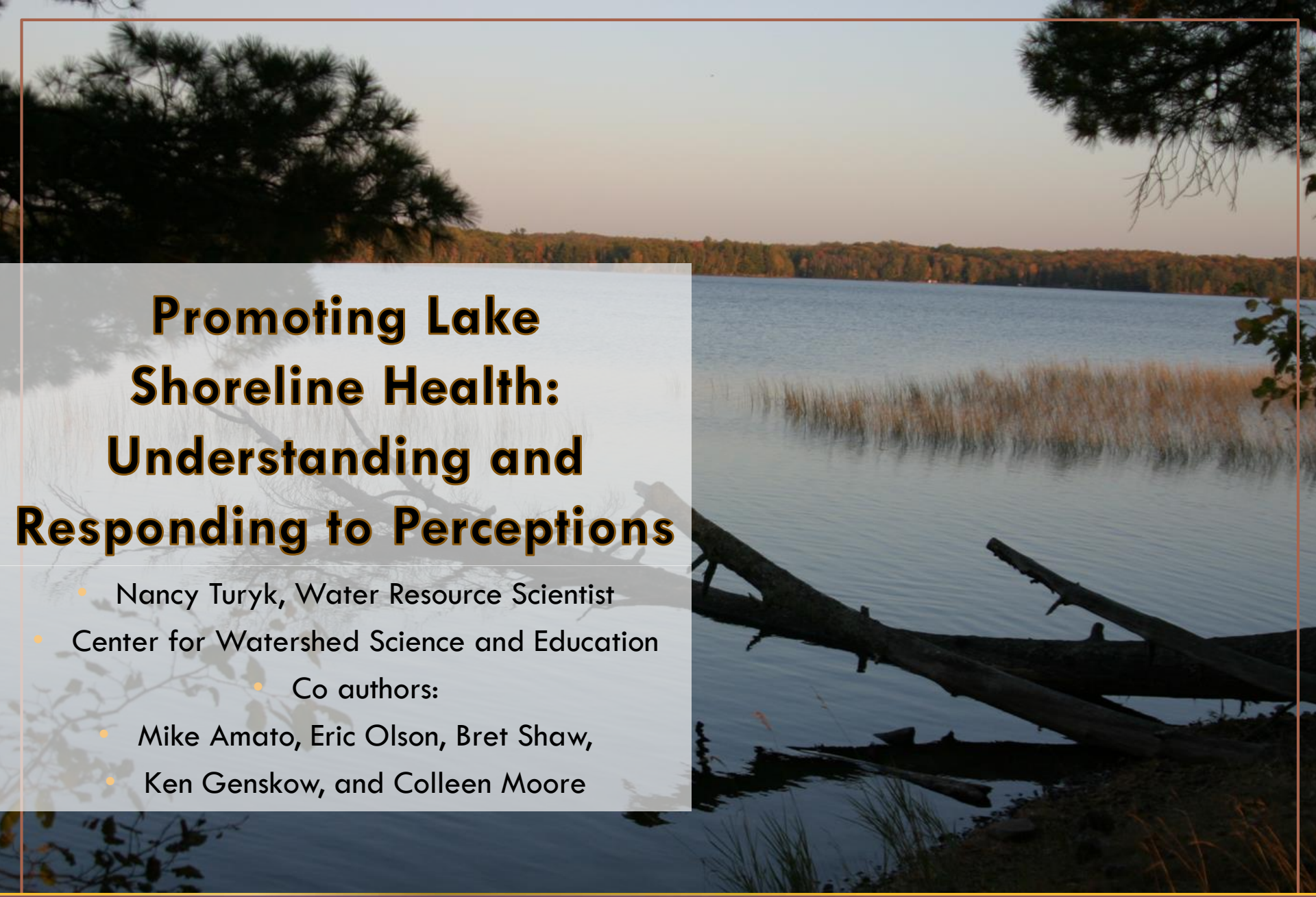


Promoting Lake Shoreline Health: Understanding and Responding to Perceptions

- Nancy Turyk, Water Resource Scientist
- Center for Watershed Science and Education
- Co authors:
- Mike Amato, Eric Olson, Bret Shaw,
- Ken Genskow, and Colleen Moore

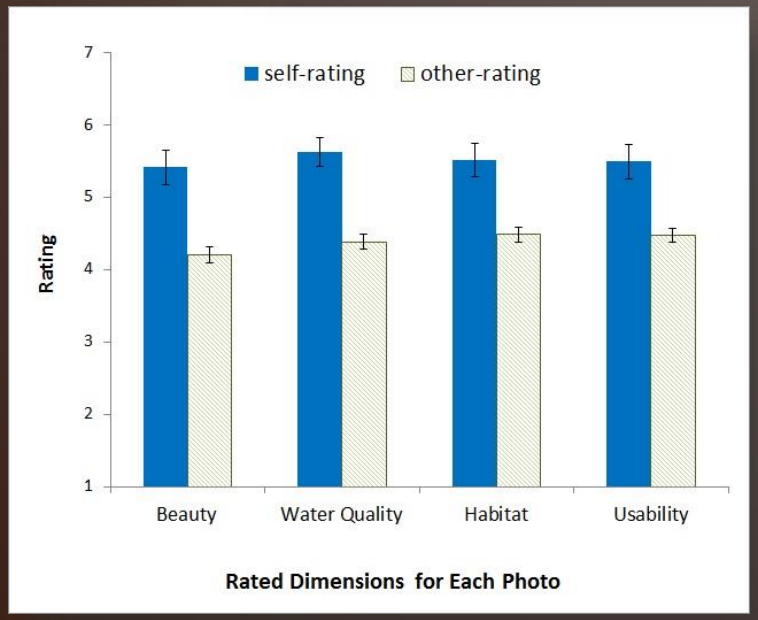
University of Wisconsin-Stevens Point
College of Natural Resources

Why a Healthy Shoreland?

