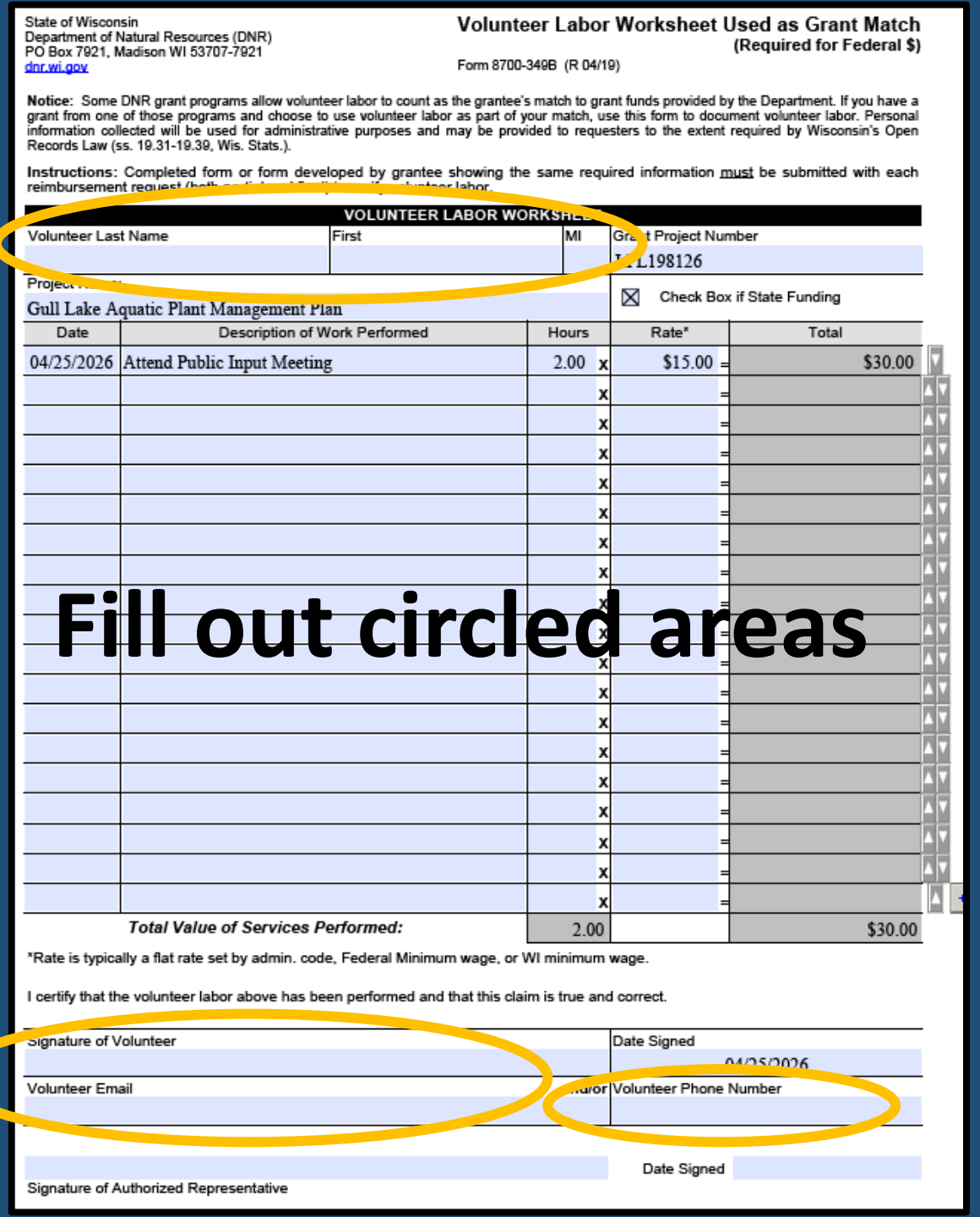
Please Fill Out the Volunteer Worksheet. Your time here counts as match toward the grant*

*For up to 20 volunteers



State of Wisconsin
Department of Natural Resources (DNR)
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

Volunteer Labor Worksheet Used as Grant Match
(Required for Federal $)

Form 8700-349B (R 04/19)

Notice: Some DNR grant programs allow volunteer labor to count as the grantee's match to grant funds provided by the Department. If you have a grant from one of those programs and choose to use volunteer labor as part of your match, use this form to document volunteer labor. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31-19.39, Wis. Stats.).

Instructions: Completed form or form developed by grantee showing the same required information must be submitted with each reimbursement request (both applicant and [illegible] volunteer labor.

VOLUNTEER LABOR WORKSHEET

Volunteer Last Name	First	MI	Grant Project Number
			LPL198126

Project Name
Gull Lake Aquatic Plant Management Plan

☒ Check Box if State Funding

Date	Description of Work Performed	Hours		Rate*		Total
04/25/2026	Attend Public Input Meeting	2.00	x	$15.00	=	$30.00
			x		=	
			x		=	
			x		=	
			x		=	
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			x		=	
			x		=	
	Total Value of Services Performed:	2.00				$30.00

Fill out circled areas

*Rate is typically a flat rate set by admin. code, Federal Minimum wage, or WI minimum wage.

I certify that the volunteer labor above has been performed and that this claim is true and correct.

Signature of Volunteer	Date Signed
	04/25/2026
Volunteer Email	Volunteer Phone Number

Date Signed

Signature of Authorized Representative

PUBLIC MEETING OSPREY LAKE AQUATIC PLANT MANAGEMENT PLAN

Sara Hatleli, Aquatic Plant & Habitat Services LLC, 715-299-4604

sarahatleli97@gmail.com

Public Input Meeting, May 16 2026

Today's Meeting Desired Outcomes

Learn about survey results. We leave with an understanding of methods & results.

Discuss options for dealing with aquatic invasive species. We leave understanding the importance of native aquatic plants and realistic options for control of EWM.

Gather YOUR input for the Aquatic Plant Management Plan. *WE leave with direction for goal development.*

Participation

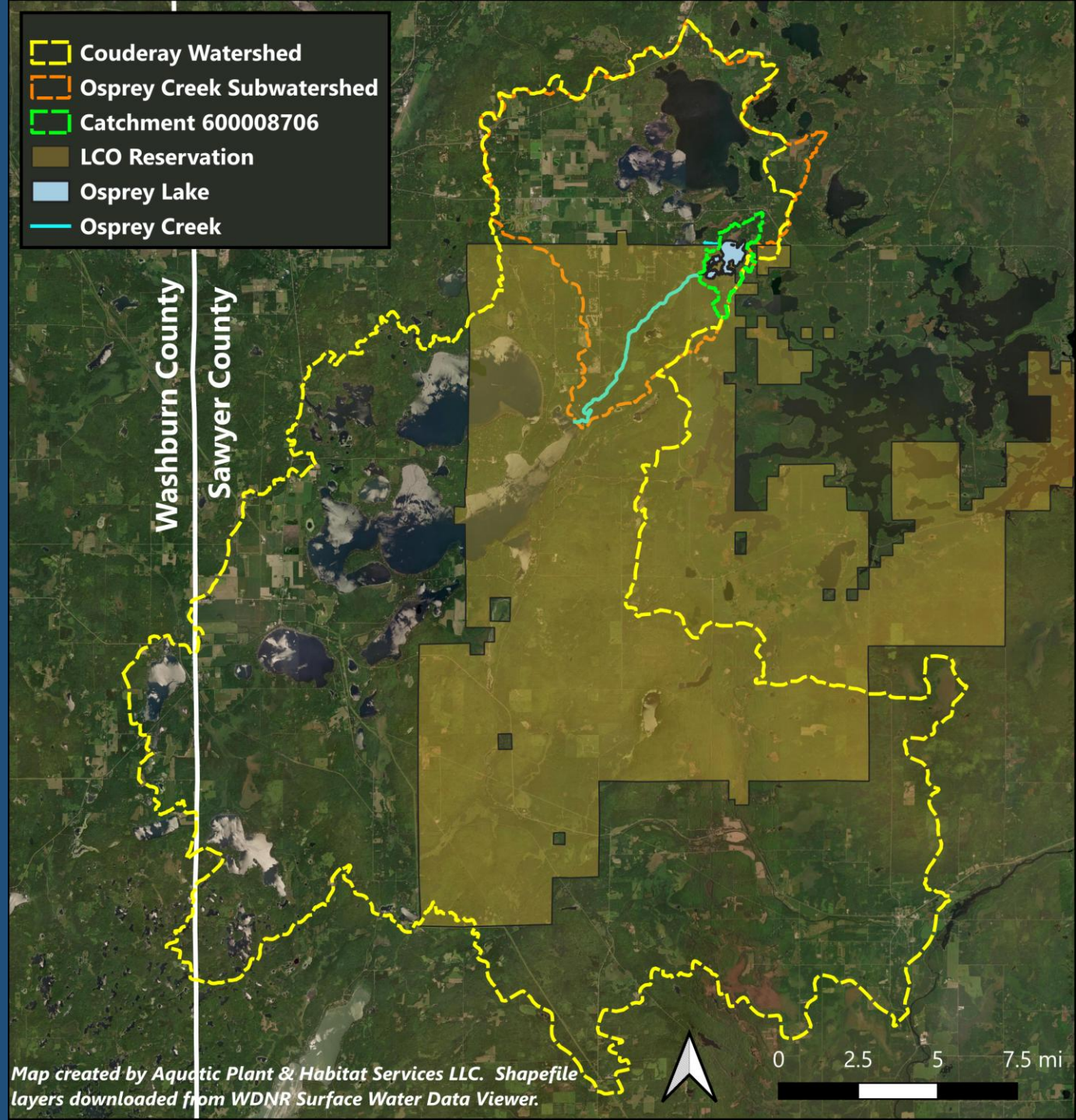
Group Agreements

- What are the things we agree on for gathering in this space and time? Think about unspoken norms……

