10,825

| | |
|------------|---------|
| NRCS: | \$5,112 |
| DATCP: | \$4,000 |
| Landowner: | \$1,713 |

Crossing: 60' x 16'
Access Road: 135 ft.
Fence: 1,805 ft



After

Shoreland Stabilization & Restoration



Strongly promoting the replacement of lawns with native plants!!

Total Plants= 1651

After



Before

Total Cost: \$11,062

DATCP: \$7,953

Landowner: \$3,409

And Remember:

1 pound of Phosphorus =

500 pounds of algae!

Pounds of Phosphorus per Acre

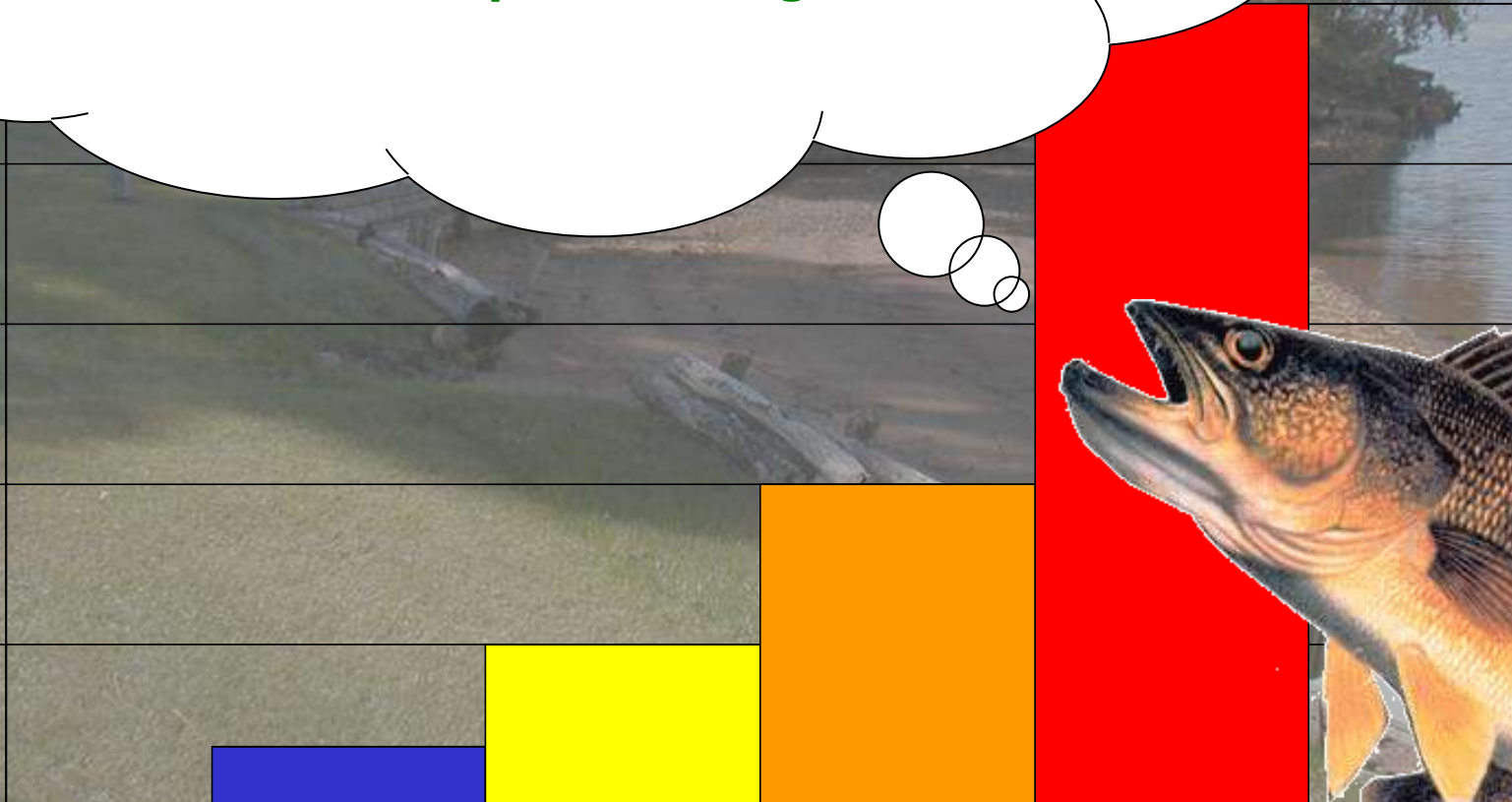
2
1.5
1
0.5
0

Forest

Rural

Agriculture

Urban Development



Tips for Your Shore

- Maintain a 35 foot + vegetated buffer along water's edge
- Leave dead trees and fallen logs in place
- Minimize removal of aquatic plants
- Avoid use of lawn chemicals along the shore and in water

Treat the Earth well. It is not inherited from your parents, it is borrowed from your children.