- Reducing polluted runoff
- Flooding and erosion control
- Privacy and natural beauty
- Habitat for fish and wildlife

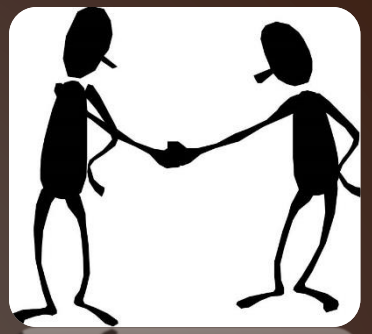
Life Happens Here!

People's perceptions of their shoreline's health and self-enhancement bias



- 57% response rate – 80 surveys returned
- Sent to properties with moderate shoreland disturbance
- Ranked 3 photos for shoreland health criteria

Neighbor to Neighbor Conversations Campaign



GOAL:
Combine knowledge about shoreland conditions with tailored messages delivered to the door by volunteers

1. How will people respond to conversations with their neighbors about shoreland health?
2. Can we help county staff identify property owners that would like to improve their shorelands?
3. Will volunteers be willing to participate in a short-term project?

Project Design

Data Summary

- Graphs
- Maps

Follow up strategies

- Short term
- Long term

Campaign and Volunteer Support

Campaign Strategy (Adaptive)

Material Development

- (1 month ahead) Tailored Messaging
- County Brochures
- Pledge Form

Hire Campaign Coordinator

- (3-4 months ahead)
  Recruitment Training Strategies
  Volunteer support and appreciation

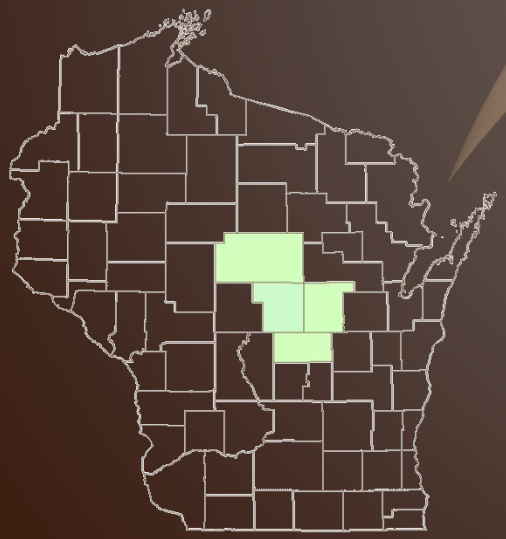
Recruit Volunteers

- (1-2 months ahead)
  Emails Facebook
  Fliers at events

County Staff

- (1 year ahead)
  Help design program
  Fit to their needs

Build Team



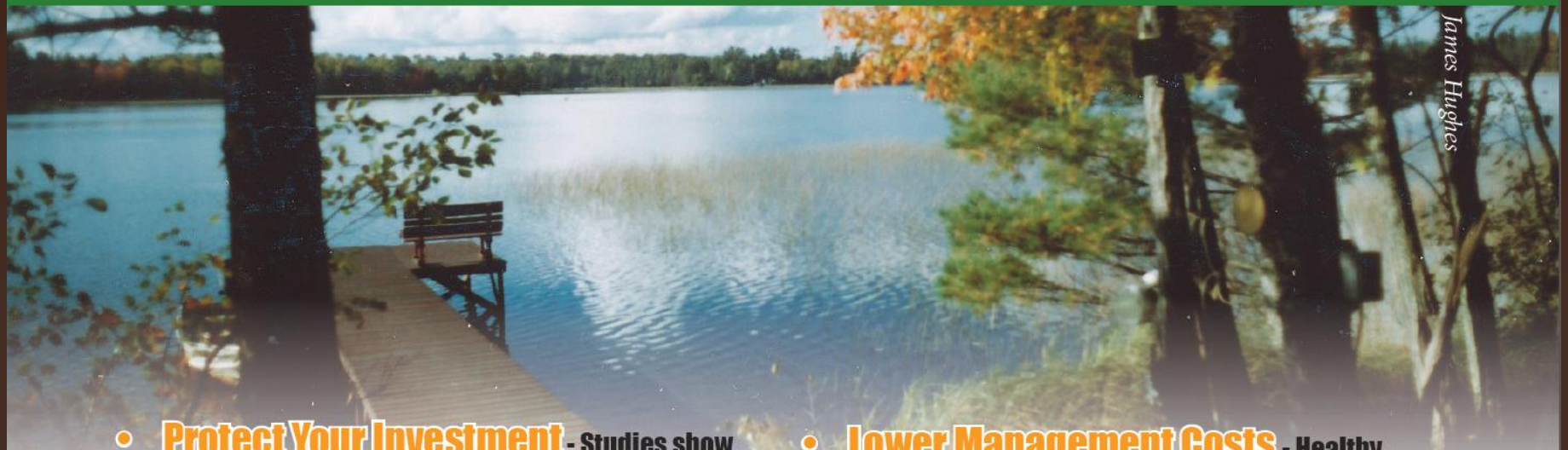
Tailored
Messages, Materials, and Strategies

Would you rather look at this...

...or this?