Pondering Pond

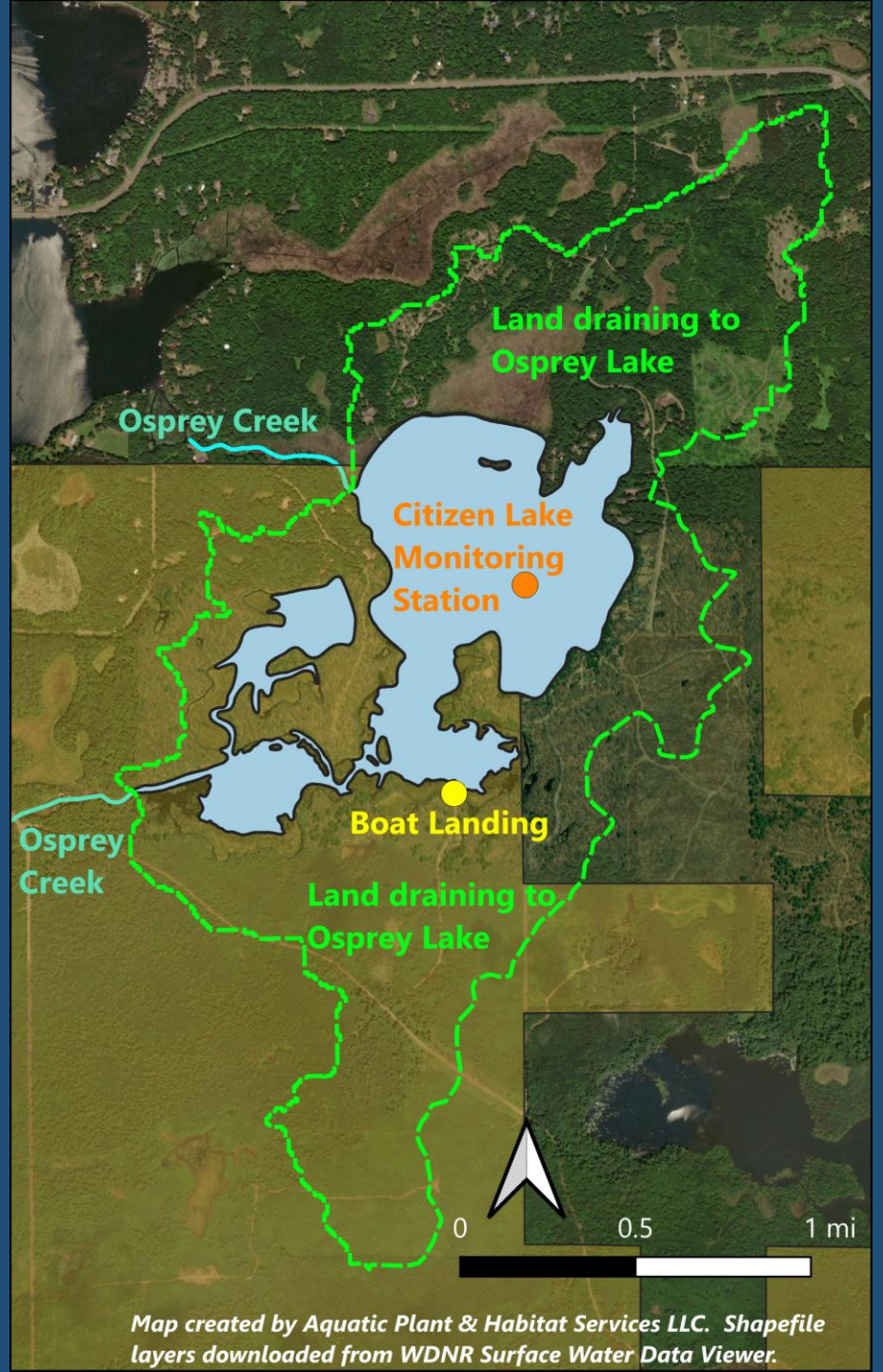
Osprey Lake in the Landscape

- Couderay Watershed
- Osprey Creek Subwatershed



Zoom to Osprey

- 214 acres
- 32 ft max depth
- Catchment 675 acres
- Seepage Lake
  - But there is a surface water inflow and outflow



Watershed Restoration and Protection Viewer

Wisconsin Department of Natural Resources

Watershed Health Index: Squaw Lake Creek

Watershed Code: **070500010401**

Watershed Name: **Squaw Lake Creek**

Watershed Health Score: **76.20**/100

Statewide Watershed Health Rank: **502**/1,744

Statewide Priority: **Y**

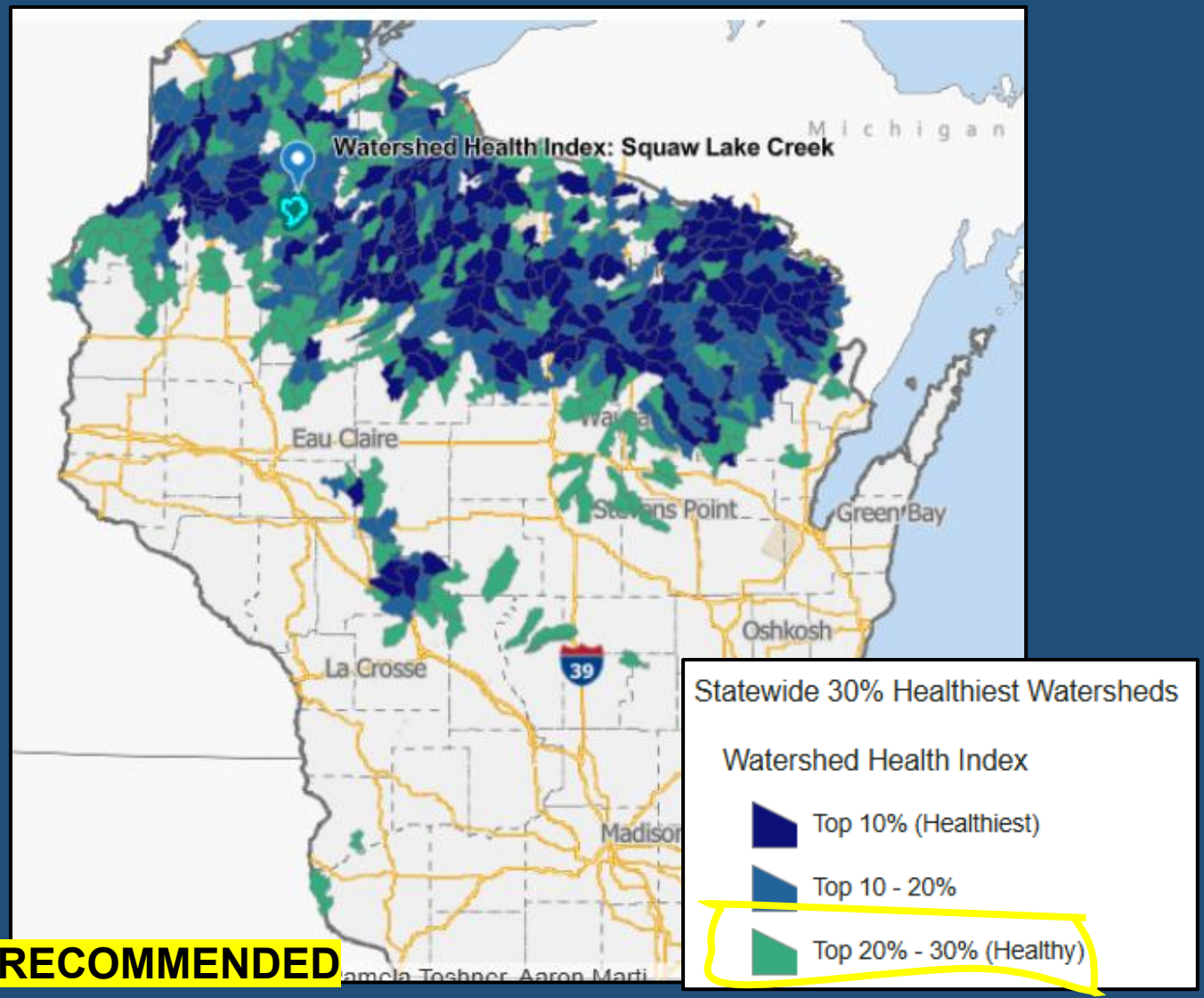
HUC6 Priority:

% Natural Land Cover: **61.24%**

Majority County: **Sawyer County-WI**

For More Information:

HWHQW Website



→ **PROTECTION RECOMMENDED**

Aquatic plants are important

Structural Habitat

Reduce Erosion

Absorb wave energy

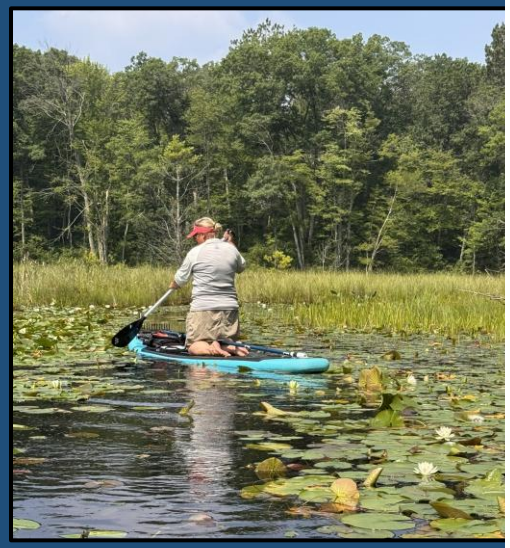
Stabilize bottom sediments

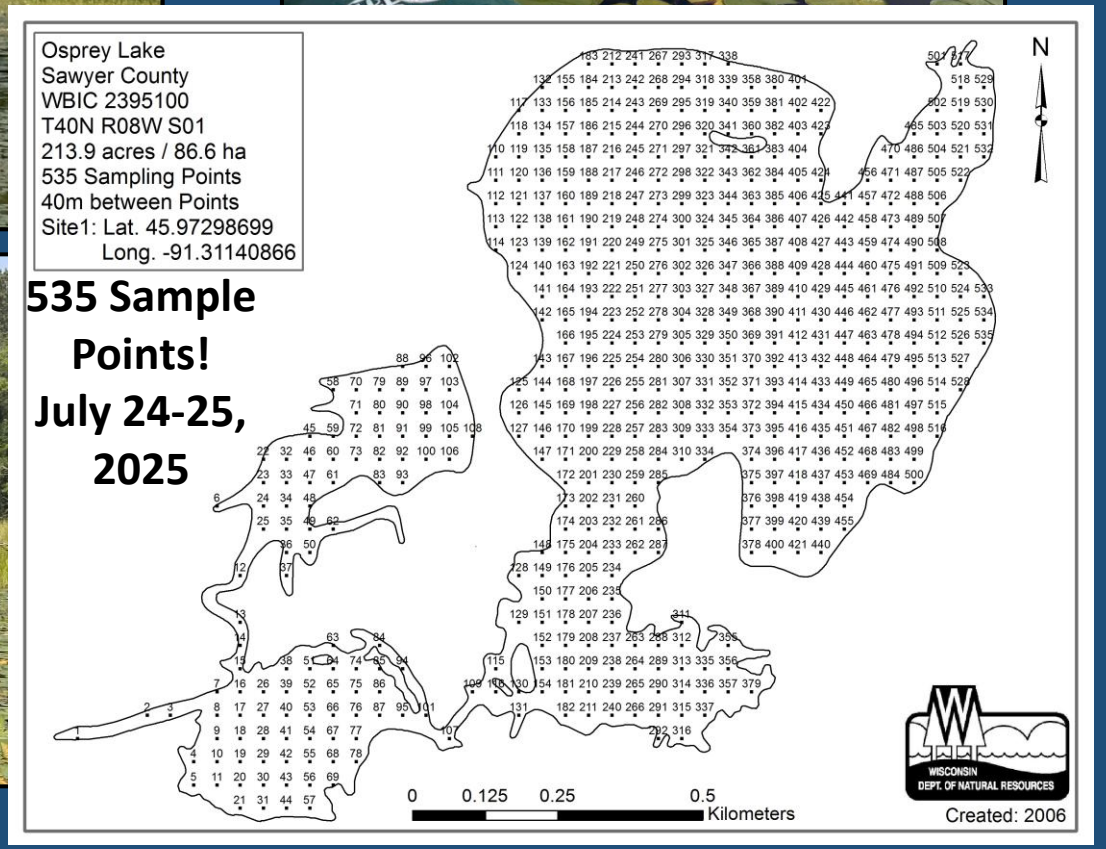
Provide oxygen

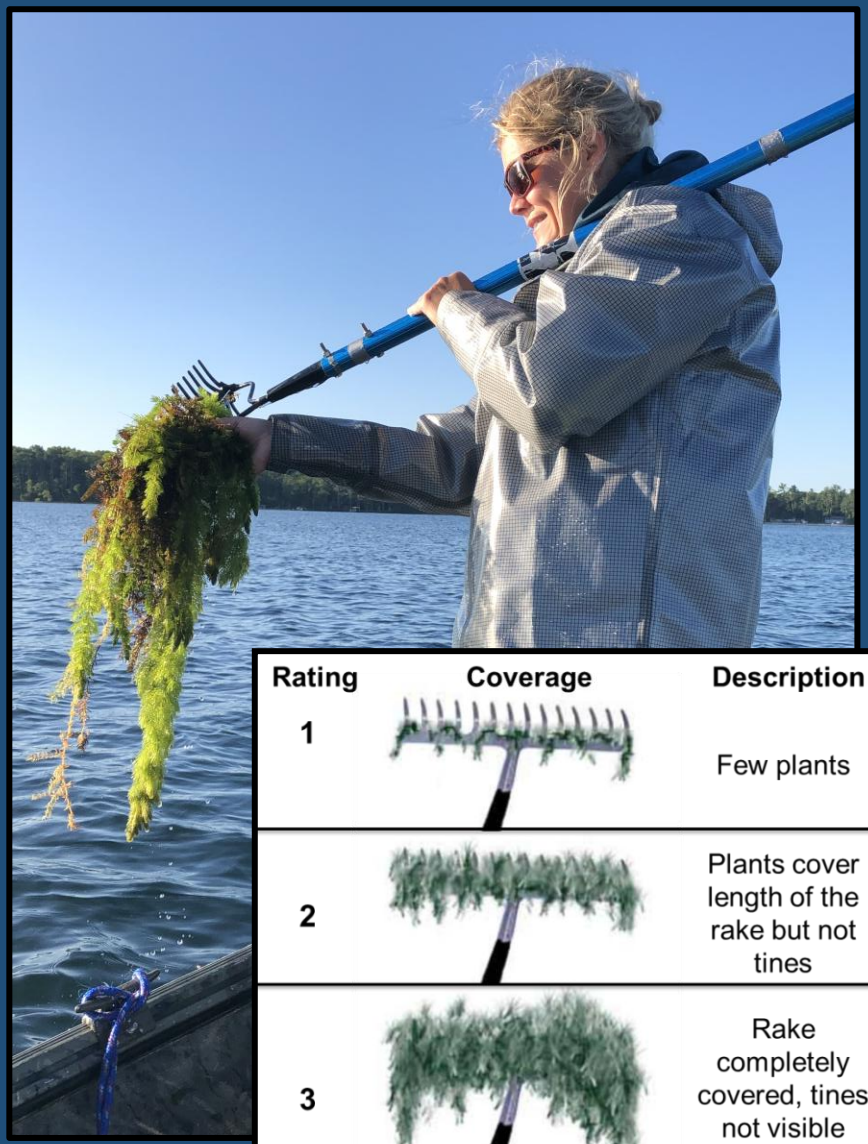
Consume Nutrients

2025 Aquatic Plant Surveys
Methods & Results

Aquatic Plant Survey Methods



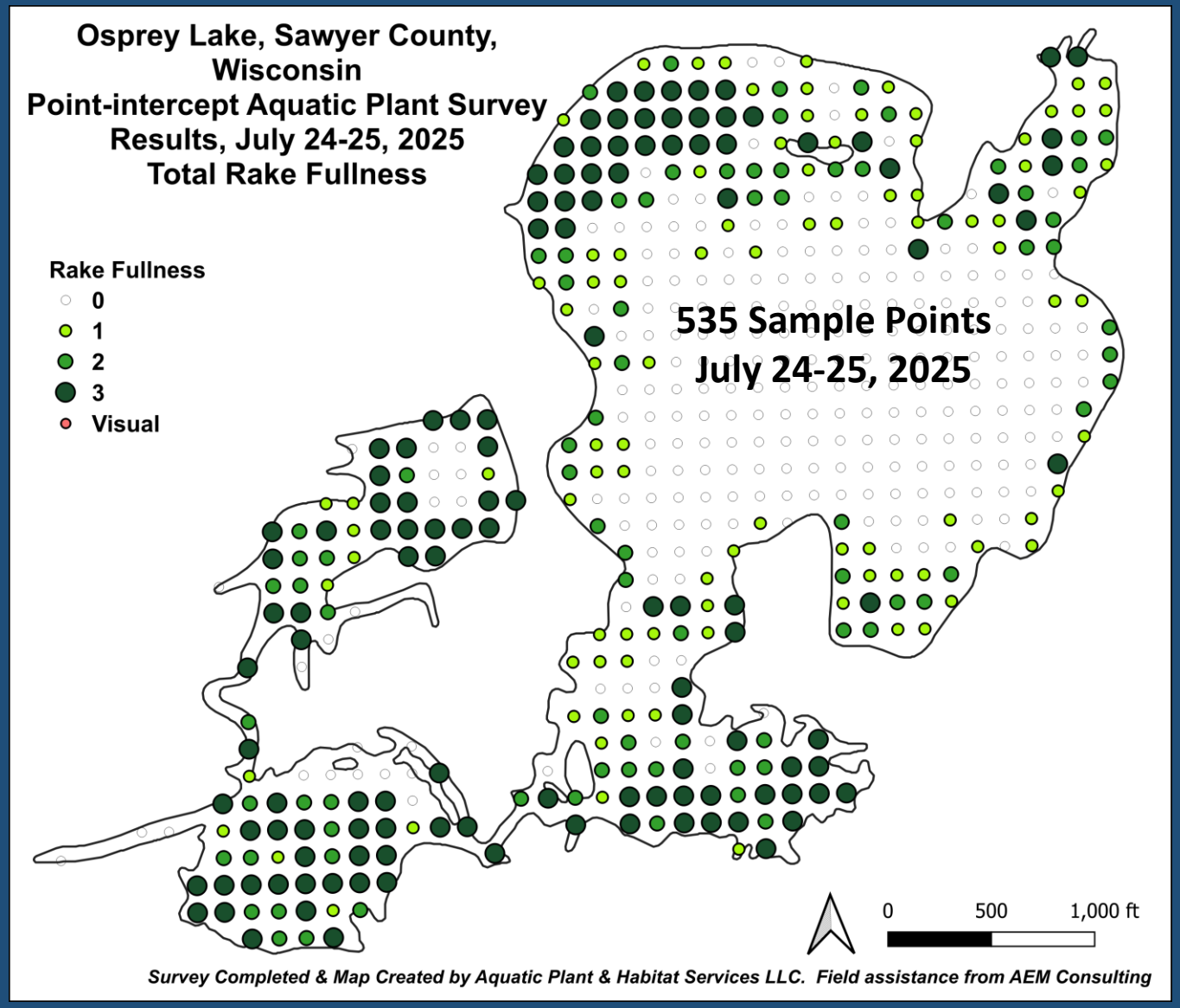




Rating	Coverage	Description
1		Few plants
2		Plants cover length of the rake but not tines
3		Rake completely covered, tines not visible

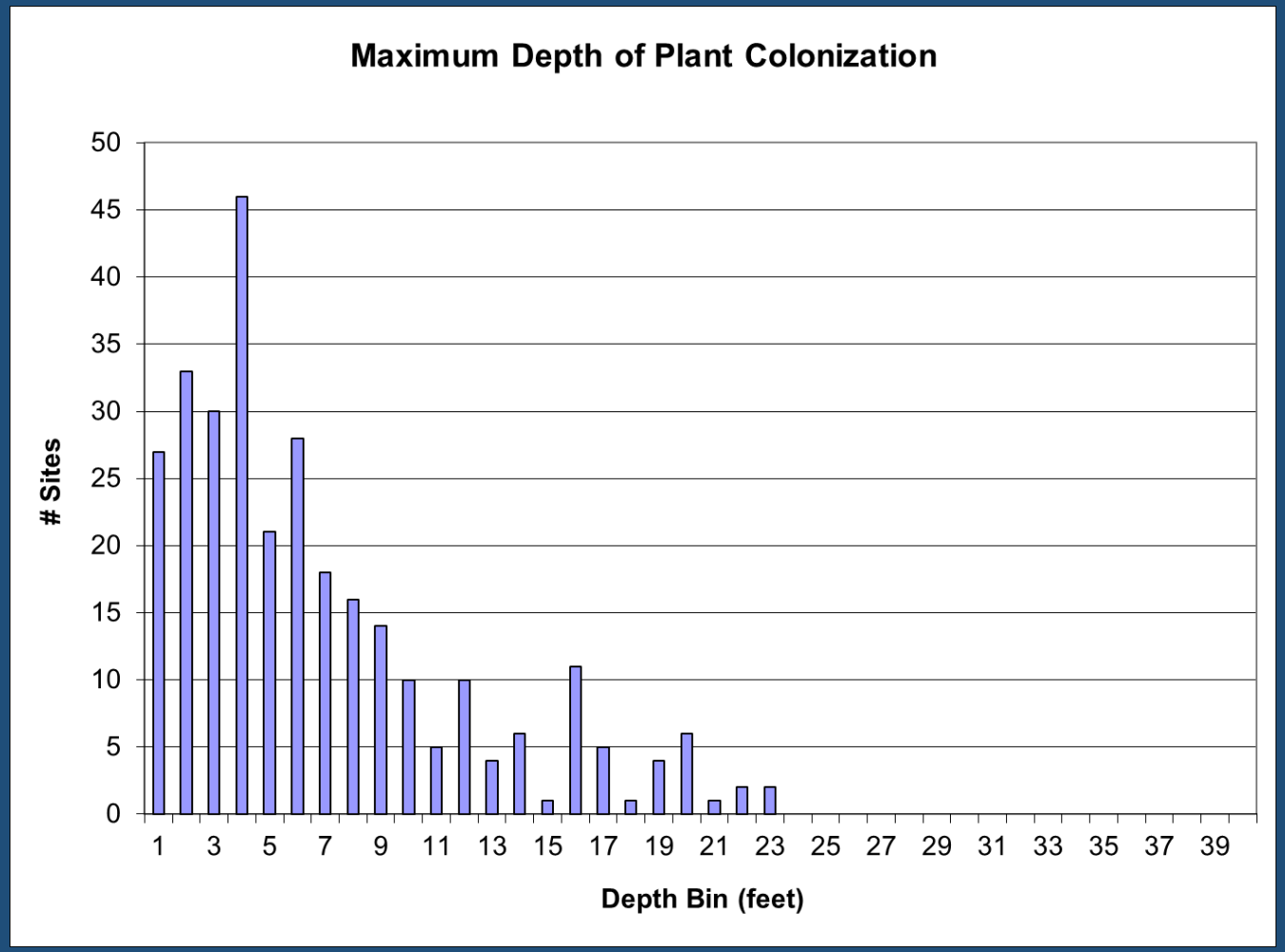
Results
2025 Plant Occurrence

- 394 points shallower than maximum depth of plants (23 ft)
- 301 sample points with plants
- 301/394 = 76% sites with plants (frequency of occurrence or FOO)
- Average Rake Fullness 2.10



Results - Depth of Plants

- 394 points shallower than maximum depth of plants (23 ft)
- Plant occurrence concentrated in 1-9 ft depth range



Results – Three Most Common Species

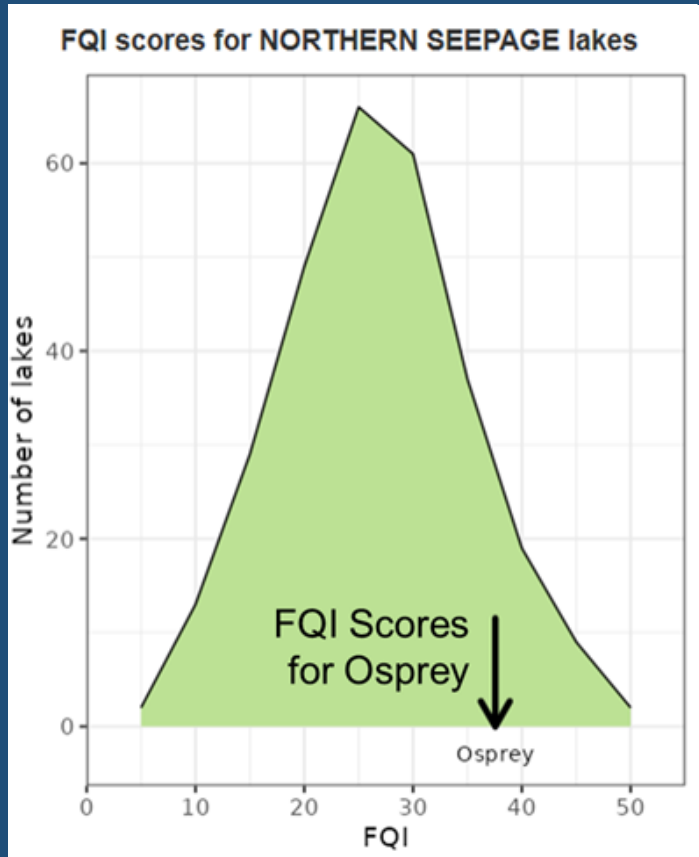
Watershield 113 sites

Results – 2025 Plant Community

39 species detected at sample points
Another 8 species visual (<6 ft from sample point but not on rake)
Another 6 species outside sample grid
53 species total

different species at many different locations (2.48 native species per sample point)

Diversity very high!