- old Kenyan proverb



Go Native !



Fred J. Rozumalski



Figure 15.1 Growth form of a sod grass (left), tufted grass, and a bunch

Lake Groups:

- AIS Program: Signage, Workshops, Media Campaign, Monitoring
- Presentations (AIS, Ecology, Restoration)
- Field Days/ Boat Tour
- 600 attendees
- 25 programs



General Public:

- Rain Barrel /Garden workshops
- Barrel Annual Distribution 150+
- Master Gardener Programs
- 25 programs



Elected Officials & Civic Leadership

- Reinforcing the privilege to enjoy our resources.
- Holding them ACCOUNTABLE to make decisions that protect resources for future generations.

- Annual Conservation Project Tour
- County Board & Zoning Programs
- Town WQ Projects
- Shoreland Ordinance Revision



When future generations judge those who came before them on environmental issues, they may conclude that “they didn’t know.” Let us not go down in history as the generations who knew, but didn’t care.

- Mikhail Gorbachev (2002)

Access Road & Culvert Replacement



| | |
|--------------|-----------------|
| LWRM= | \$14,863 |
| USFWS= | \$ 1,000 |
| <u>Town=</u> | <u>\$ 8,070</u> |
| Total= | \$23,933 |

7' x 11' x 60' pipe arch culvert

NR115 - Shoreland Zoning



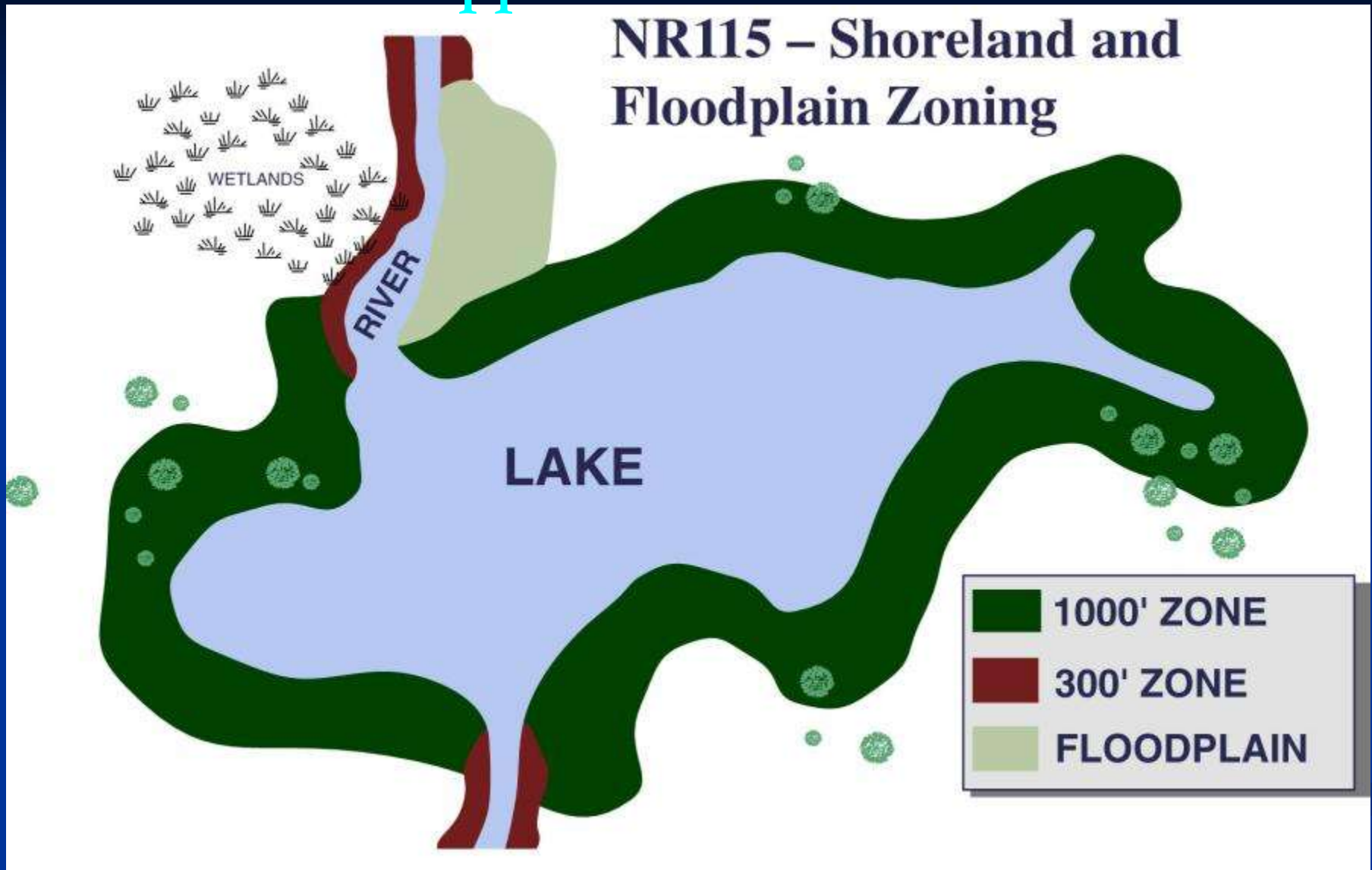
- Control the density of development on the water's edge.
- Create or keep vegetation buffers near the water's edge.