Join your neighbors, use healthy shoreland practices

The Economics of Healthy Shorelands



- **Protect Your Investment** - Studies show that property values can be lower on lakes with poorer water clarity. A healthy shoreland helps to improve water clarity by removing nutrients and sediment carried in runoff.
- **Reduce Your Maintenance** - Native plants require little to no maintenance, leading to reduced mowing time and expense.
- **Lower Management Costs** - Healthy shorelands can help reduce nuisance algae blooms and excessive aquatic plant growth, reducing lake management costs.
- **Keep it Cool** - Trees and shrubs in the shoreland area provide shade which can reduce building cooling costs.

Invest in your property by using healthy shoreland practices!

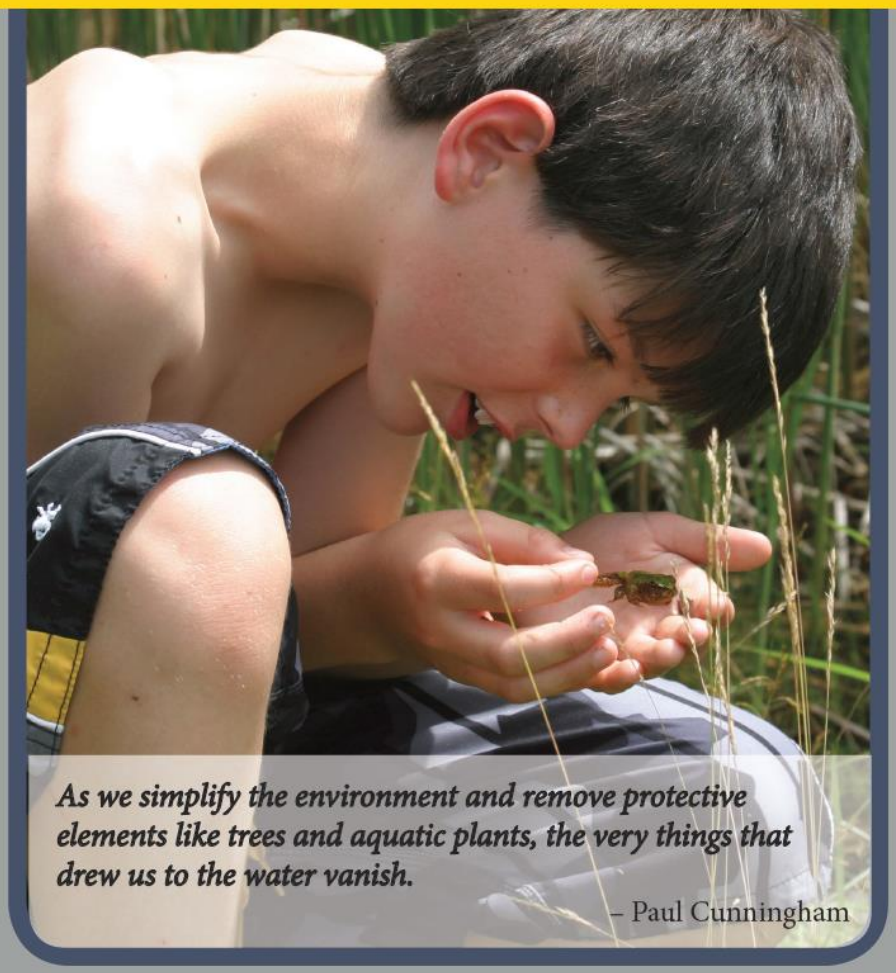
Healthy Lakes Have More Fun!

- Natural shorelands provide opportunities for kids to explore and discover frogs, fish, and dragonflies.
- Healthy shorelands offer opportunities for photographing wildlife and plants.
- Native shoreland vegetation reduces runoff. Runoff carries pollutants which increase aquatic plant growth, making swimming and boating less enjoyable.
- Herbicides applied on lawns and gardens end up in the lake, harming or killing fish, frogs and many of their food sources.

The choice is yours!

Join your neighbors in adopting healthy shoreland practices that promote good fun and preserve the lake for future generations!

Healthy Shorelands = More Enjoyment!



- Native plants require little to no maintenance, which means more leisure time to relax and enjoy life at your lake.
- Trees and shrubs in the shoreland area increase privacy by screening homes from public view, and can help to muffle noise from watercraft.
- Natural shorelands provide great opportunities for watching wildlife or photographing plants, as well as a place for kids to explore and discover frogs, fish, and butterflies.

Enjoy your lake more by using healthy shoreland practices!

Healthy Shorelands = More Time Fishing!

On the Shore...

- Shoreline trees and shrubs provide shade and cool water needed by fish on hot sunny days.
- Overhanging and fallen shrubs and trees provide excellent shelter for young fish and the food they eat. Leave them or add them!
- Managing runoff from your property can benefit the fishery. Sediment in runoff can alter fish spawning beds and cloudy water makes it difficult for predatory fish to feed.

Create a cool zone for fish by planting or protecting shrubs and trees near the shore.

In the Water...

- Aquatic plants soften the impacts of waves. Bass and other fish hide among plants and wood, and spawn in areas protected from waves and predators.
- Healthy shoreland vegetation can improve the quality of runoff entering the lake, which will reduce sediment and algae blooms.

Improve fish habitat near the shore by adding or retaining woody habitat.