FQI	Description
0-19	Low quality
20-35	High Quality
35-50	Very High Quality
> 50	Extremely rare and important

40 Osprey 2025

Mean C	Description
0-3	Common, high tolerance
4-6	Specific needs, moderate tolerance
7-8	Narrow range, minor tolerance
9-10	Very narrow range, low tolerance

6.9 Osprey 2025

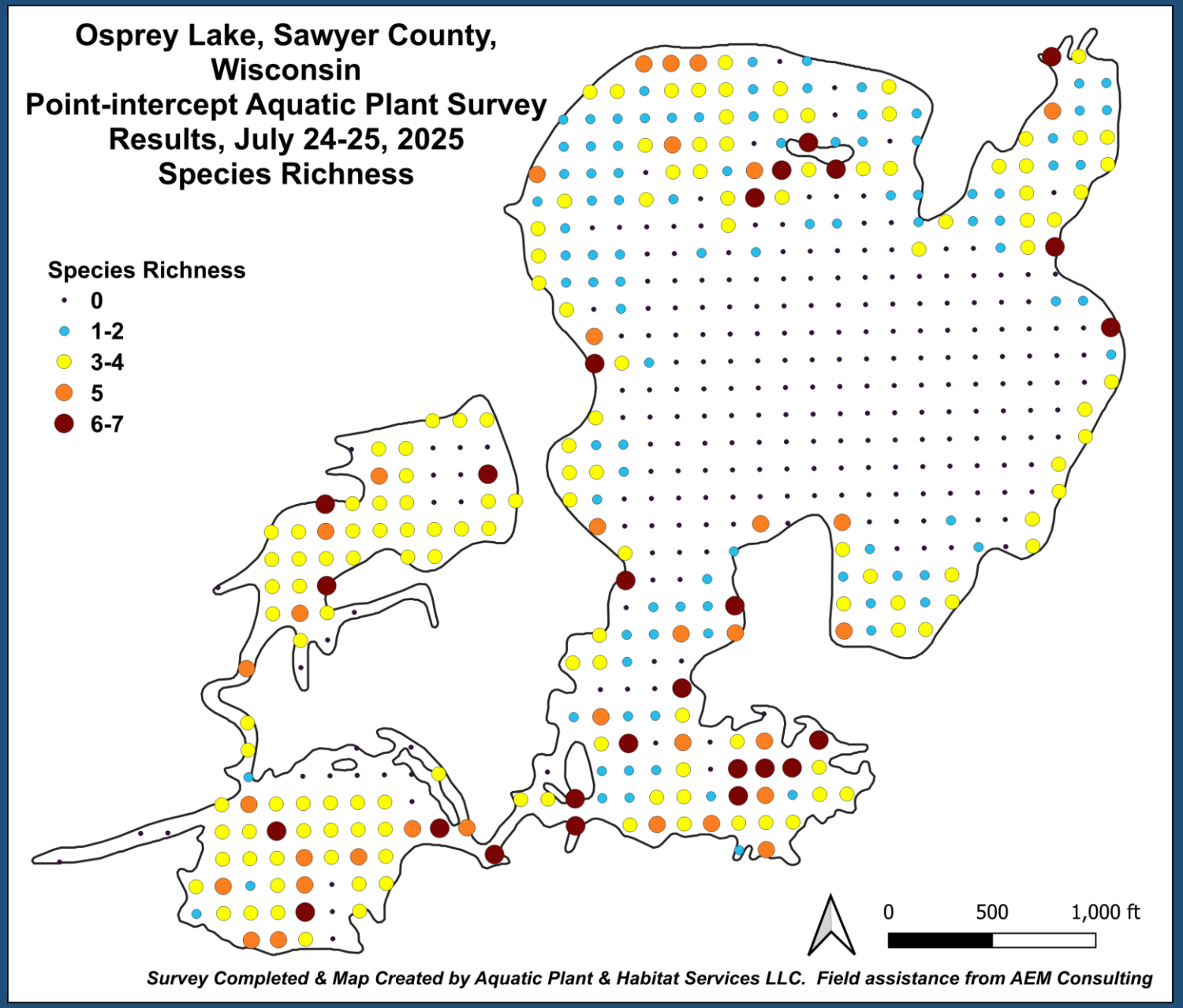
Rubric copied from WDNR Aquatic Plant Explorer

Rubric copied from WDNR Aquatic Plant Explorer

High Quality Aquatic Plant Community

Overall Conclusions

- High plant diversity.
- Some species are sensitive to human disturbance.
- Littoral zone plant occurrence and biomass is high



Eurasian Watermilfoil

- Discovered near the boat landing in 2005
- Sometimes forms dense mats on lake surface
  - Can outcompete native species
  - Might Impair navigation
- Options for control
  - Chemical
  - Manual removal
  - Mechanical removal
  - Biological control

EWM Bed Survey Methods

- Cruise the lake, late Aug – early Sept
- Capture boundaries of EWM beds on GPS device
- Record EWM bed attributes
  - Depth
  - Plant
  - Density

EWM in Osprey 2025

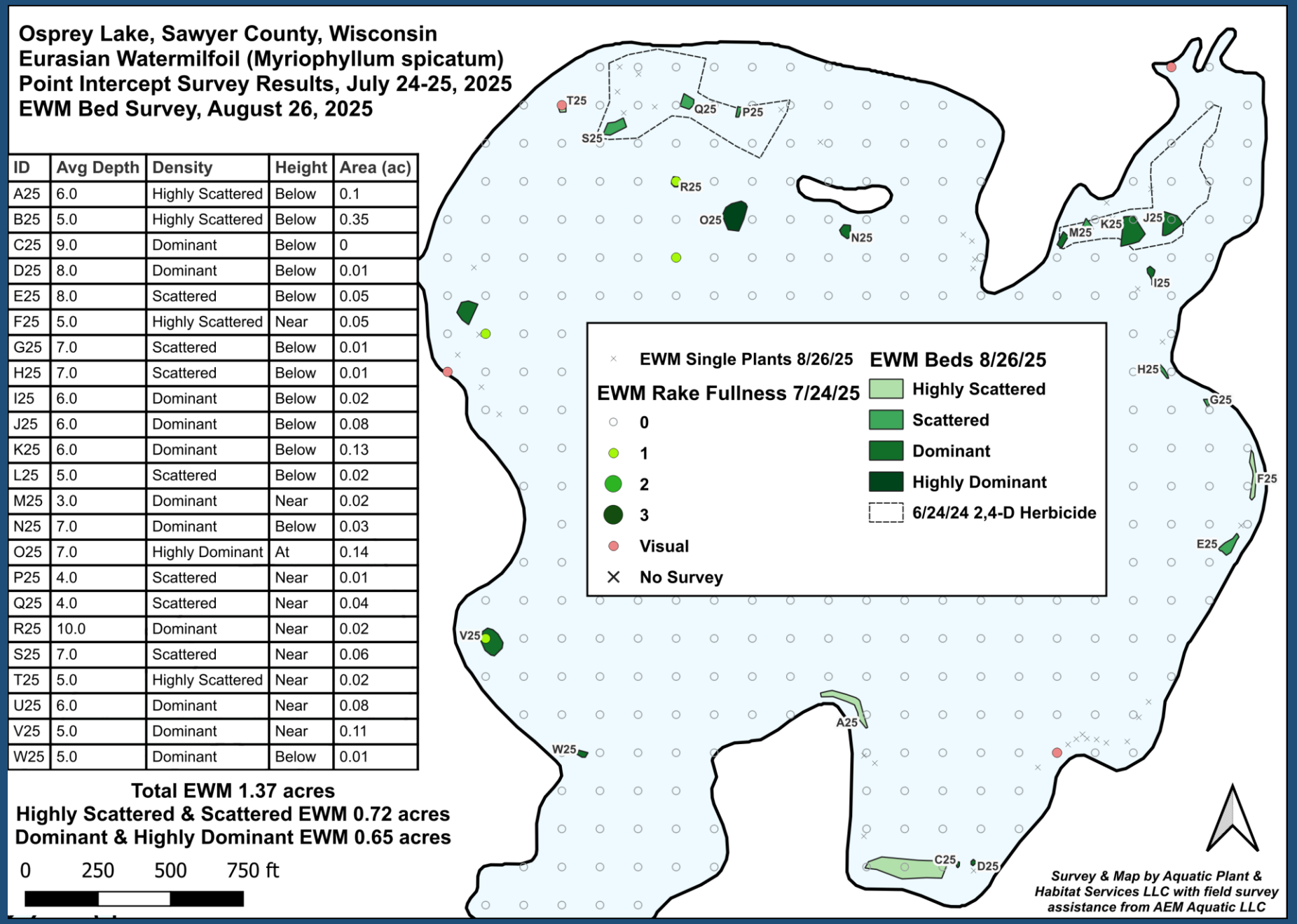
- 1 % frequency
  - 4 raked samples
  - 4 visual observations
  - Ranked 31
- 1.37 acres mapped (0.6% lake surface area)

Osprey Lake, Sawyer County, Wisconsin
Eurasian Watermilfoil (Myriophyllum spicatum)
Point Intercept Survey Results, July 24-25, 2025
EWM Bed Survey, August 26, 2025

ID	Avg Depth	Density	Height	Area (ac)
A25	6.0	Highly Scattered	Below	0.1
B25	5.0	Highly Scattered	Below	0.35
C25	9.0	Dominant	Below	0
D25	8.0	Dominant	Below	0.01
E25	8.0	Scattered	Below	0.05
F25	5.0	Highly Scattered	Near	0.05
G25	7.0	Scattered	Below	0.01
H25	7.0	Scattered	Below	0.01
I25	6.0	Dominant	Below	0.02
J25	6.0	Dominant	Below	0.08
K25	6.0	Dominant	Below	0.13
L25	5.0	Scattered	Below	0.02
M25	3.0	Dominant	Near	0.02
N25	7.0	Dominant	Below	0.03
O25	7.0	Highly Dominant	At	0.14
P25	4.0	Scattered	Near	0.01
Q25	4.0	Scattered	Near	0.04
R25	10.0	Dominant	Near	0.02
S25	7.0	Scattered	Near	0.06
T25	5.0	Highly Scattered	Near	0.02
U25	6.0	Dominant	Near	0.08
V25	5.0	Dominant	Near	0.11
W25	5.0	Dominant	Below	0.01

Total EWM 1.37 acres
Highly Scattered & Scattered EWM 0.72 acres
Dominant & Highly Dominant EWM 0.65 acres

0 250 500 750 ft



Think – Pair - Share

- Get up & stretch. Count off by 3's
- Think of some new piece of information you didn't know before. Or a question. Or a comment. Write it down or remember.
- Pair up and share.
- Share with whole group as time allow.