To preserve and protect healthy lake ecosystems and limit disappointment on Wisconsin's waters.



Where NR115 Applies

NR115 – Shoreland and Floodplain Zoning



Shoreland Zoning NR115- DNR

Lot size:

Septic: 20,000 ft² - 100' frontage

Sewer: 10,000 ft² - 65' frontage

Buffer: no clearing 35' OHWM

Setback: 75' inland of OHWM

New: height cap set at 35' tall.

Non-conforming w/n setback: limit 35' high,
↑ expansion only & ONLY if 35'+ back from OHWM; + mitigation.

Non-conf. >75' back: direction not regulated; mitigation required?

Impervious: 15% allowed w/n shoreland zone: 300' OHWM
15-30% allowed w/ mitigation.

Average setback: Prin. structures w/n 250' of proposed; not <35' OHWM.



Mitigation: A plan to offset the adverse impacts of develop.; intended to improve the shoreland buffer! Point system; examples.

Mitigation

Can automatically require restoration/main't,
or Require point system:

Exterior materials: ½ pt.

Restore/maint. buffer: 1 pt.

Restore/maintain buffer
< 50' OHWM: 2 pt.

Restore veg. on sides: 1 pt.

Removal of acc. buildings w/n setback: 1 pt.

Other practices



Shoreland Zoning NR115 – Iron County

Lot size: Class I (developed)

Septic/sewer: 40,000 ft² - 200' front

Class II (smaller) & Rivers/Streams

Septic/sewer: 90,000 ft² - 300' front

Proposed Class III (wild & <10 ac.)