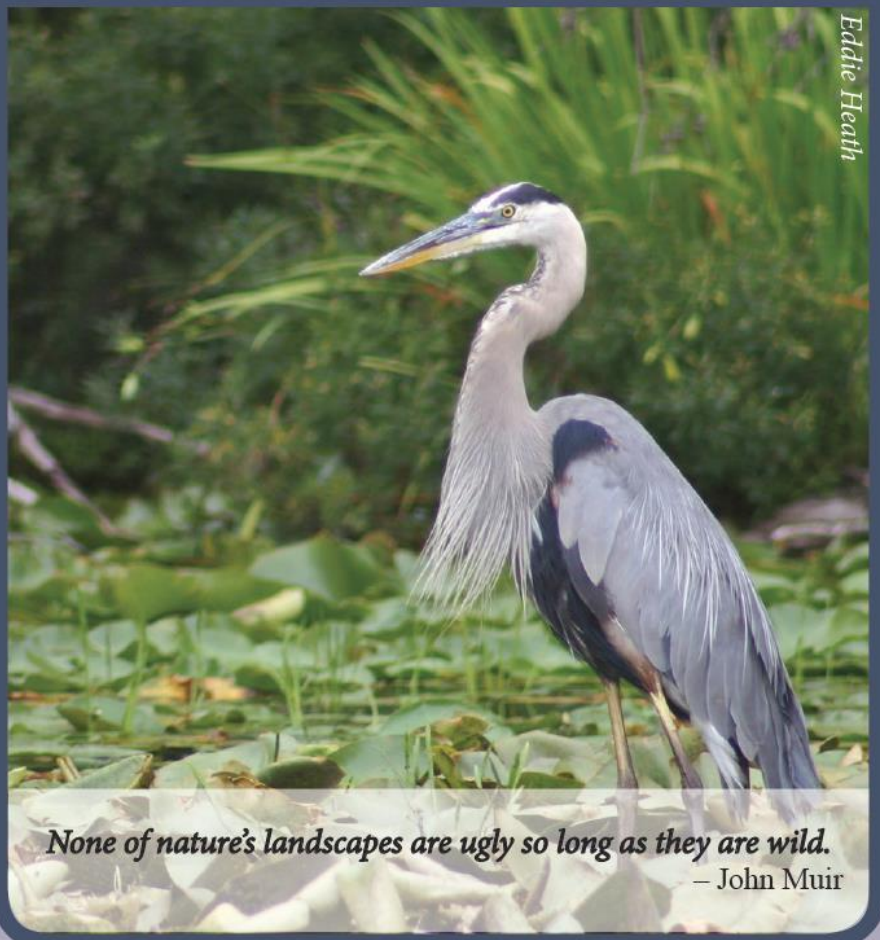
Healthy Lakes ~ Share a little shoreland with your neighbors

- Songbirds, ducks, loons, turtles, frogs, fish, dragonflies, and many others use shoreland vegetation for travel, shelter, and food!
- Fallen trees above the water are used by turtles to warm themselves. Fallen trees below the water are used by young fish and their food sources, including dragonfly nymphs.
- Butterflies, hummingbirds, and other pollinators are attracted to shoreland flowers, while geese tend to avoid shorelands with tall vegetation.

Take small steps!

Consider setting aside some of your shoreland for wildlife habitat.

Every little bit counts!



Healthy Shoreland Practices

- **Mow Less:** The simplest, most affordable way to improve your shoreline is to reduce mowing near shore. Native vegetation will re-establish itself over time.
- **Plant Native Vegetation:** Plant attractive native species of grasses/flowers, shrubs and trees that will add interest and beauty to your property.
- **Don't use fertilizers or herbicides:** They may run into the lake. Test your soil to determine if fertilizers are warranted.
- **Install a rain garden or a rain barrel:** Reduce runoff to the lake.
- **Add or leave woody habitat near the shore:** Turtles, birds and fish love it!

Ask for help:

Ed Hernandez - Waushara County Land Conservation
811 Harding, Wautoma, WI 54982
(920) 787-0453 | ed.courthouse@co.waushara.wi.us

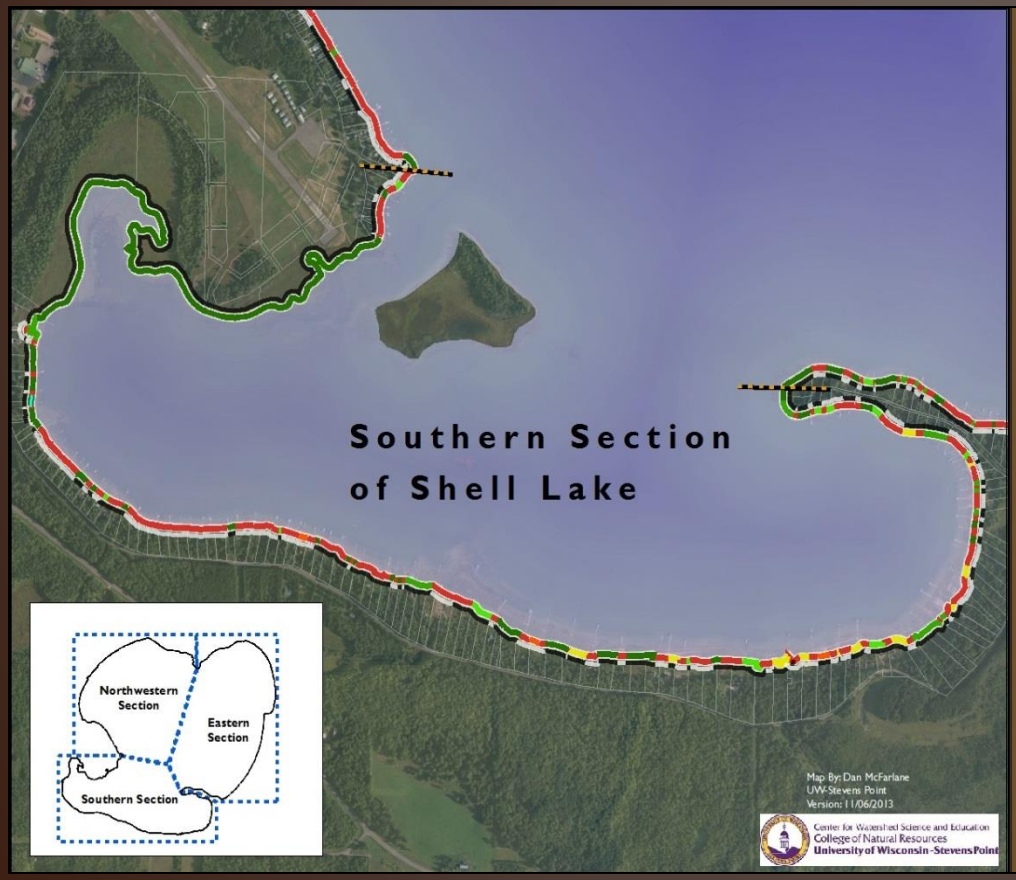
Patrick Goggin - Lake Specialist
UW-Extension Lakes
(715)-365-8943 | pgoggin@uwsp.edu