EWM MANAGEMENT OPTIONS & FEASIBILITY

With an emphasis on Eurasian watermilfoil occurrence

Sara Hatleli, Aquatic Plant & Habitat Services LLC, 715-299-4604

sarahatleli97@gmail.com

Presented May 16th, 2026

Public Input Meeting for Osprey Lake Aquatic Plant Management

Five Broad Management Methods

- Education & Monitoring
- Manual
- Mechanical
- Chemical Treatment
- Biological Control

KEEP IN MIND……..

MORE THAN ONE METHOD CAN BE USED IN THE SAME YEAR

Integrated Management

SEE POSTER

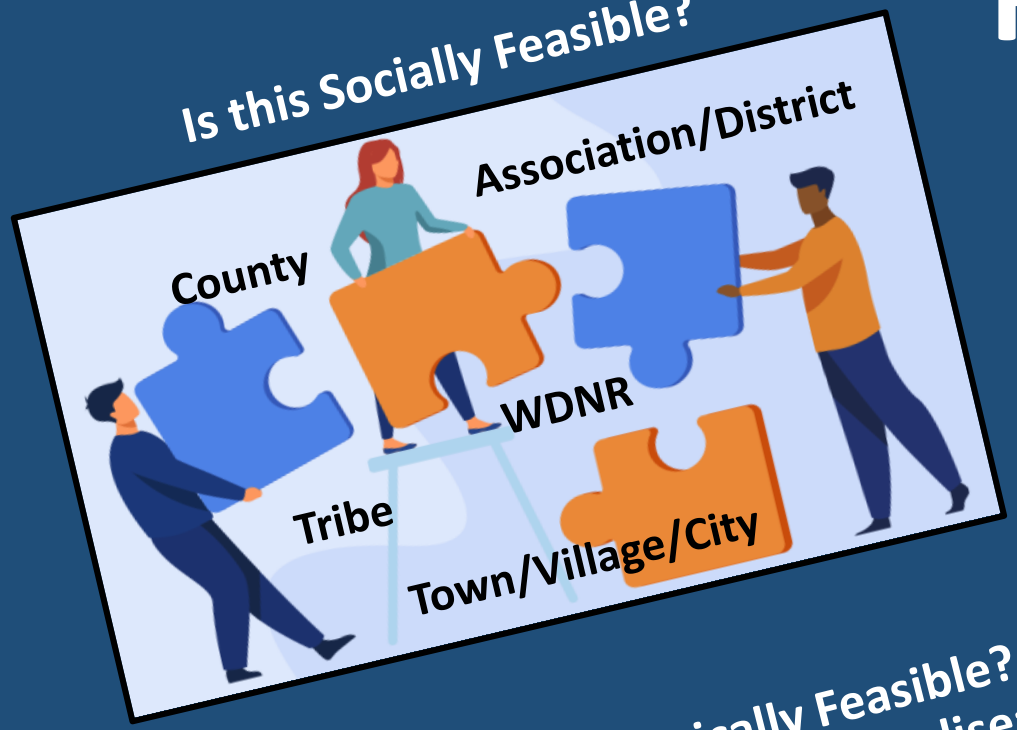
MANAGEMENT CAN CHANGE BASED ON NEW INFORMATION

Adaptive Management

ALSO KEEP IN MIND…….

Feasibility

Is this Socially Feasible?



Is this Financially Feasible?

Is this Biologically Feasible?
(Is the cure worse than the disease?)

Does our Organization have the capacity to succeed with this?

Plant Management

Which management options should be included in the goals and objectives of the Aquatic Plant Management Plan?	Level of PREFERENCE			
	Do not include	LOW Possible future option, but not now	MEDIUM Possible current or future option	HIGH Definitely current option
Education & Monitoring (survey, monitor, outreach)				
Manual (paid or volunteer hand removal of EWM)				
Mechanical – DASH (paid or volunteer SCUBA removal of EWM)				
Mechanical – Harvester (mow the EWM)				
Chemical (Herbicide applied to reduce EWM occurrence)				
Biological (first find out if weevils are present, rear & stock weevils)				

Education & Monitoring

- Education: Plant ID, AIS Prevention, shoreland protection
- Monitoring: Point-intercept survey every 5 years. EWM bed mapping every year. subPI survey in EWM beds >0.5 acres

Manual EWM Removal

- Remove plants by hand
- Remove AIS anywhere in the lake
- Appropriate for small-scale control
- No permit required

Diver Assisted Suction Harvesting (DASH)

- Uproot vegetation
- Suction tube/pontoon
- Permit required
- Appropriate for small-scale control
- Appropriate following herbicide treatment to increase time interval between herbicide application

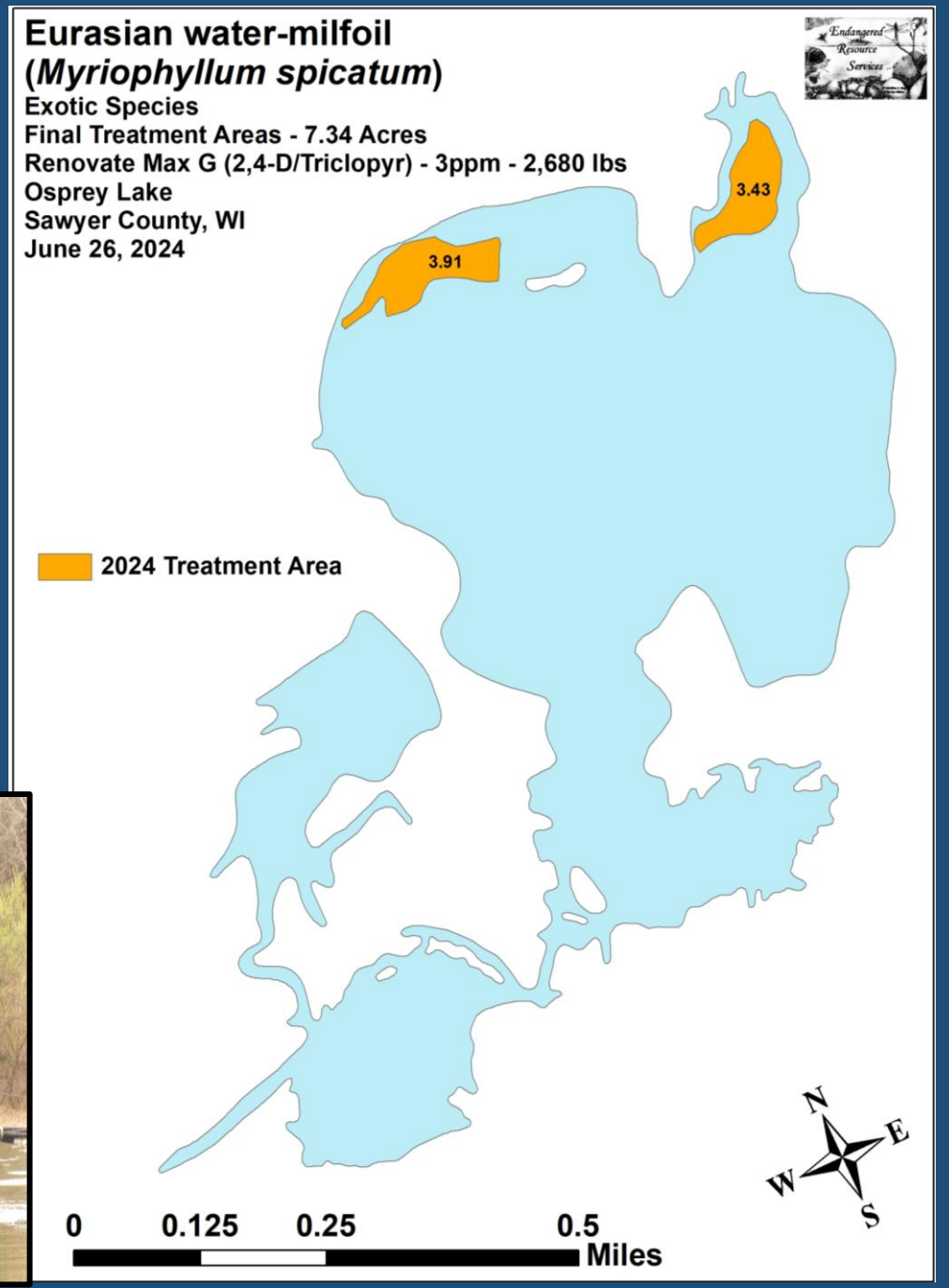
Mechanical Harvest

- Cutting plants down to depth of 5-6 feet
- Permit required
- Concerns associated with impacts to panfish spawning, timing important
- Appropriate for large-scale or lake-wide issues