Septic/sewer: 90,000 ft² - 300' Mitigation & setbacks greater

Buffer: no clearing 35' OHWM

Setback: 75' inland of OHWM on Class I & II, 100' or 125' on Class III

New: cap set at 35' tall; from lowest elevation - mean roof height

Non-conforming w/n setback & 75'+: same as state

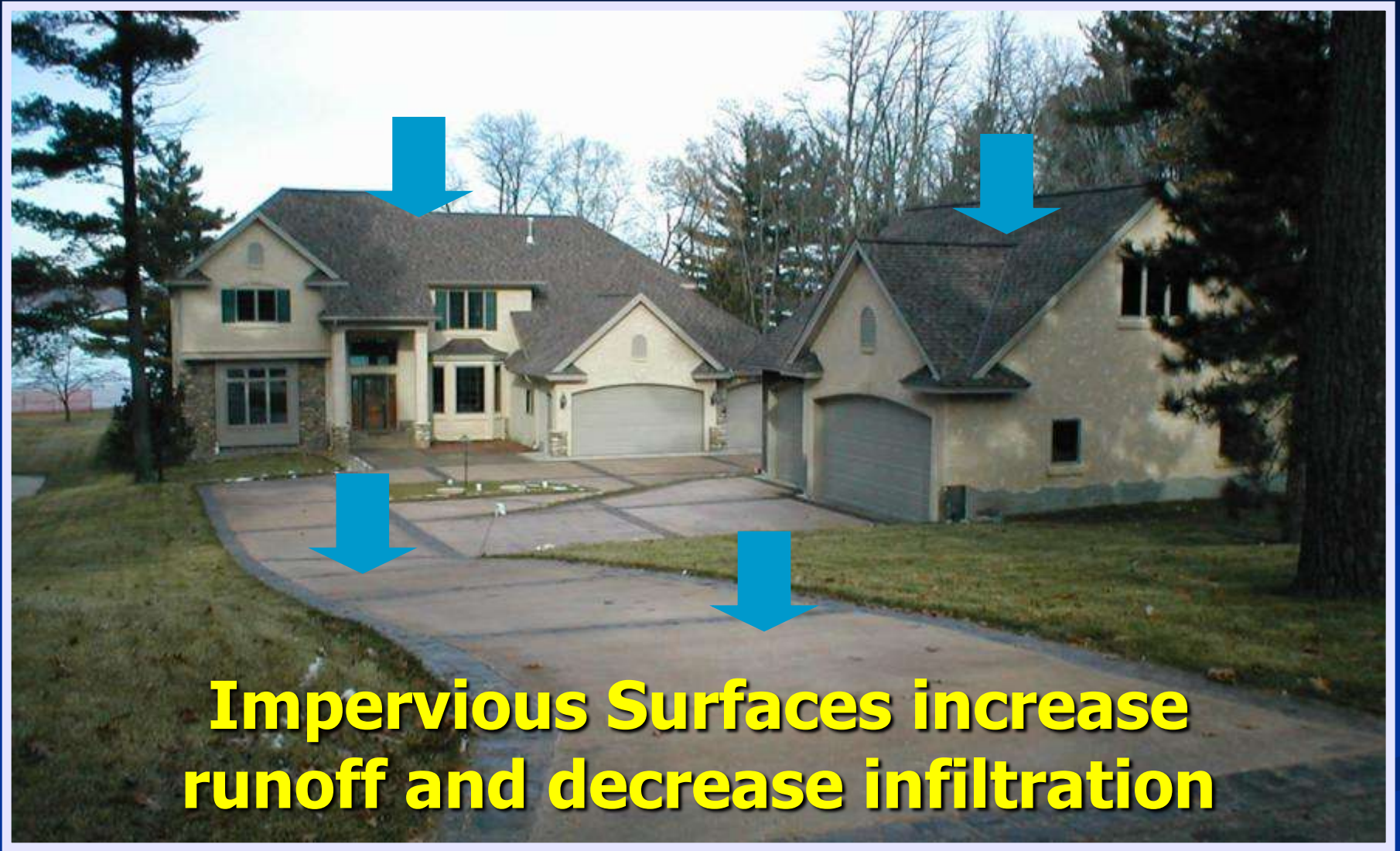
Mitigation: More points on Class III lakes

Lot size:

Septic: 20,000 ft² - 100' front.

Sewer: 10,000 ft² – 65' front.

Impervious: same as state for 15%, but limit @ 15 or 20%?



Impervious Surfaces increase runoff and decrease infiltration

Materials like cement, asphalt, roofing, and compacted soil that prevent percolation of runoff into the ground.

**Average setback: aver. of homes on adjacent lots
w/n 250' of proposed.**

Remove it? Or,

Min. setback 50' on Class I & II and 75' on Class III



Shoreland Zoning NR115- Iron County

- Received DNR Grant to update Ordinance
- Will complete updates by February 2012

- Work can be frustrating & a challenge, but

It is Exciting & Empowering



In the end, our society will be defined not only by what we create, but by what we refuse to destroy.

- John Sawhill

Engaging students, landowners, lake groups, & elected officials one day at a time.



*“Never doubt that a small group of thoughtful,
committed citizens can change the world.*

Indeed it’s the only thing that ever has.”

-Margaret Mead



**Thank you for your help in protecting &
preserving our natural resources.**

**MaryJo Gingras; Iron Co. LWCD
607 3rd Avenue N.; Hurley, WI 54534
(ph): 715-561-2234
conservation@ironcountywi.org**

www.ironcountylcd.org