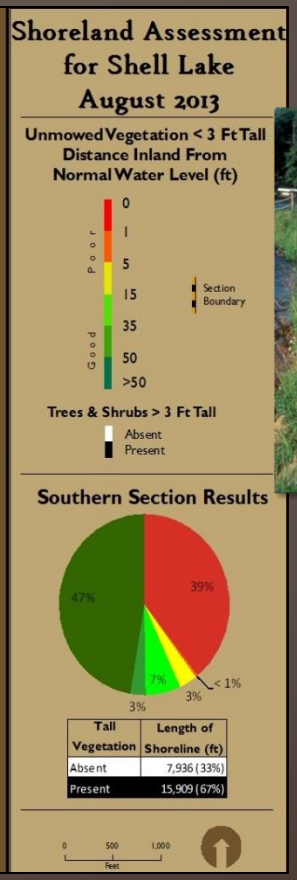
For more information:

Healthy Shoreland Practices: tinyurl.com/HealthyLakes
Pamphlets and Information: tinyurl.com/HealthyShorelands
Identifying Native Plant Species: tinyurl.com/Shoreland-Plan

Center for Watershed Science and Education
College of Natural Resources
University of Wisconsin-Stevens Point

Prioritize and provide insight about the health of the shoreland (at a given location) using the shoreland inventory