**Cost variable depending on size of harvester*

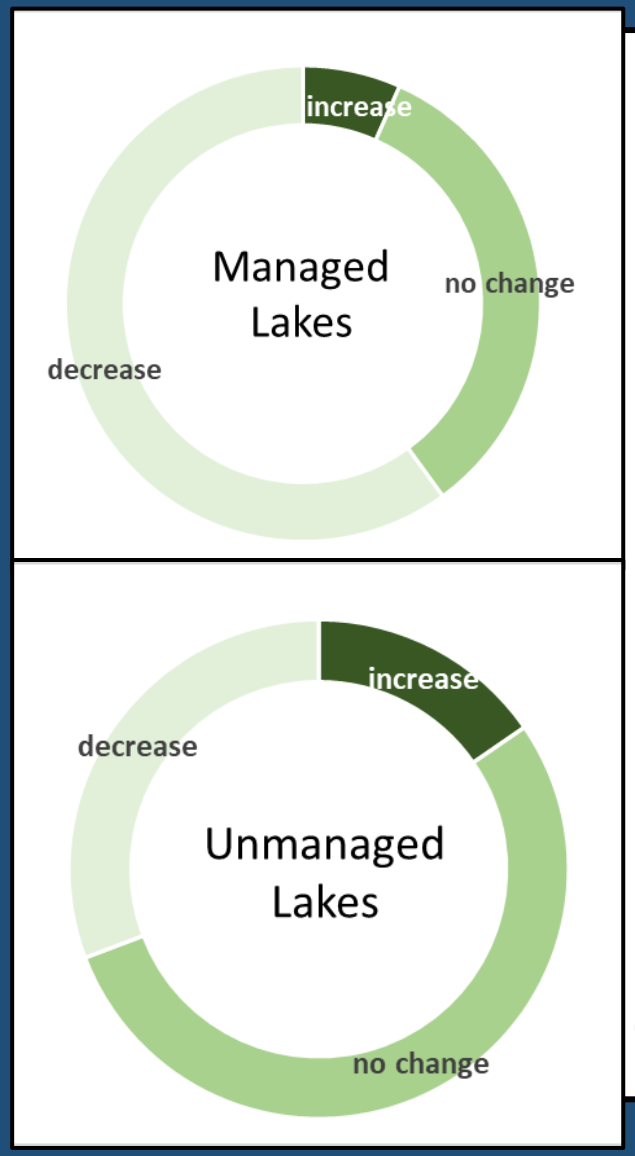
Chemical Control

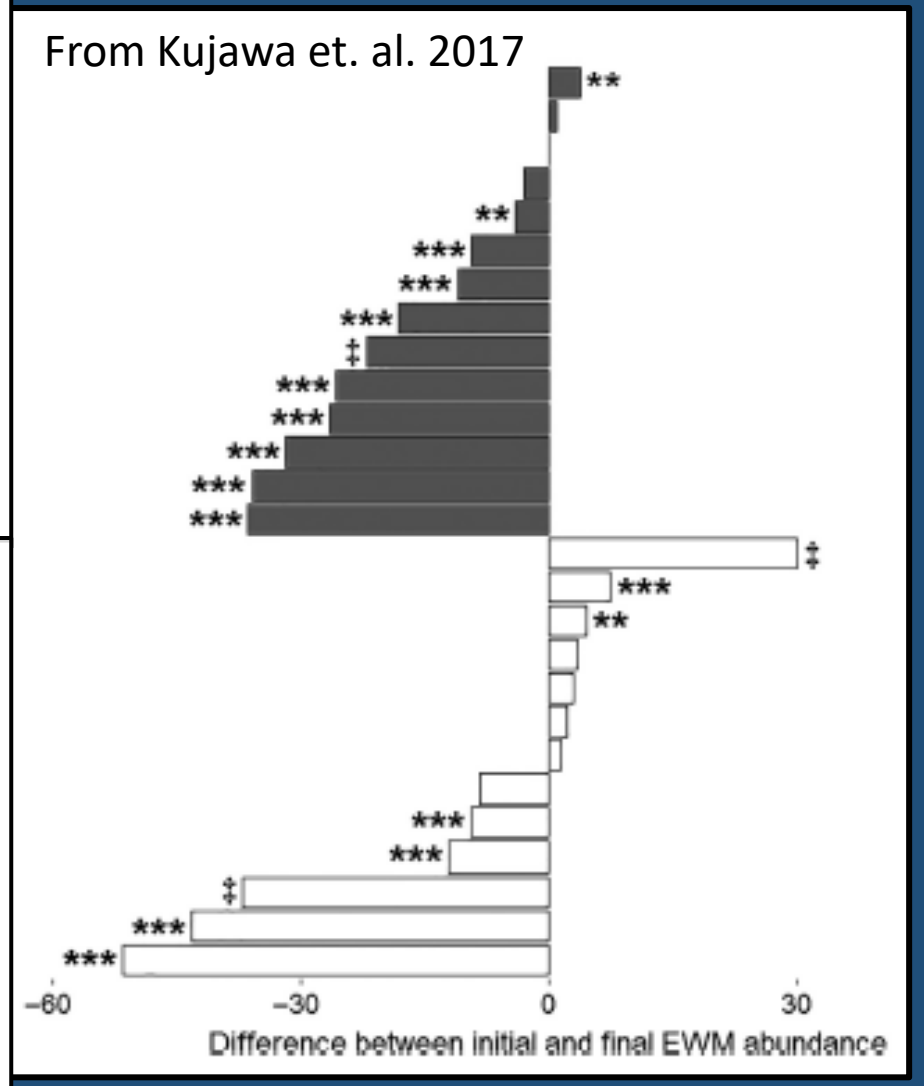
- Herbicide applied to lake to kill plants
- Permit required
- Larger treatments are more effective, small treatment areas are no longer recommended and last 2 years or less.



Herbicide Managed vs. Unmanaged Lakes (Kujawa et al 2017)

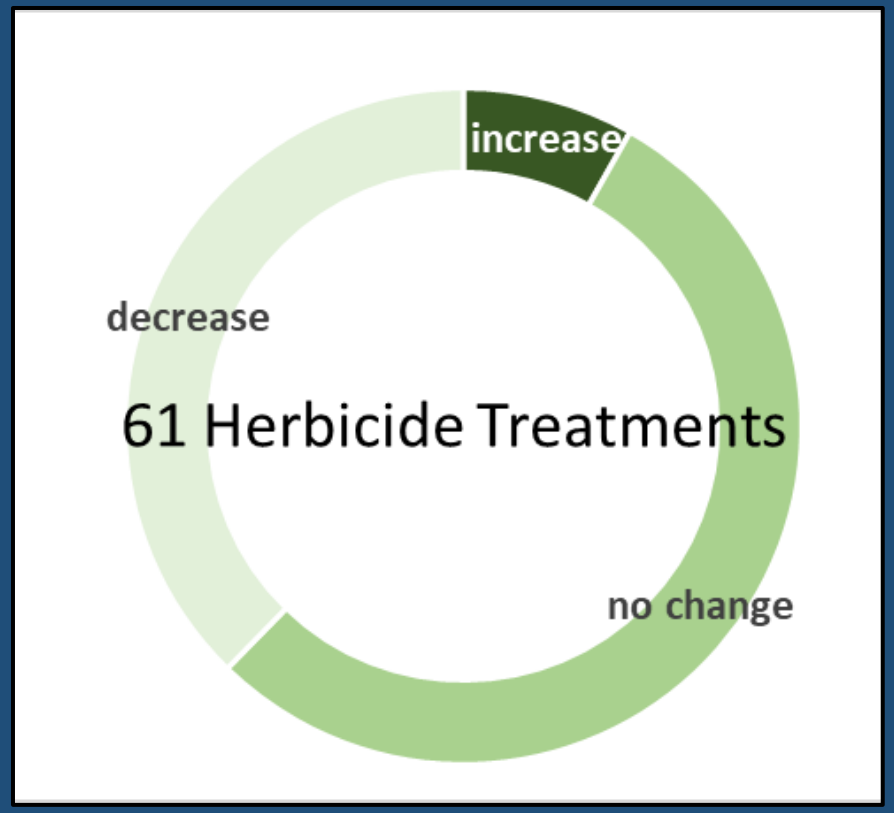
- 11-year study
- 28 Wisconsin Lakes
  - 15 managed lakes
    - 1 lake EWM increase
    - 5 lakes EWM no change
    - 9 lakes EWM decrease
  - 13 unmanaged lakes
    - 2 lakes EWM increase
    - 7 lakes EWM no change
    - 4 lakes EWM decrease





Managed Lakes (Kujawa et. al. 2017)

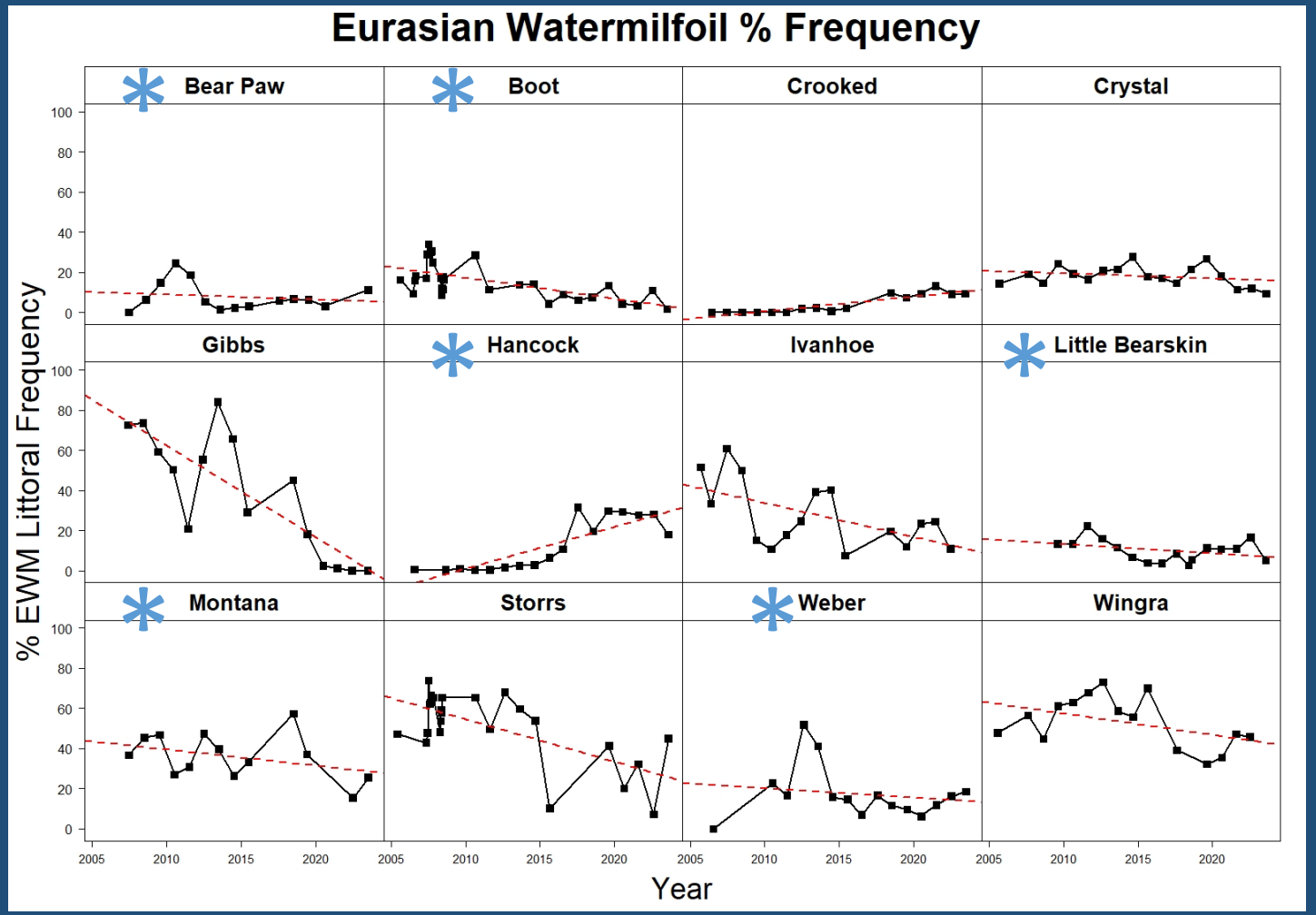
- 15 managed lakes
  - 61 herbicide treatments total over 11 years
    - 5 treatments EWM increase
    - 33 treatments EWM no change
    - 23 treatments EWM decrease
  - % of lake to be treated does not decrease with time
  - Larger treatments lead to larger decreases in EWM
  - Small-medium treatments had more variable outcomes. EWM response unpredictable



Unmanaged Lakes (Kujawa et. al. 2017)

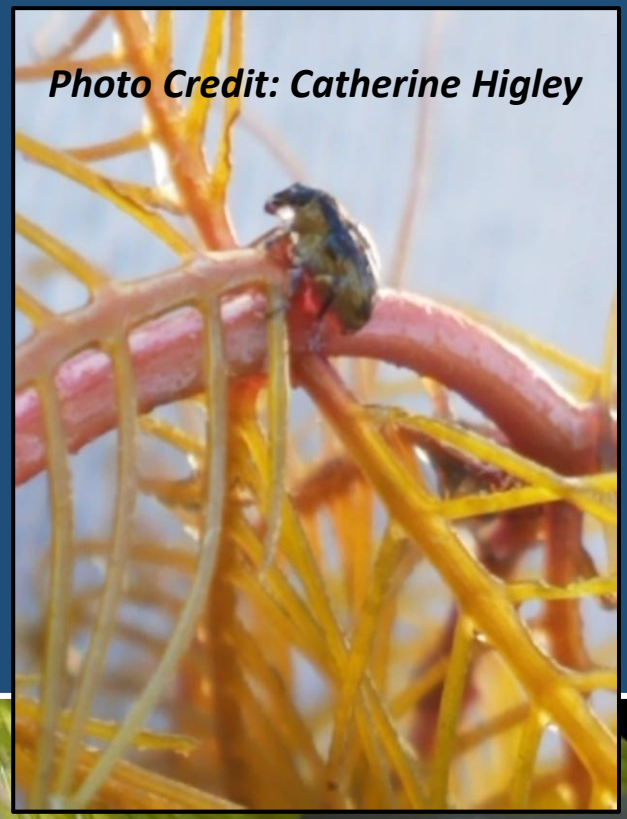
- 13 unmanaged lakes
  - Largest increases and decreases were in unmanaged lakes
  - More unpredictable EWM occurrence

* = Northern Lake



Biological Control

- Using living organisms to control plant growth
- NATIVE weevil species that feeds on EWM
- Success depends on
  - Shoreline habitat for overwintering
  - Predation
  - Other control being used (chemical, mechanical)
  - EWM density, distribution, and depth
  - “Lake characteristics that favor weevil success include dense, widespread milfoil beds in shallow waters and natural shoreline habitats. ”



https://klsa.wordpress.com/published-material/milfoil-weevil-guide/

Rearing Weevils

- Rearing tanks with starter stock of weevils
- Feed weevils using “clean” EWM
- Release into beds of EWM
- 6-12 volunteers committed for 3 years

Photos copied from Golden Sands biocontrol manual

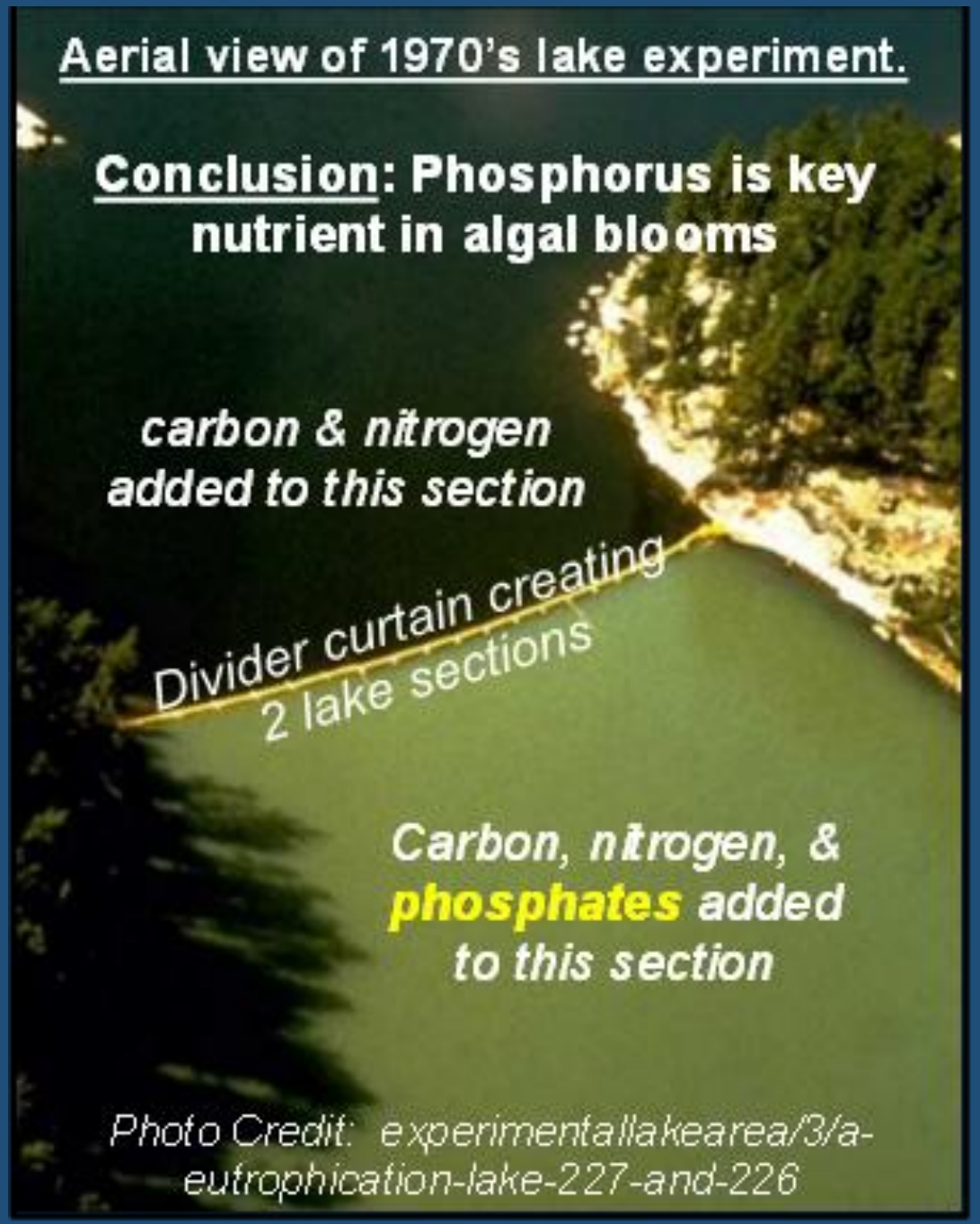
ADDITIONAL LAKE MANAGEMENT TOPICS

Surface Water Runoff

- Impervious surfaces
  - Buildings, paved surface, decks, compacted gravel sites, etc.
- Precipitation → Runoff
  - Runoff is warmer
  - Warmer water “holds” less dissolved oxygen
  - Runoff carries sand, soil into lake
  - Runoff carries phosphorus into a lake

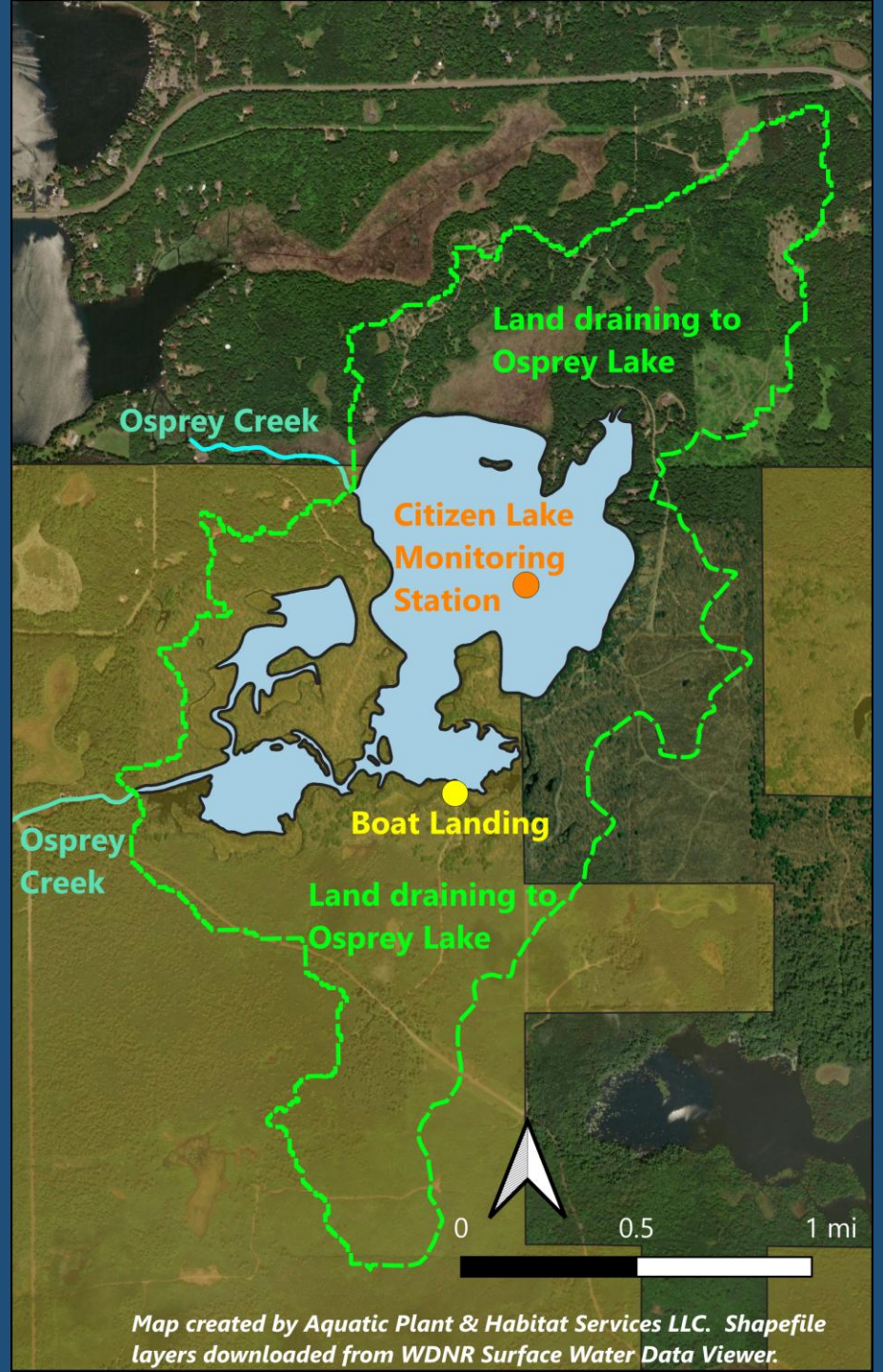
Phosphorus

A little phosphorus goes a long way!



Osprey Lake Catchment

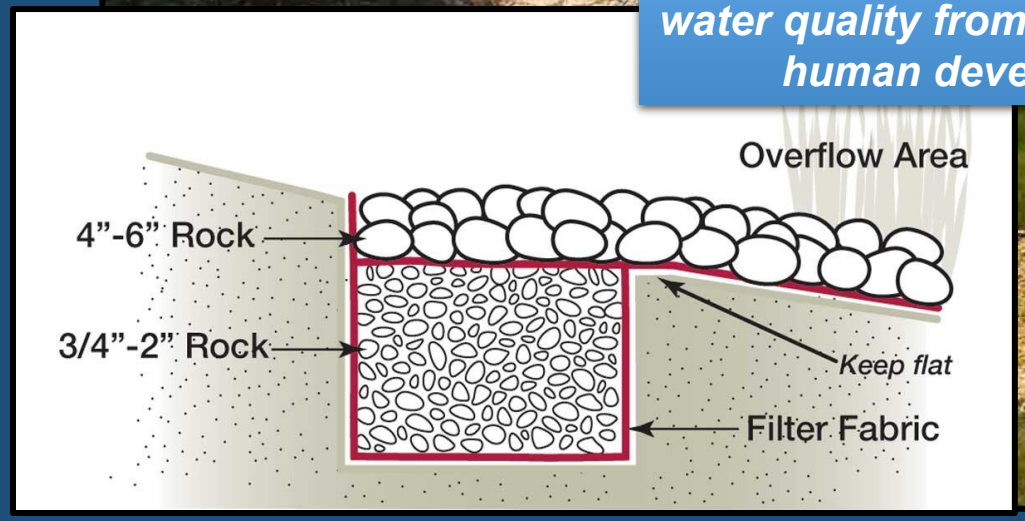
Lake property owners are the last line of defense in protecting water quality from the impacts of human development.