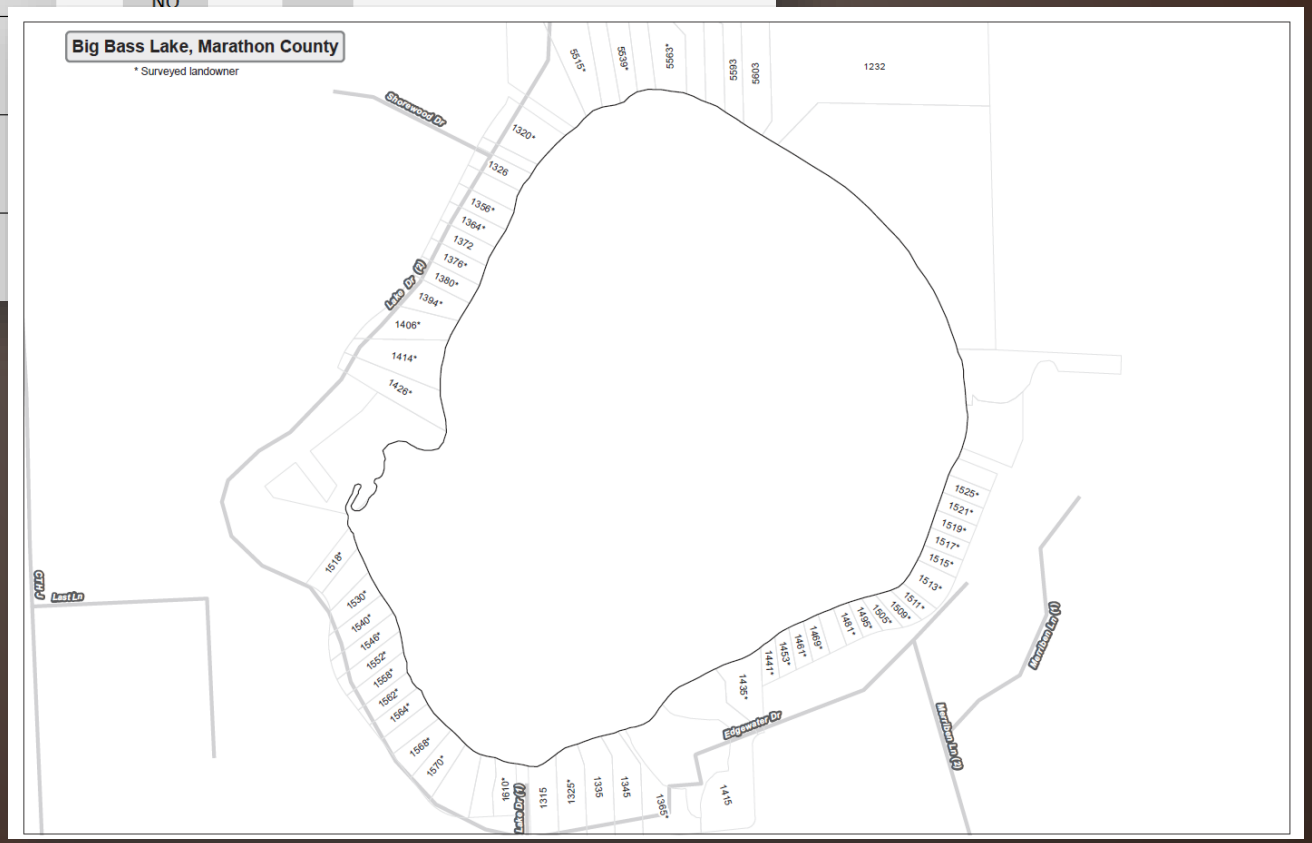




WALK-SHEET

_____ LAKE

Name and Address	INTERESTS (Check all)						Interested in shorelands?	Pledge Card?	Follow-up Materials?	NOTES (Materials for follow-up, requested contact by County, other)
	Fish	Wildlife	Recreation	Economics	Water Quality	Other				
							YES	YES	YES	
Sally and Joe Smith							Neutral	NO	NO	
1530 Edgewater St							NO			
							YES	YES	YES	
Rhonda Waters							Neutral	NO	NO	
1540 Edgewater St							NO			
							YES	YES	YES	
Bill Boat							Neutral	NO	NO	
1546 Edgewater St							NO			



Improving our Lakes – Healthy Lakes, Healthy Shorelands – 2015

What are your priorities? Please rank #1, #2, and #3

___ Improve shoreland habitat for wildlife

___ Improve habitat for fish in our lake

___ Improve the water quality of our lake

We would like to have a Healthy Shoreland! We are willing to…

(check all that apply)

☐ Talk with my neighbors about healthy shorelands

☐ Add woody habitat to our shore/lake

☐ Add a rain garden

☐ Fix erosion problems

☐ Stop applying fertilizers and/or pesticides on the shore

☐ Learn more about reducing impacts to our lake

☐ Learn more about native shoreland vegetation

Our goal for healthy shoreland vegetation (buffer) at the lake's edge:

☐ Platinum (More than 35 feet inland from the lake)

☐ Gold (25-35 feet inland from the lake)

☐ Silver (6-15 feet inland from the lake)

☐ Bronze (2-5 feet inland from the lake)

☐ Other (specify) _____

Name (optional): _____

Lake and County: _____

Please return this form to a local Healthy Lakes, Healthy Shorelands volunteer,

OR mail a completed form to: Healthy Lakes
800 Reserve St.
Stevens Point, WI 54481

OR complete the form online: http://goo.gl/forms/qKXQnEIXGo

You can also identify your projects on an online map and see what others are doing!

Thank you!

Other Strategies

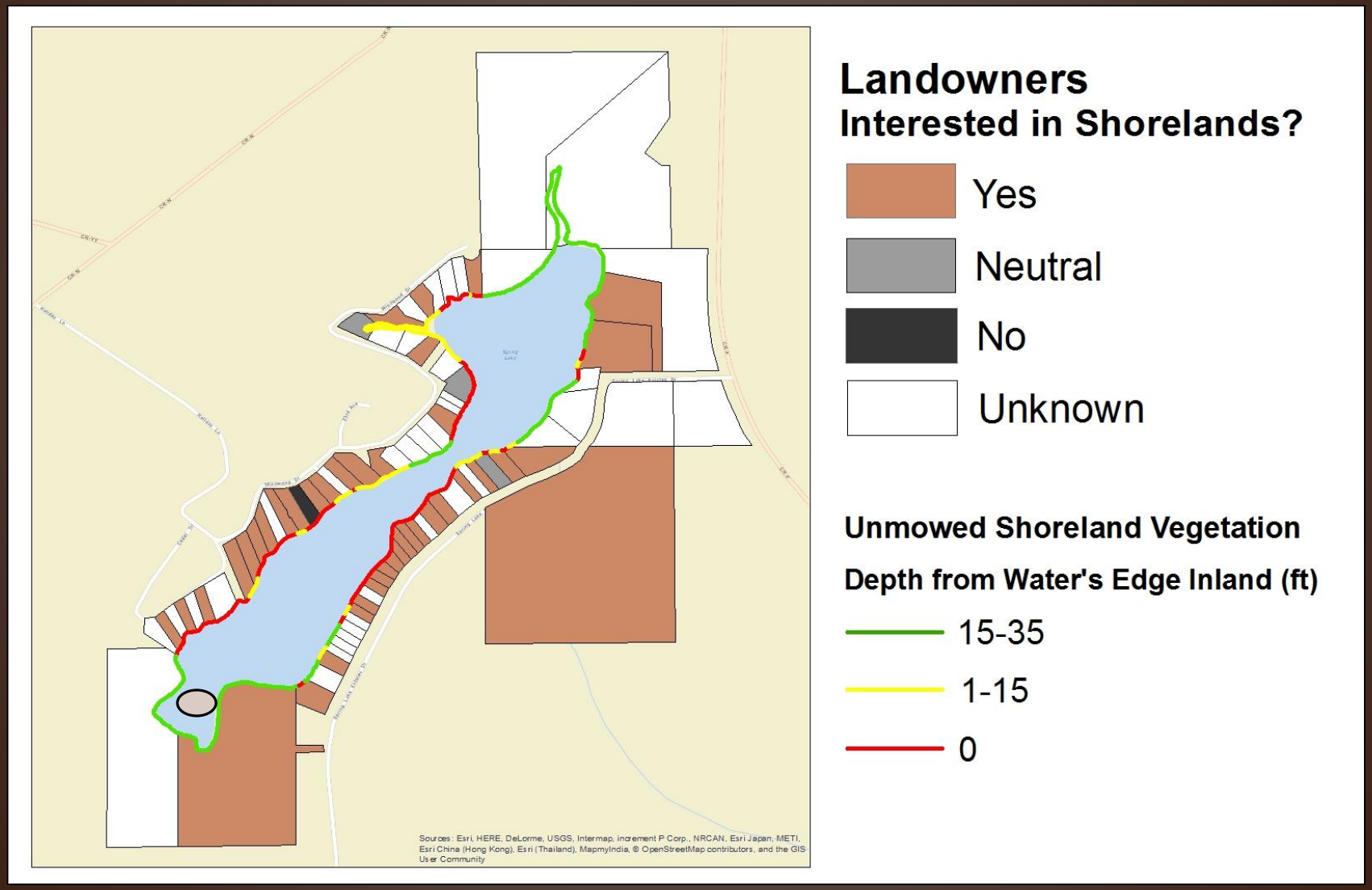
- Delivered packets of materials to paper boxes
- Only conversed with people they knew
- Incorporated questions for the lake association/district
- Returned with additional information (and second conversation)
- Held healthy shoreland “tours” prior to the neighborly conversations

Understanding and Using Results

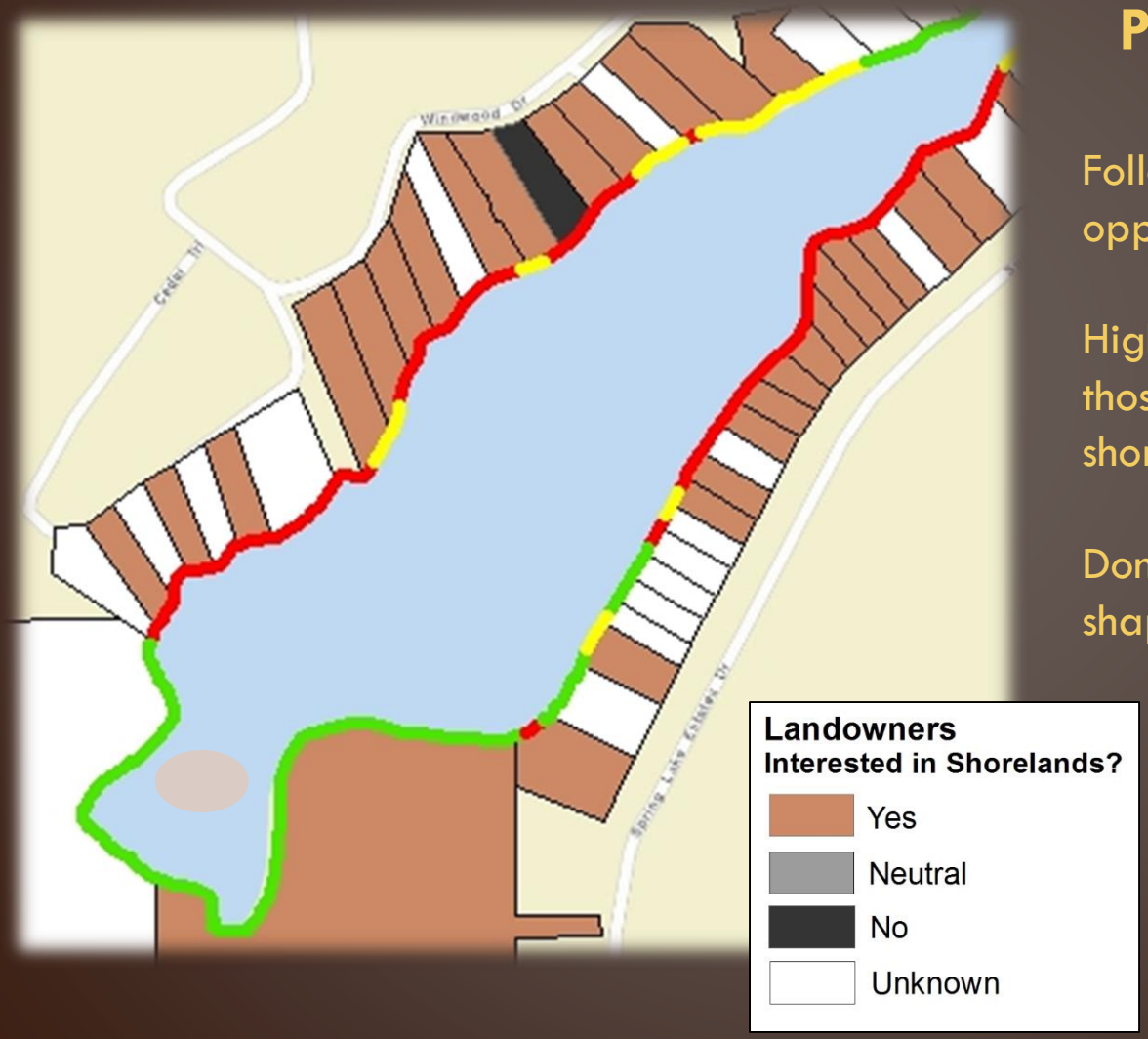
Project Summary

COUNTY	LAKES	CONTACTS	VOLUNTEERS		
			Residents	Non-residents	Total Vol.
Marathon	3	178	3		3
Portage	7	145	12	6	18
Waupaca	3	UNK	4		4
Waushara	3	69	2	1	3
TOTAL	**16**	**>392**	**21**	**7**	**28**