“With great property comes great responsibility”

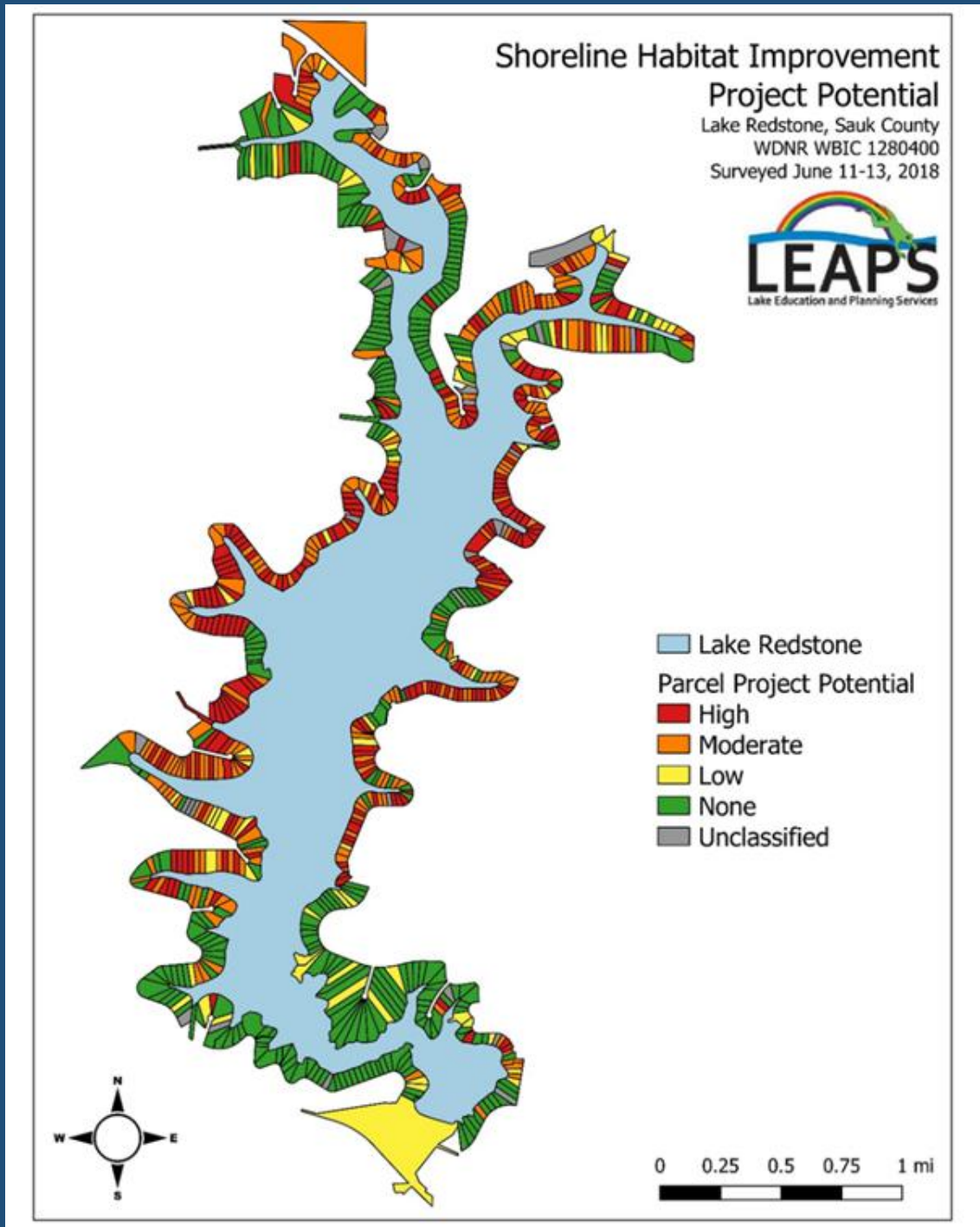
- Opportunities
  - Buffers
  - Water diversions
  - Rain gardens
  - Rock Infiltration

Lake property owners are the last line of defense in protecting water quality from the impacts of human development.



Shoreland Assessment

- 35-ft riparian area surveyed from the water
  - Canopy cover
  - Herbaceous / shrub cover
  - Impervious surface
  - Lawn
- Identify parcels with high, moderate, low, and no potential for improvement



AIS Prevention

Preventing their introduction will go a long way to prevent other species introduction

AIS Prevention - Watercraft Inspection

- Clean Boats Clean Waters Program
- GRANT ELIGIBLE

CLEAN BOATS CLEAN WATERS

AIS Prevention - Decontamination & ILIDS

- Internet Landing Installed Device Sensor (ILIDS)
  - Motion sensor audio instructs boaters
  - Camera records boater activity
- GRANT ELIGIBLE (AIS Prevention)
  - CBCW program required

AIS Prevention – Know your guests

What was prior waterbody and when? Are zebra mussels present in that prior waterbody? Has the watercraft been properly disinfected?

Internet search “wi dnr lakes with zebra mussels”

AIS Prevention – Disinfection Protocols

- BOAT, GEAR AND EQUIPMENT DECONTAMINATION AND DISINFECTION MANUAL CODE 9183.1

Table 2 Efficacy of treatment methods for invertebrates.

AIS	Steam Cleaning (212°F)	Hot Water (140°F)	Drying (5 days)	Chlorine (500 ppm, 10 min)	Virkon (2:100 solution, 20 min)	Freezing (26°F[T])
Faucet Snail	☑ 18*	☑ 18*	⊗ 35	⊗ 18	Ⓡ	Ⓡ
New Zealand mud snail	☑ 4, 65*	☑ 4, 65*	☑ 6*, 66*	⊗ 76*	☑ 9, 10*, 74, 76, 83	☑ 4, 6*
Quagga Mussel (Adults)	☑ 7*,16*	☑ 7*,16*	☑ 14*	Ⓡ	☑ 9	Ⓡ
Quagga Mussel (Veligers)	☑ 4, 17, 80*	☑ 4, 17	☑ 69*	Ⓡ	☑ 9	Ⓡ
Zebra Mussel (Adult)	☑ 7*, 8*, 25	☑ 7*, 8*, 25	☑ 14*, 25*, 27	☑ 22*	Ⓡ	☑ 25, 27
Zebra Mussel (Veligers)	☑ 4, 80*	☑ 4	Ⓡ	☑ 22*, 25	Ⓡ	Ⓡ
Asian Clam	☑ 4, 37, 78	☑ 4, 37	⊗ 4	⊗ 37*, 38*	Ⓡ	Ⓡ
Spiny Water Flea (Adult)	☑ 7*, 47*, 80*	☑ 7*, 47*	Ⓡ	☑ 76, 83	☑ 76, 83	☑ 76, 83
Spiny Water Flea (Resting Eggs)	☑ 2*, 80*	☑ 2*	☑ 2*, 4	⊗ 2	Ⓡ	⊗ 2*
Bloody Red Shrimp	Ⓡ	☑ 83*	☑ 83*	☑ 83*	☑ 83*	Ⓡ
					Ⓡ	Ⓡ

Key:

☑= Effective- Eliminates spp when applied at rates outlined in the manual code.

⊗=Not Effective- Requiring higher rates and/or longer time periods than outlined in code to eliminate spp.

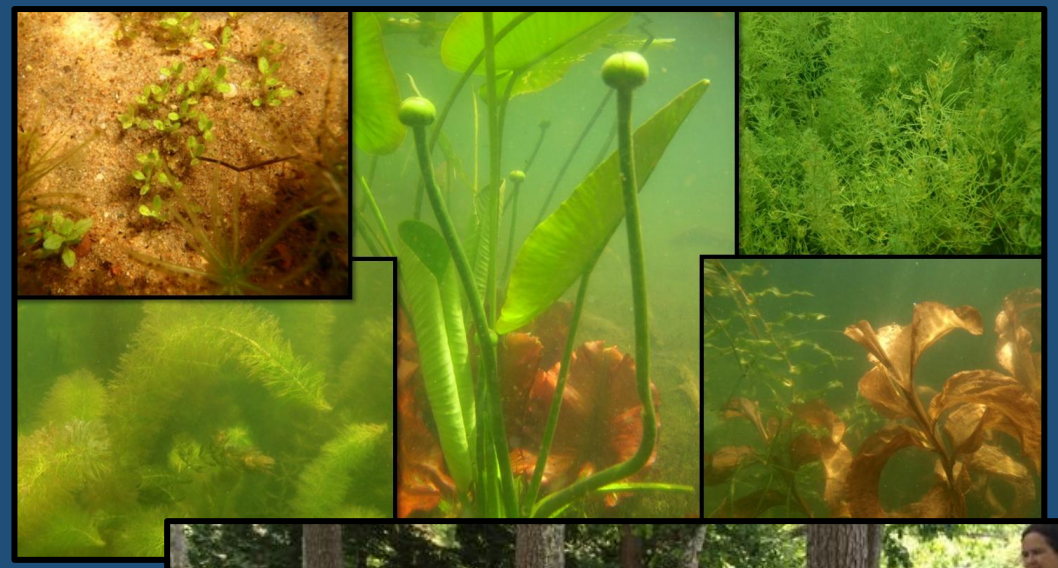
Ⓡ= Research Needed- No/insufficient sources or references found.

AIS Detection - Routine Monitoring

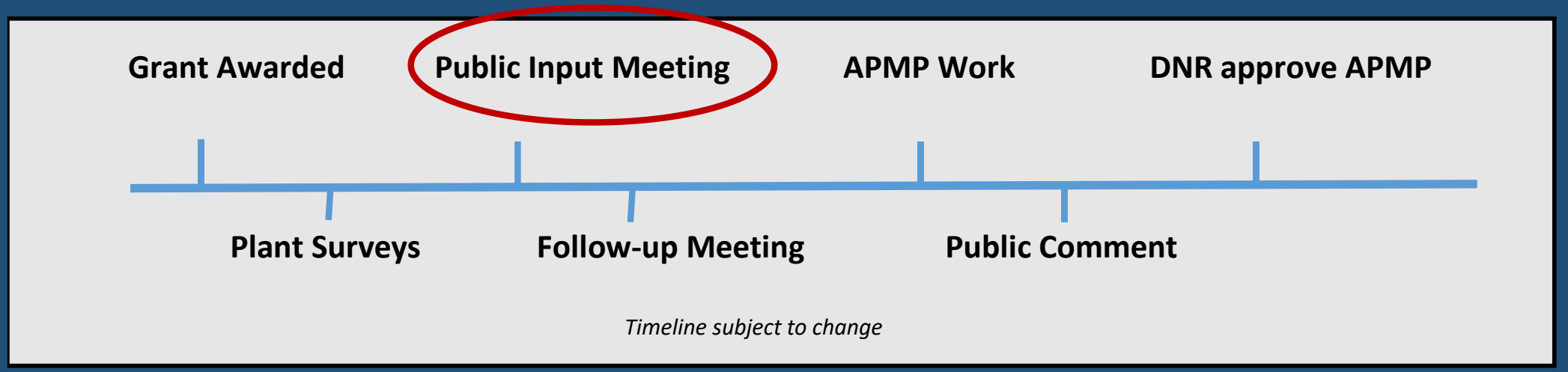
- Look for zebra mussels during dock removal in fall
- AIS monitoring
  - Assistance possibly through Sawyer County
  - Volunteer monitoring
  - Aquatic plant survey every 5 years
    - GRANT ELIGIBLE

AIS Prevention – Protect Native Plants

- Osprey Lake has a plant community that is AMAZING!
- Plants can be protected by
  - Minimize herbicides if needed for AIS control
  - Education events & presentations GRANT ELIGIBLE



Timeline for APMP Completion



Thank you!