Summarizing collected data



Summarizing collected data – Interest in shorelands up close



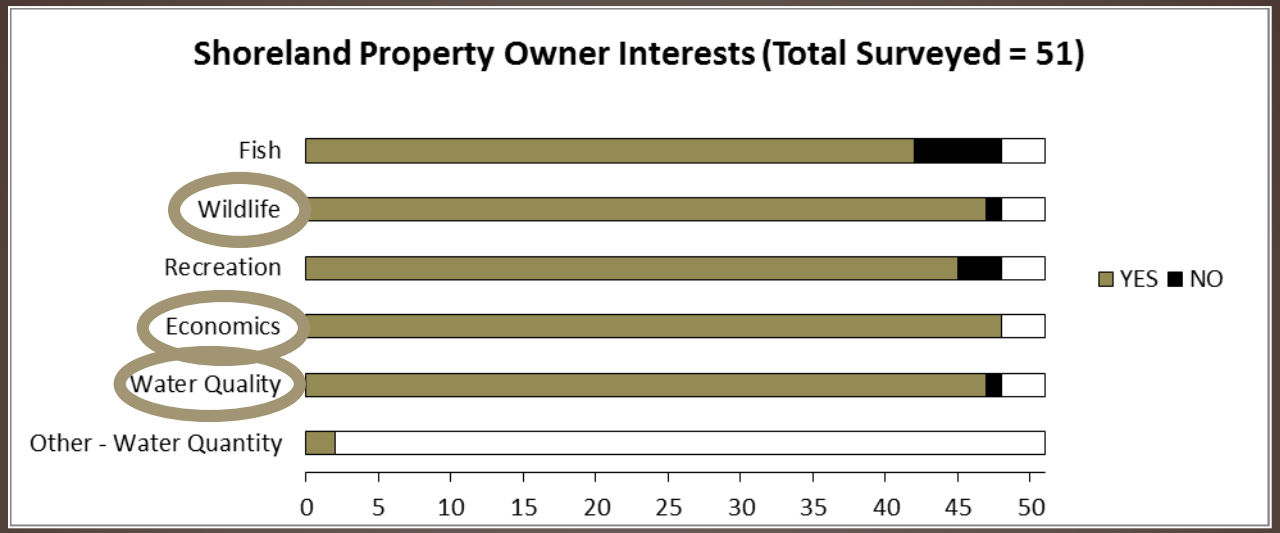
PRIORITIZING NEXT STEPS

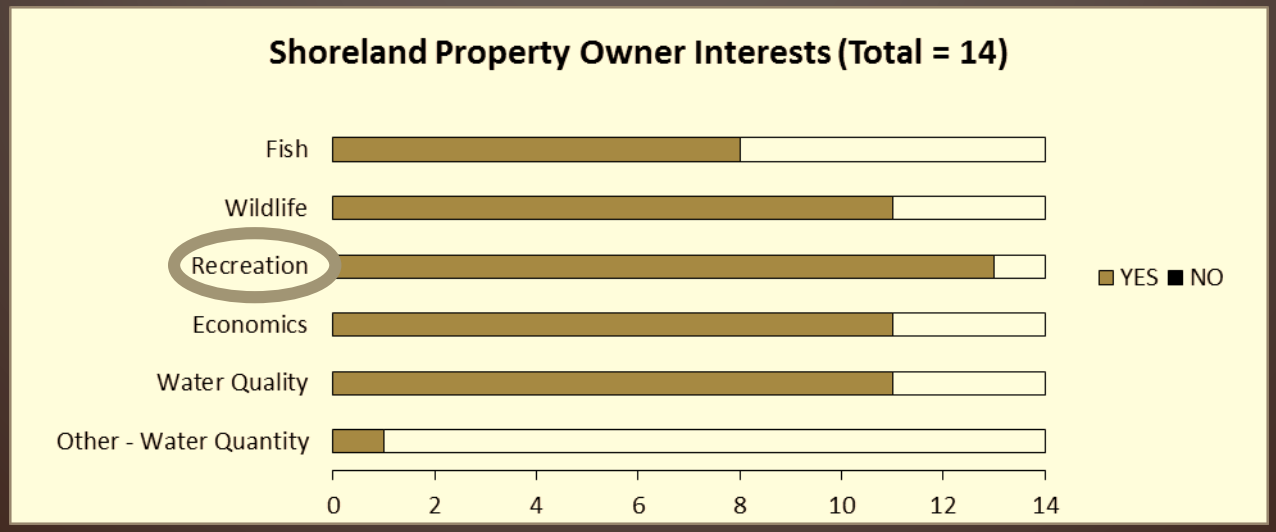
Follow up information and opportunities

Highest likelihood for change – those with neighboring healthy shorelands

Don't forget shorelands in good shape!

Framing future conversations





Follow up – a critical step!

- Volunteers delivered requested additional information
- County staff followed-up with requests for assistance
- Letter from Portage County soliciting Healthy Lake grant participation resulted in interest from 32 people – 25 were included in the Healthy Lake grant request
- Internet mapping
  - Display practices with public access
  - Interactive for citizens to populate
- Shoreland walks and info sessions by lake groups

Thank You!

Nancy Turyk
715-346-4155
nturyk@uwsp.edu

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